

**Report for Public Consultation**

Prepared by Hemson for the City of Ottawa



# 2024 Development Charges Amendment Background Study

August 30, 2024



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# List of Acronyms

AMP	Asset Management Plan
BTE	Benefit to Existing
COG	Cost of Growth
DCA	Development Charges Act
DC	Development Charges
GFA	Gross Floor Area
IGB	Inside the Greenbelt
IMP	Infrastructure Master Plan
OGB	Outside the Greenbelt
PPB	Post-Period Benefit
PPU	Persons Per Unit
SWM	Stormwater Management

# Executive Summary

## A. Purpose of the 2024 Amending Development Charges Background Study

Hemson Consulting was retained by the City to complete a Development Charges (DC) Amendment Background Study following the adoption of the 2024 City-wide DC By-law. This amendment is scoped to Water, Sanitary (Wastewater), Parks and Recreation services.

- **Water and Sanitary Services** – this amendment reflects the City’s new Infrastructure Master Plan (IMP) which was not available at the time the original 2024 Provisional DC Background Study was published. The amendment includes updating capital project costs to reflect new timing, costing and scope of work as identified through the IMP. The planning horizon has been extended to 2046 to align with the planning horizon of the IMP.
- **Parks and Recreation Services** – this amendment reflects updates to the capital program to reflect the City’s funding sources. No changes are proposed to the rates as calculated in the adopted 2024 DC City-wide By-law.

### i. Legislative Context

The Development Charges Act, 1997 (DCA), and its associated Ontario Regulation 82/98 (O. Reg. 82/98), allow municipalities in Ontario to recover development-related capital costs from new development. This DC Amendment Background Study is presented as part of a process to establish an amending DC By-law that complies with the legislation.

## **ii. Key Steps in Determining Future Development-Related Projects**

In accordance with the DCA and associated regulation, several key steps are required to calculate development charges. This includes preparing a development forecast, establishing historical service levels, determining the increase needs for services arising from development and appropriate shares of costs, attribution to development types (i.e. residential and non-residential). For some services, the final adjustment to the calculated rate is a cash flow analysis.

## **iii. DC Eligible and Ineligible Costs**

Development charges are intended to pay for the initial round of capital costs needed to service new development over an identified planning period. This is based on the principle that “growth pays for growth”, however, the DCA and associated regulation includes several statutory adjustments and deductions that prevent these costs from fully being recovered by growth. Such adjustments include, but are not limited to, ineligible costs, including operating and maintenance costs; ineligible services, including, tourism facilities, parkland acquisition, etc.; deductions for costs that exceed historical service level caps; and statutory exemptions for specific uses (i.e. industrial expansions).

## **iv. The Development-Related Capital Forecast is Subject to Change**

It is recommended that Council adopt the development-related capital forecast undertaken for the purposes of the 2024 DC Amendment Background Study. It is recognized, however, that this study is a point-in-time analysis and is subject to changes in project timing, scope, and costs through the City’s capital budgeting review process and in conjunction with the affordable funding envelopes.

## **B. City-wide and Area-Specific DCs have been Calculated**

Consistent with the City’s historical practices, both City-wide and Area-specific DCs have been calculated. The City has four primary benefiting areas: City-wide, Inside the Greenbelt (IGB), Outside the Greenbelt (OGB) and Rural as well as five special area charges. An overview of the services included in each of these areas is identified below.

<b>City-wide Services</b>	<b>Area-Specific Services</b>
Sanitary (Wastewater)	Sanitary (Wastewater)
Water	Water
Parks Development	Parks Development
Recreation Facilities	Recreation Facilities

## **C. Development Forecast**

### **i. City-wide: Residential and Non-Residential Forecasts**

The development forecast utilized in this DC Amendment Background Study is generally consistent with the City’s 2024 DC Background Study. However, the forecast has been extended to the 2046 planning horizon for the purposes of calculating the Water and Sanitary (Wastewater) Services rate calculations in order to align with the planning horizon of the City’s new Infrastructure Master Plan. Of particular importance, residential development associated with the future Tewin community located within the OGB benefitting area has been removed from the 2046 planning horizon for the purposes of the OGB Water and Sanitary (Wastewater) calculations. No changes have been made to the 10-year forecast (2024-2033) as presented in the City’s 2024 Provisional DC Background Study.

The table below provides a summary of the anticipated residential and non-residential growth over the 2024-2033 and 2024-2046 planning periods. The development forecast is further discussed in Appendix A. The forecast is expressed in mid-year estimates.



Development Forecast	2023 Estimate	10-Year 2024 to 2033		Long-Term 2024 to 2046	
		Growth	Total at 2033	Growth	Total at 2046
<b>Residential Development Forecast</b>					
Total Occupied Dwelling Units	439,454	82,457	521,911	160,046	599,500
<i>Population In New Dwellings</i>		<i>205,888</i>		<i>397,991</i>	
Total Population	1,090,236	162,299	1,252,535	319,764	1,410,000
<i>Census Population</i>	<i>1,056,221</i>	<i>157,234</i>	<i>1,213,455</i>	<i>309,787</i>	<i>1,366,008</i>
<b>Non-Residential Development Forecast</b>					
Employment*	615,565	41,419	656,984	99,455	715,020
Non-Residential Building Space (sq.m.)		2,126,261		5,171,624	
Non-Residential Building Space (sq.ft)		22,886,883		55,666,897	

\* Excludes work at home employment but includes no fixed place of work

## ii. Area-Specific: Inside Greenbelt, Outside Greenbelt and Rural

A summary of the area-specific forecasts for IGB, OGB and Rural areas to 2046 is presented in Appendix A. Additional information on the Rural serviced and unserved areas are also included in Appendix A.

AREA-SPECIFIC	2023 Estimate	10-Year 2024 to 2033		Long-Term 2024 to 2046	
		Growth	Total at 2033	Growth	Total at 2046
<b>Inside the Greenbelt</b>					
<b>Residential Development Forecast</b>					
<b>Occupied Dwellings</b>					
Total Occupied Dwelling Units	250,913	37,407	288,320	72,605	323,518
<i>% of City-wide Dwelling Units</i>		45%		45%	
<b>Population</b>					
Census Population	529,365	49,297	578,662	97,146	626,511
<i>% of City-wide Population</i>		31%		31%	
<i>Population In New Dwellings</i>		67,243		131,938	
<b>Non-Residential Development Forecast</b>					
Employment*	489,871	22,739	512,610	52,219	542,090
<b>Outside the Greenbelt</b>					
<b>Residential Development Forecast</b>					
<b>Occupied Dwellings</b>					
Total Occupied Dwelling Units	153,612	38,074	191,686	73,901	227,513
<i>% of City-wide Dwelling Units</i>		46%		46%	
<b>Population</b>					
Census Population	431,321	89,879	521,200	180,218	611,539
<i>% of City-wide Population</i>		57%		58%	
<i>Population In New Dwellings</i>		117,528		224,668	
<b>Non-Residential Development Forecast</b>					
Employment*	108,952	16,968	125,920	43,037	151,989
<b>Rural</b>					
<b>Residential Development Forecast</b>					
<b>Occupied Dwellings</b>					
Total Occupied Dwelling Units	34,929	6,976	41,905	13,540	48,469
<i>% of City-wide Dwelling Units</i>		8%		8%	
<b>Population</b>					
Census Population	95,535	18,058	113,593	32,423	127,958
<i>% of City-wide Population</i>		11%		10%	
<i>Population In New Dwellings</i>		21,166		41,292	
<b>Non-Residential Development Forecast</b>					
Employment*	16,742	1,712	18,454	4,199	20,941

\* Excludes work at home employment but includes no fixed place of work

## D. Calculated Development Charges

The following tables summarize the fully calculated residential and non-residential DCs for IGB, OGB, and Rural serviced and unserved areas inclusive of the amended Water and Sanitary (Wastewater) DC rates. The applicable City-wide charges are included in the DC rates for the IGB, OGB, Rural Serviced and Rural Unserved areas.

### IGB, OGB, Rural Serviced and Rural Unserved Charges\*

Area	Residential				
	Single and Semi-detached	Multiple, Row and Mobile Dwelling	Apartment Dwelling, Back to Back and Stacked Townhouse (2+ bedrooms)	Apartment (less than 2 bedrooms)	Dwelling Rooms
Inside the Greenbelt	\$48,980	\$39,050	\$26,934	\$19,146	\$14,792
Outside the Greenbelt	\$58,368	\$45,790	\$31,384	\$22,309	\$17,235
Rural - Serviced	\$42,496	\$33,406	\$23,092	\$16,415	\$12,682
Rural - Unserved	\$39,105	\$30,730	\$21,254	\$15,108	\$11,672

Area	Non-Residential			
	Industrial (per square foot)	Non-Industrial (per square foot)	Industrial (per square metre)	Non-Industrial (per square metre)
Inside the Greenbelt	\$15.18	\$34.99	\$163.38	\$376.49
Outside the Greenbelt	\$15.18	\$34.99	\$163.38	\$376.49
Rural - Serviced	\$15.18	\$34.99	\$163.38	\$376.49
Rural - Unserved	\$12.70	\$30.66	\$136.69	\$329.97

\* includes City-wide charges

## E. Cost of Growth Analysis

An overview of the long-term capital and operating costs as well as the asset management-related annual provisions for capital facilities and infrastructure to be included in the amending DC By-law. This examination is required as one of the provisions of the DCA. Additional details on the cost of growth analysis are included in Appendix F.

## **F. Development Charges Administration & Policy Considerations**

### **i. Consultation and Approval Process**

Following the release of the DC Amendment Background Study, consultation will continue with the public and development industry stakeholders prior to the passage of the amending DC By-law (targeted October 30, 2024). The DC Amendment Background Study will be made publicly available 60 days prior to the passage of the DC By-law and the draft DC By-law will be made available a minimum of two weeks prior to the statutory public meeting (targeted October 23, 2024).

### **ii. City-wide vs Area-Specific DCs**

As required by the DCA, consideration was given to the use of area rating. Consistent with the City's historical practice, the infrastructure identified for the Water, Sanitary (Wastewater), Parks and Recreation Services has been calculated on both a City-wide and Area-specific basis.

### **iii. Local Service Guidelines**

The provision of local services is considered to be a direct developer responsibility under s.59 of the DCA and will (or may) be recovered under other agreement(s) with the landowner or developer. Local Service Guidelines for Water and Sanitary (Wastewater) infrastructure identified in the DC Amendment Background Study is provided in Appendix G.

### **iv. Draft Amending 2024 DC By-law Available Under Separate Cover**

A draft of the Amending 2024 DC By-law will be made available on the City's website a minimum of two weeks before the statutory public meeting.

**v.      Tewin Area Will Be Reviewed in Subsequent DC Studies**

No area-specific development charges have been calculated for the Tewin community as part of the DC Amendment Background Study. It is anticipated area-specific development charges will be calculated for Tewin as part of subsequent DC Background Studies once more information becomes available regarding the development potential, timing and infrastructure needs.

# 1. Purpose of DC Amending Background Study

The Development Charges Act, 1997 (DCA), and its associated Ontario Regulation 82/98 (O. Reg. 82/98), allow municipalities in Ontario to recover development-related capital costs from new development. The City of Ottawa currently levies its City-wide and Area-specific development charges for Inside the Greenbelt (IGB), Outside Greenbelt (OGB) and Rural areas through its current DC By-law No. 2024-218.

This DC Amendment Background Study is presented as part of a process to amend the City's current Water, Sanitary (Wastewater), Parks and Recreation development charges. This DC Amendment Background Study for the City of Ottawa is presented as part of the process to lead to approval for amending DC By-law No. 2024-218 in compliance with the DCA. The DCA and O. Reg. 82/98 require that a DC Background Study be prepared with reference to:

- A forecast of the amount, type and location of housing units, population and non-residential development anticipated in the City;
- The average capital service levels provided in the City over the 15-year period immediately preceding the preparation of the background study;
- A review of capital works in progress and anticipated future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred or to be incurred by the City or its local boards to provide for the expected development, including the determination of the growth and non-development-related components of the capital projects; and
- An examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the DC by-laws would relate.

This DC Amendment Background Study presents the results of the review which determines the development-related net capital costs attributable to development that is forecast to occur in the community for Water, Sanitary (Wastewater), Parks and Recreation services. These development-related net capital costs are then apportioned among various types of development (residential and non-residential) in a manner that reflects the increase in the need for service attributable to each type of development. The DC Amendment Background Study ultimately arrives, therefore, at proposed DCs for various types of development.

The DCA provides for a period of public review and comments regarding the proposed DCs. This Amendment Study reflects the DC rates that will be used to inform the public consultation process.

### **A. Legislative Context**

The DCA, and its associated regulation (O. Reg. 82/98), allow municipalities in Ontario to recover development-related capital costs from new development. This DC Amendment Background Study is presented as part of a process to establish an amending DC By-law that complies with the legislation.

### **B. Consultation and Approval Process**

The following provides a summary of the consultation and approval process to lead to the approval of the amended DC By-law. This DC Amendment Background Study has been prepared and will be used for the formal statutory consultation process.

Activity	Timeline
Initiate DC Amendment Background Study Process	June 2024
Meetings with Staff, Stakeholders & Council Sponsors	Ongoing
Public Release Amendment Study to Public	August 30, 2024

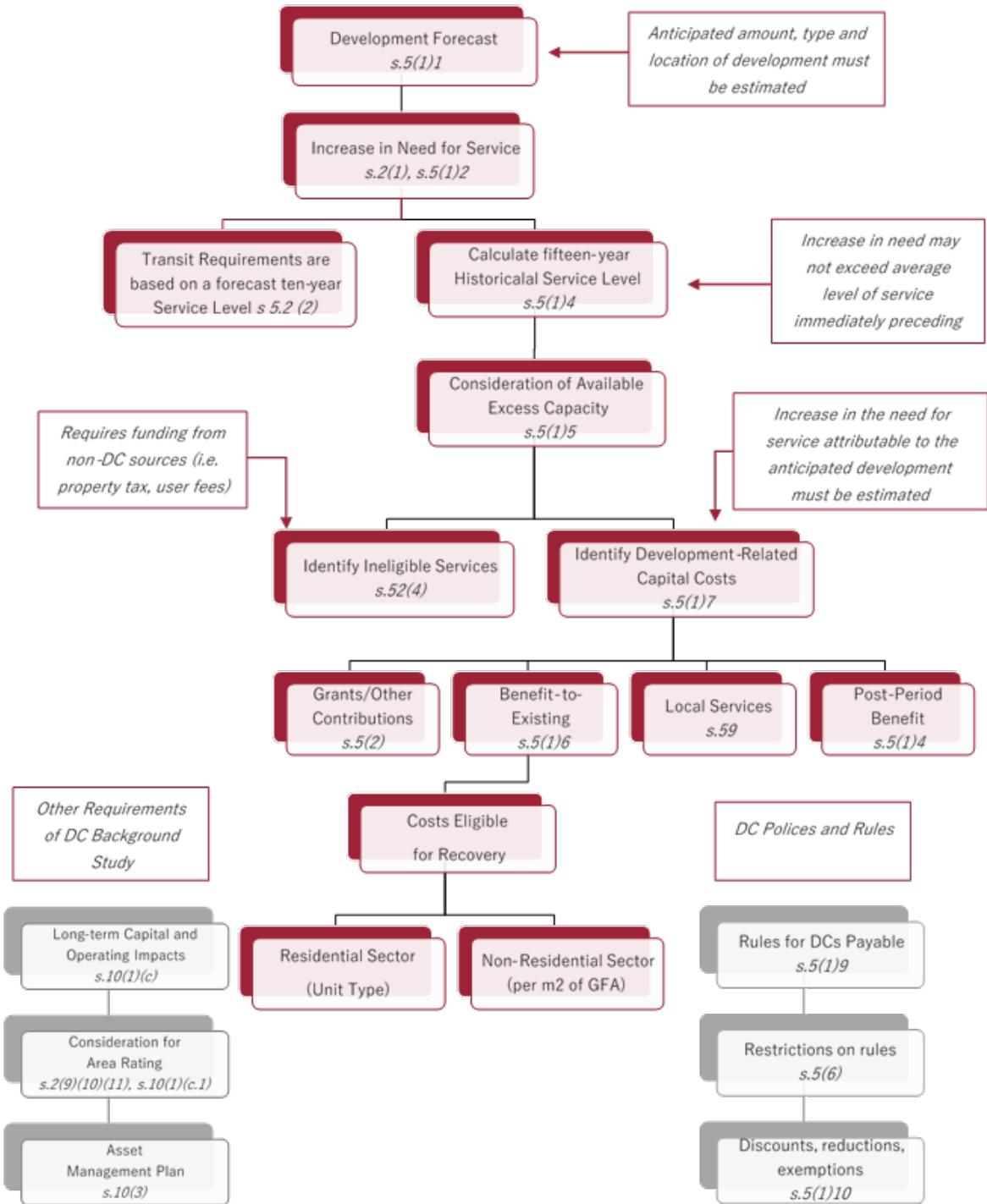
Activity	Timeline
Release of Amending DC By-law	October 9, 2024 (or earlier)
Statutory Public Meeting	October 23, 2024
Passage 2024 DC By-law	October 30, 2024

### **C. Key Steps in Determining DCs for Future Development-Related Projects**

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



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



## **i. Growth Forecast**

The first step in the calculation process requires a development forecast to be prepared for the services and associated planning horizon. For the purpose of this DC Amendment Background Study a 10-year (2024-2033) for Parks and Recreation Services and a longer-term (2024-2046) planning horizon for Water and Sanitary (Wastewater) has been used. It should be noted that all planning horizons are mid-year estimates.

The forecast of the future residential and non-residential development is consistent with the forecast prepared as part of the 2024 Provisional Development Charges Background Study. The forecast is prepared by location and is based on growth anticipated to occur within approved Official Plan designated urban areas. The residential forecast reflects Official Plan targets, 2021 Census data (where available), and recent development activity. The non-residential forecast reflects Ottawa Employment Survey data, recent development activity and traffic zone forecasts.

For the residential portion of the forecast, the net population growth and population growth in new building permits are estimated. Net population growth equals the population in new housing units reduced by the decline in the population in the existing base anticipated over the 10-year period and to build-out due to reduced household sizes as the community ages. Net population is used in the calculation of the DC funding envelopes. In calculating the per capita DC, however, the population in new units is used.

The non-residential portion of the forecast estimates the gross floor area (GFA) of building space to be developed over the 10-year period, 2024–2033 and the long-term timeframe from 2024-2046 for Water and Sanitary (Wastewater) services. The forecast provides estimates for four distinct categories: major office, population-related, employment land and rural. The forecast of GFA is based on the employment forecast for the City. Factors for floor space per worker by category are used to convert the employment forecast into GFA for the purposes of the DC Background Study.

Consistent with the City’s historical practices, Area-specific development forecasts have been prepared for the IGB, OGB and Rural areas (as discussed in Appendix A).

**ii. Service Categories and Historical Service Levels**

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

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

Historical 15-year average service levels thus form the basis for DCs. A review of the City’s capital service levels for parkland, buildings and vehicles has therefore been prepared as a basis for the calculation so that the portion of future capital projects that may be included in the DC can be determined. The historical service levels for Parks and Recreation services used in the DC Amendment Background Study have been calculated based on the previous 2009–2023 time-period and are consistent with the service levels calculated in the 2024 Provisional DC Background Study.

For certain Engineered Services, namely Water and Sanitary (Wastewater) services including Stormwater Drainage, historical service levels are based on the City’s engineering standards as well as provincial health and environmental requirements.

**iii. Development-related Capital Program and Analysis of Net Capital Costs to be Included in the DCs**

The forecast identifies development-related projects and their gross and net costs, after allowing for capital grants, subsidies or other contributions as required by the DCA (s. 5. (2)). For these projects, grants and contributions have been netted off the gross project costs thus reducing the City’s net

capital costs. The capital program provides another cornerstone upon which DCs are based. The DCA requires that the increase in the need for service attributable to the anticipated development may include an increase:

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

In conjunction with the DCA, s. 5(1)4. referenced above, these sections require that the DC be calculated on the lesser of the historical 15-year average service levels or the service levels embodied in future plans of the City. The development-related capital program prepared for the DC Amendment Background Study ensures that DCs are only imposed to help fund projects that have been or are intended to be purchased or built in order to accommodate future anticipated development. It is not sufficient in the calculation of DCs merely to have had the service in the past. There must also be a demonstrated commitment to continue to emplace facilities or infrastructure in the future. In this regard, Ontario Regulation 82/98, s. 3 states that:

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

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

discussion on the methodology for each service is included in the detailed appendices, as identified in the “replacement and benefit to existing shares” section.

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

#### **iv. Attribution to Different Benefitting Areas**

Consistent with the City’s historical practices, the capital costs are allocated on a City-wide and Area-specific basis. This includes IGB, OGB and Rural areas.

#### **v. Attribution to Types of Development**

The next step in the determination of DCs is the allocation of the development-related net capital costs between the residential and the non-residential sectors. This is done by using different apportionments for different services in accordance with the demands which the two sectors would be expected to place on the various services and the different benefits derived from those services.

Where reasonable data exist, the apportionment is based on the expected demand for, and use of, the service by each sector (e.g. shares of population and employment, water and sanitary (wastewater) demand etc.).

Finally, the residential component of the DC is applied to different housing types on the basis of average occupancy factors. The non-residential component is differentiated and applied on the basis of gross building space for the industrial and non-industrial sectors.

#### **vi. Final Adjustments: Prior Growth/Available DC Reserve Funds**

The final determination of the DC results from adjustments made to development-related net capital costs for each service and sector resulting from the application of any unallocated development-related reserve fund balances for general and engineered services that are available to finance the development-related costs in the capital forecast. The application of the available reserves are further discussed in Appendix D.

Consistent with the City's historical practice, the majority of City's development charges are calculated using an average cost methodology. For example, the average cost method for residential development is calculated by dividing the in-period DC eligible residential costs by the anticipated residential population in new units over the applicable planning period. This arrives at a \$/capita amount. A similar approach is used for non-residential development; however, the non-residential costs are divided by the total industrial and non-residential gross floor area identified over the planning period.

For all engineering services including Water and Sanitary (Wastewater), a cash flow analysis is undertaken to account for the timing of projects and receipt of DCs. Interest earnings or borrowing costs are therefore accounted for in the calculation as allowed under the DCA.

### **D. Long-term Capital and Operating Impacts and Asset Management Plan Legislative Requirements**

Section 10 of the DCA identifies what must be included in a DC Background Study, namely:

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

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

#### Asset management plan

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

The requirement to include an Asset Management Plan (AMP) was part of the DCA amendments that came into effect on January 1, 2016. A key function of the AMP is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle. For simplicity, the section of the DC Amendment Background Study that deals with the operating and capital cost impacts and AMP is called the “cost of growth analysis” (detailed analysis is included in Appendix F).

## **2. City-Wide and Area-Specific Development Charges Are Proposed**

### **A. Proposed Methodology Aligns Development-Related Costs and Benefits**

Several key steps are required in calculating a DC. However, unique circumstances arise in each municipality which must be reflected in the calculation. The approach to the calculated DCs is focused on providing a reasonable alignment of development-related costs with the growth that necessitates them. This is achieved through a process that identifies the portion of growth-related works within the planning horizon that is attributable to the development in the study period, and then further allocates the benefit between various servicing areas as well as residential and non-residential components of growth. The DC Amendment Background Study calculates charges on a City-wide and area-specific basis, consistent with the City's current DC by-laws and practices.

### **B. City-Wide and Area-Specific Development Charges are Calculated for Water, Sanitary, Parks and Recreation Services**

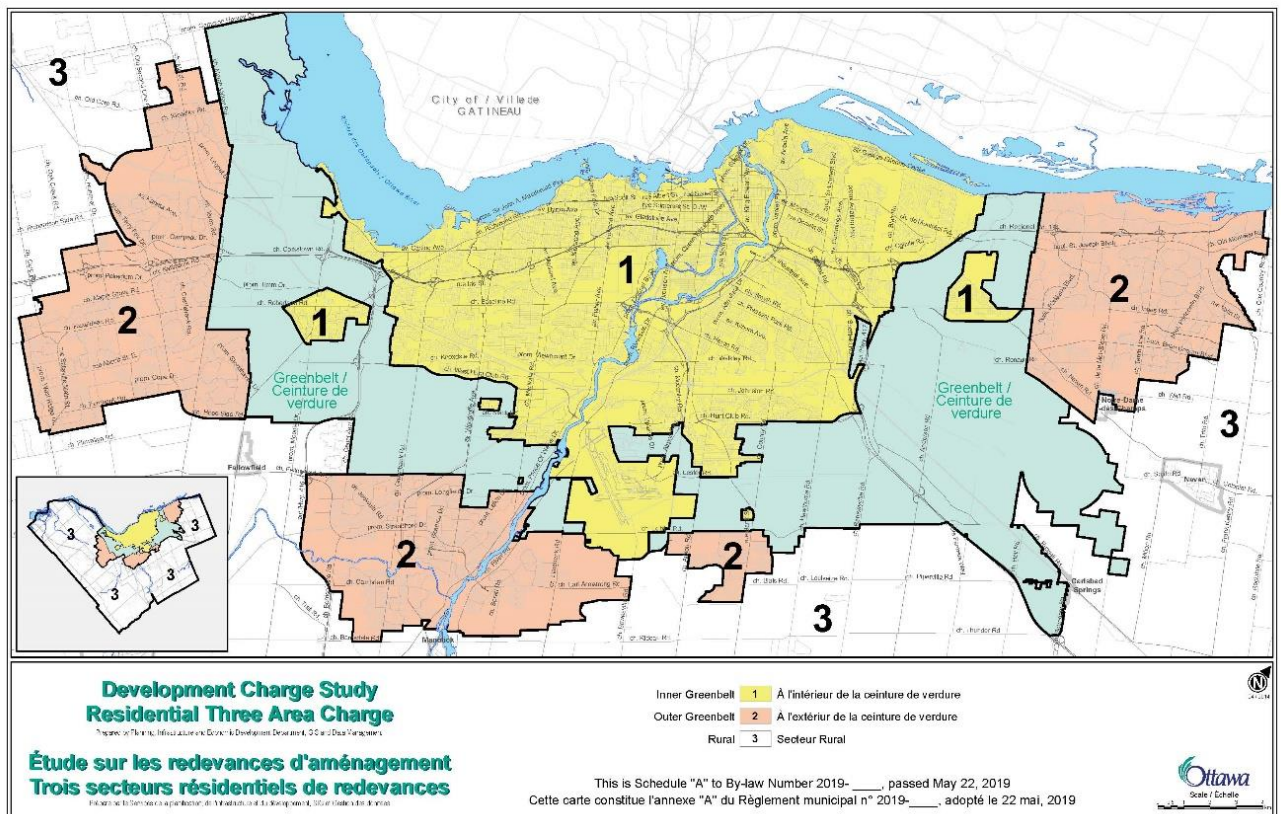
The City provides a wide range of services to the community it serves and has an extensive inventory of facilities, land, infrastructure, vehicles and equipment. The DCA provides municipalities with flexibility to define services that will be included in DC by-laws, provided that the other provisions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



The Water, Sanitary, Parks and Recreation Services development charge rates are being calculated in accordance with the same approach used in the 2024 DC Background Study in that both city-wide and area-specific rates are proposed.

Details on how these services are allocated between the benefitting areas is described in Appendix B and C. Figure 2 below provides a map of the IGB, OGB and Rural servicing areas. This map is also included in By-law 2024-218 and will continue to apply to the amended DC By-law.

**Figure 2: Map of Three Servicing Areas: IGB, OGB and Rural**



### **3. Development Forecast**

The DCA requires the City to estimate “the anticipated amount, type and location of development” for which development charges may be imposed. The development forecast must cover both residential and non-residential development and be specific enough with regards to quantum, type, location and timing of development to allow the City to prepare a reasonable development-related capital forecast.

#### **A. Applicable Planning Horizons**

Consistent with the 2024 Provisional DC Background Study, a 10-year development forecast, from 2024-2033, has been used for the purposes of the Parks and Recreation amending development charges calculation.

For Water and Sanitary (Wastewater) services, in accordance with the planning horizon of the new IMP, the capital forecast is deemed to benefit growth occurring over a planning horizon to 2046. The forecast to 2046 is consistent with the assumptions used in the 2024 Provisional DC Background Study but additional details have been provided on annual growth estimates to 2046.

It should be noted that the population and employment estimates discussed in the following sections represent mid-year estimates.

#### **B. Key Assumptions**

The City-wide and area-specific development forecasts are based on the forecasts prepared for the City as part of the 2024 Provisional DC Background Study and align with the City’s Official Plan. Additional details are provided in Appendix A.

## C. Residential and Non-Residential Development Forecast

The following provides a summary of the City-wide residential and non-residential development forecast and the area-specific residential forecasts for IGB, OGB and Rural area for the 10-year and longer-term planning periods. Additional information on the City-wide and area-specific development forecast, including estimated growth within the Rural serviced and unserved areas is included in Appendix A.

### i. City-wide Development Forecast

Table 1 provides a summary of the City-wide development forecast for the 10-year and long-term planning horizon.

**TABLE 1**  
**CITY OF OTTAWA**  
**SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL**  
**DEVELOPMENT FORECAST**  
**CITY-WIDE**

Development Forecast	2023 Estimate	10-Year 2024 to 2033		Long-Term 2024 to 2046	
		Growth	Total at 2033	Growth	Total at 2046
<b>Residential Development Forecast</b>					
Total Occupied Dwelling Units <i>Population In New Dwellings</i>	439,454	82,457 205,888	521,911	160,046 397,991	599,500
Total Population <i>Census Population</i>	1,090,236 1,056,221	162,299 157,234	1,252,535 1,213,455	319,764 309,787	1,410,000 1,366,008
<b>Non-Residential Development Forecast</b>					
Employment*	615,565	41,419	656,984	99,455	715,020
Non-Residential Building Space (sq.m.)		2,126,261		5,171,624	
Non-Residential Building Space (sq.ft)		22,886,883		55,666,897	

\* Excludes work at home employment but includes no fixed place of work

**ii. Area-Specific Development Forecast: Inside the Greenbelt, Outside the Greenbelt and Rural**

Table 2 provides a summary of the residential and non-residential development based on the IGB, OGB and Rural areas for the 10-year and long-term planning period to 2046. The OGB growth is shown including growth associated with the proposed community in Tewin. For the purposes of the Water and Sanitary (Wastewater) calculations, approximately 8,100 units associated with Tewin (and an accompanying population in new units of approximately 24,000 people) has been removed from the denominator of the calculation as Tewin will be subject to a future ASDC. Additional details are provided in Appendix A (see Table 15).

Additional details relating to the area-specific forecast for each of these areas is provided in Appendix A.

TABLE 2

**CITY OF OTTAWA  
SUMMARY OF RESIDENTIAL & NON-RESIDENTIAL  
DEVELOPMENT FORECAST  
AREA-SPECIFIC DEVELOPMENT FORECAST**

AREA-SPECIFIC	2023 Estimate	10-Year 2024 to 2033		Long-Term 2024 to 2046	
		Growth	Total at 2033	Growth	Total at 2046
<b>Inside the Greenbelt</b>					
<b>Residential Development Forecast</b>					
<b>Occupied Dwellings</b>					
Total Occupied Dwelling Units	250,913	37,407	288,320	72,605	323,518
<i>% of City-wide Dwelling Units</i>		45%		45%	
<b>Population</b>					
Census Population	529,365	49,297	578,662	97,146	626,511
<i>% of City-wide Population</i>		31%		31%	
<i>Population In New Dwellings</i>		67,243		131,938	
<b>Non-Residential Development Forecast</b>					
Employment*	489,871	22,739	512,610	52,219	542,090
<b>Outside the Greenbelt</b>					
<b>Residential Development Forecast</b>					
<b>Occupied Dwellings</b>					
Total Occupied Dwelling Units	153,612	38,074	191,686	73,901	227,513
<i>% of City-wide Dwelling Units</i>		46%		46%	
<b>Population</b>					
Census Population	431,321	89,879	521,200	180,218	611,539
<i>% of City-wide Population</i>		57%		58%	
<i>Population In New Dwellings</i>		117,528		224,668	
<b>Non-Residential Development Forecast</b>					
Employment*	108,952	16,968	125,920	43,037	151,989
<b>Rural</b>					
<b>Residential Development Forecast</b>					
<b>Occupied Dwellings</b>					
Total Occupied Dwelling Units	34,929	6,976	41,905	13,540	48,469
<i>% of City-wide Dwelling Units</i>		8%		8%	
<b>Population</b>					
Census Population	95,535	18,058	113,593	32,423	127,958
<i>% of City-wide Population</i>		11%		10%	
<i>Population In New Dwellings</i>		21,166		41,292	
<b>Non-Residential Development Forecast</b>					
Employment*	16,742	1,712	18,454	4,199	20,941

\* Excludes work at home employment but includes no fixed place of work

## 4. Summary of Historical Service Levels for Applicable Services

The DCA and O.Reg. 82/98 require that the DCs be set at a level no higher than the average service level provided in the municipality over the 15-year period immediately preceding the preparation of the background study, on a service-by-service basis. As a result, development charges only maintain, not exceed, existing service levels as the City grows.

For the purposes of this DC Amendment Background Study, the 15-year historical service level for Parks and Recreation is consistent with the inventory and funding envelope calculations contained in the 2024 DC Background Study. A summary of the 2009-2023 historical service levels for Parks and Recreation Services is provided below:

- Parks Development = \$2,838.53 per capita
- Recreation Development = \$3,577.86 per capita

A detailed summary of the Parks and Recreation historical service levels is provided in Appendix C. No historical service level has been provided for Water and Sanitary (Wastewater) services consistent with the approach used in the 2024 Provisional DC Background Study.

## 5. The Development-Related Capital Forecast

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

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

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

As part of this DC Amendment Background Study, Council will adopt the development-related capital forecast developed for the purposes of the amended DC calculations. It is assumed that future capital budgets and forecasts will continue to bring forward the development-related projects contained herein that are consistent with the growth occurring in the City. It is acknowledged that changes to the forecast presented herein may occur based on various factors that are reviewed annually during the City's capital budgeting process and in conjunction with the affordable funding envelopes.

A summary of eligible and ineligible capital costs are summarized below.

## **i. Eligible Capital Costs**

Eligible capital costs as per s. 5(3) of the DCA include:

- Costs to acquire land or an interest in land, including a leasehold interest
- Costs to improve land
- Costs to acquire, lease, construct or improve buildings and structures
- Costs to acquire, lease, construct or improve facilities including
  - Rolling stock with an estimated useful life of seven years or more;
  - Furniture and equipment, other than computer equipment; and
  - Materials acquired for circulation, reference or information purposes by a library board as defined in the Public Libraries Act.
- Interest on money borrowed to pay for costs described in paragraphs 1 to 4. 1997, c. 27, s. 5(3)

## **ii. Ineligible Costs**

It is not implied that all these costs are to be recovered from new development by way of DCs. Portions of the capital forecast not recoverable from DCs in the Study generally include:

- Operating, capital maintenance and lifecycle costs;
- Capital infrastructure needed to service the existing community that has no benefit to future development;
- Costs addressing existing service deficiencies;
- Costs benefiting growth anticipated to occur beyond the 2024-2033 and 2024-2046 planning periods;
- Capital infrastructure that increase the City's service levels; and
- Ineligible capital costs (e.g. tourism facilities, parkland acquisition, etc.) as determined by the regulations.



## **B. Development Related Capital Costs for Amended DC Services**

A summary of the net development-related capital forecast for the amended DC services is presented in Table 3. As shown, the total gross 10-year capital program cost for Parks and Recreation services amounts to \$810.9 million, and the capital expenditures for Water and Sanitary (Wastewater) services based on the planning period to 2046 amounts to \$2.3 billion. Of particular importance, \$128.7 million is identified in grants, subsidies and other recoveries.

Additional adjustments are required to be made to the DC eligible capital expenditures in accordance with the requirements of the DCA. Such adjustments include a reduction for replacement and benefit to existing shares and post-period benefit. Available DC reserve funds or prior growth have also been applied to the DC capital costs. A discussion of these adjustments is provided in Appendix B and C.

## **C. Total DC Recoverable Share of the Net Capital Forecast**

Table 4 provides a summary of the residential and non-residential in-period DC eligible capital costs for Parks, Recreation, Water and Sanitary (Wastewater) services for the following areas: City-wide, IGB, OGB and Rural. Consistent with the City's historical practice, the non-residential cost allocations arising from the area-specific residential calculations are recovered on a City-wide basis.

For Water and Sanitary (Wastewater) services, costs have been allocated between the residential and non-residential sectors based on demand flows by benefitting area IGB, OGB and Rural. Additional details on the allocations are provided in Appendix B.

TABLE 3

**CITY OF OTTAWA  
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM  
CAPITAL PROGRAM BY SERVICE  
(in \$000s)**

Service	Development-Related Capital Program 2024-2033			
	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Costs	Share of Net Costs
1 Parks Development	\$155,691.2	\$21,839.5	\$133,851.7	18.7%
2 Recreation Facilities	\$655,224.7	\$72,883.3	\$582,341.4	81.3%
<b>TOTAL</b>	<b>\$810,915.9</b>	<b>\$94,722.8</b>	<b>\$716,193.1</b>	<b>100.0%</b>

Service	Development-Related Capital Program 2024-2046			
	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Costs	Share of Net Costs
1 Sanitary (Waste Water)	\$1,465,271.7	\$30,860.2	\$1,434,411.5	63.0%
2 Water	\$845,412.9	\$3,125.5	\$842,287.4	37.0%
<b>TOTAL</b>	<b>\$2,310,684.6</b>	<b>\$33,985.7</b>	<b>\$2,276,698.9</b>	<b>100.0%</b>

<b>TOTAL</b>	<b>\$3,121,600.4</b>	<b>\$128,708.5</b>	<b>\$2,992,892.0</b>	
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TABLE 4

CITY OF OTTAWA  
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM  
CAPITAL PROGRAM BY SERVICE

(in \$000s)

10-Year General Services (2024-2033)	Residential				Non-Residential (1)			Total DC Eligible Costs		
	City-wide	Inside the Greenbelt	Outside the Greenbelt	Rural	Industrial	Non-Industrial	Uniform (2)	Residential	Non-Residential	Total
1 Parks Development	\$32,469.7	\$56,627.8	\$0.0	\$0.0	\$0.0	\$0.0	\$4,689.3	\$89,097.5	\$4,689.3	\$93,786.9
2 Recreation Facilities	\$202,871.5	\$40,478.5	\$54,257.5	\$572.5	\$0.0	\$0.0	\$15,693.7	\$298,179.9	\$15,693.7	\$313,873.5
<b>TOTAL</b>	<b>\$235,341.2</b>	<b>\$97,106.3</b>	<b>\$54,257.5</b>	<b>\$572.5</b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$20,383.0</b>	<b>\$387,277.4</b>	<b>\$20,383.0</b>	<b>\$407,660.4</b>

Long-Term Engineered Services (2024-2046)	Residential				Non-Residential (1)			Total DC Eligible Costs		
	City-wide	Inside the Greenbelt	Outside the Greenbelt	Rural	Industrial	Non-Industrial	Uniform	Residential	Non-Residential	Total
1 Sanitary (Waste Water)	\$324,754.3	\$127,374.1	\$186,449.2	\$0.0	\$19,406.1	\$169,018.6	\$0.0	\$638,577.5	\$188,424.8	\$827,002.3
3 Water	\$17,178.7	\$3,059.4	\$419,135.3	\$0.0	\$5,559.8	\$33,128.6	\$0.0	\$439,373.3	\$38,688.4	\$478,061.8
<b>TOTAL</b>	<b>\$341,933.0</b>	<b>\$130,433.4</b>	<b>\$605,584.5</b>	<b>\$0.0</b>	<b>\$24,966.0</b>	<b>\$202,147.3</b>	<b>\$0.0</b>	<b>\$1,077,950.9</b>	<b>\$227,113.2</b>	<b>\$1,305,064.1</b>

<b>TOTAL 2024-2033 and 2024-2031</b>								<b>\$1,465,228.3</b>	<b>\$247,496.2</b>	<b>\$1,712,724.6</b>
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(1) Non-Residential costs are calculated on a City-wide basis

(2) Uniform non-residential charges are only calculated for Parks Development, Recreation Facilities and Libraries, consistent with the 2014 DC Background Study and interim 2019 DC Study

## 6. Calculated Development Charges

This section summarizes the calculation of DCs for each amended service category and the resulting total DC by type of development. For residential development, the total per capita amount is then converted to a variable charge by housing unit type using various unit occupancy factors. For non-residential development, the rate per employee is divided by the related floor space per worker (FSW) assumption to arrive at a \$/square metre. The non-residential charge is proposed to be differentiated between industrial and non-industrial building space.

### A. City-Wide Residential (\$/capita) and Non-Residential (\$/square metre) DCs

The calculated residential \$/capita and non-residential industrial and non-industrial charges \$/square metre are shown in Appendix B (Parks and Recreation) and Appendix C (Water and Sanitary), respectively.

An average cost calculation methodology has been used for Parks and Recreation services whereas a cash flow analysis to account for the timing of projects and receipt of DCs was completed for Water and Sanitary (Wastewater) services. This approach is consistent with approach used in the 2024 DC Background Study and is consistent with City's historical practices.

### B. Proposed Amended Development Charges

The amended Parks, Recreation, Water and Sanitary (Wastewater) development charges are summarized in Tables 5-11. For transparency purposes, all other DC rates (as enacted through By-law 2024-218) have been included in the rate tables. Residential DCs are proposed to vary by dwelling unit type to reflect different occupancy factors and resulting

demand for services. Consistent with the City's current practices, the non-residential rate is calculated on a City-wide basis, as such only residential development charges are proposed to vary by benefitting area (e.g. IGB, OGB and Rural).

