

REPORT FOR PUBLIC CONSULTATION

PREPARED BY HEMSON FOR THE CITY OF CLARENCE-ROCKLAND

DEVELOPMENT CHARGES BACKGROUND STUDY

November 15, 2024



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1. EXECUTIVE SUMMARY

The following summarizes the findings of the City of Clarence-Rockland's 2024 Development Charges Background Study.

A. PURPOSE OF DEVELOPMENT CHARGES (DC) BACKGROUND STUDY

Hemson Consulting Ltd. was retained by the Clarence-Rockland to complete a Development Charges (DC) Background Study (the "Background Study"). The Background Study provides the basis and background to update the City's DCs to reflect the servicing needs of development and redevelopment. The study process is intended to facilitate the passage of a new by-law to implement new DCs.

i. Study Consistent with Development Charges Legislation

The City's Background Study is presented as part of a process to approve a new DC By-law in compliance with the *Development Charges Act (DCA)*. The study is prepared in accordance with the *DCA* and associated regulations, including amendments that came into force through the *More Homes, More Choice Act*, the *COVID-19 Economic Recovery Act*, the *More Homes Built Faster Act*, and the *Cutting Red Tape to Build More Homes Act, 2024*, the latter of which was granted Royal Assent on June 6, 2024.

In December of 2019, Council passed By-Law 2019-85 in advance of the expiry of By-law 2015-13 for the services of Fire Protection, Services Related to a Highway of Public Works & Roads and Related, Waterworks and Sanitary Sewage in order to continue collecting development charges.

In 2019, due to proposed provincial legislative changes, development charges for soft services of Library, Parks and Recreation, By-law and Development Related Studies were not updated until 2021 and as permitted were levied under By-law 2015-13. In October of 2021, By-Law 2021-90 was passed for the soft services.

The City needs to continue implementing DCs to fund capital projects throughout Clarence-Rockland so that new development pays for its capital requirements to the extent allowed by the *DCA* and so that new services required by growth are provided in a fiscally responsible manner.

ii. **Key Steps of the Development Charges Calculation**

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

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

iii. **Development-Related Capital Forecast is Subject to Change**

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

B. DEVELOPMENT FORECAST

The table below summarizes the residential and non-residential development forecast over the 10-year planning period (2024-2033) and over the longer-term to 2046. The forecast is further discussed in Appendix A.

City-wide Development Forecast	2023 Estimate	10-Year Planning Period 2024 - 2033		Long-Term Planning Period 2024 - 2046	
		Growth	Total at 2033	Growth	Total at 2046
Residential					
Total Occupied Dwellings	10,493	1,780	12,273	3,437	13,930
Total Population					
Census	27,153	3,282	30,435	6,769	33,922
<i>Population In New Dwellings</i>		<i>4,775</i>		<i>9,222</i>	
Non-Residential					
Employment	6,209	409	6,618	956	7,165
Non-Residential Building Space (sq.m.)		20,450		47,800	

C. DEVELOPMENT-RELATED CAPITAL PROGRAM

The development-related capital program for general services and services related to a highway is planned over a 10-year period from 2024 to 2033. The gross cost of the program amounts to \$129.15 million, of which \$61.32 million is eligible for recovery through development charges. For the engineered services of water and sanitary sewer services, the capital programs cover a long-term planning period from 2024-2046. The gross cost of the program amounts to \$148.68 million, of which \$62.58 million is eligible for recovery through development charges. Details regarding the capital programs for each service are provided in Appendix B for services under the 10-year planning horizon and Appendix C for engineered services of water and sanitary sewer under the planning horizon to 2046.

D. CALCULATED DEVELOPMENT CHARGES

Development charge rates have been established under the parameters and limitations of the DCA. A City-wide uniform cost recovery approach is used to calculate development charges for all services. This approach is in keeping with current DC practice in the City.

The table below provides the maximum calculated City-wide charges for residential and non-residential development based on the aforementioned development forecast. The total charge represents a serviced unit or non-residential development.

