



# MACVILLE COMMUNITY

## Fiscal Impact Study

Caledon, Ontario

Prepared for **Bolton Option 3 Landowners Group**

January 25, 2021



This document is available in alternative formats upon request by contacting:

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January 25, 2021

Bolton Option 3 Landowners Group  
c/o Mr. Aaron Wisson  
4900 Palladium Way, Suite 105  
Burlington, Ontario  
L7M 0W7

Dear Mr. Wisson:

**RE: Macville Community – Fiscal Impact Study (Caledon, Ontario)**

urbanMetrics inc. is pleased to submit this Fiscal Impact Study. This assessment has been completed as part of the planning application for Macville, a new master planned development located in the Town of Caledon, within the Region of Peel.

The purpose of this study is to identify the fiscal impact of the new development on the Town of Caledon's and the Region of Peel's existing and future taxpayers. Our methodology addresses the deliverables and requirements outlined in the Terms of Reference for a Fiscal Impact Study as identified by the Town of Caledon and Region of Peel.

We appreciate the opportunity to conduct this assignment on your behalf and we look forward to discussing the results of our report with you.

Yours truly,

A handwritten signature in blue ink, reading "Rowan Faludi". The signature is fluid and cursive.

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Partner  
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# 1.0 Executive Summary

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urbanMetrics inc. has been retained by Bolton Option 3 Landowners Group to estimate the financial impacts of “Macville”, a 182-hectare proposed master planned community, in the Town of Caledon and the Region of Peel. The proposed concept comprises 6,871 residential units and some 7,500 square metres of commercial floor space. It is estimated that the project will accommodate approximately 17,017 residents, 300 on-site jobs, and 760 work from home jobs at full build-out; representing a new area of concentrated growth and economic activity in the Town of Caledon.

**The purpose of this study is to quantify the net financial impact that the proposed development will have on the Town of Caledon and Region of Peel. This is accomplished through calculating both one-time and ongoing financial benefits accruing to the Town and Region, as well as the financial costs that will be incurred by the Town and Region to provide services to the future residents and employees on-site.**

Overall, the study seeks to inform the Town and Region on key financial benefits and pressures that might result from the proposed project, in order to help assist the Town and Region in managing growth over the forthcoming planning period. This Fiscal Impact Study addresses the deliverables and requirements outlined in the Terms of Reference for a Fiscal Impact Study that have been approved by the Town of Caledon.

Based on our analysis, we have determined that the development of Macville will have a positive fiscal impact on the Town of Caledon and Region of Peel throughout the lifetime of the development.

Figure 1-1 provides a general guide to the costs and revenues available to the Town and the Region. It should be recognized that some revenues, such as development charges are ear-marked for specific capital costs. Although these costs have been included in the summary table, a net surplus does not necessarily mean that all costs can be covered by the revenues in each year. This table does illustrate that over the course of the study period, the Town and Region will receive more revenues than the costs that would be occurred. Figure 1-1 also does not include the costs and revenues associated with water and wastewater operations, as it is assumed that water and wastewater rates will be established to directly offset operations and applicable capital costs for these services.

**Figure 1-1: Cumulative Operating Surplus Summary Table, Region and Town**

Period	Town of Caledon			Region of Peel		
	Total Revenues	Total Costs	Cumulative Surplus	Total Revenues	Total Costs	Cumulative Surplus
<b>2020-2024</b>	\$11,370,000	\$8,551,000	<b>\$2,819,000</b>	\$7,803,000	\$4,866,000	<b>\$2,937,000</b>
<b>2025-2029</b>	\$57,831,000	\$43,506,000	<b>\$17,144,000</b>	\$39,671,000	\$24,761,000	<b>\$17,847,000</b>
<b>2030-2034</b>	\$76,579,000	\$59,018,000	<b>\$34,705,000</b>	\$52,531,000	\$35,498,000	<b>\$34,879,000</b>
<b>2035-2039</b>	\$82,755,000	\$62,208,000	<b>\$55,252,000</b>	\$56,770,000	\$36,709,000	<b>\$54,941,000</b>
<b>2040-2044</b>	\$88,930,000	\$67,650,000	<b>\$76,532,000</b>	\$61,004,000	\$40,783,000	<b>\$75,161,000</b>
<b>2045-2049</b>	\$95,107,000	\$73,242,000	<b>\$98,396,000</b>	\$65,240,000	\$41,994,000	<b>\$98,407,000</b>
<b>2050-2054</b>	\$101,283,000	\$78,651,000	<b>\$121,028,000</b>	\$69,479,000	\$46,069,000	<b>\$121,818,000</b>
<b>2055-2059</b>	\$107,458,000	\$80,778,000	<b>\$147,708,000</b>	\$73,713,000	\$47,279,000	<b>\$148,252,000</b>
<b>2060-2064</b>	\$113,634,000	\$86,872,000	<b>\$174,470,000</b>	\$77,950,000	\$51,354,000	<b>\$174,849,000</b>
<b>2065-2069</b>	\$119,810,000	\$90,063,000	<b>\$204,217,000</b>	\$82,188,000	\$52,564,000	<b>\$204,473,000</b>
<b>2070-2076</b>	\$178,109,000	\$319,451,000	<b>\$62,875,000</b>	\$122,177,000	\$261,775,000	<b>\$64,875,000</b>

SOURCE urbanMetrics inc.

Rounded to the nearest \$1,000 – Excludes revenues and costs associated with water and wastewater fees.

## Key Findings of the Fiscal Impact Study

- Macville is estimated to generate approximately **\$303.9 million** in one-time fees for the Region of Peel based on current development charge rates. The vast majority of these fees will be generated through residential and non-residential development charges. Specifically, the project will contribute:
  - \$157.0 million** for regional water supply;
  - \$72.9 million** for regional wastewater; and
  - \$66.9 million** for regional roads.
- The one-time fees associated with Macville are anticipated to generate approximately **\$160.0 million** for the Town of Caledon. Over 90% of these one-time fees will be generated through residential and non-residential development charges. Specifically, the project will contribute:
  - \$73.3 million** in development charges for highway related services;
  - \$39.4 million** for indoor recreation facilities; and
  - \$7.2 million** for parkland and trail development based on current rates.
- At full realization (2030), Macville will generate **\$10.2 million** in ongoing revenues for the Region of Peel, per annum. Both property taxes and non-tax revenue are anticipated to increase by 2% per year thereafter.
  - \$9.9 million** in annual property tax;

- **\$260,000** in reoccurring non-tax revenues (excluding water and wastewater revenue).
- Macville will generate **\$14.8 million** in ongoing revenue, per annum, for the Town of Caledon when the project is fully built out in 2030. Both property taxes and non-tax revenue are anticipated to increase by 2% per year
  - **\$13.5 million** in annual property taxes
  - **\$1.3 million** in non-tax revenue.
- **Macville is expected to generate an ongoing annual revenue surplus for the Region of Peel and the Town of Caledon** exclusive of water and wastewater revenues. The operating surplus identified will provide the Town and Region with an opportunity to add, maintain and upgrade existing facilities or infrastructure without compromising current municipal and regional finances.
- This analysis also assumes that external water and wastewater services required to develop the site will be constructed efficiently and would be oversized to serve the entirety of the Option 3 lands, in addition to the Rounding Out Areas, future Whitebelt areas within Pressure Zone 7, and will also address water pressure deficiencies of existing residents in the northern portion of Pressure Zone 6.
- **The “Oversized” strategy would also provide servicing to the 235 acres of Option 6 (Provincially Significant Employment Zone lands) that were recently approved as part of ROPA 30.** Caledon has a tightening supply of serviced employment land with immense development pressure. Nearly 50% of all under construction industrial development in Peel Region is occurring in the Town of Caledon (Q3 2020). It is anticipated that industrial development will continue to locate in Caledon and that the Town and Region should provide servicing to additional employment lands, such as the Option 6 lands. The resulting tax base from the anticipated industrial development on the Option 6 lands will contribute significantly to the ongoing operation and maintenance costs related to the external infrastructure.
- **Due to the ongoing Covid 19 crisis and the associated economic and financial losses experienced across the world, and particularly in Ontario municipalities, the construction of the Macville Community will go a long way towards stimulating the local and regional economies.** In addition to the direct fiscal and economic benefits of hard infrastructure construction required to support Macville, the substantial infrastructure construction will also effectively “unlock” the Provincially Significant Employment lands in the southeast part of Bolton. Through this investment, new jobs and businesses will be attracted the community.
- **Overall, Macville is expected to generate an annual revenue surplus for the Region of Peel and for the Town of Caledon. The operating surplus identified will provide the Town and Region with an opportunity to maintain and upgrade existing facilities or infrastructure**

without compromising current municipal and regional finances. The development of Macville will create a new, vibrant centre in the community of Bolton; comprised of innovative mixed-density housing opportunities, multi-modal transit connectivity, and diverse economic activity. In addition, it will create the opportunity to provide for cost effective servicing of much needed additional employment lands creating jobs and economic growth to the community. This massive community development project will represent a much needed economic stimulus to the Town and the Region during a time when accelerated COVID recovery will be vital to the economy of the Province.

# 2.0 Introduction

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## 2.1 Background

urbanMetrics inc. (“urbanMetrics”) has conducted this study on behalf of the Bolton Option 3 Landowners Group in connection with seeking the necessary approvals required to permit the development of the Macville Community lands for urban development including residential, commercial, mixed uses, community uses and related servicing and infrastructure.

The lands subject to this proposal consist of approximately 182 hectares (450 acres) of land and are generally located north of King Street, east of The Gore Road and west of the CP Railway tracks. The subject lands are municipally known as 14396 Humber Station Road; 14384 Humber Station Road; 14226 Humber Station Road; 14206 Humber Station Road; 14196 Humber Station Road; 14166 Humber Station Road; 14100 Humber Station Road; 14042 Humber Station Road; 14155 The Gore Road; 0 The Gore Road; 0 The Gore Road; 14211 The Gore Road; 14275 The Gore Road; 0 Humber Station Road; 14389 The Gore Road; 0 King Street; 0 King Street; 7844 King Street; 7816 King Street; 0 King Street; 7640 King Street (herein referred to as the “Subject Lands”).

The eastern portion of the Macville Community lands, consisting of lands on both sides of Humber Station Road, north of King Street, have been the subject of Regional Official Plan Amendment 30 (ROPA 30) which was recently approved by LPAT and succeeds in bringing these lands into the Bolton Rural Service Centre Settlement Area Boundary. Accordingly, the eastern portion of these lands are designated “Urban Area” in the Region of Peel Official Plan. The western portion of the Macville Community lands, consisting of lands north of King Street and east of The Gore Road are currently designated “Rural Area” within the Region of Peel’s Rural System in the Region of Peel Official Plan and “Prime Agricultural Area” in the Town of Caledon’s Official Plan.

It is recognized that the western portion of the Macville Community lands are currently proposed to be brought into the Bolton Rural Service Centre Settlement Area Boundary through the Region’s 2051 Municipal Comprehensive Review. It is anticipated that Regional adoption of the new Regional Official Plan will occur before the end of 2021. Further, a local Official Plan Amendment is required to assign urban land use designations to all of the Macville Community lands.

This Fiscal Impact Study (the “Study”) is prepared in support of a local Official Plan Amendment to establish a Secondary Plan for the Macville Community in Bolton. This Secondary Plan will facilitate the development of these lands for residential and mixed-use development with related complimentary uses, such as open spaces, parks, trails, commercial uses, the Bolton GO Station, the Natural Heritage System (NHS), and stormwater management facilities. This report has been prepared in support of the local Official Plan process to create the Macville Community Secondary Plan for the subject lands. (including both the eastern and western portions).



## 2.2 Objectives and Approach

This Study has been prepared to estimate the financial impact of the proposed development of Macville Community. As part of this application, a Fiscal Impact Study is required to assess the cost of new development on the Town of Caledon and the Region of Peel's existing and future taxpayers.

The specific requirements for this study are outlined in a Terms of Reference, which can be found in Appendix A. In order to determine the net fiscal impact on Peel Region and the Town of Caledon, the following one-time revenues and costs have been calculated:

### Revenue

- **Development Charges** (one-time);
- **Building Permit Fees** (one-time);
- **Planning and Development Application Fees** (one-time);
- **Annual Property Taxes** (ongoing); and,
- **Other Non-Tax Revenues** (i.e. user fees, fines, and other revenues) (ongoing).

### Costs

- **Required Municipal Capital Projects** (one-time);
- **Operational Costs to Service New Development** (i.e. road maintenance, provision of emergency services, community recreation programming, etc.) (ongoing); and,
- **On-Site Lifecycle and Replacement Capital Costs** – Lifecycle costs for the incremental capital assets that are directly related to the proposed development.
- **Off-Site Construction and Replacement Capital Costs** – Lifecycle costs associated with the development and replacement of external infrastructure that will be required to service the lands. This includes water and wastewater connections, as well as regional road improvements.

## 3.0 Preliminary Framework Plan

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## Study Area

The proposed Macville Community will include a mix of residential, commercial, and institutional uses on approximately 182 hectares (450 acres) of developable area. The subject lands are located in the community of Bolton within the Town of Caledon, and are bordered by King Street to the south, The Gore Road to the west, agricultural lands to the north, and the railway to the east.

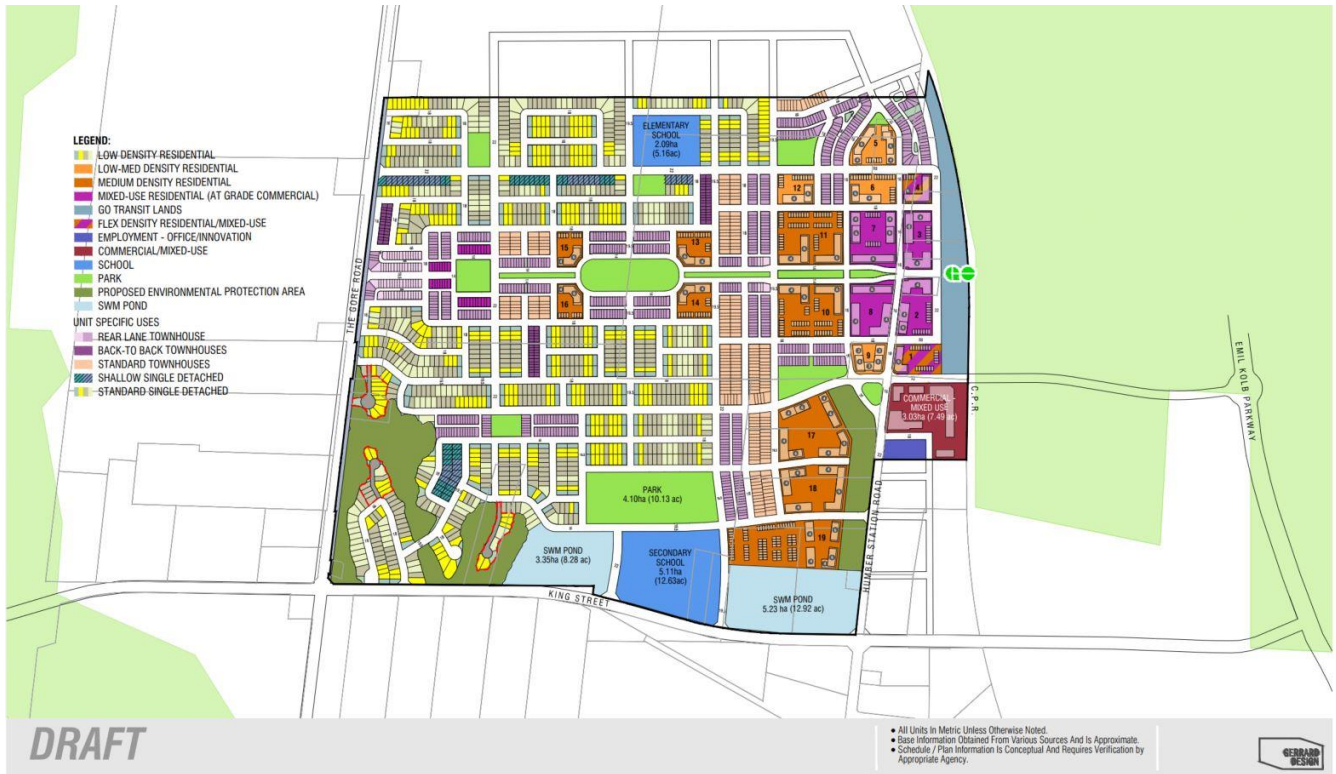
The eastern portion of the Macville Community lands, consisting of lands on both sides of Humber Station Road, north of King Street, have been the subject of Regional Official Plan Amendment 30 (ROPA 30) which was recently approved by LPAT and succeeds in bringing these lands into the Bolton Rural Service Centre Settlement Area Boundary. Accordingly, the eastern portion of these lands are designated “Urban Area” in the Region of Peel Official Plan.

The western portion of the Macville Community lands, consisting of lands north of King Street and east of The Gore Road are currently designated “Rural Area” within the Region of Peel’s Rural System in the Region of Peel Official Plan and “Prime Agricultural Area” in the Town of Caledon’s Official Plan. It is recognized that the western portion of the Macville Community lands are currently proposed to be brought into the Bolton Rural Service Centre Settlement Area Boundary through the Region’s 2051 Municipal Comprehensive Review.

This development proposal and land use planning process dates back to 2012, when the Town of Caledon identified a need to determine where additional and future population growth in the Bolton area could be accommodated. The subject lands are known as “Option 3” in the ongoing Bolton Residential Expansion Study (BRES). Option 3 was the preferred option by the Town in terms of accommodating the identified urban expansion.

Figure 3-1 illustrates the preliminary framework plan for Macville Community.

**Figure 3-1: Preliminary Framework Plan, Macville Community**



SOURCE: Bolton Option 3 Landowners Group. Preliminary Framework Plan dated: January 12, 2021.

## Housing Units

In total, the Macville project will contain 6,871 residential units once completed. As shown in Figure 3-2, 18% (1,244 units) are single family homes, 21% (1,436 units) are towns, and 61% (4,191 units) are apartment units. The project's detailed development statistics have been included in Appendix B.

**Figure 3-2: Macville Community, Residential Program**

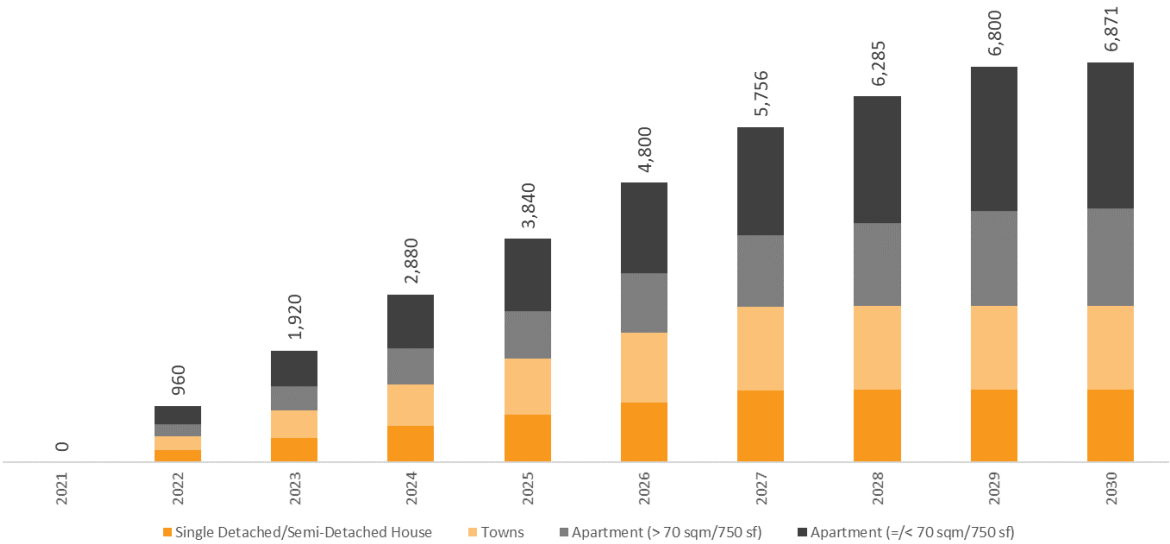
	Total Units
Singles (Low Density)	1,244
Towns (Medium Density)	1,436
Apartment (High Density)	4,191
<b>Total Housing Units</b>	<b>6,871</b>

SOURCE: urbanMetrics inc.

The Terms of Reference for this Study requires a development phasing timeline for the proposed project. However, as Macville Community is still in the early stages of development, the Bolton Option 3 Landowners Group has not identified a detailed timeline for development. Therefore, for the purposes of completing this Study, we have assumed a year-by-year phasing plan for the Macville project to better understand when related revenues and costs would be incurred.

When determined the project’s phasing plan, we reviewed historical absorption rates reported by the Canada Mortgage Housing Corporation (CMHC) for the Town of Caledon between 2014 and 2019. Throughout this period, the Town of Caledon absorbed 2,144 single-detached units and 917 townhouse units. This gradual historic growth is partially due to a series of local development appeals, which in turn limited development approvals by the Town of Caledon. It is our understanding that there is significant pent-up demand for additional housing units in the Town of Caledon, and that the project will develop at an average of 625 units per year until completion in 2030. Our development phasing by year is detailed in Figure 3-3.

**Figure 3-3: Macville Community, Cumulative Housing Units**



SOURCE: urbanMetrics inc.

NOTE: Large apartments are those > 70 sqm/750 sf. Small apartments are those ≤ 70 sqm/750 sf. We have assumed that 40% of the total units in the Macville project will be large units, and 60% will be small units.

Relative to the rest of Caledon, this development promotes a greater intensification of lands by integrating residential development of varying densities. The distinct concentration and integration of apartment units on the site, will help diversify and increase the Town’s existing housing supply.

## Potential Population

Figure 3-4 details how population estimates for Macville Community were calculated. As shown, we have relied on the person per unit (PPU) factors by dwelling type prepared by Hemson Consulting for the Region of Peel. As shown, the total 6,871 residential units of various densities being proposed on the subject site, amount to an estimated population of 17,017 persons.

**Figure 3-4: Population and Household Summary**

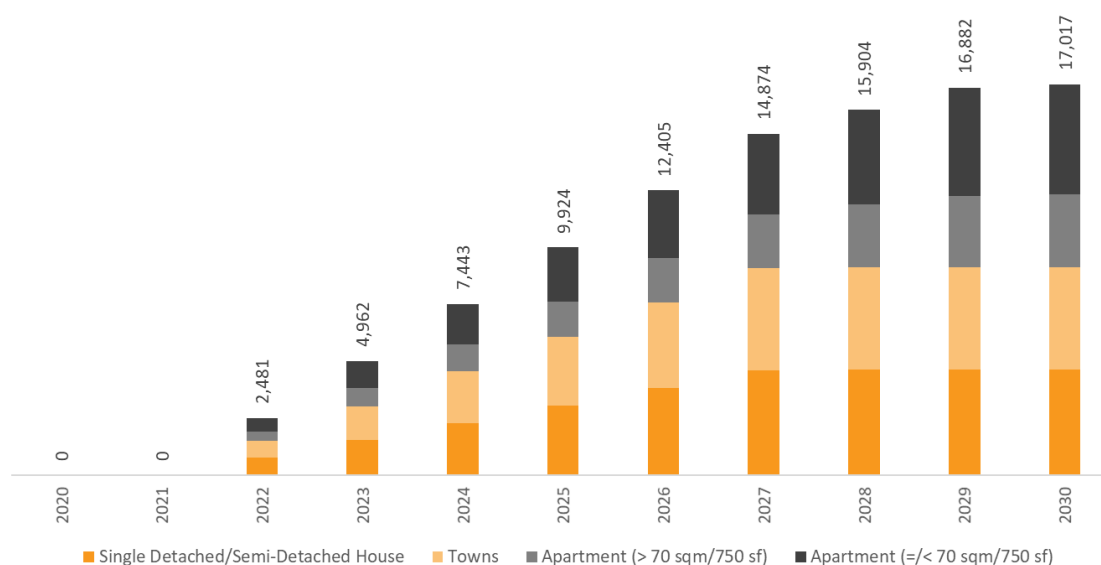
	Total Housing Units	Person Per Unit (PPU) <sup>1</sup>	Population
Singles (Low Density)	1,244	3.7	4,603
Towns (Medium Density)	1,436	3.1	4,452
Apartment (High Density)	4,191	1.9	7,963
<b>Total</b>	<b>6,871</b>		<b>17,017</b>

SOURCE: urbanMetrics inc.

<sup>1</sup> Person Per Unit (PPU) values were prepared by Hemson Consulting for the Region of Peel.

The forecast population for Macville Community is anticipated grow alongside the anticipated development phasing for the project, detailed in Figure 3-3. Figure 3-5 shows that the total 17,017 persons included in the population for the subject site, will be accrued by 2030.

**Figure 3-5: Forecast Population by Year, Cumulative**



SOURCE: urbanMetrics inc., based on Person Per Unit (PPU) values prepared by Hemson Consulting for the Region of Peel.

# Potential Employment

Macville Community is expected to accommodate some 300 commercial and institutional employment jobs. Commercial uses, or an estimated 7,575 square metres of gross floor area, are expected to accommodate some 150 of these employees, while the remaining 150 employees are expected to be accommodated within the elementary school and the secondary school. We would note that this only accounts for the employment accommodated in commercial and institutional development projects.

The on-site employment estimations for the Macville Community are based on the following assumptions.

- Average Floor Space Per Worker for Commercial Related Uses: 550 sq. ft (51.1 sq. m) per employee
- Average Number of Elementary School Employees: 40 per school
- Average Number of Secondary School Employees: 110 per school

Additionally, as reported in the 2016 Census, 2,960 persons worked from home in the Town of Caledon. This translates to 4.5% of the Town’s population. **Based on this assumption, we estimate that some 760 residents of Macville will work from home.** However, this is likely to increase due to the COVID-19 pandemic and its direct impacts on work and commuting patterns.

Figure 3-6 summarizes non-residential development and employment yields for Macville.

**Figure 3-6: Non-Residential Gross Floor Area and Employment Summary**

Sector	Land Area (m <sup>2</sup> )	Coverage Ratio <sup>1</sup>	Gross Floor Area (m <sup>2</sup> )	Square Metres per Employee <sup>2</sup>	Estimated Employees <sup>3</sup>
Commercial - Retail	30,300	25%	7,575	51	150
Institutional - Elementary School	20,900	25%	5,225	-	40
Institutional - Secondary School	51,100	25%	12,775	-	110
Work From Home	-	-	-	-	760
<b>Total Employment</b>					<b>1,060</b>

SOURCE: urbanMetrics inc.

<sup>1</sup> Based on existing school precedents identified through CoStar Realty data.

<sup>2</sup> Average floor space per worker assumption based on 2019 Town of Caledon DCBS for commercial/population-related employment (550 sq. ft. per employee).

<sup>3</sup> Excludes Works from Home and No Fixed Place of Work (NFPOW) jobs. School employee estimates are based on urbanMetrics experience and additional research.

Actual employment generated within the Secondary Plan area will be higher than the above on-site job estimation. We anticipate there will be additional employment related to persons working from home and persons with no fixed place of work who would be assigned to the community for statistical purposes.

## 4.0 One-Time Revenues

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The purpose of this analysis is to determine how the Town of Caledon and Region of Peel will be affected by the capital infrastructure required to support the development of Macville, both directly and indirectly. To quantify this impact, we have calculated the revenue that would accrue to the Town and the Region, which includes the value of:

- Development Charges;
- Other one-time fees such as building permits and planning applications that will be collected by the municipality and the region.

We have also examined the capital infrastructure costs that are either directly or indirectly associated with supporting new residents in the study area. This includes capital infrastructure projects that are financed through development charges; such as roads and related infrastructure, water and wastewater infrastructure, protection services, and recreation and parks facilities, among others.

## 4.1 Development Charges

Development charges are used by municipalities and regions as a source of revenue to recover growth-related capital costs for infrastructure. The development charge rates applied in this study, were effective as of August 1, 2020 for the Town of Caledon and January 22, 2021 for the Region of Peel. It is recognized that the ultimate development charges applied to the development of the Macville Community will change based on the development charges background studies and by-laws that are applicable at the time of construction.

It is also important to note that the specific capital costs required to support the Macville Community had not been incorporated into the development charge, although certain service costs estimated for the Bolton Residential Expansion project were included as “placeholders” until more detailed plans and costing was available.