TABLE 5

**CITY OF OTTAWA  
CITY-WIDE DEVELOPMENT CHARGES  
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE**

Service	Charge Per Capita	Residential Charge By Unit Type (1)				
		Singles & Semis	Multiple, Row and Mobile Dwelling	Apartment Dwelling, Back to Back and Stacked Townhouse (2+ bedrooms)	Apartment (less than 2 bedrooms)	Dwelling Rooms
Protection (Police)	\$191.96	\$645	\$509	\$350	\$248	\$192
Protection (Fire)	\$90.45	\$304	\$240	\$165	\$117	\$90
Parks Development	\$157.71	\$530	\$418	\$287	\$204	\$158
Recreation Facilities	\$985.35	\$3,309	\$2,612	\$1,794	\$1,275	\$985
Libraries	\$86.23	\$290	\$229	\$157	\$112	\$86
Ambulance Service	\$44.82	\$151	\$119	\$82	\$58	\$45
Public Transit	\$5,103.50	\$17,141	\$13,529	\$9,293	\$6,606	\$5,103
<b>SUB-TOTAL GENERAL SERVICES</b>	<b>\$6,660.01</b>	<b>\$22,370</b>	<b>\$17,656</b>	<b>\$12,128</b>	<b>\$8,620</b>	<b>\$6,659</b>
Roads & Related Services	\$4,463.84	\$14,992	\$11,833	\$8,128	\$5,778	\$4,464
Sanitary (Waste Water)	\$960.74	\$3,227	\$2,547	\$1,749	\$1,244	\$961
Water	\$48.84	\$164	\$129	\$89	\$63	\$49
Stormwater Drainage	\$23.81	\$80	\$63	\$43	\$31	\$24
<b>SUB-TOTAL ENGINEERING SERVICES</b>	<b>\$5,497.22</b>	<b>\$18,463</b>	<b>\$14,572</b>	<b>\$10,009</b>	<b>\$7,116</b>	<b>\$5,498</b>
<b>TOTAL CITY-WIDE CHARGE</b>	<b>\$12,157.23</b>	<b>\$40,833</b>	<b>\$32,228</b>	<b>\$22,137</b>	<b>\$15,736</b>	<b>\$12,157</b>
(1) Based on Persons Per Unit Of:		3.36	2.65	1.82	1.29	1.00

TABLE 6

**CITY OF OTTAWA  
CITY-WIDE DEVELOPMENT CHARGES  
NON-RESIDENTIAL DEVELOPMENT CHARGES**

Service	Industrial		Non-Industrial	
	Per Square Metre of GFA	Per Square Foot of GFA	Per Square Metre of GFA	Per Square Foot of GFA
Protection (Police)	\$2.29	\$0.21	\$5.77	\$0.54
Protection (Fire)	\$2.78	\$0.26	\$7.02	\$0.65
Parks Development	\$2.21	\$0.20	\$2.21	\$0.20
Recreation Facilities	\$7.38	\$0.69	\$7.38	\$0.69
Libraries	\$1.44	\$0.13	\$1.44	\$0.13
Ambulance Service	\$0.53	\$0.05	\$1.35	\$0.13
Public Transit	\$60.60	\$5.63	\$140.80	\$13.08
<b>SUB-TOTAL GENERAL SERVICES</b>	<b>\$77.22</b>	<b>\$7.17</b>	<b>\$165.96</b>	<b>\$15.42</b>
Roads & Related Services	\$59.19	\$5.50	\$163.29	\$15.17
Sanitary (Waste Water)	\$21.17	\$1.97	\$37.21	\$3.46
Water	\$5.52	\$0.51	\$9.31	\$0.87
Stormwater Drainage	\$0.29	\$0.03	\$0.73	\$0.07
<b>SUB-TOTAL ENGINEERING SERVICES</b>	<b>\$86.17</b>	<b>\$8.01</b>	<b>\$210.54</b>	<b>\$19.57</b>
<b>TOTAL CITY-WIDE CHARGE</b>	<b>\$163.38</b>	<b>\$15.18</b>	<b>\$376.49</b>	<b>\$34.99</b>

TABLE 7

**CITY OF OTTAWA  
INSIDE THE GREENBELT DEVELOPMENT CHARGES  
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE**

Service	Charge Per Capita	Residential Charge By Unit Type (1)				
		Singles & Semis	Multiple, Row and Mobile Dwelling	Apartment Dwelling, Back to Back and Stacked Townhouse (2+ bedrooms)	Apartment (less than 2 bedrooms)	Dwelling Rooms
Protection (Police)	\$0.00	\$0	\$0	\$0	\$0	\$0
Protection (Fire)	\$0.00	\$0	\$0	\$0	\$0	\$0
Parks Development	\$842.14	\$2,604	\$2,180	\$1,533	\$1,090	\$842
Recreation Facilities	\$601.97	\$1,861	\$1,559	\$1,096	\$779	\$602
Libraries	\$0.00	\$0	\$0	\$0	\$0	\$0
Ambulance Service	\$0.00	\$0	\$0	\$0	\$0	\$0
Public Transit	\$0.00	\$0	\$0	\$0	\$0	\$0
<b>SUB-TOTAL GENERAL SERVICES</b>	<b>\$1,444.11</b>	<b>\$4,465</b>	<b>\$3,739</b>	<b>\$2,629</b>	<b>\$1,869</b>	<b>\$1,444</b>
Roads & Related Services	\$166.93	\$516	\$432	\$304	\$216	\$167
Sanitary (Waste Water)	\$999.26	\$3,090	\$2,587	\$1,819	\$1,293	\$999
Water	\$24.74	\$76	\$64	\$45	\$32	\$25
Stormwater Drainage	\$0.00	\$0	\$0	\$0	\$0	\$0
<b>SUB-TOTAL ENGINEERING SERVICES</b>	<b>\$1,190.93</b>	<b>\$3,682</b>	<b>\$3,083</b>	<b>\$2,168</b>	<b>\$1,541</b>	<b>\$1,191</b>
<b>TOTAL IGB CHARGE</b>	<b>\$2,635.04</b>	<b>\$8,147</b>	<b>\$6,822</b>	<b>\$4,797</b>	<b>\$3,410</b>	<b>\$2,635</b>
(1) Based on Persons Per Unit Of:		3.09	2.59	1.82	1.29	1.00
<b>TOTAL CITY-WIDE CHARGE</b>	<b>\$12,157.23</b>	<b>\$40,833</b>	<b>\$32,228</b>	<b>\$22,137</b>	<b>\$15,736</b>	<b>\$12,157</b>
<b>TOTAL CHARGE IGB</b>	<b>\$14,792.27</b>	<b>\$48,980</b>	<b>\$39,050</b>	<b>\$26,934</b>	<b>\$19,146</b>	<b>\$14,792</b>



TABLE 8

CITY OF OTTAWA  
 OUTSIDE THE GREENBELT DEVELOPMENT CHARGES  
 RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Charge Per Capita	Residential Charge By Unit Type (1)				
		Singles & Semis	Multiple, Row and Mobile Dwelling	Apartment Dwelling, Back to Back and Stacked Townhouse (2+ bedrooms)	Apartment (less than 2 bedrooms)	Dwelling Rooms
Protection (Police)	\$0.00	\$0	\$0	\$0	\$0	\$0
Protection (Fire)	\$246.62	\$852	\$659	\$449	\$319	\$247
Parks Development	\$0.00	\$0	\$0	\$0	\$0	\$0
Recreation Facilities	\$461.66	\$1,594	\$1,233	\$841	\$598	\$462
Libraries	\$329.62	\$1,138	\$880	\$600	\$427	\$330
Ambulance Service	\$0.00	\$0	\$0	\$0	\$0	\$0
Public Transit	\$0.00	\$0	\$0	\$0	\$0	\$0
<b>SUB-TOTAL GENERAL SERVICES</b>	<b>\$1,037.89</b>	<b>\$3,584</b>	<b>\$2,772</b>	<b>\$1,890</b>	<b>\$1,344</b>	<b>\$1,039</b>
Roads & Related Services	\$853.32	\$2,947	\$2,279	\$1,554	\$1,104	\$853
Sanitary (Waste Water)	\$947.11	\$3,271	\$2,530	\$1,725	\$1,226	\$947
Water	\$2,239.42	\$7,733	\$5,981	\$4,078	\$2,899	\$2,239
Stormwater Drainage	\$0.00	\$0	\$0	\$0	\$0	\$0
<b>SUB-TOTAL ENGINEERING SERVICES</b>	<b>\$4,039.85</b>	<b>\$13,951</b>	<b>\$10,790</b>	<b>\$7,357</b>	<b>\$5,229</b>	<b>\$4,039</b>
<b>TOTAL OGB CHARGE</b>	<b>\$5,077.74</b>	<b>\$17,535</b>	<b>\$13,562</b>	<b>\$9,247</b>	<b>\$6,573</b>	<b>\$5,078</b>
(1) Based on Persons Per Unit Of:		3.45	2.67	1.82	1.29	1.00
<b>TOTAL CITY-WIDE CHARGE</b>	<b>\$12,157.23</b>	<b>\$40,833</b>	<b>\$32,228</b>	<b>\$22,137</b>	<b>\$15,736</b>	<b>\$12,157</b>
<b>TOTAL CHARGE OGB</b>	<b>\$17,234.97</b>	<b>\$58,368</b>	<b>\$45,790</b>	<b>\$31,384</b>	<b>\$22,309</b>	<b>\$17,235</b>

TABLE 9

CITY OF OTTAWA  
RURAL (SERVICED) DEVELOPMENT CHARGES  
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Charge Per Capita	Residential Charge By Unit Type (1)				
		Singles & Semis	Multiple, Row and Mobile Dwelling	Apartment Dwelling, Back to Back and Stacked Townhouse (2+ bedrooms)	Apartment (less than 2 bedrooms)	Dwelling Rooms
Protection (Police)	\$0.00	\$0	\$0	\$0	\$0	\$0
Protection (Fire)	\$21.70	\$69	\$49	\$40	\$28	\$22
Parks Development	\$0.00	\$0	\$0	\$0	\$0	\$0
Recreation Facilities	\$27.05	\$86	\$61	\$49	\$35	\$27
Libraries	\$76.87	\$244	\$173	\$140	\$100	\$77
Ambulance Service	\$0.00	\$0	\$0	\$0	\$0	\$0
Public Transit	\$0.00	\$0	\$0	\$0	\$0	\$0
<b>SUB-TOTAL GENERAL SERVICES</b>	<b>\$125.62</b>	<b>\$399</b>	<b>\$283</b>	<b>\$229</b>	<b>\$163</b>	<b>\$126</b>
Roads & Related Services	\$398.53	\$1,264	\$895	\$726	\$516	\$399
Sanitary (Waste Water)	\$0.00	\$0	\$0	\$0	\$0	\$0
Water	\$0.00	\$0	\$0	\$0	\$0	\$0
Stormwater Drainage	\$0.00	\$0	\$0	\$0	\$0	\$0
<b>SUB-TOTAL ENGINEERING SERVICES</b>	<b>\$398.53</b>	<b>\$1,264</b>	<b>\$895</b>	<b>\$726</b>	<b>\$516</b>	<b>\$399</b>
<b>TOTAL RURAL SERVICED CHARGE</b>	<b>\$524.15</b>	<b>\$1,663</b>	<b>\$1,178</b>	<b>\$955</b>	<b>\$679</b>	<b>\$525</b>
(1) Based on Persons Per Unit Of:		3.17	2.25	1.82	1.29	1.00
<b>TOTAL CITY-WIDE CHARGE</b>	<b>\$12,157.23</b>	<b>\$40,833</b>	<b>\$32,228</b>	<b>\$22,137</b>	<b>\$15,736</b>	<b>\$12,157</b>
<b>TOTAL CHARGE RURAL SERVICED</b>	<b>\$12,681.38</b>	<b>\$42,496</b>	<b>\$33,406</b>	<b>\$23,092</b>	<b>\$16,415</b>	<b>\$12,682</b>

TABLE 10

CITY OF OTTAWA  
RURAL (UNSERVICED) DEVELOPMENT CHARGES  
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Charge Per Capita	Residential Charge By Unit Type (1)				
		Singles & Semis	Multiple, Row and Mobile Dwelling	Apartment Dwelling, Back to Back and Stacked Townhouse (2+ bedrooms)	Apartment (less than 2 bedrooms)	Dwelling Rooms
Protection (Police)	\$0.00	\$0	\$0	\$0	\$0	\$0
Protection (Fire)	\$21.70	\$69	\$49	\$40	\$28	\$22
Parks Development	\$0.00	\$0	\$0	\$0	\$0	\$0
Recreation Facilities	\$27.05	\$86	\$61	\$49	\$35	\$27
Libraries	\$76.87	\$244	\$173	\$140	\$100	\$77
Ambulance Service	\$0.00	\$0	\$0	\$0	\$0	\$0
Public Transit	\$0.00	\$0	\$0	\$0	\$0	\$0
<b>SUB-TOTAL GENERAL SERVICES</b>	<b>\$125.62</b>	<b>\$399</b>	<b>\$283</b>	<b>\$229</b>	<b>\$163</b>	<b>\$126</b>
Roads & Related Services	\$398.53	\$1,264	\$895	\$726	\$516	\$399
Sanitary (Waste Water)	\$0.00	\$0	\$0	\$0	\$0	\$0
Water	\$0.00	\$0	\$0	\$0	\$0	\$0
Stormwater Drainage	\$0.00	\$0	\$0	\$0	\$0	\$0
<b>SUB-TOTAL ENGINEERING SERVICES</b>	<b>\$398.53</b>	<b>\$1,264</b>	<b>\$895</b>	<b>\$726</b>	<b>\$516</b>	<b>\$399</b>
<b>TOTAL RURAL UNSERVICED CHARGE</b>	<b>\$524.15</b>	<b>\$1,663</b>	<b>\$1,178</b>	<b>\$955</b>	<b>\$679</b>	<b>\$525</b>
(1) Based on Persons Per Unit Of:		3.17	2.25	1.82	1.29	1.00
<b>TOTAL CITY-WIDE CHARGE (2)</b>	<b>\$11,147.65</b>	<b>\$37,442</b>	<b>\$29,552</b>	<b>\$20,299</b>	<b>\$14,429</b>	<b>\$11,147</b>
<b>TOTAL CHARGE RURAL UNSERVICED</b>	<b>\$11,671.80</b>	<b>\$39,105</b>	<b>\$30,730</b>	<b>\$21,254</b>	<b>\$15,108</b>	<b>\$11,672</b>

(2) Excludes City-wide Water and Sanitary

TABLE 11

**CITY OF OTTAWA  
UNSERVICED DEVELOPMENT CHARGES  
NON-RESIDENTIAL DEVELOPMENT CHARGES PER SQUARE METRE**

Service	Industrial		Non-Industrial	
	Per Square Metre of GFA	Per Square Foot of GFA	Per Square Metre of GFA	Per Square Foot of GFA
Protection (Police)	\$2.29	\$0.21	\$5.77	\$0.54
Protection (Fire)	\$2.78	\$0.26	\$7.02	\$0.65
Parks Development	\$2.21	\$0.20	\$2.21	\$0.20
Recreation Facilities	\$7.38	\$0.69	\$7.38	\$0.69
Libraries	\$1.44	\$0.13	\$1.44	\$0.13
Ambulance Service	\$0.53	\$0.05	\$1.35	\$0.13
Public Transit	\$60.60	\$5.63	\$140.80	\$13.08
<b>SUB-TOTAL GENERAL SERVICES</b>	<b>\$77.22</b>	<b>\$7.17</b>	<b>\$165.96</b>	<b>\$15.42</b>
Roads & Related Services	\$59.19	\$5.50	\$163.29	\$15.17
Sanitary (Waste Water)	\$0.00	\$0.00	\$0.00	\$0.00
Water	\$0.00	\$0.00	\$0.00	\$0.00
Stormwater Drainage	\$0.29	\$0.03	\$0.73	\$0.07
<b>SUB-TOTAL ENGINEERING SERVICES</b>	<b>\$59.48</b>	<b>\$5.53</b>	<b>\$164.02</b>	<b>\$15.24</b>
<b>TOTAL CITY-WIDE CHARGE</b>	<b>\$136.69</b>	<b>\$12.70</b>	<b>\$329.97</b>	<b>\$30.66</b>

### **C. Comparison of Calculated and Existing DCs for City-wide and Area-Specific DCs (IGB, OGB and Rural)**

Tables 12-17 below provide a comparison of the current DC rates (as enacted under By-law 2024-218) and amendment DC rates by area.

TABLE 12

**CITY OF OTTAWA  
CITY-WIDE DEVELOPMENT CHARGES  
INDUSTRIAL DEVELOPMENT CHARGES COMPARISON**

Service	Industrial \$/square metre		Industrial \$/square foot		Difference \$	Difference %
	Current as of May 15, 2024	Calculated Total	Current as of May 15, 2024	Calculated Total		
Protection (Police)	\$2.29	\$2.29	\$0.21	\$0.21	\$0.00	0%
Protection (Fire)	\$2.78	\$2.78	\$0.26	\$0.26	\$0.00	0%
Parks Development	\$2.21	\$2.21	\$0.20	\$0.20	\$0.00	0%
Recreation Facilities	\$7.38	\$7.38	\$0.69	\$0.69	\$0.00	0%
Libraries	\$1.44	\$1.44	\$0.13	\$0.13	\$0.00	0%
Ambulance Service	\$0.53	\$0.53	\$0.05	\$0.05	\$0.00	0%
Public Transit	\$60.60	\$60.60	\$5.63	\$5.63	\$0.00	0%
Corporate Studies	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0%
<b>SUB-TOTAL GENERAL SERVICES</b>	<b>\$77.22</b>	<b>\$77.22</b>	<b>\$7.17</b>	<b>\$7.17</b>	<b>\$0.00</b>	<b>0%</b>
Roads & Related Services	\$64.56	\$59.19	\$6.00	\$5.50	(\$0.50)	-8%
Sanitary (Waste Water)	\$20.67	\$21.17	\$1.92	\$1.97	\$0.05	3%
Water	\$5.04	\$5.52	\$0.47	\$0.51	\$0.04	9%
Stormwater Drainage	\$0.29	\$0.29	\$0.03	\$0.03	\$0.00	0%
<b>SUB-TOTAL ENGINEERING SERVICES</b>	<b>\$90.55</b>	<b>\$86.17</b>	<b>\$8.42</b>	<b>\$8.01</b>	<b>(\$0.41)</b>	<b>-5%</b>
<b>TOTAL CITY-WIDE CHARGE</b>	<b>\$167.77</b>	<b>\$163.38</b>	<b>\$15.59</b>	<b>\$15.18</b>	<b>(\$0.41)</b>	<b>-3%</b>

*Note: Sanitary (Waste Water) and Water rates do not apply in the Rural unserved area*

TABLE 13

**CITY OF OTTAWA  
CITY-WIDE DEVELOPMENT CHARGES  
NON-INDUSTRIAL DEVELOPMENT CHARGES COMPARISON**

Service	Non-Industrial \$/square metre		Non-Industrial \$/square foot		Difference \$	Difference %
	Current as of May 15, 2024	Calculated Total	Current as of May 15, 2024	Calculated Total		
Protection (Police)	\$5.77	\$5.77	\$0.54	\$0.54	\$0.00	0%
Protection (Fire)	\$7.02	\$7.02	\$0.65	\$0.65	\$0.00	0%
Parks Development	\$2.21	\$2.21	\$0.20	\$0.20	\$0.00	0%
Recreation Facilities	\$7.38	\$7.38	\$0.69	\$0.69	\$0.00	0%
Libraries	\$1.44	\$1.44	\$0.13	\$0.13	\$0.00	0%
Ambulance Service	\$1.35	\$1.35	\$0.13	\$0.13	\$0.00	0%
Public Transit	\$140.80	\$140.80	\$13.08	\$13.08	\$0.00	0%
Corporate Studies	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0%
<b>SUB-TOTAL GENERAL SERVICES</b>	<b>\$165.96</b>	<b>\$165.96</b>	<b>\$15.42</b>	<b>\$15.42</b>	<b>\$0.00</b>	<b>0%</b>
Roads & Related Services	\$163.29	\$163.29	\$15.17	\$15.17	\$0.00	0%
Sanitary (Waste Water)	\$43.90	\$37.21	\$4.08	\$3.46	(\$0.62)	-15%
Water	\$10.67	\$9.31	\$0.99	\$0.87	(\$0.12)	-12%
Stormwater Drainage	\$0.73	\$0.73	\$0.07	\$0.07	\$0.00	0%
<b>SUB-TOTAL ENGINEERING SERVICES</b>	<b>\$218.58</b>	<b>\$210.54</b>	<b>\$20.31</b>	<b>\$19.57</b>	<b>(\$0.74)</b>	<b>-4%</b>
<b>TOTAL CITY-WIDE CHARGE</b>	<b>\$384.54</b>	<b>\$376.49</b>	<b>\$35.73</b>	<b>\$34.99</b>	<b>(\$0.74)</b>	<b>-2%</b>

*Note: Sanitary (Waste Water) and Water rates do not apply in the Rural unserved area*

TABLE 14

CITY OF OTTAWA  
INSIDE THE GREENBELT DEVELOPMENT CHARGES  
RESIDENTIAL DEVELOPMENT CHARGES COMPARISON

Service	\$/Single & Semi-Detached						Difference (\$)	Difference (%)
	Current City-wide	Current IGB	Current as of May 15, 2024	Calculated City-Wide	Calculated IGB	Calculated IGB Total	Current vs. Calc. Total	
Protection (Police)	\$645	\$0	\$645	\$645	\$0	\$645	\$0	0%
Protection (Fire)	\$304	\$0	\$304	\$304	\$0	\$304	\$0	0%
Parks Development	\$530	\$2,604	\$3,134	\$530	\$2,604	\$3,134	\$0	0%
Recreation Facilities	\$3,309	\$1,861	\$5,170	\$3,309	\$1,861	\$5,170	\$0	0%
Libraries	\$290	\$0	\$290	\$290	\$0	\$290	\$0	0%
Ambulance Service	\$151	\$0	\$151	\$151	\$0	\$151	\$0	0%
Public Transit	\$17,141	\$0	\$17,141	\$17,141	\$0	\$17,141	\$0	0%
Corporate Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%
<b>SUB-TOTAL GENERAL SERVICES</b>	<b>\$22,370</b>	<b>\$4,465</b>	<b>\$26,835</b>	<b>\$22,370</b>	<b>\$4,465</b>	<b>\$26,835</b>	<b>\$0</b>	<b>0%</b>
Roads & Related Services	\$16,484	\$516	\$17,000	\$14,992	\$516	\$15,508	(\$1,492)	-9%
Sanitary (Waste Water)	\$1,665	\$2,362	\$4,027	\$3,227	\$3,090	\$6,317	\$2,290	57%
Water	\$183	\$140	\$323	\$164	\$76	\$240	(\$83)	-26%
Stormwater Drainage	\$80	\$0	\$80	\$80	\$0	\$80	\$0	0%
<b>SUB-TOTAL ENGINEERING SERVICES</b>	<b>\$18,412</b>	<b>\$3,018</b>	<b>\$21,430</b>	<b>\$18,463</b>	<b>\$3,682</b>	<b>\$22,145</b>	<b>\$715</b>	<b>3%</b>
<b>TOTAL IGB CHARGE</b>	<b>\$40,782</b>	<b>\$7,483</b>	<b>\$48,265</b>	<b>\$40,833</b>	<b>\$8,147</b>	<b>\$48,980</b>	<b>\$715</b>	<b>1%</b>



TABLE 15

CITY OF OTTAWA  
 OUTSIDE THE GREENBELT DEVELOPMENT CHARGES  
 RESIDENTIAL DEVELOPMENT CHARGES COMPARISON

Service	\$/Single & Semi-Detached						Difference (\$)	Difference (%)
	Current City-wide	Current OGB	Current as of May 15, 2024	Calculated City-Wide	Calculated OGB	Calculated OGB Total	Current vs. Calc. Total	
Protection (Police)	\$645	\$0	\$645	\$645	\$0	\$645	\$0	0%
Protection (Fire)	\$304	\$852	\$1,156	\$304	\$852	\$1,156	\$0	0%
Parks Development	\$530	\$0	\$530	\$530	\$0	\$530	\$0	0%
Recreation Facilities	\$3,309	\$1,594	\$4,903	\$3,309	\$1,594	\$4,903	\$0	0%
Libraries	\$290	\$1,138	\$1,428	\$290	\$1,138	\$1,428	\$0	0%
Ambulance Service	\$151	\$0	\$151	\$151	\$0	\$151	\$0	0%
Public Transit	\$17,141	\$0	\$17,141	\$17,141	\$0	\$17,141	\$0	0%
Corporate Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%
<b>SUB-TOTAL GENERAL SERVICES</b>	<b>\$22,370</b>	<b>\$3,584</b>	<b>\$25,954</b>	<b>\$22,370</b>	<b>\$3,584</b>	<b>\$25,954</b>	<b>\$0</b>	<b>0%</b>
Roads & Related Services	\$16,484	\$2,947	\$19,431	\$14,992	\$2,947	\$17,939	(\$1,492)	-8%
Sanitary (Waste Water)	\$1,665	\$5,191	\$6,856	\$3,227	\$3,271	\$6,498	(\$358)	-5%
Water	\$183	\$5,092	\$5,275	\$164	\$7,733	\$7,897	\$2,622	50%
Stormwater Drainage	\$80	\$0	\$80	\$80	\$0	\$80	\$0	0%
<b>SUB-TOTAL ENGINEERING SERVICES</b>	<b>\$18,412</b>	<b>\$13,230</b>	<b>\$31,642</b>	<b>\$18,463</b>	<b>\$13,951</b>	<b>\$32,414</b>	<b>\$772</b>	<b>2%</b>
<b>TOTAL OGB CHARGE</b>	<b>\$40,782</b>	<b>\$16,814</b>	<b>\$57,596</b>	<b>\$40,833</b>	<b>\$17,535</b>	<b>\$58,368</b>	<b>\$772</b>	<b>1%</b>

TABLE 16

CITY OF OTTAWA  
RURAL (SERVICED) DEVELOPMENT CHARGES  
RESIDENTIAL DEVELOPMENT CHARGES COMPARISON

Service	\$/Single & Semi-Detached						Difference (\$)	Difference (%)
	Current City-wide	Current Rural Serviced	Current as of May 15, 2024	Calculated City-Wide	Calculated Rural	Calculated Rural Total	Current vs. Calc. Total	
Protection (Police)	\$645	\$0	\$645	\$645	\$0	\$645	\$0	0%
Protection (Fire)	\$304	\$69	\$373	\$304	\$69	\$373	\$0	0%
Parks Development	\$530	\$0	\$530	\$530	\$0	\$530	\$0	0%
Recreation Facilities	\$3,309	\$86	\$3,395	\$3,309	\$86	\$3,395	\$0	0%
Libraries	\$290	\$244	\$534	\$290	\$244	\$534	\$0	0%
Ambulance Service	\$151	\$0	\$151	\$151	\$0	\$151	\$0	0%
Public Transit	\$17,141	\$0	\$17,141	\$17,141	\$0	\$17,141	\$0	0%
Corporate Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%
<b>SUB-TOTAL GENERAL SERVICES</b>	<b>\$22,370</b>	<b>\$399</b>	<b>\$22,769</b>	<b>\$22,370</b>	<b>\$399</b>	<b>\$22,769</b>	<b>\$0</b>	<b>0%</b>
Roads & Related Services	\$16,484	\$1,264	\$17,748	\$14,992	\$1,264	\$16,256	(\$1,492)	-8%
Sanitary (Waste Water)	\$1,665	\$0	\$1,665	\$3,227	\$0	\$3,227	\$1,562	94%
Water	\$183	\$110	\$293	\$164	\$0	\$164	(\$129)	-44%
Stormwater Drainage	\$80	\$0	\$80	\$80	\$0	\$80	\$0	0%
<b>SUB-TOTAL ENGINEERING SERVICES</b>	<b>\$18,412</b>	<b>\$1,374</b>	<b>\$19,786</b>	<b>\$18,463</b>	<b>\$1,264</b>	<b>\$19,727</b>	<b>(\$59)</b>	<b>0%</b>
<b>TOTAL RURAL (SERVICED)</b>	<b>\$40,782</b>	<b>\$1,773</b>	<b>\$42,555</b>	<b>\$40,833</b>	<b>\$1,663</b>	<b>\$42,496</b>	<b>(\$59)</b>	<b>0%</b>

(1) Protection has been split for the purposes of the 2024 DC Study.

TABLE 17

CITY OF OTTAWA  
RURAL (UNSERVICED) DEVELOPMENT CHARGES  
RESIDENTIAL DEVELOPMENT CHARGES COMPARISON

Service	\$/Single & Semi-Detached						Difference (\$)	Difference (%)
	Current City-wide	Current Rural Unserviced	Current as of May 15, 2024	Calculated City-Wide	Calculated Rural	Calculated Rural Total	Current vs. Calc. Total	
Protection (Police)	\$645	\$0	\$645	\$645	\$0	\$645	\$0	0%
Protection (Fire)	\$304	\$69	\$373	\$304	\$69	\$373	\$0	0%
Parks Development	\$530	\$0	\$530	\$530	\$0	\$530	\$0	0%
Recreation Facilities	\$3,309	\$86	\$3,395	\$3,309	\$86	\$3,395	\$0	0%
Libraries	\$290	\$244	\$534	\$290	\$244	\$534	\$0	0%
Ambulance Service	\$151	\$0	\$151	\$151	\$0	\$151	\$0	0%
Public Transit	\$17,141	\$0	\$17,141	\$17,141	\$0	\$17,141	\$0	0%
Corporate Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%
<b>SUB-TOTAL GENERAL SERVICES</b>	<b>\$22,370</b>	<b>\$399</b>	<b>\$22,769</b>	<b>\$22,370</b>	<b>\$399</b>	<b>\$22,769</b>	<b>\$0</b>	<b>0%</b>
Roads & Related Services	\$16,484	\$1,264	\$17,748	\$14,992	\$1,264	\$16,256	(\$1,492)	-8%
Sanitary (Waste Water)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%
Water	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%
Stormwater Drainage	\$80	\$0	\$80	\$80	\$0	\$80	\$0	0%
<b>SUB-TOTAL ENGINEERING SERVICES</b>	<b>\$16,564</b>	<b>\$1,264</b>	<b>\$17,828</b>	<b>\$15,072</b>	<b>\$1,264</b>	<b>\$16,336</b>	<b>(\$1,492)</b>	<b>-8%</b>
<b>TOTAL RURAL (UNSERVICED)</b>	<b>\$38,934</b>	<b>\$1,663</b>	<b>\$40,597</b>	<b>\$37,442</b>	<b>\$1,663</b>	<b>\$39,105</b>	<b>(\$1,492)</b>	<b>-4%</b>

(1) Protection has been split for the purposes of the 2024 DC Study.

## 7. Cost of Growth Analysis

This section provides a brief examination of the long-term capital and operating costs as well as the asset management related annual provisions for the capital facilities and infrastructure to be included in the amended DC By-law. This examination is required as one of the provisions of the DCA. Additional details are provided in Appendix F.

The cost of growth analysis for Parks, Recreation, Water and Sanitary (Wastewater) services has been updated from the analysis contained in Appendix G of the 2024 Provisional DC Background Study.

The analysis provides the calculated annual asset management contribution for both the gross capital expenditures and the share related to the DC recoverable portion. The calculated annual provisions for the amended DC capital programs are as follows:

- **Parks Services (City-wide and ASDC):** \$7.2 million per annum (2034)
- **Recreation Services (City-wide and ASDC):** \$11.7 million per annum (2034)
- **Water Services (City-wide and ASDC):** \$18.6 million per annum (2047)
- **Sanitary (Wastewater) Services (City-wide and ASDC):** \$33.9 million per annum (2047)

### A. Projects are Deemed to be Financially Sustainable

The calculated annual provisions identified in Appendix B and C have already been or will be fully integrated in the City's AMP and the LRFPs discussed in these appendices.

The annual provisions are considered to be financially sustainable, as it is expected that the increased capital asset management requirements can be absorbed by the LRFPA forecasted tax and user rate increases over the planning periods. Importantly, the City's annual budget analysis will allow staff to continue to monitor and implement mitigating measures should the program become less sustainable.

## **8. Development Charges Administration & Policy Considerations**

### **A. Development Charges Consultation and Approval Process**

The DC Amendment Background Study is intended to be used for the purposes of public consultation and fully satisfies all requirements of the DCA and associated regulation.

Following the public release of the DC Amendment Background Study, consultation will continue with various stakeholders, staff, councillors and the Council sponsors leading up to the passage of the Amended DC By-law. Adjustments to the development charge rates and policies were incorporated into the finalized DC By-laws and provided to Council for their formal approval.

### **B. City-Wide and Area-Specific Charges**

#### **i. Consideration for Area Rating**

As required by the DCA, consideration was given to the use of area rating. Consistent with the City's 2024 Provisional DC Background Study, Parks, Recreation, Water and Sanitary (Wastewater) services have been calculated on both a city-wide and area-specific basis.

### **C. Other Policy Considerations**

#### **i. Statutory and Non-Statutory Policies**

Statutory policies as required by the DCA will continue to be included in the Amended DC By-law. Non-statutory provisions, which are adopted at the discretion of the municipality, will also continue in the amended DC By-law,

with exceptions. The following discretionary exemptions are proposed to be removed from By-law 2024-218 as part of the amendment:

- 7(o) Non-profit housing
- 7(p) Non-profit Health Care Facility
- 7(r) Public Facility
- 7(t) Coach House

It is also proposed that By-law 2024-2018 be amended to provide further clarification on discretionary exemption for 7(j) Unserviced Storage Structures.

## **ii. Local Service Guidelines**

The City also has revised Local Service Guidelines as part of this DC Amendment Background Study. The purpose of establishing these definitions is to determine the eligible capital costs for inclusion in the DC calculation for the City of Ottawa. Functions or services deemed to be local in nature are not to be included in the determination of the development charge rates. The provision of local services is considered to be a direct developer responsibility under s.59 of the DCA and will (or may) be recovered under other agreement(s) with the landowner or developer.

Local Service Guidelines for infrastructure identified in the 2024 Provisional DC Study are generally based on the City's prevailing practices. Updated Local Service Guidelines, however, for Water, Sanitary (Wastewater) and Stormwater Drainage infrastructure have been provided in Appendix G and reflect updates to DC capital program arising from the new IMP.

## **iii. Draft Amending DC By-law**

In accordance with the DCA, the draft amending DC By-law will be made available at least two weeks in advance of the statutory public meeting in accordance with the requirements of the DCA.

#### **iv. City's Growth-Related Funding Principles**

Consistent with the 2024 Provisional DC Background Study, the following principles shall be considered when the City funds growth-related capital projects using development charges:

- Capital projects not listed within the current background study and approved by-law cannot be funded from development charges to ensure the integrity of the growth-related funding program.
- Inflationary project cost increases will be funded from development charges based on the growth-related allocations referenced with in the current background study and approved by-law.
- Development charge revenues are only transferred to fund capital projects when growth-related expenditures have been incurred, not when the capital budget has been approved.
- Sanitary Sewer (Wastewater), Water, Stormwater (city-wide) and Public Transit reserve fund accounts are permitted to be in a cash deficit.
- Roads and Related Services reserve fund accounts are permitted to be in a deficit on a commitment basis only.
- All other growth-related reserve fund accounts are not permitted to go into a deficit on either a cash or commitment basis without prior approval.

#### **D. Summary of Preliminary Recommendations**

The following provides a summary of recommendations relating to the implementation of the Amending DC By-law.

- That present practices regarding collection of DCs and by-law administration continue to the extent possible, having regard to any requirements of the DCA;



- That under the DCA, the City should codify any rules regarding application of the by-laws and exemptions within the DC by-laws proposed for adoption;
- That the City continue to use front-ending agreements or developer agreements (or services-in-lieu arrangements), whichever are practical and desirable by the development industry and the City;
- That the by-law permit the payment of DCs in cash or through services-in-lieu agreements. The City is not obligated to enter into services-in-lieu agreements;
- That Council adopt the development-related capital forecasts, and the increase in the need for services attributable to the anticipated development, as included in the DC Amendment Background Study, subject to annual review during the City's capital budgeting process and in conjunction with the affordable funding envelopes;
- That Council intends to undertake the adopted capital forecast to ensure that the increase in need for service will be met;
- That Council determine that the future excess capacity identified in the DC Amendment Background Study shall be paid for by the development charges contemplated in the said DC Amendment Background Study, or other similar charges;
- That Council give consideration of the use of more than one development charge by-law to reflect different needs for services in different areas, also known as area rating or area-specific DCs, and determined that for the services, and associated infrastructure proposed to be funded by DCs under the DC by-law, that the charges be calculated on either a city-wide or area-specific basis; and
- That Council approve the Cost of Growth analysis, including the Asset Management Plan, that deals with all assets whose capital costs are intended to be funded under the development charge by-law and that such assets are considered to be financially sustainable over their full life cycle.

# Appendix A

## Development Forecast

# Appendix A – Development Forecast

This appendix provides details of the development forecasts used to prepare the development charges calculations as part of the City’s DC Amendment Background Study. The analysis contained in this appendix is consistent with the forecast prepared as part of the 2024 DC Background Study; with additional context provided to describe growth occurring over the long-term planning horizon to 2046. This planning horizon is used to calculate charges for the Water and Sanitary (Wastewater) services, which aligns with the planning horizon of the City’s Official Plan and Infrastructure Master Plan (IMP).

## A. Introduction

Two planning horizons are used in the DC Amendment Background Study. The different planning horizons align with the projects included in the DC capital programs and the increase in need for servicing arising from anticipated development.

- **2033 Planning Horizon – Parks and Recreation Services:** is based on the City’s current Official Plan and readily available Census data as well as assumptions provided by City staff. The planning horizon and development forecast assumptions are consistent with the 2024 DC Background Study.
- **2046 Planning Horizon – Water and Sanitary (Wastewater) Services:** is based on a 2046 planning horizon, which aligns with the City’s Official Plan and new IMP.

The forecast method and key assumptions are discussed and the results of the forecasts are presented in the following tables. The population, housing and employment forecasts, include both city-wide and area-specific boundaries (e.g. Inside the Greenbelt (IGB), Outside the Greenbelt (OGB) and the Rural areas) within Ottawa.

## Historical Development

The following historical development tables are consistent with the development forecast tables included in the 2024 DC Background Study.

Table 1	Historical Population, Occupied Households and Employment Summary (City-wide)
Table 2	Historical Building Permit Data (City-wide)
Table 3	Historical Households by Period of Construction Showing Household Size (City-wide)
Table 4	Historical Households by Period of Construction Showing Household Size (Inside the Greenbelt)
Table 5	Historical Households by Period of Construction Showing Household Size (Outside the Greenbelt)
Table 6	Historical Households by Period of Construction Showing Household Size (Rural)

## Forecast Development: City-wide

The following forecast tables have been updated from the 2024 Provisional DC Background Study to show annual growth to 2046.

Table 7	Population, Household and Employment Forecast Summary
Table 8	Forecast of Occupied Households by Unit Type
Table 9	Forecast of Annual Growth in Occupied Households by Unit Type
Table 10	Forecast Population in New Households by Unit Type
Table 11	Forecast Employment by Type
Table 12	Non-Residential Space Forecast

## **Forecast Development: Area-Specific Development**

The following forecast tables have been updated from the 2024 Provisional DC Background Study to show annual growth to 2046.

Table 13	Area-Specific Census Population Forecast Summary
Table 14	Area-Specific Household Summary
Table 15	Area-Specific Residential Unit Type and Population in New Units Forecast
Table 16	Area-Specific Total Employment Summary
Table 17	Area-Specific Rural Serviced and Unserviced Population and Dwellings Forecast
Table 18	Area-Specific Rural Serviced and Unserviced Non-Residential Employment and Space Forecast

### **B. Forecast Approach, Key Assumptions and Definitions**

#### **i. Identified Forecast Targets**

The DCA requires the City to estimate “the anticipated amount, type and location of development” for which development charges may be imposed. The development forecast must include both residential and non-residential development and be specific enough with regards to quantum, type, location and timing of development to allow the City to prepare a reasonable development-related capital program. Consistent with the approach used in the 2024 DC Background Study, a 10-year development forecast, from 2024-2033, has been used for Parks and Recreation services. A longer-term planning horizon to 2046 has been used for Water and Sanitary (Wastewater) services.

The development forecast includes growth occurring within the City’s approved development areas, specifically within the IGB, OGB and the Rural serviced and unserviced areas. The boundaries for the IGB, OGB and Rural

areas are consistent with the 2019 Interim DC Background Study. It is expected that these boundaries will be adjusted as part of subsequent DC Background Study updates.

The forecasts are premised on the City achieving population, housing and employment targets established in the current approved Official Plan. This is consistent with Provincial regulations that require development charges forecasts be based on areas approved for development in a municipality’s Official Plan.

**Figure 1: City of Ottawa 2046 Official Plan Projections**

	2046
<b>Population</b>	1,410,000
<b>Households</b>	599,500
<b>Employment</b>	827,000

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

Population figures used in the forecasts represent the population recorded in the Census (“Census population”). This definition excludes the Census net under-coverage, which represents those who were missed or double-counted by the Census and which is included in the definition of population used in the Official Plan. Population figures shown in the development forecast represent mid-year estimates. Household figures represent occupied dwellings and are associated with the year in which the dwellings are anticipated to be occupied.

“DC Study Employment” figures presented represent City estimates relating to place of work data. Place of work data identifies where people work rather than their place of residence. It includes all employment with a regular or no fixed place of work. However, work-at-home employment is excluded from the figures as, for development charge purposes, this type of employment is considered not to require building floorspace for its activities.

Employment is categorized as major office, employment land, population-related and rural:

- **Major Office** refers to office type employment contained within free standing buildings more than 20,000 net square feet (1,858 m<sup>2</sup>).
- **Employment Land** refers to industrial employment accommodated primarily in low-rise industrial-type buildings located within business parks and industrial areas.
- **Population Related** is employment that primarily serves the City's resident population. This category captures most retail and other commercial activities.
- **Rural** refers to jobs scattered throughout rural areas and includes agricultural and primary industries plus uses typically found in urban employment areas, but not located on urban land designated for industrial or population-related uses.

### **C. Historical Development in the City**

**The following section is consistent with historical development forecast analysis contained within the 2024 Provisional DC Background Study. The information below has been provided for ease of reference in the DC Amendment Background Study.**

The City has experienced steady and sustained population, household and employment growth for many years. With respect to employment, Ottawa has a unique economy owing to the high proportion of public sector employment and as such, employment has changed somewhat differently than other municipalities in Ontario.

## **i. Historical Residential Development**

Historical population and housing figures presented in Tables 1-6 and are derived from Statistics Canada Census data and data provided by the City of Ottawa.

Table 1 demonstrates that Census population growth across the City has averaged 1.5% per annum over the historical period from 2009-2023. Over the same period, the number of housing units in the City has grown at roughly the same rate as population (1.5% per annum).

The City's Census population has increased from approximately 839,920 people in 2008 to 1.06 million in 2023, representing an increase of 26%. The number of occupied dwelling units in the City also experienced an increase during the 15-year historical period, increasing from roughly 352,230 in 2008 to 439,450 occupied households in 2023, a 25% increase.

Table 2 provide details on historical residential building permit activity in Ottawa. Building permit data represents permits issued for different residential unit types within the City area over the historical period. For the purposes of the development forecast, this analysis was completed for the 2009-2023 period. Since 2008, the City has issued an average of approximately 7,600 permits annually. This number is slightly higher over the last 5-years (2019-2023) averaging roughly 9,800 units per year.

Table 3 provides details on historical occupancy patterns on a city-wide basis. At the time of completing the development forecast for the 2024 DC Study, 2021 Census data on historical household occupancy by period of construction was not available for the City's IGB, OGB and Rural areas. As such, the 2016 Census data has been relied upon. This is consistent with the data used in the City's 2019 Interim DC Background Study.

The overall average occupancy level in Ottawa for a single detached and semi-detached units is 3.36 persons per housing unit (PPU). In keeping with



the City’s historical practice, occupancy levels for recently constructed units over the historical 15-year planning period between 2001 and 2016 have generally been used in the development charges calculation. Tables 6 to 8 provide the historical PPU data for the City’s three area-specific benefiting areas: IGB, OGB and Rural areas. The table below provides an overview of these assumptions.

### PPU Assumptions

Unit Type	City-wide	Inside the Greenbelt	Outside the Greenbelt	Rural
Singles	3.43	3.29	3.52	3.20
Semis	2.76	2.51	2.87	2.65
<b>Singles &amp; Semis</b>	<b>3.36</b>	<b>3.09</b>	<b>3.45</b>	<b>3.17</b>
<b>Rows &amp; Other Multiples</b>	<b>2.65</b>	<b>2.59</b>	<b>2.67</b>	<b>2.25</b>
Apartment - Large	1.82	1.82	1.82	1.82
Apartment - Small	1.29	1.29	1.29	1.29
<b>Apartments (Overall)</b>	<b>1.62</b>	<b>1.62</b>	<b>1.62</b>	<b>1.62</b>

Consistent with the approach employed in the 2019 Interim DC Background Study, the city-wide PPU for apartments is applied to all areas in the City. Similarly, due to the smaller sample size of units in the Rural area, the PPUs for semi-detached units have been estimated. This is consistent with the approach used in the 2014 and 2019 Interim DC Background Studies. As such, the PPU estimates shown above may not match Tables 5 through 8.

### ii. Historical Non-Residential Development

As with most communities in Ontario, the COVID-19 pandemic resulted in a severe shock to the local economy. At the time of the 2021 Census business closures and stay-at-home orders were still in effect. As such, a large portion of the labour force was unemployed and many others were working from home on a full-time basis, and often outside the City. Since that time, employees have continued to gradually return to their usual place of work, either full-time or under hybrid arrangements. For that reason, the impacts

of the COVID-19 pandemic have been normalized for the purposes of the historical employment in the City, although it is evident that some shifts in work-at-home patterns will be long-lasting, which has been accounted for within the planning horizon.

Historical employment figures are shown in Table 1 and are informed by the City's historical employment survey information and traffic zone forecasts. The employment figures used for development charges calculations include employees with no fixed place of work but exclude work at home employment.

Overall, the City's employment has increased over the last 15 years from approximately 504,360 in 2008 to 615,560 in 2023, this represents an increase of 22%.

## **D. Forecast Method and Results**

This section describes the method used to establish the 10-year development charges forecast for the period 2024-2033 and the longer-term forecast from 2024-2046.

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

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

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

**i. City-wide Residential Development Forecast**

The residential development forecast incorporates projections of future population, households, and housing units by type.

As detailed in Table 7, the City's Census population is forecast to grow from approximately 1.06 million in 2023 to 1.21 million in 2033 and 1.3 million in 2036. The 10-year population growth of 157,230 persons represents a 15% increase over the existing base. Over the long-term planning period to 2046, the City anticipates adding a total of approximately 309,790 persons.

Over the 10-year planning period from 2024-2033, the number of occupied housing units is forecast to increase from approximately 439,450 in 2023 to 521,910 in 2033. The overall 10-year growth represents a 19% (82,460 units) increase in occupied dwelling units. Over the long-term planning period to 2046, the City will add approximately 160,050 units.

A breakdown of anticipated housing in the City by unit type is shown in Table 9. The housing forecast shows that the City's housing market will continue to be characterized by ground-related unit types (including singles, semi and row units), with an increase share of the market being represented by non-ground related units such as apartments. This pattern of housing unit growth represents somewhat higher density housing than the pattern experienced in the City over the last 10 years. The forecast reflects anticipated changes in unit mix such as aging population and a combination of adjustments to provincial and City planning policies.

As shown in Table 10, the City-wide population growth in the new units is estimated by applying the following PPU to the housing unit growth:

- 3.43 for single-detached units;
- 2.76 for semi-detached units;
- 2.65 for rows; and
- 1.62 for apartments.

The PPUs were based on 15-year historical Census data from 2001 to 2016. The forecast of population expected to reside in new housing units over the 2024 to 2033 period is 205,890 additional persons. Over the long-term planning period to 2046, the population growth in new housing units is approximately 397,990 persons.

## **ii. City-wide Non-Residential Development Forecast**

Table 11 illustrates the forecast total employment growth in Ottawa by employment category to 2033 and 2046. Non-residential development charges are calculated on a per unit of gross floor area (GFA) basis. Therefore, as required by the DCA, a forecast of future non-residential building space has also been developed. As with the residential forecast, the employment and GFA forecasts cover the 10-year period from 2024-2033 and longer-term timeframe to 2046.

As detailed in Table 12, four categories of employment are distinguished for the purposes of determining non-residential employment and floorspace growth: major office, employment land, population-related, and rural.

An assumed floorspace per worker (FSW) for each category is applied to the employment forecast in order to estimate the amount of associated GFA. No net new non-residential floor space is anticipated for the rural employment category, therefore a FSW of 0m<sup>2</sup> per employee has been applied. The following FSW assumptions are used:

Major Office	23.0 m <sup>2</sup> per employee
Employment Land	110.0 m <sup>2</sup> per employee
Population-Related	50.0 m <sup>2</sup> per employee
Rural	0.0 m <sup>2</sup> per employee

The non-residential floorspace forecast for the City is summarized in Table 12. The total floorspace growth is forecast at 2.13 million square metres over the 10-year period of which the largest component relates to population-related employment (67%), followed by employment land employment (25%) and finally major office (8%). Over the long-term planning period to 2046, non-residential development will grow by 5.2 million square metres. The allocation of growth between the non-residential sectors is anticipated to remain relatively consistent with the 10-year planning period (e.g. 67% population-related, 25% employment land and 8% major office) as well as over the longer term until 2046.

### iii. Area-Specific Forecasts: Inside the Greenbelt, Outside the Greenbelt and Rural

Tables 13 to 18 describe the area-specific residential and non-residential forecasts for the IGB, OGB and Rural areas. The total growth occurring within these three areas matches the city-wide growth shown in Tables 7 to 12.

A summary of the growth distribution between each area is shown in the Table below. This distribution is generally consistent between the 10-year and long-term planning periods.

#### Summary of Area-Specific Growth Distribution 2024-2033

	Inside the Greenbelt	Outside the Greenbelt	Rural	Total
<b>Population</b>	31%	57%	11%	100%
<b>Dwelling Units</b>	45%	46%	8%	100%
<b>Employment</b>	55%	41%	4%	100%

### Summary of Area-Specific Growth Distribution 2024-2046

	Inside the Greenbelt	Outside the Greenbelt	Rural	Total
<b>Population</b>	33%	56%	10%	100%
<b>Dwelling Units</b>	45%	46%	8%	100%
<b>Employment</b>	53%	43%	4%	100%

#### iv. Treatment of Tewin for Purposes of the Growth Forecast

Current analysis from the City estimates that approximately 8,100 dwelling units will be constructed in the Tewin community over the 2046 planning horizon. It is recognized that this number may be adjusted once the Secondary Plan for the area is finalized.

Table 15 includes a summary of residential growth (population and dwelling units) occurring OGB. In this table, a scenario of residential growth with and without growth anticipated for the Tewin community has been shown. The amended Water and Sanitary (Wastewater) DC rates includes shares of projects which will benefit the OGB area but removes shares of projects which will solely benefit Tewin. At the time of producing the DC Amendment Background Study, it was understood that Tewin would not be subject to the OGB DC rate and that a Tewin ASDC will be calculated once the Secondary Plan is complete and future growth-related infrastructure requirements are finalized.

#### v. Area-Specific Forecasts: Rural Serviced and Unserviced

Tables 17 to 18 describe the area-specific residential and non-residential forecasts for the Rural serviced and unserviced areas. The distribution of growth between the areas is generally consistent with the distribution identified in the 2019 Interim DC Study over the 10-year planning period,

The tables provide a forecast of growth occurring within the following areas:

- Rural Serviced Water Area
- Rural Serviced Sanitary Sewer (Wastewater) Area
- Rural Serviced Water and Sanitary Sewer (Wastewater) Area
- Rural Unserviced

The “Total Rural Serviced” areas include the serviced “Water Area”, “Sanitary Sewer (Wastewater) Area”, “Water and Sanitary Sewer (Wastewater) Area”. These areas are consistent with the defined boundaries identified in the 2019 Interim DC Study.