Service	Charge By Unit Type			Non-Residential (\$/sq.m)
	Single & Semi-Detached	Rows & Other Multiples	Apartments	
Library Services	\$667	\$530	\$353	\$0.00
Parks And Recreation	\$9,200	\$7,311	\$4,874	\$0.00
By-Law Services	\$36	\$28	\$19	\$0.26
Development Related Studies	\$192	\$153	\$102	\$1.29
Fire Services	\$1,244	\$988	\$659	\$8.44
Services Related to a Highway				
Public Works	\$873	\$694	\$463	\$5.98
Roads And Related	\$24,297	\$19,309	\$12,872	\$164.95
Waterworks	\$9,373	\$7,449	\$4,966	\$62.28
Sanitary Sewer Services	\$13,307	\$10,575	\$7,050	\$88.50
TOTAL DEVELOPMENT CHARGE (SERVICED)	\$59,189	\$47,037	\$31,358	\$331.70

E. COST OF GROWTH ANALYSIS

An overview of the long-term capital and operating costs, as well as the asset management-related annual provisions for capital facilities and infrastructure to be included in the DC by-law, is provided in Section 8 and Appendix E of the Background Study. This examination is required by the *DCA*.

F. DC BY-LAW INCLUDED UNDER SEPARATE COVER

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

2. INTRODUCTION

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

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

- A forecast of the amount, type and location of population, housing, and non-residential development anticipated in the 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 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 anticipated development, including the determination of the eligible and ineligible components of the capital projects;
- An asset management plan that demonstrates that all assets are financially sustainable over their full life cycle; and,
- An examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-laws would relate.

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

The *DCA* provides for a period of public review and comment regarding the proposed development charges. This process includes considering and responding to comments received by members of the public about the calculated charges. Following completion of

this process, in accordance with the *DCA* and Council's review of this study, it is intended that Council will pass a new development charges by-law for the City.

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

A. LEGISLATIVE CONTEXT

The study is prepared in accordance with the *DCA* and associated regulations, including the amendments that came into force most recently on November 28, 2022 under the *More Homes Built Faster Act, 2022*, and on June 6, 2024 under the *Cutting Red Tape to Build More Homes Act, 2024*. The latter reversed the 5-year mandatory phase-in of DCs and implemented DC exemptions for affordable housing projects that meet the *DCA* eligibility requirements. Key legislative changes incorporated into this study include:

- Historical service level standards have been extended from a 10 to 15-year planning period;
- DC by-laws now expire every 10 years instead of 5 years;
- The amount of interest paid on DC deferrals and freeze is capped at prime plus 1%;
- Costs associated with affordable housing services are now ineligible for recovery through DCs;
- Municipalities must spend or allocate 60% of available DC reserve funds per year for roads, water and wastewater services;
- DC discounts for purpose-built rentals based on the number of bedrooms; and
- DC exemptions for affordable and attainable housing developments which meet the provisions of the *DCA*.

B. RELEVANT ANALYSIS

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

C. CONSULTATION AND APPROVAL PROCESS

The following provides a summary of the consultation and approval process undertaken to complete the Background Study. Following the release of the Background Study, consultation will continue with the public prior to the passage of the new DC By-law(s) anticipated to occur in January 2025.

Activity	Date
Council Information Package	November 8, 2024
Public Release of DC Background Study	November 15, 2024
Statutory Public Meeting of Council	December 11, 2024
Passage of 2025 DC By-law	January 2025 (targeted)

3. THE DC METHODOLOGY ALIGNS DEVELOPMENT-RELATED COSTS AND BENEFITS

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

A. CONSIDERATION FOR AREA RATED SERVICES

In accordance with the *DCA*, Council must consider the use of area rating, also known as area-specific DCs, as part of the Background Study. Based on discussions with staff and Council, a City-wide approach has been used as part of this Background Study update.