*Bill 108, More Homes, More Choices Act*, outlines changes to how development charges are calculated. This includes the introduction of a Community Benefits Charge (“CBC”) to replace former Section 37 of the Planning Act. The Community Benefits Charge can be used to fund some services previously included in a Development Charges By-law. As per the Regulation 509/20 passed in September 2020, municipalities must prepare a Community Benefits Strategy, which among other items identifies the services that will be included in the Community Benefits Charge. Services funded by the Community Benefits Charge cannot also be funded through development charges. The maximum rate of a CBC would amount to 4% of the land value of a development property. Municipalities will likely determine how services would be funded based on an examination of the restrictions and opportunities available from both the CBC and development charges.

Municipalities must transition to the Community Benefits Charge between January 1, 2020 and January 1, 2021.

As the neither the Town of Caledon nor Peel Region has prepared a Community Benefits Strategy to date, it is not known how future services will be funded. For the purposes of this analysis we have relied on the current development charge rates for all services currently funded by the respective development charges by-laws. We recognize that some additional revenues could be available from the Community Benefits Charge in the future for services that are not currently funded through development charges. For this reason, the development charge revenue accounted for in our analysis may under-estimate the full revenues that may be collected for services in the future.

As shown in Figure 4-1, Macville will generate over \$447.7 million in development charge revenue. Approximately 68% of this development charge revenue is payable to the Region of Peel, while the remaining 32% is payable to the Town of Caledon. These development charges will go towards funding capital infrastructure required to support population and employment growth, including parks and recreation, roads and related infrastructure, and municipal services, among others.

**Figure 4-1: Total Development Charge Revenue, Town of Caledon and Region of Peel**

	Total Development Charge Revenues
Potential Revenue: Town of Caledon <sup>1</sup>	\$144,047,000
Potential Revenue: Region of Peel <sup>2</sup>	\$303,619,000
<b>Total Potential Revenue</b>	<b>\$447,666,000</b>

SOURCE: urbanMetrics inc.

Rounded to the nearest \$1,000.

<sup>1</sup> Based on Town of Caledon Bylaw No. 2019-31, inflated for August 2020.

<sup>2</sup> Based on Region of Peel Bylaw No. 77-2020, effective January 22, 2021

## Region of Peel

In Peel Region, development charges are used to fund capital infrastructure for the following service areas:

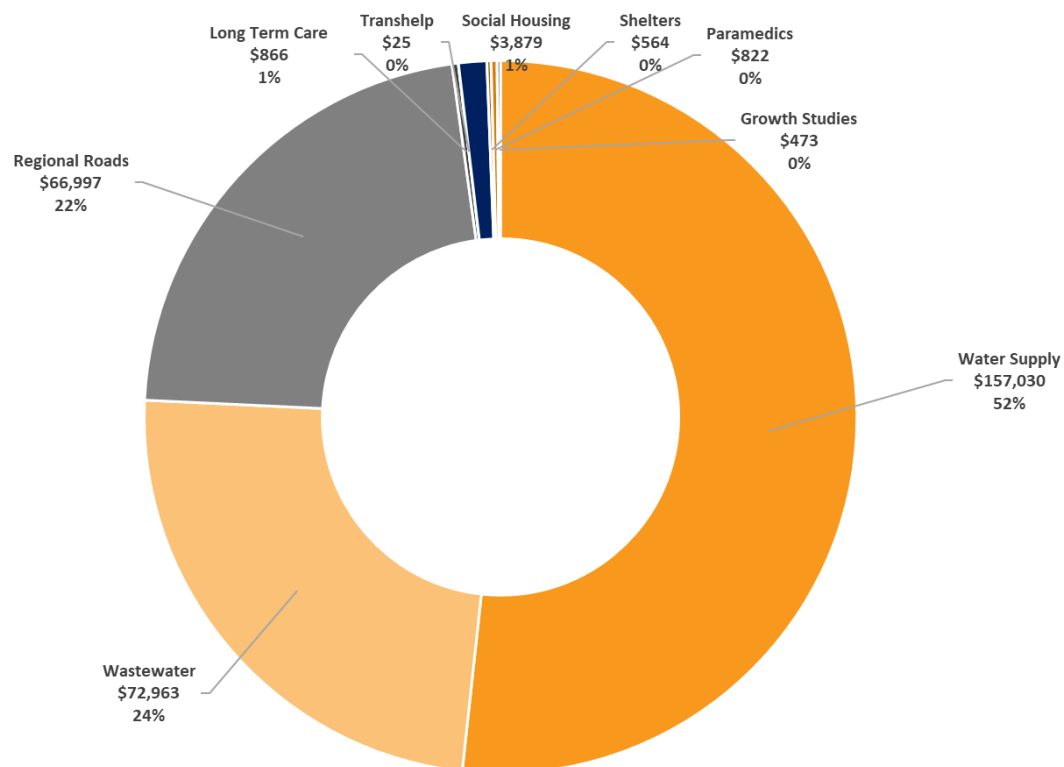
- Water Supply Services;
- Wastewater Services;
- Regional Roads;
- Long-Term Care;
- Transhelp;
- Social Housing;

- Shelters;
- Paramedics; and,
- Growth Studies.

As shown in the above Figure 4-1, this project will generate approximately \$303.6 million in development charge revenue for the Region of Peel at full build-out.<sup>1</sup> The distribution of these revenues are highlighted in Figure 4-2.

The detailed calculations and analysis that demonstrates when development charges are expected to accrue for the Region, and in what service area, has been included as Appendix C.

**Figure 4-2: Peel Region Development Charge Revenue by Service Area (\$000s)**



SOURCE: urbanMetrics inc., estimates based on Peel Region Bylaw No. 77-2020.

NOTE: Assumes 60% of apartments are > 70 sq. m/750 sq. ft, 40% are =< 70 sq. m/750 sq. ft.

<sup>1</sup> Assumes 2% annual inflation rate.

## Town of Caledon

For the purposes of this analysis, we have examined development charges collected from the Macville Community for each service area in the Town of Caledon, in comparison to the capital infrastructure that is directly and indirectly supporting population growth throughout Macville. In the Town of Caledon, development charges are used to fund capital infrastructure for the following services:

- Services Related to a Highway;
- Operations;
- Fire Protection Services;
- Parkland and Trail Development;
- Indoor Recreation Facilities;
- Library Services;
- Development Related Studies;
- Animal Control;
- Provincial Offences;
- Education; and,
- GO Transit

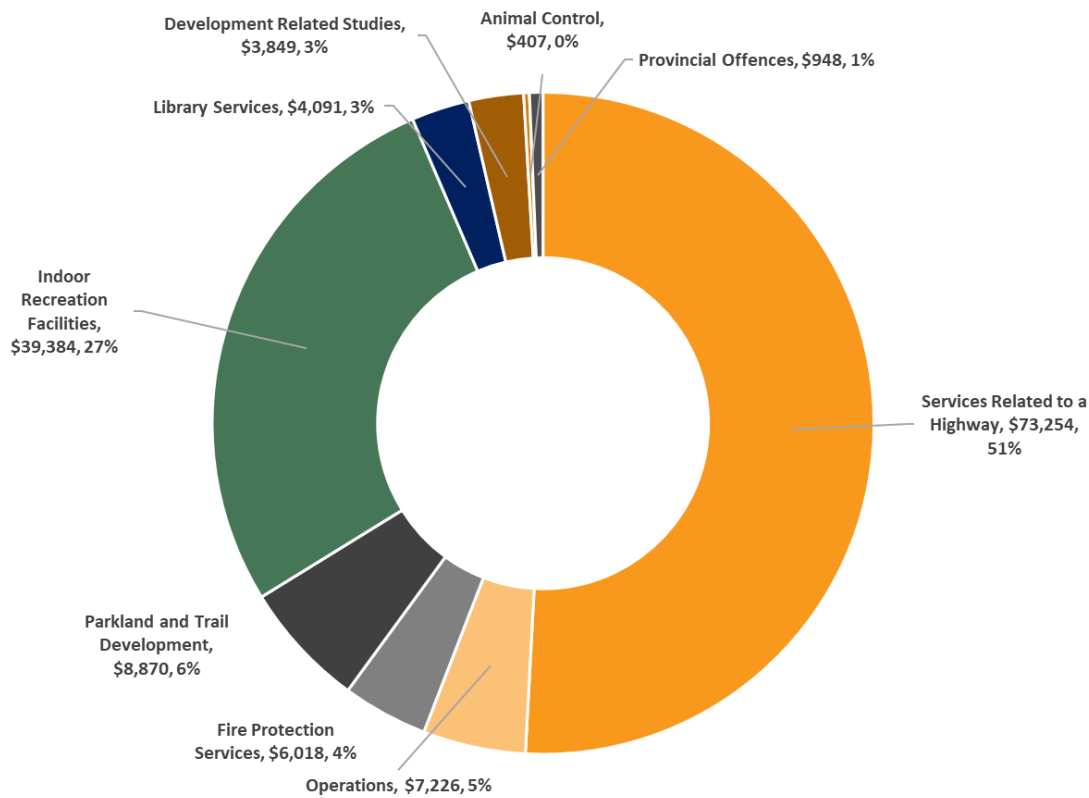
Based on development charge rates effective August 1, 2020, this project will generate some \$144.0 million in development charge revenue for the Town of Caledon at full build-out.<sup>2</sup> The anticipated distribution of these revenues is highlighted in Figure 4-3.

The detailed calculations and analysis that demonstrates when development charges are expected to accrue for the Region, and in what service area, has been included as Appendix C.

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<sup>2</sup> Assumes 2% annual inflation rate.

**Figure 4-3: Town of Caledon Development Charge Revenue by Service Area (\$000s)**



SOURCE: urbanMetrics inc., estimates based on Caledon Bylaw No. 2019-31, updated for indexing in August, 2020.

NOTE: Assumes 60% of apartments are > 70 sq. m/750 sq. ft, 40% are ≤ 70 sq. m/750 sq. ft.

## 4.2 Additional Fees and Charges

Macville Community will generate additional one-time revenues for the Town of Caledon, by way of building permits and planning application fees. We have identified and evaluated the development permitting fees that are collected by the Town. These fees help to recover costs incurred by the municipality in addition to staff costs related to processing the rezoning applications, occupancy permits, development permits, and other related permissions.

### Building Permits

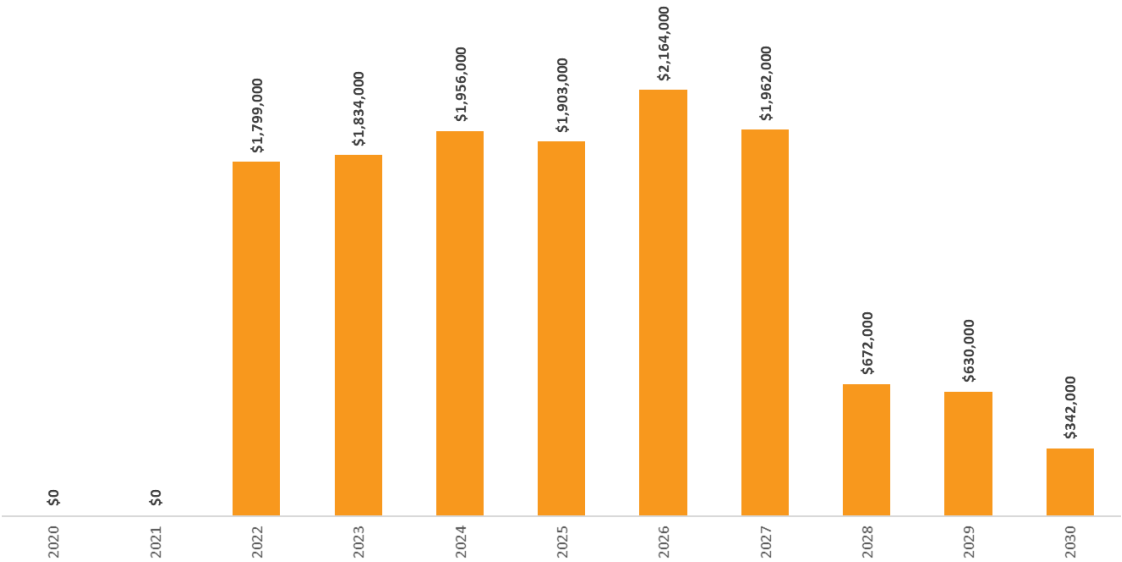
In addition to development charges, the proposed Secondary Plan will generate significant one-time revenues to the Town of Caledon by way of building permit fees. In particular, we have identified and

evaluated the development permitting fees that are collected by the Town to recover staff costs related to development permit, building permit, and other related permits.

Building permits are an important one-time source of revenue for municipalities such as the Town of Caledon. Based on the Town of Caledon User Fees effective January 28, 2020 we have estimated building permit fees payable for the proposed residential, schools and retail uses.

As shown in Figure 4-4, we estimate that the proposed construction of Macville Community will generate over \$13,262,000 in total building permit revenue for the Town at full build-out. More detailed calculations and information has been included as Appendix C. We would note that the timing of development reflects our estimates of when units will be required to support additional population growth. It is recognized that towards the end of the period, building permit revenues will likely be more variable than shown in Figure 4-4 due to the fact that building permit revenues would be derived in large tranches coinciding with when high-density buildings are constructed.

**Figure 4-4: Summary of Potential Building Permit Revenue, Macville Community**



SOURCE: urbanMetrics inc., based on the Town of Caledon Building Permit Fees (Bylaw No. 2019-78).  
Rounded to the nearest \$1,000.

### Planning and Development Fees

Planning and development application fees are based on the 2020 rates published by the Town of Caledon and Region of Peel. These fees have been estimated by urbanMetrics based on our

assumptions with regards to the planning approvals required for each project. Based on our understanding, the relevant Planning and Development Application Fees include:

- Official Plan Amendments
- Zoning By-law Amendments;
- Plan of Subdivision for Residential; and,
- Condominium Approvals.

As indicated in Figure 4-5 and Figure 4-6, the total planning and development application fees generated by the development of the proposed project are estimated at over \$2.7 million for the Town of Caledon and over \$250,000 for the Region of Peel.

We note that this estimate is a high-level assessment and likely under represents the actual value of fees paid during the build-out of the project. Additionally, we have not assumed when the pertinent planning fees would be payable on a year-by-year basis. Our analysis excludes fees relating to administration, development agreements, registration, engineering, site alterations, and revisions to the Official Plan Amendments, Zoning Bylaw Amendments, Site Plan Amendments, and Subdivision Amendments. Further, our analysis excludes the considerable and mandatory fees payable to relevant agencies outside of the Region and Town, including Conservation Authorities.

**Figure 4-5: Estimated Planning and Development Application Fees, Town of Caledon**

	2020 Base Fee	Fee per Unit	Number of Applications	Total
Major Official Plan Amendment	\$32,916	-	1	<b>\$32,900</b>
Major Zoning Amendment Application	\$17,429	-	8	<b>\$139,400</b>
Plan of Subdivision (Residential)	\$29,999	\$619	8	<b>\$1,898,900</b>
Plan of Condominium Application <sup>1</sup>	\$21,902	\$51	19	<b>\$629,900</b>
<b>Total Planning Fees</b>			<b>36</b>	<b>\$2,701,100</b>

SOURCE: urbanMetrics inc. based on the Town of Caledon Bylaw No. 2019-78 (2020 Fees and Charges).

<sup>1</sup> Assumed one Plan of Condominium Application for each Mixed Use and Medium/High-Density Block.

**Figure 4-6: Estimated Planning and Development Application Fees, Region of Peel**

	2020 Base Fee	Number of Applications	Total
Review of Area Municipal Plan Amendments	\$12,000	1	<b>\$12,000</b>
Plan of Subdivision	\$20,000	8	<b>\$160,000</b>
Major Site Plan Application	\$1,000	8	<b>\$8,000</b>
Plan of Condominium <sup>1</sup>	\$3,000	19	<b>\$57,000</b>
Agreement Review and Execution	\$2,000	8	<b>\$16,000</b>
<b>Total Planning Fees</b>		<b>44</b>	<b>\$253,000</b>

SOURCE: urbanMetrics inc. based on the Region of Peel Bylaw No. 2019-67 (2020 Fees).

<sup>1</sup> Assumed one Plan of Condominium Application for each Mixed Use and High/Medium-Density Block.

## 4.3 Summary

Based on our analysis, we estimate that the total one-time revenues generated by Macville will amount to \$303.9 million for the Region of Peel and \$160.0 million for the Town of Caledon (2020 dollars). As shown in Figure 4-7, the majority of this revenue is related to residential and non-residential development charges that will fund growth-related capital infrastructure.

**Figure 4-7: Summary of Regional and Municipal One Time Revenues**

	Region of Peel	Town of Caledon
Development Charges	\$303,619,000	\$144,047,000
Building Permit Fees	\$0	\$13,262,000
Planning and Development Application Fees	\$253,000	\$2,701,100
<b>Total One Time Revenues</b>	<b>\$303,872,000</b>	<b>\$160,010,100</b>

SOURCE: urbanMetrics inc.

Rounded to the nearest \$1,000.

Of note, in the 2020 COVID-19 Financial Update presentation (April 2020), the Town of Caledon's Chief Financial Officer indicated that the COVID-19 global pandemic is anticipated to have a severe impact on the Town's municipal finance, as there are expected decreases in projected revenues related to development charges, planning applications, building permit fees, and recreation user fees, among others. The development of Macville will generate a substantial amount of one-time and on-going revenues for the Town of Caledon and Region of Peel, providing each jurisdiction with new available monies to fund growth-related capital infrastructure and potentially reduce revenue shortfalls.



## 5.0 Ongoing Operational Impacts

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Macville will generate on-going operating revenue for the Town of Caledon and Region of Peel, namely through property taxes, and non-tax revenue sources such as user fees, and fines. The following section calculates revenues from each of these sources based on the residential and non-residential floor space that has been included in the proposed development concept. Further, this section summarizes the operating costs associated with anticipated population growth (i.e. residential and employment) that would be supported on the proposed development. These ongoing revenues and costs will be important in understanding the net operating impact of the development on the Town and Region.

Current assessed values were obtained from various resources including the Municipal Property Assessment Corporation (MPAC), and CoStar, and were based on comparable development in the vicinity of the Macville Community. Future property taxes have been calculated based on an application of 2020 Property Tax Rates by class for the Town and Region.

## 5.1 Assessed Value and Property Taxes

In this Study, we have calculated the property tax revenue for Macville. The property tax revenue is based on the Region of Peel and Town of Caledon 2020 property tax rates and the estimated 2020 assessed values for residential and commercial properties by unit type, in the vicinity of the project lands.

Figure 5-1 summarizes the current assessed value per square metre for each property type proposed in Macville, with a detailed list of comparable properties in Appendix D. The assessed values for each property type are based on assessed values for newly constructed residential and commercial properties in the vicinity of the project lands. To the extent possible, we have utilized estimates from new construction in the community of Bolton; however, we have also supplemented this information with other precedents throughout the Town of Caledon and the City of Brampton to ensure the assessed values utilized in this study accurately reflect what would be built on the subject lands.

**Figure 5-1: Summary of Average Assessed Value Per Square Metre by Property Type (2020)**

Property Type	Assessed Value	Assessed Value Per Square Metre
Single/Semi-Detached	\$706,000	\$2,360
Townhomes	\$455,000	\$2,810
Apartment (> 70 sqm/750 sf)	\$425,000	\$4,970
Apartment (≤/ < 70 sqm/750 sf)	\$312,000	\$4,640
Commercial	-	\$1,350

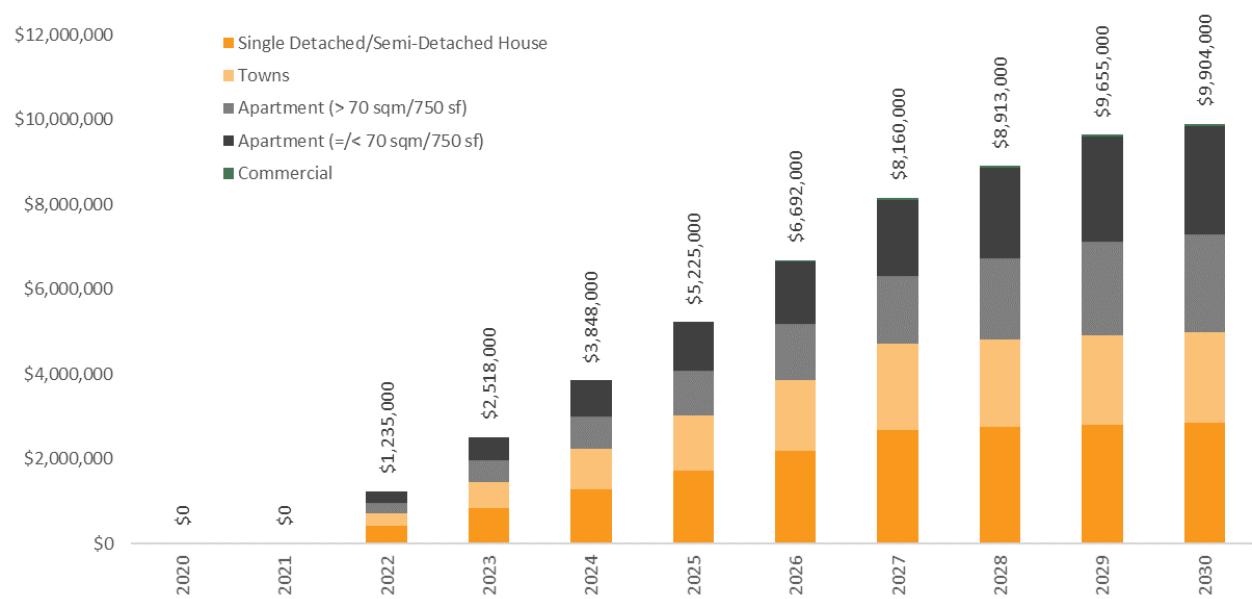
SOURCE: urbanMetrics inc., based on a variety of sources.

The assessed value for residential units has been rounded to the nearest \$1,000.

For illustrative purposes, we have detailed the property tax revenue estimates for the Region and Town, in five-year increments. The property tax revenues calculated assume 2020 property tax rates with no escalation, aside from increases in the future assessed values of dwellings. However, we note that if property tax rates for the Town or Region were to increase, it would increase the property tax revenue received by both geographies.

Figure 5-2 outlines the estimated the annual property tax revenue that would be payable to the Region of Peel. By full build-out, in 2030, Macville is estimated to generate \$9.9 million in annual property taxes from all residential types and commercial units for the Region of Peel. This represents an increase to Regional tax revenues collected from Caledon of some 19% compared to 2019.

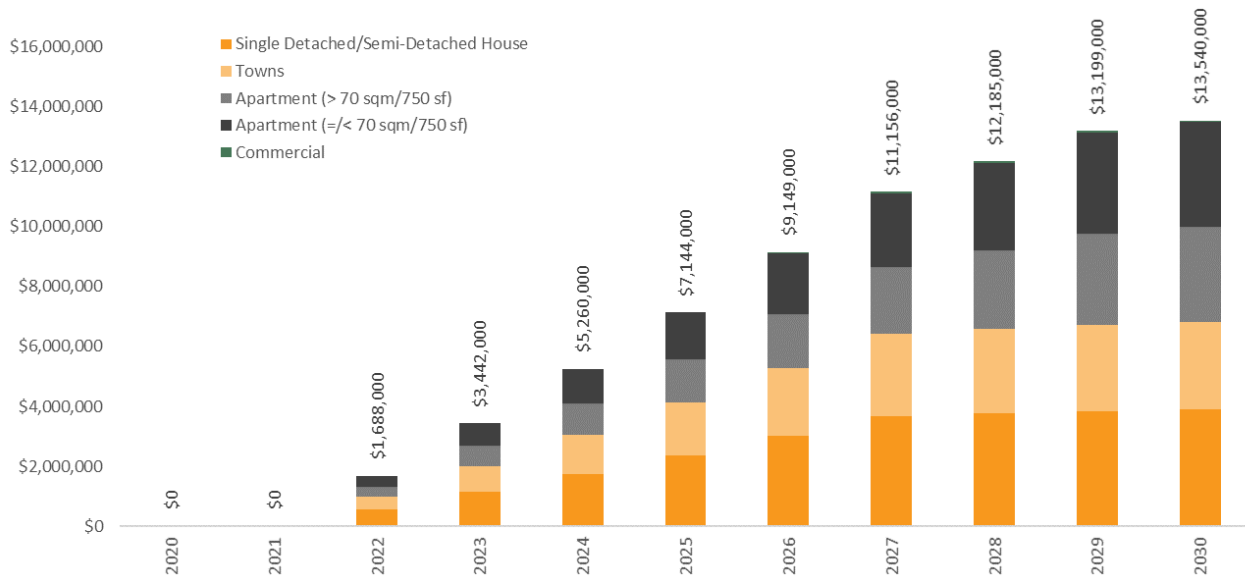
**Figure 5-2: Summary of Total Property Tax Revenues, Region of Peel**



SOURCE: urbanMetrics inc.  
Rounded to the nearest \$1,000.

By comparison, as shown in Figure 5-3 5-3, the project will generate \$13.5 million in property tax revenue for the Town of Caledon in 2030, representing a 19% increase over 2019 taxation revenues. More detailed property tax tables can be found in Appendix D.

**Figure 5-3: Summary of Total Property Tax Revenues, Town of Caledon**



SOURCE: urbanMetrics inc.  
Rounded to the nearest \$1,000.

## 5.2 Non-Property Tax Revenue

### Per Resident and Per Employee Revenue

Beyond property taxes, other sources can generate revenue for municipalities and regions. These sources of non-tax revenues include user fees, fines, charges, penalties on interest and earnings on investments. They can be accrued by the Town of Caledon and the Region of Peel. We have calculated these non-tax revenues based on the most recent 2019 Financial Information Return (FIR) filed by the by the Town of Caledon and the Region of Peel with the Ministry of Municipal Affairs and Housing.

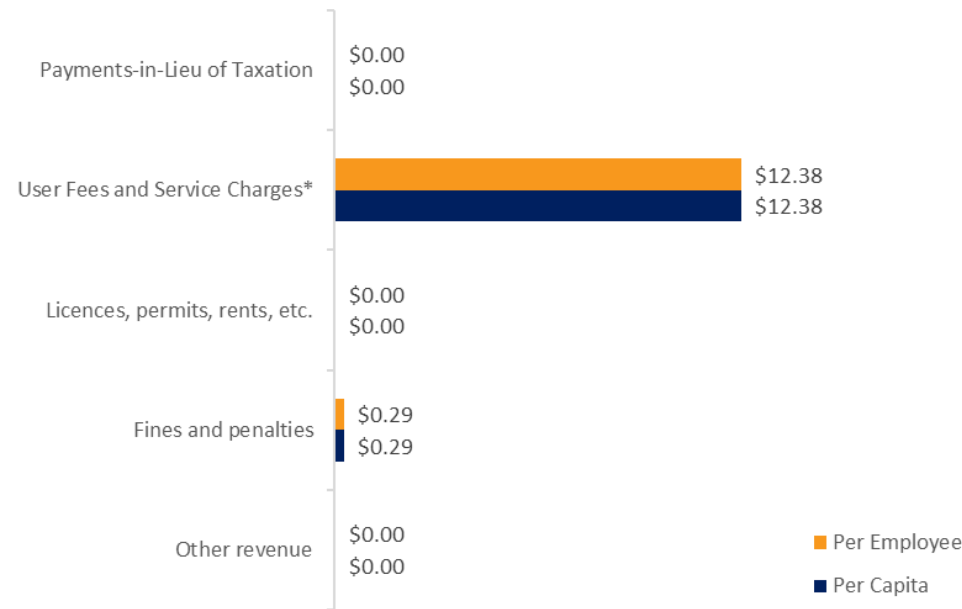
These non-tax revenues are summarized by category (i.e. grants, payments in lieu of taxes, fines, penalties, etc.) in Figure 5-4 and Figure 5-5. For the proportion of non-tax revenue that would increase overtime based on residential and non-residential growth, we have made assumptions to calculate growth-related non-tax revenue.

We have examined user fees and service charges by service area. For general government, protection, transportation, health services, social and family services, environmental services, planning and development, and recreation and culture, we have assumed that new residents in Macville will generate the same user fees per capita as existing residents in the Town and the Region. For the “Other Revenue” sub-category, we have only included a portion of revenues, those which have been

assumed to relate to population and employment growth. The residential and non-residential share, as well as the growth share for each service area are summarized in Appendix E.