**APPENDIX A - TABLE 1**  
**CITY OF OTTAWA**  
**HISTORICAL POPULATION, OCCUPIED DWELLINGS & EMPLOYMENT SUMMARY**  
**CITY-WIDE**

Mid-Year	Census Population	Annual Growth	Occupied Dwellings	Annual Growth	Av. Household Size (PPU)	DC Study Employment <sup>1</sup>	Annual Growth	Activity Rate
<b>2006</b>	<b>812,129</b>		<b>340,732</b>		<b>2.38</b>	<b>487,224</b>		<b>60.0%</b>
2007	825,906	13,777	346,435	5,703	2.38	495,720	8,496	60.0%
2008	839,917	14,011	352,233	5,798	2.38	504,363	8,643	60.0%
2009	854,165	14,248	358,128	5,895	2.39	513,157	8,794	60.1%
2010	868,655	14,490	364,122	5,994	2.39	522,104	8,947	60.1%
<b>2011</b>	<b>883,391</b>	<b>14,736</b>	<b>370,217</b>	<b>6,095</b>	<b>2.39</b>	<b>531,208</b>	<b>9,104</b>	<b>60.1%</b>
2012	893,335	9,944	375,233	5,016	2.38	538,394	7,186	60.3%
2013	903,391	10,056	380,317	5,084	2.38	545,677	7,283	60.4%
2014	913,560	10,169	385,470	5,153	2.37	553,058	7,381	60.5%
2015	923,844	10,284	390,692	5,222	2.36	560,539	7,481	60.7%
<b>2016</b>	<b>934,243</b>	<b>10,399</b>	<b>395,985</b>	<b>5,293</b>	<b>2.36</b>	<b>568,121</b>	<b>7,582</b>	<b>60.8%</b>
2017	951,102	16,859	400,632	4,647	2.37	575,806	7,685	60.5%
2018	968,265	17,163	405,334	4,702	2.39	583,595	7,789	60.3%
2019	985,738	17,473	410,091	4,757	2.40	591,489	7,894	60.0%
2020	1,003,526	17,788	414,904	4,813	2.42	599,490	8,001	59.7%
<b>2021</b>	<b>1,021,635</b>	<b>18,109</b>	<b>419,773</b>	<b>4,869</b>	<b>2.43</b>	<b>607,601</b>	<b>8,111</b>	<b>59.5%</b>
2022	1,038,426	16,791	429,501	9,728	2.42	611,570	3,969	58.9%
2023	1,056,221	17,795	439,454	9,953	2.40	615,565	3,995	58.3%
Growth 2009-2023		216,304		87,221			111,202	

Source: Statistics Canada, City of Ottawa, Hemson Consulting

<sup>1</sup> DC Study Employment includes No Fixed Place of Work but excludes Work at Home Employment



APPENDIX A - TABLE 2  
CITY OF OTTAWA  
HISTORICAL BUILDING PERMIT DATA  
CITY-WIDE

Year	Building Permits					Shares By Unit Type				
	Singles	Semis	Rows	Apartments	Total	Singles	Semis	Rows	Apartments	Total
2006	2,206	321	1,707	688	4,922	45%	7%	35%	14%	100%
2007	2,884	287	2,371	1,153	6,695	43%	4%	35%	17%	100%
2008	2,725	201	2,573	1,239	6,738	40%	3%	38%	18%	100%
2009	2,179	276	2,353	1,600	6,408	34%	4%	37%	25%	100%
2010	1,999	327	2,185	2,188	6,699	30%	5%	33%	33%	100%
<b>2011</b>	<b>1,380</b>	<b>343</b>	<b>2,166</b>	<b>2,480</b>	<b>6,369</b>	<b>22%</b>	<b>5%</b>	<b>34%</b>	<b>39%</b>	<b>100%</b>
2012	2,009	338	2,288	1,548	6,183	32%	5%	37%	25%	100%
2013	1,467	304	1,432	1,988	5,191	28%	6%	28%	38%	100%
2014	1,954	236	2,408	2,412	7,010	28%	3%	34%	34%	100%
2015	1,558	157	1,113	1,557	4,385	36%	4%	25%	36%	100%
<b>2016</b>	1,942	192	1,936	2,918	6,988	28%	3%	28%	42%	100%
2017	1,956	245	2,033	2,474	6,708	29%	4%	30%	37%	100%
2018	2,283	257	2,243	3,939	8,722	26%	3%	26%	45%	100%
2019	2,421	176	2,920	3,996	9,513	25%	2%	31%	42%	100%
2020	2,504	236	3,092	5,617	11,449	22%	2%	27%	49%	100%
<b>2021</b>	<b>2,760</b>	<b>134</b>	<b>3,065</b>	<b>3,601</b>	<b>9,560</b>	<b>29%</b>	<b>1%</b>	<b>32%</b>	<b>38%</b>	<b>100%</b>
2022	1,976	109	2,541	4,549	9,175	22%	1%	28%	50%	100%
2023	1,062	55	1,727	6,602	9,446	11%	1%	18%	70%	100%
Growth 2009-2023	29,450	3,385	33,502	47,469	113,806	26%	3%	29%	42%	100%

Source: Statistics Canada

**APPENDIX A - TABLE 3**  
**CITY OF OTTAWA**  
**HISTORICAL HOUSEHOLDS BY PERIOD OF CONSTRUCTION SHOWING HOUSEHOLD SIZE**  
**CITY-WIDE**

Dwelling Unit Type	Period of Construction										Period of Construction Summaries		
	Pre 1945	1946-1960	1961-1970	1971-1980	1981-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2016	2001-2016	2006-2016	Total
<b>Singles &amp; Semis</b>													
Household Population	39,370	56,920	62,745	60,695	91,345	28,620	37,690	53,270	50,320	35,725	139,315	86,045	516,700
Households	14,945	23,005	24,455	22,685	31,760	9,165	11,935	15,955	14,790	10,735	41,480	25,525	179,430
Household Size	2.63	2.47	2.57	2.68	2.88	3.12	3.16	3.34	3.40	3.33	3.36	3.37	2.88
<b>Rows</b>													
Household Population	4,680	6,800	15,710	39,295	34,830	18,980	18,385	23,340	26,205	22,415	71,960	48,620	210,640
Households	1,735	2,215	5,465	15,055	13,565	7,070	7,185	8,840	9,590	8,715	27,145	18,305	79,435
Household Size	2.70	3.07	2.87	2.61	2.57	2.68	2.56	2.64	2.73	2.57	2.65	2.66	2.65
<b>Apartments (incl. Duplexes)</b>													
Household Population	19,185	21,015	31,745	43,240	27,935	9,040	6,630	7,310	9,605	12,950	29,865	22,555	188,655
Households	10,970	12,870	19,765	26,960	16,755	5,330	3,810	4,370	5,870	8,225	18,465	14,095	114,925
Household Size	1.75	1.63	1.61	1.60	1.67	1.70	1.74	1.67	1.64	1.57	1.62	1.60	1.64
<b>All Units</b>													
Household Population	63,235	84,735	110,200	143,230	154,110	56,640	62,705	83,920	86,130	71,090	241,140	157,220	915,995
Households	27,650	38,090	49,685	64,700	62,080	21,565	22,930	29,165	30,250	27,675	87,090	57,925	373,790
Household Size	2.29	2.22	2.22	2.21	2.48	2.63	2.73	2.88	2.85	2.57	2.77	2.71	2.45

*Note: Population and household values in this table are based on response rates and may differ from Census values  
Source: Statistics Canada "Period of Construction Data" from 2016 Census*

**APPENDIX A - TABLE 4**  
**CITY OF OTTAWA**  
**HISTORICAL HOUSEHOLDS BY PERIOD OF CONSTRUCTION SHOWING HOUSEHOLD SIZE**  
**INSIDE THE GREENBELT**

Dwelling Unit Type	Period of Construction											Period of Construction Summaries		
	1920 or before	1921 to 1945	1946-1960	1961-1970	1971-1980	1981-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2016	2001-2016	2006-2016	Total
<b>Singles &amp; Semis</b>														
Household Population	15,070	16,805	51,005	47,510	25,230	22,770	5,510	6,555	6,330	5,225	4,260	15,815	9,485	206,270
Households	5,715	6,350	20,505	18,310	9,390	7,845	1,750	2,145	1,995	1,745	1,375	5,115	3,120	77,125
Household Size	2.64	2.65	2.49	2.59	2.69	2.90	3.15	3.06	3.17	2.99	3.10	3.09	3.04	2.67
<b>Rows</b>														
Household Population	2,775	1,805	6,540	14,755	31,350	21,400	7,450	8,470	7,625	4,020	1,805	13,450	5,825	107,995
Households	1,085	560	2,105	5,085	11,830	8,070	2,665	3,270	2,925	1,585	685	5,195	2,270	39,865
Household Size	2.56	3.22	3.11	2.90	2.65	2.65	2.80	2.59	2.61	2.54	2.64	2.59	2.57	2.71
<b>Apartments (incl. Duplexes)</b>														
Household Population	10,325	8,515	20,405	30,910	41,895	25,580	8,365	5,970	5,840	6,950	8,400	21,190	15,350	173,155
Households	5,585	5,125	12,550	19,295	26,135	15,235	4,890	3,370	3,460	4,275	5,475	13,210	9,750	105,395
Household Size	1.85	1.66	1.63	1.60	1.60	1.68	1.71	1.77	1.69	1.63	1.53	1.60	1.57	1.64
<b>All Units</b>														
Household Population	28,170	27,125	77,950	93,175	98,475	69,750	21,325	20,995	19,795	16,195	14,465	50,455	30,660	487,420
Households	12,385	12,035	35,160	42,690	47,355	31,150	9,305	8,785	8,380	7,605	7,535	23,520	15,140	222,385
Household Size	2.27	2.25	2.22	2.18	2.08	2.24	2.29	2.39	2.36	2.13	1.92	2.15	2.03	2.19

Note: Population and household values in this table are based on response rates and may differ from Census values  
Source: Statistics Canada "Period of Construction Data" from 2016 Census

**APPENDIX A - TABLE 5**  
**CITY OF OTTAWA**  
**HISTORICAL HOUSEHOLDS BY PERIOD OF CONSTRUCTION SHOWING HOUSEHOLD SIZE**  
**OUTSIDE THE GREENBELT**

Dwelling Unit Type	Period of Construction											Period of Construction Summaries		
	1920 or before	1921 to 1945	1946-1960	1961-1970	1971-1980	1981-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2016	2001-2016	2006-2016	Total
<b>Singles &amp; Semis</b>														
Household Population	135	185	1,830	7,825	21,275	51,200	16,395	25,090	37,430	37,195	26,815	101,440	64,010	225,375
Households	80	70	725	3,070	7,765	17,755	5,185	7,765	10,915	10,605	7,855	29,375	18,460	71,790
Household Size	1.69	2.64	2.52	2.55	2.74	2.88	3.16	3.23	3.43	3.51	3.41	3.45	3.47	3.14
<b>Rows</b>														
Household Population	10	30	230	915	7,940	13,385	11,410	9,870	15,445	22,010	20,220	57,675	42,230	101,465
Households	20	0	85	385	3,170	5,465	4,330	3,875	5,765	7,930	7,900	21,595	15,830	38,925
Household Size	0.50	n/a	2.71	2.38	2.50	2.45	2.64	2.55	2.68	2.78	2.56	2.67	2.67	2.61
<b>Apartments (incl. Duplexes)</b>														
Household Population	50	65	345	670	855	2,015	705	655	1,510	2,765	4,640	8,915	7,405	14,275
Households	10	40	180	285	530	1,260	410	385	860	1,595	2,795	5,250	4,390	8,350
Household Size	5.00	1.63	1.92	2.35	1.61	1.60	1.72	1.70	1.76	1.73	1.66	1.70	1.69	1.71
<b>All Units</b>														
Household Population	195	280	2,405	9,410	30,070	66,600	28,510	35,615	54,385	61,970	51,675	168,030	113,645	341,115
Households	110	110	990	3,740	11,465	24,480	9,925	12,025	17,540	20,130	18,550	56,220	38,680	119,065
Household Size	1.77	2.55	2.43	2.52	2.62	2.72	2.87	2.96	3.10	3.08	2.79	2.99	2.94	2.86

Note: Population and household values in this table are based on response rates and may differ from Census values  
Source: Statistics Canada "Period of Construction Data" from 2016 Census

**APPENDIX A - TABLE 6**  
**CITY OF OTTAWA**  
**HISTORICAL HOUSEHOLDS BY PERIOD OF CONSTRUCTION SHOWING HOUSEHOLD SIZE**  
**RURAL**

Dwelling Unit Type	Period of Construction											Period of Construction Summaries		
	1920 or before	1921 to 1945	1946-1960	1961-1970	1971-1980	1981-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2016	2001-2016	2006-2016	Total
<b>Singles &amp; Semis</b>														
Household Population	5,920	1,200	4,035	7,150	13,485	17,130	6,590	6,015	9,440	7,890	4,590	21,920	12,480	83,445
Households	525	1,755	2,930	5,175	6,035	2,230	2,010	3,000	2,480	1,465	2,285	6,230	3,750	29,890
Household Size	11.28	0.68	1.38	1.38	2.23	7.68	3.28	2.01	3.81	5.39	2.01	3.34	3.33	2.79
<b>Rows</b>														
Household Population	10	0	40	20	25	50	130	40	280	170	370	820	540	1,135
Households	0	0	10	10	35	10	45	20	170	85	110	365	195	495
Household Size	n/a	n/a	4.00	2.00	0.71	5.00	2.89	2.00	1.65	2.00	3.36	2.25	2.77	2.29
<b>Apartments (incl. Duplexes)</b>														
Household Population	95	40	90	245	330	315	50	125	35	30	10	75	40	1,365
Households	45	40	70	125	160	260	20	30	20	0	10	30	10	780
Household Size	2.11	1.00	1.29	1.96	2.06	1.21	2.50	4.17	1.75	n/a	1.00	2.50	4.00	1.75
<b>All Units</b>														
Household Population	6,025	1,240	4,165	7,415	13,840	17,495	6,770	6,180	9,755	8,090	4,970	22,815	13,060	85,945
Households	570	1,795	3,010	5,310	6,230	2,500	2,075	3,050	2,670	1,550	2,405	6,625	3,955	31,165
Household Size	10.57	0.69	1.38	1.40	2.22	7.00	3.26	2.03	3.65	5.22	2.07	3.44	3.30	2.76

*Note: Population and household values in this table are based on response rates and may differ from Census values  
Source: Statistics Canada "Period of Construction Data" from 2016 Census*

**APPENDIX A - TABLE 7  
CITY OF OTTAWA  
POPULATION, HOUSEHOLD AND EMPLOYMENT FORECAST SUMMARY  
CITY-WIDE**

Mid-Year	Total Population	Annual Growth	Census Population	Annual Growth	Occupied Dwellings	Annual Growth	Av. Household Size (PPU)	DC Study Employment <sup>1</sup>	Annual Growth	Activity Rate	Work at Home Employment	Annual Growth	Total Employment	Annual Growth
<b>2021</b>	<b>1,054,500</b>		<b>1,021,635</b>		<b>419,773</b>		<b>2.43</b>	<b>607,601</b>		<b>59.5%</b>	<b>40,769</b>		<b>648,370</b>	
2022	1,071,868	17,368	1,038,426	16,791	429,501	9,728	2.42	611,570	3,969	58.9%	42,459	1,690	654,029	5,659
2023	1,090,236	18,368	1,056,221	17,795	439,454	9,953	2.40	615,565	3,995	58.3%	44,218	1,759	659,783	5,754
2024	1,108,918	18,682	1,074,320	18,099	449,638	10,184	2.39	619,586	4,021	57.7%	46,050	1,832	665,636	5,853
2025	1,127,921	19,003	1,092,730	18,410	460,058	10,420	2.38	623,634	4,048	57.1%	47,958	1,908	671,592	5,956
<b>2026</b>	<b>1,148,000</b>	<b>20,079</b>	<b>1,112,182</b>	<b>19,452</b>	<b>470,720</b>	<b>10,662</b>	<b>2.36</b>	<b>627,708</b>	<b>4,074</b>	<b>56.4%</b>	<b>49,945</b>	<b>1,987</b>	<b>677,653</b>	<b>6,061</b>
2027	1,163,003	15,003	1,126,717	14,535	478,076	7,356	2.36	631,809	4,101	56.1%	52,015	2,070	683,824	6,171
2028	1,178,202	15,199	1,141,442	14,725	485,547	7,471	2.35	635,937	4,128	55.7%	54,170	2,155	690,107	6,283
2029	1,193,599	15,397	1,156,359	14,917	493,134	7,587	2.34	640,092	4,155	55.4%	56,415	2,245	696,507	6,400
2030	1,209,198	15,599	1,171,471	15,112	500,840	7,706	2.34	644,274	4,182	55.0%	58,753	2,338	703,027	6,520
<b>2031</b>	<b>1,225,000</b>	<b>15,802</b>	<b>1,186,780</b>	<b>15,309</b>	<b>508,666</b>	<b>7,826</b>	<b>2.33</b>	<b>648,483</b>	<b>4,209</b>	<b>54.6%</b>	<b>61,188</b>	<b>2,435</b>	<b>709,671</b>	<b>6,644</b>
2032	1,238,691	13,691	1,200,043	13,263	515,246	6,580	2.33	652,720	4,237	54.4%	63,723	2,535	716,443	6,772
2033	1,252,535	13,844	1,213,455	13,412	521,911	6,665	2.33	656,984	4,264	54.1%	66,363	2,640	723,347	6,904
2034	1,266,533	13,998	1,227,017	13,562	528,662	6,751	2.32	661,276	4,292	53.9%	69,113	2,750	730,389	7,042
2035	1,280,688	14,155	1,240,730	13,713	535,500	6,838	2.32	665,596	4,320	53.6%	71,977	2,864	737,573	7,184
<b>2036</b>	<b>1,295,000</b>	<b>14,312</b>	<b>1,254,596</b>	<b>13,866</b>	<b>542,426</b>	<b>6,926</b>	<b>2.31</b>	<b>669,944</b>	<b>4,348</b>	<b>53.4%</b>	<b>74,959</b>	<b>2,982</b>	<b>744,903</b>	<b>7,330</b>
2037	1,307,362	12,362	1,267,594	12,998	548,425	5,999	2.31	674,321	4,377	53.2%	78,065	3,106	752,386	7,483
2038	1,319,842	12,480	1,280,727	13,133	554,490	6,065	2.31	678,726	4,405	53.0%	81,300	3,235	760,026	7,640
2039	1,332,441	12,599	1,293,996	13,269	560,622	6,132	2.31	683,160	4,434	52.8%	84,669	3,369	767,829	7,803
2040	1,345,160	12,719	1,307,402	13,406	566,822	6,200	2.31	687,623	4,463	52.6%	88,177	3,508	775,800	7,971
<b>2041</b>	<b>1,358,000</b>	<b>12,840</b>	<b>1,315,630</b>	<b>8,228</b>	<b>573,092</b>	<b>6,270</b>	<b>2.30</b>	<b>692,115</b>	<b>4,492</b>	<b>52.6%</b>	<b>91,831</b>	<b>3,654</b>	<b>783,946</b>	<b>8,146</b>
2042	1,368,244	10,244	1,325,555	9,925	578,279	5,187	2.29	696,637	4,522	52.6%	95,636	3,805	792,273	8,327
2043	1,378,566	10,322	1,335,555	10,000	583,513	5,234	2.29	701,188	4,551	52.5%	99,599	3,963	800,787	8,514
2044	1,388,965	10,399	1,345,630	10,075	588,794	5,281	2.29	705,769	4,581	52.4%	103,726	4,127	809,495	8,708
2045	1,399,443	10,478	1,355,781	10,151	594,123	5,329	2.28	710,380	4,611	52.4%	108,024	4,298	818,404	8,909
<b>2046</b>	<b>1,410,000</b>	<b>10,557</b>	<b>1,366,008</b>	<b>10,227</b>	<b>599,500</b>	<b>5,377</b>	<b>2.28</b>	<b>715,020</b>	<b>4,640</b>	<b>52.3%</b>	<b>112,500</b>	<b>4,476</b>	<b>827,520</b>	<b>9,116</b>
Growth 2024-2033		162,299		157,234		82,457			41,419			22,145		63,564
Growth 2024-2046		319,764		309,787		160,046			99,455			68,282		167,737

Source: City of Ottawa

<sup>1</sup> Employment includes no fixed place of work and work at home

**APPENDIX A - TABLE 8  
CITY OF OTTAWA  
FORECAST OF OCCUPIED HOUSEHOLDS BY UNIT TYPE  
CITY-WIDE**

Mid-Year	Occupied Households					Shares By Unit Type				
	Singles	Semis	Rows	Apartments	Total	Singles	Semis	Rows	Apts.	Total
<b>2021</b>	<b>172,072</b>	<b>21,866</b>	<b>92,359</b>	<b>133,476</b>	<b>419,773</b>	<b>41%</b>	<b>5%</b>	<b>22%</b>	<b>32%</b>	<b>100%</b>
2022	176,060	22,373	94,499	136,569	429,501	41%	5%	22%	32%	100%
2023	180,140	22,891	96,689	139,734	439,454	41%	5%	22%	32%	100%
2024	183,602	22,993	99,235	143,808	449,638	41%	5%	22%	32%	100%
2025	187,135	23,097	101,840	147,986	460,058	41%	5%	22%	32%	100%
<b>2026</b>	<b>190,738</b>	<b>23,204</b>	<b>104,506</b>	<b>152,272</b>	<b>470,720</b>	<b>41%</b>	<b>5%</b>	<b>22%</b>	<b>32%</b>	<b>100%</b>
2027	193,217	23,278	106,345	155,236	478,076	40%	5%	22%	32%	100%
2028	195,727	23,353	108,213	158,254	485,547	40%	5%	22%	33%	100%
2029	198,268	23,429	110,110	161,327	493,134	40%	5%	22%	33%	100%
2030	200,841	23,506	112,037	164,456	500,840	40%	5%	22%	33%	100%
<b>2031</b>	<b>203,447</b>	<b>23,584</b>	<b>113,994</b>	<b>167,641</b>	<b>508,666</b>	<b>40%</b>	<b>5%</b>	<b>22%</b>	<b>33%</b>	<b>100%</b>
2032	205,631	23,650	115,639	170,326	515,246	40%	5%	22%	33%	100%
2033	207,837	23,717	117,305	173,052	521,911	40%	5%	22%	33%	100%
2034	210,064	23,785	118,993	175,820	528,662	40%	4%	23%	33%	100%
2035	212,314	23,853	120,703	178,630	535,500	40%	4%	23%	33%	100%
<b>2036</b>	<b>214,585</b>	<b>23,922</b>	<b>122,435</b>	<b>181,484</b>	<b>542,426</b>	<b>40%</b>	<b>4%</b>	<b>23%</b>	<b>33%</b>	<b>100%</b>
2037	216,546	23,982	123,935	183,962	548,425	39%	4%	23%	34%	100%
2038	218,523	24,043	125,451	186,473	554,490	39%	4%	23%	34%	100%
2039	220,516	24,104	126,984	189,018	560,622	39%	4%	23%	34%	100%
2040	222,525	24,166	128,534	191,597	566,822	39%	4%	23%	34%	100%
<b>2041</b>	<b>224,549</b>	<b>24,229</b>	<b>130,102</b>	<b>194,212</b>	<b>573,092</b>	<b>39%</b>	<b>4%</b>	<b>23%</b>	<b>34%</b>	<b>100%</b>
2042	226,219	24,281	131,399	196,380	578,279	39%	4%	23%	34%	100%
2043	227,899	24,333	132,708	198,573	583,513	39%	4%	23%	34%	100%
2044	229,589	24,386	134,028	200,791	588,794	39%	4%	23%	34%	100%
2045	231,289	24,439	135,360	203,035	594,123	39%	4%	23%	34%	100%
<b>2046</b>	<b>232,999</b>	<b>24,493</b>	<b>136,704</b>	<b>205,304</b>	<b>599,500</b>	<b>39%</b>	<b>4%</b>	<b>23%</b>	<b>34%</b>	<b>100%</b>

Source: City of Ottawa

**APPENDIX A - TABLE 9  
CITY OF OTTAWA  
FORECAST OF ANNUAL GROWTH IN OCCUPIED HOUSEHOLDS BY UNIT TYPE  
CITY-WIDE**

Mid-Year	Annual Growth in Occupied Households					Shares By Unit Type				
	Singles	Semis	Rows	Apartments	Total	Singles	Semis	Rows	Apts.	Total
<b>2021</b>										
2022	3,988	507	2,140	3,093	9,728	41%	5%	22%	32%	100%
2023	4,080	518	2,190	3,165	9,953	41%	5%	22%	32%	100%
2024	3,462	102	2,546	4,074	10,184	34%	1%	25%	40%	100%
2025	3,533	104	2,605	4,178	10,420	34%	1%	25%	40%	100%
<b>2026</b>	<b>3,603</b>	<b>107</b>	<b>2,666</b>	<b>4,286</b>	<b>10,662</b>	<b>34%</b>	<b>1%</b>	<b>25%</b>	<b>40%</b>	<b>100%</b>
2027	2,479	74	1,839	2,964	7,356	34%	1%	25%	40%	100%
2028	2,510	75	1,868	3,018	7,471	34%	1%	25%	40%	100%
2029	2,541	76	1,897	3,073	7,587	34%	1%	25%	41%	100%
2030	2,573	77	1,927	3,129	7,706	33%	1%	25%	41%	100%
<b>2031</b>	<b>2,606</b>	<b>78</b>	<b>1,957</b>	<b>3,185</b>	<b>7,826</b>	<b>33%</b>	<b>1%</b>	<b>25%</b>	<b>41%</b>	<b>100%</b>
2032	2,184	66	1,645	2,685	6,580	33%	1%	25%	41%	100%
2033	2,206	67	1,666	2,726	6,665	33%	1%	25%	41%	100%
2034	2,227	68	1,688	2,768	6,751	33%	1%	25%	41%	100%
2035	2,250	68	1,710	2,810	6,838	33%	1%	25%	41%	100%
<b>2036</b>	<b>2,271</b>	<b>69</b>	<b>1,732</b>	<b>2,854</b>	<b>6,926</b>	<b>33%</b>	<b>1%</b>	<b>25%</b>	<b>41%</b>	<b>100%</b>
2037	1,961	60	1,500	2,478	5,999	33%	1%	25%	41%	100%
2038	1,977	61	1,516	2,511	6,065	33%	1%	25%	41%	100%
2039	1,993	61	1,533	2,545	6,132	33%	1%	25%	42%	100%
2040	2,009	62	1,550	2,579	6,200	32%	1%	25%	42%	100%
<b>2041</b>	<b>2,024</b>	<b>63</b>	<b>1,568</b>	<b>2,615</b>	<b>6,270</b>	<b>32%</b>	<b>1%</b>	<b>25%</b>	<b>42%</b>	<b>100%</b>
2042	1,670	52	1,297	2,168	5,187	32%	1%	25%	42%	100%
2043	1,680	52	1,309	2,193	5,234	32%	1%	25%	42%	100%
2044	1,690	53	1,320	2,218	5,281	32%	1%	25%	42%	100%
2045	1,700	53	1,332	2,244	5,329	32%	1%	25%	42%	100%
<b>2046</b>	<b>1,710</b>	<b>54</b>	<b>1,344</b>	<b>2,269</b>	<b>5,377</b>	<b>32%</b>	<b>1%</b>	<b>25%</b>	<b>42%</b>	<b>100%</b>
Growth 2024-2033	27,697	826	20,616	33,318	82,457	34%	1%	25%	40%	100%
Growth 2024-2046	52,859	1,602	40,015	65,570	160,046	33%	1%	25%	41%	100.0%

Source: City of Ottawa



**APPENDIX A - TABLE 10**  
**CITY OF OTTAWA**  
**FORECAST POPULATION IN NEW HOUSEHOLDS BY UNIT TYPE**  
**CITY-WIDE**

Mid-Year	Forecast Population in New Households				
	Singles	Semis	Rows	Apartments	Total
<b>2021</b>					
2022	13,678	1,399	5,672	5,011	25,760
2023	13,994	1,431	5,803	5,127	26,355
2024	11,875	282	6,747	6,600	25,504
2025	12,118	287	6,903	6,768	26,076
<b>2026</b>	<b>12,358</b>	<b>295</b>	<b>7,065</b>	<b>6,943</b>	<b>26,661</b>
2027	8,503	204	4,873	4,802	18,382
2028	8,609	207	4,950	4,889	18,655
2029	8,716	210	5,027	4,978	18,931
2030	8,825	213	5,107	5,069	19,214
<b>2031</b>	<b>8,939</b>	<b>215</b>	<b>5,186</b>	<b>5,160</b>	<b>19,500</b>
2032	7,491	182	4,359	4,350	16,382
2033	7,567	185	4,415	4,416	16,583
2034	7,639	188	4,473	4,484	16,784
2035	7,718	188	4,532	4,552	16,990
<b>2036</b>	<b>7,790</b>	<b>190</b>	<b>4,590</b>	<b>4,623</b>	<b>17,193</b>
2037	6,726	166	3,975	4,014	14,881
2038	6,781	168	4,017	4,068	15,034
2039	6,836	168	4,062	4,123	15,189
2040	6,891	171	4,108	4,178	15,348
<b>2041</b>	<b>6,942</b>	<b>174</b>	<b>4,155</b>	<b>4,236</b>	<b>15,507</b>
2042	5,728	144	3,437	3,512	12,821
2043	5,762	144	3,469	3,553	12,928
2044	5,797	146	3,498	3,593	13,034
2045	5,831	146	3,530	3,635	13,142
<b>2046</b>	<b>5,865</b>	<b>149</b>	<b>3,562</b>	<b>3,676</b>	<b>13,252</b>
Growth 2024-2033	95,001	2,280	54,632	53,975	205,888
Growth 2024-2046	181,307	4,422	106,040	106,222	397,991

Based on person per unit:

3.43

2.76

2.65

1.62

Source: City of Ottawa and Hemson Consulting

**APPENDIX A - TABLE 11**  
**CITY OF OTTAWA**  
**FORECAST EMPLOYMENT BY TYPE**  
**CITY-WIDE**

Mid-Year	Major Office	Annual Growth	Employment Land	Annual Growth	Population-Related	Annual Growth	Rural	Annual Growth	DC Study Employment	Annual Growth
<b>2021</b>	<b>291,491</b>		<b>48,280</b>		<b>260,310</b>		<b>7,520</b>		<b>607,601</b>	
2022	292,265	774	48,735	455	262,978	2,668	7,592	72	611,570	3,969
2023	293,032	767	49,195	460	265,673	2,695	7,665	73	615,565	3,995
2024	293,792	760	49,659	464	268,396	2,723	7,739	74	619,586	4,021
2025	294,547	755	50,127	468	271,147	2,751	7,813	74	623,634	4,048
<b>2026</b>	<b>295,294</b>	<b>747</b>	<b>50,600</b>	<b>473</b>	<b>273,926</b>	<b>2,779</b>	<b>7,888</b>	<b>75</b>	<b>627,708</b>	<b>4,074</b>
2027	296,034	740	51,077	477	276,734	2,808	7,964	76	631,809	4,101
2028	296,768	734	51,559	482	279,570	2,836	8,040	76	635,937	4,128
2029	297,494	726	52,045	486	282,436	2,866	8,117	77	640,092	4,155
2030	298,212	718	52,536	491	285,331	2,895	8,195	78	644,274	4,182
<b>2031</b>	<b>298,922</b>	<b>710</b>	<b>53,031</b>	<b>495</b>	<b>288,256</b>	<b>2,925</b>	<b>8,274</b>	<b>79</b>	<b>648,483</b>	<b>4,209</b>
2032	299,625	703	53,531	500	291,211	2,955	8,353	79	652,720	4,237
2033	300,319	694	54,036	505	294,196	2,985	8,433	80	656,984	4,264
2034	301,005	686	54,546	510	297,211	3,015	8,514	81	661,276	4,292
2035	301,683	678	55,060	514	300,257	3,046	8,596	82	665,596	4,320
<b>2036</b>	<b>302,351</b>	<b>668</b>	<b>55,579</b>	<b>519</b>	<b>303,335</b>	<b>3,078</b>	<b>8,679</b>	<b>83</b>	<b>669,944</b>	<b>4,348</b>
2037	303,012	661	56,103	524	306,444	3,109	8,762	83	674,321	4,377
2038	303,663	651	56,632	529	309,585	3,141	8,846	84	678,726	4,405
2039	304,305	642	57,166	534	312,758	3,173	8,931	85	683,160	4,434
2040	304,937	632	57,705	539	315,964	3,206	9,017	86	687,623	4,463
<b>2041</b>	<b>305,559</b>	<b>622</b>	<b>58,249</b>	<b>544</b>	<b>319,203</b>	<b>3,239</b>	<b>9,104</b>	<b>87</b>	<b>692,115</b>	<b>4,492</b>
2042	306,173	614	58,798	549	322,475	3,272	9,191	87	696,637	4,522
2043	306,776	603	59,353	555	325,780	3,305	9,279	88	701,188	4,551
2044	307,369	593	59,913	560	329,119	3,339	9,368	89	705,769	4,581
2045	307,952	583	60,478	565	332,492	3,373	9,458	90	710,380	4,611
<b>2046</b>	<b>308,520</b>	<b>568</b>	<b>61,050</b>	<b>572</b>	<b>335,900</b>	<b>3,408</b>	<b>9,550</b>	<b>92</b>	<b>715,020</b>	<b>4,640</b>
Growth 2024-2033		7,287		4,841		28,523		768		41,419
Growth 2024-2046		15,488		11,855		70,227		1,885		99,455

Source: City of Ottawa, Hemson Consulting

Note: Includes No Fixed Place of Work Employment, excludes Work at Home Employment

**APPENDIX A - TABLE 12  
CITY OF OTTAWA  
NON-RESIDENTIAL SPACE FORECAST**

<b>Employment Density Assumptions</b>	
Major Office	23.0 m <sup>2</sup> per employee
Employment Land	110.0 m <sup>2</sup> per employee
Population Related	50.0 m <sup>2</sup> per employee
Rural	- m <sup>2</sup> per employee

Mid-Year	Square Metres of Non-Residential Space				Total
	Major Office	Employment Land	Population-Related	Rural	
<b>2021</b>	-	-	-	-	-
2022	17,812	50,050	133,400	-	201,262
2023	17,641	50,600	134,750	-	202,991
2024	17,480	51,040	136,150	-	204,670
2025	17,365	51,480	137,550	-	206,395
<b>2026</b>	<b>17,181</b>	<b>52,030</b>	<b>138,950</b>	-	<b>208,161</b>
2027	17,020	52,470	140,400	-	209,890
2028	16,882	53,020	141,800	-	211,702
2029	16,698	53,460	143,300	-	213,458
2030	16,514	54,010	144,750	-	215,274
<b>2031</b>	<b>16,330</b>	<b>54,450</b>	<b>146,250</b>	-	<b>217,030</b>
2032	16,169	55,000	147,750	-	218,919
2033	15,962	55,550	149,250	-	220,762
2034	15,778	56,100	150,750	-	222,628
2035	15,594	56,540	152,300	-	224,434
<b>2036</b>	<b>15,364</b>	<b>57,090</b>	<b>153,900</b>	-	<b>226,354</b>
2037	15,203	57,640	155,450	-	228,293
2038	14,973	58,190	157,050	-	230,213
2039	14,766	58,740	158,650	-	232,156
2040	14,536	59,290	160,300	-	234,126
<b>2041</b>	<b>14,306</b>	<b>59,840</b>	<b>161,950</b>	-	<b>236,096</b>
2042	14,122	60,390	163,600	-	238,112
2043	13,869	61,050	165,250	-	240,169
2044	13,639	61,600	166,950	-	242,189
2045	13,409	62,150	168,650	-	244,209
<b>2046</b>	<b>13,064</b>	<b>62,920</b>	<b>170,400</b>	-	<b>246,384</b>
Growth 2024-2033	167,601	532,510	1,426,150	-	2,126,261
Growth 2024-2046	356,224	1,304,050	3,511,350	-	5,171,624

Source: City of Ottawa, Hemson Consulting

**APPENDIX A - TABLE 13  
CITY OF OTTAWA  
AREA-SPECIFIC CENSUS POPULATION FORECAST SUMMARY**

Mid-Year	Inside the Greenbelt	Annual Growth	Outside the Greenbelt	Annual Growth	Rural	Annual Growth	Total City-wide	Total Growth
<b>2021</b>	<b>517,825</b>		<b>412,710</b>		<b>91,100</b>		<b>1,021,635</b>	
2022	523,222	5,397	421,913	9,203	93,291	2,191	1,038,426	16,791
2023	529,365	6,143	431,321	9,408	95,535	2,244	1,056,221	17,795
2024	535,548	6,183	440,939	9,618	97,833	2,298	1,074,320	18,099
2025	541,773	6,225	450,771	9,832	100,186	2,353	1,092,730	18,410
<b>2026</b>	<b>548,762</b>	<b>6,989</b>	<b>460,823</b>	<b>10,052</b>	<b>102,597</b>	<b>2,411</b>	<b>1,112,182</b>	<b>19,452</b>
2027	552,993	4,231	469,485	8,662	104,239	1,642	1,126,717	14,535
2028	557,225	4,232	478,310	8,825	105,907	1,668	1,141,442	14,725
2029	561,456	4,231	487,301	8,991	107,602	1,695	1,156,359	14,917
2030	565,686	4,230	496,461	9,160	109,324	1,722	1,171,471	15,112
<b>2031</b>	<b>569,913</b>	<b>4,227</b>	<b>505,792</b>	<b>9,331</b>	<b>111,075</b>	<b>1,751</b>	<b>1,186,780</b>	<b>15,309</b>
2032	574,278	4,365	513,438	7,646	112,327	1,252	1,200,043	13,263
2033	578,662	4,384	521,200	7,762	113,593	1,266	1,213,455	13,412
2034	583,065	4,403	529,079	7,879	114,873	1,280	1,227,017	13,562
2035	587,485	4,420	537,078	7,999	116,167	1,294	1,240,730	13,713
<b>2036</b>	<b>591,922</b>	<b>4,437</b>	<b>545,198</b>	<b>8,120</b>	<b>117,476</b>	<b>1,309</b>	<b>1,254,596</b>	<b>13,866</b>
2037	598,192	6,270	551,053	5,855	118,349	873	1,267,594	12,998
2038	604,527	6,335	556,971	5,918	119,229	880	1,280,727	13,133
2039	610,929	6,402	562,952	5,981	120,115	886	1,293,996	13,269
2040	617,396	6,467	568,998	6,046	121,008	893	1,307,402	13,406
<b>2041</b>	<b>618,614</b>	<b>1,218</b>	<b>575,108</b>	<b>6,110</b>	<b>121,908</b>	<b>900</b>	<b>1,315,630</b>	<b>8,228</b>
2042	620,244	1,630	582,216	7,108	123,095	1,187	1,325,555	9,925
2043	621,850	1,606	589,412	7,196	124,293	1,198	1,335,555	10,000
2044	623,430	1,580	596,697	7,285	125,503	1,210	1,345,630	10,075
2045	624,984	1,554	604,072	7,375	126,725	1,222	1,355,781	10,151
<b>2046</b>	<b>626,511</b>	<b>1,527</b>	<b>611,539</b>	<b>7,467</b>	<b>127,958</b>	<b>1,233</b>	<b>1,366,008</b>	<b>10,227</b>
Growth 2024-2033		49,297		89,879		18,058		157,234
Growth 2024-2046		97,146		180,218		32,423		309,787

Source: Hemson Consulting

**APPENDIX A - TABLE 14  
CITY OF OTTAWA  
AREA-SPECIFIC HOUSEHOLD SUMMARY**

Mid-Year	Inside the Greenbelt	Annual Growth	Outside the Greenbelt	Annual Growth	Rural	Annual Growth	Total City-wide	Total Growth
<b>2021</b>	<b>239,675</b>		<b>146,733</b>		<b>33,365</b>		<b>419,773</b>	
2022	245,230	5,555	150,133	3,400	34,138	773	429,501	9,728
2023	250,913	5,683	153,612	3,479	34,929	791	439,454	9,953
2024	257,016	6,103	157,051	3,439	35,571	642	449,638	10,184
2025	263,266	6,250	160,567	3,516	36,225	654	460,058	10,420
<b>2026</b>	<b>269,667</b>	<b>6,401</b>	<b>164,162</b>	<b>3,595</b>	<b>36,891</b>	<b>666</b>	<b>470,720</b>	<b>10,662</b>
2027	272,669	3,002	167,838	3,676	37,569	678	478,076	7,356
2028	275,692	3,023	171,596	3,758	38,259	690	485,547	7,471
2029	278,734	3,042	175,438	3,842	38,962	703	493,134	7,587
2030	281,796	3,062	179,366	3,928	39,678	716	500,840	7,706
<b>2031</b>	<b>284,877</b>	<b>3,081</b>	<b>183,382</b>	<b>4,016</b>	<b>40,407</b>	<b>729</b>	<b>508,666</b>	<b>7,826</b>
2032	286,608	1,731	187,488	4,106	41,150	743	515,246	6,580
2033	288,320	1,712	191,686	4,198	41,905	755	521,911	6,665
2034	292,056	3,736	194,229	2,543	42,377	472	528,662	6,751
2035	295,840	3,784	196,806	2,577	42,854	477	535,500	6,838
<b>2036</b>	<b>299,673</b>	<b>3,833</b>	<b>199,417</b>	<b>2,611</b>	<b>43,336</b>	<b>482</b>	<b>542,426</b>	<b>6,926</b>
2037	302,538	2,865	202,063	2,646	43,824	488	548,425	5,999
2038	305,429	2,891	204,744	2,681	44,317	493	554,490	6,065
2039	308,345	2,916	207,461	2,717	44,816	499	560,622	6,132
2040	311,288	2,943	210,214	2,753	45,320	504	566,822	6,200
<b>2041</b>	<b>314,259</b>	<b>2,971</b>	<b>213,003</b>	<b>2,789</b>	<b>45,830</b>	<b>510</b>	<b>573,092</b>	<b>6,270</b>
2042	316,104	1,845	215,829	2,826	46,346	516	578,279	5,187
2043	317,952	1,848	218,693	2,864	46,868	522	583,513	5,234
2044	319,803	1,851	221,595	2,902	47,396	528	588,794	5,281
2045	321,658	1,855	224,535	2,940	47,930	534	594,123	5,329
<b>2046</b>	<b>323,518</b>	<b>1,860</b>	<b>227,513</b>	<b>2,978</b>	<b>48,469</b>	<b>539</b>	<b>599,500</b>	<b>5,377</b>
Growth 2024-2033		37,407		38,074		6,976		82,457
Growth 2024-2046		72,605		73,901		13,540		160,046

Source: Hemson Consulting

**APPENDIX A - TABLE 15  
CITY OF OTTAWA  
AREA-SPECIFIC RESIDENTIAL UNIT TYPE AND POPULATION IN NEW UNITS FORECAST**

	Inside the Greenbelt				
<b>Residential Forecast</b>	<b>Singles</b>	<b>Semis</b>	<b>Rows</b>	<b>Apartments</b>	<b>Total</b>
Growth in Units 2024-2033	374	374	5,862	30,797	37,407
<i>Pop in New Households</i>	<i>1,230</i>	<i>939</i>	<i>15,183</i>	<i>49,891</i>	<i>67,243</i>
Growth in Units 2024-2046	726	726	12,844	58,309	72,605
<i>Pop in New Households</i>	<i>2,389</i>	<i>1,822</i>	<i>33,266</i>	<i>94,461</i>	<i>131,938</i>
Based on PPU:	3.29	2.51	2.59	1.62	

	Outside the Greenbelt				
<b>Residential Forecast</b>	<b>Singles</b>	<b>Semis</b>	<b>Rows</b>	<b>Apartments</b>	<b>Total</b>
Growth in Units 2024-2033	21,548	274	13,871	2,381	38,074
<i>Pop in New Households</i>	<i>75,849</i>	<i>786</i>	<i>37,036</i>	<i>3,857</i>	<i>117,528</i>
<b>OGB - Including Tewin</b>					
Growth in Units 2024-2046	40,674	598	25,639	6,990	73,901
<i>Pop in New Households</i>	<i>143,172</i>	<i>1,716</i>	<i>68,456</i>	<i>11,324</i>	<i>224,668</i>
<b>OGB - Without Tewin</b>					
Growth in Units 2024-2046	36,216	532	22,829	6,224	65,801
<i>Pop in New Households</i>	<i>127,480</i>	<i>1,527</i>	<i>60,953</i>	<i>10,083</i>	<i>200,043</i>
Based on ppu:	3.52	2.87	2.67	1.62	

	Rural				
<b>Residential Forecast</b>	<b>Singles</b>	<b>Semis</b>	<b>Rows</b>	<b>Apartments</b>	<b>Total</b>
Growth in Units 2024-2033	5,775	178	883	140	6,976
<i>Pop in New Households</i>	<i>18,480</i>	<i>472</i>	<i>1,987</i>	<i>227</i>	<i>21,166</i>
Growth in Units 2024-2046	11,459	278	1,532	271	13,540
<i>Pop in New Households</i>	<i>36,669</i>	<i>737</i>	<i>3,447</i>	<i>439</i>	<i>41,292</i>
Based on ppu:	3.20	2.65	2.25	1.62	

**APPENDIX A - TABLE 16  
CITY OF OTTAWA  
AREA-SPECIFIC TOTAL EMPLOYMENT SUMMARY**

Mid-Year	Inside the Greenbelt	Annual Growth	Outside the Greenbelt	Annual Growth	Rural	Annual Growth	Total City-wide	Total Growth
<b>2021</b>	<b>483,534</b>		<b>107,542</b>		<b>16,525</b>		<b>607,601</b>	
2022	486,692	3,158	108,245	703	16,633	108	611,570	3,969
2023	489,871	3,179	108,952	707	16,742	109	615,565	3,995
2024	492,140	2,269	110,540	1,588	16,906	164	619,586	4,021
2025	494,411	2,271	112,152	1,612	17,071	165	623,634	4,048
<b>2026</b>	<b>496,683</b>	<b>2,272</b>	<b>113,787</b>	<b>1,635</b>	<b>17,238</b>	<b>167</b>	<b>627,708</b>	<b>4,074</b>
2027	498,956	2,273	115,446	1,659	17,407	169	631,809	4,101
2028	501,231	2,275	117,129	1,683	17,577	170	635,937	4,128
2029	503,506	2,275	118,837	1,708	17,749	172	640,092	4,155
2030	505,781	2,275	120,570	1,733	17,923	174	644,274	4,182
<b>2031</b>	<b>508,057</b>	<b>2,276</b>	<b>122,328</b>	<b>1,758</b>	<b>18,098</b>	<b>175</b>	<b>648,483</b>	<b>4,209</b>
2032	510,334	2,277	124,111	1,783	18,275	177	652,720	4,237
2033	512,610	2,276	125,920	1,809	18,454	179	656,984	4,264
2034	514,886	2,276	127,756	1,836	18,634	180	661,276	4,292
2035	517,161	2,275	129,619	1,863	18,816	182	665,596	4,320
<b>2036</b>	<b>519,435</b>	<b>2,274</b>	<b>131,509</b>	<b>1,890</b>	<b>19,000</b>	<b>184</b>	<b>669,944</b>	<b>4,348</b>
2037	521,709	2,274	133,426	1,917	19,186	186	674,321	4,377
2038	523,981	2,272	135,371	1,945	19,374	188	678,726	4,405
2039	526,252	2,271	137,345	1,974	19,563	189	683,160	4,434
2040	528,522	2,270	139,347	2,002	19,754	191	687,623	4,463
<b>2041</b>	<b>530,789</b>	<b>2,267</b>	<b>141,379</b>	<b>2,032</b>	<b>19,947</b>	<b>193</b>	<b>692,115</b>	<b>4,492</b>
2042	533,055	2,266	143,440	2,061	20,142	195	696,637	4,522
2043	535,318	2,263	145,531	2,091	20,339	197	701,188	4,551
2044	537,578	2,260	147,653	2,122	20,538	199	705,769	4,581
2045	539,835	2,257	149,806	2,153	20,739	201	710,380	4,611
<b>2046</b>	<b>542,090</b>	<b>2,255</b>	<b>151,989</b>	<b>2,183</b>	<b>20,941</b>	<b>202</b>	<b>715,020</b>	<b>4,640</b>
Growth 2024-2033		22,739		16,968		1,712		41,419
Growth 2024-2046		52,219		43,037		4,199		99,455

Source: City of Ottawa

Note: Includes No Fixed Place of Work Employment but excludes Work at Home Employment

**APPENDIX A - TABLE 17  
CITY OF OTTAWA  
AREA-SPECIFIC RURAL SERVICED AND UNSERVICED POPULATION AND DWELLINGS FORECAST**

Population Growth						
Mid-Year	Rural Serviced Water	Rural Serviced Sewer	Rural Serviced Water and Sewer Area	Total Rural Serviced	Total Rural Unserviced	Total Rural
2023	1,911	4,777	6,687	13,375	82,160	95,535
2031	2,222	6,331	16,788	25,341	85,734	111,075
2033	2,272	6,583	18,425	27,280	86,313	113,593
2046	2,559	8,020	27,762	38,341	89,617	127,958
Growth 2024-2033	361	1,806	11,738	13,905	4,153	18,058
Growth 2024-2046	648	3,243	21,075	24,966	7,457	32,423

Dwelling Unit Growth						
Mid-Year	Rural Serviced Water	Rural Serviced Sewer	Rural Serviced Water and Sewer Area	Total Rural Serviced	Total Rural Unserviced	Total Rural
2023	699	1,746	2,096	4,541	30,388	34,929
2033	839	2,234	5,305	8,378	33,527	41,905
2046	970	2,693	8,324	11,987	36,481	48,468
Growth 2024-2033	140	488	3,209	3,837	3,139	6,976
Growth 2024-2046	271	947	6,228	7,446	6,093	13,539

Population in New Dwelling Units Growth						
Mid-Year	Rural Serviced Water	Rural Serviced Sewer	Rural Serviced Water and Sewer Area	Total Rural Serviced	Total Rural Unserviced	Total Rural
Growth 2024-2033	425	1,481	9,736	11,642	9,524	21,166
Growth 2024-2046	826	2,888	18,993	22,707	18,581	41,288
PPUs 2024-2033	3.03	3.03	3.03	3.03	3.03	3.03
PPUs 2024-2046	3.05	3.05	3.05	3.05	3.05	3.05

Employment Growth						
Mid-Year	Rural Serviced Water	Rural Serviced Sewer	Rural Serviced Water and Sewer Area	Total Rural Serviced	Total Rural Unserviced	Total Rural
2023	1,842	670	1,339	3,851	12,891	16,742
2033	2,116	738	1,544	4,398	14,056	18,454
2046	2,514	837	1,842	5,193	15,748	20,941
Growth 2024-2033	274	68	205	547	1,165	1,712
Growth 2024-2046	672	167	503	1,342	2,857	4,199

Notes:

- 1) Rural Serviced Water Area is defined as the serviced portion of South Gloucester and the the villages of Notre-Dame-de-Champs, Carlsbad Springs, Vars and Marionville.
- 2) Rural Serviced Sewer Area is defined as the parts of the village of Richmond not included in (3).
- 3) Rural Serviced Water and Sewer Area is defined as the serviced portion of Manotick and the villages of Munster and Carp and parts of the village of Richmond (Western Development lands and King's Landing).
- 4) Non-residential employment growth includes no fixed place of work employment and work at home



**APPENDIX A - TABLE 18**  
**CITY OF OTTAWA**  
**AREA-SPECIFIC RURAL SERVICED AND UNSERVICED NON-RESIDENTIAL**  
**EMPLOYMENT AND SPACE FORECAST**  
**INCLUDES WORK AT HOME AND NO-FIXED PLACE OF WORK**  
**2023-2033**

<b>Employment Density Assumptions</b>	
Major Office	23.0 m <sup>2</sup> per employee
Employment Land	110.0 m <sup>2</sup> per employee
Population Related	50.0 m <sup>2</sup> per employee
Rural	-

<b>Non-Residential Forecast by Rural Area</b>					
	<b>Major Office</b>	<b>Employment Land</b>	<b>Population Related</b>	<b>Rural</b>	<b>Total</b>
<b>Rural Serviced Water</b>					
Employees	-	98	108	11	217
GFA (sq.m)	-	10,780	5,400	-	16,180
<b>Rural Serviced Sewer Area</b>					
Employees	-	-	54	-	54
GFA (sq.m)	-	-	2,700	-	2,700
<b>Rural Serviced Water and Sewer Area</b>					
Employees	-	139	16	8	163
GFA (sq.m)	-	15,290	800	-	16,090
<b>Total Rural Serviced Area</b>					
Employees	-	237	178	19	434
GFA (sq.m)	-	26,070	8,900	-	34,970
<b>Total Rural Unserviced</b>					
Employees	-	645	231	46	922
GFA (sq.m)	-	70,950	11,550	-	82,500
<b>Total Rural</b>					
Employees	-	<b>882</b>	<b>409</b>	<b>65</b>	<b>1,356</b>
GFA (sq.m)	-	<b>97,020</b>	<b>20,450</b>	-	<b>117,470</b>

Notes:

- 1) Rural Serviced Water Area is defined as the serviced portion of South Gloucester and the villages of Notre-Dame-de-Champs, Carlsbad Springs, Vars and Marionville.
- 2) Rural Serviced Sewer Area is defined as the parts of the village of Richmond not included in 4).
- 3) Rural Serviced Water and Sewer Area is defined as the serviced portion of Manotick and the villages of Munster and Carp and parts of the village of Richmond (Western Development lands and King's Landing).
- 4) Total Employment Growth includes No Fixed Place of Work but excludes Work at Home Employment.