B. CITY-WIDE DEVELOPMENT CHARGES ARE PROPOSED

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

For all services, a range of capital facilities and infrastructure is available throughout the City, and all Clarence-Rockland residents and employees have access to these assets. As new development occurs, new infrastructure will be needed in order to maintain overall service levels in the City. A widely accepted method of sharing the development-related capital costs for such City services is to apportion them over all the anticipated growth.

The following services are included in the City-wide DC calculations:

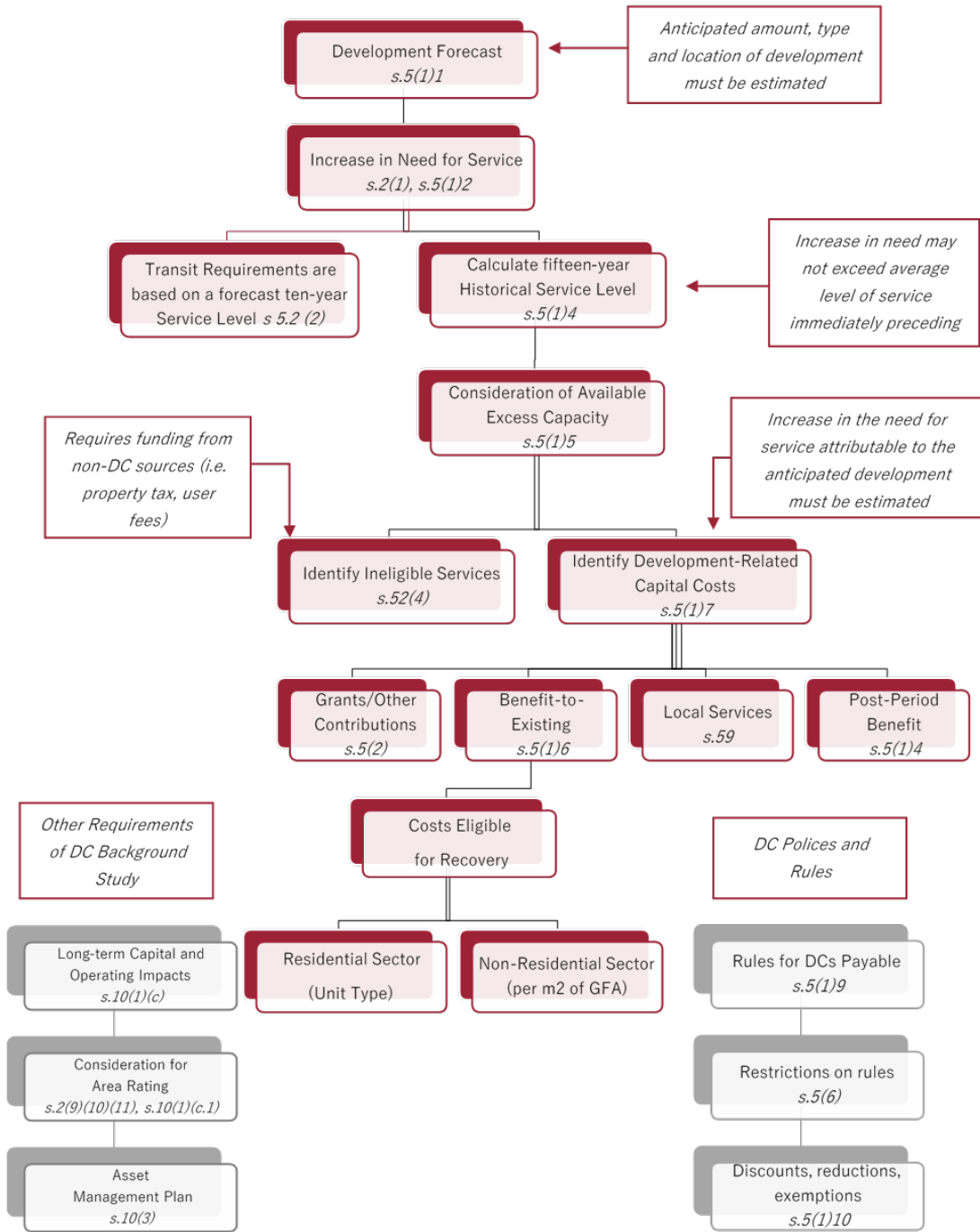
- Library Services
- Parks and Recreation
- By-Law Services
- Development-Related Studies
- Fire Services
- Services Related to a Highway (Public Works and Roads and Related)
- Waterworks Services
- Sanitary Sewer Services