As shown in Figure 5-4, the non-tax revenue per person and employee has been estimated at \$12.67 in 2020 for the Region of Peel. We have assumed that non-tax revenue per employee and per capita increases at a rate of 2% per year.

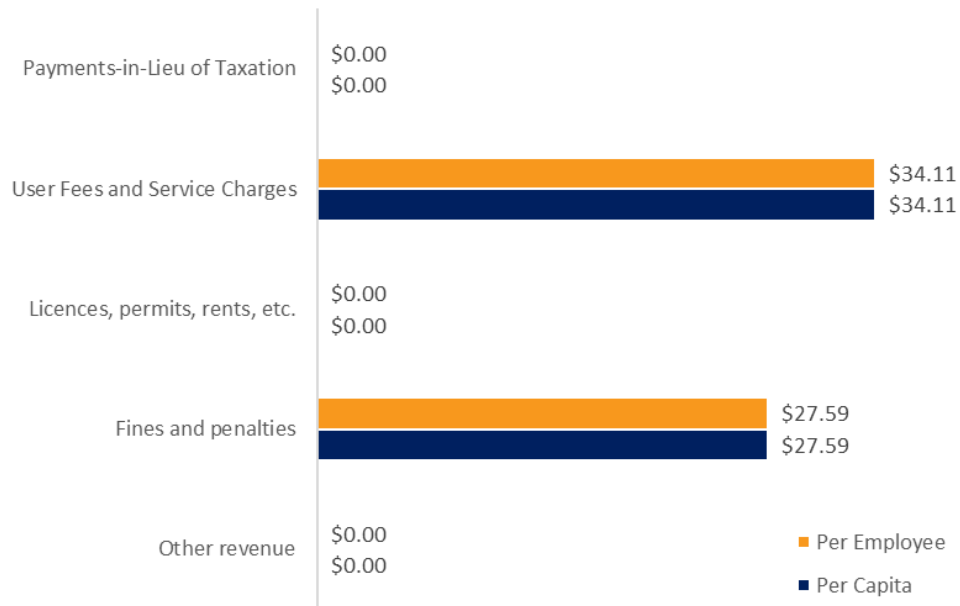
**Figure 5-4: Estimated Annual Non-Tax Revenue, Region of Peel**



\*Excludes water and wastewater user fees as discussed in Section 5.5.  
SOURCE: urbanMetrics inc. based on Region of Peel 2019 Financial Information Return.

Further, as found in Figure 5-5, the non-tax revenue per person and employee has been estimated at \$61.70 in 2020 for the Town of Caledon. We have similarly assumed that non-tax revenue per employee and per capita increases at a rate of 2% per year.

**Figure 5-5: Estimated Annual Non-Tax Revenue, Town of Caledon**



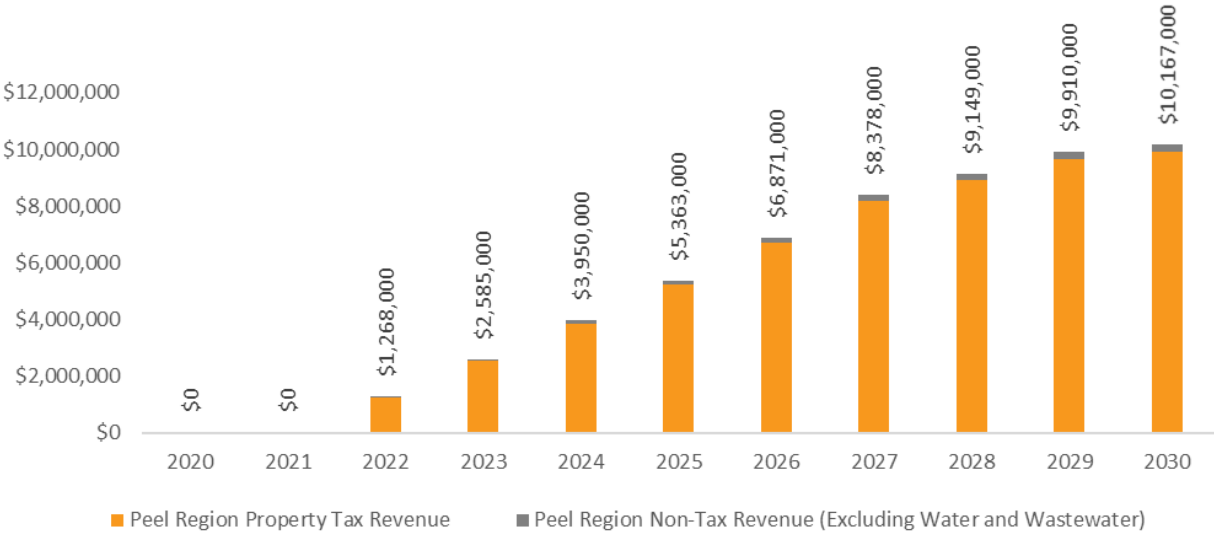
SOURCE: urbanMetrics inc. based on Town of Caledon 2019 Financial Information Return.

# 5.3 Total Ongoing Revenues

Figure 5-6 and Figure 5-7 summarize the annual ongoing revenue that Peel Region and the Town of Caledon can expect to collect for the proposed Macville development.

As shown in Figure 5-6, Macville is expected to generate approximately \$10.2 million in total ongoing revenue, per annum, for the Region of Peel at full build-out in 2030. This revenue excludes water and wastewater charges. It is assumed for the purposes of this study that the rates for these services will be established to effectively match the costs of providing water and wastewater services throughout the region, so that any revenues achieved from Macville would be directly offset by operating and capital costs.

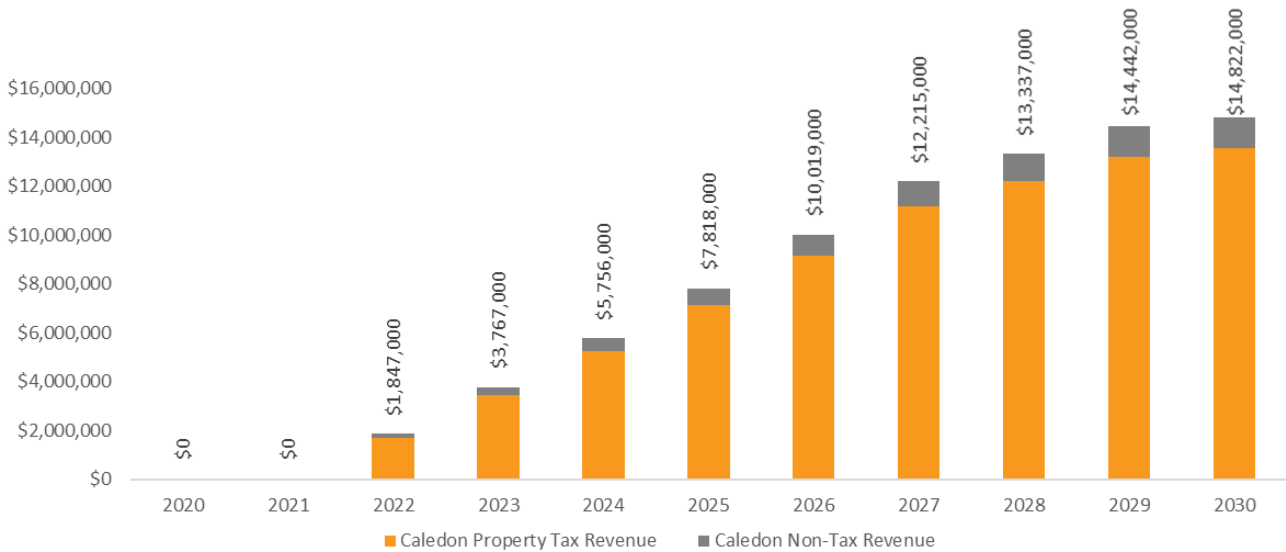
Figure 5-6: Estimated Ongoing Revenue Generated by Macville, Region of Peel



SOURCE: urbanMetrics inc.  
Rounded to the nearest \$1,000.

Figure 5-7 shows that the project is anticipated to generate approximately \$14.8 million in ongoing revenue, per annum, for the Town of Caledon when the project is fully built out in 2030.

**Figure 5-7: Estimated Ongoing Revenue Generated by Macville, Town of Caledon**



SOURCE: urbanMetrics inc.  
Rounded to the nearest \$1,000.

## 5.4 Operating Costs

The Town of Caledon and Region of Peel could incur ongoing operational costs from the Macville development. We have estimated costs from two sources:

- **Regional and Municipal Operational Costs** (i.e., road maintenance, provision of emergency services, community recreation programming, etc.), which have been estimated on a per capita and per employee basis.
- **Incremental Operating Costs** – The annual operating costs associated with new roads, water, wastewater and stormwater, and sidewalk infrastructure that are required on-site to service development.
- **On-Site Lifecycle and Replacement Capital Costs** – Lifecycle costs for the incremental capital assets that are directly related to the proposed development.
- **Off-Site Construction and Replacement Capital Costs** – Lifecycle costs associated with the development and replacement of external infrastructure that will be required to service the lands. This includes water and wastewater connections, as well as regional road improvements.



## Region- and Municipal-Wide Operating Costs

To estimate regional and municipal operating costs we have relied upon the operating expenditures taken from Schedule 40 in the 2019 FIR submitted by the Region of Peel and the 2019 FIR submitted by the Town of Caledon to the Ministry of Municipal Affairs and Housing. Operating expenses listed in Schedule 40 are grouped by the object expenses identified below:

- **Salaries, Wages and Employee Benefits** – includes expenses incurred for full-time, part-time and temporary salaries and wages including regular, overtime, shift premiums and other remuneration to employees.
- **Interest on Long Term Debt** – interest incurred on long-term liabilities and for leased tangible capital assets.
- **Materials** – includes materials purchased by a municipality for its own uses and/or disposal or resale. This also includes expenses for insurance, travel, reimbursement of mileage, photocopying, and materials purchased by the municipality which are subsequently provided to a third party.
- **Contracted Services** – includes expenses incurred when a municipality is responsible for providing services, and contracts out service delivery. This could include services contracted out to a private contractor, another municipality, or another level of government. For example, Peel Region contracts out the OPP to serve the Town of Caledon.
- **Rents and Financial Expenses** – includes rents and financial expenses paid to external parties, including expenses for the rental of building, land, machinery, equipment, and engineering structures.
- **External Transfers** – this category includes transfers to charitable organization, conservation authorities, individuals (i.e. social assistance) and unconsolidated local boards. Amounts billed by the Province for social housing are also reported under this category.
- **Amortization** – includes the annual amortization expenses for tangible capital assets.

For the purpose of this analysis, we have deducted interest on long-term debt and external transfers from total expenditures to arrive at “adjusted” operating expenditures. Debt charges have been removed because these charges are for “sunk” investments and are unaffected by growth. For external transfers, these transfers generally relate to capital expenditures and vary significantly from year-to-year.

The calculated adjusted operating expenditures have then been distributed between the residential and non-residential sectors based on a review of the allocations in the Peel Region 2015 Development Charges Background Study and the 2019 Caledon Development Charges Background

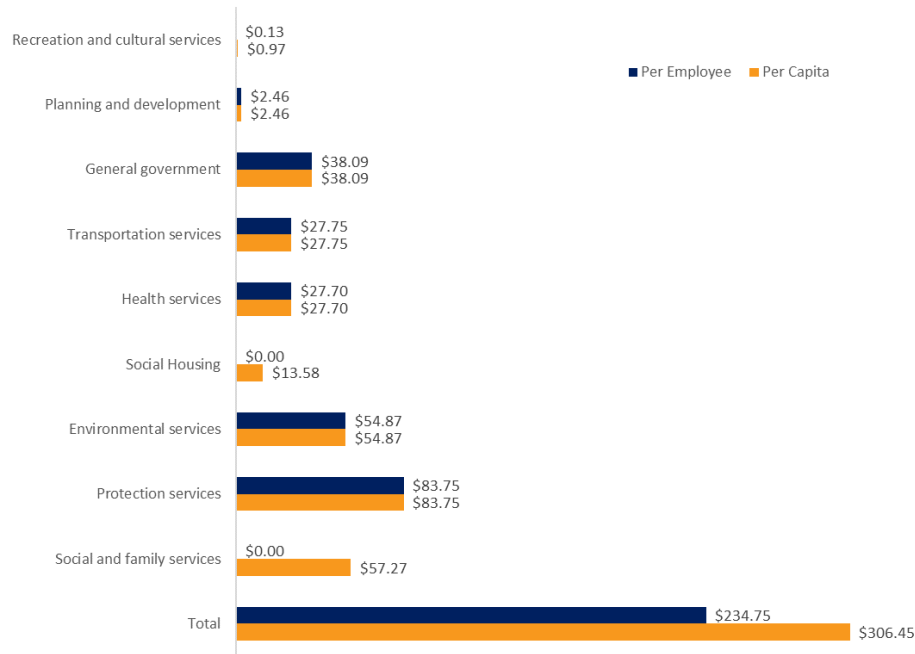
Study, as well as our knowledge of financing arrangements in Caledon and Peel, as well as, urbanMetrics' professional experience.

After allocating adjusted operating expenditures between the residential and non-residential sectors, we have estimated the degree to which adjusted operating expenditures will change with additional growth by applying a "growth related" factor. In some cases, the growth related factor indicates that there would be near proportionate increases in operating costs in comparison to the operating expenditures being incurred by the Town and Region to provide services to existing residents, with a small allowance made for efficiencies and economies of scale. That being said, there are some services such as general government, planning and development and solid waste collection that will likely grow at a slower pace than population growth because there are fixed costs, such as council and senior staff salaries that will not change in direct response to population growth. Some services, however, are more closely correlated with growth, such as waste collection.

**It is important to note that the Region of Peel receives conditional grants to fund a variety of services, including Health Services and Social and Family Services. We have accounted for this grant funding by reducing the estimated growth impact share accordingly. It is also recognized that the funding arrangements for social services with the Province have changed and that the costs paid by the Region will be significantly reduced in the future.**

Figure 5-8 summarizes our operation costs per employee and resident based on the growth-related factors summarized below, the Region of Peel's growth-related annual operating costs amount to \$234.75 per employee, and \$306.45 per capita. We have assumed that non-tax revenue per employee and per capita increases at a rate of 2% per year. Details are provided in Appendix G.

**Figure 5-8: Growth-Related Operating Expenditures, Per Capita and Per Employee, Region of Peel**

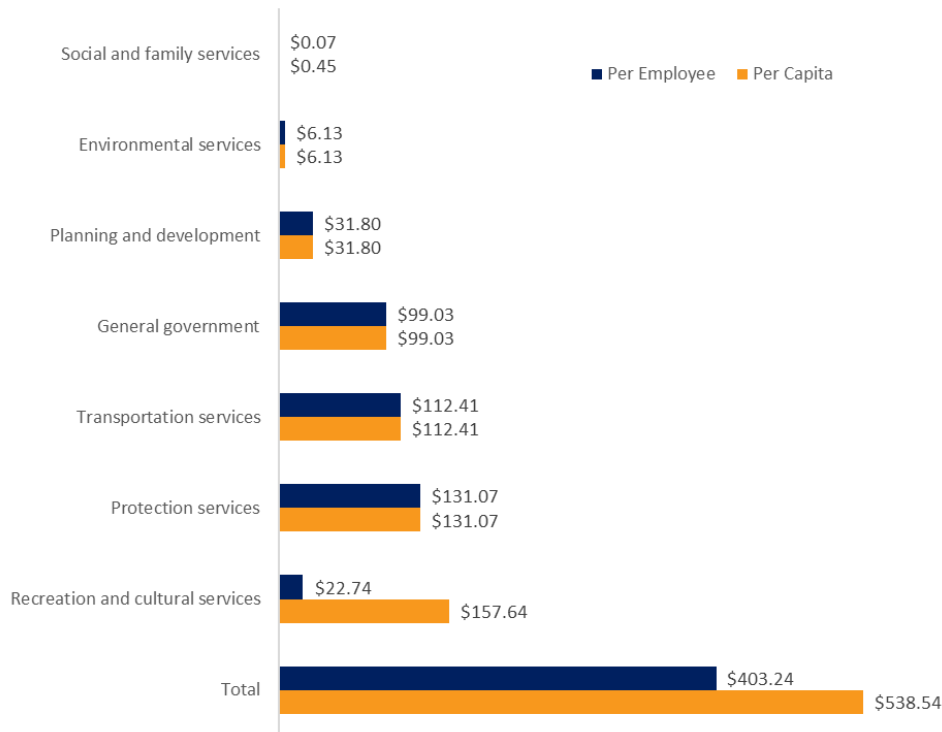


SOURCE: urbanMetrics inc., based on the 2019 Region of Peel Financial Information Return, inflated to the year 2020.

\*Excludes water and wastewater user fees as discussed in Section 5.5.

Figure 5-9 summarizes our operation costs per employee and resident based on the growth-related factors summarized above, the Town of Caledon’s growth-related annual operating costs amount to \$403.24 per employee, and \$538.54 per capita. We have similarly assumed that non-tax revenue per employee and per capita increases at a rate of 2% per year. Details are provided in Appendix G.

**Figure 5-9: Growth-Related Operating Expenditures, Per Capita and Per Employee, Town of Caledon**



SOURCE: urbanMetrics inc., based on the 2019 Town of Caledon Financial Information Return, inflated to the year 2020.

## Incremental Operating Costs for New Site-Specific Infrastructure

Our analysis has taken into consideration the long-term costs of maintaining site-specific infrastructure required to support the development of Macville. This includes infrastructure such as roads, sidewalks, water, wastewater, and stormwater infrastructure.

For the purposes of this analysis, we have relied on estimates prepared by UrbanTech Consulting on July 31, 2020, to calculate the maintenance costs incurred by the Town and the Region for new site-specific infrastructure included within the Macville development. This information provided by UrbanTech can be found in Appendix H.

Figure 5-10 shows the estimated long-term costs for the ongoing maintenance of the infrastructure required to support the development of Macville. The maintenance cost estimates are based the assumption that 5% of the sanitary, storm and watermain lengths will require repair at each 10-year interval; 30% of the road area will require rehabilitation at each 10-year interval; 20% of the sidewalk lengths will require repairs at each 10-year interval; and SWM Ponds facilities will need to be cleaned out at each 10-year interval.

It is our understanding that the initial construction of all on-site infrastructure will be funded by the Bolton Option 3 Landowner’s Group, and thus, these costs have not been considered within this Study.

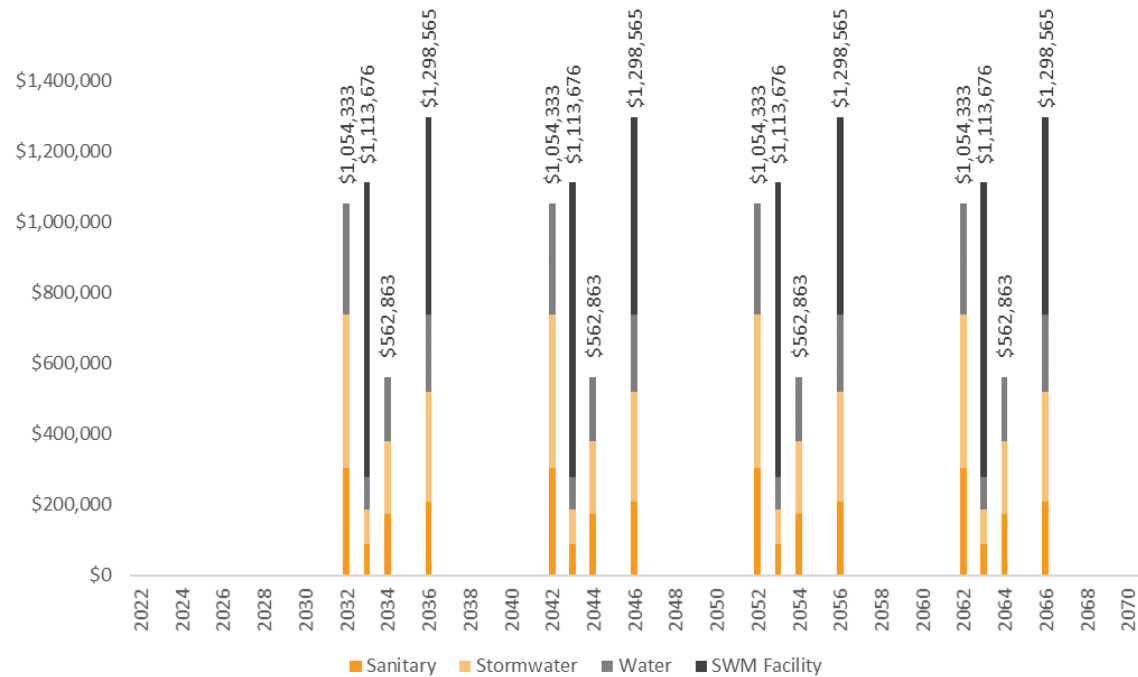
**Figure 5-10: Internal Infrastructure Maintenance Cost Estimates (Per 10-Year Interval)**

Description	Phase 1	Phase 2	Phase 3	Phase 4
Sanitary	\$303,456	\$88,354	\$175,316	\$209,742
Storm	\$436,223	\$99,708	\$205,761	\$311,842
Water	\$314,654	\$91,614	\$181,785	\$217,481
Local Roads	\$1,846,904	\$578,682	\$1,021,898	\$1,231,464
Sidewalks	\$668,946	\$220,324	\$429,742	\$517,788
SWM Facility	-	\$834,000	-	\$559,500

SOURCE: urbanMetrics inc., based on UrbanTech information provided July 31, 2020 and included in Appendix H.

The Region of Peel can expect to assume costs associated with sanitary, stormwater, water and the stormwater facility. As shown in Figure 5-11, this amounts to some \$4.03 million in maintenance fees every 10-years (initiating in year 2032).

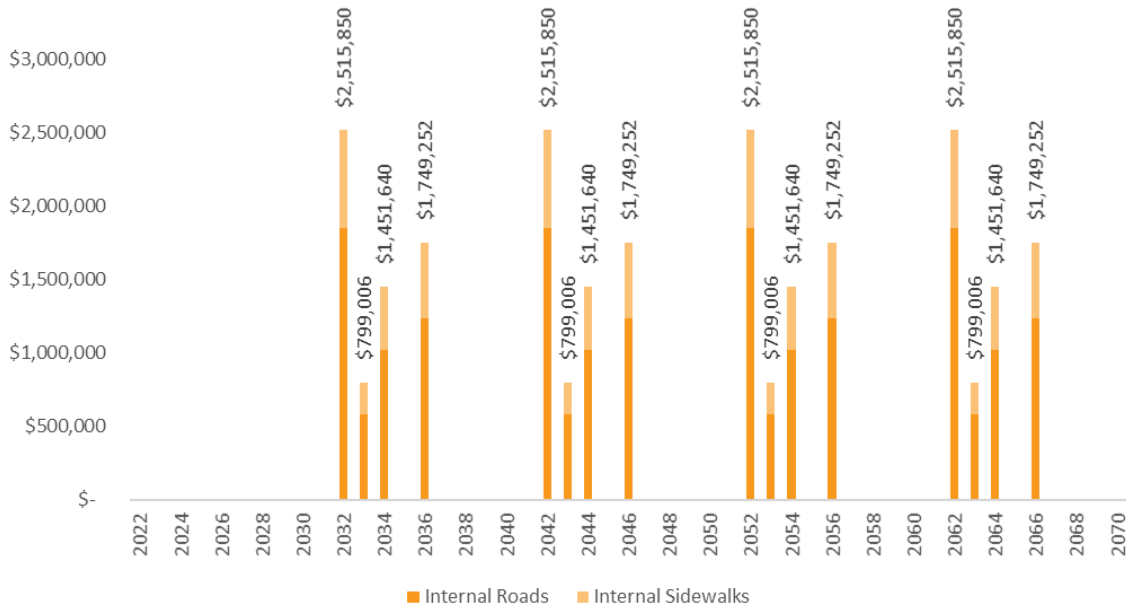
**Figure 5-11: On-Site Infrastructure Operating and Maintenance Costs, Region of Peel**



SOURCE: urbanMetrics inc., based on UrbanTech information provided July 31, 2020 and included in Appendix H.

The Town of Caledon can expect to assume maintenance costs for local roads and sidewalks. As shown in Figure 5-12, this amounts to approximately \$6.5 million in maintenance fees every 10-years (i.e., initiating in year 2032).

**Figure 5-12: On-Site Infrastructure Operating and Maintenance Costs, Town of Caledon**



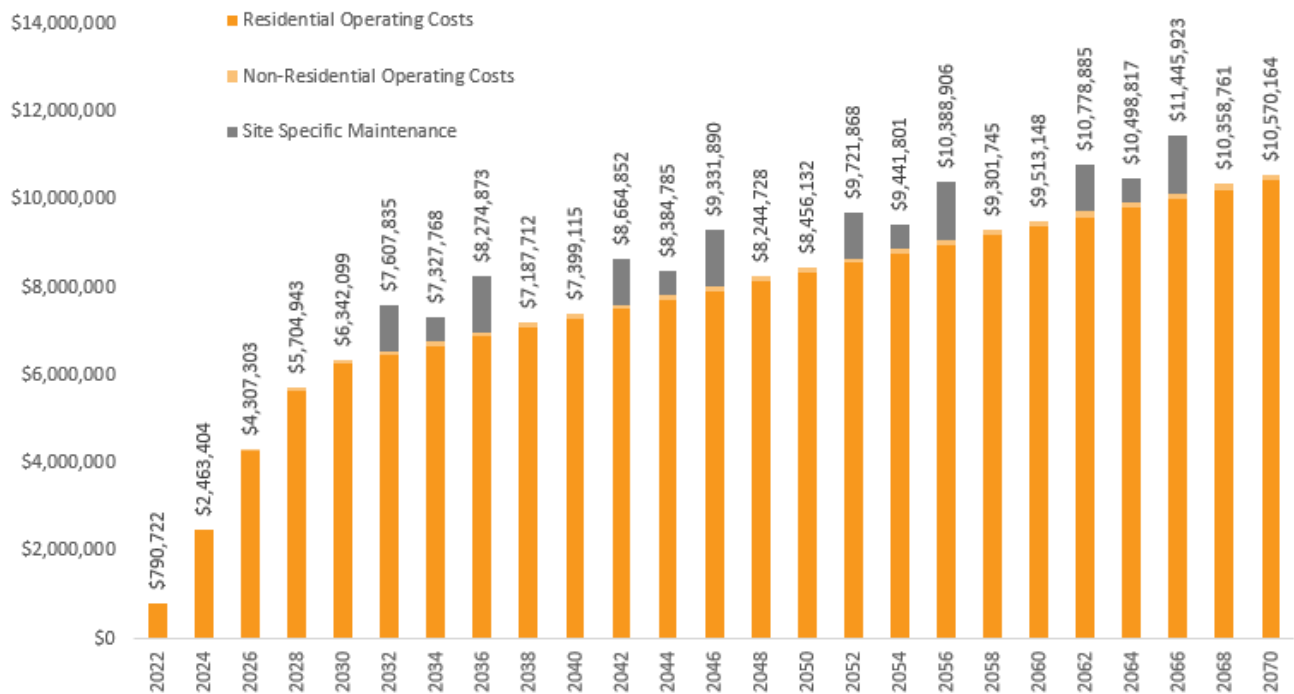
SOURCE: urbanMetrics inc., based on UrbanTech information provided July 31, 2020 and included in Appendix H.

The results of this analysis are included in Figure 5-13, with detailed appendices in Appendix H. As shown, we have separated operating costs incurred by the Region of Peel into two categories:

1. Site specific operating costs for all service areas (municipal-wide per capita and per employee costs);
2. Site specific maintenance, which includes the maintenance costs for sanitary, stormwater, and water.

The operating costs are based on the annual operating costs per capita and per employee, as identified earlier in this report.

**Figure 5-13: Operating Costs Generated by Macville, Region of Peel**



SOURCE: urbanMetrics inc.