**APPENDIX A - TABLE 19**  
**CITY OF OTTAWA**  
**AREA-SPECIFIC RURAL SERVICED AND UNSERVICED NON-RESIDENTIAL**  
**EMPLOYMENT AND SPACE FORECAST**  
**INCLUDES WORK AT HOME AND NO-FIXED PLACE OF WORK**  
**2023-2046**

<b>Employment Density Assumptions</b>	
Major Office	23.0 m <sup>2</sup> per employee
Employment Land	110.0 m <sup>2</sup> per employee
Population Related	50.0 m <sup>2</sup> per employee
Rural	-

<b>Non-Residential Forecast by Rural Area</b>					
	<b>Major Office</b>	<b>Employment Land</b>	<b>Population Related</b>	<b>Rural</b>	<b>Total</b>
<b>Rural Serviced Water</b>					
Employees	-	302	336	34	672
GFA (sq.m)	-	33,220	16,800	-	50,020
<b>Rural Serviced Sewer Area</b>					
Employees	-	-	167	-	167
GFA (sq.m)	-	-	8,350	-	8,350
<b>Rural Serviced Water and Sewer Area</b>					
Employees	-	428	50	25	503
GFA (sq.m)	-	47,080	2,500	-	49,580
<b>Total Rural Serviced Area</b>					
Employees	-	730	553	59	1,342
GFA (sq.m)	-	80,300	27,650	-	107,950
<b>Total Rural Unserviced</b>					
Employees	-	2,000	714	143	2,857
GFA (sq.m)	-	219,964	35,700	-	255,664
<b>Total Rural</b>					
Employees	-	<b>2,730</b>	<b>1,267</b>	<b>202</b>	<b>4,199</b>
GFA (sq.m)	-	<b>300,264</b>	<b>63,350</b>	-	<b>363,614</b>

Notes:

- 1) Rural Serviced Water Area is defined as the serviced portion of South Gloucester and the the villages of Notre-Dame-de-Champs, Carlsbad Springs, Vars and Marionville.
- 2) Rural Serviced Sewer Area is defined as the parts of the village of Richmond not included in 4).
- 3) Rural Serviced Water and Sewer Area is defined as the serviced portion of Manotick and the villages of Munster and Carp and parts of the village of Richmond (Western Development lands and King's Landing).
- 4) Total Employment Growth includes No Fixed Place of Work but excludes Work at Home Employment.

**Appendix B**  
**Engineered Services**  
**Technical Appendix**

# Appendix B – Engineered Services Technical Appendix

## Introduction and Overview

The following appendix provides the detailed analysis undertaken to establish the amended development charge rates for each of the following services in the City of Ottawa.

Appendix B.1 Sanitary (Wastewater)

Appendix B.2 Water

All service areas contain tables that provide the background data and analysis undertaken to arrive at the calculated development charge rates for that particular service. An overview of the content and purpose of each of the tables is given below.

### Development-Related Capital Program: City-wide and Area-Specific

Consistent with the City’s historical practice, engineering services are calculated on both a city-wide and area-specific basis.

The DCA requires that Council express its intent to provide future capital facilities to support forecasted growth. The cost, quantum and timing of the projects identified in the forecast have been provided by City staff and are generally based on the capital projects identified in the 2024 IMP, past debentures, previous DC projects with additional DC costs or oversizing components of local works and committed reserve fund balances. For the purposes of the DC rate calculations, a 2046 planning horizon is used, consistent with the planning horizon in the 2024 IMP.

### Calculation of Development Charge Rates: City-wide and Area-Specific

The section below the capital program displays the calculation of the applicable development charge rates. An unadjusted rate is calculated below each capital program but a further adjustment is made to account for

the timing of capital works and timing of anticipated development through the cashflow analysis. All services and rates use this methodology.

### **City-wide Residential and Non-Residential DCs**

The first step when determining the development charge rate is to allocate development-related net capital cost between the residential and non-residential sectors. The apportionment between these sectors varies based on the identified benefitting area (e.g. city-wide, IGB, OGB and Rural area). The approach used to allocate costs is discussed in each appendix.

Consistent with the City's historical approach, the non-residential development charges are calculated and applied on a city-wide basis.

# Appendix B.1

## Sanitary (Wastewater)

# Appendix B.1 – Sanitary (Wastewater)

## Technical Appendix

Capital infrastructure contained in the amended Sanitary (Wastewater) service category includes plant expansions and upgrades of linear sanitary sewer infrastructure.

This appendix provides a brief outline of historical service levels for Sanitary (Wastewater) services, the projects that will benefit development occurring over the 2024 to 2046 development-related capital forecast. The cost, quantum and timing of the projects identified in the forecast have been provided by City staff and are based on the capital projects identified in the City's 2024 IMP.

Table B.1-1: Forecast Water Demand by Area

Table B.1-2: 2024-2046 Development-Related Capital Forecast and Calculation of the Discounted Growth-Related Net Capital Costs

Table B.1-3: Development Charge Calculation: Cash Flow Analysis for Sanitary (Wastewater) Area-Specific Development Charges

### **A. Benefitting Area**

The City's Sanitary (Wastewater) development charges are calculated on both a City-wide and area-specific basis. The smaller benefitting areas are defined as: IGB, OGB and Rural area.

## **B. Historical Service Level Analysis**

Sanitary (Wastewater) facilities included in the DC capital forecast are required to achieve health and safety standards as identified in relevant legislation including Provincial regulations, other relevant legislation as well as City standards. As such, in accordance with section 4(3) of O.Reg. 82/98, the 15-year historical service level does not apply.

## **C. Forecast Wastewater Demand by Area**

Consistent with the approach included in the 2024 Provisional DC Background Study, the residential and non-residential allocations have been based on average flows required by these types of development (shown in Table B.1-1).

## **D. Development-Related Capital Forecast**

The development-related capital forecast that will benefit development forecasted to occur over the 2024 to 2046 period includes a variety of projects for the provision of Sanitary (Wastewater) services in the City and amounts to a total gross cost of \$1.5 billion, as shown in Table B.1-2.

The following summarizes the city-wide and area-specific capital programs:

- **City-wide Capital Program** – The development-related capital forecast that will benefit development occurring over the 2024 to 2046 period includes expansion of the R.O. Pickard Plant, improving reliability of the plant, wet weather program costs as well as the recovery of outstanding debenture payments. The total gross cost of the capital program amounts to \$562.8 million, as shown in Table B.1-2.
- **IGB Capital Program** – The gross capital program for IGB Sanitary totals \$371.5 million and includes the recovery of costs for O’Conner Flood



Control Works, Rideau River Collector Upgrade and Twinning as well as other expansion and upgrade projects.

- **OGB Capital Program** – The total gross capital program related to development OGB totals \$530.9 million. The program includes the recovery of outstanding principal and interest debenture payments, various expansion and upgrade projects as well as projects in the east, west and south urban communities.
- **Rural** – there are no capital projects identified for sewer in the Rural area of the City and as such, there is no DC rate calculated for development occurring in this area.

## **E. Calculation of Discounted Development-Related Capital Costs**

### **i. Grants, Subsidies and Other Recoveries**

A total of \$30.9 million in grants, subsidies or other recoveries has been identified for Sanitary (Wastewater) Services. Some of these costs relate to ineligible portions of oversizing projects and that amount has been reduced from the DC eligible costs.

### **ii. Replacement and Benefit to Existing Shares**

The replacement and benefit to existing shares have been examined on a project-by-project basis and the nature of each project determined the rationale for the reductions. The identified benefit to existing shares includes costs that meet the needs of existing development, including past development. The benefit to existing shares of projects were determined based on analysis contained within the 2024 IMP and assessed on a project-by-project basis. New projects are deemed to be entirely growth-related, and no replacement shares have been deducted from the net cost.

In total, \$257.6 million is identified as the replacement and benefit to existing share over the planning period.

### **iii. Prior DC Funding / Available DC Reserve Funds**

Prior DC funding relates to portions of projects which have had DCs collected and applied against a portion of the DC eligible project costs. These amounts are removed from the capital forecast and not brought forward into the development charge calculation. Table B.1-2 provides details on the available DC reserve fund balance by benefitting area.

In total, the \$94.5 million identified in the City-wide Sanitary (Wastewater) committed reserve fund has been reduced from the total City-wide DC eligible capital costs. This amount includes the minor reserves in the Rural Sanitary service area. Similarly, \$25.7 million is identified in the IGB and \$4.4 million in the OGB DC committed reserve funds, which have been applied to projects occurring in these areas.

### **iv. Post-2046 Benefit**

None of the projects identified are anticipated to benefit development beyond the 2046-time horizon and therefore no post-2046 benefit has been identified.

### **v. 2024-2046 DC Eligible Development Related Costs**

The total in-period DC eligible costs shown in Table B.1-2 amounts to \$951.6 million after adjustments for benefit to existing and post-period benefits. After deductions for available DC reserve fund balances the in-period DC eligible cost is reduced to \$827.0 million (shown in the DC cost allocation summary at the bottom of Table B.1-2).

## **F. Calculation of Residential and Non-Residential Discounted Development-Related Capital Costs**

The discounted development-related costs have been allocated based on shares of forecast demand for each area over the 2024-2046 benefitting period.

The table below provides a summary of the DC eligible costs that are deemed to benefit development occurring City-wide, Inside the Greenbelt, Outside the Greenbelt and Rural areas. The “residual” shown in the area-specific non-residential summary represents the sum of the costs remaining once the residential allocations have been made for Inside the Greenbelt and Outside the Greenbelt area.

These costs allocations and DC rate calculations are presented in Table B.1-2. The total costs shown below reflect the total costs brought forward to the DC calculation after adjusting for DC reserve funds as of April 2024.

**Residential and Non-Residential Cost Allocations**

<b>Benefitting Area</b>	<b>% Allocation</b>	<b>Total Cost (\$)</b>
<b>Residential</b>		
Inside the Greenbelt	71%	\$127,374,077
Outside the Greenbelt	87%	\$186,449,168
Rural	0%	\$0
City Wide	82%	\$353,592,036
<b>Subtotal Residential</b>		<b>\$667,415,282</b>
<b>Non-Residential --Industrial</b>		
Area-Specific	Residual	\$11,293,530
City-wide	3%	\$11,127,083
<b>Non-Residential – Non-Industrial</b>		
Area-Specific	Residual	\$69,092,371
City-wide	16%	\$68,074,071
<b>Subtotal Non-Residential</b>		<b>\$159,587,055</b>
<b>TOTAL</b>		<b>\$827,002,336</b>

## **G. Development Charge Calculation**

The Sanitary (Wastewater) DC rates include financing costs through a cash flow analysis. A cash flow analysis is undertaken to account for the timing of projects and receipt of DCs. It is particularly applicable where the timing of the forecast capital expenditures is significantly front-ended or back ended over the planning period. Interest earnings or borrowing costs are therefore accounted for in the calculation as allowed under the DCA. Based on the development forecast, the analysis calculates the DC rate required to finance the discounted development-related capital spending plan including provisions for any borrowing costs or interest earnings on the reserve funds. The cash flow analysis is designed so that the closing cash balance at the end of the planning period is as close to nil as possible.

In order to determine appropriate DC rates reflecting borrowing and earnings necessary to support the discounted development-related funding requirement, assumptions are used for the inflation and interest rates. An inflation rate of 3.0% is used for the funding requirements, an interest rate of 3.0% is used for positive opening balances, and a rate of 5.0% is used for negative opening balances.

Table B.1-3 displays the results of the cash flow analysis and provides the adjusted or final per capita residential and per employees required for new non-residential DCs. For residential development charges a per capita amount has been calculated for development occurring IGB and OGB area. A city-wide charge has been calculated for the residual industrial and non-industrial shares of the program. Debenture interest is not inflated in the cash flow analysis and the principal repayment component of the charge continues to be not indexed annually as has been the case since 2014.

The following table provides a summary of the calculated per capita and per square metre of industrial and non-industrial space City-wide.

**Summary of Adjusted Area-Specific Sanitary (Wastewater)  
Cash Flow Analysis**

Benefitting Area	Adjusted Charge
<b>Residential</b>	
City-wide (\$/capita)	\$963.76
Inside the Greenbelt (\$/capita)	\$999.26
Outside the Greenbelt (\$/capita)	\$947.11
Rural (\$/capita)	\$0.0
<b>Non-Residential - Industrial</b>	
City-wide (\$/m <sup>2</sup> )	\$21.29
<b>Non-Residential – Non-Industrial</b>	
City-wide (\$/m <sup>2</sup> )	\$36.88

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

**CITY OF OTTAWA  
SANITARY (WASTEWATER) DEMAND BY AREA**

<b>Residential no Outdoor Water Demand (OWD)</b>										
<b>Wastewater</b>	<b>Residential - MId</b>		<b>ICI MId</b>		<b>Total - MId</b>		<b>Growth in Demand</b>	<b>Res Growth</b>	<b>Non-Res Growth</b>	<b>Res Component of Growth</b>
	<b>2018*</b>	<b>2046</b>	<b>2018*</b>	<b>2046</b>	<b>2018*</b>	<b>2046</b>	<b>MId</b>	<b>MId</b>	<b>MId</b>	<b>%</b>
<b>Inside the Greenbelt</b>	152.0	179.9	34.5	46.0	186.5	225.9	39.4	27.9	11.5	70.90%
<b>Outside the Greenbelt</b>	81.9	153.1	23.3	34.0	105.2	187.1	82.0	71.2	10.7	86.90%
<b>West Urban Community</b>	26.5	43.7	5.0	8.5	31.6	52.1	20.6	17.1	3.4	83.40%
<b>South Urban Community</b>	29.3	69.2	15.1	20.2	44.4	89.4	45.0	39.9	5.1	88.60%
<b>East Urban Community</b>	26.1	40.3	3.1	5.3	29.2	45.6	16.4	14.2	2.2	86.60%
<b>Total</b>	<b>233.8</b>	<b>333.0</b>	<b>57.8</b>	<b>80.0</b>	<b>291.7</b>	<b>413.0</b>	<b>121.4</b>	<b>99.2</b>	<b>22.2</b>	<b>81.70%</b>

\* Post-Zone Reconfiguration

APPENDIX B.1  
TABLE B.1-2

CITY OF OTTAWA  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
SANITARY (WASTE WATER)

Project Description	Item Number	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Benefiting Area	% City-Wide	Benefiting Area Costs	DC Eligible Costs			
						BTE Share (%)	Replacement & BTE Shares					Prior Growth	2024 - 2046	Post 2046	
<b>1.0 SANITARY (WASTE WATER): CITY-WIDE</b>															
<b>1.1 R.O. Pickard Plant Expansion</b>															
1.1.1	Secondary Treatment Expansion	10.24CW01	2024 - 2029	\$ 8,326,560	\$ -	\$ 8,326,560	0%	\$ -	\$ 8,326,560	City-wide	100%	\$ 8,326,560	\$ -	\$ 8,326,560	\$ -
1.1.2	Disinfection Expansion	10.24CW02	2024 - 2029	\$ 25,965,720	\$ -	\$ 25,965,720	0%	\$ -	\$ 25,965,720	City-wide	100%	\$ 25,965,720	\$ -	\$ 25,965,720	\$ -
1.1.3	Anaerobic Digestion Expansion	10.24CW03	2024 - 2029	\$ 131,252,880	\$ -	\$ 131,252,880	0%	\$ -	\$ 131,252,880	City-wide	100%	\$ 131,252,880	\$ -	\$ 131,252,880	\$ -
1.1.4	Raw Wastewater Pumping - SOT Pumping Expansion	10.24CW04	2024 - 2029	\$ 47,877,720	\$ -	\$ 47,877,720	0%	\$ -	\$ 47,877,720	City-wide	100%	\$ 47,877,720	\$ -	\$ 47,877,720	\$ -
1.1.5	Raw Wastewater Pumping - OCCPS Expansion	10.24CW05	2024 - 2029	\$ 49,959,360	\$ -	\$ 49,959,360	0%	\$ -	\$ 49,959,360	City-wide	100%	\$ 49,959,360	\$ -	\$ 49,959,360	\$ -
1.1.6	Outfall Expansion	10.24CW06	2024 - 2029	\$ 50,835,840	\$ -	\$ 50,835,840	70%	\$ 35,585,088	\$ 15,250,752	City-wide	100%	\$ 15,250,752	\$ -	\$ 15,250,752	\$ -
1.1.7	Biosolids Dewatering and Storage Expansion	10.24CW07	2034 - 2039	\$ 186,142,440	\$ -	\$ 186,142,440	0%	\$ -	\$ 186,142,440	City-wide	100%	\$ 186,142,440	\$ -	\$ 186,142,440	\$ -
1.1.8	Screening & Degritting Facility Expansion	10.24CW08	2034 - 2039	\$ 2,300,760	\$ -	\$ 2,300,760	0%	\$ -	\$ 2,300,760	City-wide	100%	\$ 2,300,760	\$ -	\$ 2,300,760	\$ -
	Subtotal R.O. Pickard Plant Expansion			\$ 502,661,280	\$ -	\$ 502,661,280		\$ 35,585,088	\$ 467,076,192			\$ 467,076,192	\$ -	\$ 467,076,192	\$ -
<b>1.2 Debt Payments</b>															
1.2.1	ROPEC Plant Digester Expansion - Principal	10.24CWD1	2024 - 2042	\$ 17,174,519	\$ -	\$ 17,174,519	0%	\$ -	\$ 17,174,519	City-Wide	100%	\$ 17,174,519	\$ -	\$ 17,174,519	\$ -
	Subtotal Debt Payments			\$ 17,174,519	\$ -	\$ 17,174,519		\$ -	\$ 17,174,519			\$ 17,174,519	\$ -	\$ 17,174,519	\$ -
<b>1.3 Debt Payments</b>															
1.3.1	ROPEC Plant Digester Expansion - Interest	10.24CWD1	2024 - 2042	\$ 43,000,800	\$ -	\$ 43,000,800	0%	\$ -	\$ 43,000,800	City-Wide	100%	\$ 43,000,800	\$ -	\$ 43,000,800	\$ -
	Subtotal Debt Payments			\$ 43,000,800	\$ -	\$ 43,000,800		\$ -	\$ 43,000,800			\$ 43,000,800	\$ -	\$ 43,000,800	\$ -
<b>TOTAL SANITARY (WASTE WATER): CITY-WIDE</b>				\$ 562,836,599	\$ -	\$ 562,836,599		\$ 35,585,088	\$ 527,251,511			\$ 527,251,511	\$ -	\$ 527,251,511	\$ -
<b>1.0 SANITARY (WASTE WATER): INSIDE THE GREENBELT</b>															
<b>1.4 Expansion and Upgrade Projects</b>															
1.4.1	O'Connor Flood Control Works	10.24IG01	2034 - 2039	\$ 130,376,400	\$ -	\$ 130,376,400	95%	\$ 123,857,580	\$ 6,518,820	IGB	100%	\$ 6,518,820	\$ -	\$ 6,518,820	\$ -
1.4.2	Rideau River Collector Twinning	10.24IG02	2034 - 2039	\$ 23,445,840	\$ -	\$ 23,445,840	0%	\$ -	\$ 23,445,840	IGB	100%	\$ 23,445,840	\$ -	\$ 23,445,840	\$ -
1.4.3	Merivale South Sewer Upgrade and Extension	10.24IG03	2024 - 2029	\$ 11,065,560	\$ -	\$ 11,065,560	5%	\$ 553,278	\$ 10,512,282	IGB	100%	\$ 10,512,282	\$ -	\$ 10,512,282	\$ -
1.4.4	Merivale North Diversion	10.24IG04	2024 - 2029	\$ 1,533,840	\$ -	\$ 1,533,840	5%	\$ 76,692	\$ 1,457,148	IGB	100%	\$ 1,457,148	\$ -	\$ 1,457,148	\$ -
1.4.5	Merivale North Sewer Oversizing	10.24IG05	2024 - 2029	\$ 5,039,760	\$ -	\$ 5,039,760	95%	\$ 4,787,772	\$ 251,988	IGB	100%	\$ 251,988	\$ -	\$ 251,988	\$ -
1.4.6	Pinecrest Trunk Collector Upgrade	10.24IG06	2029 - 2034	\$ 12,051,600	\$ -	\$ 12,051,600	5%	\$ 602,580	\$ 11,449,020	IGB	100%	\$ 11,449,020	\$ -	\$ 11,449,020	\$ -
1.4.7	Pinecrest Trunk Collector Flow Reduction	10.24IG07	2024 - 2029	\$ 5,806,680	\$ -	\$ 5,806,680	5%	\$ 290,334	\$ 5,516,346	IGB	100%	\$ 5,516,346	\$ -	\$ 5,516,346	\$ -
1.4.8	Crystal Beach Diversion PS Upgrade and Forcemain Phase 1	10.24IG08	2029 - 2034	\$ 35,716,560	\$ -	\$ 35,716,560	20%	\$ 7,143,312	\$ 28,573,248	IGB	100%	\$ 28,573,248	\$ -	\$ 28,573,248	\$ -
1.4.9	Crystal Beach Diversion PS Upgrade and Forcemain Phase 2	10.24IG09	2039 - 2044	\$ 34,073,160	\$ -	\$ 34,073,160	20%	\$ 6,814,632	\$ 27,258,528	IGB	100%	\$ 27,258,528	\$ -	\$ 27,258,528	\$ -
1.4.10	Woodroffe Diversion PS Capacity Upgrade and Forcemain	10.24IG10	2029 - 2034	\$ 65,626,440	\$ -	\$ 65,626,440	20%	\$ 13,125,288	\$ 52,501,152	IGB	100%	\$ 52,501,152	\$ -	\$ 52,501,152	\$ -
1.4.11	Prince of Wales Diversion Sewer	10.24IG11	2039 - 2044	\$ 5,806,680	\$ -	\$ 5,806,680	20%	\$ 1,161,336	\$ 4,645,344	IGB	100%	\$ 4,645,344	\$ -	\$ 4,645,344	\$ -
1.4.12	Airport Parkway Diversion Sewer	10.24IG12	2024 - 2029	\$ 38,017,320	\$ -	\$ 38,017,320	20%	\$ 7,603,464	\$ 30,413,856	IGB	100%	\$ 30,413,856	\$ -	\$ 30,413,856	\$ -
1.4.13	Walkley Sewer Upgrades	10.24IG13	2034 - 2039	\$ 2,958,120	\$ -	\$ 2,958,120	5%	\$ 147,906	\$ 2,810,214	IGB	100%	\$ 2,810,214	\$ -	\$ 2,810,214	\$ -
	Subtotal Expansion and Upgrade Projects			\$ 371,517,960	\$ -	\$ 371,517,960		\$ 166,164,174	\$ 205,353,786			\$ 205,353,786	\$ -	\$ 205,353,786	\$ -
<b>TOTAL SANITARY (WASTE WATER): INSIDE THE GREENBELT</b>				\$ 371,517,960	\$ -	\$ 371,517,960		\$ 166,164,174	\$ 205,353,786			\$ 205,353,786	\$ -	\$ 205,353,786	\$ -

APPENDIX B.1  
TABLE B.1-2

CITY OF OTTAWA  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
SANITARY (WASTE WATER)

Project Description	Item Number	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Benefiting Area	% City-Wide	Benefiting Area Costs	DC Eligible Costs			
						BTE Share (%)	Replacement & BTE Shares					Prior Growth	2024 - 2046	Post 2046	
<b>1.0 SANITARY (WASTE WATER): OUTSIDE THE GREENBELT</b>															
<b>1.5 Expansion and Upgrade Projects</b>															
1.5.1	Kanata West Trunk Sewers Diversion	10.240G01	2029 - 2034	\$ 3,286,800	\$ -	\$ 3,286,800	5%	\$ 164,340	\$ 3,122,460	OGB	100%	\$ 3,122,460	\$ -	\$ 3,122,460	\$ -
1.5.2	Kanata West Trunk Sewers Oversizing	10.240G02	2029 - 2034	\$ 1,972,080	\$ -	\$ 1,972,080	0%	\$ -	\$ 1,972,080	OGB	100%	\$ 1,972,080	\$ -	\$ 1,972,080	\$ -
1.5.3	Kanata West Pump Station Capacity Upgrade	10.240G03	2029 - 2034	\$ 3,615,480	\$ -	\$ 3,615,480	0%	\$ -	\$ 3,615,480	OGB	100%	\$ 3,615,480	\$ -	\$ 3,615,480	\$ -
1.5.4	Shea Road Pumping Station Capacity Upgrade and Forcemain	10.240G04	2029 - 2034	\$ 8,545,680	\$ -	\$ 8,545,680	0%	\$ -	\$ 8,545,680	OGB	100%	\$ 8,545,680	\$ -	\$ 8,545,680	\$ -
1.5.5	March Pumping Station Capacity Upgrade	10.240G05	2039 - 2044	\$ 3,067,680	\$ -	\$ 3,067,680	30%	\$ 920,304	\$ 2,147,376	OGB	100%	\$ 2,147,376	\$ -	\$ 2,147,376	\$ -
1.5.6	Signature Ridge Pump Station and Forcemain Expansion	10.240G06	2029 - 2034	\$ 6,464,040	\$ -	\$ 6,464,040	25%	\$ 1,616,010	\$ 4,848,030	OGB	100%	\$ 4,848,030	\$ -	\$ 4,848,030	\$ -
1.5.7	Penfield Trunk Collector Upgrade	10.240G07	2029 - 2034	\$ 8,545,680	\$ -	\$ 8,545,680	5%	\$ 427,284	\$ 8,118,396	OGB	100%	\$ 8,118,396	\$ -	\$ 8,118,396	\$ -
1.5.8	Stittsville Pump Station Gravity Connection and Decommissioning	10.240G08	2024 - 2029	\$ 7,121,400	\$ -	\$ 7,121,400	70%	\$ 4,984,980	\$ 2,136,420	OGB	100%	\$ 2,136,420	\$ -	\$ 2,136,420	\$ -
1.5.9	Acres PS Risk Mitigation Phase 2	10.240G09	2024 - 2029	\$ 27,937,800	\$ -	\$ 27,937,800	52%	\$ 14,527,656	\$ 13,410,144	OGB	100%	\$ 13,410,144	\$ -	\$ 13,410,144	\$ -
1.5.10	Acres PS Capacity Upgrade Phase 3	10.240G10	2029 - 2034	\$ 37,359,960	\$ -	\$ 37,359,960	61%	\$ 22,789,576	\$ 14,570,384	OGB	100%	\$ 14,570,384	\$ -	\$ 14,570,384	\$ -
1.5.11	Acres PS Overflow Phase 4	10.240G11	2034 - 2039	\$ 28,814,280	\$ -	\$ 28,814,280	20%	\$ 5,762,856	\$ 23,051,424	OGB	100%	\$ 23,051,424	\$ -	\$ 23,051,424	\$ -
1.5.12	Spratt Road Trunk Sewer Upgrade	10.240G12	2029 - 2034	\$ 15,119,280	\$ -	\$ 15,119,280	5%	\$ 755,964	\$ 14,363,316	OGB	100%	\$ 14,363,316	\$ -	\$ 14,363,316	\$ -
1.5.13	Conroy Road Trunk Collector Upgrade Phase 1	10.240G13	2029 - 2034	\$ 13,475,880	\$ -	\$ 13,475,880	5%	\$ 673,794	\$ 12,802,086	OGB	100%	\$ 12,802,086	\$ -	\$ 12,802,086	\$ -
1.5.14	Conroy Road Trunk Collector Upgrade Phase 2	10.240G14	2029 - 2034	\$ 9,641,280	\$ -	\$ 9,641,280	5%	\$ 482,064	\$ 9,159,216	OGB	100%	\$ 9,159,216	\$ -	\$ 9,159,216	\$ -
1.5.15	Forest Valley PS Upgrade Phase 1	10.240G15	2029 - 2034	\$ 2,848,560	\$ -	\$ 2,848,560	96%	\$ 2,734,618	\$ 113,942	OGB	100%	\$ 113,942	\$ -	\$ 113,942	\$ -
1.5.16	Forest Valley PS Upgrade Phase 2	10.240G16	2044 - 2046	\$ 3,286,800	\$ -	\$ 3,286,800	0%	\$ -	\$ 3,286,800	OGB	100%	\$ 3,286,800	\$ -	\$ 3,286,800	\$ -
1.5.17	Tenth Line PS Capacity Upgrade and Forcemain	10.240G17	2034 - 2039	\$ 2,519,880	\$ -	\$ 2,519,880	0%	\$ -	\$ 2,519,880	OGB	100%	\$ 2,519,880	\$ -	\$ 2,519,880	\$ -
1.5.18	Tewin Collector Sewer (excluding Tewin cost allocation)	10.240G18	2029 - 2034	\$ 225,221,000	\$ -	\$ 225,221,000	0%	\$ -	\$ 225,221,000	Tewin	0%	\$ -	\$ -	\$ -	\$ -
	Subtotal Expansion and Upgrade Projects			\$ 408,843,560	\$ -	\$ 408,843,560		\$ 55,839,446	\$ 353,004,114			\$ 127,783,114	\$ -	\$ 127,783,114	\$ -
<b>1.6 Expansion and Upgrade Projects Eligible for Oversizing Payment</b>															
1.6.1	Cardinal Creek Village - Trunk Sewer Oversizing	WWOS2401	2024 - 2033	\$ 2,249,600	\$ 1,218,000	\$ 1,031,600	0%	\$ -	\$ 1,031,600	OGB	100%	\$ 1,031,600	\$ -	\$ 1,031,600	\$ -
1.6.2	Mer Bleue Urban Expansion - Southern Outlet Oversizing	WWOS2402	2024 - 2033	\$ 290,100	\$ 221,100	\$ 69,000	0%	\$ -	\$ 69,000	OGB	100%	\$ 69,000	\$ -	\$ 69,000	\$ -
1.6.3	Mer Bleue Urban Expansion - Tenth Line Road Gravity Sewer Oversizing	WWOS2403	2024 - 2033	\$ 1,716,000	\$ 672,400	\$ 1,043,600	0%	\$ -	\$ 1,043,600	OGB	100%	\$ 1,043,600	\$ -	\$ 1,043,600	\$ -
1.6.4	Riverside South - New South Side of Earl Armstrong Road Oversizing	WWOS2404	2024 - 2033	\$ 4,048,400	\$ 2,613,700	\$ 1,434,700	0%	\$ -	\$ 1,434,700	OGB	100%	\$ 1,434,700	\$ -	\$ 1,434,700	\$ -
1.6.5	Orleans EUC MUC - Trunk Sewer Oversizing	WWOS2405	2024 - 2033	\$ 670,800	\$ 325,900	\$ 344,900	0%	\$ -	\$ 344,900	OGB	100%	\$ 344,900	\$ -	\$ 344,900	\$ -
1.6.6	Orleans EUC MUC - Trailsedge Phase 2 Oversizing	WWOS2406	2024 - 2033	\$ 209,000	\$ 162,300	\$ 46,700	0%	\$ -	\$ 46,700	OGB	100%	\$ 46,700	\$ -	\$ 46,700	\$ -
1.6.7	Neighbourhood 4 - Orleans South Business Park Oversizing	WWOS2407	2024 - 2033	\$ 1,202,300	\$ 829,600	\$ 372,700	0%	\$ -	\$ 372,700	OGB	100%	\$ 372,700	\$ -	\$ 372,700	\$ -
1.6.8	Neighbourhood 4 - EUC Sanitary Sewer System	WWOS2408	2024 - 2033	\$ 180,500	\$ 168,700	\$ 11,800	0%	\$ -	\$ 11,800	OGB	100%	\$ 11,800	\$ -	\$ 11,800	\$ -
1.6.9	Mer Bleue UEA Wastewater Pump Station and Forcemain	WWOS2409	2024 - 2033	\$ 13,350,000	\$ -	\$ 13,350,000	0%	\$ -	\$ 13,350,000	OGB	100%	\$ 13,350,000	\$ -	\$ 13,350,000	\$ -
1.6.10	March Road Offsite Sanitary Trunk Sewer - West - FE Agreement - 909613	10.ASAX1	2024 - 2033	\$ 18,235,300	\$ 12,876,700	\$ 5,358,600	0%	\$ -	\$ 5,358,600	OGB	100%	\$ 5,358,600	\$ -	\$ 5,358,600	\$ -
1.6.11	Fernbank Trunk Sewer (Abbott) - FE Agreement - 910386	10.04940	2024 - 2033	\$ 9,764,400	\$ 7,809,000	\$ 1,955,400	0%	\$ -	\$ 1,955,400	OGB	100%	\$ 1,955,400	\$ -	\$ 1,955,400	\$ -
1.6.12	Shea Road Pump Station - FE Agreement - 907840	MOTION	2024 - 2033	\$ 3,851,900	\$ 3,844,200	\$ 7,700	0%	\$ -	\$ 7,700	OGB	100%	\$ 7,700	\$ -	\$ 7,700	\$ -
1.6.13	Navan Road (EUC) Sanitary Sewer - FE Agreement - 908557	10.00X6	2024 - 2033	\$ 7,482,100	\$ 118,600	\$ 7,363,500	0%	\$ -	\$ 7,363,500	OGB	100%	\$ 7,363,500	\$ -	\$ 7,363,500	\$ -
1.6.15	Subtotal Expansion and Upgrade Projects Eligible for Oversizing Payment			\$ 63,250,400	\$ 30,860,200	\$ 32,390,200		\$ -	\$ 32,390,200			\$ 32,390,200	\$ -	\$ 32,390,200	\$ -



APPENDIX B.1  
TABLE B.1-2

CITY OF OTTAWA  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
SANITARY (WASTE WATER)

Project Description	Item Number	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Benefiting Area	% City-Wide	Benefiting Area Costs	DC Eligible Costs			
						BTE Share (%)	Replacement & BTE Shares					Prior Growth	2024 - 2046	Post 2046	
<b>1.7 Debt Payments</b>															
1.7.1	Kanata West Pump Station & Forcemain - Principal	10.240GD1	2026 - 2046	\$ 5,230,054	\$ -	\$ 5,230,054	0%	\$ -	\$ 5,230,054	OGB	100%	\$ 5,230,054	\$ -	\$ 5,230,054	\$ -
1.7.2	Bilberry Creek Ind Gravity Outlet Ph2 - Principal	10.240GD2	2026 - 2046	\$ 2,495,284	\$ -	\$ 2,495,284	0%	\$ -	\$ 2,495,284	OGB	100%	\$ 2,495,284	\$ -	\$ 2,495,284	\$ -
1.7.3	Kanata West Pump Station & Forcemain - Principal	10.240GD3	2024 - 2046	\$ 81,239	\$ -	\$ 81,239	0%	\$ -	\$ 81,239	OGB	100%	\$ 81,239	\$ -	\$ 81,239	\$ -
1.7.4	South Nepean Collector Ph 2 & Decommission - Principal	10.240GD4	2024 - 2046	\$ 231,261	\$ -	\$ 231,261	0%	\$ -	\$ 231,261	OGB	100%	\$ 231,261	\$ -	\$ 231,261	\$ -
1.7.5	North Kanata Sewer Ph 2 - Principal	10.240GD5	2024 - 2046	\$ 388,323	\$ -	\$ 388,323	0%	\$ -	\$ 388,323	OGB	100%	\$ 388,323	\$ -	\$ 388,323	\$ -
1.7.6	March PS Conversion - Principal	10.240GD6	2024 - 2046	\$ 76,906	\$ -	\$ 76,906	0%	\$ -	\$ 76,906	OGB	100%	\$ 76,906	\$ -	\$ 76,906	\$ -
1.7.7	DCA-O/S - Riverside S Community Sanitary - Principal	10.240GD7	2024 - 2046	\$ 13,540	\$ -	\$ 13,540	0%	\$ -	\$ 13,540	OGB	100%	\$ 13,540	\$ -	\$ 13,540	\$ -
1.7.8	Stittsville/Fernbank Intercept-Diversion - Principal	10.240GD8	2024 - 2046	\$ 6,844,123	\$ -	\$ 6,844,123	0%	\$ -	\$ 6,844,123	OGB	100%	\$ 6,844,123	\$ -	\$ 6,844,123	\$ -
1.7.9	By-Law 2016-256 - Principal	10.240GD9	2024 - 2046	\$ 2,587,054	\$ -	\$ 2,587,054	0%	\$ -	\$ 2,587,054	OGB	100%	\$ 2,587,054	\$ -	\$ 2,587,054	\$ -
1.7.10	Acres Road PS Upgrade - Principal	10.240GD10	2024 - 2039	\$ 18,822	\$ -	\$ 18,822	0%	\$ -	\$ 18,822	OGB	100%	\$ 18,822	\$ -	\$ 18,822	\$ -
1.7.11	South Nepean Collector Ph 2 & Decommission - Principal	10.240GD11	2024 - 2046	\$ 231,261	\$ -	\$ 231,261	0%	\$ -	\$ 231,261	OGB	100%	\$ 231,261	\$ -	\$ 231,261	\$ -
1.7.12	Kanata West Pump Station & Forcemain - Principal	10.240GD12	2024 - 2046	\$ 81,239	\$ -	\$ 81,239	0%	\$ -	\$ 81,239	OGB	100%	\$ 81,239	\$ -	\$ 81,239	\$ -
1.7.13	Authorized and TBA - Principal		2026 - 2045	\$ 9,159,603	\$ -	\$ 9,159,603	0%	\$ -	\$ 9,159,603	OGB	100%	\$ 9,159,603	\$ -	\$ 9,159,603	\$ -
	Subtotal Debt Payments			\$ 27,438,708	\$ -	\$ 27,438,708	\$ -	\$ -	\$ 27,438,708			\$ 27,438,708	\$ -	\$ 27,438,708	\$ -
<b>1.8 Debt Payments (Interest)</b>															
1.8.1	Kanata West Pump Station & Forcemain - Interest	10.240GD1	2026 - 2046	\$ 4,749,155	\$ -	\$ 4,749,155	0%	\$ -	\$ 4,749,155	OGB	100%	\$ 4,749,155	\$ -	\$ 4,749,155	\$ -
1.8.2	Bilberry Creek Ind Gravity Outlet Ph2 - Interest	10.240GD2	2026 - 2046	\$ 2,265,845	\$ -	\$ 2,265,845	0%	\$ -	\$ 2,265,845	OGB	100%	\$ 2,265,845	\$ -	\$ 2,265,845	\$ -
1.8.3	Kanata West Pump Station & Forcemain - Interest	10.240GD3	2024 - 2046	\$ 115,848	\$ -	\$ 115,848	0%	\$ -	\$ 115,848	OGB	100%	\$ 115,848	\$ -	\$ 115,848	\$ -
1.8.4	South Nepean Collector Ph 2 & Decommission - Interest	10.240GD4	2024 - 2046	\$ 329,780	\$ -	\$ 329,780	0%	\$ -	\$ 329,780	OGB	100%	\$ 329,780	\$ -	\$ 329,780	\$ -
1.8.5	North Kanata Sewer Ph 2 - Interest	10.240GD5	2024 - 2046	\$ 553,752	\$ -	\$ 553,752	0%	\$ -	\$ 553,752	OGB	100%	\$ 553,752	\$ -	\$ 553,752	\$ -
1.8.6	March PS Conversion - Interest	10.240GD6	2024 - 2046	\$ 109,669	\$ -	\$ 109,669	0%	\$ -	\$ 109,669	OGB	100%	\$ 109,669	\$ -	\$ 109,669	\$ -
1.8.7	DCA-O/S - Riverside S Community Sanitary - Interest	10.240GD7	2024 - 2046	\$ 19,308	\$ -	\$ 19,308	0%	\$ -	\$ 19,308	OGB	100%	\$ 19,308	\$ -	\$ 19,308	\$ -
1.8.8	Stittsville/Fernbank Intercept-Diversion - Interest	10.240GD8	2024 - 2046	\$ 9,759,777	\$ -	\$ 9,759,777	0%	\$ -	\$ 9,759,777	OGB	100%	\$ 9,759,777	\$ -	\$ 9,759,777	\$ -
1.8.9	By-Law 2016-256 - Interest	10.240GD9	2024 - 2046	\$ 3,861,588	\$ -	\$ 3,861,588	0%	\$ -	\$ 3,861,588	OGB	100%	\$ 3,861,588	\$ -	\$ 3,861,588	\$ -
1.8.10	Acres Road PS Upgrade - Interest	10.240GD10	2024 - 2039	\$ 14,490	\$ -	\$ 14,490	0%	\$ -	\$ 14,490	OGB	100%	\$ 14,490	\$ -	\$ 14,490	\$ -
1.8.11	South Nepean Collector Ph 2 & Decommission - Interest	10.240GD11	2024 - 2046	\$ 329,780	\$ -	\$ 329,780	0%	\$ -	\$ 329,780	OGB	100%	\$ 329,780	\$ -	\$ 329,780	\$ -
1.8.12	Kanata West Pump Station & Forcemain - Interest	10.240GD12	2024 - 2046	\$ 115,848	\$ -	\$ 115,848	0%	\$ -	\$ 115,848	OGB	100%	\$ 115,848	\$ -	\$ 115,848	\$ -
1.8.13	Authorized and TBA - Interest		2026 - 2045	\$ 9,159,603	\$ -	\$ 9,159,603	0%	\$ -	\$ 9,159,603	OGB	100%	\$ 9,159,603	\$ -	\$ 9,159,603	\$ -
	Subtotal Debt Payments (Interest)			\$ 31,384,440	\$ -	\$ 31,384,440	\$ -	\$ -	\$ 31,384,440			\$ 31,384,440	\$ -	\$ 31,384,440	\$ -
<b>TOTAL SANITARY (WASTE WATER): OUTSIDE THE GREENBELT</b>				<b>\$ 530,917,109</b>	<b>\$ 30,860,200</b>	<b>\$ 500,056,909</b>		<b>\$ 55,839,446</b>	<b>\$ 444,217,463</b>			<b>\$ 218,996,463</b>	<b>\$ -</b>	<b>\$ 218,996,463</b>	<b>\$ -</b>
<b>TOTAL SANITARY (WASTE WATER)</b>				<b>\$1,465,271,668</b>	<b>\$ 30,860,200</b>	<b>\$1,434,411,468</b>		<b>\$ 257,588,708</b>	<b>\$1,176,822,760</b>			<b>\$ 951,601,760</b>	<b>\$ -</b>	<b>\$ 951,601,760</b>	<b>\$ -</b>

APPENDIX B.1  
TABLE B.1-2

CITY OF OTTAWA  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
SANITARY (WASTE WATER)

Cost Allocation By Benefitting Area			Reserve Adjs	DC Rate
<b>Inside the Greenbelt Residential Calculation</b>				
Residential Share of Eligible Costs	71%	\$ 145,595,834	\$18,221,757	\$127,374,077
22-Year Population Growth		131,938		131,938
Unadjusted Per Charge per Capita		<b>\$1,103.52</b>		<b>\$965.41</b>
<b>Outside the Greenbelt Residential Calculation</b>				
Residential Share of Eligible Costs	87%	\$ 190,307,926	\$3,858,758	\$186,449,168
22-Year Population Growth		200,043		200,043
Unadjusted Per Charge per Capita		<b>\$951.34</b>		<b>\$932.05</b>
<b>Rural Residential Calculation</b>				
Residential Share of Eligible Costs	0%	\$0	\$0	\$0
22-Year Population Growth		41,292		41,292
Unadjusted Per Charge per Capita		<b>\$0.00</b>		<b>\$0.00</b>
<b>Non-Residential Calculation</b>				
Non-Residential Share of Eligible Costs		\$88,446,488	\$8,060,588	\$80,385,901
<b>Industrial</b>				
Non-Residential Share of Eligible Costs		\$9,109,233	\$830,172	\$8,279,061
22-Year Non-Residential Growth in GFA (m2)		1,084,086		1,084,086
Charge per Square Metre		<b>\$8.40</b>		<b>\$7.64</b>
<b>Non-Industrial</b>				
Non-Residential Share of Eligible Costs		\$79,337,256	\$7,230,416	\$72,106,840
22-Year Non-Residential Growth in GFA (m2)		3,831,874		3,831,874
Charge per Square Metre		<b>\$20.70</b>		<b>\$18.82</b>

\*Residential and non-residential share of costs are based on forecast demand for each area

City-wide Cost Allocations (Residential and Non-Residential)				
Residential Calculation			Reserve Adjs	DC Rate
Residential Share of Eligible Costs	75%	\$395,632,831	\$ 70,878,532	\$324,754,299
22-Year Population Growth		379,410		379,410
Unadjusted Per Charge per Capita		<b>\$1,042.76</b>		<b>\$855.95</b>
Non-Residential Calculation				
Non-Residential Share of Eligible Costs	25%	\$131,618,680	\$ 23,579,789	\$108,038,891
<b>Industrial</b>				
Non-Residential Share of Eligible Costs	3%	\$13,555,600	\$2,428,517	\$11,127,083
22-Year Non-Residential Growth in GFA (m2)		1,084,086		1,084,086
Charge per Square Metre		<b>\$12.50</b>		<b>\$10.26</b>
<b>Non-Industrial</b>				
Non-Residential Share of Eligible Costs	22%	\$118,063,081	\$21,151,272	\$96,911,808
22-Year Non-Residential Growth in GFA (m2)		3,831,874		3,831,874
Charge per Square Metre		<b>\$30.81</b>		<b>\$25.29</b>

TOTAL DC ELIGIBLE COSTS 2019-2031 AFTER ADJUSTMENT FOR AVAILABLE DC RESERVE FUNDS \$ 827,002,336

Reserve Fund Balance - April 2024			
	Total	Residential	Non-Residential
City-wide	\$94,435,179	\$70,861,167	\$23,574,012
IGB	\$25,700,645	\$18,221,757	\$7,478,888
OGB	\$4,440,458	\$3,858,758	\$581,700
Rural	\$23,142	\$17,365	\$5,777
City-wide Restated*	\$ 94,458,321	\$ 70,878,532	\$ 23,579,789

\*City-wide Restated includes Rural DC reserves

APPENDIX B.1  
TABLE B.1-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
SANITARY (WASTE WATER)

CITY-WIDE RESIDENTIAL DEVELOPMENT CHARGE  
CITY-WIDE  
(in \$000)