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

C. KEY STEPS IN DETERMINING DEVELOPMENT CHARGES FOR FUTURE DEVELOPMENT-RELATED PROJECTS

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

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



i. Development Forecast

The first step in the methodology requires that a development forecast be prepared for forecast study period, in this case, a 10-year period from 2024-2033 is employed for general services and services related to a highway while a 23-year period to 2046 is employed for engineered services of water and sanitary sewer.

The forecast of the future residential and non-residential development is based on growth anticipated to occur in the City. For the residential portion of the forecast both the Census or “net” population growth and population growth in new units is estimated. Net population growth determines the need for additional facilities and provides the foundation for the development-related capital program.

When calculating the development charge however, the development-related net capital costs are spread over the total additional population that occupy new housing units. This population in new units represents the population from which development charges will be collected.

The non-residential portion of the forecast estimates the gross floor area (GFA) of building space to be developed over the full planning period. The forecast of GFA is based on the employment forecasts for the City. Factors for floor space per worker are used to convert the employment forecast into gross floor areas for the purposes of the Background Study.

ii. Service Categories and Historical Service Levels

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

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

Historical 15-year average service levels thus form the basis for development charges. A review of the City’s capital service levels for buildings, land, vehicles, and so on has therefore been prepared as a reference for the calculation so that the portion of future capital projects that may be included in the development charge can be determined. The historical service levels used in this study have been calculated based on the period 2009-2023.

iii. **Development-Related Capital Forecast and Analysis of DC Eligible Costs to be Recovered through Development Charges**

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

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

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

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

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

There is also a requirement in the *DCA* to reduce the applicable development charge by the amount of any "uncommitted excess capacity" that is available for a service. Such capacity

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

iv. Attribution of Types of Development

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

Where reasonable data exist, the apportionment is based on the expected demand for, and use of, the service by sector (e.g. shares of population in new units and employment).

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

v. Final Adjustment

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

D. OPERATING & CAPITAL COST IMPACTS AND ASSET MANAGEMENT PLAN LEGISLATIVE REQUIREMENTS

Section 10 of the *DCA* identifies what must be included in a Development Charges Background Study, 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; and
 - (c.2) an asset management plan prepared in accordance with subsection (3).

i. Asset Management Plan

- (3) The asset management plan shall,



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

The requirement to include an Asset Management Plan (AMP) was part of the *DCA* amendments that came into effect on January 1, 2016. A key function of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle. The section of the DC Background Study that deals with the operating and capital cost impacts and the asset management plan can be found in Appendix E.

4. DEVELOPMENT FORECAST

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

The forecasts are based on a range of statistical data including Statistics Canada Census and National Household Survey data, Canada Mortgage Housing Corporation (CMHC) housing market information. The development forecasts are also based on the United Counties of Prescott and Russell's 2022 Growth Management Strategy Update (March 30th, 2022).

A. RESIDENTIAL FORECAST

DCs are levied on residential development as a charge per new unit. Therefore, for the residential forecast, a projection of the population growth (or net population growth) as well as the population growth in new units is required.

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

Table 1 provides a summary of the residential forecast for a ten-year period from 2024 to 2033 and a long-term planning period to 2046. The 10-year planning period is applicable to all general services and services related to a highway while the 23-year period is applicable to the engineered services of water and sanitary sewer.