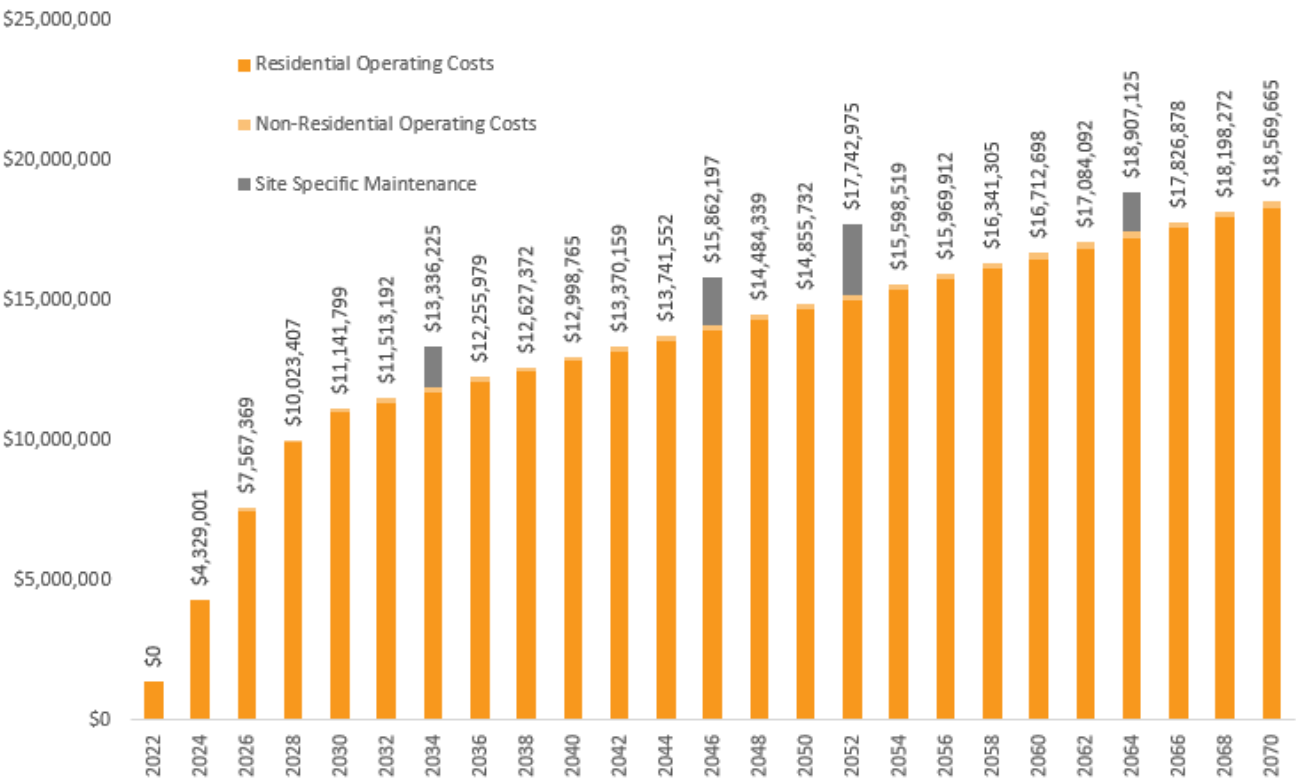
\*Excludes water and wastewater user fees as discussed in Section 5.5.

Figure 5-14 summarizes the anticipated operating costs that could be incurred by the Town of Caledon. Operating costs incurred by the Town of Caledon can be grouped within two categories:

1. Site specific operating costs for all service areas (municipal-wide per capita and per employee costs)
2. Site specific maintenance, which includes the maintenance costs for local roads and sidewalks.

The operating costs are based on the annual operating costs per capita and per employee, as identified earlier in this report.

Figure 5-14: Operating Costs Generated by Macville, Town of Caledon



SOURCE: urbanMetrics inc.

## On-Site Infrastructure Replacement Costs

In addition to annual operating costs associated with new site-specific infrastructure, our analysis also includes lifecycle capital costs to replace the infrastructure at the end of its estimated useful life.

To estimate the replacement costs for the site-specific infrastructure, we relied on the preliminary construction cost estimates and discussions with the project engineer. The total quantity of each site-specific infrastructure was multiplied by its respective unit rate and was inflated by 5% per annum, until the end of its useful life. It is typical for a project like Macville that the replacement costs would be higher than the construction costs. Initial construction will occur in greenfield and generally unconstrained lands that are easier to build on. Conversely, replacement of infrastructure will be carried out within established roadways and neighbourhoods which will include the removal of existing infrastructure, traffic control, trench box and slower production premiums, and granular backfill. The respective unit rates, quantities, and useful life assumptions are included in Appendix I.



Based on the assumed phasing of infrastructure, we have calculated the annual lifecycle replacement costs incurred by the Region of Peel. Figure 5-15 summarizes these costs over a 56-year timeframe to reflect the 50-year estimated useful life for sanitary, stormwater, stormwater management facility and water. Therefore, over this timeframe, all infrastructure operated by the Region of Peel has been replaced at least once.

Figure 5-15: Lifecycle Replacement Costs On-Site Infrastructure, Region of Peel



SOURCE: urbanMetrics inc., based on information provided by UrbanTech Consulting.

Based on the assumed phasing of infrastructure, we have similarly calculated the annual lifecycle replacement costs incurred by the Town of Caledon. This includes replacement costs related to local roads and sidewalks.

Figure 5-16 summarizes these costs over a 56-year timeframe to reflect the 50-year estimated useful life for this infrastructure.

**Figure 5-16: Lifecycle Replacement Costs On-Site Infrastructure, Town of Caledon**



SOURCE: urbanMetrics inc., based on information provided by UrbanTech Consulting.

### External Infrastructure Costs

In order for development to occur on the Option 3 lands, the provision of external infrastructure will be required to service the lands. This includes water and wastewater connections, as well as regional road improvements.

The costs associated with the external infrastructure required to support the development of Macville were prepared by R.J. Burnside & Associates on December 11, 2020, and can be found in Appendix I. The cost estimates, which include water and wastewater servicing, are provided on a total capital basis and consider the infrastructure necessary to extend trunk servicing to the Option 3 lands.

The external costs associated with this development are provided in three costing options, an interim, nominal, and oversized servicing level. Each of these scenarios are differentiated by the extent to which water/wastewater servicing is provided. The estimated costs for each scenario are shown in Figure 5-17.

**Figure 5-17: External Infrastructure Servicing Strategies**

	Interim	Nominal	Oversizing
Water Servicing	\$15,871,960	\$22,812,608	\$50,441,503
Wastewater Servicing	\$38,158,356	\$38,158,356	\$47,650,432
Regional Roads	\$22,000,000	\$22,000,000	\$22,000,000
<b>Total Costs</b>	<b>\$76,030,316</b>	<b>\$82,970,964</b>	<b>\$120,091,935</b>

SOURCE: urbanMetrics inc., based on information provided by R.J Burnside and Associates Limited on December 10, 2020 and included in Appendix I.

This analysis has assumed an “Oversized” level of water and wastewater serving to the site. An Oversized servicing level will provide necessary water and wastewater servicing to the entirety of the Option 3 lands, in addition to the Rounding Out Areas, future Whitebelt areas within Pressure Zone 7, and will also address water pressure deficiencies of existing residents in the northern portion of Pressure Zone 6. The Region will require the watermains and wastewater trunks to be oversized in order to service the ultimate build-out of these contributing drainage areas.

### Correlated Benefits for the Town and Region of Oversizing

The “Oversized” strategy would also provide servicing to the 235 acres of Option 6 (Provincially Significant Employment Zone lands) that were recently approved as part of ROPA 30. Caledon has a tightening supply of serviced employment land with immense development pressure. Nearly 50% of all under-construction industrial development in Peel Region is occurring in the Town of Caledon (Q3 2020). It is anticipated that industrial development will continue to locate in Caledon and that the Town and Region should provide servicing to additional employment lands, such as the Option 6 lands. The resulting tax base from the anticipated industrial development on the Option 6 lands will contribute to the ongoing operation and maintenance costs related to the external infrastructure.

Given the significant regional benefit associated with providing a strategically oversized level of servicing to the Option 3 lands, it is assumed that the Region will fund the initial construction, as well as ongoing maintenance and replacement of the external infrastructure.

The 2019 Caledon Development Charge Background study projects that between 2019 and 2031, the Bolton Community will absorb some 655,000 square feet of industrial space annually. This would equate to approximately 56 gross acres per year assuming a typical 35% coverage ratio for industrial lands and a 30% net to gross ratio. If the Option 6 lands were able to capture a conservative third of this growth (i.e. 19 acres per year) it would be fully developed within 12 years. Over this period, assuming the current water and wastewater development charge rates, the Option 6 lands would generate some 2,508,000 square feet of industrial development which would result in approximately

\$36 million<sup>3</sup> in Water and Wastewater development charges, which is almost all of the incremental water and wastewater costs. In addition to these charges external to the Option 3 lands, the Region would receive development charges from the Rounding Out Areas and other lands in Pressure Zone 7.

Figure 5-18 details the magnitude of costs and when the Region of Peel can expect to incur the costs associated with external servicing, including both initial and replacement fees. Similar to the site’s internal infrastructure estimates, we relied on the preliminary construction cost estimates and discussions with the project engineer to estimate the replacement costs for external servicing to the Macville site. The total quantity of each site-specific infrastructure was multiplied by its respective unit rate and was inflated by 5% per annum, until the end of its useful life.

Peel Region can expect to incur approximately \$98.1 million for initial water and wastewater servicing, and \$22.0 million for regional road servicing. In total, some \$147.8 million in replacement costs will be incurred by the Region of Peel in 2072 (i.e., 50-year after initial servicing).

**Figure 5-18: External Infrastructure Servicing Costs, Region of Peel**

	Initial Servicing	Every 50-Years (Replacement)
Water Servicing	\$50,441,503	\$70,773,521
Wastewater Servicing	\$47,650,432	\$77,038,238
Regional Roads	\$22,000,000	\$0
<b>Total Costs</b>	<b>\$120,091,935</b>	<b>\$147,811,759</b>

SOURCE: urbanMetrics inc., based on information provided by R.J Burnside and Associates Limited on December 10, 2020 and included in Appendix I.

## 5.5 Water and Wastewater

Peel Region will also incur operating revenues and costs associated with water and wastewater. For the purpose of this Study, these revenues and costs have been excluded from our analysis because these services are self-sustaining on an ongoing basis.

However, for demonstrative purposes, we have considered these specific revenues and costs separately as shown in Figure 5-19. The water and wastewater operating revenues and costs have

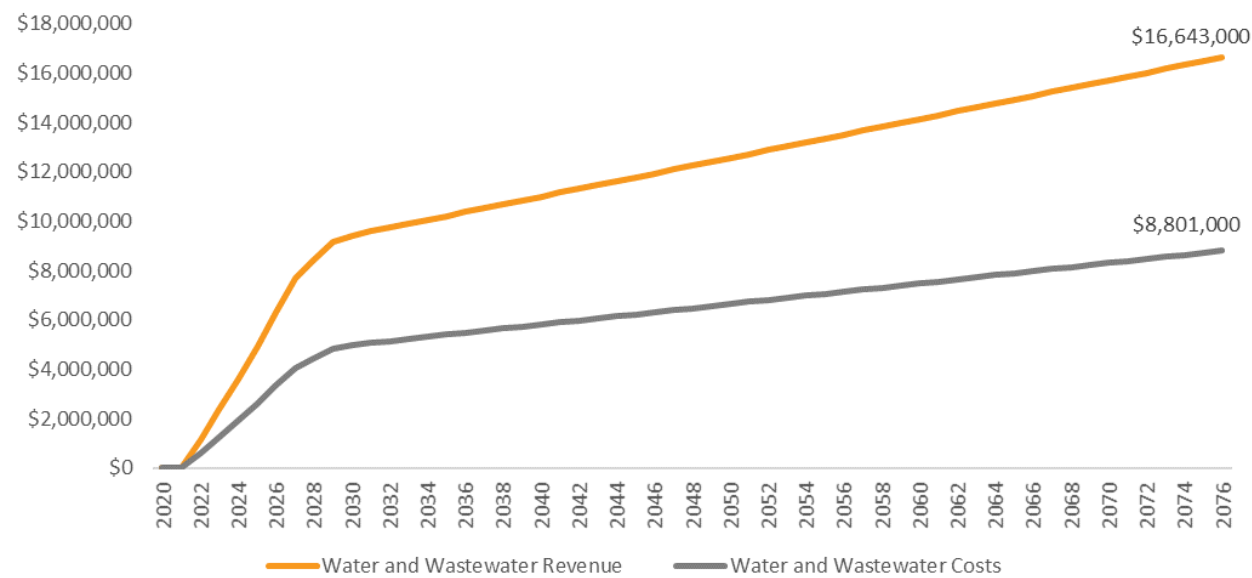
<sup>3</sup> Assuming 2% annual indexing of current rates assuming 2020 rates of \$8.19 per square foot for water and \$3.90 per square foot for wastewater.

been estimated based on Peel Region’s 2020 Combined Annual Water and Wastewater Utility Bill and the 2020 Water and Wastewater rates<sup>4</sup>.

These estimates are based on an expense to revenue ratio of approximately 53% for water and wastewater services. This ratio has been determined by comparing the revenues and costs for environmental services – less amortization – included in the 2019 FIR filed by the Region of Peel with the Ministry of Municipal Affairs and Housing. The remaining proportion of costs would largely cover the capital costs (principal and interest) associated with water and wastewater services.

Water and wastewater rates are established to offset the costs to the region including the provision of these services as well as some capital expenses and in total are assumed to be directly offsetting with revenues. Depending on the Region’s other capital commitments with respect to these services, the revenues net of operating costs available to the Region (currently at 47%) would be available to fund the lifecycle replacement costs noted above.

**Figure 5-19: Water and Wastewater Operating Costs and Revenues, Region of Peel**



SOURCE: urbanMetrics inc., based on Peel Region’s 2020 Combined Annual Water and Wastewater Utility Bill and the 2020 Water and Wastewater rates.

<sup>4</sup> <https://www.peelregion.ca/water/billing/#rates>

## 5.6 Net Operating Impact

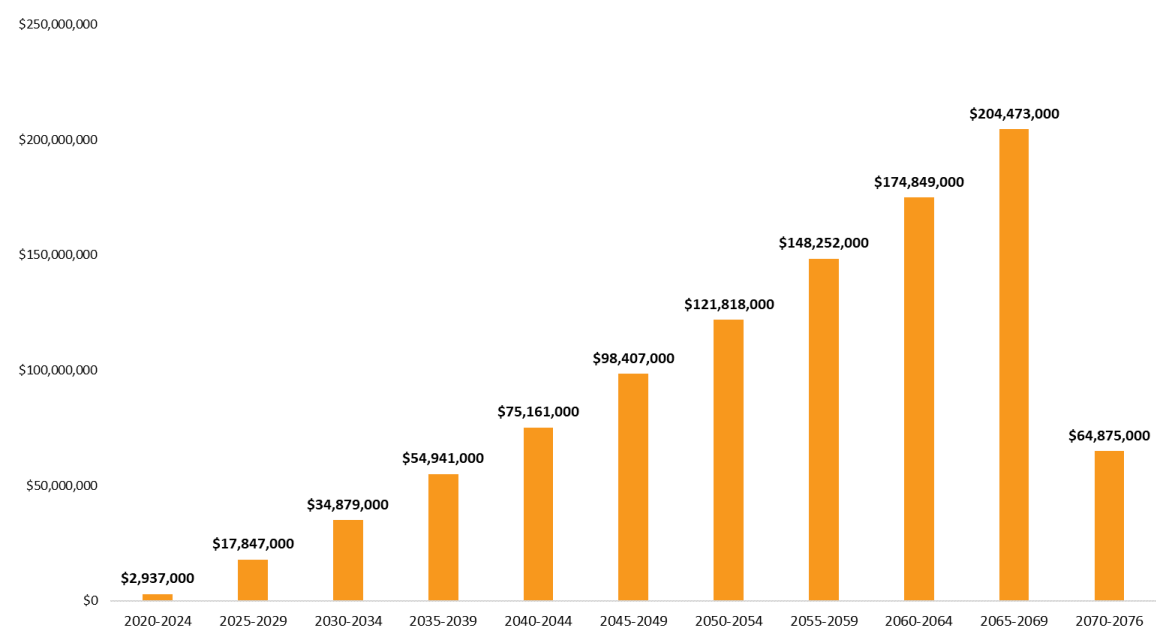
To estimate the net operating impact associated with Macville, we have compared the municipal revenues that could be generated by the development to the estimated operating costs that could be incurred by the Region of Peel and Town of Caledon. We have represented the net operating impact as an accumulated surplus/deficit measure in five-year increments. This measure is an accumulation of annual net operating incomes and provides the net economic position of the Town and Region from all years within the development timeline. When total revenues exceed total costs, the municipal jurisdiction is in an accumulated surplus position.

Overall, the project is estimated to generate a net positive financial benefit to the Town of Caledon and the Region of Peel throughout the development timeline.

### Region of Peel

As shown in Figure 5-20 and Figure 5-21, Macville is estimated to have a net positive financial benefit to the Region of Peel. The surplus is related to the significant development of residential units and associated property taxes the Region can expect to accrue, in addition to operating revenues. We would note that by 2070 many of the infrastructure projects will be approaching the end of their lifecycle and will require capital investment. This is reflected in the declining surplus at the end of the period.

Figure 5-20: Region of Peel Net Operating Impact, Cumulative Surplus



SOURCE: urbanMetrics inc.

Figure 5-21: Region of Peel Net Operating Impact, Summary Table

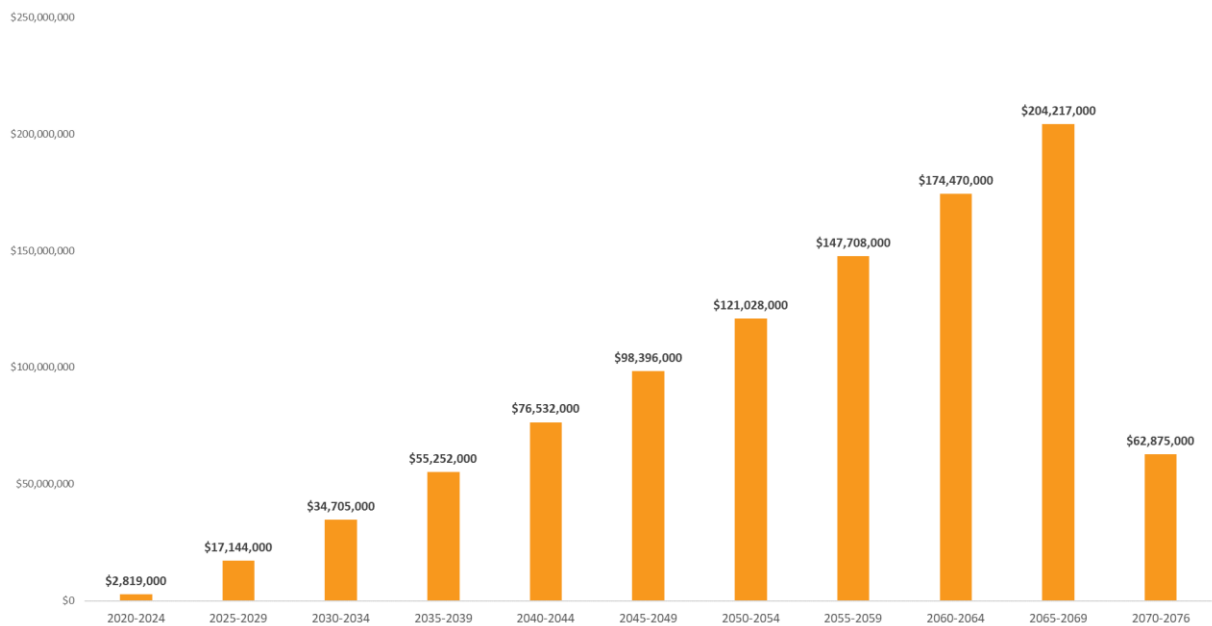
Period	Total Revenues	Total Costs	Cumulative Surplus
2020-2024	\$7,803,000	\$4,866,000	\$2,937,000
2025-2029	\$39,671,000	\$24,761,000	\$17,847,000
2030-2034	\$52,531,000	\$35,498,000	\$34,879,000
2035-2039	\$56,770,000	\$36,709,000	\$54,941,000
2040-2044	\$61,004,000	\$40,783,000	\$75,161,000
2045-2049	\$65,240,000	\$41,994,000	\$98,407,000
2050-2054	\$69,479,000	\$46,069,000	\$121,818,000
2055-2059	\$73,713,000	\$47,279,000	\$148,252,000
2060-2064	\$77,950,000	\$51,354,000	\$174,849,000
2065-2069	\$82,188,000	\$52,564,000	\$204,473,000
2070-2076	\$122,177,000	\$261,775,000	\$64,875,000

SOURCE: urbanMetrics inc.  
Rounded to the nearest \$1,000.

## Town of Caledon

Figure 5-22 and Figure 5-23 demonstrate that the Town of Caledon will maintain a positive net operating surplus throughout the development timeline. One factor contributing to the positive net operating surplus is the Bolton 3 Landowners Group’s commitment to upfront financing the construction of the site’s internal infrastructure. As such, the Town of Caledon will only be fiscally responsible for maintaining and replacing this infrastructure over its useful life as highlighted in Figure 5-12. This financial surplus from the development of Macville could be effectively used to provide future services, fund growth-related capital infrastructure, and potentially reduce revenue shortfalls.

Figure 5-22: Town of Caledon Net Operating Impact, Cumulative Surplus



SOURCE: urbanMetrics inc.



**Figure 5-23: Town of Caledon Net Operating Impact, Summary Table**

Period	Total Revenues	Total Costs	Cumulative Surplus
<b>2020-2024</b>	\$11,370,000	\$8,551,000	<b>\$2,819,000</b>
<b>2025-2029</b>	\$57,831,000	\$43,506,000	<b>\$17,144,000</b>
<b>2030-2034</b>	\$76,579,000	\$59,018,000	<b>\$34,705,000</b>
<b>2035-2039</b>	\$82,755,000	\$62,208,000	<b>\$55,252,000</b>
<b>2040-2044</b>	\$88,930,000	\$67,650,000	<b>\$76,532,000</b>
<b>2045-2049</b>	\$95,107,000	\$73,242,000	<b>\$98,396,000</b>
<b>2050-2054</b>	\$101,283,000	\$78,651,000	<b>\$121,028,000</b>
<b>2055-2059</b>	\$107,458,000	\$80,778,000	<b>\$147,708,000</b>
<b>2060-2064</b>	\$113,634,000	\$86,872,000	<b>\$174,470,000</b>
<b>2065-2069</b>	\$119,810,000	\$90,063,000	<b>\$204,217,000</b>
<b>2070-2076</b>	\$178,109,000	\$319,451,000	<b>\$62,875,000</b>

SOURCE: urbanMetrics inc.

Rounded to the nearest \$1,000.

## 6.0 Summary & Conclusions

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The Bolton Option 3 Landowners Group is proposing the development of Macville Community, a significant master planned development located in the community of Bolton within the Town of Caledon. The proposed concept is distributed over 182 hectares (450 acres) of developable area, comprising 6,871 residential units and some 7,500 metres of commercial floor space. It is estimated that the project will ultimately accommodate some 17,017 residents, 300 on-site jobs, and 760 work from home jobs at full build-out; representing a new area of concentrated growth and economic activity for the Town of Caledon.

This Fiscal Impact Study has been prepared in support of the Bolton Option 3 Landowners Group's application for the Macville Community Secondary Plan. Overall, the study seeks to inform the Town and Region on key financial pressures that might result from the proposed project, in order to help assist the Town and Region in managing growth over the forthcoming planning period. This Fiscal Impact Study addresses the deliverables and requirements outlined in the Terms of Reference for a Fiscal Impact Study that have been approved by the Town of Caledon. Based on our analysis, we have determined that the project will have a positive fiscal impact on the Town and Region.

To address requirements outlined in the Fiscal Impact Study Terms of Reference, the following results of our analysis consider the fiscal impact on the Town of Caledon and Region of Peel.

- As the project is still in preliminary planning stages, the Bolton Option 3 Landowners Group has not confirmed a development phasing plan. In order to assess the financial impact of the project on a phased basis, we analyzed the construction of Macville on a year by year basis. **Based on development trends in the local area, we have assumed that full build-out of Macville will occur by 2030.**
- In total, Macville will comprise of **6,871 residential units**, some 7,500 square metres of commercial space, and two schools.
- **The Region of Peel** can expect to accrue approximately **\$303.9 million** in one-time fees from Macville, mainly driven by development charges.
  - **\$303.6 million** in total residential and non-residential development charges:
    - **\$157.0 million** for regional water supply;
    - **\$72.9 million** for regional wastewater; and
    - **\$66.9 million** for regional roads.
- Macville will generate approximately **\$160.0 million** in one-time revenues for the **Town of Caledon**, which is comprised of residential and non-residential development charges, building permit fees, and planning and development application fees.
  - **\$144.0 million** in total residential and non-residential development charges:

- **\$73.3 million** for services related to a highway;
  - **\$7.2 million** for operations; and
  - **\$39.4 million** for indoor recreation facilities.
- **\$13.3 million** in building permit fees.
- **\$2.7 million** in planning and development application fees.
- At full realization (2030), Macville will generate \$10.2 million in ongoing revenues for the Region of Peel, per annum. Both property taxes and non-tax revenue are anticipated to increase by 2% per year thereafter.
  - **\$9.9 million** in annual property tax;
  - **\$260,000** in reoccurring non-tax revenues (excluding water and wastewater revenue).
- Macville will generate **\$14.8 million** in ongoing revenue, per annum, for the Town of Caledon when the project is fully built out in 2030. Both property taxes and non-tax revenue are anticipated to increase by 2% per year
  - **\$13.5 million** in annual property taxes
  - **\$1.3 million** in non-tax revenue for the Town of Caledon.
- Macville’s infrastructure investment will produce correlated and compounding benefits to both the Town and Region. As Caledon has a tightening supply of serviced employment land and is facing immense development pressure, there is an immediate need for additional employment lands. **The project’s “Oversized” servicing strategy will provide servicing to the 235 acres of Option 6 (Provincially Significant Employment Zone lands) that were recently approved as part of ROPA 30.**
- **Overall, Macville is expected to generate an annual revenue surplus for the Region of Peel and for the Town of Caledon.** The operating surplus identified will provide the Town and Region with an opportunity to maintain and upgrade existing facilities or infrastructure without compromising current municipal and regional finances. The development of Macville will create a new, vibrant centre in the community of Bolton; comprised of innovative mixed-density housing opportunities, multi-modal transit connectivity, and diverse economic activity. In addition, it will create the opportunity to provide for cost effective servicing of much needed additional employment lands creating jobs and economic growth to the community. This massive community development project will represent a much needed economic stimulus to the Town and the Region during a time when accelerated COVID recovery will be vital to the economy of the Province.

# Appendix A    Terms of Reference

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## **Bolton Residential Expansion**

### **Town of Caledon and Region of Peel Fiscal Impact Study Terms of Reference**

#### **Purpose**

- The Financial Impact Study (FIS) will provide an analysis of the cost of new development on the Town of Caledon's and the Region of Peel's existing and future taxpayers
- It will be based on the assumption that new infrastructure and facilities will be required to support growth related development in order to maintain service levels currently provided for within the municipality and Region and that there will be additional operating impacts to support the new infrastructure

#### **Requirements**

- The FIS will provide a determination of the net impact of the development on the town taking into account:
  - tax and non-tax revenues generated and capital and associated operating costs triggered by the development (both on and off site) over the specified planning horizon
  - an assessment forecast by building type, timeline of development and its associated demand for public services.
  - an assessment of development charge and other non-tax revenues
  - a provision for life-cycle or full costing for services to maintain the Town's and Region's current state of good repair (Based on the Current Asset Management Plan)
  - identification of all capital costs required to deliver the development and any reliance on funding that may be set out in the Town's and Region's Capital Forecast and/or Development Charge (DC) study/bylaw.
  - identification of any infrastructure that will be beyond the typical standard practice of the Town and Region and an assessment of its full life-cycle impact (e.g. intensification impact on municipality)
  - a phasing time-line
- There will be a reflection of the impact of each of the planned phases of development within the overall phasing plan
- The analysis will be mindful of the Town and Region Official Plan, Master plans, Planning policies/by-laws and governing studies (e.g. Development Charges Study). The FIS will identify where the proposed development deviates (exceeds or diminishes) from those assumptions (either by size of development or by timing of the development) and a sensitivity analysis should be undertaken to determine impacts associated with deviations deemed of concern by the Town and the Region.