SANITARY (WASTE WATER)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
OPENING CASH BALANCE	\$77,172.45	\$54,373.65	\$30,194.32	\$4,572.16	(\$22,557.65)	(\$51,713.66)	(\$83,111.46)	(\$70,615.17)	(\$56,938.20)	(\$42,004.84)	(\$25,735.11)	(\$43,204.10)
2024-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Sanitary (Waste Water): Non Inflated	\$37,940.5	\$37,940.5	\$37,940.5	\$37,940.5	\$37,940.5	\$37,940.5	\$0.0	\$0.0	\$0.0	\$0.0	\$25,659.7	\$25,659.7
- Sanitary (Waste Water): Inflated	\$37,940.5	\$39,078.7	\$40,251.1	\$41,458.6	\$42,702.4	\$43,983.5	\$0.0	\$0.0	\$0.0	\$0.0	\$34,484.5	\$35,519.0
- Sanitary (Waste Water) Infrastructure: Debenture Finance Interest (1)	\$1,849.0	\$1,849.0	\$1,849.0	\$1,849.0	\$1,849.0	\$1,849.0	\$1,849.0	\$1,849.0	\$1,849.0	\$1,849.0	\$1,849.0	\$1,849.0
- Sanitary (Waste Water) (Inflation + Debenture Financed)	\$39,789.6	\$40,927.8	\$42,100.1	\$43,307.7	\$44,551.4	\$45,832.5	\$1,849.0	\$1,849.0	\$1,849.0	\$1,849.0	\$36,333.5	\$37,368.0
NEW RESIDENTIAL DEVELOPMENT												
- Growth in Population in New Units - City-Wide	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496
REVENUE												
- DC Receipts: Inflated	\$15,288.1	\$15,746.8	\$16,219.2	\$16,705.7	\$17,206.9	\$17,723.1	\$18,254.8	\$18,802.5	\$19,366.5	\$19,947.5	\$20,546.0	\$21,162.3
INTEREST												
- Interest on Opening Balance	\$2,315.2	\$1,631.2	\$905.8	\$137.2	(\$1,127.9)	(\$2,585.7)	(\$4,155.6)	(\$3,530.8)	(\$2,846.9)	(\$2,100.2)	(\$1,286.8)	(\$2,160.2)
- Interest on In-year Transactions	(\$612.5)	(\$629.5)	(\$647.0)	(\$665.0)	(\$683.6)	(\$702.7)	\$246.1	\$254.3	\$262.8	\$271.5	(\$394.7)	(\$405.1)
TOTAL REVENUE	\$16,990.8	\$16,748.4	\$16,478.0	\$16,177.9	\$15,395.4	\$14,434.7	\$14,345.3	\$15,526.0	\$16,782.4	\$18,118.8	\$18,864.5	\$18,597.0
CLOSING CASH BALANCE	\$54,373.6	\$30,194.3	\$4,572.2	(\$22,557.7)	(\$51,713.7)	(\$83,111.5)	(\$70,615.2)	(\$56,938.2)	(\$42,004.8)	(\$25,735.1)	(\$43,204.1)	(\$61,975.1)

APPENDIX B.1  
TABLE B.1-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
SANITARY (WASTE WATER)

CITY-WIDE RESIDENTIAL DEVELOPMENT CHARGE  
CITY-WIDE  
(in \$000)

SANITARY (WASTE WATER)	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	TOTAL
OPENING CASH BALANCE	(\$61,975.15)	(\$82,126.21)	(\$103,739.54)	(\$126,901.90)	(\$151,704.77)	(\$136,265.84)	(\$119,307.93)	(\$100,732.68)	(\$78,559.39)	(\$54,461.13)	(\$28,317.17)	
2024-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Sanitary (Waste Water): Non Inflated	\$25,659.7	\$25,659.7	\$25,659.7	\$25,659.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$381,601.2
- Sanitary (Waste Water): Inflated	\$36,584.6	\$37,682.1	\$38,812.6	\$39,976.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$468,474.5
- Sanitary (Waste Water) Infrastructure: Debenture Finance Interest (1)	\$1,849.0	\$1,849.0	\$1,849.0	\$1,849.0	\$1,849.0	\$1,849.0	\$1,849.0	\$0.0	\$0.0	\$0.0	\$0.0	\$35,131.7
- Sanitary (Waste Water) (Inflation + Debenture Financed)	\$38,433.6	\$39,531.1	\$40,661.6	\$41,826.0	\$1,849.0	\$1,849.0	\$1,849.0	\$0.0	\$0.0	\$0.0	\$0.0	\$503,606.2
NEW RESIDENTIAL DEVELOPMENT												
- Growth in Population in New Units - City-Wide	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496	379,410
REVENUE												
- DC Receipts: Inflated	\$21,797.2	\$22,451.1	\$23,124.7	\$23,818.4	\$24,532.9	\$25,268.9	\$26,027.0	\$26,807.8	\$27,612.0	\$28,440.4	\$29,293.6	\$496,143.6
INTEREST												
- Interest on Opening Balance	(\$3,098.8)	(\$4,106.3)	(\$5,187.0)	(\$6,345.1)	(\$7,585.2)	(\$6,813.3)	(\$5,965.4)	(\$5,036.6)	(\$3,928.0)	(\$2,723.1)	(\$1,415.9)	(\$67,009.2)
- Interest on In-year Transactions	(\$415.9)	(\$427.0)	(\$438.4)	(\$450.2)	\$340.3	\$351.3	\$362.7	\$402.1	\$414.2	\$426.6	\$439.4	(\$2,700.7)
TOTAL REVENUE	\$18,282.5	\$17,917.8	\$17,499.3	\$17,023.1	\$17,288.0	\$18,806.9	\$20,424.3	\$22,173.3	\$24,098.3	\$26,144.0	\$28,317.2	\$426,433.7
CLOSING CASH BALANCE	(\$82,126.2)	(\$103,739.5)	(\$126,901.9)	(\$151,704.8)	(\$136,265.8)	(\$119,307.9)	(\$100,732.7)	(\$78,559.4)	(\$54,461.1)	(\$28,317.2)	\$0.0	

2024 Principal Repayment Charge (2)	\$	36.98
2024 Adjusted Capital Cost & Finance Interest Charge Per Capita	\$	926.77
<b>Total Charge per Capita</b>	\$	<b>963.76</b>

<b>Allocation of Capital Program</b>	
Residential	81.7%
Non-Residential	18.3%
<b>Rates for 2024</b>	
Inflation Rate	3.00%
Interest Rate on Positive Balances	3.00%
Interest Rate on Negative Balances	5.00%

Notes

(1) Debenture finance interest are not inflated

(2) Principle Repayment Charge will not be indexed

APPENDIX B.1  
TABLE B.1-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
SANITARY (WASTE WATER)

INSIDE THE GREENBELT RESIDENTIAL DEVELOPMENT CHARGE  
INSIDE THE GREENBELT  
(in \$000)

SANITARY (WASTE WATER)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
OPENING CASH BALANCE	\$18,221.76	\$18,811.31	\$19,419.85	\$20,047.96	\$20,696.28	\$21,365.46	\$9,065.23	\$2,971.66	(\$3,495.67)	(\$10,423.63)	(\$17,900.59)	(\$31,295.04)
2024-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Sanitary (Waste Water): Non Inflated	\$5,689.9	\$5,689.9	\$5,689.9	\$5,689.9	\$5,689.9	\$16,623.1	\$10,933.2	\$10,933.2	\$10,933.2	\$10,933.2	\$14,806.1	\$3,872.9
- Sanitary (Waste Water): Inflated	\$5,689.9	\$5,860.6	\$6,036.4	\$6,217.5	\$6,404.1	\$19,270.7	\$13,054.8	\$13,446.4	\$13,849.8	\$14,265.3	\$19,898.1	\$5,361.0
- Sanitary (Waste Water) Infrastructure: Debenture Finance Interest (1)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Sanitary (Waste Water) (Inflation + Debenture Financed)	\$5,689.9	\$5,860.6	\$6,036.4	\$6,217.5	\$6,404.1	\$19,270.7	\$13,054.8	\$13,446.4	\$13,849.8	\$14,265.3	\$19,898.1	\$5,361.0
NEW RESIDENTIAL DEVELOPMENT												
- Growth in Population in New Units	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736
REVENUE												
- DC Receipts: Inflated	\$5,732.2	\$5,904.2	\$6,081.3	\$6,263.7	\$6,451.6	\$6,645.2	\$6,844.5	\$7,049.9	\$7,261.4	\$7,479.2	\$7,703.6	\$7,934.7
INTEREST												
- Interest on Opening Balance	\$546.7	\$564.3	\$582.6	\$601.4	\$620.9	\$641.0	\$272.0	\$89.1	(\$174.8)	(\$521.2)	(\$895.0)	(\$1,564.8)
- Interest on In-year Transactions	\$0.6	\$0.7	\$0.7	\$0.7	\$0.7	(\$315.6)	(\$155.3)	(\$159.9)	(\$164.7)	(\$169.7)	(\$304.9)	\$38.6
TOTAL REVENUE	\$6,279.5	\$6,469.1	\$6,664.5	\$6,865.8	\$7,073.2	\$6,970.5	\$6,961.2	\$6,979.1	\$6,921.9	\$6,788.4	\$6,503.7	\$6,408.5
CLOSING CASH BALANCE	\$18,811.3	\$19,419.8	\$20,048.0	\$20,696.3	\$21,365.5	\$9,065.2	\$2,971.7	(\$3,495.7)	(\$10,423.6)	(\$17,900.6)	(\$31,295.0)	(\$30,247.5)

APPENDIX B.1  
TABLE B.1-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
SANITARY (WASTE WATER)

INSIDE THE GREENBELT RESIDENTIAL DEVELOPMENT CHARGE  
INSIDE THE GREENBELT  
(in \$000)

SANITARY (WASTE WATER)	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	TOTAL
OPENING CASH BALANCE	(\$30,247.50)	(\$29,069.21)	(\$27,751.28)	(\$26,284.32)	(\$30,649.74)	(\$28,986.22)	(\$27,143.64)	(\$25,110.18)	(\$22,873.33)	(\$20,419.86)	(\$10,617.35)	
2024-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Sanitary (Waste Water): Non Inflated	\$3,872.9	\$3,872.9	\$3,872.9	\$7,642.9	\$3,770.0	\$3,770.0	\$3,770.0	\$3,770.0	\$3,770.0	\$0.0	\$0.0	\$145,595.8
- Sanitary (Waste Water): Inflated	\$5,521.8	\$5,687.5	\$5,858.1	\$11,907.3	\$6,049.7	\$6,231.2	\$6,418.1	\$6,610.7	\$6,809.0	\$0.0	\$0.0	\$190,448.2
- Sanitary (Waste Water) Infrastructure: Debenture Finance Interest (1)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Sanitary (Waste Water) (Inflation + Debenture Financed)	\$5,521.8	\$5,687.5	\$5,858.1	\$11,907.3	\$6,049.7	\$6,231.2	\$6,418.1	\$6,610.7	\$6,809.0	\$0.0	\$0.0	\$190,448.2
NEW RESIDENTIAL DEVELOPMENT												
- Growth in Population in New Units	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736	131,938
REVENUE												
- DC Receipts: Inflated	\$8,172.7	\$8,417.9	\$8,670.4	\$8,930.6	\$9,198.5	\$9,474.4	\$9,758.7	\$10,051.4	\$10,353.0	\$10,663.6	\$10,983.5	\$186,026.0
INTEREST												
- Interest on Opening Balance	(\$1,512.4)	(\$1,453.5)	(\$1,387.6)	(\$1,314.2)	(\$1,532.5)	(\$1,449.3)	(\$1,357.2)	(\$1,255.5)	(\$1,143.7)	(\$1,021.0)	(\$530.9)	(\$13,195.4)
- Interest on In-year Transactions	\$39.8	\$41.0	\$42.2	(\$74.4)	\$47.2	\$48.6	\$50.1	\$51.6	\$53.2	\$160.0	\$164.8	(\$604.1)
TOTAL REVENUE	\$6,700.1	\$7,005.4	\$7,325.1	\$7,541.9	\$7,713.2	\$8,073.8	\$8,451.6	\$8,847.5	\$9,262.5	\$9,802.5	\$10,617.3	\$172,226.5
CLOSING CASH BALANCE	(\$29,069.2)	(\$27,751.3)	(\$26,284.3)	(\$30,649.7)	(\$28,986.2)	(\$27,143.6)	(\$25,110.2)	(\$22,873.3)	(\$20,419.9)	(\$10,617.3)	(\$0.0)	

2024 Principal Repayment Charge (2)	\$	-
2024 Adjusted Capital Cost & Finance Interest Charge Per Capita	\$	999.26
<b>Total Charge per Capita</b>	\$	<b>999.26</b>

<b>Allocation of Capital Program</b>	
Residential	70.9%
Non-Residential	29.1%
<b>Rates for 2024</b>	
Inflation Rate	3.00%
Interest Rate on Positive Balances	3.00%
Interest Rate on Negative Balances	5.00%

Notes

(1) Debenture finance interest are not inflated

(2) Principle Repayment Charge will not be indexed

APPENDIX B.1  
TABLE B.1-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
SANITARY (WASTE WATER)

OUTSIDE THE GREENBELT RESIDENTIAL DEVELOPMENT CHARGE  
OUTSIDE THE GREENBELT  
(in \$000)

SANITARY (WASTE WATER)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
OPENING CASH BALANCE	\$3,858.76	\$5,448.48	\$7,154.35	\$8,314.05	\$9,581.16	\$10,961.08	(\$1,508.82)	(\$11,966.43)	(\$23,213.69)	(\$35,298.07)	(\$48,269.67)	(\$63,405.77)
2024-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Sanitary (Waste Water): Non Inflated	\$5,066.4	\$5,066.4	\$5,066.4	\$5,066.4	\$5,066.4	\$16,831.3	\$14,579.7	\$14,579.7	\$14,579.7	\$14,579.7	\$15,468.5	\$3,703.6
- Sanitary (Waste Water): Inflated	\$5,066.4	\$5,218.4	\$5,374.9	\$5,536.2	\$5,702.2	\$19,512.1	\$17,408.9	\$17,931.2	\$18,469.1	\$19,023.2	\$20,788.4	\$5,126.6
- Sanitary (Waste Water) Infrastructure: Debenture Finance Interest (1)	\$795.9	\$795.9	\$1,453.9	\$1,453.9	\$1,453.9	\$1,453.9	\$1,453.9	\$1,453.9	\$1,453.9	\$1,453.9	\$1,453.9	\$1,453.9
- Sanitary (Waste Water) (Inflation + Debenture Financed)	\$5,862.3	\$6,014.2	\$6,828.8	\$6,990.0	\$7,156.1	\$20,966.0	\$18,862.8	\$19,385.0	\$19,923.0	\$20,477.0	\$22,242.3	\$6,580.5
NEW RESIDENTIAL DEVELOPMENT												
- Growth in Population in New Units	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698
REVENUE												
- DC Receipts: Inflated	\$7,314.4	\$7,533.9	\$7,759.9	\$7,992.7	\$8,232.5	\$8,479.4	\$8,733.8	\$8,995.8	\$9,265.7	\$9,543.7	\$9,830.0	\$10,124.9
INTEREST												
- Interest on Opening Balance	\$115.8	\$163.5	\$214.6	\$249.4	\$287.4	\$328.8	(\$75.4)	(\$598.3)	(\$1,160.7)	(\$1,764.9)	(\$2,413.5)	(\$3,170.3)
- Interest on In-year Transactions	\$21.8	\$22.8	\$14.0	\$15.0	\$16.1	(\$312.2)	(\$253.2)	(\$259.7)	(\$266.4)	(\$273.3)	(\$310.3)	\$53.2
TOTAL REVENUE	\$7,452.0	\$7,720.1	\$7,988.5	\$8,257.1	\$8,536.0	\$8,496.1	\$8,405.1	\$8,137.8	\$7,838.6	\$7,505.4	\$7,106.2	\$7,007.8
CLOSING CASH BALANCE	\$5,448.5	\$7,154.4	\$8,314.1	\$9,581.2	\$10,961.1	(\$1,508.8)	(\$11,966.4)	(\$23,213.7)	(\$35,298.1)	(\$48,269.7)	(\$63,405.8)	(\$62,978.5)

APPENDIX B.1  
TABLE B.1-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
SANITARY (WASTE WATER)

OUTSIDE THE GREENBELT RESIDENTIAL DEVELOPMENT CHARGE  
OUTSIDE THE GREENBELT  
(in \$000)

SANITARY (WASTE WATER)	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	TOTAL
OPENING CASH BALANCE	(\$62,978.50)	(\$62,377.67)	(\$61,590.03)	(\$60,601.54)	(\$59,888.72)	(\$52,951.00)	(\$45,324.18)	(\$36,963.55)	(\$27,821.83)	(\$19,594.43)	(\$10,035.62)	
2024-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Sanitary (Waste Water): Non Inflated	\$3,703.6	\$3,703.6	\$3,703.6	\$4,014.6	\$311.0	\$311.0	\$311.0	\$311.0	\$1,263.1	\$952.1	\$952.1	\$139,190.6
- Sanitary (Waste Water): Inflated	\$5,280.4	\$5,438.8	\$5,602.0	\$6,254.6	\$499.1	\$514.1	\$529.5	\$545.4	\$2,281.3	\$1,771.1	\$1,824.3	\$175,698.0
- Sanitary (Waste Water) Infrastructure: Debenture Finance Interest (1)	\$1,453.9	\$1,453.9	\$1,453.9	\$1,453.5	\$1,453.1	\$1,453.1	\$1,453.1	\$1,453.1	\$1,453.1	\$1,453.1	\$1,809.3	\$32,473.1
- Sanitary (Waste Water) (Inflation + Debenture Financed)	\$6,734.3	\$6,892.7	\$7,055.9	\$7,708.1	\$1,952.1	\$1,967.1	\$1,982.5	\$1,998.4	\$3,734.3	\$3,224.2	\$3,633.5	\$208,171.2
NEW RESIDENTIAL DEVELOPMENT												
- Growth in Population in New Units	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	200,043
REVENUE												
- DC Receipts: Inflated	\$10,428.6	\$10,741.5	\$11,063.7	\$11,395.6	\$11,737.5	\$12,089.6	\$12,452.3	\$12,825.9	\$13,210.7	\$13,607.0	\$14,015.2	\$237,374.4
INTEREST												
- Interest on Opening Balance	(\$3,148.9)	(\$3,118.9)	(\$3,079.5)	(\$3,030.1)	(\$2,994.4)	(\$2,647.5)	(\$2,266.2)	(\$1,848.2)	(\$1,391.1)	(\$979.7)	(\$501.8)	(\$32,829.9)
- Interest on In-year Transactions	\$55.4	\$57.7	\$60.1	\$55.3	\$146.8	\$151.8	\$157.0	\$162.4	\$142.1	\$155.7	\$155.7	(\$232.0)
TOTAL REVENUE	\$7,335.1	\$7,680.3	\$8,044.4	\$8,420.9	\$8,889.9	\$9,593.9	\$10,343.2	\$11,140.1	\$11,961.7	\$12,783.0	\$13,669.2	\$204,312.4
CLOSING CASH BALANCE	(\$62,377.7)	(\$61,590.0)	(\$60,601.5)	(\$59,888.7)	(\$52,951.0)	(\$45,324.2)	(\$36,963.5)	(\$27,821.8)	(\$19,594.4)	(\$10,035.6)	\$0.0	

2024 Principal Repayment Charge (2)	\$	106.13
2024 Adjusted Capital Cost & Finance Interest Charge Per Capita	\$	840.98
<b>Total Charge per Capita</b>	<b>\$</b>	<b>947.11</b>

<b>Allocation of Capital Program</b>	
Residential	86.9%
Non-Residential	13.1%
<b>Rates for 2024</b>	
Inflation Rate	3.00%
Interest Rate on Positive Balances	3.00%
Interest Rate on Negative Balances	5.00%

Notes  
(1) Debenture finance interest are not inflated  
(2) Principle Repayment Charge will not be indexed



APPENDIX B.1  
TABLE B.1-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
SANITARY (WASTE WATER)

CITY-WIDE NON-RESIDENTIAL DEVELOPMENT CHARGE  
INDUSTRIAL  
(in \$000)

SANITARY (WASTE WATER)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
OPENING CASH BALANCE	\$3,560.96	\$2,907.19	\$2,213.30	\$1,463.18	\$668.79	(\$171.83)	(\$2,109.40)	(\$2,277.78)	(\$2,453.74)	(\$2,637.62)	(\$2,829.79)	(\$4,476.52)
2024-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS												
- Sanitary (Waste Water): Non Inflated	\$1,629.3	\$1,629.3	\$1,629.3	\$1,629.3	\$1,629.3	\$2,508.9	\$939.2	\$939.2	\$939.2	\$939.2	\$1,988.8	\$1,109.2
- Sanitary (Waste Water): Inflated	\$1,629.3	\$1,678.2	\$1,728.6	\$1,780.4	\$1,833.8	\$2,908.6	\$1,121.5	\$1,155.1	\$1,189.8	\$1,225.5	\$2,672.8	\$1,535.4
- Sanitary (Waste Water) Infrastructure: Debenture Finance Interest (1)	\$75.0	\$75.0	\$89.0	\$89.0	\$89.0	\$89.0	\$89.0	\$89.0	\$89.0	\$89.0	\$89.0	\$89.0
- Sanitary (Waste Water) (Inflation + Debenture Financed)	\$1,704.4	\$1,753.3	\$1,817.5	\$1,869.4	\$1,922.8	\$2,997.5	\$1,210.5	\$1,244.1	\$1,278.8	\$1,314.4	\$2,761.8	\$1,624.4
NEW NON-RESIDENTIAL DEVELOPMENT												
- Growth in Non-Res Industrial GFA	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134
REVENUE												
- DC Receipts: Inflated	\$962.3	\$991.2	\$1,020.9	\$1,051.6	\$1,083.1	\$1,115.6	\$1,149.1	\$1,183.5	\$1,219.1	\$1,255.6	\$1,293.3	\$1,332.1
INTEREST												
- Interest on Opening Balance	\$106.8	\$87.2	\$66.4	\$43.9	\$20.1	(\$8.6)	(\$105.5)	(\$113.9)	(\$122.7)	(\$131.9)	(\$141.5)	(\$223.8)
- Interest on In-year Transactions	(\$18.6)	(\$19.1)	(\$19.9)	(\$20.4)	(\$21.0)	(\$47.0)	(\$1.5)	(\$1.5)	(\$1.5)	(\$1.5)	(\$36.7)	(\$7.3)
TOTAL REVENUE	\$1,050.6	\$1,059.4	\$1,067.4	\$1,075.0	\$1,082.2	\$1,060.0	\$1,042.1	\$1,068.1	\$1,094.9	\$1,122.3	\$1,115.1	\$1,101.0
CLOSING CASH BALANCE	\$2,907.2	\$2,213.3	\$1,463.2	\$668.8	(\$171.8)	(\$2,109.4)	(\$2,277.8)	(\$2,453.7)	(\$2,637.6)	(\$2,829.8)	(\$4,476.5)	(\$5,000.0)

APPENDIX B.1  
TABLE B.1-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
SANITARY (WASTE WATER)

CITY-WIDE NON-RESIDENTIAL DEVELOPMENT CHARGE  
INDUSTRIAL  
(in \$000)

SANITARY (WASTE WATER)	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	TOTAL
OPENING CASH BALANCE	(\$4,999.99)	(\$5,555.88)	(\$6,146.00)	(\$6,772.27)	(\$7,794.34)	(\$7,071.74)	(\$6,276.92)	(\$5,405.21)	(\$4,392.57)	(\$3,326.84)	(\$1,745.42)	
2024-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS												
- Sanitary (Waste Water): Non Inflated	\$1,109.2	\$1,109.2	\$1,109.2	\$1,333.2	\$224.0	\$224.0	\$224.0	\$224.0	\$244.1	\$20.2	\$0.0	\$23,331.7
- Sanitary (Waste Water): Inflated	\$1,581.5	\$1,629.0	\$1,677.8	\$2,077.1	\$359.4	\$370.2	\$381.3	\$392.7	\$440.9	\$37.5	\$0.0	\$29,406.5
- Sanitary (Waste Water) Infrastructure: Debenture Finance Interest (1)	\$89.0	\$89.0	\$89.0	\$89.0	\$89.0	\$89.0	\$89.0	\$30.8	\$30.8	\$30.8	\$38.3	\$1,793.3
- Sanitary (Waste Water) (Inflation + Debenture Financed)	\$1,670.5	\$1,717.9	\$1,766.8	\$2,166.1	\$448.4	\$459.2	\$470.3	\$423.5	\$471.7	\$68.3	\$38.3	\$31,199.8
NEW NON-RESIDENTIAL DEVELOPMENT												
- Growth in Non-Res Industrial GFA	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134	1,084,086
REVENUE												
- DC Receipts: Inflated	\$1,372.1	\$1,413.2	\$1,455.6	\$1,499.3	\$1,544.3	\$1,590.6	\$1,638.3	\$1,687.5	\$1,738.1	\$1,790.2	\$1,843.9	\$31,230.4
INTEREST												
- Interest on Opening Balance	(\$250.0)	(\$277.8)	(\$307.3)	(\$338.6)	(\$389.7)	(\$353.6)	(\$313.8)	(\$270.3)	(\$219.6)	(\$166.3)	(\$87.3)	(\$3,497.8)
- Interest on In-year Transactions	(\$7.5)	(\$7.6)	(\$7.8)	(\$16.7)	\$16.4	\$17.0	\$17.5	\$19.0	\$19.0	\$25.8	\$27.1	(\$93.8)
TOTAL REVENUE	\$1,114.6	\$1,127.8	\$1,140.5	\$1,144.0	\$1,171.0	\$1,254.0	\$1,342.0	\$1,436.2	\$1,537.4	\$1,649.7	\$1,783.7	\$27,638.9
CLOSING CASH BALANCE	(\$5,555.9)	(\$6,146.0)	(\$6,772.3)	(\$7,794.3)	(\$7,071.7)	(\$6,276.9)	(\$5,405.2)	(\$4,392.6)	\$5.0	(\$1,745.4)	(\$0.0)	

2024 Principle Repayment Charge (2)	\$	0.87
2024 Adjusted Capital Cost & Finance Interest Charge Per M2	\$	20.42
<b>Total Charge per m2</b>	\$	<b>21.29</b>

<b>Allocation of Capital Program</b>	
Industrial Sector	2.6%
Non-Industrial Sector	15.7%
<b>Rates for 2024</b>	
Inflation Rate	3.00%
Interest Rate on Positive Balances	3.00%
Interest Rate on Negative Balances	5.00%

Notes

(1) Debenture finance interest are not inflated

(2) Principle Repayment Charge will not be indexed

APPENDIX B.1  
TABLE B.1-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
SANITARY (WASTE WATER)

CITY-WIDE NON-RESIDENTIAL DEVELOPMENT CHARGE  
NON-INDUSTRIAL  
(in \$000)

SANITARY (WASTE WATER)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
OPENING CASH BALANCE	\$21,785.50	\$17,790.24	\$13,549.78	\$8,965.61	\$4,110.94	(\$1,026.35)	(\$12,873.75)	(\$13,897.07)	(\$14,966.20)	(\$16,083.28)	(\$17,250.53)	(\$27,315.97)
2024-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Sanitary (Waste Water): Non Inflated	\$9,968.1	\$9,968.1	\$9,968.1	\$9,968.1	\$9,968.1	\$15,349.4	\$5,746.0	\$5,746.0	\$5,746.0	\$5,746.0	\$12,167.5	\$6,786.2
- Sanitary (Waste Water): Inflated	\$9,968.1	\$10,267.1	\$10,575.1	\$10,892.4	\$11,219.1	\$17,794.2	\$6,861.1	\$7,066.9	\$7,278.9	\$7,497.3	\$16,352.1	\$9,393.6
- Sanitary (Waste Water) Infrastructure: Debenture Finance Interest (1)	\$459.1	\$459.1	\$544.4	\$544.4	\$544.4	\$544.4	\$544.4	\$544.4	\$544.4	\$544.4	\$544.4	\$544.4
- Sanitary (Waste Water) (Inflation + Debenture Financed)	\$10,427.2	\$10,726.2	\$11,119.5	\$11,436.7	\$11,763.5	\$18,338.5	\$7,405.4	\$7,611.2	\$7,823.2	\$8,041.6	\$16,896.4	\$9,938.0
NEW NON-RESIDENTIAL DEVELOPMENT												
- Growth in Non-Res Non-Industrial GFA	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603
REVENUE												
- DC Receipts: Inflated	\$5,891.7	\$6,068.5	\$6,250.5	\$6,438.1	\$6,631.2	\$6,830.1	\$7,035.0	\$7,246.1	\$7,463.5	\$7,687.4	\$7,918.0	\$8,155.5
INTEREST												
- Interest on Opening Balance	\$653.6	\$533.7	\$406.5	\$269.0	\$123.3	(\$51.3)	(\$643.7)	(\$694.9)	(\$748.3)	(\$804.2)	(\$862.5)	(\$1,365.8)
- Interest on In-year Transactions	(\$113.4)	(\$116.4)	(\$121.7)	(\$125.0)	(\$128.3)	(\$287.7)	(\$9.3)	(\$9.1)	(\$9.0)	(\$8.9)	(\$224.5)	(\$44.6)
TOTAL REVENUE	\$6,431.9	\$6,485.8	\$6,535.3	\$6,582.1	\$6,626.2	\$6,491.1	\$6,382.1	\$6,542.1	\$6,706.2	\$6,874.4	\$6,831.0	\$6,745.2
CLOSING CASH BALANCE	\$17,790.2	\$13,549.8	\$8,965.6	\$4,110.9	(\$1,026.3)	(\$12,873.7)	(\$13,897.1)	(\$14,966.2)	(\$16,083.3)	(\$17,250.5)	(\$27,316.0)	(\$30,508.8)

APPENDIX B.1  
TABLE B.1-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
SANITARY (WASTE WATER)

CITY-WIDE NON-RESIDENTIAL DEVELOPMENT CHARGE  
NON-INDUSTRIAL  
(in \$000)

SANITARY (WASTE WATER)	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	TOTAL
OPENING CASH BALANCE	(\$30,508.79)	(\$33,899.33)	(\$37,498.61)	(\$41,318.24)	(\$47,558.57)	(\$43,124.42)	(\$38,247.63)	(\$32,899.43)	(\$26,688.12)	(\$20,150.96)	(\$10,457.76)	
2024-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Sanitary (Waste Water): Non Inflated	\$6,786.2	\$6,786.2	\$6,786.2	\$8,156.4	\$1,370.2	\$1,370.2	\$1,370.2	\$1,370.2	\$1,493.6	\$123.4	\$123.4	\$142,863.7
- Sanitary (Waste Water): Inflated	\$9,675.5	\$9,965.7	\$10,264.7	\$12,707.4	\$2,198.8	\$2,264.8	\$2,332.8	\$2,402.7	\$2,697.6	\$229.5	\$236.4	\$180,141.7
- Sanitary (Waste Water) Infrastructure: Debenture Finance Interest (1)	\$544.4	\$544.4	\$544.4	\$544.3	\$544.3	\$544.3	\$544.3	\$188.3	\$188.3	\$188.3	\$234.4	\$10,971.1
- Sanitary (Waste Water) (Inflation + Debenture Financed)	\$10,219.8	\$10,510.1	\$10,809.0	\$13,251.7	\$2,743.1	\$2,809.1	\$2,877.0	\$2,591.0	\$2,885.9	\$417.8	\$470.8	\$191,112.8
NEW NON-RESIDENTIAL DEVELOPMENT												
- Growth in Non-Res Non-Industrial GFA	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603	3,831,874
REVENUE												
- DC Receipts: Inflated	\$8,400.2	\$8,652.2	\$8,911.8	\$9,179.1	\$9,454.5	\$9,738.1	\$10,030.3	\$10,331.2	\$10,641.1	\$10,960.4	\$11,289.2	\$191,203.8
INTEREST												
- Interest on Opening Balance	(\$1,525.4)	(\$1,695.0)	(\$1,874.9)	(\$2,065.9)	(\$2,377.9)	(\$2,156.2)	(\$1,912.4)	(\$1,645.0)	(\$1,334.4)	(\$1,007.5)	(\$522.9)	(\$21,302.2)
- Interest on In-year Transactions	(\$45.5)	(\$46.4)	(\$47.4)	(\$101.8)	\$100.7	\$103.9	\$107.3	\$116.1	\$116.3	\$158.1	\$162.3	(\$574.2)
TOTAL REVENUE	\$6,829.3	\$6,910.8	\$6,989.4	\$7,011.4	\$7,177.2	\$7,685.9	\$8,225.2	\$8,802.3	\$9,423.0	\$10,111.0	\$10,928.6	\$169,327.3
CLOSING CASH BALANCE	(\$33,899.3)	(\$37,498.6)	(\$41,318.2)	(\$47,558.6)	(\$43,124.4)	(\$38,247.6)	(\$32,899.4)	(\$26,688.1)	(\$20,151.0)	(\$10,457.8)	(\$0.0)	

2024 Principle Repayment Charge (2)	\$ 1.51
2024 Adjusted Capital Cost & Finance Interest Charge Per M2	\$ 35.36
<b>Total Charge per m2</b>	<b>\$ 36.88</b>

<b>Allocation of Capital Program</b>	
Industrial Sector	2.6%
Non-Industrial Sector	15.7%
<b>Rates for 2024</b>	
Inflation Rate	3.00%
Interest Rate on Positive Balances	3.00%
Interest Rate on Negative Balances	5.00%

Notes

(1) Debenture finance interest are not inflated

(2) Principle Repayment Charge will not be indexed

# Appendix B.2

## Water

# Appendix B.2 – Water Technical Appendix

Capital infrastructure contained in the Water service category includes plant expansions and upgrades of linear Water infrastructure.

This appendix provides a brief outline of historical service levels for Water services, the projects that will benefit development occurring over the mid-2024 to mid-2046 development-related capital forecast. The cost, quantum and timing of the projects identified in the forecast have been provided by City staff and are generally based on the capital projects identified in the City's 2024 Infrastructure Master Plan.

Table B.2-1: Forecast Water Demand by Area

Table B.2-2: 2024-2031 Development-Related Capital Forecast and Calculation of the Discounted Growth-Related Net Capital Costs

Table B.2-3: Development Charge Calculation: Cash Flow Analysis for Water Area-Specific Development Charges

## H. Benefitting Area

The City's Water development charges is calculated on both a City-wide and area-specific basis. The smaller benefitting areas are defined as: Inside the Greenbelt, Outside the Greenbelt and Rural area.

## I. Historical Service Level Analysis

Water facilities included in the DC capital forecast are required to achieve health and safety standards as identified in relevant legislation including Provincial regulations, other relevant legislation as well as Ottawa Water and standards. As such, in accordance with section 4(3) of O.Reg. 82/98, the 15-year historical service level does not apply.

## J. Forecast Water Demand by Area

Consistent with the approach included in the 2014 DC Background Study, 2019 Interim DC Background Study and 2024 IMP, the residential and non-residential allocations have been based on average flows required by these types of development (shown in Table B.2-1).

Water supply and treatment facilities are based on the allocations (by servicing area) shown in Table B.2-1. City-wide projects are based on the total average flow for residential and non-residential development. This results in an allocation of 82% residential and 18% non-residential.

## K. Development-Related Capital Forecast

The development-related capital forecast that will benefit development occurring over the 2024 to 2046 period includes a variety of projects for the provision of Water services in the City and amounts to a total gross cost of \$845.4 million, as shown in Table B.2-2.

The following summarizes the city-wide and area-specific capital programs:

- **City-wide Capital Program** – The development-related capital forecast that will benefit development occurring over the 2024 to 2046 period includes expansions and upgrades at the Lemieux Water Purification Plant. The total gross cost of the capital program amounts to \$38.7 million, as shown in Table B.2-2.
- **Inside the Greenbelt Capital Program** – The gross capital program for IGB Water totals \$4.2 million and includes the upgrade at the Brittany Drive Pump Station and recovery of debenture costs for Brittany, Hurdman Bridge/Billings Bridge Pumping Stations.

- **Outside the Greenbelt Capital Program** – The total gross capital program related to development OGB totals \$802.5 million. The program includes the recovery of outstanding principal and interest debenture payments and various expansion and upgrade projects.
- **Rural** – there are no capital projects identified for Water in the Rural area of the City.

## **L. Calculation of Discounted Development-Related Capital Costs**

### **i. Grants, Subsidies and Other Recoveries**

A total of \$3.1 million in grants, subsidies or other recoveries has been identified for Water Services related to Mer Bleue – Watermain Oversizing. This amount has been removed from the DC eligible costs.

### **ii. Replacement and Benefit to Existing Shares**

The replacement and benefit to existing shares have been examined on a project-by-project basis and the nature of each project determined the rationale for the reductions. The identified benefit to existing shares includes costs that meet the needs of existing development, including past development. Decisions were based on a variety of factors including the population and employment growth over the planning period, rehabilitation costs and input from City staff. New projects are deemed to be entirely growth-related and no replacement shares have been deducted from the net cost. Additional details on benefit to existing shares can be found in the City's 2024 IMP.

In total, \$39.4 million is identified as the replacement and benefit to existing share over the planning period.



### **iii. Prior DC Funding / Available DC Reserve Funds**

Prior DC funding relates to portions of projects which have had DCs collected and applied against a portion of the DC eligible project costs. These amounts are removed from the capital forecast and not brought forward into the development charge calculation. Table B.2-2 provides details on the available DC committed reserve fund balance by benefitting area.

In total, the \$7.8 million identified in the City-wide Water reserve fund has been reduced from the total City-wide DC eligible capital costs. This includes the recovery of a negative reserve fund balance for the Rural area of \$435,400. Outside the Greenbelt reserve fund balance at April 2024 was \$12.5 million. The City's DC reserve funds for Inside the Greenbelt (\$1.5 million) are in a negative position. As such, these costs have been included in the DC eligible costs as it relates to committed excess capacity that will benefit growth over the identified planning period.

### **iv. Post-2046 Benefit**

There have been no projects identified in the capital program that benefit development beyond 2046 and as such, no post period benefit shares have been identified

### **v. 2024-2046 DC Eligible Development Related Costs**

The total in-period DC eligible costs shown in Table B.2-2 amounts to \$496.9 million after adjustments for benefit to existing and post-period benefits. After deductions for available DC committed reserve fund balances the in-period DC eligible cost is reduced to \$478.1 million (shown in the DC cost allocation summary at the bottom of Table B.2-2). The reduction is the result of a positive DC reserve fund balance.

## M. Calculation of Residential and Non-Residential Discounted Development-Related Capital Costs

The discounted development-related costs have been allocated based on shares of forecast demand for each area over the 2024-2046 benefitting period.

The table below provides a summary of the DC eligible costs that are deemed to benefit development occurring City-wide, IGB, OGB and Rural areas. The “residual” shown in the area-specific non-residential summary represents the sum of the costs remaining once the residential allocations have been made for IGB, OGB and Rural area.

These costs allocations and DC rate calculations are presented in Table B.2-2. The total costs shown below reflect the total costs brought forward to the DC calculation after adjusting for DC reserve funds.

### Residential and Non-Residential Cost Allocations

Benefitting Area	% Allocation	Total Cost (\$)
<b>Residential</b>		
Inside the Greenbelt	73%	\$3,059,351
Outside the Greenbelt	93%	\$419,135,303
Rural	0%	\$0
City-Wide	%	\$17,178,694
<b>Subtotal Residential</b>		<b>\$439,373,348</b>
<b>Non-Residential --Industrial</b>		
Area-Specific	Residual	\$5,006,853
City-wide	3%	\$552,966
<b>Non-Residential – Non-Industrial</b>		
Area-Specific	Residual	\$29,833,720
City-wide	16%	\$3,294,893
<b>Subtotal Non-Residential</b>		<b>\$38,688,432</b>
<b>TOTAL</b>		<b>\$478,061,780</b>

## **N. Development Charge Calculation**

The Water DC rates include financing costs through a cash flow analysis. A cash flow analysis is undertaken to account for the timing of projects and receipt of DCs. It is particularly applicable where the timing of the forecast capital expenditures is significantly front-ended or back ended over the planning period. Interest earnings or borrowing costs are therefore accounted for in the calculation as allowed under the DCA. Based on the development forecast, the analysis calculates the DC rate required to finance the discounted development-related capital spending plan including provisions for any borrowing costs or interest earnings on the reserve funds. The cash flow analysis is designed so that the closing cash balance at the end of the planning period is as close to nil as possible.

In order to determine appropriate DC rates reflecting borrowing and earnings necessary to support the discounted development-related funding requirement, assumptions are used for the inflation and interest rates. An inflation rate of 3.0% is used for the funding requirements, an interest rate of 3.0% is used for positive opening balances, and a rate of 5.0% is used for negative opening balances.

Table B.2-3 displays the results of the cash flow analysis and provides the adjusted or final per capita residential and per employees in new non-residential DCs. For residential development charges a per capita amount has been calculated for development occurring IGB, OGB and the Rural area. A city-wide charge has been calculated for the residual industrial and non-industrial shares of the program. Debenture interest is not inflated in the cash flow analysis and the principal repayment component of the charge continues to be not indexed annually as has been the case since 2014.

The following table provides a summary of the calculated per capita and per square metre of industrial and non-industrial space City-wide.

### Summary of Adjusted Area-Specific Water Cash Flow Analysis

Benefitting Area	Adjusted Charge
<b>Residential</b> City-wide (\$/capita) Inside the Greenbelt (\$/capita) Outside the Greenbelt (\$/capita) Rural (\$/capita)	\$48.84 \$24.74 \$2,239.42 \$0
<b>Non-Residential - Industrial</b> City-wide (\$/m <sup>2</sup> )	\$5.52
<b>Non-Residential – Non-Industrial</b> City-wide (\$/m <sup>2</sup> )	\$9.31

**APPENDIX B.2  
TABLE B2-1**

**CITY OF OTTAWA  
WATER DEMAND BY AREA**

<b>Residential no Outdoor Water Demand (OWD)</b>										
<b>Water</b>	<b>Residential - Mid</b>		<b>ICI Mid</b>		<b>Total - Mid</b>		<b>Total Growth in Demand</b>	<b>Res Growth</b>	<b>Non-Res Growth</b>	<b>Res Component of Growth</b>
	<b>2018*</b>	<b>2046</b>	<b>2018*</b>	<b>2046</b>	<b>2018*</b>	<b>2046</b>	<b>Mid</b>	<b>Mid</b>	<b>Mid</b>	<b>%</b>
<b>Inside the Greenbelt</b>	152.0	179.9	34.5	46.0	186.5	225.9	39.4	27.9	11.5	70.90%
<b>Outside the Greenbelt</b>	81.9	153.1	23.3	34.0	105.2	187.1	82.0	71.2	10.7	86.90%
<b>West Urban Community</b>	26.5	43.7	5.0	8.5	31.6	52.1	20.6	17.1	3.4	83.40%
<b>South Urban Community</b>	29.3	69.2	15.1	20.2	44.4	89.4	45.0	39.9	5.1	88.60%
<b>East Urban Community</b>	26.1	40.3	3.1	5.3	29.2	45.6	16.4	14.2	2.2	86.60%
<b>Total</b>	<b>233.8</b>	<b>333.0</b>	<b>57.8</b>	<b>80.0</b>	<b>291.7</b>	<b>413.0</b>	<b>121.4</b>	<b>99.2</b>	<b>22.2</b>	<b>81.70%</b>

<b>Residential includes Outdoor Water Demand (OWD) no No Revenue Water (NRW)</b>										
<b>Water</b>	<b>Residential - Mid</b>		<b>ICI Mid</b>		<b>Total - Mid</b>		<b>Growth in Demand</b>	<b>Res Growth</b>	<b>Non-Res Growth</b>	<b>Res Component of Growth</b>
	<b>2018*</b>	<b>2046</b>	<b>2018*</b>	<b>2046</b>	<b>2018*</b>	<b>2046</b>	<b>Mid</b>	<b>Mid</b>	<b>Mid</b>	<b>%</b>
<b>Inside the Greenbelt</b>	142.4	175.7	34.5	46.0	176.9	221.7	44.7	33.3	11.5	74.30%
<b>Outside the Greenbelt</b>	114.6	246.6	23.3	34.0	137.9	280.6	142.7	132.0	10.7	92.50%
<b>West Urban Community</b>	42.0	76.9	5.0	5.0	47.1	85.3	38.3	34.9	3.4	91.10%
<b>South Urban Community</b>	35.8	108.5	15.1	15.1	50.9	128.7	77.8	72.6	5.1	93.40%
<b>East Urban Community</b>	36.8	61.3	3.1	5.3	39.9	66.6	26.7	24.5	2.2	91.70%
<b>Total</b>	<b>257.1</b>	<b>422.3</b>	<b>57.8</b>	<b>80.0</b>	<b>314.8</b>	<b>502.3</b>	<b>187.4</b>	<b>165.2</b>	<b>22.2</b>	<b>88.10%</b>

\* Post-Zone Reconfiguration

APPENDIX B.2  
TABLE B.2-2  
CITY OF OTTAWA  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
WATER

Project Description	Item Number	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Benefiting Area	% City-Wide	Benefiting Area Costs	DC Eligible Costs		
						BTE Share (%)	Replacement & BTE Shares					Prior Growth	2024 - 2046	Post 2046
<b>2.0 WATER: CITY-WIDE</b>														
<b>2.1 Expansion and Upgrade Projects</b>														
2.1.1 Lemieux Winter Capacity Upgrade - Basins 1-3	11.24CW01	2029 - 2034	\$ 38,674,680	\$ -	\$ 38,674,680	25%	\$ 9,797,585.60	\$ 28,877,094	City-wide	100%	\$ 28,877,094	\$ -	\$ 28,877,094	\$ -
Subtotal Expansion and Upgrade Projects			\$ 38,674,680	\$ -	\$ 38,674,680		\$ 9,797,586	\$ 28,877,094			\$ 28,877,094	\$ -	\$ 28,877,094	\$ -
<b>TOTAL WATER: CITY-WIDE</b>			<b>\$ 38,674,680</b>	<b>\$ -</b>	<b>\$ 38,674,680</b>		<b>\$ 9,797,586</b>	<b>\$ 28,877,094</b>			<b>\$ 28,877,094</b>	<b>\$ -</b>	<b>\$ 28,877,094</b>	<b>\$ -</b>
<b>2.0 WATER: INSIDE THE GREENBELT</b>														
<b>2.2 Expansion and Upgrade Projects</b>														
2.2.1 Brittany Drive Pump Station Suction Upgrade	11.24IG01	2039 - 2044	\$ 3,067,680	\$ -	\$ 3,067,680	50%	\$ 1,533,840	\$ 1,533,840	IGB	100%	\$ 1,533,840	\$ -	\$ 1,533,840	\$ -
Subtotal Expansion and Upgrade Projects			\$ 3,067,680	\$ -	\$ 3,067,680		\$ 1,533,840	\$ 1,533,840			\$ 1,533,840	\$ -	\$ 1,533,840	\$ -
<b>2.3 Debt Payment</b>														
2.3.1 Brittany Pumping Station - Principal	11.24IGD1	2024 - 2046	\$ 826,472	\$ -	\$ 826,472	0%	\$ -	\$ 826,472	IGB	100%	\$ 826,472	\$ -	\$ 826,472	\$ -
2.3.2 Hurdman Bridge/Billings Bridge PS Upgrade - Principal	11.24IGD2	2024 - 2046	\$ 350,411	\$ -	\$ 350,411	0%	\$ -	\$ 350,411	IGB	100%	\$ 350,411	\$ -	\$ 350,411	\$ -
Subtotal Debt Payment			\$ 1,176,884	\$ -	\$ 1,176,884		\$ -	\$ 1,176,884			\$ 1,176,884	\$ -	\$ 1,176,884	\$ -
<b>TOTAL WATER: INSIDE THE GREENBELT</b>			<b>\$ 4,244,564</b>	<b>\$ -</b>	<b>\$ 4,244,564</b>		<b>\$ 1,533,840</b>	<b>\$ 2,710,724</b>			<b>\$ 2,710,724</b>	<b>\$ -</b>	<b>\$ 2,710,724</b>	<b>\$ -</b>