As shown on Table 1, over the 10-year planning period from 2024 to 2033, the number of households is forecast to increase by 1,780. This translates to population growth in new units of 4,775 persons. Over the 23-year planning period to 2046, the number of households is estimated to increase by 3,437, translating to a population growth in new units of 9,222 persons.

The City's census population is forecast to increase by 3,282 over the next 10 years and 6,769 over the next 23 years, reaching 30,435 people by 2033 and 33,922 people by 2046.

B. NON-RESIDENTIAL FORECAST

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

The non-residential forecast projects an increase of 409 jobs by 2033 and 956 jobs by 2046, excluding work from home employment. The net employment growth will be accommodated with approximately 20,450 square metres of new non-residential building space by 2033 and 47,800 square metres by 2046.

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

TABLE 1
CITY OF CLARENCE-ROCKLAND
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL
DEVELOPMENT FORECAST

City-wide Development Forecast	2023 Estimate	10-Year Planning Period 2024 - 2033		Long-Term Planning Period 2024 - 2046	
		Growth	Total at 2033	Growth	Total at 2046
Residential					
Total Occupied Dwellings	10,493	1,780	12,273	3,437	13,930
Total Population					
Census	27,153	3,282	30,435	6,769	33,922
<i>Population In New Dwellings</i>		<i>4,775</i>		<i>9,222</i>	
Non-Residential					
Employment	6,209	409	6,618	956	7,165
Non-Residential Building Space (sq.m.)		20,450		47,800	

5. SUMMARY OF HISTORICAL CAPITAL SERVICE LEVELS

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

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

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

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

TABLE 2

CITY OF CLARENCE-ROCKLAND
 SUMMARY OF AVERAGE HISTORICAL SERVICE LEVELS 2009 - 2023

Service	2009 - 2023 Service Level Indicator
1.0 LIBRARY SERVICES Buildings Land Materials Furniture And Equipment	\$318.52 per capita \$240.65 per capita \$5.16 per capita \$55.63 per capita \$17.08 per capita
2.0 PARKS AND RECREATION Indoor Recreation Park Facilities	\$5,147.48 per capita \$4,216.98 per capita \$930.50 per capita
3.0 BY-LAW SERVICES Buildings Land Furniture And Equipment	\$13.97 per capita \$2.18 per capita \$0.01 per capita \$11.78 per capita
4.0 FIRE SERVICES Buildings Land Furniture & Equipment At Stations Vehicles Equipment And Gear	\$550.99 per pop & empl \$225.83 per pop & empl \$23.36 per pop & empl \$17.71 per pop & empl \$232.89 per pop & empl \$51.20 per pop & empl
5.0 PUBLIC WORKS Buildings Land Furniture And Equipment Small Tools Fleet Fleet Contracted Services	\$400.09 per pop & empl \$125.08 per pop & empl \$17.49 per pop & empl \$4.48 per pop & empl \$3.27 per pop & empl \$245.69 per pop & empl \$4.08 per pop & empl
6.0 ROADS AND RELATED Roads Bridges & Culverts Streetlights Sidewalks	\$16,536.03 per pop & empl \$15,060.70 per pop & empl \$772.86 per pop & empl \$319.97 per pop & empl \$382.50 per pop & empl

6. 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 development charges calculation. As noted above in Section 2, O. Reg. 82/98, s. 3 states that:

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

A. A DEVELOPMENT-RELATED CAPITAL FORECAST IS PROVIDED FOR COUNCIL'S APPROVAL

Based on the development forecasts summarized in Section 4 and detailed in Appendix A, City staff, in collaboration with the consultants, developed a development-related capital program setting out those projects that are required to service anticipated development. For all general services and services related to a highway, the capital plan covers the 10-year period from 2024-2033. A long-term planning period to 2046 is used for the capital plan for the engineered services of water and sanitary sewer services.