- Contemplated works that deviate from the Town's and Region's standards or requirements will include a justification and consideration of models that would minimize the impact on the municipality
- All estimates will be in current dollars
- The analysis will include viable funding options acceptable to the Region and the Town in order to deal with any shortfall resulting from the new development
- The analysis will consider previous fiscal impact work with regards to the Bolton Residential Expansion undertaken on behalf of the Town and the Region.

## Appendix B Development Statistics

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BRES AREA 3 TOTAL

LAND USE SUMMARY

Site Area		181.86 ha.	449.38 ac.	
Net Site Area (Post Land Exchange)		181.90 ha.	449.47 ac.	
NON-DEVELOPABLE				
	Road Widening	1.43 ha.	3.53 ac.	
	Proposed Environmental Protection Area	10.52 ha.	25.99 ac.	
Net Area		169.95 ha.	419.95 ac.	100.0%
DEVELOPABLE				
	Residential (see 'UNIT SUMMARY')	61.96 ha.	153.10 ac.	36.5%
	Employment - Office/Innovation	0.52 ha.	1.28 ac.	0.3%
	GO Station Lands	3.89 ha.	9.61 ac.	2.3%
	Commercial/Mixed Use	3.03 ha.	7.49 ac.	1.8%
	Low-Medium Density Blocks	2.30 ha.	5.68 ac.	1.4%
	Medium Density Blocks	14.19 ha.	35.06 ac.	8.3%
	Flex Denisty Residential/Mixed Use Blocks	1.43 ha.	3.53 ac.	0.8%
	Mixed Use Blocks	5.20 ha.	12.85 ac.	3.1%
	Parks	10.79 ha.	26.66 ac.	6.3%
	Schools	7.20 ha.	17.79 ac.	4.2%
	SWM Ponds	8.57 ha.	21.18 ac.	5.0%
	Vista/Walkway	0.53 ha.	1.31 ac.	0.3%
	Right of Way	50.34 ha.	124.39 ac.	29.6%
TOTAL (Net Developable)		169.95 ha.	419.95 ac.	100.0%

UNIT SUMMARY				Unit Depth	Unit Count	Lot Mix	Frontage (m)	Area		% Net Res	Net Density (uph)	Population Yield	
				width									
Condo													
Orange	Low-Medium Density Blocks												
	Townhouses	md	n/a	41	1%						300.9	1,364	
	Apartment Units	md	n/a	651	9%								
Medium Density Blocks													
Dark Orange	Townhouses	hd	n/a	241	4%						169.6	4,861	
	Apartment Units	hd	n/a	2,165	32%								
Flex Density Residential/Mixed Use Blocks													
Purple	Townhouses	hd	n/a	25	0%						188.1	541	
	Apartment Units	hd	n/a	244	4%								
Mixed Use Blocks													
Magenta	Townhouses	hd	n/a	34	0%						224.0	2,254	
	Apartment Units	hd	n/a	1,131	16%								
Yellow	Detached Homes (Condo)	(36')	11.00	x	27.0	18	0%	198.0					
Light Green	Detached Homes (Condo)	(38')	11.60	x	27.0	5	0%	58.0	1.79 ha.	4.42 ac.	2.9%	14.5	96
Light Yellow	Detached Homes (Condo)	(45')	13.72	x	27.0	3	0%	41.2					
FREEHOLD													
Pink	Rear Lane Towns (3 Storey)	(20')	6.10	x	21.0	68	1%	414.8	1.09 ha.	2.69 ac.	1.8%	62.4	211
Magenta	Rear Lane Mixed Use Towns (3 Storey)	(20')	6.10	x	23.0	38	1%	231.8	0.62 ha.	1.53 ac.	1.0%	61.3	118
Light Purple	Rear Lane Towns (3 Storey)	(20')	6.10	x	23.0	643	9%	3,922.3	10.75 ha.	26.56 ac.	17.3%	59.8	1,993
Dark Purple	Back-to-Back Towns	(21')	6.40	x	13.5	94	1%	601.6	0.95 ha.	2.35 ac.	1.5%	98.9	291
Orange	Standard Towns (2 Storey)	(25')	7.60	x	27.0	252	4%	1,915.2	6.00 ha.	14.83 ac.	9.7%	42.0	781
Teal	Detached Homes	(40')	12.20	x	23.75	29	0%	353.8	0.88 ha.	2.17 ac.	1.4%	33.0	107
Blue	Detached Homes	(44')	13.40	x	23.75	29	0%	388.6	0.94 ha.	2.32 ac.	1.5%	30.9	107
Light Teal	Detached Homes	(34')	10.40	x	27.0	133	2%	1,383.2	4.31 ha.	10.65 ac.	7.0%	30.9	492
Yellow	Detached Homes	(36')	11.00	x	27.0	333	5%	3,663.0	10.50 ha.	25.95 ac.	16.9%	31.7	1,232
Light Green	Detached Homes	(38')	11.60	x	27.0	522	8%	6,055.2	17.04 ha.	42.11 ac.	27.5%	30.6	1,931
Light Yellow	Detached Homes	(45')	13.72	x	27.0	172	3%	2,359.8	7.09 ha.	17.52 ac.	11.4%	24.3	636
TOTAL					6,871	100%	21,586.5	61.96 ha.	153.10 ac.	100.0%	110.9	17,017	

ROW SCHEDULE		(m) width	(lin.m)	(lin.m) Half
Major Collector	22.0		4,210.3	0.0
Minor Collector	19.5		4,703.8	6.9
Local Road	18.0		12,474.9	112.7
Window Road	16.0		1,548.4	0.0
Central Spine Road	14.0		2,266.2	0.0
Lane	11.0		23.0	0.0
Condo Lane	10.3		356.4	0.0
Lane	8.0		2,975.5	0.0
Lane	6.5		225.3	0.0
ROW TOTAL			28,783.8	119.6

# Appendix C    One-Time Revenues

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**Figure C- 1: 2020 Town of Caledon Development Charges**

	Single/Semi	Apartment (> 70 sqm/750 sf)	Apartment (≤/ < 70 sqm/750 sf)	Other Residential Dwellings	Non-Residential
Services Related to a Highway Operations	\$15,898.87	\$9,237.54	\$5,421.36	\$12,103.61	\$43.70
Fire Protection Services	\$1,568.54	\$911.41	\$534.71	\$1,193.93	\$4.28
Parkland and Trail Development	\$1,305.90	\$758.63	\$445.76	\$994.07	\$3.60
Indoor Recreation Facilities	\$1,933.73	\$1,123.82	\$659.23	\$1,472.27	\$0.57
Library Services	\$8,586.69	\$4,989.19	\$2,927.80	\$6,536.81	\$2.48
Development Related Studies	\$891.53	\$517.96	\$304.50	\$679.11	\$0.23
Animal Control	\$835.02	\$485.53	\$284.62	\$636.21	\$2.36
Provincial Offences	\$88.94	\$51.27	\$30.35	\$68.02	\$0.00
	\$206.14	\$119.29	\$70.11	\$156.96	\$0.57
<b>Total</b>	<b>\$31,315.35</b>	<b>\$18,194.65</b>	<b>\$10,678.43</b>	<b>\$23,840.98</b>	<b>\$57.78</b>

SOURCE: urbanMetrics inc., based on the Town of Caledon's Development Charge Rates, and the 2019-31 Bylaw, inflated for August, 2020.

**Figure C- 2: 2020 Peel Region Development Charges**

	Single/Semi	Apartment (> 70 sqm/750 sf)	Apartment (≤/ < 70 sqm/750 sf)	Other Residential Dwellings	Non-Residential
Water Supply	\$31,132.48	\$22,582.91	\$11,943.38	\$24,658.16	\$85.96
Waste Water	\$14,463.53	\$10,492.34	\$5,549.08	\$11,455.30	\$40.91
Regional Roads	\$13,176.29	\$9,558.30	\$5,054.75	\$10,435.79	\$99.69
Long Term Care	\$172.63	\$124.54	\$66.39	\$136.66	\$0.00
Transhelp	\$5.00	\$2.97	\$2.37	\$3.63	\$0.00
Social Housing	\$773.09	\$560.42	\$296.36	\$611.95	\$0.00
Shelters	\$112.59	\$81.54	\$42.68	\$89.49	\$0.00
Paramedics	\$163.87	\$118.61	\$62.83	\$129.40	\$0.00
Growth Studies	\$93.82	\$68.20	\$35.56	\$73.77	\$0.42
<b>Total</b>	<b>\$60,093.31</b>	<b>\$43,589.82</b>	<b>\$23,053.40</b>	<b>\$47,594.15</b>	<b>\$226.98</b>

SOURCE: urbanMetrics inc., based on the Region of Peel's Development Charge Rates included in Bylaw 77-2020, effective January 22, 2021.

Figure C- 3: Peel Region Development Charge Revenue

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Water Supply	\$0	\$0	\$21,457,345	\$21,869,986	\$22,282,628	\$22,695,269	\$23,837,203	\$23,408,110	\$10,170,649	\$9,831,696	\$1,477,204
Waste Water	\$0	\$0	\$9,968,855	\$10,160,564	\$10,352,273	\$10,543,982	\$11,082,764	\$10,875,163	\$4,725,414	\$4,567,950	\$686,330
Regional Roads	\$0	\$0	\$9,081,439	\$9,256,082	\$9,430,725	\$9,605,368	\$10,625,741	\$9,907,067	\$4,304,634	\$4,161,180	\$625,218
Long Term Care	\$0	\$0	\$118,870	\$121,156	\$123,442	\$125,727	\$128,013	\$129,676	\$56,291	\$54,409	\$8,168
Transhelp	\$0	\$0	\$3,369	\$3,434	\$3,499	\$3,563	\$3,628	\$3,676	\$1,639	\$1,585	\$228
Social Housing	\$0	\$0	\$532,594	\$542,836	\$553,078	\$563,321	\$573,563	\$581,015	\$252,395	\$243,975	\$36,657
Shelters	\$0	\$0	\$77,485	\$78,975	\$80,465	\$81,955	\$83,445	\$84,527	\$36,566	\$35,336	\$5,315
Paramedics	\$0	\$0	\$112,781	\$114,949	\$117,118	\$119,287	\$121,456	\$123,035	\$53,459	\$51,674	\$7,763
Growth Studies	\$0	\$0	\$64,422	\$65,661	\$66,900	\$68,139	\$72,980	\$70,280	\$30,530	\$29,507	\$4,440
Total	\$0	\$0	\$41,417,159	\$42,213,643	\$43,010,127	\$43,806,611	\$46,528,793	\$45,182,549	\$19,631,577	\$18,977,311	\$2,851,323

Figure C- 4: Town of Caledon Development Charge Revenue

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Services Related to a Highway	\$0	\$0	\$10,127,989	\$10,322,758	\$10,517,527	\$10,712,296	\$11,277,781	\$11,046,641	\$4,404,405	\$4,217,694	\$626,759
Operations	\$0	\$0	\$999,120	\$1,018,333	\$1,037,547	\$1,056,761	\$1,112,283	\$1,089,744	\$434,486	\$416,065	\$61,830
Fire Protection Services	\$0	\$0	\$831,992	\$847,992	\$863,992	\$879,992	\$926,529	\$907,458	\$361,907	\$346,574	\$51,495
Parkland and Trail Development	\$0	\$0	\$1,231,885	\$1,255,575	\$1,279,265	\$1,302,955	\$1,331,439	\$1,343,622	\$535,707	\$512,998	\$76,237
Indoor Recreation Facilities	\$0	\$0	\$5,469,889	\$5,575,079	\$5,680,269	\$5,785,459	\$5,911,689	\$5,966,032	\$2,378,717	\$2,277,877	\$338,501
Library Services	\$0	\$0	\$568,179	\$579,106	\$590,032	\$600,959	\$613,838	\$619,715	\$247,148	\$236,682	\$35,165
Development Related Studies	\$0	\$0	\$532,098	\$542,331	\$552,564	\$562,796	\$593,092	\$580,361	\$231,368	\$221,562	\$32,929
Animal Control	\$0	\$0	\$56,654	\$57,744	\$58,833	\$59,923	\$61,012	\$61,792	\$24,549	\$23,503	\$3,490
Provincial Offences	\$0	\$0	\$131,161	\$133,683	\$136,206	\$138,728	\$146,044	\$143,057	\$56,925	\$54,502	\$8,098
Total	\$0	\$0	\$19,948,966	\$20,332,600	\$20,716,234	\$21,099,868	\$21,973,708	\$21,758,421	\$8,675,212	\$8,307,456	\$1,234,503

**Figure C- 5: Building Administration Fees**

ASSEMBLY			
a)	Schools, libraries, churches, recreation, bus terminals, etc	Per m2	\$15.60
b)	Occupancy Permit	Flat Fee	\$255.00
RESIDENTIAL			
a)	Detached singles, townhouses, duplexes	Per m2	\$13.20
b)	All other multiple unit residential buildings (apartments)	Per m2	\$12.10
c)	Hotels, motels	Per m2	\$16.70
i)	Occupancy Permit	Flat Fee	\$150.00
BUSINESS AND PERSONAL SERVICES			
a)	Office building (shell)	Per m2	\$14.00
b)	Office Building (finished)	Per m2	\$16.80
c)	Funeral homes, banks, medical clinics, fire hall	Per m2	\$16.80
d)	Occupancy Permit	Flat Fee	\$255.00
MERCANTILE OCCUPANCIES			
a)	Retail stores (shell/strip plazas)	Per m2	\$12.80
b)	Retail stores (finished), supermarkets, department stores	Per m2	\$16.00
c)	Occupancy Permit	Flat Fee	\$255.00

SOURCE: urbanMetrics inc., based on Town of Caledon Bylaw No. 2019-78, 2020 Fees and Charges.

**Figure C- 6: Building Permit Revenue**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>TOTAL BASE FEE</b>	\$0	\$0	\$149,760	\$152,640	\$155,520	\$158,400	\$161,280	\$163,476	\$92,046	\$91,155	\$12,780
<b>TOTAL PER SQ.M. Fee</b>	\$0	\$0	\$1,649,203	\$1,680,918	\$1,800,665	\$1,744,349	\$2,003,100	\$1,798,274	\$579,855	\$539,205	\$329,630
Total Building Permit Fees (rounded)	\$0	\$0	\$1,799,000	\$1,834,000	\$1,956,000	\$1,903,000	\$2,164,000	\$1,962,000	\$672,000	\$630,000	\$342,000

SOURCE: urbanMetrics inc., based on Town of Caledon Bylaw No. 2019-78, 2020 Fees and Charges.

## Appendix D    Assessed Value Research and Property Taxes

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**Figure D- 1: Assessed Values of Comparable Commercial Developments**

Address	Building Size sq.m.	Est. Assessed Value	Assessed Value Per sq.m.
10545 Bramlea Road	905	\$3,512,000	\$3,880
60 Commuter Road	278	\$730,000	\$2,622
9990 The Gore Road	1,394	\$3,060,000	\$2,196
247 Queen Street E.	23,755	\$27,685,000	\$1,165
111 Queen Street E.	604	\$1,345,000	\$2,227
<b>Total/Average</b>	<b>26,936</b>	<b>\$36,332,000</b>	<b>\$1,350</b>

**Figure D- 2: Assessed Values of Comparable Single-Detached Homes**

Address	Unit Size sq.m.	Est. Assessed Value	Assessed Value Per sq.m.
13 Trailview Lane	409	\$658,000	\$1,609
88 Headwater Road	308	\$596,000	\$1,932
72 Silvervalley Drive	557	\$734,000	\$1,319
35 Country Stroll Crescent	232	\$624,000	\$2,687
24 Littlebrook Lane	302	\$746,977	\$2,473
26 Jean Street	302	\$860,951	\$2,851
5 Strattonvale Court	302	\$744,843	\$2,466
10 Albert Spencer Avenue	255	\$749,613	\$2,940
17 Natureview Court	255	\$790,031	\$3,098
10 Natureview Court	255	\$722,250	\$2,832
14 Country Stroll Cres	255	\$661,623	\$2,595
178 Cedaragroce Rd	209	\$637,899	\$3,052
153 Harvest Moon Dr	255	\$650,954	\$2,553
<b>Total/Average</b>	<b>300</b>	<b>\$706,000</b>	<b>\$2,360</b>

**Figure D- 3: Assessed Values of Comparable Townhomes**

Address	Unit Size sq.m.	Est. Assessed Value	Assessed Value Per sq.m.
87 Frank Johnston Rd	542	\$454,000	\$837
24 Wood Circle	150	\$399,000	\$2,664
106 Morra Ave	162	\$515,390	\$3,181
4 Cuddles Crt	162	\$460,035	\$2,840
10 Tormore Rd.	162	\$548,779	\$3,388
42 Alderbrook Pl.	162	\$457,023	\$2,821
42 Wood Circ	120	\$401,040	\$3,342
2 Sheartown Tr	162	\$433,048	\$2,673
22 Wood Circle	120	\$399,032	\$3,325
6 McCreary Tr.	120	\$449,994	\$3,750
53 McCreary Tr.	120	\$451,876	\$3,766
159 Hanton Cres.	162	\$444,973	\$2,747
92 Wood Circle	120	\$414,973	\$3,458
<b>Total/Average</b>	<b>170</b>	<b>\$455,000</b>	<b>\$2,810</b>

**Figure D- 4: Assessed Values of Comparable Large Apartments (> 70 sqm/750 sf)**

Address	Unit Size sq.m.	Est. Assessed Value	Assessed Value Per sq.m.
12 Woodstream Blvd	84	\$435,000	\$5,180
7730 Kipling Ave	79	\$390,000	\$4,939
60 Ann St	74	\$387,000	\$5,230
60 Ann St	102	\$447,358	\$4,386
60 Ann St	72	\$446,000	\$6,194
60 Ann St	102	\$446,000	\$4,373
<b>Total/Average</b>	<b>90</b>	<b>\$425,000</b>	<b>\$4,970</b>

**Figure D- 5: Assessed Values of Comparable Small Apartments (=/< 70 sqm/750 sf)**

Address	Unit Size sq.m.	Est. Assessed Value	Assessed Value Per sq.m.
281 Woodbridge Ave	56	\$215,000	\$3,839
60 Ann St	69	\$347,192	\$5,032
60 Ann St	70	\$348,000	\$4,971
45 Yorkland Blvd	69	\$337,401	\$4,890
55 Yorkland Blvd	69	\$301,251	\$4,366
55 Yorkland Blvd	69	\$301,251	\$4,366
55 Yorkland Blvd	69	\$335,016	\$4,855
<b>Total/Average</b>	<b>70</b>	<b>\$312,000</b>	<b>\$4,640</b>

SOURCE: urbanMetrics inc., based on data from Municipal Property Assessment Corporation and HouseSigma.



**Figure D- 6: 2020 Town of Caledon Property Tax Rates**

2020 Tax Rates	Town Rate	Broadband Rate	Region Rate	Education Tax Rate	Total Rate
Residential	0.370863%	0.001531%	0.271283%	0.153000%	0.523863%
Multi-Residential	0.370863%	0.001530%	0.271283%	0.153000%	0.523863%
Commercial New Construction	0.499751%	0.002063%	0.365563%	0.944727%	1.444478%
Office New Construction	0.499751%	0.002063%	0.365563%	0.944727%	1.444478%
Parking Lot	0.499750%	0.002063%	0.365563%	0.944727%	1.444477%

SOURCE: urbanMetrics inc., based on the Town of Caledon's Property Tax Rates, 2020.

**Figure D- 7: Peel Region Property Tax Revenue**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Peel Region Property Tax Revenue	\$0	\$0	\$1,235,000	\$2,518,000	\$3,848,000	\$5,225,000	\$6,692,000	\$8,160,000	\$8,913,000	\$9,655,000	\$9,904,000
Peel Region Non-Tax Revenue (Excluding Water and Wastewater)	\$0	\$0	\$33,000	\$67,000	\$102,000	\$138,000	\$179,000	\$218,000	\$236,000	\$255,000	\$263,000
Peel Region Water and Wastewater Revenue	\$0	\$0	\$1,159,000	\$2,363,000	\$3,612,000	\$4,905,000	\$6,305,000	\$7,683,000	\$8,416,000	\$9,145,000	\$9,421,000
Peel Region Total Revenue	\$0	\$0	\$1,268,000	\$2,585,000	\$3,950,000	\$5,363,000	\$6,871,000	\$8,378,000	\$9,149,000	\$9,910,000	\$10,167,000

**Figure D- 8: Town of Caledon Property Tax Revenue**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Caledon Property Tax Revenue	\$0	\$0	\$1,688,000	\$3,442,000	\$5,260,000	\$7,144,000	\$9,149,000	\$11,156,000	\$12,185,000	\$13,199,000	\$13,540,000
Caledon Non-Tax Revenue	\$0	\$0	\$159,000	\$325,000	\$496,000	\$674,000	\$870,000	\$1,059,000	\$1,152,000	\$1,243,000	\$1,282,000
Caledon Total Revenue	\$0	\$0	\$1,847,000	\$3,767,000	\$5,756,000	\$7,818,000	\$10,019,000	\$12,215,000	\$13,337,000	\$14,442,000	\$14,822,000

# Appendix E      Non-Tax Revenue and Cost Assumptions

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Figure E- 1: Peel Region Non-Tax Revenue Assumptions Per Capita and Per Employee

Peel Region								
2019 Non-Tax Revenue	Residential Allocation	Non-Residential Allocation	Growth Share	2019 Non-Tax Revenue Per Capita	2020 Non-Tax Revenue Per Capita	2019 Non-Tax Revenue Per Employee	2020 Non-Tax Revenue Per Employee	
<b>User Fees and Service Charges</b>								
General government . . . . .	\$1,137,723	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Protection services</b>								
Fire . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Police . . . . .	\$26,273,623	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Court Security . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Prisoner Transportation . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Conservation authority . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Protective inspection and control . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Building permit and inspection services . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Emergency measures . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Provincial Offences Act (POA) . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Protection services</b>	<b>\$26,273,623</b>				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>Transportation services</b>								
Roads - Paved . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Roads - Unpaved . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Roads - Bridges and Culverts . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Roads - Traffic Operations & Roadside . . . . .	\$1,069,684	71%	29%	50%	\$0.25	\$0.26	\$0.25	\$0.26
Winter Control - Except sidewalks, Parking Lots . . . . .	\$37,173	71%	29%	50%	\$0.01	\$0.01	\$0.01	\$0.01
Winter Control - Sidewalks, Parking Lots Only . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Transit - Conventional . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Transit - Disabled & special needs . . . . .	\$2,457,092	71%	29%	100%	\$1.16	\$1.18	\$1.16	\$1.18
Parking . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Street lighting . . . . .	\$10,184	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Air transportation . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Other Admin . . . . .	\$490,977	71%	29%	50%	\$0.12	\$0.12	\$0.12	\$0.12
<b>Sub-total - Transportation services</b>	<b>\$4,065,110</b>				<b>\$1.54</b>	<b>\$1.57</b>	<b>\$1.54</b>	<b>\$1.57</b>
<b>Environmental services</b>								
Wastewater collection/conveyance . . . . .	\$158,253,664	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Wastewater treatment & disposal . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Urban storm sewer system . . . . .	\$0	71%	29%	100%	\$0.00	\$0.00	\$0.00	\$0.00
Rural storm sewer system . . . . .	\$0	71%	29%	100%	\$0.00	\$0.00	\$0.00	\$0.00
Water treatment . . . . .	\$111,639,676	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Water distribution/transmission . . . . .	\$119,020,455	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Solid waste collection . . . . .	\$794,489	71%	29%	100%	\$0.38	\$0.38	\$0.38	\$0.38
Solid waste disposal . . . . .	\$38,419	71%	29%	100%	\$0.02	\$0.02	\$0.02	\$0.02
Waste diversion . . . . .	\$5,833,381	71%	29%	100%	\$2.75	\$2.81	\$2.75	\$2.81
Other . . . . .	\$0	71%	29%	100%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Environmental services</b>	<b>\$237,326,420</b>				<b>\$3.15</b>	<b>\$3.21</b>	<b>\$3.15</b>	<b>\$3.21</b>
<b>Health services</b>								
Public health services . . . . .	\$1,194,921	71%	29%	75%	\$0.42	\$0.43	\$0.42	\$0.43
Hospitals . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Ambulance services . . . . .	\$27,575	71%	29%	75%	\$0.01	\$0.01	\$0.01	\$0.01
Ambulance dispatch . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Cemeteries . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Health services</b>	<b>\$1,222,496</b>				<b>\$0.43</b>	<b>\$0.44</b>	<b>\$0.43</b>	<b>\$0.44</b>
<b>Social and family services</b>								
General assistance . . . . .	\$1,413,081	71%	29%	75%	\$0.50	\$0.51	\$0.50	\$0.51
Assistance to aged persons . . . . .	\$18,385,626	71%	29%	75%	\$6.51	\$6.64	\$6.51	\$6.64
Child care . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Social and family services</b>	<b>\$19,798,707</b>				<b>\$7.01</b>	<b>\$7.15</b>	<b>\$7.01</b>	<b>\$7.15</b>

Peel Region							
2019 Non-Tax Revenue	Residential Allocation	Non-Residential Allocation	Growth Share	2019 Non-Tax Revenue Per Capita	2020 Non-Tax Revenue Per Capita	2019 Non-Tax Revenue Per Employee	2020 Non-Tax Revenue Per Employee

**Social Housing**

Public Housing . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Non - Profit/Cooperative Housing . . . . .	\$313,586	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Rent Supplement Programs . . . . .	\$138,620	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other AHP Funding	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Social Housing</b>	<b>\$452,206</b>				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>

**Recreation and cultural services**

Parks . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Recreation programs . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Recreation facilities - Golf Course, Marina, Ski Hill . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Recreation facilities - All Other . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Libraries . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Museums . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Cultural services . . . . .	\$177,968	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Recreation and cultural services</b>	<b>\$177,968</b>				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>

**Planning and development**

Planning and zoning . . . . .	\$2,618,518	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Commercial and industrial . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Residential development . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Agriculture and reforestation . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Tile drainage/shoreline assistance . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Planning and development</b>	<b>\$2,618,518</b>				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>

Other	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
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<b>Total - User Fees and Service Charges</b>	<b>\$293,072,771</b>				<b>\$12.13</b>	<b>\$12.38</b>	<b>\$12.13</b>	<b>\$12.38</b>
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Peel Region							
2019 Non-Tax Revenue	Residential Allocation	Non-Residential Allocation	Growth Share	2019 Non-Tax Revenue Per Capita	2020 Non-Tax Revenue Per Capita	2019 Non-Tax Revenue Per Employee	2020 Non-Tax Revenue Per Employee

**Licences, permits, rents, etc.**

Trailer revenue and permits . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Licences and permits . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Rents, concessions and franchises . . . . .	\$78,216,807	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Royalties . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Green Energy . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Licences, permits, rents, etc.</b>	<b>\$78,216,807</b>				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>

**Fines and penalties**

Provincial Offences Act (POA) Municipality which ad	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Other fines . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Penalties and interest on taxes . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . . Late charges for Utility Bi	\$1,210,492	71%	29%	50%	\$0.29	\$0.29	\$0.29	\$0.29
<b>Sub-total - Fines and penalties</b>	<b>\$1,210,492</b>				<b>\$0.29</b>	<b>\$0.29</b>	<b>\$0.29</b>	<b>\$0.29</b>

**Other revenue**

Investment income. . . . .	\$17,163,390	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Interest earned on reserves and reserve funds. . . . .	\$70,904,715	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Gain/Loss on sale of land & capital assets. . . . .	\$179,040	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Deferred revenue earned (Development Charges) (SL	\$252,360,136	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Deferred revenue earned (Recreational land (The Pla	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other Deferred revenue ear Federal Gas Tax - Lower t	\$69,712,365	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Donations. . . . .	\$38,952	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Donated Tangible Capital Assets (SLC 53 0610 01). . . .	\$105,972,555	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Sale of publications, equipment, etc. . . . .	\$1,064,594	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Contributions from non-consolidated entities . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other Revenues from Government Business Enterpris	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Gaming and Casino Revenues . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . . Recyclables / Other	\$6,647,102	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . . Other PHC Revenue	\$5,265,796	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Other revenue</b>	<b>\$529,308,645</b>				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>