APPENDIX B.2  
TABLE B.2-2  
  
CITY OF OTTAWA  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
WATER

Project Description	Item Number	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Benefiting Area	% City-Wide	Benefiting Area Costs	DC Eligible Costs			
						BTE Share (%)	Replacement & BTE Shares					Prior Growth	2024 - 2026	Post 2026	
<b>2.0 WATER: OUTSIDE THE GREENBELT</b>															
<b>2.4 Expansion and Upgrade Projects</b>															
2.4.1	Kanata West Feedermain Ph2	11.24OG01	2029 - 2034	\$ 4,820,640	\$ -	\$ 4,820,640	10%	\$ 482,064	\$ 4,338,576	OGB	100%	\$ 4,338,576	\$ -	\$ 4,338,576	\$ -
2.4.2	Kanata West Feedermain Ph3	11.24OG01	2029 - 2034	\$ 6,573,600	\$ -	\$ 6,573,600	10%	\$ 657,360	\$ 5,916,240	OGB	100%	\$ 5,916,240	\$ -	\$ 5,916,240	\$ -
2.4.3	Kanata West Feedermain Ph4	11.24OG01	2029 - 2034	\$ 15,119,280	\$ -	\$ 15,119,280	10%	\$ 1,511,928	\$ 13,607,352	OGB	100%	\$ 13,607,352	\$ -	\$ 13,607,352	\$ -
2.4.4	Greenbank Road Watermain	11.24OG02	2029 - 2034	\$ 15,447,960	\$ -	\$ 15,447,960	10%	\$ 1,544,796	\$ 13,903,164	OGB	100%	\$ 13,903,164	\$ -	\$ 13,903,164	\$ -
2.4.5	Orleans Storage Upgrade	11.24OG03	2029 - 2034	\$ 169,160,640	\$ -	\$ 169,160,640	0%	\$ -	\$ 169,160,640	OGB	100%	\$ 169,160,640	\$ -	\$ 169,160,640	\$ -
2.4.6	New Watermain for Urban Expansion Area E-4 & E-5	11.24OG20	2039 - 2044	\$ 6,902,280	\$ -	\$ 6,902,280	0%	\$ -	\$ 6,902,280	OGB	100%	\$ 6,902,280	\$ -	\$ 6,902,280	\$ -
2.4.7	March Road Pipe Upgrade (Zone 2W West Feedermain)	11.24OG04	2024 - 2029	\$ 5,478,000	\$ -	\$ 5,478,000	10%	\$ 547,800	\$ 4,930,200	OGB	100%	\$ 4,930,200	\$ -	\$ 4,930,200	\$ -
2.4.8	New Watermain for Urban Expansion Area S-1	11.24OG13	2029 - 2034	\$ 5,587,560	\$ -	\$ 5,587,560	0%	\$ -	\$ 5,587,560	OGB	100%	\$ 5,587,560	\$ -	\$ 5,587,560	\$ -
2.4.9	New Watermains for Urban Expansion Area S-3	11.24OG14	2029 - 2034	\$ 16,653,120	\$ -	\$ 16,653,120	0%	\$ -	\$ 16,653,120	OGB	100%	\$ 16,653,120	\$ -	\$ 16,653,120	\$ -
2.4.10	New Watermains for Urban Expansion Area S-3	11.24OG14	2029 - 2034	\$ 3,067,680	\$ -	\$ 3,067,680	0%	\$ -	\$ 3,067,680	OGB	100%	\$ 3,067,680	\$ -	\$ 3,067,680	\$ -
2.4.11	Limebank Feedermain Phase 2 (to RSET)	11.24OG15	2024 - 2029	\$ 12,161,160	\$ -	\$ 12,161,160	10%	\$ 1,216,116.00	\$ 10,945,044	OGB	100%	\$ 10,945,044	\$ -	\$ 10,945,044	\$ -
2.4.12	Limebank Feedermain Phase 3 (Earl Armstrong to Spratt)	11.24OG15	2029 - 2034	\$ 8,874,360	\$ -	\$ 8,874,360	10%	\$ 887,436.00	\$ 7,986,924	OGB	100%	\$ 7,986,924	\$ -	\$ 7,986,924	\$ -
2.4.13	Ottawa South Storage Upgrade	11.24OG17	2024 - 2029	\$ 49,630,680	\$ -	\$ 49,630,680	10%	\$ 4,963,068	\$ 44,667,612	OGB	100%	\$ 44,667,612	\$ -	\$ 44,667,612	\$ -
2.4.14	New Riverside South Elevated Tank	11.24OG19	2024 - 2029	\$ 37,031,280	\$ -	\$ 37,031,280	10%	\$ 3,703,128	\$ 33,328,152	OGB	100%	\$ 33,328,152	\$ -	\$ 33,328,152	\$ -
	Subtotal Expansion and Upgrade Projects			\$ 356,508,240	\$ -	\$ 356,508,240		\$ 15,513,696	\$ 340,994,544			\$ 340,994,544	\$ -	\$ 340,994,544	\$ -
<b>2.5 Tewin OGB Share only</b>															
2.5.1	Water Feed - Phases 1 & 2 (excluding Tewin cost allocation)	11.24OG21	2029 - 2034	\$ 191,202,400	\$ -	\$ 191,202,400	0%	\$ -	\$ 191,202,400	OGB	25%	\$ 47,828,024	\$ -	\$ 47,828,024	\$ -
2.5.2	Bi-Directional Water Feed (excluding Tewin cost allocation)	11.24OG22	2029 - 2034	\$ 58,029,900	\$ -	\$ 58,029,900	0%	\$ -	\$ 58,029,900	OGB	30%	\$ 17,441,879	\$ -	\$ 17,441,879	\$ -
2.5.3	Water Feed - Phase 3 - Billings Bridge to Conroy (excluding Tewin cost allocation)	11.24OG23	2034 - 2039	\$ 90,719,700	\$ -	\$ 90,719,700	12%	\$ 10,860,037	\$ 79,859,663	OGB	20%	\$ 15,933,306	\$ -	\$ 15,933,306	\$ -
2.5.4	Tewin Pump Station & Reservoir Phase 1 (excluding Tewin cost allocation)	11.24OG24	2029 - 2034	\$ 48,376,500	\$ -	\$ 48,376,500	0%	\$ -	\$ 48,376,500	Tewin	0%	\$ -	\$ -	\$ -	\$ -
2.5.5	Tewin Pump Station & Reservoir Phase 2	11.24OG25	2034 - 2039	\$ 20,732,800	\$ -	\$ 20,732,800	0%	\$ -	\$ 20,732,800	OGB	100%	\$ 20,732,800	\$ -	\$ 20,732,800	\$ -
2.5.6	Conroy Tank Feed (excluding Tewin cost allocation)	11.24OG26	2034 - 2039	\$ 13,821,900	\$ -	\$ 13,821,900	12%	\$ 1,645,464	\$ 12,176,436	OGB	20%	\$ 2,415,959	\$ -	\$ 2,415,959	\$ -
	Subtotal Tewin OGB Share only			\$ 422,883,200	\$ -	\$ 422,883,200		\$ 12,505,501	\$ 410,377,699			\$ 104,351,969	\$ -	\$ 104,351,969	\$ -
<b>2.6 Eligible Watermain Pipes for Oversizing Payment</b>															
2.6.1	Mer Bleue - Watermain Oversizing (BHPB to Future Mer Bleu)	WOS2402	2024 - 2033	\$ 4,405,000	\$ 3,125,484	\$ 1,279,516	0%	\$ -	\$ 1,279,516	OGB	100%	\$ 1,279,516	\$ -	\$ 1,279,516	\$ -
	Subtotal Eligible Watermain Pipes for Oversizing Payment			\$ 4,405,000	\$ 3,125,484	\$ 1,279,516		\$ -	\$ 1,279,516			\$ 1,279,516	\$ -	\$ 1,279,516	\$ -
<b>2.7 Debt Payment</b>															
2.7.1	2W/3W Pumping Station - Principal	11.24OGD1	2024 - 2033	\$ 1,155,021	\$ -	\$ 1,155,021	0%	\$ -	\$ 1,155,021	OGB	100%	\$ 1,155,021	\$ -	\$ 1,155,021	\$ -
2.7.2	Barrhaven PS Conversion to 3C & Orleans Transmission Main - Principal	11.24OGD2	2024 - 2046	\$ 1,141,170	\$ -	\$ 1,141,170	0%	\$ -	\$ 1,141,170	OGB	100%	\$ 1,141,170	\$ -	\$ 1,141,170	\$ -
2.7.3	Barrhaven PS Conversion, Leitrim Supply Watermain, Orleans TM, - Principal	11.24OGD3	2024 - 2046	\$ 928,473	\$ -	\$ 928,473	0%	\$ -	\$ 928,473	OGB	100%	\$ 928,473	\$ -	\$ 928,473	\$ -
2.7.4	Orléans Transmission Main - Principal	11.24OGD4	2024 - 2046	\$ 18,956	\$ -	\$ 18,956	0%	\$ -	\$ 18,956	OGB	100%	\$ 18,956	\$ -	\$ 18,956	\$ -
2.7.5	Barrhaven PS Conversion to 3C - Principal	11.24OGD5	2024 - 2046	\$ 627,166	\$ -	\$ 627,166	0%	\$ -	\$ 627,166	OGB	100%	\$ 627,166	\$ -	\$ 627,166	\$ -
2.7.6	Fallowfield Rd (Reservoir to Cedarnview) - Principal	11.24OGD6	2024 - 2046	\$ 115,360	\$ -	\$ 115,360	0%	\$ -	\$ 115,360	OGB	100%	\$ 115,360	\$ -	\$ 115,360	\$ -
2.7.7	DCA-Mer Bleue Rd Reliability Links - Principal	11.24OGD7	2024 - 2046	\$ 128,899	\$ -	\$ 128,899	0%	\$ -	\$ 128,899	OGB	100%	\$ 128,899	\$ -	\$ 128,899	\$ -
2.7.8	Barrhaven Res Pump Upgrades - Principal	11.24OGD8	2024 - 2039	\$ 158,748	\$ -	\$ 158,748	0%	\$ -	\$ 158,748	OGB	100%	\$ 158,748	\$ -	\$ 158,748	\$ -
2.7.9	3C/2W Pressure Zone Separation - Principal	11.24OGD9	2024 - 2039	\$ 1,131,236	\$ -	\$ 1,131,236	0%	\$ -	\$ 1,131,236	OGB	100%	\$ 1,131,236	\$ -	\$ 1,131,236	\$ -
2.7.10	OGB - TBA - Principal		2026 - 2045	\$ 2,093,141	\$ -	\$ 2,093,141	0%	\$ -	\$ 2,093,141	OGB	100%	\$ 2,093,141	\$ -	\$ 2,093,141	\$ -
2.7.11	OGB - Authorized - Principal		2026 - 2045	\$ 674,714	\$ -	\$ 674,714	0%	\$ -	\$ 674,714	OGB	100%	\$ 674,714	\$ -	\$ 674,714	\$ -
	Subtotal Debt Payment			\$ 8,172,882	\$ -	\$ 8,172,882		\$ -	\$ 8,172,882			\$ 8,172,882	\$ -	\$ 8,172,882	\$ -

APPENDIX B.2  
TABLE B.2-2  
CITY OF OTTAWA  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
WATER

Project Description	Item Number	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	Benefiting Area	% City-Wide	Benefiting Area Costs	DC Eligible Costs			
						BTE Share (%)	Replacement & BTE Shares					Prior Growth	2024 - 2046	Post 2046	
<b>2.8 Debt Payment (Interest)</b>															
2.8.1 2W/3W Pumping Station - Interest	11.240GD1	2024 - 2033	\$ 596,200	\$ -	\$ 596,200	0%	\$ -	\$ 596,200	OGB	100%	\$ 596,200	\$ -	\$ 596,200	\$ -	
2.8.2 Barrhaven PS Conversion to 3C & Orleans Transmission Main - Interest	11.240GD2	2024 - 2046	\$ 1,703,377	\$ -	\$ 1,703,377	0%	\$ -	\$ 1,703,377	OGB	100%	\$ 1,703,377	\$ -	\$ 1,703,377	\$ -	
2.8.3 Barrhaven PS Conversion, Leitrim Supply Watermain, Orleans TM, - Interest	11.240GD3	2024 - 2046	\$ 1,385,893	\$ -	\$ 1,385,893	0%	\$ -	\$ 1,385,893	OGB	100%	\$ 1,385,893	\$ -	\$ 1,385,893	\$ -	
2.8.4 Orléans Transmission Main - Interest	11.240GD4	2024 - 2046	\$ 27,031	\$ -	\$ 27,031	0%	\$ -	\$ 27,031	OGB	100%	\$ 27,031	\$ -	\$ 27,031	\$ -	
2.8.5 Barrhaven PS Conversion to 3C - Interest	11.240GD5	2024 - 2046	\$ 894,344	\$ -	\$ 894,344	0%	\$ -	\$ 894,344	OGB	100%	\$ 894,344	\$ -	\$ 894,344	\$ -	
2.8.6 Fallowfield Rd (Reservoir to Cedarview) - Interest	11.240GD6	2024 - 2046	\$ 164,504	\$ -	\$ 164,504	0%	\$ -	\$ 164,504	OGB	100%	\$ 164,504	\$ -	\$ 164,504	\$ -	
2.8.7 DCA-Mer Bleue Rd Reliability Links - Interest	11.240GD7	2024 - 2046	\$ 183,812	\$ -	\$ 183,812	0%	\$ -	\$ 183,812	OGB	100%	\$ 183,812	\$ -	\$ 183,812	\$ -	
2.8.8 Barrhaven Res Pump Upgrades - Interest	11.240GD8	2024 - 2039	\$ 122,210	\$ -	\$ 122,210	0%	\$ -	\$ 122,210	OGB	100%	\$ 122,210	\$ -	\$ 122,210	\$ -	
2.8.9 3C/2W Pressure Zone Separation - Principal	11.240GD9	2024 - 2039	\$ 870,867	\$ -	\$ 870,867	0%	\$ -	\$ 870,867	OGB	100%	\$ 870,867	\$ -	\$ 870,867	\$ -	
2.8.10 OGB - TBA - Interest		2026 - 2045	\$ 3,460,586	\$ -	\$ 3,460,586	0%	\$ -	\$ 3,460,586	OGB	100%	\$ 3,460,586	\$ -	\$ 3,460,586	\$ -	
2.8.11 OGB - Authorized - Interest		2026 - 2045	\$ 1,115,503	\$ -	\$ 1,115,503	0%	\$ -	\$ 1,115,503	OGB	100%	\$ 1,115,503	\$ -	\$ 1,115,503	\$ -	
Subtotal Debt Payment (Interest)			\$ 10,524,326	\$ -	\$ 10,524,326		\$ -	\$ 10,524,326			\$ 10,524,326	\$ -	\$ 10,524,326	\$ -	
<b>TOTAL WATER: OUTSIDE THE GREENBELT</b>			<b>\$ 802,493,649</b>	<b>\$ 3,125,484</b>	<b>\$ 799,368,164</b>		<b>\$ 28,019,197</b>	<b>\$ 771,348,967</b>			<b>\$ 465,323,238</b>	<b>\$ -</b>	<b>\$ 465,323,238</b>	<b>\$ -</b>	
<b>TOTAL WATER</b>			<b>\$ 845,412,892</b>	<b>\$ 3,125,484</b>	<b>\$ 842,287,408</b>		<b>\$ 39,350,623</b>	<b>\$ 802,936,785</b>			<b>\$ 496,911,056</b>	<b>\$ -</b>	<b>\$ 496,911,056</b>	<b>\$ -</b>	



APPENDIX B.2  
TABLE B.2-2

CITY OF OTTAWA  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
WATER

Residential Cost Allocation By Benefitting Area				Reserve Adjs	DC Rate
<b>Inside the Greenbelt Residential Calculation</b>					
Residential Share of Eligible Costs*	73%	\$1,974,054		(\$1,085,297)	\$3,059,351
22-Year Population Growth		131,938			131,938
Unadjusted Per Charge per Capita		<b>\$14.96</b>			<b>\$23.19</b>
<b>Outside the Greenbelt Residential Calculation</b>					
Residential Share of Eligible Costs*	93%	\$430,694,936		\$11,559,633	\$419,135,303
22-Year Population Growth		200,043			200,043
Unadjusted Per Charge per Capita		<b>\$2,153.01</b>			<b>\$2,095.23</b>
<b>Rural Residential Calculation</b>					
Residential Share of Eligible Costs*	0%	\$0		\$0	\$0
22-Year Population Growth		41,292			41,292
Unadjusted Per Charge per Capita		<b>\$0.00</b>			<b>\$0.00</b>
<b>Non-Residential Calculation</b>					
Non-Residential Share of Eligible Costs		\$35,364,972		\$524,399	\$34,840,573
<b>Industrial</b>					
Non-Residential Share of Eligible Costs		\$5,082,213		\$75,360	\$5,006,853
22-Year Non-Residential Growth in GFA (m2)		1,084,086			1,084,086
Charge per Square Metre		<b>\$4.69</b>			<b>\$4.62</b>
<b>Non-Industrial</b>					
Non-Residential Share of Eligible Costs		\$30,282,758		\$449,039	\$29,833,720
22-Year Non-Residential Growth in GFA (m2)		3,831,874			3,831,874
Charge per Square Metre		<b>\$7.90</b>			<b>\$7.79</b>

\*Residential share of costs are based on forecast demand for each area

City-wide Cost Allocations					
Residential Calculation				Reserve Adjs	DC Rate
Residential Share of Eligible Costs	82%	\$23,592,586		\$6,413,892	\$17,178,694
22-Year Population Growth		379,410			379,410
Unadjusted Per Charge per Capita		<b>\$62.18</b>			<b>\$45.28</b>
<b>Non-Residential Calculation</b>					
Non-Residential Share of Eligible Costs	18%	\$5,284,508		\$1,436,649	\$3,847,859
<b>Industrial</b>					
Non-Residential Share of Eligible Costs	3%	\$759,424		\$206,457	\$552,966
22-Year Non-Residential Growth in GFA (m2)		1,084,086			1,084,086
Charge per Square Metre		<b>\$0.70</b>			<b>\$0.51</b>
<b>Non-Industrial</b>					
Non-Residential Share of Eligible Costs	16%	\$4,525,085		\$1,230,192	\$3,294,893
22-Year Non-Residential Growth in GFA (m2)		3,831,874			3,831,874
Charge per Square Metre		<b>\$1.18</b>			<b>\$0.86</b>

TOTAL DC ELIGIBLE COSTS 2019-2031 AFTER ADJUSTMENT FOR AVAILABLE DC RESERVE FUNDS

\$ 478,061,780

Reserve Fund Balance- April 2024			
	Total	Residential	Non-Res.
City-wide	\$8,285,894	\$6,769,575	\$1,516,319
IGB	(\$1,490,304)	(\$1,085,297)	(\$405,007)
OBG	\$12,489,039	\$11,559,633	\$929,406
Rural	(\$435,353)	(\$355,683)	(\$79,670)
City-wide Restated*	\$7,850,541	\$6,413,892	\$1,436,649

\*City-wide Restated includes Rural DC reserves

APPENDIX B.2  
TABLE B.2-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
WATER

CITY-WIDE RESIDENTIAL DEVELOPMENT CHARGE  
CITY-WIDE  
(in \$000)

WATER	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
OPENING CASH BALANCE	\$6,413.89	\$7,424.01	\$8,488.97	\$9,611.14	\$10,793.00	\$12,037.12	\$8,683.18	\$5,117.17	\$1,329.38	(\$2,690.28)	(\$7,006.12)	(\$11,663.20)
2024-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Water: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3,932.1	\$3,932.1	\$3,932.1	\$3,932.1	\$3,932.1	\$3,932.1	\$0.0
- Water: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,558.4	\$4,695.1	\$4,836.0	\$4,981.1	\$5,130.5	\$5,284.4	\$0.0
- Water Infrastructure: Debenture Finance Interest (1)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Water (Inflation + Debenture Financed)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,558.4	\$4,695.1	\$4,836.0	\$4,981.1	\$5,130.5	\$5,284.4	\$0.0
NEW RESIDENTIAL DEVELOPMENT												
- Growth in Population in New Units - City-Wide	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496
REVENUE												
- DC Receipts: Inflated	\$805.6	\$829.8	\$854.7	\$880.3	\$906.7	\$933.9	\$962.0	\$990.8	\$1,020.5	\$1,051.2	\$1,082.7	\$1,115.2
INTEREST												
- Interest on Opening Balance	\$192.4	\$222.7	\$254.7	\$288.3	\$323.8	\$361.1	\$260.5	\$153.5	\$39.9	(\$134.5)	(\$350.3)	(\$583.2)
- Interest on In-year Transactions	\$12.1	\$12.4	\$12.8	\$13.2	\$13.6	(\$90.6)	(\$93.3)	(\$96.1)	(\$99.0)	(\$102.0)	(\$105.0)	\$16.7
TOTAL REVENUE	\$1,010.1	\$1,065.0	\$1,122.2	\$1,181.9	\$1,244.1	\$1,204.4	\$1,129.1	\$1,048.2	\$961.4	\$814.7	\$627.3	\$548.7
CLOSING CASH BALANCE	\$7,424.0	\$8,489.0	\$9,611.1	\$10,793.0	\$12,037.1	\$8,683.2	\$5,117.2	\$1,329.4	(\$2,690.3)	(\$7,006.1)	(\$11,663.2)	(\$11,114.5)

APPENDIX B.2  
TABLE B.2-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
WATER

CITY-WIDE RESIDENTIAL DEVELOPMENT CHARGE  
CITY-WIDE  
(in \$000)

WATER	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	TOTAL
OPENING CASH BALANCE	(\$11,114.46)	(\$10,504.34)	(\$9,828.73)	(\$9,083.31)	(\$8,263.52)	(\$7,364.53)	(\$6,381.21)	(\$5,308.19)	(\$4,139.75)	(\$2,869.87)	(\$1,492.20)	
2024-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Water: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$23,592.6
- Water: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$29,485.5
- Water Infrastructure: Debenture Finance Interest (1)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Water (Inflation + Debenture Financed)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$29,485.5
NEW RESIDENTIAL DEVELOPMENT												
- Growth in Population in New Units - City-Wide	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496	16,496	379,410
REVENUE												
- DC Receipts: Inflated	\$1,148.6	\$1,183.1	\$1,218.6	\$1,255.1	\$1,292.8	\$1,331.6	\$1,371.5	\$1,412.7	\$1,455.0	\$1,498.7	\$1,543.7	\$26,144.7
INTEREST												
- Interest on Opening Balance	(\$555.7)	(\$525.2)	(\$491.4)	(\$454.2)	(\$413.2)	(\$368.2)	(\$319.1)	(\$265.4)	(\$207.0)	(\$143.5)	(\$74.6)	(\$2,788.5)
- Interest on In-year Transactions	\$17.2	\$17.7	\$18.3	\$18.8	\$19.4	\$20.0	\$20.6	\$21.2	\$21.8	\$22.5	\$23.2	(\$284.6)
TOTAL REVENUE	\$610.1	\$675.6	\$745.4	\$819.8	\$899.0	\$983.3	\$1,073.0	\$1,168.4	\$1,269.9	\$1,377.7	\$1,492.2	\$23,071.6
CLOSING CASH BALANCE	(\$10,504.3)	(\$9,828.7)	(\$9,083.3)	(\$8,263.5)	(\$7,364.5)	(\$6,381.2)	(\$5,308.2)	(\$4,139.7)	(\$2,869.9)	(\$1,492.2)	(\$0.0)	

2024 Principal Repayment Charge (2)	\$	-
2024 Adjusted Capital Cost & Finance Interest Charge Per Capita	\$	48.84
<b>Total Charge per Capita</b>	\$	<b>48.84</b>

<b>Allocation of Capital Program</b>	
Residential	81.7%
Non-Residential	18.3%
<b>Rates for 2024</b>	
Inflation Rate	3.00%
Interest Rate on Positive Balances	3.00%
Interest Rate on Negative Balances	5.00%

Notes

(1) Debenture finance interest are not inflated

(2) Principle Repayment Charge will not be indexed

APPENDIX B.2  
TABLE B.2-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
WATER

INSIDE THE GREENBELT RESIDENTIAL DEVELOPMENT CHARGE  
INSIDE THE GREENBELT  
(in \$000)

WATER	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
OPENING CASH BALANCE	(\$1,085.30)	(\$1,045.32)	(\$999.03)	(\$945.96)	(\$885.67)	(\$817.63)	(\$741.33)	(\$656.21)	(\$561.67)	(\$457.09)	(\$341.80)	(\$215.12)
2024-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Water: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Water: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Water Infrastructure: Debenture Finance Interest (1)	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1
- Water (Inflation + Debenture Financed)	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1
NEW RESIDENTIAL DEVELOPMENT												
- Growth in Population in New Units	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736
REVENUE												
- DC Receipts: Inflated	\$141.9	\$146.2	\$150.5	\$155.1	\$159.7	\$164.5	\$169.4	\$174.5	\$179.8	\$185.2	\$190.7	\$196.4
INTEREST												
- Interest on Opening Balance	(\$54.3)	(\$52.3)	(\$50.0)	(\$47.3)	(\$44.3)	(\$40.9)	(\$37.1)	(\$32.8)	(\$28.1)	(\$22.9)	(\$17.1)	(\$10.8)
- Interest on In-year Transactions	\$1.4	\$1.5	\$1.5	\$1.6	\$1.7	\$1.7	\$1.8	\$1.9	\$2.0	\$2.0	\$2.1	\$2.2
TOTAL REVENUE	\$89.0	\$95.4	\$102.1	\$109.4	\$117.1	\$125.4	\$134.2	\$143.6	\$153.6	\$164.3	\$175.7	\$187.9
CLOSING CASH BALANCE	(\$1,045.3)	(\$999.0)	(\$946.0)	(\$885.7)	(\$817.6)	(\$741.3)	(\$656.2)	(\$561.7)	(\$457.1)	(\$341.8)	(\$215.1)	(\$76.3)

APPENDIX B.2  
TABLE B.2-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
WATER

INSIDE THE GREENBELT RESIDENTIAL DEVELOPMENT CHARGE  
INSIDE THE GREENBELT  
(in \$000)

WATER	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	TOTAL
OPENING CASH BALANCE	(\$76.29)	\$75.46	\$239.45	\$414.70	\$306.18	\$192.28	\$72.77	(\$52.56)	(\$185.03)	(\$326.51)	(\$124.68)	
2024-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Water: Non Inflated	\$0.0	\$0.0	\$0.0	\$186.2	\$186.2	\$186.2	\$186.2	\$186.2	\$186.2	\$0.0	\$0.0	\$1,117.0
- Water: Inflated	\$0.0	\$0.0	\$0.0	\$290.0	\$298.7	\$307.7	\$316.9	\$326.4	\$336.2	\$0.0	\$0.0	\$1,876.1
- Water Infrastructure: Debenture Finance Interest (1)	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$49.1	\$142.9	\$1,222.2
- Water (Inflation + Debenture Financed)	\$49.1	\$49.1	\$49.1	\$339.1	\$347.8	\$356.8	\$366.0	\$375.5	\$385.3	\$49.1	\$142.9	\$3,098.3
NEW RESIDENTIAL DEVELOPMENT												
- Growth in Population in New Units	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736	5,736	131,938
REVENUE												
- DC Receipts: Inflated	\$202.3	\$208.4	\$214.6	\$221.1	\$227.7	\$234.5	\$241.6	\$248.8	\$256.3	\$264.0	\$271.9	\$4,605.2
INTEREST												
- Interest on Opening Balance	(\$3.8)	\$2.3	\$7.2	\$12.4	\$9.2	\$5.8	\$2.2	(\$2.6)	(\$9.3)	(\$16.3)	(\$6.2)	(\$436.8)
- Interest on In-year Transactions	\$2.3	\$2.4	\$2.5	(\$3.0)	(\$3.0)	(\$3.1)	(\$3.1)	(\$3.2)	(\$3.2)	\$3.2	\$1.9	\$15.2
TOTAL REVENUE	\$200.8	\$213.0	\$224.3	\$230.6	\$233.9	\$237.3	\$240.7	\$243.0	\$243.8	\$250.9	\$267.6	\$4,183.6
CLOSING CASH BALANCE	\$75.5	\$239.4	\$414.7	\$306.2	\$192.3	\$72.8	(\$52.6)	(\$185.0)	(\$326.5)	(\$124.7)	(\$0.0)	

2024 Principle Repayment Charge (2)	\$	-
2024 Adjusted Capital Cost & Finance Interest Charge Per Capita	\$	24.74
<b>Total Charge per Capita</b>	\$	<b>24.74</b>

<b>Allocation of Capital Program</b>	
Residential	72.8%
Non-Residential	27.2%
<b>Rates for 2024</b>	
Inflation Rate	3.00%
Interest Rate on Positive Balances	3.00%
Interest Rate on Negative Balances	5.00%

Notes

(1) Debenture finance interest are not inflated

(2) Principle Repayment Charge will not be indexed

APPENDIX B.2  
TABLE B.2-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
WATER

OUTSIDE THE GREENBELT RESIDENTIAL DEVELOPMENT CHARGE  
OUTSIDE THE GREENBELT  
(in \$000)

WATER	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
OPENING CASH BALANCE	\$11,559.63	\$16,279.85	\$21,281.29	\$26,361.63	\$31,742.50	\$37,437.36	(\$12,489.50)	(\$47,957.23)	(\$86,228.63)	(\$127,474.80)	(\$171,876.30)	(\$227,708.95)
2024-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Water: Non Inflated	\$14,599.3	\$14,599.3	\$14,599.3	\$14,599.3	\$14,599.3	\$61,725.5	\$47,244.6	\$47,244.6	\$47,244.6	\$47,244.6	\$53,155.1	\$6,028.9
- Water: Inflated	\$14,599.3	\$15,037.3	\$15,488.4	\$15,953.1	\$16,431.7	\$71,556.8	\$56,412.6	\$58,104.9	\$59,848.1	\$61,643.5	\$71,436.1	\$8,345.5
- Water Infrastructure: Debenture Finance Interest (1)	\$276.4	\$276.4	\$488.2	\$488.2	\$488.2	\$488.2	\$488.2	\$488.2	\$488.2	\$488.2	\$433.0	\$433.0
- Water (Inflation + Debenture Financed)	\$14,875.7	\$15,313.7	\$15,976.6	\$16,441.3	\$16,919.9	\$72,045.0	\$56,900.8	\$58,593.1	\$60,336.3	\$62,131.7	\$71,869.1	\$8,778.5
NEW RESIDENTIAL DEVELOPMENT												
- Growth in Population in New Units	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698
REVENUE												
- DC Receipts: Inflated	\$19,184.5	\$19,760.1	\$20,352.9	\$20,963.5	\$21,592.4	\$22,240.1	\$22,907.3	\$23,594.6	\$24,302.4	\$25,031.5	\$25,782.4	\$26,555.9
INTEREST												
- Interest on Opening Balance	\$346.8	\$488.4	\$638.4	\$790.8	\$952.3	\$1,123.1	(\$624.5)	(\$2,397.9)	(\$4,311.4)	(\$6,373.7)	(\$8,593.8)	(\$11,385.4)
- Interest on In-year Transactions	\$64.6	\$66.7	\$65.6	\$67.8	\$70.1	(\$1,245.1)	(\$849.8)	(\$875.0)	(\$900.8)	(\$927.5)	(\$1,152.2)	\$266.7
TOTAL REVENUE	\$19,596.0	\$20,315.2	\$21,057.0	\$21,822.1	\$22,614.7	\$22,118.1	\$21,433.0	\$20,321.7	\$19,090.1	\$17,730.2	\$16,036.4	\$15,437.1
CLOSING CASH BALANCE	\$16,279.8	\$21,281.3	\$26,361.6	\$31,742.5	\$37,437.4	(\$12,489.5)	(\$47,957.2)	(\$86,228.6)	(\$127,474.8)	(\$171,876.3)	(\$227,709.0)	(\$221,050.3)

APPENDIX B.2  
TABLE B.2-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
WATER

OUTSIDE THE GREENBELT RESIDENTIAL DEVELOPMENT CHARGE  
OUTSIDE THE GREENBELT  
(in \$000)

WATER	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	TOTAL
OPENING CASH BALANCE	(\$221,050.34)	(\$213,504.29)	(\$205,009.79)	(\$195,502.29)	(\$186,567.16)	(\$166,761.78)	(\$145,080.74)	(\$121,403.70)	(\$95,603.48)	(\$67,545.77)	(\$35,078.16)	
2024-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Water: Non Inflated	\$6,028.9	\$6,028.9	\$6,028.9	\$7,093.7	\$1,064.8	\$1,064.8	\$1,064.8	\$1,064.8	\$1,064.8	\$0.0	\$0.0	\$413,389.1
- Water: Inflated	\$8,595.8	\$8,853.7	\$9,119.3	\$11,051.8	\$1,708.6	\$1,759.9	\$1,812.7	\$1,867.1	\$1,923.1	\$0.0	\$0.0	\$511,549.3
- Water Infrastructure: Debenture Finance Interest (1)	\$433.0	\$433.0	\$433.0	\$403.4	\$373.7	\$373.7	\$373.7	\$373.7	\$373.7	\$373.7	\$471.8	\$9,741.1
- Water (Inflation + Debenture Financed)	\$9,028.9	\$9,286.7	\$9,552.3	\$11,455.1	\$2,082.4	\$2,133.6	\$2,186.4	\$2,240.8	\$2,296.8	\$373.7	\$471.8	\$521,290.4
NEW RESIDENTIAL DEVELOPMENT												
- Growth in Population in New Units	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	8,698	200,043
REVENUE												
- DC Receipts: Inflated	\$27,352.6	\$28,173.1	\$29,018.3	\$29,888.9	\$30,785.6	\$31,709.1	\$32,660.4	\$33,640.2	\$34,649.4	\$35,688.9	\$36,759.6	\$622,593.7
INTEREST												
- Interest on Opening Balance	(\$11,052.5)	(\$10,675.2)	(\$10,250.5)	(\$9,775.1)	(\$9,328.4)	(\$8,338.1)	(\$7,254.0)	(\$6,070.2)	(\$4,780.2)	(\$3,377.3)	(\$1,753.9)	(\$112,002.3)
- Interest on In-year Transactions	\$274.9	\$283.3	\$292.0	\$276.5	\$430.5	\$443.6	\$457.1	\$471.0	\$485.3	\$529.7	\$544.3	(\$860.6)
TOTAL REVENUE	\$16,574.9	\$17,781.2	\$19,059.8	\$20,390.3	\$21,887.7	\$23,814.7	\$25,863.5	\$28,041.0	\$30,354.5	\$32,841.3	\$35,550.0	\$509,730.8
CLOSING CASH BALANCE	(\$213,504.3)	(\$205,009.8)	(\$195,502.3)	(\$186,567.2)	(\$166,761.8)	(\$145,080.7)	(\$121,403.7)	(\$95,603.5)	(\$67,545.8)	(\$35,078.2)	(\$0.0)	

2024 Principle Repayment Charge (2)	\$ 33.67
2024 Adjusted Capital Cost & Finance Interest Charge Per Capita	\$ 2,205.75
<b>Total Charge per Capita</b>	<b>\$ 2,239.42</b>

<b>Allocation of Capital Program</b>	
Residential	92.6%
Non-Residential	7.4%
<b>Rates for 2024</b>	
Inflation Rate	3.00%
Interest Rate on Positive Balances	3.00%
Interest Rate on Negative Balances	5.00%

Notes

(1) Debenture finance interest are not inflated

(2) Principle Repayment Charge will not be indexed

APPENDIX B.2  
TABLE B.2-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
WATER

CITY-WIDE NON-RESIDENTIAL DEVELOPMENT CHARGE  
INDUSTRIAL  
(in \$000)

WATER	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
OPENING CASH BALANCE	\$281.8	\$371.53	\$466.55	\$564.63	\$668.43	\$778.20	\$97.71	(\$419.29)	(\$975.52)	(\$1,575.36)	(\$2,221.47)	(\$3,010.08)
2024-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS												
- Water: Non Inflated	\$168.7	\$168.7	\$168.7	\$168.7	\$168.7	\$839.8	\$672.4	\$672.4	\$672.4	\$672.4	\$740.7	\$69.7
- Water: Inflated	\$168.7	\$173.7	\$179.0	\$184.3	\$189.9	\$973.5	\$802.9	\$827.0	\$851.8	\$877.4	\$995.5	\$96.4
- Water Infrastructure: Debenture Finance Interest (1)	\$5.8	\$5.8	\$8.3	\$8.3	\$8.3	\$8.3	\$8.3	\$8.3	\$8.3	\$8.3	\$7.6	\$7.6
- Water (Inflation + Debenture Financed)	\$174.5	\$179.6	\$187.2	\$192.6	\$198.1	\$981.8	\$811.2	\$835.3	\$860.1	\$885.7	\$1,003.1	\$104.1
NEW NON-RESIDENTIAL DEVELOPMENT												
- Growth in Non-Res Non-Industrial GFA	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134
REVENUE												
- DC Receipts: Inflated	\$254.6	\$262.2	\$270.1	\$278.2	\$286.5	\$295.1	\$304.0	\$313.1	\$322.5	\$332.2	\$342.1	\$352.4
INTEREST												
- Interest on Opening Balance	\$8.5	\$11.1	\$14.0	\$16.9	\$20.1	\$23.3	\$2.9	(\$21.0)	(\$48.8)	(\$78.8)	(\$111.1)	(\$150.5)
- Interest on In-year Transactions	\$1.2	\$1.2	\$1.2	\$1.3	\$1.3	(\$17.2)	(\$12.7)	(\$13.1)	(\$13.4)	(\$13.8)	(\$16.5)	\$3.7
TOTAL REVENUE	\$264.2	\$274.6	\$285.3	\$296.4	\$307.9	\$301.3	\$294.2	\$279.1	\$260.3	\$239.5	\$214.5	\$205.6
CLOSING CASH BALANCE	\$371.5	\$466.6	\$564.6	\$668.4	\$778.2	\$97.7	(\$419.3)	(\$975.5)	(\$1,575.4)	(\$2,221.5)	(\$3,010.1)	(\$2,908.5)



APPENDIX B.2  
TABLE B.2-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
WATER

CITY-WIDE NON-RESIDENTIAL DEVELOPMENT CHARGE  
INDUSTRIAL  
(in \$000)

WATER	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	TOTAL
OPENING CASH BALANCE	(\$2,908.5)	(\$2,794.13)	(\$2,665.97)	(\$2,523.13)	(\$2,399.53)	(\$2,148.22)	(\$1,873.01)	(\$1,572.34)	(\$1,244.59)	(\$888.06)	(\$458.84)	
2024-2031 NON-RESIDENTIAL FUNDING REQUIREMENTS												
- Water: Non Inflated	\$69.7	\$69.7	\$69.7	\$91.9	\$22.3	\$22.3	\$22.3	\$22.3	\$22.3	\$0.0	\$0.0	\$5,595.7
- Water: Inflated	\$99.3	\$102.3	\$105.4	\$143.2	\$35.8	\$36.8	\$37.9	\$39.1	\$40.3	\$0.0	\$0.0	\$6,960.3
- Water Infrastructure: Debenture Finance Interest (1)	\$7.6	\$7.6	\$7.6	\$7.3	\$6.9	\$6.9	\$6.9	\$6.9	\$6.9	\$6.9	\$13.1	\$178.1
- Water (Inflation + Debenture Financed)	\$107.0	\$109.9	\$113.0	\$150.5	\$42.7	\$43.8	\$44.9	\$46.0	\$47.2	\$6.9	\$13.1	\$7,138.4
NEW NON-RESIDENTIAL DEVELOPMENT												
- Growth in Non-Res Industrial GFA	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134	47,134	1,084,086
REVENUE												
- DC Receipts: Inflated	\$363.0	\$373.8	\$385.1	\$396.6	\$408.5	\$420.8	\$433.4	\$446.4	\$459.8	\$473.6	\$487.8	\$8,261.4
INTEREST												
- Interest on Opening Balance	(\$145.4)	(\$139.7)	(\$133.3)	(\$126.2)	(\$120.0)	(\$107.4)	(\$93.7)	(\$78.6)	(\$62.2)	(\$44.4)	(\$22.9)	(\$1,387.0)
- Interest on In-year Transactions	\$3.8	\$4.0	\$4.1	\$3.7	\$5.5	\$5.7	\$5.8	\$6.0	\$6.2	\$7.0	\$7.1	(\$17.8)
TOTAL REVENUE	\$221.4	\$238.1	\$255.8	\$274.1	\$294.0	\$319.0	\$345.6	\$373.8	\$403.7	\$436.2	\$472.0	\$6,856.6
CLOSING CASH BALANCE	(\$2,794.1)	(\$2,666.0)	(\$2,523.1)	(\$2,399.5)	(\$2,148.2)	(\$1,873.0)	(\$1,572.3)	(\$1,244.6)	(\$888.1)	(\$458.8)	(\$0.0)	

2024 Principle Repayment Charge (2)	\$	0.12
2024 Adjusted Capital Cost & Finance Interest Charge Per M2	\$	5.40
<b>Total Charge per m2</b>	\$	<b>5.52</b>

<b>Allocation of Capital Program</b>	
Industrial Sector	2.6%
Non-Industrial Sector	15.7%
<b>Rates for 2024</b>	
Inflation Rate	3.00%
Interest Rate on Positive Balances	3.00%
Interest Rate on Negative Balances	5.00%

Notes

(1) Debenture finance interest are not inflated

(2) Principle Repayment Charge will not be indexed

APPENDIX B.2  
TABLE B.2-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
WATER

CITY-WIDE NON-RESIDENTIAL DEVELOPMENT CHARGE  
NON-INDUSTRIAL  
(in \$000)

WATER	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
OPENING CASH BALANCE	\$1,679.23	\$2,213.80	\$2,779.98	\$3,364.40	\$3,982.89	\$4,636.96	\$582.19	(\$2,498.34)	(\$5,812.68)	(\$9,386.90)	(\$13,236.83)	(\$17,935.79)
2024-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Water: Non Inflated	\$1,005.1	\$1,005.1	\$1,005.1	\$1,005.1	\$1,005.1	\$5,003.8	\$4,006.8	\$4,006.8	\$4,006.8	\$4,006.8	\$4,413.7	\$415.1
- Water: Inflated	\$1,005.1	\$1,035.3	\$1,066.3	\$1,098.3	\$1,131.3	\$5,800.8	\$4,784.4	\$4,927.9	\$5,075.7	\$5,228.0	\$5,931.7	\$574.6
- Water Infrastructure: Debenture Finance Interest (1)	\$34.7	\$34.7	\$49.3	\$49.3	\$49.3	\$49.3	\$49.3	\$49.3	\$49.3	\$49.3	\$45.5	\$45.5
- Water (Inflation + Debenture Financed)	\$1,039.8	\$1,070.0	\$1,115.6	\$1,147.6	\$1,180.6	\$5,850.0	\$4,833.6	\$4,977.2	\$5,125.0	\$5,277.3	\$5,977.2	\$620.0
NEW NON-RESIDENTIAL DEVELOPMENT												
- Growth in Non-Res Non-Industrial GFA	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603
REVENUE												
- DC Receipts: Inflated	\$1,516.9	\$1,562.4	\$1,609.2	\$1,657.5	\$1,707.2	\$1,758.5	\$1,811.2	\$1,865.5	\$1,921.5	\$1,979.2	\$2,038.5	\$2,099.7
INTEREST												
- Interest on Opening Balance	\$50.4	\$66.4	\$83.4	\$100.9	\$119.5	\$139.1	\$17.5	(\$124.9)	(\$290.6)	(\$469.3)	(\$661.8)	(\$896.8)
- Interest on In-year Transactions	\$7.2	\$7.4	\$7.4	\$7.6	\$7.9	(\$102.3)	(\$75.6)	(\$77.8)	(\$80.1)	(\$82.5)	(\$98.5)	\$22.2
TOTAL REVENUE	\$1,574.4	\$1,636.2	\$1,700.0	\$1,766.1	\$1,834.6	\$1,795.3	\$1,753.1	\$1,662.8	\$1,550.8	\$1,427.4	\$1,278.2	\$1,225.1
CLOSING CASH BALANCE	\$2,213.8	\$2,780.0	\$3,364.4	\$3,982.9	\$4,637.0	\$582.2	(\$2,498.3)	(\$5,812.7)	(\$9,386.9)	(\$13,236.8)	(\$17,935.8)	(\$17,330.7)

APPENDIX B.2  
TABLE B.2-3

CITY OF OTTAWA  
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE  
WATER

CITY-WIDE NON-RESIDENTIAL DEVELOPMENT CHARGE  
NON-INDUSTRIAL  
(in \$000)

WATER	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	TOTAL
OPENING CASH BALANCE	(\$17,330.75)	(\$16,649.02)	(\$15,885.36)	(\$15,034.25)	(\$14,297.77)	(\$12,800.36)	(\$11,160.45)	(\$9,368.88)	(\$7,415.99)	(\$5,291.55)	(\$2,734.02)	
2024-2031 RESIDENTIAL FUNDING REQUIREMENTS												
- Water: Non Inflated	\$415.1	\$415.1	\$415.1	\$547.9	\$132.8	\$132.8	\$132.8	\$132.8	\$132.8	\$0.0	\$0.0	\$33,342.5
- Water: Inflated	\$591.8	\$609.5	\$627.8	\$853.6	\$213.1	\$219.5	\$226.1	\$232.9	\$239.8	\$0.0	\$0.0	\$41,473.4
- Water Infrastructure: Debenture Finance Interest (1)	\$45.5	\$45.5	\$45.5	\$43.4	\$41.4	\$41.4	\$41.4	\$41.4	\$41.4	\$41.4	\$78.2	\$1,061.2
- Water (Inflation + Debenture Financed)	\$637.3	\$655.0	\$673.3	\$897.0	\$254.5	\$260.9	\$267.5	\$274.3	\$281.2	\$41.4	\$78.2	\$42,534.6
NEW NON-RESIDENTIAL DEVELOPMENT												
- Growth in Non-Res Non-Industrial GFA	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603	166,603	3,831,874
REVENUE												
- DC Receipts: Inflated	\$2,162.7	\$2,227.6	\$2,294.4	\$2,363.2	\$2,434.1	\$2,507.1	\$2,582.3	\$2,659.8	\$2,739.6	\$2,821.8	\$2,906.5	\$49,226.4
INTEREST												
- Interest on Opening Balance	(\$866.5)	(\$832.5)	(\$794.3)	(\$751.7)	(\$714.9)	(\$640.0)	(\$558.0)	(\$468.4)	(\$370.8)	(\$264.6)	(\$136.7)	(\$8,264.8)
- Interest on In-year Transactions	\$22.9	\$23.6	\$24.3	\$22.0	\$32.7	\$33.7	\$34.7	\$35.8	\$36.9	\$41.7	\$42.4	(\$106.3)
TOTAL REVENUE	\$1,319.0	\$1,418.7	\$1,524.4	\$1,633.5	\$1,751.9	\$1,900.8	\$2,059.0	\$2,227.2	\$2,405.7	\$2,598.9	\$2,812.2	\$40,855.3
CLOSING CASH BALANCE	(\$16,649.0)	(\$15,885.4)	(\$15,034.3)	(\$14,297.8)	(\$12,800.4)	(\$11,160.4)	(\$9,368.9)	(\$7,416.0)	(\$5,291.5)	(\$2,734.0)	\$0.0	

2024 Principle Repayment Charge (2)	\$	0.21
2024 Adjusted Capital Cost & Finance Interest Charge Per M2	\$	9.10
<b>Total Charge per m2</b>	\$	<b>9.31</b>

<b>Allocation of Capital Program</b>	
Industrial Sector	2.6%
Non-Industrial Sector	15.7%
<b>Rates for 2024</b>	
Inflation Rate	3.00%
Interest Rate on Positive Balances	3.00%
Interest Rate on Negative Balances	5.00%

Notes

(1) Debenture finance interest are not inflated

(2) Principle Repayment Charge will not be indexed

**Appendix C**  
**Parks and Recreation Services**  
**Technical Appendix**

# Appendix C: Parks and Recreation Services

## Technical Appendix

### Introduction and Overview

The following appendix provides the detailed analysis undertaken to establish the development charge rates for each of the services in the City of Ottawa.

Appendix C.1	Parks Development
Appendix C.2	Recreation Facilities

Each service contains two sets of tables. The tables provide the background data and analysis undertaken to arrive at the calculated development charge rates for that particular service. An overview of the content and purpose of each of the tables is given below.

### Historical Inventory Analysis and Funding Envelope Calculation

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

O. Reg. 82/98 requires that when defining and determining historical service levels, both the quantity and quality of service be taken into consideration. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet. The qualitative aspect is introduced by considering the monetary value of the facility or service. In the case of buildings, for example, the cost is shown in terms of cost per square foot to replace or

construct a facility of the same quality. This approach helps to ensure that the development-related capital facilities that are to be funded by new growth reflect not only the quantity (number and size) but also the quality (replacement value or cost) of service provided by the City in the past. Both the quantitative and qualitative aspects of service levels used in the current analysis are based on information provided by municipal staff. This information is generally based on historical records and experience with costs to acquire or construct similar facilities, equipment and infrastructure. Consistent with the practices used in the City's prior development charge background studies, the replacement cost related to land has been excluded from the historical inventory calculations.

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

The existing facilities have been examined and consideration has been given to whether "excess capacity" exists within the City's infrastructure that may be available to partially meet future servicing requirements. It has been determined that no "uncommitted excess capacity" exists within the City's general services, and as such, no adjustments have been made to the service level calculations.