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

B. THE DEVELOPMENT-RELATED CAPITAL FORECAST FOR GENERAL SERVICES AND SERVICES RELATED TO A HIGHWAY

A summary of the development-related capital forecast for general services and services related to a highway is presented in Table 3.

The development-related capital forecast estimates a total gross cost of \$129.15 million. A total of \$2.93 million of grants and subsidies has been identified to help fund the program. Therefore, the City's share of the capital forecast is reduced to \$126.22 million.

The capital forecast incorporates those projects identified to be related to development anticipated in the next 10 years. It is not implied that all of these costs are to be recovered from new development by way of development charges. Portions of the capital forecast may relate to replacement of existing facilities, shares of projects that benefit the existing population, or growth anticipated to occur beyond the 2024–2033 planning period. After these reductions, the remaining development-related capital costs are brought forward to the development charges calculation.

The capital forecast associated with **Library Services** includes provisions for additional facility expansions, parking spaces, materials, and a book mobile, for a total of \$3.05 million.

The capital program for **Parks and Recreation** amounts to \$17.07 million and provides for new parkland development (including new playgrounds, washrooms, waterfront, and sports parks), debenture repayment recoveries, upgrades to various existing facility features, and parks and recreation master plans.

The capital forecast associated with **By-Law Services** provides for the recovery of negative reserve balance and additional vehicles and equipment totalling about \$171,600.

The capital forecast associated with **Development-Related Studies** includes various planning studies and master plans over the planning period amounting to approximately \$337,900.

The capital forecast associated with **Fire Services** totals \$3.99 million and provides for the recovery of DC debenture payments associated to a fire hall expansion, a new vehicle and a Fire Master Plan.

The capital works for **Services Related to a Highway – Public Works** totals \$6.62 million. This includes new snow depots (including land acquisition) at Rockland and Bourget, a garage renovation and expansion, and the acquisition of fleet and equipment.

The **Services Related to a Highway - Roads and Related** capital program includes bike and multi-use paths, roadworks, intersection improvements, sidewalk improvements, developer projects, County roadworks, and transportation master plan and studies at a total cost of \$94.98 million.

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

TABLE 3
CITY OF CLARENCE-ROCKLAND
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM
FOR GENERAL SERVICES 2024 - 2033
(in \$000)

Service	Gross Cost	Grants/ Subsidies	Municipal Cost
1.0 LIBRARY SERVICES	\$3,053.4	\$0.0	\$3,053.4
1.1 Branch Expansion	\$2,810.8	\$0.0	\$2,810.8
1.2 Materials and Equipment	\$182.6	\$0.0	\$182.6
1.3 Materials and Equipment	\$60.0	\$0.0	\$60.0
2.0 PARKS AND RECREATION	\$20,003.1	\$2,930.0	\$17,073.1
2.1 Indoor Recreation Debt	\$1,584.1	\$0.0	\$1,584.1
2.2 Indoor Recreation Facilities	\$6,760.0	\$2,930.0	\$3,830.0
2.3 Park Facilities	\$11,359.0	\$0.0	\$11,359.0
2.4 Studies	\$300.0	\$0.0	\$300.0
3.0 BY-LAW SERVICES	\$171.6	\$0.0	\$171.6
3.1 Recovery of Negative Reserve Fund Balance	\$76.8	\$0.0	\$76.8
3.2 Buildings & Equipment	\$94.8	\$0.0	\$94.8
4.0 DEVELOPMENT RELATED STUDIES	\$337.9	\$0.0	\$337.9
4.1 Negative Reserve Fund Balance	\$12.9	\$0.0	\$12.9
4.2 Development-Related Studies	\$325.0	\$0.0	\$325.0
5.0 FIRE SERVICES	\$3,987.1	\$0.0	\$3,987.1
5.1 Buildings, Land & Furnishings	\$2,362.1	\$0.0	\$2,362.1
5.2 Vehicles	\$1,500.0	\$0.0	\$1,500.0
5.3 Equipment & Studies	\$125.0	\$0.0	\$125.0
SERVICES RELATED TO A HIGHWAY			
6.0 PUBLIC WORKS	\$6,620.0	\$0.0	\$6,620.0
6.1 Buildings & Equipment	\$5,020.0	\$0.0	\$5,020.0
6.2 Fleet & Equipment	\$1,600.0	\$0.0	\$1,600.0
7.0 ROADS AND RELATED	\$94,981.4	\$0.0	\$94,981.4
7.1 City-Wide Roads Projects	\$94,981.4	\$0.0	\$94,981.4
TOTAL - GENERAL SERVICES + SERVICES RELATED TO A HIGHWAY	\$129,154.5	\$2,930.0	\$126,224.5