Figure E- 2: Town of Caledon Non-Tax Revenue Assumptions Per Capita and Per Employee

Caledon								
2019 Non-Tax Revenue	Residential Allocation	Non-Residential Allocation	Growth Share	2019 Non-Tax Revenue Per Capita	2020 Non-Tax Revenue Per Capita	2019 Non-Tax Revenue Per Employee	2020 Non-Tax Revenue Per Employee	
<b>User Fees and Service Charges</b>								
General government . . . . .	\$412,042	73%	27%	50%	\$2.00	\$2.04	\$2.00	\$2.04
<b>Protection services</b>								
Fire . . . . .	\$669,432	73%	27%	75%	\$4.89	\$4.98	\$4.89	\$4.98
Police . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Court Security . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Prisoner Transportation . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Conservation authority . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Protective inspection and control . . . . .	\$428,473	73%	27%	75%	\$3.13	\$3.19	\$3.13	\$3.19
Building permit and inspection services . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Emergency measures . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Provincial Offences Act (POA) . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Protection services</b>	<b>\$1,097,905</b>				<b>\$8.01</b>	<b>\$8.17</b>	<b>\$8.01</b>	<b>\$8.17</b>
<b>Transportation services</b>								
Roads - Paved . . . . .	\$137,048	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Roads - Unpaved . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Roads - Bridges and Culverts . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Roads - Traffic Operations & Roadside . . . . .	\$446,000	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Winter Control - Except sidewalks, Parking Lots . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Winter Control - Sidewalks, Parking Lots Only . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Transit - Conventional . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Transit - Disabled & special needs . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Parking . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Street lighting . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Air transportation . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Transportation services</b>	<b>\$583,048</b>				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>Environmental services</b>								
Wastewater collection/conveyance . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Wastewater treatment & disposal . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Urban storm sewer system . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Rural storm sewer system . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Water treatment . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Water distribution/transmission . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Solid waste collection . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Solid waste disposal . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Waste diversion . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Environmental services</b>	<b>\$0</b>				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>Health services</b>								
Public health services . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Hospitals . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Ambulance services . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Ambulance dispatch . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Cemeteries . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Health services</b>	<b>\$0</b>				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>Social and family services</b>								
General assistance . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Assistance to aged persons . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Child care . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Social and family services</b>	<b>\$0</b>				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>

Caledon								
2019 Non-Tax Revenue	Residential Allocation	Non-Residential Allocation	Growth Share	2019 Non-Tax Revenue Per Capita	2020 Non-Tax Revenue Per Capita	2019 Non-Tax Revenue Per Employee	2020 Non-Tax Revenue Per Employee	
<b>Social Housing</b>								
Public Housing . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Non - Profit/Cooperative Housing . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Rent Supplement Programs . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Social Housing</b>	<b>\$0</b>				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>Recreation and cultural services</b>								
Parks . . . . .	\$491,979	73%	27%	50%	\$2.39	\$2.44	\$2.39	\$2.44
Recreation programs . . . . .	\$2,564,308	73%	27%	50%	\$12.48	\$12.73	\$12.48	\$12.73
Recreation facilities - Golf Course, Marina, Ski Hill . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Recreation facilities - All Other . . . . .	\$1,745,066	73%	27%	50%	\$8.49	\$8.66	\$8.49	\$8.66
Libraries . . . . .	\$12,123	73%	27%	50%	\$0.06	\$0.06	\$0.06	\$0.06
Museums . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Cultural services . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Recreation and cultural services</b>	<b>\$4,813,476</b>				<b>\$23.42</b>	<b>\$23.89</b>	<b>\$23.42</b>	<b>\$23.89</b>
<b>Planning and development</b>								
Planning and zoning . . . . .	\$2,593,627	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Commercial and industrial . . . . .	\$24,748	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Residential development . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Agriculture and reforestation . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Tile drainage/shoreline assistance . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Planning and development</b>	<b>\$2,618,375</b>				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>Other</b>								
	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Total - User Fees and Service Charges</b>	<b>\$9,524,846</b>				<b>\$33.44</b>	<b>\$34.11</b>	<b>\$33.44</b>	<b>\$34.11</b>

Caledon							
2019 Non-Tax Revenue	Residential Allocation	Non-Residential Allocation	Growth Share	2019 Non-Tax Revenue Per Capita	2020 Non-Tax Revenue Per Capita	2019 Non-Tax Revenue Per Employee	2020 Non-Tax Revenue Per Employee

OK

**Licences, permits, rents, etc.**

Trailer revenue and permits . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Licences and permits . . . . .	\$3,108,551	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Rents, concessions and franchises . . . . .	\$390,567	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Royalties . . . . .	\$165,137	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Green Energy . . . . .	\$76,706	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . . Advertising sales	\$6,138	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Licences, permits, rents, etc.</b>	<b>\$3,747,099</b>				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>

**Fines and penalties**

Provincial Offences Act (POA) Municipality which administers PO	\$3,517,776	73%	27%	50%	\$17.12	\$17.46	\$17.12	\$17.46
Other fines . . . . .	\$33,774	73%	27%	50%	\$0.16	\$0.17	\$0.16	\$0.17
Penalties and interest on taxes . . . . .	\$2,008,708	73%	27%	50%	\$9.77	\$9.97	\$9.77	\$9.97
Other . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Fines and penalties</b>	<b>\$5,560,258</b>				<b>\$27.05</b>	<b>\$27.59</b>	<b>\$27.05</b>	<b>\$27.59</b>

**Other revenue**

Investment income. . . . .	\$1,764,258	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Interest earned on reserves and reserve funds. . . . .	\$1,348,898	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Gain/Loss on sale of land & capital assets. . . . .	-\$777,464	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Deferred revenue earned (Development Charges) (SLC 60 1025 01)	\$17,824,857	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Deferred revenue earned (Recreational land (The Planning Act)) (\$	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other Deferred revenue earne	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Donations. . . . .	\$245,162	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Donated Tangible Capital Assets (SLC 53 0610 01). . . . .	\$21,066,717	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Sale of publications, equipment, etc. . . . .	\$793	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Contributions from non-consolidated entities . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other Revenues from Government Business Enterprise (ie. Divide	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Gaming and Casino Revenues . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . . External Recovery	\$425,070	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . . Developer Contributions	\$430,454	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . . Insurance Recovery	\$644,182	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . . WSIB - Neer	\$504,340	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . . Property Standards Recovery	\$777,872	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Other revenue</b>	<b>\$44,255,139</b>				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>



Figure E- 3: Peel Region Operation Costs Per Capita and Per Employee

	Allocation of Expenses				2019 Expenses Per Resident	2020 Expenses Per Resident	2019 Expenses Per Employee	2020 Expenses Per Employee
	Total Expenses (Excluding Long- Term Debt)	Residential	Non- Residential	Estimated Growth Impact				
<b>General government</b>								
Governance . . . . .	\$4,232,429	71%	29%	50%	\$1.00	\$1.02	\$1.00	\$1.02
Corporate Management . . . . .	\$54,139,571	71%	29%	50%	\$12.78	\$13.04	\$12.78	\$13.04
Program Support . . . . .	\$99,770,251	71%	29%	50%	\$23.56	\$24.03	\$23.56	\$24.03
<b>Sub-total - General government</b>						<b>\$38.09</b>		<b>\$38.09</b>
<b>Protection services</b>								
Fire . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Police . . . . .	\$13,103,018	73%	27%	50%	\$63.75	\$65.03	\$63.75	\$65.03
Court Security . . . . .	\$2,343,964	71%	29%	75%	\$0.83	\$0.85	\$0.83	\$0.85
Prisoner Transportation . . . . .	\$10,225,356	71%	29%	50%	\$2.41	\$2.46	\$2.41	\$2.46
Conservation authority . . . . .	\$42,641,950	71%	29%	75%	\$15.10	\$15.41	\$15.10	\$15.41
Protective inspection and control . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Building permit and inspection services . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Emergency measures . . . . .	\$21,272	71%	29%	75%	\$0.01	\$0.01	\$0.01	\$0.01
Provincial Offences Act (POA) . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Protection services</b>						<b>\$83.75</b>		<b>\$83.75</b>
<b>Transportation services</b>								
Roads - Paved . . . . .	\$76,368,887	71%	29%	25%	\$9.02	\$9.20	\$9.02	\$9.20
Roads - Unpaved . . . . .	\$0	71%	29%	25%	\$0.00	\$0.00	\$0.00	\$0.00
Roads - Bridges and Culverts . . . . .	\$4,487,170	71%	29%	25%	\$0.53	\$0.54	\$0.53	\$0.54
Roads - Traffic Operations & Roadside . . . . .	\$8,277,001	71%	29%	25%	\$0.98	\$1.00	\$0.98	\$1.00
Winter Control - Except sidewalks, Parking Lots . . . . .	\$8,128,576	71%	29%	50%	\$1.92	\$1.96	\$1.92	\$1.96
Winter Control - Sidewalks, Parking Lots Only . . . . .	\$88,706	71%	29%	50%	\$0.02	\$0.02	\$0.02	\$0.02
Transit - Conventional . . . . .	\$12,300,911	71%	29%	50%	\$2.90	\$2.96	\$2.90	\$2.96
Transit - Disabled & special needs . . . . .	\$25,838,923	71%	29%	50%	\$6.10	\$6.22	\$6.10	\$6.22
Parking . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Street lighting . . . . .	\$1,384,094	71%	29%	50%	\$0.33	\$0.33	\$0.33	\$0.33
Air transportation . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Other Admin . . . . .	\$22,929,032	71%	29%	50%	\$5.41	\$5.52	\$5.41	\$5.52
<b>Sub-total - Transportation services</b>						<b>\$27.75</b>		<b>\$27.75</b>
<b>Environmental services</b>								
Wastewater collection/conveyance . . . . .	\$75,975,256	60%	40%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Wastewater treatment & disposal . . . . .	\$75,841,145	60%	40%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Urban storm sewer system . . . . .	\$12,882	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Rural storm sewer system . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Water treatment . . . . .	\$86,805,160	68%	32%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Water distribution/transmission . . . . .	\$135,389,166	68%	32%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Solid waste collection . . . . .	\$36,511,397	71%	29%	75%	\$12.93	\$13.19	\$12.93	\$13.19
Solid waste disposal . . . . .	\$37,771,085	71%	29%	75%	\$13.38	\$13.65	\$13.38	\$13.65
Waste diversion . . . . .	\$77,580,811	71%	29%	75%	\$27.48	\$28.03	\$27.48	\$28.03
Other . . . . .	\$0	71%	29%	75%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Environmental services</b>						<b>\$54.87</b>		<b>\$54.87</b>
<b>Health services</b>								
Public health services . . . . .	\$66,744,607	71%	29%	35%	\$11.03	\$11.25	\$11.03	\$11.25
Hospitals . . . . .	\$0	71%	29%	35%	\$0.00	\$0.00	\$0.00	\$0.00
Ambulance services . . . . .	\$97,583,611	71%	29%	35%	\$16.13	\$16.45	\$16.13	\$16.45
Ambulance dispatch . . . . .	\$0	71%	29%	35%	\$0.00	\$0.00	\$0.00	\$0.00
Cemeteries . . . . .	\$0	71%	29%	35%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	71%	29%	35%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Health services</b>						<b>\$27.70</b>		<b>\$27.70</b>

		Allocation of Expenses							
	Total Expenses (Excluding Long- Term Debt)	Residential	Non- Residential	Estimated Growth Impact	2019 Expenses Per Resident	2020 Expenses Per Resident	2019 Expenses Per Employee	2020 Expenses Per Employee	
Social and family services									
General assistance . . . . .	\$251,524,458	100%	0%	15%	\$25.01	\$25.51	\$0.00	\$0.00	
Assistance to aged persons . . . . .	\$93,074,046	100%	0%	15%	\$9.25	\$9.44	\$0.00	\$0.00	
Child care . . . . .	\$192,416,258	100%	0%	15%	\$19.13	\$19.51	\$0.00	\$0.00	
Other Admin	\$27,733,402	100%	0%	15%	\$2.76	\$2.81	\$0.00	\$0.00	
Sub-total - Social and family services						\$57.27	\$0.00		
Social Housing									
Public Housing . . . . .	\$45,318,545	100%	0%	0%	\$0.00	\$0.00	\$0.00	\$0.00	
Non-Profit/Cooperative Housing . . . . .	\$132,427,150	100%	0%	0%	\$0.00	\$0.00	\$0.00	\$0.00	
Rent Supplement Programs . . . . .	\$40,173,823	100%	0%	50%	\$13.31	\$13.58	\$0.00	\$0.00	
Other	\$0	100%	0%	50%	\$0.00	\$0.00	\$0.00	\$0.00	
Other	\$0	100%	0%	50%	\$0.00	\$0.00	\$0.00	\$0.00	
Sub-total - Social Housing						\$13.58	\$0.00		
Recreation and cultural services									
Parks . . . . .	\$0	95%	5%	50%	\$0.00	\$0.00	\$0.00	\$0.00	
Recreation programs . . . . .	\$0	95%	5%	50%	\$0.00	\$0.00	\$0.00	\$0.00	
Rec. Fac. - Golf Crs, Marina, Ski Hill . . . . .	\$0	95%	5%	50%	\$0.00	\$0.00	\$0.00	\$0.00	
Rec. Fac. - All Other . . . . .	\$0	95%	5%	50%	\$0.00	\$0.00	\$0.00	\$0.00	
Libraries . . . . .	\$0	95%	5%	50%	\$0.00	\$0.00	\$0.00	\$0.00	
Museums . . . . .	\$0	95%	5%	50%	\$0.00	\$0.00	\$0.00	\$0.00	
Cultural services . . . . .	\$3,024,381	95%	5%	50%	\$0.95	\$0.97	\$0.12	\$0.13	
Other	\$0	95%	5%	50%	\$0.00	\$0.00	\$0.00	\$0.00	
Sub-total - Recreation and cultural services						\$0.97	\$0.13		
Planning and development									
Planning and zoning . . . . .	\$10,231,824	71%	29%	50%	\$2.42	\$2.46	\$2.42	\$2.46	
Commercial and Industrial . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00	
Residential development . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00	
Agriculture and reforestation . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00	
Tile drainage/shoreline assistance . . . . .	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00	
Other	\$0	71%	29%	50%	\$0.00	\$0.00	\$0.00	\$0.00	
Sub-total - Planning and development						\$2.46	\$2.46		
Other	Federal Gas Tax - lower tiers	\$69,712,365	71%	29%	0%	\$0.00	\$0.00	\$0.00	\$0.00
Total Expenses		\$1,790,316,082				\$306.45	\$234.75		

Figure E- 4: Town of Caledon Operation Costs Per Capita and Per Employee

	Allocation of Expenses				2019 Expenses Per Resident	2020 Expenses Per Resident	2019 Expenses Per Employee	2020 Expenses Per Employee
	Total Expenses (Excluding Long-Term Debt)	Residential	Non- Residential	Estimated Growth Impact				
<b>General government</b>								
Governance . . . . .	\$767,790	73%	27%	50%	\$3.74	\$3.81	\$3.74	\$3.81
Corporate Management . . . . .	\$9,071,764	73%	27%	50%	\$44.14	\$45.02	\$44.14	\$45.02
Program Support . . . . .	\$10,115,441	73%	27%	50%	\$49.22	\$50.20	\$49.22	\$50.20
<b>Sub-total - General government</b>						<b>\$99.03</b>		<b>\$99.03</b>
<b>Protection services</b>								
Fire . . . . .	\$11,453,325	73%	27%	75%	\$83.59	\$85.26	\$83.59	\$85.26
Police . . . . .	\$820,712	73%	27%	75%	\$5.99	\$6.11	\$5.99	\$6.11
Court Security . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Prisoner Transportation . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Conservation authority . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Protective inspection and control . . . . .	\$2,149,774	73%	27%	75%	\$15.69	\$16.00	\$15.69	\$16.00
Building permit and inspection services . . . . .	\$1,969,605	73%	27%	75%	\$14.37	\$14.66	\$14.37	\$14.66
Emergency measures . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Provincial Offences Act (POA) . . . . .	\$1,821,540	73%	27%	50%	\$8.86	\$9.04	\$8.86	\$9.04
Other . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Protection services</b>						<b>\$131.07</b>		<b>\$131.07</b>
<b>Transportation services</b>								
Roads - Paved . . . . .	\$7,066,859	73%	27%	50%	\$34.38	\$35.07	\$34.38	\$35.07
Roads - Unpaved . . . . .	\$688,311	73%	27%	50%	\$3.35	\$3.42	\$3.35	\$3.42
Roads - Bridges and Culverts . . . . .	\$1,947,924	73%	27%	50%	\$9.48	\$9.67	\$9.48	\$9.67
Roads - Traffic Operations & Roadside . . . . .	\$8,457,729	73%	27%	50%	\$41.15	\$41.97	\$41.15	\$41.97
Winter Control - Except sidewalks, Parking Lots Only	\$1,953,170	73%	27%	50%	\$9.50	\$9.69	\$9.50	\$9.69
Winter Control - Sidewalks, Parking Lots Only	\$742,600	73%	27%	50%	\$3.61	\$3.69	\$3.61	\$3.69
Transit - Conventional . . . . .	\$159,807	73%	27%	50%	\$0.78	\$0.79	\$0.78	\$0.79
Transit - Disabled & special needs . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Parking . . . . .	\$445,561	73%	27%	50%	\$2.17	\$2.21	\$2.17	\$2.21
Street lighting . . . . .	\$1,188,159	73%	27%	50%	\$5.78	\$5.90	\$5.78	\$5.90
Air transportation . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Transportation services</b>						<b>\$112.41</b>		<b>\$112.41</b>
<b>Environmental services</b>								
Wastewater collection/conveyance . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Wastewater treatment & disposal . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Urban storm sewer system . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Rural storm sewer system . . . . .	\$793,966	73%	27%	75%	\$5.79	\$5.91	\$5.79	\$5.91
Water treatment . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Water distribution/transmission . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Solid waste collection . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Solid waste disposal . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Waste diversion . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . . Community Green	\$30,003	73%	27%	75%	\$0.22	\$0.22	\$0.22	\$0.22
<b>Sub-total - Environmental services</b>						<b>\$6.13</b>		<b>\$6.13</b>
<b>Health services</b>								
Public health services . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Hospitals . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Ambulance services . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Ambulance dispatch . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Cemeteries . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
Other . . . . .	\$0	73%	27%	75%	\$0.00	\$0.00	\$0.00	\$0.00
<b>Sub-total - Health services</b>						<b>\$0.00</b>		<b>\$0.00</b>

	Allocation of Expenses		Estimated Growth Impact	2019 Expenses Per Resident	2020 Expenses Per Resident	2019 Expenses Per Employee	2020 Expenses Per Employee
	Total Expenses (Excluding Long-Term Debt)	Residential					
<b>Social and family services</b>							
General assistance . . . . .	\$0	95%	5%	75%	\$0.00	\$0.00	\$0.00
Assistance to aged persons . . . . .	\$47,052	95%	5%	75%	\$0.45	\$0.45	\$0.06
Child care . . . . .	\$0	95%	5%	75%	\$0.00	\$0.00	\$0.00
Other	\$0	95%	5%	75%	\$0.00	\$0.00	\$0.00
<b>Sub-total - Social and family services</b>					<b>\$0.45</b>		<b>\$0.07</b>
<b>Social Housing</b>							
Public Housing . . . . .	\$0	95%	5%	0%	\$0.00	\$0.00	\$0.00
Non-Profit/Cooperative Housing . . . . .	\$0	95%	5%	0%	\$0.00	\$0.00	\$0.00
Rent Supplement Programs . . . . .	\$0	95%	5%	50%	\$0.00	\$0.00	\$0.00
Other = [F182401 Oakville] . . . . .	\$0	95%	5%	50%	\$0.00	\$0.00	\$0.00
Other	\$0	95%	5%	50%	\$0.00	\$0.00	\$0.00
<b>Sub-total - Social Housing</b>					<b>\$0.00</b>		<b>\$0.00</b>
<b>Recreation and cultural services</b>							
Parks . . . . .	\$3,663,779	95%	5%	75%	\$34.67	\$35.37	\$5.00
Recreation programs . . . . .	\$2,729,665	95%	5%	75%	\$25.83	\$26.35	\$3.73
Rec. Fac. - Golf Crs, Marina, Ski Hill . . . . .	\$0	95%	5%	50%	\$0.00	\$0.00	\$0.00
Rec. Fac. - All Other . . . . .	\$11,205,294	95%	5%	50%	\$70.69	\$72.11	\$10.20
Libraries . . . . .	\$3,701,420	95%	5%	50%	\$23.35	\$23.82	\$3.37
Museums . . . . .	\$0	95%	5%	50%	\$0.00	\$0.00	\$0.00
Cultural services . . . . .	\$0	95%	5%	50%	\$0.00	\$0.00	\$0.00
Other	\$0	95%	5%	50%	\$0.00	\$0.00	\$0.00
<b>Sub-total - Recreation and cultural services</b>					<b>\$157.64</b>		<b>\$22.74</b>
<b>Planning and development</b>							
Planning and zoning . . . . .	\$5,674,825	73%	27%	50%	\$27.61	\$28.16	\$28.16
Commercial and Industrial . . . . .	\$654,796	73%	27%	50%	\$3.19	\$3.25	\$3.19
Residential development . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00
Agriculture and reforestation . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00
Tile drainage/shoreline assistance . . . . .	\$0	73%	27%	50%	\$0.00	\$0.00	\$0.00
Other BIA	\$77,640	73%	27%	50%	\$0.38	\$0.39	\$0.38
<b>Sub-total - Planning and development</b>					<b>\$31.80</b>		<b>\$31.80</b>
<b>Other</b>	\$0	73%	27%	0%	\$0.00	\$0.00	\$0.00
<b>Total Expenses</b>	<b>\$89,398,511</b>				<b>\$538.54</b>		<b>\$403.24</b>

## Appendix F    Ongoing Revenue

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**Figure F- 1: Peel Region Non-Tax Revenue Per Capita and Employee (Excluding Water and Wastewater User Fees)****Per Capita**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Payments-in-Lieu of Taxation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
OMPF and Cannabis	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Conditional Grants	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Revenue from other municipalities for Tangible Capital Assets	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Revenue from other municipalities	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
User Fees and Service Charges	\$12.38	\$12.62	\$12.87	\$13.12	\$13.37	\$13.61	\$13.86	\$14.11	\$14.36	\$14.60	\$14.85
Licences, permits, rents, etc.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fines and penalties	\$0.29	\$0.30	\$0.30	\$0.31	\$0.31	\$0.32	\$0.33	\$0.33	\$0.34	\$0.34	\$0.35
Other revenue	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Peel Region - Non-Tax Revenue Per Resident (Excluding Water and Sewer)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$32,686</b>	<b>\$66,628</b>	<b>\$101,828</b>	<b>\$138,285</b>	<b>\$175,999</b>	<b>\$214,791</b>	<b>\$233,699</b>	<b>\$252,355</b>	<b>\$258,683</b>

**Per Employee**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Payments-in-Lieu of Taxation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
OMPF and Cannabis	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Conditional Grants	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Revenue from other municipalities for Tangible Capital Assets	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Revenue from other municipalities	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
User Fees and Service Charges	\$12.38	\$12.62	\$12.87	\$13.12	\$13.37	\$13.61	\$13.86	\$14.11	\$14.36	\$14.60	\$14.85
Licences, permits, rents, etc.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fines and penalties	\$0.29	\$0.30	\$0.30	\$0.31	\$0.31	\$0.32	\$0.33	\$0.33	\$0.34	\$0.34	\$0.35
Other revenue	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Peel Region - Non-Tax Revenue Employee (Excluding Water and Sewer)</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,675</b>	<b>\$2,723</b>	<b>\$2,770</b>	<b>\$2,818</b>	<b>\$4,538</b>

**Figure F- 2: Town of Caledon Non-Tax Revenue Per Capita and Employee**

**Per Capita**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Payments-in-Lieu of Taxation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
OMPF and Cannabis	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Conditional Grants	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Revenue from other municipalities for Tangible Capital Assets	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Revenue from other municipalities	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
User Fees and Service Charges	\$34.11	\$34.79	\$35.47	\$36.15	\$36.83	\$37.52	\$38.20	\$38.88	\$39.56	\$40.24	\$40.93
Licences, permits, rents, etc.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fines and penalties	\$27.59	\$28.15	\$28.70	\$29.25	\$29.80	\$30.35	\$30.91	\$31.46	\$32.01	\$32.56	\$33.11
Other revenue	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Caledon Non-Tax Revenue Per Resident</b>	<b>\$0</b>	<b>\$0</b>	<b>\$159,200</b>	<b>\$324,524</b>	<b>\$495,970</b>	<b>\$673,540</b>	<b>\$857,233</b>	<b>\$1,046,176</b>	<b>\$1,138,270</b>	<b>\$1,229,136</b>	<b>\$1,259,957</b>

**Per Employee**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Payments-in-Lieu of Taxation	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
OMPF and Cannabis	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Conditional Grants	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Revenue from other municipalities for Tangible Capital Assets	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Revenue from other municipalities	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
User Fees and Service Charges	\$34.11	\$34.79	\$35.47	\$36.15	\$36.83	\$37.52	\$38.20	\$38.88	\$39.56	\$40.24	\$40.93
Licences, permits, rents, etc.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Fines and penalties	\$27.59	\$28.15	\$28.70	\$29.25	\$29.80	\$30.35	\$30.91	\$31.46	\$32.01	\$32.56	\$33.11
Other revenue	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Caledon Non-Tax Revenue Per Employee</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$13,028</b>	<b>\$13,261</b>	<b>\$13,493</b>	<b>\$13,726</b>	<b>\$22,103</b>

Figure F- 3: Peel Region Water and Wastewater User Fees

Residential Water and Wastewater Revenue

Annual Consumption Charge

Average Daily Water Demand (L/day)  
Average Monthly Water Demand (m3/month)  
Annual Water Consumption Charge

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
0	0	719,490	1,438,980	2,158,470	2,877,960	3,597,450	4,313,344	4,612,131	4,895,896	4,935,017
0	0	21,585	43,169	64,754	86,339	107,924	129,400	138,364	146,877	148,051
\$0	\$0	\$754,606	\$1,538,235	\$2,350,888	\$3,192,564	\$4,063,263	\$4,958,851	\$5,395,376	\$5,826,078	\$5,972,168

Annual Service Charge

Number of Properties  
Annual Service Charge

0	0	960	1,920	2,880	3,840	4,800	5,756	6,285	6,800	6,871
\$0	\$0	\$404,711	\$824,989	\$1,260,832	\$1,712,241	\$2,179,215	\$2,659,907	\$2,955,318	\$3,252,609	\$3,342,274

Non-Residential Water and Wastewater Revenue

Annual Consumption Charge

Average Daily Water Demand (L/day)  
Average Monthly Water Demand (m3/month)  
Annual Water Consumption Charge

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
0	0	0	0	0	0	54,674	54,674	54,674	54,674	86,574
0	0	0	0	0	0	1,640	1,640	1,640	1,640	2,597
\$0	\$0	\$0	\$0	\$0	\$0	\$61,753	\$62,856	\$63,958	\$65,061	\$104,768

Annual Service Charge

Number of Blocks  
Annual Service Charge

0	0	0	0	0	0	2	2	2	2	3
\$0	\$0	\$0	\$0	\$0	\$0	\$908	\$924	\$940	\$957	\$1,459



## Appendix G   Ongoing Costs

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Figure G- 1: Peel Region Operating Costs