### **Development-Related Capital Program: City-wide and Area-Specific**

Consistent with the City's historical practice, the general services capital programs calculate applicable development charges on a City-wide and area-specific basis. The benefitting area for each project is shown in Table 2.

The DCA requires that Council express its intent to provide future capital facilities to support anticipated growth. Based on the development forecasts presented in Appendix A, Hemson Consulting, in collaboration with City staff, has created a development-related capital program which sets out the projects required to service anticipated development for the 10-year period from mid-2024 to mid-2033. This forecast is consistent with the 2024 Provisional DC Background Study.

To determine the share of the development-related capital program eligible for recovery through development charges, the project costs are reduced by any anticipated grants and “replacement” or benefit to existing shares.

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

The capital program less any replacement or benefit to existing yields the development-related costs. Although deemed development-related, not all of the net development-related capital program may be recoverable from development charges in the 10-year period. For some of the services, a portion of the capital program will service growth beyond 2033. This portion of the capital program is either deemed “pre-built” service capacity to be considered as committed excess capacity and recovered under future development, or is a service level increase.

The remaining portion of the net capital program represents the development-related cost that may be included in the development charge. In all cases, as required, this amount is equal to or less than the maximum allowable capital amount as calculated on the final page of Table 1. The

result is the discounted development-related net capital cost that is eligible for recovery against development over the period from mid-2024 to mid-2033.

For the purposes of the DC calculations, the existing reserve funds are assumed to be paying for space, and/or servicing capacity related to development that has paid development charges, prior to the passage of the 2024 Amending DC by-law (“prior growth”). This includes development that has paid DCs but the associated servicing capacity (facility) has yet to be constructed.

### **Calculation of Development Charge Rates: City-wide and Area-Specific**

The section below the capital program displays the calculation of the applicable development charge rates. Consistent with the City’s historical growth-related practices, for the services included in this appendix, an average cost methodology is used to calculate the applicable rates.

#### **City-wide Residential and Non-Residential DCs**

The first step when determining the development charge rate is to allocate development-related net capital cost between the residential and non-residential sectors. Projects that provide a City-wide benefit have been apportioned based on shares of City-wide net population and employment growth. For City-wide projects, the development-related costs have been apportioned as approximately 79% residential and 21% non-residential.

Consistent with the City’s historical approach, the non-residential development charges for Parks and Recreation services are calculated on a uniform, City-wide basis. A nominal 5% cost allocation have been calculated on an industrial and non-industrial basis.

#### **Area-Specific DCs**

For Parks and Recreation services, area-specific projects have been identified for the following defined areas in the City: IGB, OGB and Rural. Projects identified for these areas are recovered against residential growth occurring in these respective areas while the residual non-residential costs are recovered on a City-wide basis.



## **Calculated Development Charges**

Once costs have been apportioned between the benefitting areas, the residential share of DC eligible costs are divided by the forecast population growth in new units occurring in each area to yield the residential charge per capita.

The non-residential share of DC eligible costs are divided by the forecast increase in non-residential gross floor area (GFA) to yield the non-residential charge.

# Appendix C.1

## Parks Development

# Appendix C.1 – Parks Development Technical Appendix

## A. Introduction

Parks are provided to residents in the City through a network of developed parkland, park amenities and special facilities. The assumptions included in this appendix are generally consistent with the 2024 Provisional DC Background Study. No changes have been made to the historical service level analysis. However, the capital program has been updated to reflect refinements to funding sources (e.g. use of CIL of parkland, anticipated grants etc.) no changes have been made to the overall DC rates.

This appendix provides a brief outline of historical service levels for Parks services, the 2024–2033 development-related capital forecast and calculation of the development charges. The cost, quantum and timing of the projects identified in the forecast have been provided by City staff and are based on adopted 2021 Parks and Recreation Facilities Master Plan as well as the capital budget.

Consistent with the 2014 and 2019 (Interim) DC Background Study, the infrastructure included in the Parks Development capital program has been updated to reflect current funding arrangements. For example, the 2014 DC Background Study excluded Non-District Parks (e.g. neighbourhood parks and community located within OGB and Rural area) – these projects were removed from the DC capital program as this infrastructure has been deemed to be a developer (local service) funding responsibility. In particular, the capital program includes for Urban Parks which are recovered from development occurring IGB and District Parks which are recovered on a broader City-wide benefitting area.

The following discusses the individual components included in the Parks Development service category. The analysis is set out in the tables which follow and include:

Table C.1-1 Historical Service Levels and Calculation of 15-Year Average Service Level

Table C.1-2 2024–2033 Development-Related Capital Forecast and Calculation of the Growth-Related Net Capital Costs

## **B. Benefitting Area**

Parks Development DCs continue to be calculated on both a City-wide and area-specific basis. Costs relating to District Parks are calculated on a City-wide basis and costs relating to Urban Parks are calculated on an area-specific basis IGB.

## **C. Historical Service Levels and Calculation of 15-Year Average Service Levels and Maximum Allowable Charges**

The replacement cost for hectares of parkland have been calculated based on park classification. For instance:

- Passive District Parks have a replacement cost of \$265,000 per hectare;
- Active District Parks have a replacement cost of \$844,000 per hectare;
- Urban Parks (IGB) have a replacement cost of \$2,090,000; and
- Community Trails has a replacement cost of \$603,000 per kilometre of developed trail.

It should be noted that only District and Urban parks are included in the historical inventory as Community, Neighbourhood Parks and Parkettes

located OGB and within the Rural area are not included in the DC capital program and therefore do not form part of the historical service level calculation.

Table C.1-1 provides a summary of the level of service and the calculation of the 15-year historical service level. The calculation of the maximum allowable funding envelope is summarized as follows:

**Ten-Year Funding Envelope Calculation**

<b>Average Service Level per Capita (2009 – 2023)</b>	<b>\$2,838.53</b>
<b>Net Population Growth (2024 – 2033)</b>	157,234
<b>Maximum Allowable Funding Envelope</b>	<b>\$446,313,426</b>

The existing facilities have been examined and consideration has been given to whether “excess capacity” exists within the City’s infrastructure that may be available to partially meet future servicing requirements. It has been determined that no “uncommitted excess capacity” exists within the City’s Parks infrastructure, and as such, no adjustments have been made to the service level calculations.

**D. The Development-Related Capital Program**

The 2024–2033 development-related capital forecast includes active and passive District Parks, new urban parks and parks for the City’s Secondary Plan Areas. Where possible, a park’s location and/or neighbourhood is identified. In total, the gross capital costs of the City-wide and IGB projects amount to \$155.7 million (\$81.2 million for City-wide park development and \$74.5 for IGB). The projects identified in the capital forecast will result, in whole or in part, in increased capacity to meet the servicing needs of new development over the planning period.

Paragraph 5 of s.s.5(1) of the DCA requires a deduction from the increase in the need for service attributable to the anticipated development that can be

met using the City’s “excess capacity” that is “uncommitted”. “Excess capacity” is not defined by the DCA but is considered to relate to the capacity available to meet some or all of the increase in need for service arising from development over the planning horizon. It is recognized that no “surplus” of capacity exists within Parks Development services, as the deduction of uncommitted excess capacity would occur as part of the conceptual planning and feasibility work associated with new facilities.

## **E. Calculation of Development-Related Capital Costs**

### **i. Grants, Subsidies, CIL and Other Recoveries**

Grants and subsidies of \$21.8 million have been identified for various projects in the Parks Development capital program. Approximately \$17.9 million have been identified for City-wide District Parks, while the remaining \$3.9 million relates IGB Urban Parks.

### **ii. Replacement and Benefit to Existing Shares**

The replacement and benefit to existing shares have been examined on a project-by-project basis and the nature of each project determined the rationale for reductions. The identified benefit to existing shares include costs that meet the needs of existing development, including past development.

- **City-wide Parks** – for all District Parks in the capital program a BTE share of 10% has been applied to projects recognizing that there is a nominal benefit to existing residents.
- **IGB Urban Parks** – Generally speaking, the BTE shares for Urban Parks ranges from 5 to 10% recognizing that although these projects are largely required to service the needs of future development, a nominal share will benefit existing residents.

In total, \$11.8 million is identified as the replacement and BTE share and will not be funded from development charges. Consistent with the City's historical practices, CIL contributions are used (all or in part) to fund benefit to existing shares of projects. Any CIL funds attributed to a project which are not used to fund the BTE component are removed from the DC calculation.

### **iii. Prior Growth**

Prior growth shares have been applied to projects occurring within the identified planning period. Table C.1-2 provides details on the available DC reserve fund balance, the amount used and the amount of funding remaining.

Approximately \$10.5 million in available DC reserve funds has been removed from DC eligible shares of projects relating to City-wide projects. The available IGB reserve fund balance of \$4.3 million has been applied to Urban Parks projects. In total, \$14.7 million in DC reserve funds have been removed from the development charges calculation.

### **iv. Post-2033 Benefit**

The DC eligible costs included in the Parks Development capital program are well below the maximum permissible funding envelope of \$446.3 million (shown in Table C.1-1 and C.1-2). A portion, however, of total DC eligible costs relating to District Parks will benefit development occurring over the planning period to 2033. A share of \$8.8 million has been attributed to post-2033 development that is recoverable under future DCs.

### **v. 2024-2033 In-Period Eligible Costs**

After adjustments, a total of \$93.8 million is included in the development charge calculation.

## F. Calculation of Residential and Non-Residential Development-Related Capital Costs

### i. Residential and Non-Residential Allocation

The development-related costs have been allocated 95% to residential development, as these facilities are primarily provided and planned for the residential community. A nominal 5% allocation is made for non-residential development recognizing that park facilities are used by employees working within the City of Ottawa.

The table below provides a summary of the DC eligible costs that are deemed to benefit development occurring City-wide and IGB. The “residual” shown in the area-specific non-residential summary represents the sum of the costs remaining once the residential allocations have been made.

These costs allocations and DC rate calculations are presented in Table 2.

#### Residential and Non-Residential Cost Allocations

Benefitting Area	% Allocation	Total Cost (\$)
<b>Residential</b>		
<b>Inside the Greenbelt</b>	95%	\$56,627,840
<b>Outside the Greenbelt</b>	95%	\$0
<b>Rural</b>	95%	\$0
<b>City-wide</b>	95%	\$32,469,710
<b>Subtotal Residential</b>		<b>\$89,097,550</b>
<b>Non-Residential</b>		
<b>Area-Specific</b>	Residual	\$2,980,413
<b>City-wide</b>	5%	\$1,708,932
<b>Subtotal Non-Residential</b>		<b>\$4,689,345</b>
<b>Total</b>		<b>\$93,786,894</b>



## G. Development Charge Calculation

Consistent with the City’s historical practice, an average cost methodology has been used to calculate development charges for Parks infrastructure.

The following table provides a summary of the residential and non-residential Parks Development services development charges for each of the identified benefitting areas City-wide and IGB.

### Residential and Non-Residential Development Charges

Benefitting Area	Measure	Calculated DC
<b>Residential</b>		
<b>Inside the Greenbelt</b>	\$/capita	\$842.14
<b>Outside the Greenbelt</b>	\$/capita	\$0
<b>Rural</b>	\$/capita	\$0
<b>City Wide</b>	\$/capita	\$157.71
<b>Non-Residential</b>		
<b>Area-Specific</b>	\$/square metre	\$1.40
<b>City-wide</b>	\$/square metre	\$0.80
<b>Total Non-Residential \$/m<sup>2</sup></b>		<b>\$2.21</b>

APPENDIX C.1  
TABLE C.1-1

CITY OF OTTAWA  
INVENTORY OF CAPITAL ASSETS  
PARKS DEVELOPMENT

TRAILS Description	# of km of Developed Trails															UNIT COST (\$/km)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Community Trails	110	110	110	110	110	111	112	113	113	113	113	113	113	116	119	\$603,000
<b>Total (sq.ft.)</b>	<b>110</b>	<b>110</b>	<b>110</b>	<b>110</b>	<b>110</b>	<b>111</b>	<b>112</b>	<b>113</b>	<b>113</b>	<b>113</b>	<b>113</b>	<b>113</b>	<b>113</b>	<b>116</b>	<b>119</b>	
<b>Total (\$000)</b>	<b>\$66,330.0</b>	<b>\$66,330.0</b>	<b>\$66,330.0</b>	<b>\$66,330.0</b>	<b>\$66,330.0</b>	<b>\$66,933.0</b>	<b>\$67,536.0</b>	<b>\$68,139.0</b>	<b>\$68,139.0</b>	<b>\$68,139.0</b>	<b>\$68,139.0</b>	<b>\$68,139.0</b>	<b>\$68,139.0</b>	<b>\$69,948.0</b>	<b>\$71,455.5</b>	

PARKLAND Park Name	# of Hectares of Developed Area															UNIT COST (\$/ha)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
District Parks - Passive	534	534	534	534	534	534	543	559	559	559	559	559	559	560	563	\$265,000
District Parks - Active	487	487	487	487	487	492	492	492	492	492	492	492	492	494	499	\$844,000
Urban Parks (Inside Greenbelt)	974	976	976	976	976	976	977	977	977	985	985	985	986	989	996	\$2,090,000
<b>Total (ha)</b>	<b>1,995.00</b>	<b>1,997.00</b>	<b>1,997.00</b>	<b>1,997.00</b>	<b>1,997.00</b>	<b>2,002.00</b>	<b>2,012.00</b>	<b>2,028.00</b>	<b>2,028.00</b>	<b>2,036.00</b>	<b>2,036.00</b>	<b>2,036.30</b>	<b>2,036.54</b>	<b>2,042.84</b>	<b>2,057.34</b>	
<b>Total (\$000)</b>	<b>\$2,588,198.0</b>	<b>\$2,592,378.0</b>	<b>\$2,592,378.0</b>	<b>\$2,592,378.0</b>	<b>\$2,592,378.0</b>	<b>\$2,596,598.0</b>	<b>\$2,601,073.0</b>	<b>\$2,605,313.0</b>	<b>\$2,605,313.0</b>	<b>\$2,622,033.0</b>	<b>\$2,622,033.0</b>	<b>\$2,622,660.0</b>	<b>\$2,623,161.6</b>	<b>\$2,632,924.1</b>	<b>\$2,651,524.1</b>	

Note: Only District and Urban parks are included in the historical inventory as community, neighbourhood parks and parkettes and not recovered in the DC capital program

APPENDIX C.1  
TABLE C.1-1

CITY OF OTTAWA  
CALCULATION OF SERVICE LEVELS  
PARKS DEVELOPMENT

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2018
Historical Population	854,165	868,655	883,391	893,335	903,391	913,560	923,844	934,243	951,102	968,265	985,738	1,003,526	1,021,635	1,038,426	1,056,221

INVENTORY SUMMARY (\$000)

Trails	\$66,330.0	\$66,330.0	\$66,330.0	\$66,330.0	\$66,330.0	\$66,933.0	\$67,536.0	\$68,139.0	\$68,139.0	\$68,139.0	\$68,139.0	\$68,139.0	\$68,139.0	\$69,948.0	\$71,455.5
Parkland	\$2,588,198.0	\$2,592,378.0	\$2,592,378.0	\$2,592,378.0	\$2,592,378.0	\$2,596,598.0	\$2,601,073.0	\$2,605,313.0	\$2,605,313.0	\$2,622,033.0	\$2,622,033.0	\$2,622,660.0	\$2,623,161.6	\$2,632,924.1	\$2,651,524.1
<b>Total (\$000)</b>	<b>\$2,654,528.0</b>	<b>\$2,658,708.0</b>	<b>\$2,658,708.0</b>	<b>\$2,658,708.0</b>	<b>\$2,658,708.0</b>	<b>\$2,663,531.0</b>	<b>\$2,668,609.0</b>	<b>\$2,673,452.0</b>	<b>\$2,673,452.0</b>	<b>\$2,690,172.0</b>	<b>\$2,690,172.0</b>	<b>\$2,690,799.0</b>	<b>\$2,691,300.6</b>	<b>\$2,702,872.1</b>	<b>\$2,722,979.6</b>

SERVICE LEVEL (\$/pop)

																Average Service Level
Trails	\$77.65	\$76.36	\$75.09	\$74.25	\$73.42	\$73.27	\$73.10	\$72.93	\$71.64	\$70.37	\$69.12	\$67.90	\$66.70	\$67.36	\$67.65	\$71.79
Parkland	\$3,030.09	\$2,984.36	\$2,934.58	\$2,901.91	\$2,869.61	\$2,842.29	\$2,815.49	\$2,788.69	\$2,739.26	\$2,707.97	\$2,659.97	\$2,613.44	\$2,567.61	\$2,535.50	\$2,510.39	\$2,766.74
<b>Total (\$/pop)</b>	<b>\$3,107.75</b>	<b>\$3,060.72</b>	<b>\$3,009.66</b>	<b>\$2,976.16</b>	<b>\$2,943.03</b>	<b>\$2,915.55</b>	<b>\$2,888.59</b>	<b>\$2,861.62</b>	<b>\$2,810.90</b>	<b>\$2,778.34</b>	<b>\$2,729.09</b>	<b>\$2,681.34</b>	<b>\$2,634.31</b>	<b>\$2,602.85</b>	<b>\$2,578.04</b>	<b>\$2,838.53</b>

CITY OF OTTAWA  
CALCULATION OF MAXIMUM ALLOWABLE  
PARKS DEVELOPMENT

<b>10-Year Funding Envelope Calculation</b>	
15 Year Average Service Level 2009 - 2023	\$2,838.53
Net Population Growth 2024 - 2033	157,234
<b>Maximum Allowable Funding Envelope</b>	<b>\$446,313,426</b>

APPENDIX C.1  
TABLE C.1-2

CITY OF OTTAWA  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
PARKS DEVELOPMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Funding	Net Municipal Cost	Ineligible Costs				Total DC Eligible Costs	Less: Prior Growth	DC Recoverable 2024-2033	Less: Post -2033 (Future DC Recoverable)
					BTE Share (%)	Replacement & BTE Shares	CIL used to fund BTE	Remaining BTE				
<b>4.0 PARKS DEVELOPMENT: CITY-WIDE</b>												
<b>4.1 District Parks (City-wide)</b>												
4.1.1 East Urban Community District Park - Active	2024 - 2029	\$ 4,231,700	\$ -	\$ 4,231,700	10%	\$ 423,170	\$ -	\$ 423,170	\$ 3,808,530	\$ -	\$ 3,808,530	\$ -
4.1.2 Riverside South Community - North District Park - Active	2024 - 2029	\$ 10,972,000	\$ -	\$ 10,972,000	10%	\$ 1,097,200	\$ 613,000	\$ 484,200	\$ 9,874,800	\$ 9,874,800	\$ -	\$ -
4.1.3 Fernbank Community District Park - Active	2024 - 2029	\$ 10,612,400	\$ 2,612,000	\$ 8,000,400	10%	\$ 800,040	\$ -	\$ 800,040	\$ 7,200,360	\$ 579,988	\$ 6,620,372	\$ -
4.1.4 Kanata West Community District Park - Active	2024 - 2029	\$ 3,094,500	\$ -	\$ 3,094,500	10%	\$ 309,450	\$ 1,594,641	\$ -	\$ 1,499,859	\$ -	\$ 1,499,859	\$ -
4.1.5 Jock River North District Park	2024 - 2029	\$ 12,216,000	\$ 7,923,259	\$ 4,292,741	10%	\$ 429,274	\$ 2,321,040	\$ -	\$ 1,971,701	\$ -	\$ 1,971,701	\$ -
4.1.7 Francois Dupuis District Park	2024 - 2029	\$ 12,695,000	\$ 1,095,930	\$ 11,599,070	10%	\$ 1,159,907	\$ 1,483,500	\$ -	\$ 10,115,570	\$ -	\$ 10,115,570	\$ -
4.1.8 Riverside South Community Core District Park - Active	2024 - 2029	\$ 9,262,900	\$ 6,326,000	\$ 2,936,900	10%	\$ 293,690	\$ -	\$ 293,690	\$ 2,643,210	\$ -	\$ 2,643,210	\$ -
4.1.9 1010 Somerset Urban District Park	2024 - 2029	\$ 2,152,100	\$ -	\$ 2,152,100	10%	\$ 215,210	\$ -	\$ 215,210	\$ 1,936,890	\$ -	\$ 1,936,890	\$ -
4.1.10 Bank Street S SP: Ledbury Park Expansion East (Future Albion Address)	2024 - 2033	\$ 4,000,000	\$ -	\$ 4,000,000	10%	\$ 400,000	\$ -	\$ 400,000	\$ 3,600,000	\$ -	\$ 3,600,000	\$ -
4.1.11 Lebreton Urban District Park	2024 - 2029	\$ 12,000,000	\$ -	\$ 12,000,000	10%	\$ 1,200,000	\$ -	\$ 1,200,000	\$ 10,800,000	\$ -	\$ 1,982,510	\$ 8,817,490
Subtotal District Parks (City-wide)		\$ 81,236,600	\$ 17,957,189	\$ 63,279,411		\$ 6,327,941	\$ 6,012,181	\$ 3,816,310	\$ 53,450,920	\$ 10,454,788	\$ 34,178,642	\$ 8,817,490
<b>TOTAL PARKS DEVELOPMENT: CITY-WIDE</b>		<b>\$ 81,236,600</b>	<b>\$ 17,957,189</b>	<b>\$ 63,279,411</b>		<b>\$ 6,327,941</b>	<b>\$ 6,012,181</b>	<b>\$ 3,816,310</b>	<b>\$ 53,450,920</b>	<b>\$ 10,454,788</b>	<b>\$ 34,178,642</b>	<b>\$ 8,817,490</b>

APPENDIX C.1  
TABLE C.1-2

CITY OF OTTAWA  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
PARKS DEVELOPMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Funding	Net Municipal Cost	Ineligible Costs				Total DC Eligible Costs	Less: Prior Growth	DC Recoverable 2024-2033	Less: Post -2033 (Future DC Recoverable)
					BTE Share (%)	Replacement & BTE Shares	CIL used to fund BTE	Remaining BTE				
<b>4.0 PARKS DEVELOPMENT: INSIDE GREENBELT</b>												
<b>4.2 Urban Parks</b>												
4.2.1 1770 Heatherington Road - Urban Park	2024 - 2033	\$ 873,900	\$ 503,000	\$ 370,900	10%	\$ 37,090	\$ 118,000	\$ -	\$ 252,900	\$ 252,900	\$ -	\$ -
4.2.2 West Downtown Core Secondary Plan (Dow's Lake Station): Preston / Carling & Ev Tremblay Expansion	2024 - 2033	\$ 3,550,500	\$ 681,000	\$ 2,869,500	10%	\$ 286,950	\$ 160,000	\$ 126,950	\$ 2,582,550	\$ 2,582,550	\$ -	\$ -
4.2.3 West Downtown Core Secondary Plan (Corso Italia Station): 933 Gladstone adjacent to 1010 Somerset	2024 - 2033	\$ 562,900	\$ -	\$ 562,900	10%	\$ 56,290	\$ -	\$ 56,290	\$ 506,610	\$ -	\$ 506,610	\$ -
4.2.4 West Downtown Core Secondary Plan (Corso Italia Station): 951 Gladstone	2024 - 2033	\$ 281,500	\$ -	\$ 281,500	10%	\$ 28,150	\$ -	\$ 28,150	\$ 253,350	\$ -	\$ 253,350	\$ -
4.2.5 West Downtown Core Secondary Plan (Corso Italia Station): 75 Breezehill	2024 - 2033	\$ 562,900	\$ -	\$ 562,900	10%	\$ 56,290	\$ -	\$ 56,290	\$ 506,610	\$ -	\$ 506,610	\$ -
4.2.6 West Downtown Core Secondary Plan (Corso Italia Station): Rochesterville / 818 Gladstone Piazza Dante Expansion	2024 - 2033	\$ 422,200	\$ -	\$ 422,200	10%	\$ 42,220	\$ -	\$ 42,220	\$ 379,980	\$ -	\$ 379,980	\$ -
4.2.7 West Downtown Core Secondary Plan (Corso Italia Station): Park 5 of 5	2024 - 2033	\$ 146,400	\$ -	\$ 146,400	10%	\$ 14,640	\$ -	\$ 14,640	\$ 131,760	\$ -	\$ 131,760	\$ -
4.2.8 1354-1376 Carling Avenue Urban Parkette	2024 - 2033	\$ 301,200	\$ -	\$ 301,200	10%	\$ 30,120	\$ -	\$ 30,120	\$ 271,080	\$ -	\$ 271,080	\$ -
4.2.9 Inner East Lines 1&3 Stations Secondary Plan (Blair Station): Urban Park 1 of 3	2024 - 2033	\$ 726,200	\$ -	\$ 726,200	10%	\$ 72,620	\$ -	\$ 72,620	\$ 653,580	\$ -	\$ 653,580	\$ -
4.2.10 Inner East Lines 1&3 Stations Secondary Plan (Blair Station): Urban Park 2 of 3	2024 - 2033	\$ 726,200	\$ -	\$ 726,200	10%	\$ 72,620	\$ -	\$ 72,620	\$ 653,580	\$ -	\$ 653,580	\$ -
4.2.11 Inner East Lines 1&3 Stations Secondary Plan (Blair Station): Urban Park 3 of 3	2024 - 2033	\$ 726,200	\$ -	\$ 726,200	10%	\$ 72,620	\$ -	\$ 72,620	\$ 653,580	\$ -	\$ 653,580	\$ -
4.2.12 Inner East Lines 1&3 Stations Secondary Plan (Cyrville Station): Ogilvie Park 2 of 3	2024 - 2033	\$ 699,400	\$ 287,300	\$ 412,100	5%	\$ 20,605	\$ 50,700	\$ -	\$ 361,400	\$ 361,400	\$ -	\$ -
4.2.13 Inner East Lines 1&3 Stations Secondary Plan (Cyrville Station): PDG Park 1 of 3	2024 - 2033	\$ 699,400	\$ 324,900	\$ 374,500	5%	\$ 18,725	\$ 17,100	\$ 1,625	\$ 355,775	\$ 355,775	\$ -	\$ -
4.2.14 Inner East Lines 1&3 Stations Secondary Plan (Cyrville Station): Urban Park 3 of 3	2024 - 2033	\$ 1,452,300	\$ 266,000	\$ 1,186,300	5%	\$ 59,315	\$ 47,000	\$ 12,315	\$ 1,126,985	\$ 718,562	\$ 408,423	\$ -
4.2.15 400 Albert Street: Urban Park 1 of 3	2024 - 2033	\$ 85,800	\$ -	\$ 85,800	10%	\$ 8,580	\$ -	\$ 8,580	\$ 77,220	\$ -	\$ 77,220	\$ -
4.2.16 Urban Parks Manual	2024 - 2033	\$ 301,200	\$ -	\$ 301,200	10%	\$ 30,120	\$ -	\$ 30,120	\$ 271,080	\$ -	\$ 271,080	\$ -
4.2.17 Scott Street Secondary Plan: Spencer Park 1 of 3	2024 - 2033	\$ 422,200	\$ -	\$ 422,200	10%	\$ 42,220	\$ -	\$ 42,220	\$ 379,980	\$ -	\$ 379,980	\$ -
4.2.18 Scott Street Secondary Plan: Armstrong Park Expansion 2 of 3	2024 - 2033	\$ 422,200	\$ -	\$ 422,200	10%	\$ 42,220	\$ -	\$ 42,220	\$ 379,980	\$ -	\$ 379,980	\$ -
4.2.19 Scott Street Secondary Plan: Urban Park 3 of 3	2024 - 2033	\$ 1,434,500	\$ -	\$ 1,434,500	10%	\$ 143,450	\$ -	\$ 143,450	\$ 1,291,050	\$ -	\$ 1,291,050	\$ -
4.2.20 Heron Gate: Sandalwood Park 1 of 2	2024 - 2033	\$ 2,329,000	\$ -	\$ 2,329,000	10%	\$ 232,900	\$ 700,000	\$ -	\$ 1,629,000	\$ -	\$ 1,629,000	\$ -
4.2.21 Heron Gate: Baycrest Park 2 of 2	2024 - 2033	\$ 4,221,800	\$ 283,000.0	\$ 3,938,800	10%	\$ 393,880	\$ 67,000	\$ 326,880	\$ 3,544,920	\$ -	\$ 3,544,920	\$ -
4.2.22 Urban DC Forecourt	2024 - 2033	\$ 1,844,400	\$ 560,520	\$ 1,283,880	10%	\$ 128,388	\$ 365,052	\$ -	\$ 918,828	\$ -	\$ 918,828	\$ -
4.2.23 West Downtown Core Secondary Plan (Bayview Station): 3 Urban Parks	2024 - 2033	\$ 3,492,900	\$ -	\$ 3,492,900	10%	\$ 349,290	\$ -	\$ 349,290	\$ 3,143,610	\$ -	\$ 3,143,610	\$ -
4.2.24 Lincoln Fields Secondary Plan: Carling Park 1 of 3	2024 - 2033	\$ 1,293,800	\$ -	\$ 1,293,800	10%	\$ 129,380	\$ -	\$ 129,380	\$ 1,164,420	\$ -	\$ 1,164,420	\$ -

APPENDIX C.1  
TABLE C.1-2

CITY OF OTTAWA  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
PARKS DEVELOPMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Funding	Net Municipal Cost	Ineligible Costs				Total DC Eligible Costs	Less: Prior Growth	DC Recoverable 2024-2033	Less: Post -2033 (Future DC Recoverable)
					BTE Share (%)	Replacement & BTE Shares	CIL used to fund BTE	Remaining BTE				
4.2.25 Lincoln Fields Secondary Plan: Richmond Park 2 of 3	2024 - 2033	\$ 422,200	\$ -	\$ 422,200	10%	\$ 42,220	\$ -	\$ 42,220	\$ 379,980	\$ -	\$ 379,980	\$ -
4.2.26 Lincoln Fields Secondary Plan: Cleary Park 3 of 3	2024 - 2033	\$ 562,900	\$ -	\$ 562,900	10%	\$ 56,290	\$ -	\$ 56,290	\$ 506,610	\$ -	\$ 506,610	\$ -
4.2.27 West Downtown Core Secondary Plan (Dow's Lake Station): 552 Booth (Norman Rochester Park 1 of 1)	2024 - 2033	\$ 654,400	\$ 376,585	\$ 277,815	10%	\$ 27,782	\$ 88,415	\$ -	\$ 189,400	\$ -	\$ 189,400	\$ -
4.2.28 Elmvale Acres Secondary Plan: Park 1	2024 - 2033	\$ 688,200	\$ -	\$ 688,200	10%	\$ 68,820	\$ -	\$ 68,820	\$ 619,380	\$ -	\$ 619,380	\$ -
4.2.29 Elmvale Acres Secondary Plan: Park 2 (Extension to Park 1)	2024 - 2033	\$ 562,900	\$ -	\$ 562,900	10%	\$ 56,290	\$ -	\$ 56,290	\$ 506,610	\$ -	\$ 506,610	\$ -
4.2.30 Elmvale Acres Secondary Plan: Park 3	2024 - 2033	\$ 914,700	\$ -	\$ 914,700	10%	\$ 91,470	\$ -	\$ 91,470	\$ 823,230	\$ -	\$ 823,230	\$ -
4.2.31 Hurdman & Lees Station TOD Areas: 1 of 5 320 Lees Avenue (2 Robinson)	2024 - 2033	\$ 1,310,200	\$ -	\$ 1,310,200	10%	\$ 131,020	\$ -	\$ 131,020	\$ 1,179,180	\$ -	\$ 1,179,180	\$ -
4.2.32 Hurdman & Lees Station TOD Areas: 2 of 5 Urban Park	2024 - 2033	\$ 1,310,200	\$ -	\$ 1,310,200	10%	\$ 131,020	\$ -	\$ 131,020	\$ 1,179,180	\$ -	\$ 1,179,180	\$ -
4.2.33 Hurdman & Lees Station TOD Areas: 3 of 5 Urban Park	2024 - 2033	\$ 1,310,200	\$ -	\$ 1,310,200	10%	\$ 131,020	\$ -	\$ 131,020	\$ 1,179,180	\$ -	\$ 1,179,180	\$ -
4.2.34 Hurdman & Lees Station TOD Areas: 4 of 5 Urban Park	2024 - 2033	\$ 250,000	\$ -	\$ 250,000	10%	\$ 25,000	\$ -	\$ 25,000	\$ 225,000	\$ -	\$ 225,000	\$ -
4.2.35 Hurdman & Lees Station TOD Areas: 5 of 5 Urban Park	2024 - 2033	\$ 250,000	\$ -	\$ 250,000	10%	\$ 25,000	\$ -	\$ 25,000	\$ 225,000	\$ -	\$ 225,000	\$ -
4.2.36 West Downtown Core Secondary Plan (Pimisi Station and Lebreton Flats): Lett St Park 1 of 1	2024 - 2033	\$ 723,300	\$ -	\$ 723,300	5%	\$ 36,165	\$ -	\$ 36,165	\$ 687,135	\$ -	\$ 687,135	\$ -
4.2.37 Sherbourne and New Orchard Secondary Plan (Sherbourne Station): 30 Cleary Avenue - park requested at the pre-consult	2024 - 2033	\$ 521,700	\$ -	\$ 521,700	5%	\$ 26,085	\$ -	\$ 26,085	\$ 495,615	\$ -	\$ 495,615	\$ -
4.2.38 Sherbourne and New Orchard Secondary Plan (Sherbourne Station): 801 809 Richmond Road	2024 - 2033	\$ 140,700	\$ -	\$ 140,700	5%	\$ 7,035	\$ -	\$ 7,035	\$ 133,665	\$ -	\$ 133,665	\$ -
4.2.39 Sherbourne and New Orchard Secondary Plan (500m to New Orchard Station): 2085 Carling Avenue / Carlingwood redevelopment	2024 - 2033	\$ 112,600	\$ -	\$ 112,600	5%	\$ 5,630	\$ -	\$ 5,630	\$ 106,970	\$ -	\$ 106,970	\$ -
4.2.40 Sherbourne and New Orchard Secondary Plan - 1047 Richmond	2024 - 2033	\$ 281,500	\$ -	\$ 281,500	5%	\$ 14,075	\$ -	\$ 14,075	\$ 267,425	\$ -	\$ 267,425	\$ -
4.2.41 Sherbourne and New Orchard Secondary Plan (700m to New Orchard Station): 2175 Carling - Ancaster Park	2024 - 2033	\$ 140,700	\$ -	\$ 140,700	5%	\$ 7,035	\$ -	\$ 7,035	\$ 133,665	\$ -	\$ 133,665	\$ -
4.2.42 Sherbourne and New Orchard Secondary Plan:	2024 - 2033	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500	\$ 237,500	\$ -	\$ 237,500	\$ -
4.2.43 Sherbourne and New Orchard Secondary Plan:	2024 - 2033	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500	\$ 237,500	\$ -	\$ 237,500	\$ -
4.2.44 Pinecrest-Queensview Secondary Plan Study: 2 parks and 1 Expansion in next 5 years (2029)	2024 - 2033	\$ 2,300,000	\$ -	\$ 2,300,000	10%	\$ 230,000	\$ -	\$ 230,000	\$ 2,070,000	\$ -	\$ 2,070,000	\$ -
4.2.45 Pinecrest and Queensview Secondary Plan Study (N of HWY): 3 new parks, 1 park expansion - Ruth Wildgen	2024 - 2033	\$ 3,236,700	\$ -	\$ 3,236,700	10%	\$ 323,670	\$ -	\$ 323,670	\$ 2,913,030	\$ -	\$ 2,913,030	\$ -
4.2.46 Pinecrest and Queensview Secondary Plan Study (S of HWY): 3 new parks, 1 park expansion - Parkway Park	2024 - 2033	\$ 3,236,700	\$ -	\$ 3,236,700	10%	\$ 323,670	\$ -	\$ 323,670	\$ 2,913,030	\$ -	\$ 2,913,030	\$ -
4.2.47 St. Laurent Station TOD Plan: 599 Tremblay Rd (development application address)	2024 - 2033	\$ 1,286,200	\$ 600,000	\$ 686,200	5%	\$ 34,310	\$ 100,000	\$ -	\$ 586,200	\$ -	\$ 586,200	\$ -
4.2.48 St. Laurent Station TOD Plan: 400 Coventry Road (St Laurant TOD)	2024 - 2033	\$ 703,600	\$ -	\$ 703,600	5%	\$ 35,180	\$ -	\$ 35,180	\$ 668,420	\$ -	\$ 668,420	\$ -
4.2.49 St. Laurent Station TOD Plan: 500 Coventry Road - St. Laurent TOD/Inner East	2024 - 2033	\$ 1,286,200	\$ -	\$ 1,286,200	5%	\$ 64,310	\$ -	\$ 64,310	\$ 1,221,890	\$ -	\$ 1,221,890	\$ -
4.2.50 Lines 1 and 3 Stations Secondary Plan	2024 - 2033	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500	\$ 237,500	\$ -	\$ 237,500	\$ -
4.2.51 St. Laurent Station TOD Plan: Park 4 of 4	2024 - 2033	\$ 984,400	\$ -	\$ 984,400	5%	\$ 49,220	\$ -	\$ 49,220	\$ 935,180	\$ -	\$ 935,180	\$ -
4.2.52 Tremblay Station TOD Plan: 1330 Avenue K (25 Pickering)	2024 - 2033	\$ 984,400	\$ -	\$ 984,400	5%	\$ 49,220	\$ -	\$ 49,220	\$ 935,180	\$ -	\$ 935,180	\$ -
4.2.53 Tremblay Station TOD Plan: Park 2 of 4	2024 - 2033	\$ 984,400	\$ -	\$ 984,400	5%	\$ 49,220	\$ -	\$ 49,220	\$ 935,180	\$ -	\$ 935,180	\$ -
4.2.54 Tremblay Station TOD Plan: Park 3 of 4	2024 - 2033	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500	\$ 237,500	\$ -	\$ 237,500	\$ -
4.2.55 Tremblay Station TOD Plan: Park 4 of 4	2024 - 2033	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500	\$ 237,500	\$ -	\$ 237,500	\$ -
Subtotal Urban Parks		\$ 53,003,600	\$ 3,882,305	\$ 49,121,295		\$ 4,422,720	\$ 1,713,267	\$ 3,650,545	\$ 43,757,483	\$ 4,271,187	\$ 39,486,296	\$ -

APPENDIX C.1  
TABLE C.1-2

CITY OF OTTAWA  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
PARKS DEVELOPMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Funding	Net Municipal Cost	Ineligible Costs				Total DC Eligible Costs	Less: Prior Growth	DC Recoverable 2024-2033	Less: Post -2033 (Future DC Recoverable)
					BTE Share (%)	Replacement & BTE Shares	CL used to fund BTE	Remaining BTE				
<b>4.3 New Urban Parks</b>												
4.3.1 Central and East Downtown Core Secondary Plan: 267 O'Connor (expansion of POPs)	2024 - 2033	\$ 500,000	\$ -	\$ 500,000	5%	\$ 25,000	\$ -	\$ 25,000.0	\$ 475,000	\$ -	\$ 475,000	\$ -
4.3.1 Bank Street South Secondary Plan: Riverside to CN Rail - Greenway Linear Park	2024 - 2033	\$ 1,103,000	\$ -	\$ 1,103,000	5%	\$ 55,150	\$ -	\$ 55,150.0	\$ 1,047,850	\$ -	\$ 1,047,850	\$ -
4.3.1 Bank Street South Secondary Plan: Billings Bridge	2024 - 2033	\$ 1,103,000	\$ -	\$ 1,103,000	5%	\$ 55,150	\$ -	\$ 55,150.0	\$ 1,047,850	\$ -	\$ 1,047,850	\$ -
4.3.1 South Keys Secondary Plan: 2200 Bank Street (South Phase): Transit Plaza	2024 - 2033	\$ 1,635,378	\$ -	\$ 1,635,378	5%	\$ 81,769	\$ -	\$ 81,768.9	\$ 1,553,609	\$ -	\$ 1,553,609	\$ -
4.3.1 1451 Wellington Street / 355 Island Park Drive (Rockhurst Parkette)	2024 - 2033	\$ 189,800	\$ -	\$ 189,800	5%	\$ 9,490	\$ -	\$ 9,490.0	\$ 180,310	\$ -	\$ 180,310	\$ -
4.3.1 70 / 80 Woodridge Crescent (Bayshore Station)	2029 - 2029	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500.0	\$ 237,500	\$ -	\$ 237,500	\$ -
4.3.1 2946 Baseline Brigil	2029 - 2029	\$ 800,000	\$ -	\$ 800,000	5%	\$ 40,000	\$ -	\$ 40,000.0	\$ 760,000	\$ -	\$ 760,000	\$ -
4.3.1 1500 Merivale Road Claridge	2028 - 2028	\$ 1,185,800	\$ -	\$ 1,185,800	5%	\$ 59,290	\$ -	\$ 59,290.0	\$ 1,126,510	\$ -	\$ 1,126,510	\$ -
4.3.1 780 Baseline Road Theberge Homes	2029 - 2029	\$ 337,900	\$ -	\$ 337,900	5%	\$ 16,895	\$ -	\$ 16,895.0	\$ 321,005	\$ -	\$ 321,005	\$ -
4.3.1 Chapel St-parkette	2024 - 2033	\$ 101,700	\$ -	\$ 101,700	5%	\$ 5,085	\$ -	\$ 5,085.0	\$ 96,615	\$ -	\$ 96,615	\$ -
4.3.1 200 Barribeau (addition to St Ambrose Park)	2025 - 2025	\$ 286,200	\$ -	\$ 286,200	5%	\$ 14,310	\$ -	\$ 14,310.0	\$ 271,890	\$ -	\$ 271,890	\$ -
4.3.1 Montreal and Selkirk	2024 - 2033	\$ 355,100	\$ -	\$ 355,100	5%	\$ 17,755	\$ -	\$ 17,755.0	\$ 337,345	\$ -	\$ 337,345	\$ -
4.3.1 112 Montreal	2024 - 2033	\$ 266,900	\$ -	\$ 266,900	5%	\$ 13,345	\$ -	\$ 13,345.0	\$ 253,555	\$ -	\$ 253,555	\$ -
4.3.1 Manor Park 1/2-south (Manor Park SP)	2028 - 2028	\$ 2,044,500	\$ -	\$ 2,044,500	5%	\$ 102,225	\$ -	\$ 102,225.0	\$ 1,942,275	\$ -	\$ 1,942,275	\$ -
4.3.1 Manor Park 2/2-north (Manor Park SP)	2029 - 2029	\$ 1,549,500	\$ -	\$ 1,549,500	5%	\$ 77,475	\$ -	\$ 77,475.0	\$ 1,472,025	\$ -	\$ 1,472,025	\$ -
4.3.1 1081 Carling Avenue	2029 - 2029	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500.0	\$ 237,500	\$ -	\$ 237,500	\$ -
4.3.1 1705 Carling	2024 - 2024	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500.0	\$ 237,500	\$ -	\$ 237,500	\$ -
4.3.1 320 McCrae	2024 - 2024	\$ 336,000	\$ -	\$ 336,000	5%	\$ 16,800	\$ -	\$ 16,800.0	\$ 319,200	\$ -	\$ 319,200	\$ -
4.3.1 Lion's Park expansion (150m to westboro station)	2025 - 2025	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500.0	\$ 237,500	\$ -	\$ 237,500	\$ -
4.3.1 861 Clyde - new park along Clyde	2029 - 2029	\$ 581,100	\$ -	\$ 581,100	5%	\$ 29,055	\$ -	\$ 29,055.0	\$ 552,045	\$ -	\$ 552,045	\$ -
4.3.1 Riverside and Hunt Club - New Park extension and trail	2024 - 2033	\$ 1,000,000	\$ -	\$ 1,000,000	5%	\$ 50,000	\$ -	\$ 50,000.0	\$ 950,000	\$ -	\$ 950,000	\$ -
4.3.1 1640-1660 Carling Avenue - new park at Carling and Clyde (Canadian Tire)	2029 - 2029	\$ 1,094,600	\$ -	\$ 1,094,600	5%	\$ 54,730	\$ -	\$ 54,730.0	\$ 1,039,870	\$ -	\$ 1,039,870	\$ -
4.3.1 3071 / 3095 Riverside Drive	2025 - 2025	\$ 1,291,300	\$ -	\$ 1,291,300	5%	\$ 64,565	\$ -	\$ 64,565.0	\$ 1,226,735	\$ -	\$ 1,226,735	\$ -
4.3.1 299 Carling CLC	2026 - 2026	\$ 236,700	\$ -	\$ 236,700	5%	\$ 11,835	\$ -	\$ 11,835.0	\$ 224,865	\$ -	\$ 224,865	\$ -
4.3.1 1600 James Naismith	2024 - 2033	\$ 818,300	\$ -	\$ 818,300	5%	\$ 40,915	\$ -	\$ 40,915.0	\$ 777,385	\$ -	\$ 777,385	\$ -
4.3.1 2510 St Laurent	2024 - 2033	\$ 1,134,200	\$ -	\$ 1,134,200	5%	\$ 56,710	\$ -	\$ 56,710.0	\$ 1,077,490	\$ -	\$ 821,017	\$ 256,473
4.3.1 1765 Montreal & 9 Beckham	2024 - 2033	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500.0	\$ 237,500	\$ -	\$ 237,500	\$ -
4.3.1 Central and East Downtown Core Secondary Plan: 381 Kent Street	2024 - 2033	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500.0	\$ 237,500	\$ -	\$ 237,500	\$ -
4.3.1 265 Catherine Street	2024 - 2033	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500.0	\$ 237,500	\$ -	\$ 237,500	\$ -
4.3.1 335 Roosevelt Avenue	2024 - 2033	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500.0	\$ 237,500	\$ -	\$ 237,500	\$ -
4.3.1 1919 / 1967 Riverside Drive	2024 - 2033	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500.0	\$ 237,500	\$ -	\$ 237,500	\$ -
4.3.1 1495 Heron Road	2024 - 2033	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500.0	\$ 237,500	\$ -	\$ 237,500	\$ -
4.3.1 1244 Kilborn Avenue	2024 - 2033	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500.0	\$ 237,500	\$ -	\$ 237,500	\$ -
4.3.1 1740 / 1754 / 1760 St-Laurent Boulevard	2024 - 2033	\$ 250,000	\$ -	\$ 250,000	5%	\$ 12,500	\$ -	\$ 12,500.0	\$ 237,500	\$ -	\$ 237,500	\$ -
4.3.1 LeBretton Lett St park	2024 - 2033	\$ 500,000	\$ -	\$ 500,000	5%	\$ 25,000	\$ -	\$ 25,000.0	\$ 475,000	\$ -	\$ 475,000	\$ -
Subtotal New Urban Parks		\$ 21,450,978	\$ -	\$ 21,450,978		\$ 1,072,549	\$ -	\$ 1,072,548.9	\$ 20,378,429	\$ -	\$ 20,121,956	\$ 256,473
<b>TOTAL PARKS DEVELOPMENT: INSIDE GREENBELT</b>		<b>\$ 74,454,578</b>	<b>\$ 3,882,305</b>	<b>\$ 70,572,273</b>		<b>\$ 5,495,268</b>	<b>\$ 1,713,267</b>	<b>\$ 4,723,094</b>	<b>\$ 64,135,912</b>	<b>\$ 4,271,187</b>	<b>\$ 59,608,252</b>	<b>\$ 256,473</b>

<b>TOTAL PARKS DEVELOPMENT</b>		<b>\$ 155,691,178</b>	<b>\$ 21,839,494.0</b>	<b>\$ 133,851,684</b>		<b>\$ 11,823,210</b>	<b>\$ 7,725,448</b>	<b>\$ 8,539,404</b>	<b>\$ 117,586,832</b>	<b>\$ 14,725,975</b>	<b>\$ 93,786,894</b>	<b>\$ 9,073,963</b>
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APPENDIX C.1

TABLE C.1-2

CITY OF OTTAWA  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
PARKS DEVELOPMENT

Cost Allocation By Benefitting Area			
<b>Residential Calculation</b>			
<b>Inside the Greenbelt Residential Calculation</b>			
Residential Share of Eligible Costs	95%	\$	56,627,840
10 Year Population Growth			67,243
Charge per Capita			<b>\$842.14</b>
<b>Outside the Greenbelt Residential Calculation</b>			
Residential Share of Eligible Costs	95%	\$	-
10 Year Population Growth			103,007
Charge per Capita			<b>\$0.00</b>
<b>Rural Residential Calculation</b>			
Residential Share of Eligible Costs	95%	\$	-
10 Year Population Growth			21,166
Charge per Capita			<b>\$0.00</b>
<b>Non-Residential Calculation</b>			
Non-Residential Share of Eligible Costs			<b>\$2,980,413</b>
10 Year Non-Residential Growth in GFA (m2)			2,126,261
Charge per Square Metre			<b>\$1.40</b>

City-wide Cost Allocations (Residential and Non-Residential)			
<b>Residential Calculation</b>			
Residential Share of Eligible Costs	95%	\$	32,469,710
10 Year Employment Growth			205,888
Unadjusted Per Unit Charge			<b>\$157.71</b>
<b>Non-Residential Calculation</b>			
Non-Residential Share of Eligible Costs	5%	\$	1,708,932
10 Year Non-Residential Growth in GFA (m2)			2,126,261
Charge per Square Metre			<b>\$0.80</b>

Available DC Reserve Fund Balance			
	Total	Amount Used	Remaining
City-wide	\$10,454,788	\$10,454,788	\$0
IGB	\$4,271,187	\$4,271,187	\$0
OGB	\$0	\$0	\$0
Rural	\$0	\$0	\$0
<b>Total</b>	<b>\$14,725,975</b>	<b>\$14,725,975</b>	<b>\$0</b>

(1) Portion of OGB and Rural available reserve fund balance is applied to City-wide projects

2024 - 2033 Net Funding Envelope	\$446,313,426
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# Appendix C.2

## Recreation Facilities

# Appendix C.2 – Recreation Facilities Technical Appendix

Recreation services are provided to residents in the City through a range of facilities including recreation complexes; community centres and buildings; fieldhouses; indoor pool, ice pad and soccer facilities, outdoor skate parks and pools; stadiums and a sportsfield. Similar to Parks Services, no changes are proposed to the historical service level analysis contained in the Provisional 2024 DC Background Study. The capital program has been updated to reflect refinements to funding sources (e.g. use of CIL of parkland, anticipated grants etc.) no changes have been made to the overall DC rates.