C. THE DEVELOPMENT-RELATED CAPITAL FORECAST FOR ENGINEERED SERVICES

Table 4 provides the City-wide development-related capital recoveries for the Waterworks and Sanitary Sewage services. The City-wide gross capital program totals \$148.68 million and provides servicing for anticipated development over the 23-year planning period from 2024-2046. There are a substantial amount of funding contributions anticipated from other municipalities to pay for a share of the water related expansion projects. The \$61.62 million in contributions have been considered which reduces the capital program to a net municipal cost of \$87.06 million.

The largest proportion of the net municipal engineering capital program cost is associated with growth-related Sanitary Sewer projects. The various treatment plant improvements, pumping stations, linear infrastructure projects and studies have a net municipal cost of \$51.19 million.

Waterworks projects include investments in the treatment plant, as well as linear infrastructure, pumping stations and studies. The net municipal cost totals \$35.88 million.

TABLE 4
CITY OF CLARENCE-ROCKLAND
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM
FOR ENGINEERED SERVICES 2024 - 2046
(in \$000)

Service	Gross Cost	Grants / Subsidies	Net Municipal
1.0 WATERWORKS	\$97,494.3	\$61,616.0	\$35,878.3
1.1 Water Treatment Plant Projects	\$34,770.0	\$11,242.1	\$23,527.9
1.2 Studies	\$3,150.0	\$1,020.0	\$2,130.0
1.3 Watermains	\$49,950.3	\$43,343.4	\$6,606.8
1.4 Water Pumping Station and Storage	\$9,624.0	\$6,010.5	\$3,613.5
2.0 SANITARY SEWER SERVICES	\$51,185.0	\$0.0	\$51,185.0
2.1 Water Pollution Control Plant Projects	\$30,329.0	\$0.0	\$30,329.0
2.2 Studies	\$300.0	\$0.0	\$300.0
2.3 Sewage Pumping Stations	\$18,551.0	\$0.0	\$18,551.0
2.4 Sewers	\$2,005.0	\$0.0	\$2,005.0
TOTAL - 23-YEAR PROGRAM	\$148,679.3	\$61,616.0	\$87,063.3

7. PROPOSED DEVELOPMENT CHARGES ARE CALCULATED IN ACCORDANCE WITH THE DCA

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

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

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

A. DEVELOPMENT CHARGES CALCULATION

A summary of the “unadjusted” residential and non-residential development charges is presented in Tables 5 for services using a 10-year planning horizon and Table 6 for engineered services of water and sanitary sewer under a longer-term planning horizon to 2046. Further details of the calculations for each individual City service category are available in Appendix B for the general services and services related to a highway (10-year program) and Appendix C for engineered services of water and sanitary sewer (to 2046).

i. General Services and Services Related to a Highway

A summary of the “unadjusted” residential and non-residential development charges for general services is presented in Table 5.