**Per Capita**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
General government	\$38.09	\$38.85	\$39.61	\$40.37	\$41.13	\$41.90	\$42.66	\$43.42	\$44.18	\$44.94	\$45.70
Protection services	\$83.75	\$85.42	\$87.10	\$88.77	\$90.45	\$92.12	\$93.80	\$95.47	\$97.15	\$98.82	\$100.50
Transportation services	\$27.75	\$28.31	\$28.86	\$29.42	\$29.97	\$30.53	\$31.08	\$31.64	\$32.19	\$32.75	\$33.30
Environmental services	\$54.87	\$55.96	\$57.06	\$58.16	\$59.26	\$60.35	\$61.45	\$62.55	\$63.65	\$64.74	\$65.84
Health services	\$27.70	\$28.26	\$28.81	\$29.37	\$29.92	\$30.47	\$31.03	\$31.58	\$32.14	\$32.69	\$33.24
Social and family services	\$57.27	\$58.42	\$59.57	\$60.71	\$61.86	\$63.00	\$64.15	\$65.29	\$66.44	\$67.58	\$68.73
Social Housing	\$13.58	\$13.85	\$14.12	\$14.40	\$14.67	\$14.94	\$15.21	\$15.48	\$15.75	\$16.03	\$16.30
Recreation and cultural services	\$0.97	\$0.99	\$1.01	\$1.03	\$1.05	\$1.07	\$1.09	\$1.11	\$1.13	\$1.15	\$1.17
Planning and development	\$2.46	\$2.51	\$2.56	\$2.61	\$2.66	\$2.71	\$2.76	\$2.81	\$2.86	\$2.91	\$2.96
Other	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Peel Region Residential Additional Municipal-wide Operating Costs</b>	<b>\$0</b>	<b>\$0</b>	<b>\$790,722</b>	<b>\$1,611,857</b>	<b>\$2,463,404</b>	<b>\$3,345,363</b>	<b>\$4,257,735</b>	<b>\$5,196,187</b>	<b>\$5,653,604</b>	<b>\$6,104,920</b>	<b>\$6,258,002</b>

**Per Employee**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
General government	\$38.09	\$38.85	\$39.61	\$40.37	\$41.13	\$41.90	\$42.66	\$43.42	\$44.18	\$44.94	\$45.70
Protection services	\$83.75	\$85.42	\$87.10	\$88.77	\$90.45	\$92.12	\$93.80	\$95.47	\$97.15	\$98.82	\$100.50
Transportation services	\$27.75	\$28.31	\$28.86	\$29.42	\$29.97	\$30.53	\$31.08	\$31.64	\$32.19	\$32.75	\$33.30
Environmental services	\$54.87	\$55.96	\$57.06	\$58.16	\$59.26	\$60.35	\$61.45	\$62.55	\$63.65	\$64.74	\$65.84
Health services	\$27.70	\$28.26	\$28.81	\$29.37	\$29.92	\$30.47	\$31.03	\$31.58	\$32.14	\$32.69	\$33.24
Social and family services	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Social Housing	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Recreation and cultural services	\$0.13	\$0.13	\$0.13	\$0.13	\$0.14	\$0.14	\$0.14	\$0.14	\$0.15	\$0.15	\$0.15
Planning and development	\$2.46	\$2.51	\$2.56	\$2.61	\$2.66	\$2.71	\$2.76	\$2.81	\$2.86	\$2.91	\$2.96
Other	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Peel Region Non-Residential Additional Municipal-wide Operating Costs</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$49,569</b>	<b>\$50,454</b>	<b>\$51,339</b>	<b>\$52,224</b>	<b>\$84,097</b>

Figure G- 2: Peel Region Water and Wastewater Costs

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Water and Wastewater Revenue	\$0	\$0	\$1,159,000	\$2,363,000	\$3,612,000	\$4,905,000	\$6,305,000	\$7,683,000	\$8,416,000	\$9,145,000	\$9,421,000
Expense to Revenue Ratio	53%	53%	53%	53%	53%	53%	53%	53%	53%	53%	53%
Water and Wastewater Costs	\$0	\$0	\$612,909	\$1,249,615	\$1,910,118	\$2,593,889	\$3,334,245	\$4,062,967	\$4,450,596	\$4,836,110	\$4,982,066
Site Specific Water and Wastewater Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Expense to Revenue Ratio	53%	53%	53%	53%	53%	53%	53%	53%	53%	53%	53%
<b>Total Water and Wastewater Costs</b>	<b>\$0</b>	<b>\$0</b>	<b>\$612,909</b>	<b>\$1,249,615</b>	<b>\$1,910,118</b>	<b>\$2,593,889</b>	<b>\$3,334,245</b>	<b>\$4,062,967</b>	<b>\$4,450,596</b>	<b>\$4,836,110</b>	<b>\$4,982,066</b>

**Figure G- 3: Town of Caledon Operating Costs**

**Per Capita**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
General government	\$99.03	\$101.01	\$102.99	\$104.97	\$106.95	\$108.93	\$110.92	\$112.90	\$114.88	\$116.86	\$118.84
Protection services	\$131.07	\$133.70	\$136.32	\$138.94	\$141.56	\$144.18	\$146.80	\$149.42	\$152.05	\$154.67	\$157.29
Transportation services	\$112.41	\$114.65	\$116.90	\$119.15	\$121.40	\$123.65	\$125.90	\$128.14	\$130.39	\$132.64	\$134.89
Environmental services	\$6.13	\$6.26	\$6.38	\$6.50	\$6.62	\$6.75	\$6.87	\$6.99	\$7.12	\$7.24	\$7.36
Health services	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Social and family services	\$0.45	\$0.46	\$0.47	\$0.48	\$0.49	\$0.50	\$0.51	\$0.52	\$0.53	\$0.54	\$0.55
Social Housing	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Recreation and cultural services	\$157.64	\$160.79	\$163.95	\$167.10	\$170.25	\$173.40	\$176.56	\$179.71	\$182.86	\$186.02	\$189.17
Planning and development	\$31.80	\$32.43	\$33.07	\$33.71	\$34.34	\$34.98	\$35.61	\$36.25	\$36.89	\$37.52	\$38.16
Other	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Caledon Residential Additional Municipal-wide Operating Costs</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,389,556</b>	<b>\$2,832,556</b>	<b>\$4,329,001</b>	<b>\$5,878,890</b>	<b>\$7,482,223</b>	<b>\$9,131,388</b>	<b>\$9,935,220</b>	<b>\$10,728,328</b>	<b>\$10,997,343</b>

**Per Employee**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
General government	\$99.03	\$101.01	\$102.99	\$104.97	\$106.95	\$108.93	\$110.92	\$112.90	\$114.88	\$116.86	\$118.84
Protection services	\$131.07	\$133.70	\$136.32	\$138.94	\$141.56	\$144.18	\$146.80	\$149.42	\$152.05	\$154.67	\$157.29
Transportation services	\$112.41	\$114.65	\$116.90	\$119.15	\$121.40	\$123.65	\$125.90	\$128.14	\$130.39	\$132.64	\$134.89
Environmental services	\$6.13	\$6.26	\$6.38	\$6.50	\$6.62	\$6.75	\$6.87	\$6.99	\$7.12	\$7.24	\$7.36
Health services	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Social and family services	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.07	\$0.08	\$0.08	\$0.08
Social Housing	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Recreation and cultural services	\$22.74	\$23.19	\$23.64	\$24.10	\$24.55	\$25.01	\$25.46	\$25.92	\$26.37	\$26.83	\$27.28
Planning and development	\$31.80	\$32.43	\$33.07	\$33.71	\$34.34	\$34.98	\$35.61	\$36.25	\$36.89	\$37.52	\$38.16
Other	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Caledon Non-Residential Additional Municipal-wide Operating Costs</b>	<b>\$0.00</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$85,146</b>	<b>\$86,667</b>	<b>\$88,187</b>	<b>\$89,707</b>	<b>\$144,456</b>

## Appendix H    UrbanTech Consulting – Infrastructure Costs

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# URBANTECH®

July 31, 2020

**Project #:** 15-458

Attn: Cate Flanagan,  
Associate Consultant  
Urban Metrics Inc.  
67 Yonge Street, Suite 804  
Toronto, ON, M5E 1J8

**Re: Macville Bres Option 3 Development Costs  
Town of Caledon**

Dear Ms. Flanagan,

As requested, we have prepared the following assessment to outline the long-term infrastructure costs to the Town of Caledon for the maintenance and, ultimately, full replacement of the municipal infrastructure associated with the captioned development.

## 1. Construction Cost Estimate

Based on the conceptual design prepared by Gerrard Design Inc., dated July 6, 2020, the project will include municipal infrastructure as summarized in Table 1.

**Table 1 – Municipal Infrastructure**

Description	Unit	Ph1 Quantity	Ph2 Quantity	Ph3 Quantity	Ph4 Quantity
Sanitary	Lineal Metre	10,472	3,049	6,050	7,238
Storm	Lineal Metre	9,625	2,200	4,540	6,880
Water	Lineal Metre	10,472	3,049	6,050	7,238
Roads	Lineal Metre	11,872	3,103	6,569	7,738
Sidewalks	Lineal Metre	17,592	5,798	11,309	13,626
SWM Facility	Each	-	1	-	1

We have prepared a summary of preliminary construction cost estimate for the underground servicing, roadworks, sidewalks, and stormwater management facilities listed above, as summarized in Table 2.

**Table 2 – Preliminary Cost Estimate Summary**

Description	Ph1 Total	Ph2 Total	Ph3 Total	Ph4 Total
Sanitary	\$3,879,680.00	\$1,251,910.00	\$2,247,500.00	\$2,796,470.00
Storm	\$4,567,900.00	\$1,626,700.00	\$1,516,550.00	\$5,223,250.00
Water	\$3,073,380.00	\$1,209,335.00	\$1,967,750.00	\$1,817,520.00
Roads	\$8,885,710.00	\$2,740,336.00	\$4,885,020.00	\$5,995,619.00
Sidewalks	\$1,970,304.00	\$649,376.00	\$1,266,608.00	\$1,526,112.00
SWM Facility	-	\$625,000.00	-	\$604,000.00

The following items were not included in the calculation of the preliminary cost estimate:

- Earthworks of lots, blocks, roads, parks, and SWM ponds
- Dewatering, blasting, or removal of unsuitable material
- Construction premiums for works within existing ROW
- Demolition of existing underground and aboveground structures
- Hydro, streetlighting, and gas
- Landscaping
- Engineering fees, and taxes

## 2. Maintenance and Replacement Cycle

Reasonable maintenance intervals and useful lifespan (i.e. full replacement interval) for the municipal infrastructure are listed in Table 3.

**Table 3 – Lifespan and Maintenance Intervals**

Item	Useful Lifespan (Years)	Maintenance Interval (Years)	Description of Maintenance
Sanitary	50	10	Localized flushing and isolated repairs
Storm	50	10	Localized flushing and isolated repairs
Water	50	10	Periodic maintenance of valves and isolated repairs
Roads	50	10	Rehabilitation of asphalt
Sidewalks	50	10	Isolated repairs
SWM Facility	50	10	Removal of accumulated sediment

### 3. Maintenance Cost Estimate

We have prepared a summary of the maintenance cost estimate based on the description of maintenance from Table 3 above for the underground servicing, roadworks, sidewalks, and stormwater management facilities, as summarized in Table 4. The maintenance cost estimate is based on the assumption that 5% of the sanitary, storm, and water-main lengths will require repair at each 10 year interval; 30% of the road area will require rehabilitation at each 10 year interval; 20% of the sidewalk lengths will require repairs at each 10 year interval; and SWM Ponds facilities to be cleaned out at each 10 year interval.

**Table 4 – Maintenance Cost Estimate (Per 10 Year Interval)**

Description	Ph1 Total	Ph2 Total	Ph3 Total	Ph4 Total
Sanitary	\$303,456.37	\$88,353.56	\$175,316.18	\$209,741.90
Storm	\$436,223.26	\$99,708.17	\$205,761.41	\$311,814.65
Water	\$314,653.84	\$91,613.78	\$181,785.30	\$217,481.33
Roads	\$1,846,903.50	\$578,682.00	\$1,021,897.50	\$1,231,464.00
Sidewalks	\$668,946.00	\$220,324.00	\$429,742.00	\$517,788.00
SWM Facility	-	\$834,000.00	-	\$559,500.00

For further details of our cost estimates, we have included Attachment 1 for the preliminary cost estimate breakdown, and Attachment 2 for the preliminary servicing and road length plans.

Regards,  
**Urbantech® Consulting**

David Luc, P.Eng.  
*Senior Associate, Contract Admin*

**Cc:** Aaron Wisson, Argo Development Corp  
Dave Leighton, Urbantech Consulting

**Attachment 1**

**Preliminary Construction Cost Estimate Breakdown**



PRELIMINARY COST ESTIMATE - BREAKDOWN  
ARGO MACVILLE - BRES OPTION 3  
TOWN OF CALEDON

July 31, 2020



**SWM POND**

Item	Description	Unit	Unit Rate	PHASE 1		PHASE 2		PHASE 3		PHASE 4	
				Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
<b>1</b>	<b>Servicing:</b>	<b>Avg/ha</b>	<b>\$ 132,292.79</b>								
a)	Inlet Structures	ea	\$ 85,000.00			5.56ha	\$ 625,000.00			3.73ha	\$ 604,000.00
b)	Spillways / Access Roads	ea	\$ 35,000.00			2	\$ 70,000.00			2	\$ 70,000.00
c)	Dewatering Sump	ls	\$ 40,000.00			1	\$ 40,000.00			1	\$ 40,000.00
d)	Outlet Structures	ls	\$ 150,000.00			1	\$ 150,000.00			1	\$ 150,000.00
e)	Maintenance Roads	m	\$ 150.00			800	\$ 120,000.00			660	\$ 99,000.00
f)	Emergency Spillway	ls	\$ 75,000.00			1	\$ 75,000.00			1	\$ 75,000.00

PRELIMINARY COST ESTIMATE - BREAKDOWN  
ARGO MACVILLE - BRES OPTION 3  
TOWN OF CALEDON



July 31, 2020

UNDERGROUND SERVICING

Item	Description	Unit	Unit Rate	PHASE 1		PHASE 2		PHASE 3		PHASE 4	
				Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
1	Sanitary:	Avg/ROW m	\$ 379.56	10472m	\$ 3,879,680.00	3049m	\$ 1,251,910.00	6050m	\$ 2,247,500.00	7238m	\$ 2,796,470.00
	a) Manholes (1200mm Dia at 3-5m Depth)	ea	\$ 18,000.00	105	\$ 1,890,000.00	31	\$ 558,000.00	61	\$ 1,098,000.00	73	\$ 1,314,000.00
	b) Sewer (250mm Dia at 3-5m Depth)	m	\$ 160.00	10,472	\$ 1,675,520.00	2,009	\$ 321,440.00	6,050	\$ 968,000.00	6,263	\$ 1,002,080.00
	c) Sewer (450mm Dia at 3-5m Depth)	m	\$ 230.00		-	370	\$ 85,100.00		-		\$ -
	d) Sewer (525mm Dia at 3-5m Depth)	m	\$ 270.00		-	370	\$ 99,900.00		-	975	\$ 263,250.00
	e) Sewer (600mm Dia at 3-5m Depth)	m	\$ 320.00		-	300	\$ 96,000.00		-		\$ -
	f) CCTV/Air/Mandrel	m	\$ 30.00	10,472	\$ 314,160.00	3,049	\$ 91,470.00	6,050	\$ 181,500.00	7,238	\$ 217,140.00
2	Storm:	Avg/ROW m	\$ 556.44	9625m	\$ 4,567,900.00	2200m	\$ 1,626,700.00	4540m	\$ 1,516,550.00	6880m	\$ 5,223,250.00
	a) Manholes (1200mm Dia at 3-5m Depth)	ea	\$ 6,000.00	89	\$ 534,000.00	21	\$ 126,000.00	45	\$ 270,000.00	62	\$ 372,000.00
	b) Manholes (1500mm Dia at 3-5m Depth)	ea	\$ 7,500.00	5	\$ 37,500.00	2	\$ 15,000.00		-	2	\$ 15,000.00
	c) Manholes (1800mm Dia at 3-5m Depth)	ea	\$ 9,000.00		-		-		-	4	\$ 36,000.00
	d) Manholes (1800 x 3000mm Box at 3-5m Depth)	ea	\$ 30,000.00	1	\$ 30,000.00		-		-	3	\$ 90,000.00
	e) Manholes (2400 x 3800mm Box at 3-5m Depth)	ea	\$ 40,000.00		-		40,000.00		-		\$ -
	f) Sewer (375mm Dia at 3-5m Depth)	m	\$ 190.00	2,350	\$ 446,500.00	1,075	\$ 204,250.00	2,595	\$ 493,050.00	3,475	\$ 660,250.00
	g) Sewer (450mm Dia at 3-5m Depth)	m	\$ 230.00	1,425	\$ 327,750.00	825	\$ 189,750.00	1,265	\$ 290,950.00	1,075	\$ 247,250.00
	h) Sewer (525mm Dia at 3-5m Depth)	m	\$ 270.00	3,850	\$ 1,039,500.00		-	350	\$ 94,500.00	600	\$ 162,000.00
	i) Sewer (675mm Dia at 3-5m Depth)	m	\$ 380.00	850	\$ 323,000.00		-	130	\$ 49,400.00	380	\$ 144,400.00
	j) Sewer (750mm Dia at 3-5m Depth)	m	\$ 500.00	400	\$ 200,000.00		-	200	\$ 100,000.00	70	\$ 35,000.00
	k) Sewer (900mm Dia at 3-5m Depth)	m	\$ 690.00	100	\$ 69,000.00		-		-		\$ -
	l) Sewer (1200mm Dia at 3-5m Depth)	m	\$ 1,050.00	400	\$ 420,000.00	100	\$ 105,000.00		-	100	\$ 105,000.00
	m) Sewer (1500mm Dia at 3-5m Depth)	m	\$ 1,890.00		-		-		-	350	\$ 661,500.00
	n) Sewer (1200 x 2400mm Box at 3-5m Depth)	m	\$ 2,730.00	250	\$ 682,500.00		-		-	380	\$ 1,037,400.00
	o) Sewer (1500 x 2400mm Box at 3-5m Depth)	m	\$ 2,940.00		-		-		-	450	\$ 1,323,000.00
	p) Sewer (1500 x 3000mm Box at 3-5m Depth)	m	\$ 4,200.00		-	200	\$ 840,000.00		-		\$ -
	q) CB / DCB Average	ea	\$ 3,850.00	94	\$ 361,900.00	22	\$ 84,700.00	45	\$ 173,250.00	69	\$ 265,650.00
	r) CCTV mainlines	m	\$ 10.00	9,625	\$ 96,250.00	2,200	\$ 22,000.00	4,540	\$ 45,400.00	6,880	\$ 68,800.00
3	Watermain:	Avg/ROW m	\$ 300.94	10472m	\$ 3,073,380.00	3049m	\$ 1,209,335.00	6050m	\$ 1,967,750.00	7238m	\$ 1,817,520.00
	a) 200mm Dia. PVC	m	\$ 125.00	9,782	\$ 1,222,750.00	2,379	\$ 297,375.00	5,290	\$ 661,250.00	7,238	\$ 904,750.00
	b) 400mm Dia. PVC	m	\$ 450.00	690	\$ 310,500.00	670	\$ 301,500.00	760	\$ 342,000.00		\$ -
	c) Watermain Restrained Joints (50% of Watermain)	m	\$ 50.00	5,236	\$ 261,800.00	1,525	\$ 76,225.00	3,025	\$ 151,250.00	3,619	\$ 180,950.00
	d) Hydrants (100m Spacing)	ea	\$ 6,000.00	105	\$ 630,000.00	30	\$ 180,000.00	60	\$ 360,000.00	72	\$ 432,000.00
	e) Valve Boxes 200mm Dia. (In-Line)	ea	\$ 2,250.00	85	\$ 191,250.00	26	\$ 58,500.00	50	\$ 112,500.00	85	\$ 191,250.00
	f) Valve Chamber (For 400mm Dia. WM)	ea	\$ 50,000.00	6	\$ 300,000.00	5	\$ 250,000.00	5	\$ 250,000.00		\$ -
	g) Testing	m	\$ 15.00	10,472	\$ 157,080.00	3,049	\$ 45,735.00	6,050	\$ 90,750.00	7,238	\$ 108,570.00

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15-048-02-02-03-Argo Macville BRES Option 3 Preliminary Estimate Exc/Earthwork/Inst



PRELIMINARY COST ESTIMATE - BREAKDOWN  
ARGO MACVILLE - BRES OPTION 3  
TOWN OF CALEDON



July 31, 2020

ROADWORKS

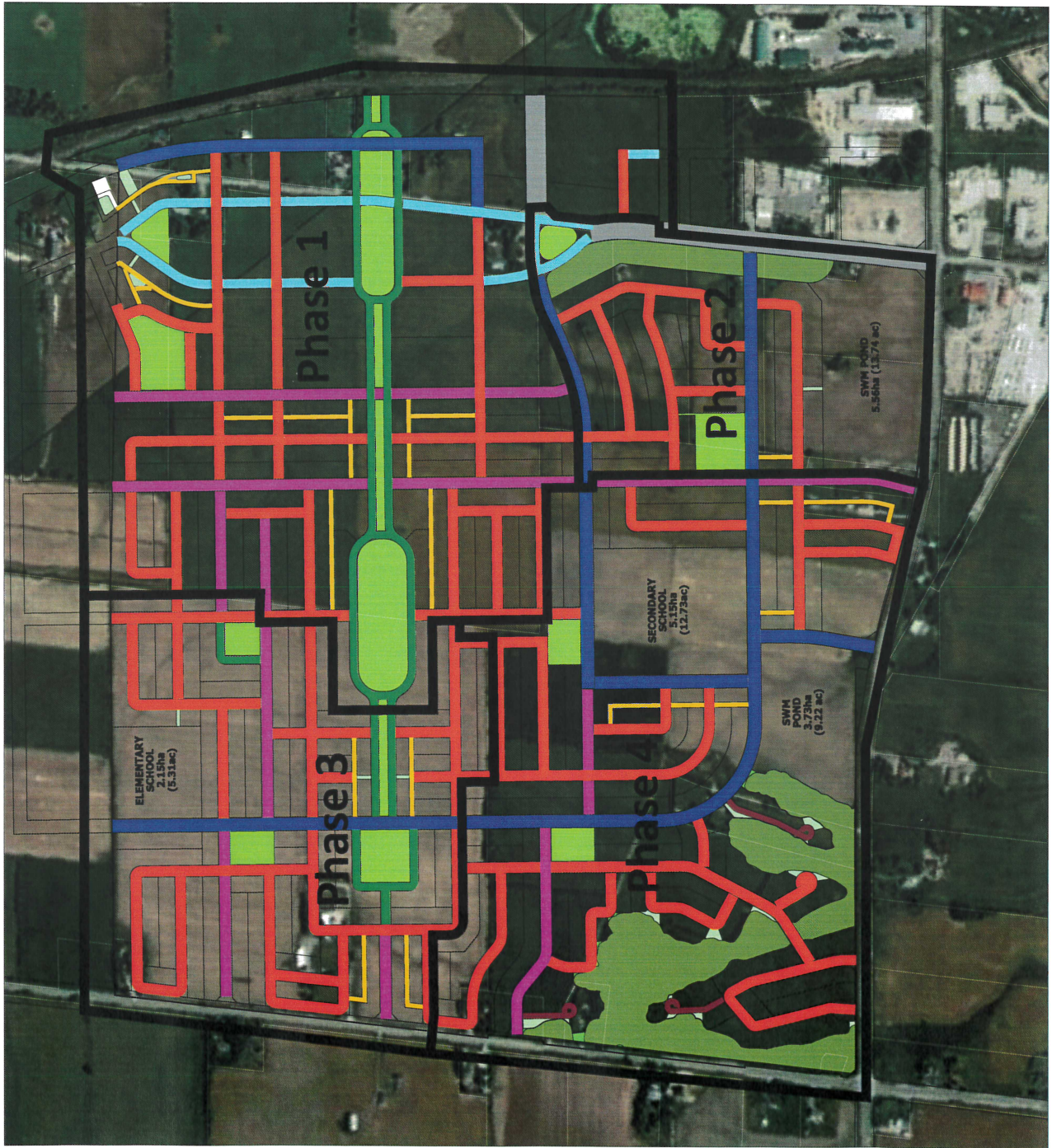
Item	Description	Unit	Unit Rate	PHASE 1		PHASE 2		PHASE 3		PHASE 4	
				Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
ROAD LENGTH SUMMARY:											
				190	30m ROW	560	30m ROW	0	30m ROW	0	30m ROW
				694	22m ROW	696	22m ROW	570	22m ROW	1,735	22m ROW
				1,756	20m ROW	0	20m ROW	725	20m ROW	1,038	20m ROW
				4,480	18m ROW	1,493	18m ROW	3,964	18m ROW	4,040	18m ROW
				3,352	14m - 16m ROW	300	14m - 16m ROW	791	14m - 16m ROW	0	14m - 16m ROW
				1,400	8m - 10m Laneway	54	8m - 10m Laneway	519	8m - 10m Laneway	925	8m - 10m Laneway
1	Road Works:	Avg/ROW m	\$ 768.62	11872m	\$ 8,885,710.00	3103m	\$ 2,740,336.00	6569m	\$ 4,885,020.00	7738m	\$ 5,995,619.00
a)	Fine-Grade	m <sup>2</sup>	\$ 1.00	197,088	\$ 197,088.00	64,218	\$ 64,218.00	113,618	\$ 113,618.00	139,900	\$ 139,900.00
b)	Sub-Base (300mm Depth Granular 'B')	m <sup>2</sup>	\$ 16.00	81,434	\$ 1,302,944.00	16,857	\$ 269,712.00	47,223	\$ 755,568.00	43,366	\$ 693,856.00
c)	Sub-Base (450mm Depth Granular 'B')	m <sup>2</sup>	\$ 22.00	28,712	\$ 631,664.00	16,854	\$ 370,788.00	13,722	\$ 301,884.00	29,846	\$ 656,612.00
d)	Base (150mm Depth Granular 'A')	m <sup>2</sup>	\$ 10.00	106,584	\$ 1,065,840.00	32,780	\$ 327,800.00	58,975	\$ 589,750.00	70,890	\$ 708,900.00
e)	Subdrain	m	\$ 15.00	23,744	\$ 356,160.00	6,206	\$ 93,090.00	13,138	\$ 197,070.00	15,476	\$ 232,140.00
f)	Base Curb	m	\$ 45.00	23,744	\$ 1,068,480.00	6,206	\$ 279,270.00	13,138	\$ 591,210.00	15,476	\$ 696,420.00
g)	Raise Structures	ea	\$ 275.00	300	\$ 82,500.00	82	\$ 22,550.00	156	\$ 42,900.00	213	\$ 58,575.00
h)	Base Course Asphalt (65mm HL8)	m <sup>2</sup>	\$ 15.00	69,433	\$ 1,041,495.00	14,456	\$ 216,840.00	40,367	\$ 605,505.00	36,911	\$ 553,665.00
i)	Base Course Asphalt (90mm HL8)	m <sup>2</sup>	\$ 20.00	22,430	\$ 448,600.00	6,820	\$ 136,400.00	12,038	\$ 240,760.00	26,241	\$ 524,820.00
j)	Base Course Asphalt (110mm HL8)	m <sup>2</sup>	\$ 25.00	2,850	\$ 71,250.00	8,400	\$ 210,000.00	13,138	\$ 328,950.00	15,476	\$ 392,925.00
k)	Top Curb	m	\$ 55.00	23,744	\$ 1,305,920.00	6,206	\$ 341,330.00	13,138	\$ 722,590.00	15,476	\$ 851,180.00
l)	Raise Structures	ea	\$ 275.00	300	\$ 82,500.00	82	\$ 22,550.00	156	\$ 42,900.00	213	\$ 58,575.00
m)	Clean/Flush Base	m <sup>2</sup>	\$ 1.00	94,713	\$ 94,713.00	29,676	\$ 29,676.00	52,405	\$ 52,405.00	63,152	\$ 63,152.00
n)	Surface Course Asphalt (40mm HL3 High Stability)	t	\$ 120.00	9,471	\$ 1,136,556.00	2,968	\$ 356,112.00	5,241	\$ 628,860.00	6,315	\$ 757,824.00
2	Sidewalks:	Avg/ROW m	\$ 112.00	17592m	\$ 1,970,304.00	5798m	\$ 649,376.00	11309m	\$ 1,266,608.00	13626m	\$ 1,526,112.00
a)	Sidewalk (1.5m - Incl. Tactile Plates)	m	\$ 112.00	17,592	\$ 1,970,304.00	5,798	\$ 649,376.00	11,309	\$ 1,266,608.00	13,626	\$ 1,526,112.00



**Attachment 2**

**Preliminary Servicing and Road Length Plans**





R.O.W.	PHASE 1	PHASE 2	PHASE 3	PHASE 4	TOTAL
8m LANE	1400	54	519	500	2473
10m	-	-	-	425	425
14m	2236	-	791	-	3027
16m	1116	300	-	-	1416
18m	4480	1493	3964	4040	13977
20m	1756	-	725	1038	3519
22m	694	696	570	1735	3695
30m	190	560	-	-	750
TOTAL	11872	3103	6569	7738	29782







SECONDARY SCHOOL  
5.15ha



**SWM POND**  
**5.56ha (13.74 ac)**

**POND**  
**3.73ha**  
**(9.22 ac)**

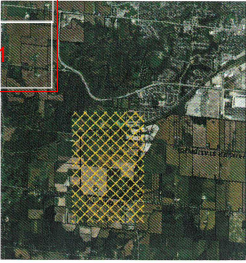


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**ARGO MACVILLE**  
**TOWN OF CALEDON**

### BRES OPTION 3 PRELIMINARY PIPE SIZING

PROJECT No.	DATE	SCALE	DWG No.
15-458	JUNE 2020	1:3000	2



BRES OPTION 3 - SANITARY SEWER LENGTHS

PIPE SIZE	PHASE 1	PHASE 2	PHASE 3	PHASE 4	TOTAL
250mm $\phi$	10472	2009	6050	6263	24794
450mm $\phi$	-	370	-	-	370
525mm $\phi$	-	370	-	975	1345
600mm $\phi$	-	300	-	-	300
TOTAL	10472	3049	6050	7238	26809



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ARGO MACVILLE  
TOWN OF CALEDON

BRES OPTION 3  
PRELIMINARY  
SANITARY PIPE SIZING

PROJECT NO.	DATE	SCALE	DWG NO.
15-458	JULY 2020	1:3000	3

Not For Construction. This drawing is for informational purposes only. It is not to be used for construction.