This appendix provides a brief outline of historical service levels for Recreation Facilities services, the 2024–2033 development-related capital forecast and calculation of the development charges. The cost, quantum and timing of the projects identified in the forecast are based on the projects identified in the 2014 and 2019 (Interim) DC Background Studies, adjusted to account for expenditures and increases in project costs (i.e. indexing). The projects are further informed based on Council-approved capital budgets and Parks and Recreation Facilities Master Plan.

The following discusses the individual components included in the Recreation Facilities service category. The analysis is set out in the tables which follow and include:

Table C.2-1	Historical Service Levels and Calculation of 15-Year Average Service Level
Table C.2-2	2024–2033 Development-Related Capital Forecast and Calculation of the Growth-Related Net Capital Costs

## H. Benefitting Area

The City’s Recreation Facilities development charges is calculated on both a City-wide and area-specific basis. The smaller benefitting areas are defined as: IGB, OGB and Rural area.

## I. Historical Service Levels and Calculation of 15-Year Average Service Levels and Maximum Allowable Charges

The replacement costs for Recreation Facilities are based on recent estimates provided by City staff. Consistent with the City’s prior DC Background Studies, no land has been included in the historical inventory calculation.

Table C.2-1 provides a summary of the level of service and the calculation of the 15-year historical service level. The calculation of the maximum allowable funding envelope is summarized as follows:

### Ten-Year Funding Envelope Calculation

<b>Average Service Level per Capita (2009 – 2023)</b>	<b>\$3,577.86</b>
<b>Net Population Growth (2024 – 2033)</b>	157,2234
<b>Maximum Allowable Funding Envelope</b>	<b>\$562,561,239</b>

The existing facilities have been examined and consideration has been given to whether “excess capacity” exists within the City’s infrastructure that may be available to partially meet future servicing requirements. It has been determined that no “uncommitted excess capacity” exists within the City’s parks infrastructure, and as such, no adjustments have been made to the service level calculations.

## **J. The Development-Related Capital Program**

The 2024–2033 development-related capital forecast includes a variety of projects for the provision of Recreation Facilities in the City and amounts to a total gross cost of \$665.2 million. The projects identified in the capital forecast will result, in whole or in part, in increased capacity to meet the servicing needs of new development over the planning period.

The capital program provides for new outdoor aquatic facilities, indoor skate parks and studios that will provide a benefit to development occurring on a City-wide basis. Consistent with the City’s historical practice, smaller recreation facilities that provide a more localized benefit (e.g. community centres) are recovered based on smaller geographic areas.

The capital program also includes for the recovery of principal and interest payments related to the construction of existing Recreation Facilities. In accordance with the DCA, eligible capital expenditures include costs incurred or to be incurred by a municipality and can include interest on money borrowed (s.5(3)). This category includes projects identified in previous Development Charge By-laws with committed funding that are completed or will be completed in the future.

Paragraph 5 of s.s.5(1) of the DCA requires a deduction from the increase in the need for service attributable to the anticipated development that can be met using the City’s “excess capacity” that is “uncommitted”. “Excess capacity” is undefined in the DCA but is considered to relate to the capacity available to meet some or all the increase in need for service in order to potentially represent a deduction. It is recognized that no “surplus” of capacity exists within Recreation Facilities services as the deduction of uncommitted excess capacity would occur as part of the conceptual planning and feasibility work associated with planning new facilities.

## **K. Calculation of Development-Related Capital Costs**

### **i. Grants, Subsidies, CIL and Other Recoveries**

Grants and subsidies of \$72.9 million have been identified for the Recreation Facilities capital program. Grants, subsidies and other recoveries reflect shares of projects which have already received DC funding. This includes \$33.2 million in funding applied to the Riverside South Recreation Complex and other facilities located in the OGB area. A further \$16.8 million in other recoveries have been reduced from the IGB area Recreation project costs. A further \$892,000 has been reduced from the Rural recreation project costs.

### **ii. Replacement and Benefit to Existing Shares**

The replacement and benefit to existing shares have been examined on a project-by-project basis and the nature of each project determined the rationale for reductions. The identified benefit to existing shares include costs that meet the needs of existing development, including past development. Shares have been deducted from the net cost of projects that account for portions of the overall cost that relate to state of good repair or the replacement or reconstruction of existing facilities.

As stated in the 2024 Provisional DC Background Study, the benefit to existing shares are consistent with the approach utilized in the 2014 and 2019 DC Background Studies. For example, a minimum of a 5% BTE share has been applied to most new community centre space. For larger facilities that are intended to meet both existing and future needs, a higher BTE share has been applied. It should be noted that the identified debenture payments are entirely related to new development, as these only address net growth-related capital costs.

For the purposes of the DC study calculations, the existing reserve funds are assumed to be paying for space and/or servicing capacity, which is in addition to this requirement and relates to development that occurred prior

to the passage of the 2024 DC by-law (“prior growth”) that has paid DCs but has yet to receive new facilities. As such, a significant portion of the Riverside South Recreation Complex (\$75.6 million) is funded from the City’s available reserve fund balance for OGB.

In total, \$90.5 million is identified as the replacement and benefit to existing share. These costs will not be funded from future DC requirements.

Consistent with the City’s historical practices, CIL contributions are used (all or in part) to fund benefit to existing shares of projects. Any CIL funds attributed to a project which are not used to fund the BTE component are removed from the DC calculation.

### **iii. Prior Growth**

Available DC reserve funds have been applied to projects occurring within the identified planning period. Table C.2-2 provides details on the available DC reserve fund balance, the amount used and the amount of funding remaining

In total, \$12.2 million in available DC reserve funds have been removed from City-wide DC eligible costs, \$93.2 million has been removed from OGB DC eligible costs and \$1.4 million has been removed from Rural DC eligible costs.

### **iv. Post-2033 Benefit**

The DC eligible costs included in the Recreation Facilities capital program is well below the maximum permissible funding envelope of \$562.6 million (shown in Table C.2-1 and C.2-2). Some of the projects, however, have been deemed to provide benefit beyond the 2033 planning period and \$67.7 million has been removed from the DC calculation to be recovered under future DCs.

### **v. 2024-2033 In-Period Eligible Costs**

After these adjustments, a total of \$313.9 million is included in the development charge calculation.

## L. Calculation of Residential and Non-Residential Development-Related Capital Costs

### i. Residential and Non-Residential Allocation

The development-related costs have generally been allocated 95% to residential development, as these facilities are primarily provided and planned for the residential community. A nominal 5% allocation is made for non-residential development recognizing that Recreation Facilities are used by employees working within the City of Ottawa.

The table below provides a summary of the DC eligible costs that are deemed to benefit development occurring City-wide, IGB, OGB and Rural areas. The “residual” shown in the area-specific non-residential summary represents the sum of the costs remaining once the residential allocations have been made to the benefitting areas.

These costs allocations and DC rate calculations are presented in Table C.2-2.

#### Residential and Non-Residential Cost Allocations

Benefitting Area	% Allocation	Total Cost (\$)
<b>Residential</b>		
Inside the Greenbelt	95%	\$40,478,450
Outside the Greenbelt	95%	\$54,257,493
Rural	95%	\$572,467
City Wide	95%	\$202,871,458
<b>Subtotal Residential</b>		<b>\$289,179,868</b>
<b>Non-Residential</b>		
Area-Specific	Residual	\$5,106,232
City-wide	5%	\$10,677,445
<b>Subtotal Non-Residential</b>		<b>\$15,693,677</b>
<b>Total:</b>		<b>\$313,873,545</b>

## M. Development Charge Calculation

Consistent with the City’s historical practice, an average cost methodology has been used to calculate development charges for Recreation services.

The following table provides a summary of the residential and non-residential Recreation Facilities development charges for each of the identified benefitting areas.

### Residential and Non-Residential Development Charges

Benefitting Area	Measure	Calculated DC
<b>Residential</b>		
Inside the Greenbelt	\$/capita	\$601.97
Outside the Greenbelt	\$/capita	\$461.66
Rural	\$/capita	\$27.05
City Wide	\$/capita	\$985.35
<b>Non-Residential</b>		
Area-Specific	\$/square metre	\$2.36
City-wide	\$/square metre	\$5.02
<b>Total Non-Residential \$/m<sup>2</sup></b>		<b>\$7.38</b>



APPENDIX C.2  
TABLE C.2-1

CITY OF OTTAWA  
INVENTORY OF CAPITAL ASSETS  
RECREATION FACILITIES

BUILDINGS Facility Name	# of Square Feet															UNIT COST (\$/sq. ft.)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Recreation Complex	1,681,168	1,681,168	1,696,238	1,696,238	1,819,220	1,819,220	2,119,220	2,119,220	2,119,220	2,130,320	2,130,320	2,130,320	2,130,320	2,130,320	2,130,320	\$700
Community Centre	882,000	898,250	914,400	922,220	922,220	922,220	922,220	927,720	928,900	932,200	934,934	934,934	934,934	934,934	934,934	\$1,004
Community Building	52,863	52,863	52,863	52,863	55,875	55,875	55,875	55,875	56,650	56,650	60,150	60,150	60,150	64,350	69,650	\$1,343
Fieldhouse	180,683	180,683	183,912	183,912	183,912	183,912	183,912	184,287	184,287	184,287	184,287	184,287	184,287	184,287	185,387	\$1,364
Indoor Pool	502,680	506,575	506,575	506,575	506,575	506,575	506,575	506,575	506,575	506,575	506,575	506,575	506,575	506,575	506,575	\$700
Indoor Ice Pad	56,725	56,725	56,725	56,725	56,725	56,725	56,725	56,725	75,405	75,405	75,405	75,405	82,326	82,326	82,326	\$888
Indoor Soccer	142,200	142,200	142,200	142,200	142,200	142,200	142,200	142,200	142,200	142,200	142,200	142,200	142,200	142,200	142,200	\$100
Outdoor District Skateboard Park	39,720	39,720	39,720	39,720	51,850	59,650	59,650	69,850	69,850	69,850	69,850	69,850	69,850	69,850	69,850	\$0
Outdoor Pool	10,835	10,835	10,835	10,835	10,835	10,835	10,835	10,835	10,835	10,835	27,543	27,543	27,543	27,543	44,251	\$300
Stadium	440,420	440,420	440,420	440,420	440,420	440,420	440,420	440,420	440,420	440,420	440,420	440,420	440,420	440,420	440,420	\$700
Sportsfield (Lansdowne)	72,647	72,647	72,647	72,647	72,647	72,647	72,647	72,647	72,647	72,647	72,647	72,647	72,647	72,647	72,647	\$100
<b>Total (sq.ft.)</b>	<b>4,061,941</b>	<b>4,082,086</b>	<b>4,116,535</b>	<b>4,124,355</b>	<b>4,262,479</b>	<b>4,270,279</b>	<b>4,570,279</b>	<b>4,586,354</b>	<b>4,618,089</b>	<b>4,621,389</b>	<b>4,644,331</b>	<b>4,644,331</b>	<b>4,651,252</b>	<b>4,655,452</b>	<b>4,678,560</b>	
<b>Total (\$000)</b>	<b>\$3,115,279.5</b>	<b>\$3,134,325.8</b>	<b>\$3,165,497.5</b>	<b>\$3,173,351.1</b>	<b>\$3,263,483.6</b>	<b>\$3,263,483.6</b>	<b>\$3,473,483.6</b>	<b>\$3,479,518.6</b>	<b>\$3,506,106.1</b>	<b>\$3,509,420.3</b>	<b>\$3,521,878.9</b>	<b>\$3,521,878.9</b>	<b>\$3,528,026.2</b>	<b>\$3,533,666.8</b>	<b>\$3,547,297.1</b>	

APPENDIX C.2  
TABLE C.2-1

CITY OF OTTAWA  
CALCULATION OF SERVICE LEVELS  
RECREATION FACILITIES

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Historical Population	854,165	868,655	883,391	893,335	903,391	913,560	923,844	934,243	951,102	968,265	985,738	1,003,526	1,021,635	1,038,426	1,056,221

INVENTORY SUMMARY (\$000)

Buildings	\$3,115,279.5	\$3,134,325.8	\$3,165,497.5	\$3,173,351.1	\$3,263,483.6	\$3,263,483.6	\$3,473,483.6	\$3,479,518.6	\$3,506,106.1	\$3,509,420.3	\$3,521,878.9	\$3,521,878.9	\$3,528,026.2	\$3,533,666.8	\$3,547,297.1
<b>Total (\$000)</b>	<b>\$3,115,279.5</b>	<b>\$3,134,325.8</b>	<b>\$3,165,497.5</b>	<b>\$3,173,351.1</b>	<b>\$3,263,483.6</b>	<b>\$3,263,483.6</b>	<b>\$3,473,483.6</b>	<b>\$3,479,518.6</b>	<b>\$3,506,106.1</b>	<b>\$3,509,420.3</b>	<b>\$3,521,878.9</b>	<b>\$3,521,878.9</b>	<b>\$3,528,026.2</b>	<b>\$3,533,666.8</b>	<b>\$3,547,297.1</b>

SERVICE LEVEL (\$/pop)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average Service Level
Buildings	\$3,647.16	\$3,608.25	\$3,583.35	\$3,552.25	\$3,612.48	\$3,572.27	\$3,759.82	\$3,724.43	\$3,686.36	\$3,624.44	\$3,572.83	\$3,509.50	\$3,453.31	\$3,402.91	\$3,358.48	\$3,577.86
<b>Total (\$/pop)</b>	<b>\$3,647.16</b>	<b>\$3,608.25</b>	<b>\$3,583.35</b>	<b>\$3,552.25</b>	<b>\$3,612.48</b>	<b>\$3,572.27</b>	<b>\$3,759.82</b>	<b>\$3,724.43</b>	<b>\$3,686.36</b>	<b>\$3,624.44</b>	<b>\$3,572.83</b>	<b>\$3,509.50</b>	<b>\$3,453.31</b>	<b>\$3,402.91</b>	<b>\$3,358.48</b>	<b>\$3,577.86</b>

CITY OF OTTAWA  
CALCULATION OF MAXIMUM ALLOWABLE  
RECREATION FACILITIES

10-Year Funding Envelope Calculation	
15 Year Average Service Level 2009 - 2023	\$3,577.86
Net Population Growth 2024 - 2033	157,234
<b>Maximum Allowable Funding Envelope</b>	<b>\$562,561,239</b>

APPENDIX C.2

TABLE C.2-2

CITY OF OTTAWA  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
RECREATION FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Funding	Net Municipal Cost	Ineligible Costs				Total DC Eligible Costs	Less: Prior Growth	DC Recoverable 2024-2033	Less: Post-2033 (Future DC Recoverable)
					BTE Share (%)	Replacement & BTE Shares	CIL used to fund BTE	Remaining BTE				
<b>5.0 RECREATION FACILITIES: CITY-WIDE</b>												
<b>5.1 City-wide Facilities</b>												
5.1.1 Outdoor Aquatic Facility	2024 - 2029	\$ 3,248,000	\$ -	\$ 3,248,000	79%	\$ 2,565,920	\$ -	\$ 2,565,920.0	\$ 682,080	\$ 682,080	\$ -	\$ -
5.1.2 Outdoor Aquatic Facility	2024 - 2029	\$ 3,248,000	\$ -	\$ 3,248,000	10%	\$ 324,800	\$ 153,000	\$ 171,800.0	\$ 2,923,200	\$ 2,923,200	\$ -	\$ -
5.1.3 Indoor Major Aquatic Facility	2024 - 2029	\$ 54,600,000	\$ -	\$ 54,600,000	45%	\$ 24,570,000	\$ -	\$ 24,570,000.0	\$ 30,030,000	\$ 8,569,717	\$ 21,460,283	\$ -
5.1.4 Cricket (Millenium)	2024 - 2029	\$ 500,000	\$ -	\$ 500,000	10%	\$ 50,000	\$ -	\$ 50,000.0	\$ 450,000	\$ -	\$ 450,000	\$ -
5.1.5 Barhaven Town Centre Civic Complex	2024 - 2029	\$ 32,374,049	\$ 19,219,144	\$ 13,154,905	10%	\$ 1,315,491	\$ -	\$ 1,315,490.5	\$ 11,839,415	\$ -	\$ 11,839,415	\$ -
5.1.7 Recreation Complex - 1 new Queensview (160,000 sq feet)	2026 - 2033	\$ 112,000,000	\$ -	\$ 112,000,000	10%	\$ 11,200,000	\$ 2,900,000	\$ 8,300,000.0	\$ 100,800,000	\$ -	\$ 42,692,486	\$ 58,107,515
5.1.8 Community Centre- 3 new (25,000 sq feet each)	2024 - 2033	\$ 52,040,800	\$ -	\$ 52,040,800	10%	\$ 5,204,080	\$ -	\$ 5,204,080.0	\$ 46,836,720	\$ -	\$ 46,836,720	\$ -
5.1.9 Indoor Ice Pad - 2 new twin arenas (70,000 sq feet each)	2024 - 2033	\$ 97,300,000	\$ -	\$ 97,300,000	10%	\$ 9,730,000	\$ -	\$ 9,730,000.0	\$ 87,570,000	\$ -	\$ 87,570,000	\$ -
5.1.10 Outdoor District Skateboard Park - 2 within District Parks	2024 - 2033	\$ 3,000,000	\$ -	\$ 3,000,000	10%	\$ 300,000	\$ -	\$ 300,000.0	\$ 2,700,000	\$ -	\$ 2,700,000	\$ -
Subtotal City-wide Facilities		\$ 358,310,849	\$ 19,219,144	\$ 339,091,705		\$ 55,260,291	\$ 3,053,000	\$ 52,207,291	\$ 283,831,415	\$ 12,174,997	\$ 213,548,903	\$ 58,107,515
<b>TOTAL RECREATION FACILITIES: CITY-WIDE</b>		<b>\$ 358,310,849</b>	<b>\$ 19,219,144</b>	<b>\$ 339,091,705</b>		<b>\$ 55,260,291</b>	<b>\$ 3,053,000</b>	<b>\$ 52,207,291</b>	<b>\$ 283,831,415</b>	<b>\$ 12,174,997</b>	<b>\$ 213,548,903</b>	<b>\$ 58,107,515</b>

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Funding	Net Municipal Cost	Ineligible Costs				Total DC Eligible Costs	Less: Prior Growth	DC Recoverable 2024-2033	Less: Post-2033 (Future DC Recoverable)
					BTE Share (%)	Replacement & BTE Shares	CIL used to fund BTE	Remaining BTE				
<b>5.0 RECREATION FACILITIES: INSIDE GREENBELT</b>												
<b>5.2 Recovery of Negative DC Reserve balance</b>												
5.2.1 As of December 2023	2024 - 2024	\$ 9,191,041	\$ -	\$ 9,191,041	0%	\$ -	\$ -	\$ -	\$ 9,191,041	\$ -	\$ 9,191,041	\$ -
Subtotal Recovery of Negative DC Reserve balance		\$ 9,191,041	\$ -	\$ 9,191,041		\$ -	\$ -	\$ -	\$ 9,191,041	\$ -	\$ 9,191,041	\$ -
<b>5.3 Outstanding Debentures - Principal and Interest</b>												
5.3.1 903417 Albion Heatherington CC Expansion By-Law 2013-323	2024 - 2033	\$ 119,551	\$ -	\$ 119,551	0%	\$ -	\$ -	\$ -	\$ 119,551	\$ -	\$ 119,551	\$ -
5.3.2 903718 Hunt Club / Riverside Expansion By-Law 2013-323	2024 - 2033	\$ 239,102	\$ -	\$ 239,102	0%	\$ -	\$ -	\$ -	\$ 239,102	\$ -	\$ 239,102	\$ -
5.3.3 903718 Hunt Club/Riverside Expansion By-Law 2017-258	2024 - 2033	\$ 52,960	\$ -	\$ 52,960	0%	\$ -	\$ -	\$ -	\$ 52,960	\$ -	\$ 52,960	\$ -
Subtotal Outstanding Debentures - Principal and Interest		\$ 411,613	\$ -	\$ 411,613		\$ -	\$ -	\$ -	\$ 411,613	\$ -	\$ 411,613	\$ -
<b>5.4 Area-Specific Facilities</b>												
5.4.1 Pinecrest Community Centre Expansion (12,000 SF)	2024 - 2029	\$ 12,945,800	\$ -	\$ 12,945,800	70%	\$ 9,062,060	\$ -	\$ 9,062,060.0	\$ 3,883,740	\$ -	\$ 3,883,740	\$ -
5.4.2 Community Centre - Central (Ottawa East - 25,500 SF)	2024 - 2029	\$ 17,346,000	\$ 8,977,500	\$ 8,368,500	45%	\$ 3,765,825	\$ 1,522,500	\$ 2,243,325.0	\$ 4,602,675	\$ -	\$ 4,602,675	\$ -
5.4.3 Community Centre Space Upgrades - Alexander	2024 - 2029	\$ 11,801,000	\$ 4,465,760	\$ 7,335,240	45%	\$ 3,300,858	\$ 4,615,906	\$ -	\$ 2,719,334	\$ -	\$ 2,719,334	\$ -
5.4.4 Field House - Wateridge Village	2024 - 2029	\$ 2,900,000	\$ 1,282,500	\$ 1,617,500	5%	\$ 80,875	\$ 217,500	\$ -	\$ 1,400,000	\$ -	\$ 1,400,000	\$ -
5.4.5 Community Centre Space Upgrades - Sawmill Creek	2029 - 2033	\$ 5,901,000	\$ 2,107,380	\$ 3,793,620	45%	\$ 1,707,129	\$ 2,149,954	\$ -	\$ 1,643,666	\$ -	\$ 1,643,666	\$ -
5.4.6 Sandy Hill CC- Expansion	2029 - 2033	\$ 10,500,000	\$ -	\$ 10,500,000	70%	\$ 7,350,000	\$ -	\$ 7,350,000.0	\$ 3,150,000	\$ -	\$ 3,150,000	\$ -
5.4.7 Frank Ryan Fieldhouse Redevelopment & Expansion	2024 - 2029	\$ 3,000,000	\$ -	\$ 3,000,000	45%	\$ 1,350,000	\$ 253,877	\$ 1,096,123.0	\$ 1,650,000	\$ -	\$ 1,650,000	\$ -
5.4.8 Woodroffe Fieldhouse redevelopment	2024 - 2029	\$ 3,000,000	\$ -	\$ 3,000,000	45%	\$ 1,350,000	\$ 340,875	\$ 1,009,125.0	\$ 1,650,000	\$ -	\$ 1,650,000	\$ -
5.4.9 Heron Park Fieldhouse redevelopment	2024 - 2029	\$ 3,900,000	\$ -	\$ 3,900,000	49%	\$ 1,897,861	\$ 2,000,000	\$ -	\$ 1,900,000	\$ -	\$ 1,900,000	\$ -
5.4.10 Community Building-3 new (3,500 sq feet each)	2024 - 2033	\$ 8,000,000	\$ -	\$ 8,000,000	5%	\$ 400,000	\$ -	\$ 400,000.0	\$ 7,600,000	\$ -	\$ 7,600,000	\$ -
5.4.11 Community Building - Lebreton Park Service Building	2024 - 2033	\$ 3,000,000	\$ -	\$ 3,000,000	5%	\$ 150,000	\$ -	\$ 150,000.0	\$ 2,850,000	\$ -	\$ 2,806,826	\$ 43,174
5.4.12 Fieldhouse 3 @ (1722 sq feet each)	2024 - 2033	\$ 4,000,000	\$ -	\$ 4,000,000	5%	\$ 200,000	\$ -	\$ 200,000.0	\$ 3,800,000	\$ -	\$ -	\$ 3,800,000
Subtotal Area-Specific Facilities		\$ 86,293,800	\$ 16,833,140	\$ 69,460,660		\$ 30,614,608	\$ 11,100,612	\$ 21,510,633	\$ 36,849,415	\$ -	\$ 33,006,241	\$ 3,843,174
<b>TOTAL RECREATION FACILITIES: INSIDE GREENBELT</b>		<b>\$ 95,896,454</b>	<b>\$ 16,833,140</b>	<b>\$ 79,063,314</b>		<b>\$ 30,614,608</b>	<b>\$ 11,100,612</b>	<b>\$ 21,510,633</b>	<b>\$ 46,452,069</b>	<b>\$ -</b>	<b>\$ 42,608,895</b>	<b>\$ 3,843,174</b>

APPENDIX C.2  
TABLE C.2-2

CITY OF OTTAWA  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
RECREATION FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Funding	Net Municipal Cost	Ineligible Costs				Total DC Eligible Costs	Less: Prior Growth	DC Recoverable 2024-2033	Less: Post -2033 (Future DC Recoverable)
					BTE Share (%)	Replacement & BTE Shares	CIL used to fund BTE	Remaining BTE				
<b>5.0 RECREATION FACILITIES: OUTSIDE GREENBELT</b>												
<b>5.5 Area-Specific Facilities</b>												
5.5.1 Riverside South Recreation Complex Construction	2024 - 2029	\$ 109,085,700	\$ 33,220,000	\$ 75,865,700	0%	\$ -	\$ 250,000	\$ -	\$ 75,615,700	\$ 75,615,700	\$ -	\$ -
5.5.6 Riverside South Recreation Complex - Land Acquisition (Formerly Barhaven Town)	2024 - 2029	\$ 13,500,000	\$ 1,822,000	\$ 11,678,000	0%	\$ -	\$ 855,000	\$ -	\$ 10,823,000	\$ -	\$ 10,823,000	\$ -
5.5.2 Community Centre - East (EUC)	2029 - 2033	\$ 14,700,000	\$ 897,000	\$ 13,803,000	5%	\$ 690,150	\$ 153,000	\$ 537,150	\$ 13,112,850	\$ 13,112,850	\$ -	\$ -
5.5.3 Community Centre - West (25,500 SF)	2024 - 2033	\$ 19,334,000	\$ -	\$ 19,334,000	5%	\$ 966,700	\$ -	\$ 966,700	\$ 18,367,300	\$ 4,508,728	\$ 9,479,464	\$ 4,379,110
Subtotal Area-Specific Facilities		\$ 156,619,700	\$ 35,939,000	\$ 120,680,700		\$ 1,656,850	\$ 1,258,000	\$ 1,503,850.0	\$ 117,918,850	\$ 93,237,276	\$ 20,302,464	\$ 4,379,110
<b>5.6 Outstanding Debentures - Principal and Interest</b>												
5.6.1 Riverside South Community Centre	2024 - 2033	\$ 13,270,519	\$ -	\$ 13,270,519	0%	\$ -	\$ -	\$ -	\$ 13,270,519	\$ -	\$ 13,270,519	\$ -
5.6.2 Minto Recreation Complex	2024 - 2033	\$ 8,669,409	\$ -	\$ 8,669,409	0%	\$ -	\$ -	\$ -	\$ 8,669,409	\$ -	\$ 8,669,409	\$ -
5.6.3 903625 S.E. Nepean Complex Land By-Law 2012-282	2024 - 2033	\$ 1,995,824	\$ -	\$ 1,995,824	0%	\$ -	\$ -	\$ -	\$ 1,995,824	\$ -	\$ 1,995,824	\$ -
5.6.4 903613 Goulbourn CC Expansion By-Law 2013-323	2024 - 2033	\$ 1,075,959	\$ -	\$ 1,075,959	0%	\$ -	\$ -	\$ -	\$ 1,075,959	\$ -	\$ 1,075,959	\$ -
5.6.5 903620 Kanata North Complex Land By-Law 2013-323	2024 - 2033	\$ 1,793,265	\$ -	\$ 1,793,265	0%	\$ -	\$ -	\$ -	\$ 1,793,265	\$ -	\$ 1,793,265	\$ -
5.6.6 904373 Kanata North Recreations Centre By-Law 2013-323	2024 - 2033	\$ 5,499,346	\$ -	\$ 5,499,346	0%	\$ -	\$ -	\$ -	\$ 5,499,346	\$ -	\$ 5,499,346	\$ -
5.6.7 904373 North Kanata Recreation Complex By-Law 2017-258	2024 - 2033	\$ 962,611	\$ -	\$ 962,611	0%	\$ -	\$ -	\$ -	\$ 962,611	\$ -	\$ 962,611	\$ -
5.6.8 902168 - CLS*Indoor Pools - Growth (OSGB) (Tax DC Component)	2024 - 2033	\$ 3,543,752	\$ -	\$ 3,543,752	0%	\$ -	\$ -	\$ -	\$ 3,543,752	\$ -	\$ 3,543,752	\$ -
Subtotal Outstanding Debentures - Principal and Interest		\$ 36,810,686	\$ -	\$ 36,810,686		\$ -	\$ -	\$ -	\$ 36,810,686	\$ -	\$ 36,810,686	\$ -
<b>TOTAL RECREATION FACILITIES: OUTSIDE GREENBELT</b>		<b>\$ 193,430,386</b>	<b>\$ 35,939,000</b>	<b>\$ 157,491,386</b>		<b>\$ 1,656,850</b>	<b>\$ 1,258,000</b>	<b>\$ 1,503,850</b>	<b>\$ 154,729,536</b>	<b>\$ 93,237,276</b>	<b>\$ 57,113,150</b>	<b>\$ 4,379,110</b>
<b>5.0 RECREATION FACILITIES: RURAL</b>												
<b>5.7 Area-Specific Facilities</b>												
5.7.1 Community Building - Rural East (3,000 SF)	2024 - 2029	\$ 2,524,000	\$ -	\$ 2,524,000	45%	\$ 1,135,800	\$ -	\$ 1,135,800	\$ 1,388,200	\$ 1,370,253	\$ 17,947	\$ -
5.7.2 Community Building - Rural West Corkery (3,000 SF)	2024 - 2029	\$ 5,063,000	\$ 892,000	\$ 4,171,000	45%	\$ 1,876,950	\$ 2,198,515	\$ -	\$ 1,972,485	\$ -	\$ 584,650	\$ 1,387,835
Subtotal Area-Specific Facilities		\$ 7,587,000	\$ 892,000	\$ 6,695,000		\$ 3,012,750	\$ 2,198,515	\$ 1,135,800	\$ 3,360,685	\$ 1,370,253	\$ 602,597	\$ 1,387,835
<b>TOTAL RECREATION FACILITIES: RURAL</b>		<b>\$ 7,587,000</b>	<b>\$ 892,000</b>	<b>\$ 6,695,000</b>		<b>\$ 3,012,750</b>	<b>\$ 2,198,515</b>	<b>\$ 1,135,800</b>	<b>\$ 3,360,685</b>	<b>\$ 1,370,253</b>	<b>\$ 602,597</b>	<b>\$ 1,387,835</b>
<b>TOTAL ALL AREAS</b>		<b>\$ 655,224,688</b>	<b>\$ 72,883,284</b>	<b>\$ 582,341,404</b>		<b>\$ 90,544,498</b>	<b>\$ 17,610,127</b>	<b>\$ 76,357,574</b>	<b>\$ 488,373,704</b>	<b>\$ 106,782,526</b>	<b>\$ 313,873,545</b>	<b>\$ 67,717,633</b>

APPENDIX C.2  
TABLE C.2-2

CITY OF OTTAWA  
DEVELOPMENT-RELATED CAPITAL PROGRAM  
RECREATION FACILITIES

Cost Allocation By Benefitting Area			
<b>Residential Calculation</b>			
<i>Inside the Greenbelt Residential Calculation</i>			
Residential Share of Eligible Costs	95%	\$	40,478,450
10 Year Population Growth			67,243
Charge per Capita			<b>\$601.97</b>
<i>Outside the Greenbelt Residential Calculation</i>			
Residential Share of Eligible Costs	95%	\$	54,257,493
10 Year Population Growth			117,528
Charge per Capita			<b>\$461.66</b>
<i>Rural Residential Calculation</i>			
Residential Share of Eligible Costs	95%	\$	572,467
10 Year Population Growth			21,166
Charge per Capita			<b>\$27.05</b>
<b>Non-Residential Calculation</b>			
Non-Residential Share of Eligible Costs		\$	5,016,232
10 Year Non-Residential Growth in GFA (m2)			2,126,261
Charge per Square Metre			<b>\$2.36</b>

City-wide Cost Allocations (Residential and Non-Residential)			
<b>Residential Calculation</b>			
Residential Share of Eligible Costs	95%	\$	202,871,458
10 Year Employment Growth			205,888
Unadjusted Per Unit Charge			<b>\$985.35</b>
<b>Non-Residential Calculation</b>			
Non-Residential Share of Eligible Costs	5%	\$	10,677,445
10 Year Non-Residential Growth in GFA (m2)			2,126,261
Charge per Square Metre			<b>\$5.02</b>

Available DC Reserve Fund Balance			
	Total	Amount Used	Remaining
City-wide	\$12,174,997	\$12,174,997	\$0
IGB	(\$9,191,041)	(\$9,191,041)	\$0
OGB	\$93,237,276	\$93,237,276	\$0
Rural	\$1,370,253	\$1,370,253	\$0
<b>Total</b>	<b>\$97,591,485</b>	<b>\$97,591,485</b>	<b>\$0</b>

2024 - 2033 Net Funding Envelope	\$562,561,239
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# Appendix D

## Reserve Fund Balances

# Appendix D – Development Charges

## Reserve Fund Balances

The DCA requires that a reserve fund be established for each service for which development charges are collected. Table D.1 presents the committed reserve fund balances that are available to help fund or that require additional contributions to offset the various existing growth-related net capital costs. The balances of the development charges reserve funds as of April 30, 2024, have been adjusted to account for current capital project commitments. All the reserve fund balances, both positive and negative, are accounted for in the study.

The DC reserve funds are shown by benefitting area – City-wide, Inside the Greenbelt, Outside the Greenbelt and Rural. The column entitled “DC Reserve Fund Balance” is the cumulative total of these individual accounts. The application of the various balances in each of the reserve funds is discussed in the appendix section related to each service. The available positive fund balances are assigned to projects in the initial years of the capital program for those services. This has the effect of reducing and deferring capital costs brought forward to the development charges calculation and the cash flow analysis.

APPENDIX D

TABLE D.1

CITY OF OTTAWA  
 DEVELOPMENT CHARGE RESERVE FUNDS  
 ENGINEERING SERVICES  
 (in \$000)  
 As of April 30, 2024

Service	DC Reserve Fund Balance	City-wide	Inside Greenbelt	Outside Greenbelt	Rural
SANITARY (WASTE WATER)	\$ 124,599,424	\$ 94,435,179	\$ 25,700,645	\$ 4,440,458	\$ 23,142
WATER	\$ 18,849,276	\$ 8,285,894	\$ (1,490,304)	\$ 12,489,039	\$ (435,353)



# Appendix E

## Cost of Growth Analysis

# Appendix E – Cost of Growth Analysis

This appendix satisfies the long-term capital and operating costs and asset management plan requirements as required by subsections 10(1)(c) and 10(3) of the DCA for all services considered in this DC Background Study.

The DCA requires an examination of the long-term capital and operating costs related to the capital infrastructure proposed to be funded from development charges. Furthermore, the DCA also requires that a DC Study include an asset management plan (AMP) for all assets proposed to be funded from development charges. The following appendix provides a discussion of the Cost of Growth (COG) analysis addressing these DCA requirements and includes all eligible services.

Section A provides an overview of the City’s approach to long-range financial planning and the comprehensive COG impact analysis undertaken. Section B addresses the AMP analysis, the results of which have been or will be incorporated into the City’s long-range financial plan analysis and annual budgets.

## **A. Cost of Growth Analysis**

### **i. Long-Term Capital and Operating Impacts**

The 2019 Interim DC Background Study provided an overview of the City’s recent long-range financial plans (LRFPs) for utility services, transit services and all other property tax supported services. These reports clearly identify the fiscal impacts (operating, capital and state of good repair) of funding and operating City facilities and infrastructure, including infrastructure proposed to be funded, in whole or part, from development charges included in this DC Study. The additional details on this report, and other relevant

plans and studies, can be found in Appendix H of the City’s 2019 Interim DC Background Study (pages 344 to 347).

## **B. Asset Management Plan**

The DCA requires that municipalities complete an AMP before passing a development charges by-law. A key function of the AMP is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle. The AMP requirements discussed in this study are aligned with the City’s ongoing policies and practices.

### **i. Relevant Analysis and City Documents**

The City of Ottawa undertakes extensive evaluations of the fiscal impacts of capital works; these analyses include an examination of the full range of costs – initial capital, operating and the long-term repair, maintenance and replacement of infrastructure. The following are three key, and interrelated, documents central to the City’s AMP fiscal evaluation:

- Comprehensive Asset Management (CAM) Policy
- 2017 State of Assets Report (SOAR)
- 2017 Strategic Asset Management Plan (SAMP)
- 2022 Asset Management plans for Transportation, Drinking Water, Stormwater and Wastewater. Comprehensive Asset Management | City of Ottawa
- 2024 Asset Management Plans

The key objective of these studies is to ensure the City’s financial sustainability. In addition, the City’s annual budget process implements and manages the year-to-year expenditure needs and revenue requirements.

## ii. Useful Life Assumptions

A summary of future City-owned assets and estimated useful life assumptions for eligible DC services considered as part of this study are outlined in Table E-1 and E-2 below. Where possible, useful life assumptions align with the City's AMP policies and practices.

Although all capital assets considered in the study have been identified, not all assets necessitate future replacement or ongoing maintenance activities. The exception and the justification is as follows:

- Some of the works identified may represent one-time expenditures and may be temporary in nature. Therefore, the assets would not be required to be replaced and no ongoing operation and maintenance costs exist.
- Some projects do not relate to the emplacement of a tangible capital asset— some examples include the acquisition of land or the undertaking of development-related studies. These projects/costs do not necessarily require future replacement or ongoing maintenance.
- For debenture payments where the assets have been constructed, it is assumed that the annual contribution associated with the ongoing repair and replacement of these assets is already included within the City's existing asset management policies.

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

**Table E-1 – Summary of Municipal Assets Considered City-wide General Services**

<b>Service and Amenities</b>	<b>Estimated Useful Life</b>
<b>Parks Development</b> <ul style="list-style-type: none"> <li>▪ Park amenities</li> </ul>	20 years
<b>Recreation Facilities</b> <ul style="list-style-type: none"> <li>▪ Various indoor recreation facilities</li> </ul>	85 years

**Table E-2 – Summary of Municipal Assets Considered Engineered Services**

<b>Capital Project Descriptions</b>	<b>Estimated Useful Life</b>
<b>Water</b> <ul style="list-style-type: none"> <li>▪ Mains</li> </ul>	85 years
<b>Sanitary Sewer</b> <ul style="list-style-type: none"> <li>▪ Mains, plant pumping stations and trunk infrastructure</li> </ul>	50-85 years

**iii. Calculated Annual Provision**

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

Based on the information obtained from City staff regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset, a provision for infrastructure replacement has been calculated for both the general and engineered services. Provisions for infrastructure replacement are initially calculated for each asset based on their useful life and the anticipated cost of replacement. The aggregate of all individual provisions form the required annual capital provision. In calculating the annual provisions, a number of assumptions are made to account for inflation (3.0%) and interest (3.0%).

Consistent with the requirements of the DCA, assets that are proposed to be funded under the development charges by-law have been included in the

analysis. As a result, the total calculated annual provision for development charge related infrastructure has been netted down to consider the replacement of existing infrastructure or benefit-to-existing development. However, for reference, the annual replacement provisions associated with the non-development charge funded costs, including costs related to benefit-to-existing and post-period shares have also been calculated.

Tables E-3 and E-4 provide the calculated annual asset management contribution for both the gross capital expenditures and the share related to the DC recoverable portion. The years 2034 and 2047 have been included to calculate the annual contribution for the 2024-2033 and 2024-2046 periods as the expenditures in 2033 and 2046 and will not trigger asset management contributions until 2034 and 2047, respectively.

Table E-3 identifies that the City will need to fund an additional \$18.8 million per annum in order to properly fund the full life cycle costs of the new assets related to City-wide general services supported under the development charges by-law.

Table E-4 provides an analysis of the annual provisions required for the City-wide engineered services capital program to 2046. As shown in Table E-4, the annual provision in 2047 amounts to \$52.5 million.

### **C. Financial Sustainability of the Program**

The calculated annual provisions identified in Tables E-3 and E-4 are already or will be fully integrated in the ongoing City's Corporate Asset Management Planning and the LRFPs discussed above. The annual provisions are considered to be financially sustainable, as it is expected that the increased capital asset management requirements can be absorbed by the LRFP forecasted tax and user increases over the planning periods. Importantly, the City's annual budget analysis will allow staff to continue to monitor and implement mitigating measures should the program become less sustainable.

**APPENDIX E  
TABLE E-3**

**CITY OF OTTAWA  
GENERAL SERVICES  
CALCULATED ANNUAL PROVISION BY 2034**

Service	2024 - 2033 Capital Program		Calculated AMP Annual Provision by 2034	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
Parks Development	\$ 108,513,000	\$ 47,178,000	\$ 7,159,000	\$ 3,083,000
Recreation Facilities	\$ 420,656,000	\$ 234,569,000	\$ 11,692,000	\$ 7,550,000
<b>Total</b>	<b>\$ 529,169,000</b>	<b>\$ 281,747,000</b>	<b>\$ 18,851,000</b>	<b>\$ 10,633,000</b>

**APPENDIX E  
TABLE E-4**

**CITY OF OTTAWA  
ENGINEERED SERVICES  
CALCULATED ANNUAL PROVISION BY 2047**

Service	2024 - 2046 Capital Program		Calculated AMP Annual Provision by 2047	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
Sanitary (Waste Water)	\$ 951,602,000	\$ 288,449,000	\$ 33,855,000	\$ 11,184,000
Water	\$ 496,911,000	\$ 42,476,000	\$ 18,648,000	\$ 1,787,000
<b>Total</b>	<b>\$ 1,448,513,000</b>	<b>\$ 330,925,000</b>	<b>\$ 52,503,000</b>	<b>\$ 12,971,000</b>

*\* Note: may not add up due to costs associated with Tewin.*

# Appendix F

## Local Service Definitions



# Local Service Definitions

## Local Servicing Guidelines for City of Ottawa

### General Conditions:

1. A local service is defined as an infrastructure service that is:
  - a. Internal to a development or  
External to a development that is required to support a specific development and with dimensions of less than 450mm for Sanitary Sewers (Wastewater) and less than 400mm for Watermains.
  - b. Private or temporary pumping stations.
  - c. Pumping stations servicing a small, localized area with a design flow of 80 L/S or less.
2. All projects identified in the City's Infrastructure Master Plan are 100% development charge eligible except where noted in the plan.
3. For existing stormwater management development charge benefiting areas only, storm sewers with dimensions less than 1800mm are also considered local services.
4. For new stormwater management works, outside of existing area-specific development charge benefiting areas, stormwater management ponds, fish compensation and storm sewers are classified as local services and fully funded by developers and/or landowner groups.
5. Local Services are to be paid for directly by developers and/or landowner groups pursuant to a development agreement or applicable approval process.
6. Temporary servicing of any kind is NOT eligible for development charge funding.

The above is a general description of local services only. Criteria for DC eligibility for non-local services are clarified in the following sections:

## **A. Stormwater Management Works:**

This section applies to existing area-specific development charge stormwater management benefiting areas

- 1.1. Centralized stormwater facilities sized to service growth-related projects for multiple owners, are considered development charge projects provided that the works have been identified in a Master Servicing Study which has been approved by the City of Ottawa.
- 1.2. Stormwater works designed to fulfill both water quality and quantity are considered development charge projects when they have been identified in a city-approved study and found to benefit a broader area of future development.
- 1.3. All other stormwater works implemented to achieve quality and quantity control are considered a local service.
- 1.4. When an approved Master Drainage Plan/Study has identified a stormwater management facility as a growth-related project, this facility shall be deemed as a development charge project regardless of tributary area ownership.
- 1.5. As part of the costing for stormwater management facilities, other works, such as erosion control, water quality control devices, land costs, engineering requirements, and storm outfall works are to be included.
- 1.6. Land cost associated with stormwater management facilities shall be set on actual land dedication area multiplied by a comparable unit land value (i.e., dollars per hectare) as determined by an approved land appraiser and confirmed by City staff.

- 1.7. Storm sewers 1800mm and larger (with minimum rational method design flow of 3400 L/S) shall be eligible to recover the cost of the oversizing component from development charges. The growth-related cost contribution provided towards funding the oversizing component of 1800mm and greater shall be calculated using unit rates provided in the enacted DC By-law. The unit prices are the difference between the cost of the actual pipe diameter and the cost of a 1650mm pipe diameter.
- 1.8. In-stream works that are required to support growth as part of an approved study.
- 1.9. Other instream works such as fish compensation, major culverts, erosion protection and engineering shall also be considered eligible for development charge funding.
- 1.10. Development charges for new stormwater management area-specific benefiting areas are limited to projects as described below and may be imposed by the City:
  - a) In-stream works that are required to support growth as part of an approved study.
  - b) All other projects are considered a local service and are to be paid for directly by developers and landowners pursuant to a development agreement or applicable approval process.

## **B. Water**

- 1.11. Watermains that are 400mm and larger that are identified in a Master Servicing Study and are internal to or directly connected to a plan of subdivision shall be eligible for oversizing cost recovery. The growth-related cost contribution towards oversizing through development charges for watermains 400mm and greater shall be calculated using oversizing unit rates provided in the enacted DC By-law. The unit

prices are the difference between the cost of the actual pipe diameter and the cost of a 300mm pipe diameter.

- 1.12. Direct connections and system links to trunk mains and pumping stations to service specific areas (may include more than one development application) are to be a direct developer responsibility, with growth-related cost contributions per B1.1.

### **C. Sanitary Sewer (Wastewater)**

- 1.13. Sanitary sewers (Wastewater) that are 450mm and larger (with a minimum flow of 80 L/S) that are identified within a Master Servicing Study and are internal to or directly connected to a plan of subdivision shall be eligible for oversizing cost recovery. The growth-related cost contribution towards funding oversizing works using development charges for sanitary sewers 450mm and greater shall be calculated using oversizing unit rates provided in the corresponding rate table of the DC By-law. The unit prices are the difference between the cost of the actual pipe diameter and the cost of a 375mm pipe.
- 1.14. Connections to trunk sewers and pumping stations to service specific areas are to be a direct developer responsibility, with development charge contributions per C1.1.
- 1.15. Pumping stations that are municipally owned with a design flow that exceeds 80 L/S and service more than one property shall be eligible for development charge cost recovery. The pumping stations must be included within the City's current Development Charges Background Study.
- 1.16. Incremental capacity upgrades for municipal pumping stations are to be included in the calculation of development charges and must be identified in the City's current Development Charges Background Study.

## **D. Overall Growth-related Cost Recovery**

Overall, to be eligible for cost recovery from development charges, despite what is defined as being growth-related above, the various stormwater, water and sanitary sewer (wastewater) capital projects must be included with the calculation of various rates listed with the current DC by-law. In addition, the specific capital projects must also be listed within either the corresponding City-wide Development Charges Background Study or Area-specific Development Charges Background Study.

**Appendix G**  
**2024 Amending DC By-law**  
**(Available Under Separate Cover)**