**BRES OPTION 3 - WATER SERVICING LENGTHS**

PIPE SIZE	PHASE 1	PHASE 2	PHASE 3	PHASE 4	TOTAL
200mm $\phi$	9782	2379	5290	7238	24689
400mm $\phi$	690	670	760	-	2120
<b>TOTAL</b>	<b>10472</b>	<b>3049</b>	<b>6050</b>	<b>7238</b>	<b>26809</b>



**ARGO MACVILLE  
TOWN OF CALEDON**

**BRES OPTION 3  
PRELIMINARY WATER  
SERVICING PIPE SIZING**

PROJECT No.	DATE	SCALE	DWG No.
15-458	JULY 2020	1:3000	4

Per: Prepared by: [Name] Date: [Date] Drawn by: [Name] Date: [Date] Checked by: [Name] Date: [Date] Approved by: [Name] Date: [Date]

## Appendix I      R.J Burnside Capital Costs Assessment Memo

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## Technical Memorandum

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**Date:** September 15, 2020 **Project No.:** 300034976.0002

**Project Name:** Bolton Residential Expansion Study  
Preliminary Capital Costs – Water and Wastewater, Option 3 Lands

**Client Name:** Bolton Option 3 Landowners Group

**Submitted To:** Mr. Aaron Wisson

**Submitted By:** Ian Drever

---

As requested, R.J. Burnside and Associates Limited (Burnside) has prepared a preliminary assessment of capital costs of the external water and wastewater services associated with the Option 3 lands. The assessment has considered the infrastructure necessary to service the Option 3 lands on an interim, nominal, and oversized basis. Each scenario is better described as follows:

- Interim – provision of trunk water and sanitary services necessary to service an initial phase of development of the Option 3 lands without the need for a new elevated storage tank within a new Zone 7 water system. The infrastructure provided would service approximately 75% of the Option 3 lands, as well as the Rounding Out Areas, and also address water pressure deficiencies of existing residents in the northern portion of Pressure Zone 6.
- Nominal – provision of water and sanitary services necessary to service the entirety of the Option 3 lands, as well as the Rounding Out Areas, and also address water pressure deficiencies of existing residents in the northern portion of Pressure Zone 6. The elevated storage tank would be sized for the ultimate service area, which would include future Whitebelt areas within Pressure Zone 7.
- Oversized - provision of water and sanitary services necessary to service the entirety of the Option 3 lands, in addition to the future Whitebelt areas within Pressure Zone 7, as well as the Rounding Out Areas, and also address water pressure deficiencies of existing residents in the northern portion of Pressure Zone 6. As the trunk sanitary sewer route along Healey Road and Humber Station Road traverses the Option 4 and 5 lands, the oversized analysis includes the provision of trunk water servicing to accommodate all of the Option 4 and 5 lands as well.

For each scenario, the variant is the extent to which water servicing is provided. The trunk sanitary sewer would be sized for the ultimate catchment in each case, as the alignment of the sanitary sewer would be consistent throughout, and pipes would be simply oversized.

Cost estimates have been prepared on a total capital and per capita serviced basis. Population forecasts for the Option 3 lands have been provided by Gerrard Design, and are based on a preliminary Block Plan for Option 3 dated August 25, 2020. Population forecasts for all other lands are based on estimated net developable areas provided by Gerrard Design and a population and employment density forecast of 65 persons and jobs per hectare. Forecasts of future Whitebelt populations are based on estimated net developable area by Burnside, and a population and employment density forecast of 65 persons and jobs per hectare. The table below summarizes total population and employment considered for this analysis:

**Table 1: Total Population and Employment Considered**

Area	Estimated Net Developable Area (ha)	Estimated Population and Employment Forecast
Option 3	170.8	18491
Option 4	156.8	10192
Option 5	182.0	11830
Rounding Out Areas	25.0	1625
Future Whitebelt Lands (Pressure Zone 7 only)	266.0	17290

Preliminary sizing of facilities from which estimates are derived is based on current Region of Peel criteria for Master Planning, as adopted through the 2020 Water and Wastewater Master Plan for the Lake Based System. More specifically, the following criteria are used:

- Water Consumption
  - Residential - 270 L/cap/d and a Maximum Day Peaking Factor of 1.8
  - Employment - 250 L/cap/d and a Maximum Day Peaking Factor of 1.4
  - Peak Hour Factor of 3.0
- Wastewater Generation
  - Residential – 290 L/cap/d
  - Employment – 270 L/cap/d
  - Inflow and Infiltration Allowance – 0.26 L/s/ha

The cost estimates include only those projects necessary to extend trunk servicing “to the door” of each servicing area. Servicing internal to the lands has not been included (with the exception of a trunk feedermain through the Option 3 lands to the Zone 7 Elevated Tank). Watermain sizing is based on a boundary condition Infowater model prepared by Burnside.

Preliminary cost estimates have been developed at a Master Plan Level of accuracy using the Cost Estimating Framework established by the Region of Peel and included as Appendix B to each of the 2020 Water and Wastewater Master Plans.

The Cost Estimating Framework establishes 2020 Unit Rates for various sizes of water and wastewater infrastructure based on a historical review of construction costs within the Region. Base construction costs are calculated by multiplying the appropriate unit rate by the size or length of infrastructure required. For the purposes of this analysis, the 2020 unit rates established in the Water and Wastewater Master Plan have been used. Consistent with the Cost Estimating Framework approach, a number of factors and/or allowances are applied to the base construction cost to establish an overall capital cost for each component or segment of infrastructure as follows:

- Construction Uplift allowance varying with the project environment ranging from greenfield to urban.
- Additional Construction Cost allowance varying with project complexity to address items such as mobilization, traffic management etc.
- Provisional allowance over and above the base construction cost for labour and materials.
- Varying allowances for the following soft costs associated with each project, based on project complexity or value:
  - Geotechnical and hydrogeological fees
  - Engineering design and contract administration fees, both external consultant and Region staff
  - Property and easement acquisitions
  - Environmental Assessments and permitting
- Project Contingency allowance varying based on project complexity.

Detailed calculations are attached to this memorandum. Estimated costs for water and wastewater for each scenario are summarized in the following table on a total cost and per capita serviced basis.

**Table 2: Summary of Water and Wastewater Servicing Cost – Option 3 Lands**

Scenario	Total Water Servicing Cost	Total Wastewater Servicing Cost	Population and Employment Serviced	Cost Per Capita
Option 3 Interim	\$22,739,316	\$40,770,534	18493	\$3,434.22
Option 3 Nominal	\$37,689,434	\$40,770,534	23116	\$3,394.18
Option 3 Strategic Oversizing	\$68,065,533	\$40,770,534	64768	\$1,680.40

Servicing of the Option 3 lands can effectively address existing water pressure issues at the upper limit of Zone 6 through redefining the boundary between Zone 6 and the new Zone 7, as well as allow for the development of the Rounding Out Areas without creating additional water pressure issues within the existing Zone 6. In addition, the analysis shows that the alignment of infrastructure necessary to service Option 3 may be further extended to service additional Employment (Option 5) and Residential (Option 4) lands, at nominal cost.

**R.J. Burnside & Associates Limited**



Ian Drever  
President  
ID:lam

Enclosure(s)      Water Capital Cost Estimating Spreadsheets (Tables A1, B1 and C1)  
                         Wastewater Capital Cost Estimating Spreadsheets (Table A2)

In the preparation of the various instruments of service contained herein, R.J. Burnside & Associates Limited was required to use and rely upon various sources of information (including but not limited to: reports, data, drawings, observations) produced by parties other than R.J. Burnside & Associates Limited. For its part R.J. Burnside & Associates Limited has proceeded based on the belief that the third party/parties in question produced this documentation using accepted industry standards and best practices and that all information was therefore accurate, correct and free of errors at the time of consultation. As such, the comments, recommendations, and materials presented in this instrument of service reflect our best judgment in light of the information available at the time of preparation. R.J. Burnside & Associates Limited, its employees, affiliates and subcontractors accept no liability for inaccuracies or errors in the instruments of service provided to the client, arising from deficiencies in the aforementioned third-party materials and documents.

BRES SERVICING COSTS - WATER SERVICING STRATEGIES

Water - Strategic Oversizing

15-Sep-20

Option 3																						
Project #	Project Description	Type	Size	Unit	Unit	Unit Rate	Length (m) or Capacity (L/s or ML)	Base Cost (\$)	Construction Uplift (\$)	Additional Costs (\$) Low/High	Crossings (\$)	Construction Total (\$)	Geotech/Hydrog Requirements (\$) Medium	Property / Easement (\$) Medium	Engineering (Internal Staff) (\$) <\$10M	Engineering Consulting External (\$) <\$10M	Soft Costs Total (\$)	Sub-Total Cost (\$)	Engineering / Contingency (\$) Medium	Non-refundable HST 1.76%	Total Estimated Cost (2020\$)	Cost Per Capita Serviced Population (2020\$)
1	Z6 Feedermain from ex. 1050 mm main on Coleraine to Zone 7 BPS	WM	600	mm	\$ per m	\$ 1,337	1,038	\$ 1,387,806	\$ 277,561	\$ 277,561	\$ 480,000	\$ 2,422,928	\$ 24,229	\$ 36,344	\$ 193,834	\$ 363,439	\$ 617,847	\$ 3,040,775	\$ 456,116	\$ 61,545	\$ 3,558,437	\$ 83
2	Z7 BPS at King/Coleraine	PS	257.32	L/s	\$ per l/s	\$ 48,000	257	\$ 12,351,420	\$ 1,235,142	\$ 1,852,713		\$ 15,439,275	\$ 308,786	\$ 308,786	\$ 926,357	\$ 1,852,713	\$ 3,396,641	\$ 18,835,916	\$ 2,825,387	\$ 381,239	\$ 22,042,542	\$ 516
3	Z7 Feedermain on King through Option 3 lands to E.T.	WM	600	mm	\$ per m	\$ 1,337	3,050	\$ 4,077,850	\$ 407,785	\$ 611,678	\$ 480,000	\$ 5,577,313	\$ 55,773	\$ 83,660	\$ 446,185	\$ 836,597	\$ 1,422,215	\$ 6,999,527	\$ 1,049,929	\$ 141,670	\$ 8,191,127	\$ 192
4	E.T for Option 3	ET	9.5	ML	\$ per ML	\$ 900,000	9	\$ 8,515,844	\$ -	\$ 851,584		\$ 9,367,428	\$ 187,349	\$ 187,349	\$ 749,394	\$ 1,405,114	\$ 2,529,206	\$ 11,896,634	\$ 1,784,495	\$ 240,788	\$ 13,921,917	\$ 326
5	Z7 Feedermain from E.T. to Gore/King	WM	600	mm	\$ per m	\$ 1,337	1,980	\$ 2,647,260	\$ -	\$ 264,726		\$ 2,911,986	\$ 29,120	\$ 43,680	\$ 232,959	\$ 436,798	\$ 742,556	\$ 3,654,542	\$ 548,181	\$ 73,968	\$ 4,276,692	\$ 100
6	Z7 Feedermain King Street from Gore Road to Humber Station Road	WM	400	mm	\$ per m	\$ 873	1,330	\$ 1,161,090	\$ 116,109	\$ 174,164		\$ 1,451,363	\$ 14,514	\$ 21,770	\$ 116,109	\$ 217,704	\$ 370,097	\$ 1,821,460	\$ 273,219	\$ 36,866	\$ 2,131,545	\$ 50
	Sub-total Water Option 3							\$ 30,141,270	\$ 2,036,597	\$ 4,032,426	\$ 960,000	\$ 37,170,293	\$ 619,770	\$ 681,588	\$ 2,664,838	\$ 5,112,366	\$ 9,078,561	\$ 46,248,854	\$ 6,937,328	\$ 936,077	\$ 54,122,259	\$ 1,266

Option 4																						
Project #	Project Description	Type	Size	Unit	Unit	Unit Rate	Length (m) or Capacity (L/s or ML)	Base Cost (\$)	Construction Uplift (\$)	Additional Costs (\$) Low/High	Crossings (\$)	Construction Total (\$)	Geotech/Hydrog Requirements (\$) Medium	Property / Easement (\$) Medium	Engineering (Internal Staff) (\$) <\$10M	Engineering Consulting External (\$) <\$10M	Soft Costs Total (\$)	Sub-Total Cost (\$)	Engineering / Contingency (\$) Medium	Non-refundable HST 1.76%	Total Estimated Cost (2020\$)	Cost Per Capita Serviced Population (2020\$)
1	Z6 Feedermain from North Bolton E.T. to Humber Station Road	WM	600	mm	\$ per m	\$ 1,337	800	\$ 1,069,600	\$ -	\$ 106,960		\$ 1,176,560	\$ 11,766	\$ 17,648	\$ 94,125	\$ 176,484	\$ 300,023	\$ 1,476,583	\$ 221,487	\$ 29,886	\$ 1,727,956	\$ 170
2	Z6 Feedermain on Humber Station Road (total length 1550 m)	WM	600	mm	\$ per m	\$ 1,337	1,550	\$ 2,072,350	\$ 207,235	\$ 310,853	\$ 160,000	\$ 2,750,438	\$ 27,504	\$ 41,257	\$ 220,035	\$ 412,566	\$ 701,362	\$ 3,451,799	\$ 517,770	\$ 69,864	\$ 4,039,433	\$ 396
Sub-total Water Option 4								\$ 3,141,950	\$ 207,235	\$ 417,813	\$ 160,000	\$ 3,926,998	\$ 39,270	\$ 58,905	\$ 314,160	\$ 589,050	\$ 1,001,384	\$ 4,928,382	\$ 739,257	\$ 99,750	\$ 5,767,390	\$ 566

Option 5																						
Project #	Project Description	Type	Size	Unit	Unit	Unit Rate	Length (m) or Capacity (L/s or ML)	Base Cost (\$)	Construction Uplift (\$)	Additional Costs (\$) Low/High	Crossings (\$)	Construction Total (\$)	Geotech/Hydrog Requirements (\$) Medium	Property / Easement (\$) Medium	Engineering (Internal Staff) (\$) <\$10M	Engineering Consulting External (\$) <\$10M	Soft Costs Total (\$)	Sub-Total Cost (\$)	Engineering / Contingency (\$) Medium	Non-refundable HST 1.76%	Total Estimated Cost (2020\$)	Cost Per Capita Serviced Population (2020\$)
2	Z6 Feedermain on Healey Road from Humber Station Road to Coleraine Drive	WM	600	mm	\$ per m	\$ 1,337	1,375	\$ 1,838,375	\$ 183,838	\$ 275,756		\$ 2,297,969	\$ 22,980	\$ 34,470	\$ 183,838	\$ 344,695	\$ 585,982	\$ 2,883,951	\$ 432,593	\$ 58,371	\$ 3,374,915	\$ 285
3	Z6 Feedermain on Coleraine Drive from Healey Road to exisiting Zone 6 Feedermain	WM	600	mm	\$ per m	\$ 1,337	675	\$ 902,475	\$ 180,495	\$ 180,495		\$ 1,263,465	\$ 12,635	\$ 18,952	\$ 101,077	\$ 189,520	\$ 322,184	\$ 1,585,649	\$ 237,847	\$ 32,094	\$ 1,855,589	\$ 157
4	Z6 Feedermain on Humber Station Road from Healey Road to 1200 m north	WM	600	mm	\$ per m	\$ 1,337	1,200	\$ 1,604,400	\$ 160,440	\$ 240,660		\$ 2,005,500	\$ 20,055	\$ 30,083	\$ 160,440	\$ 300,825	\$ 511,403	\$ 2,516,903	\$ 377,535	\$ 50,942	\$ 2,945,380	\$ 249
Sub-total Water Option 5								\$ 4,345,250	\$ 524,773	\$ 696,911	\$ -	\$ 5,566,934	\$ 55,669	\$ 83,504	\$ 445,355	\$ 835,040	\$ 1,419,568	\$ 6,986,502	\$ 1,047,975	\$ 141,407	\$ 8,175,884	\$ 691



TABLE B1

BRES SERVICING COSTS - WATER SERVICING STRATEGIES



Water - Nominal

15-Sep-20

Option 3																						
Project #	Project Description	Type	Size	Unit	Unit	Unit Rate	Length (m) or Capacity (L/s or ML)	Base Cost (\$)	Construction Uplift (\$)	Additional Costs (\$) Low/High	Crossings (\$)	Construction Total (\$)	Geotech/Hydrog Requirements (\$) Medium	Property / Easement (\$) Medium	Engineering (Internal Staff) (\$) <\$10M	Engineering Consulting External (\$) <\$10M	Soft Costs Total (\$)	Sub-Total Cost (\$)	Engineering / Contingency (\$) Medium	Non-refundable HST 1.76%	Total Estimated Cost (\$2020)	Cost Per Capita Serviced Population (2020\$)
1	Z6 Feedermain from ex. 1050 mm main on Coleraine to Zone 7 BPS	WM	600	mm	\$ per m	\$ 1,337	1,038	\$ 1,387,806	\$ 277,561	\$ 277,561	\$ 480,000	\$ 2,422,928	\$ 24,229	\$ 36,344	\$ 193,834	\$ 363,439	\$ 617,847	\$ 3,040,775	\$ 456,116	\$ 61,545	\$ 3,558,437	\$ 154
2	Z7 BPS at King/Coleraine	PS	130.03	L/s	\$ per l/s	\$ 48,000	130	\$ 6,241,320	\$ 624,132	\$ 936,198		\$ 7,801,650	\$ 156,033	\$ 156,033	\$ 624,132	\$ 1,170,248	\$ 2,106,446	\$ 9,908,096	\$ 1,486,214	\$ 200,540	\$ 11,594,850	\$ 502
3	Z7 Feedermain on King through Option 3 lands to E.T.	WM	600	mm	\$ per m	\$ 1,337	3,050	\$ 4,077,850	\$ 407,785	\$ 611,678	\$ 480,000	\$ 5,577,313	\$ 55,773	\$ 83,660	\$ 446,185	\$ 836,597	\$ 1,422,215	\$ 6,999,527	\$ 1,049,929	\$ 141,670	\$ 8,191,127	\$ 354
4	E.T for Option 3	ET	9.5	ML	\$ per ML	\$ 900,000	9.5	\$ 8,515,844	\$ -	\$ 851,584		\$ 9,367,428	\$ 187,349	\$ 187,349	\$ 749,394	\$ 1,405,114	\$ 2,529,206	\$ 11,896,634	\$ 1,784,495	\$ 240,788	\$ 13,921,917	\$ 602
5	Z7 Feedermain from E.T. to Option 3 lands	WM	400	mm	\$ per m	\$ 873	300	\$ 261,900	\$ -	\$ 26,190		\$ 288,090	\$ 2,881	\$ 4,321	\$ 23,047	\$ 43,214	\$ 73,463	\$ 361,553	\$ 54,233	\$ 7,318	\$ 423,104	\$ 18
	Sub-total Water Option 3							\$ 20,484,720	\$ 1,309,478	\$ 2,703,211	\$ 960,000	\$ 25,457,409	\$ 426,265	\$ 467,707	\$ 2,036,593	\$ 3,818,611	\$ 6,749,176	\$ 32,206,585	\$ 4,830,988	\$ 651,861	\$ 37,689,434	\$ 1,630



TABLE C1

BRES SERVICING COSTS - WATER SERVICING STRATEGIES



Water - Interim

15-Sep-20

Option 3																						
Project #	Project Description	Type	Size	Unit	Unit	Unit Rate	Length (m) or Capacity (L/s or ML)	Base Cost (\$)	Construction Uplift (\$)	Additional Costs (\$) Low/High	Crossings (\$)	Construction Total (\$)	Geotech/Hydrog Requirements (\$) Medium	Property / Easement (\$) Medium	Engineering (Internal Staff) (\$) <\$10M	Engineering Consulting External (\$) <\$10M	Soft Costs Total (\$)	Sub-Total Cost (\$)	Engineering / Contingency (\$) Medium	Non-refundable HST 1.76%	Total Estimated Cost (\$2020)	Cost Per Capita Served Population (2020\$)
1	Z6 Feedermain from ex. 1050 mm main on Coleraine to Zone 7 BPS	WM	600	mm	\$ per m	\$ 1,337	1,038	\$ 1,387,806	\$ 277,561	\$ 277,561	\$ 480,000	\$ 2,422,928	\$ 24,229	\$ 36,344	\$ 193,834	\$ 363,439	\$ 617,847	\$ 3,040,775	\$ 456,116	\$ 61,545	\$ 3,558,437	\$ 192
2	Z7 BPS at King/Coleraine	PS	104.02	L/s	\$ per l/s	\$ 48,000	104	\$ 4,993,178	\$ 499,318	\$ 748,977		\$ 6,241,472	\$ 124,829	\$ 124,829	\$ 499,318	\$ 936,221	\$ 1,685,197	\$ 7,926,669	\$ 1,189,000	\$ 160,436	\$ 9,276,105	\$ 502
3	Standby Fire Pump arrangement at Zone 7 BPS	PS	220.00	L/s	\$ per l/s	\$ 12,000	220	\$ 2,640,000	\$ 264,000	\$ 396,000		\$ 3,300,000	\$ 66,000	\$ 66,000	\$ 264,000	\$ 495,000	\$ 891,000	\$ 4,191,000	\$ 628,650	\$ 84,826	\$ 4,904,476	\$ 265
4	Z7 Feedermain on King from Z7 BPS to Option 3 Collector Road	WM	600	mm	\$ per m	\$ 1,337	1,750	\$ 2,339,750	\$ 233,975	\$ 350,963	\$ 480,000	\$ 3,404,688	\$ 34,047	\$ 51,070	\$ 272,375	\$ 510,703	\$ 868,195	\$ 4,272,883	\$ 640,932	\$ 86,483	\$ 5,000,298	\$ 270
Sub-total Water Option 3								\$ 11,360,734	\$ 1,274,854	\$ 1,773,500	\$ 960,000	\$ 15,369,088	\$ 249,106	\$ 278,244	\$ 1,229,527	\$ 2,305,363	\$ 4,062,239	\$ 19,431,327	\$ 2,914,699	\$ 393,290	\$ 22,739,316	\$ 1,230

TABLE A2

BRES SERVICING COSTS - WASTEWATER SERVICING STRATEGIES



Wastewater - Strategic Oversizing

15-Sep-20

Option 3																																			
Project #	Project Description	Type	Size	Unit	Unit Cost (\$/m < 5m, or \$/L/s)	Unit Cost (\$/m > 5m depth	Unit	Length (m) <5m depth or Capacity (L/s or ML)	Length (m) >5m depth	Base Cost (\$)	Construction Uplift (\$)	Additional Costs (\$)	# Minor Creek Crossings	Minor Creek Crossing (\$)	# Minor Rd / Utility Corridor Crossing	Minor Rd / Utility Corridor Crossing (\$)	# Major Creek/ Major Road Crossing	Major Creek/ Major Road Crossing (\$)	Crossings (\$)	Trenchless Length (m)	Trenchless Cost (\$)	Provisional Allowance 10%	Construction Total (\$)	Geotech/Hydrog Requirements (\$)	Property / Easement (\$)	Engineering (Internal Staff) (\$)	Engineering Consulting External (\$)	Soft Costs Total(\$)	Sub-Total Cost (\$)	Engineering / Contingency / Contingency (\$)	Non-refundable HST 1.76%	Total Estimated Cost (20205)	Cost Per Capita Serviced Population (20205) - Option 3 Only	Cost Per Capita Serviced Population (20205) - Option 3 and 4 Only	Cost Per Capita Serviced Population (20205) - Option 3, 4 and 5 Only
1	825 mm diameter sewer on Coleraine Drive from existing trunk sewer to Healey Road	WWM	825	mm	\$ 1,552	\$ 3,912 \$ per m	-	1,016	\$ 3,974,992	\$ 794,918	\$ 596,189		1	\$ 164,000					\$ 164,000			\$ 552,970	\$ 6,082,669	\$ 60,827	\$ 91,240	\$ 486,614	\$ 912,400	\$ 1,551,081	\$ 7,633,750	\$ 1,145,062	\$ 154,507	\$ 8,933,319	\$ 444	\$ 295	\$ 212
2	825 mm diameter sewer on Healey Road from Coleraine Drive to Humber Station Road	WWM	825	mm	\$ 1,552	\$ 3,912 \$ per m	600	773	\$ 3,955,176	\$ 395,518	\$ 593,276								\$ -			\$ 494,397	\$ 5,438,367	\$ 54,384	\$ 81,576	\$ 435,069	\$ 815,755	\$ 1,386,784	\$ 6,825,151	\$ 1,023,773	\$ 138,141	\$ 7,987,064	\$ 397	\$ 264	\$ 190
3	750 mm diameter sewer on Humber Station Road from Healey Road to 1800 m north of Healey Road	WWM	750	mm	\$ 1,440	\$ 3,757 \$ per m	900	900	\$ 4,677,300	\$ 467,730	\$ 701,595								\$ -			\$ 584,663	\$ 6,431,288	\$ 64,313	\$ 96,469	\$ 514,503	\$ 964,693	\$ 1,639,978	\$ 8,071,266	\$ 1,210,690	\$ 163,362	\$ 9,445,318	\$ 470	\$ 312	\$ 224
4	675 mm diameter sewer on Humber Station Road from 1800 m north of Healy Road to King Street	WWM	675	mm	\$ 1,295	\$ 3,573 \$ per m	-	1,200	\$ 4,287,600	\$ 428,760	\$ 643,140		1	\$ 130,000	1	\$ 390,000			\$ 520,000			\$ 587,950	\$ 6,467,450	\$ 64,675	\$ 97,012	\$ 517,396	\$ 970,118	\$ 1,649,200	\$ 8,116,650	\$ 1,217,497	\$ 164,281	\$ 9,498,428	\$ 472	\$ 313	\$ 225
5	675 mm diameter sewer on King Street from Humber Station Road to Option 3 Collector Road	WWM	675	mm	\$ 1,295	\$ 3,573 \$ per m	-	680	\$ 2,429,640	\$ 242,964	\$ 364,446								\$ -			\$ 303,705	\$ 3,340,755	\$ 33,408	\$ 50,111	\$ 267,260	\$ 501,113	\$ 851,893	\$ 4,192,648	\$ 628,897	\$ 84,859	\$ 4,906,404	\$ 244	\$ 162	\$ 116
Sub-Total Wastewater Option 3																			\$ -	\$ 684,000	\$ -	\$ 2,523,685	\$ 27,760,529	\$ 277,605	\$ 416,408	\$ 2,220,842	\$ 4,164,079	\$ 7,078,935	\$ 34,839,463	\$ 5,225,920	\$ 705,151	\$ 40,770,534	\$ 2,027	\$ 1,345	\$ 968
Note: Includes ROA's, does not include per capita wh																																			

Note: Includes ROA's, does not include per capita whitebelt)