TABLE 5

CITY OF CLARENCE-ROCKLAND
 SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
 10-YEAR CAPITAL PROGRAM FOR GENERAL SERVICES AND SERVICES RELATED TO A HIGHWAY

10 Year Growth in Population in New Units	4,775
10 Year Growth in Square Metres	20,450

Service	Development-Related Capital Program (2024 - 2033)						Total DC Eligible Costs for Recovery			
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Other Contributions (\$000)	Available DC Reserves (\$000)	Post-2033 Benefit (\$000)	Total DC Eligible Costs for Recovery (\$000)	Residential Share		Non-Residential Share	
							%	(\$000)	%	(\$000)
1.0 LIBRARY SERVICES	\$3,053.4	\$0.0	\$0.0	\$379.9	\$1,628.1	\$1,045.4	100%	\$1,045.4	0%	\$0.00
Unadjusted Development Charge Per Capita								\$218.9		
Unadjusted Development Charge Per Sq.M										\$0.00
2.0 PARKS AND RECREATION	\$17,073.1	\$993.5	\$0.0	\$1,921.0	\$0.0	\$14,158.6	100%	\$14,158.6	0%	\$0.00
Unadjusted Development Charge Per Capita								\$2,965.2		
Unadjusted Development Charge Per Sq.M										\$0.00
3.0 BY-LAW SERVICES	\$171.6	\$0.0	\$0.0	\$0.0	\$120.0	\$51.6	92%	\$47.4	8%	\$4.13
Unadjusted Development Charge Per Capita								\$9.9		
Unadjusted Development Charge Per Sq.M										\$0.20
4.0 DEVELOPMENT RELATED STUDIES	\$337.9	\$37.5	\$0.0	\$0.0	\$0.0	\$300.4	92%	\$276.3	8%	\$24.03
Unadjusted Development Charge Per Capita								\$57.9		
Unadjusted Development Charge Per Sq.M										\$1.18
5.0 FIRE SERVICES	\$3,987.1	\$1,125.0	\$0.0	\$340.4	\$488.0	\$2,033.7	92%	\$1,871.0	8%	\$162.70
Unadjusted Development Charge Per Capita								\$391.83		
Unadjusted Development Charge Per Sq.M										\$7.96
SERVICES RELATED TO A HIGHWAY										
6.0 PUBLIC WORKS	\$6,620.0	\$2,510.0	\$0.0	\$1,114.7	\$1,518.5	\$1,476.7	92%	\$1,358.6	8%	\$118.14
Unadjusted Development Charge Per Capita								\$284.5		
Unadjusted Development Charge Per Sq.M										\$5.78
7.0 ROADS AND RELATED	\$94,981.4	\$12,027.1	\$5,170.5	\$4,811.2	\$30,717.0	\$42,255.5	92%	\$38,875.1	8%	\$3,380.44
Unadjusted Development Charge Per Capita								\$8,141.4		
Unadjusted Development Charge Per Sq.M										\$165.30
TOTAL 10-YEAR GENERAL SERVICES	\$126,224.5	\$16,693.1	\$5,170.5	\$8,567.3	\$34,471.7	\$61,321.9		\$57,632.5		\$3,689.4
Unadjusted Development Charge Per Capita								\$12,069.61		
Unadjusted Development Charge Per Sq.M										\$180.42

The capital forecast for general services and services related to a highway incorporates those projects identified to be related to development anticipated in the next 10-years. However, not all of the capital costs are to be recovered from new development by way of development charges. Table 5 shows that \$16.69 million of the capital forecast relates to replacement of existing capital facilities or for shares of projects that provide benefit to the existing community. These portions of capital costs will have to be funded from non-development charge revenue sources.

Another share of the forecast, \$34.47 million, is attributable to development beyond the 2033 period (and may therefore be recovered under future development charge studies).



Direct developer contributions of \$5.17 million has been identified for capital projects associated with Roads and Related and are netted off the total capital costs.

After accounting for the development-related reserves (\$8.57 million), the total costs eligible for recovery through development charges is \$61.32 million. This amount is allocated between the residential and non-residential sectors to derive the unadjusted development charges. Library and Parks and Recreation are deemed to benefit residential development only, while the remaining services are allocated between both sectors based on shares of population in new units and employment growth over the next ten years. The allocation to the residential sector for these services is calculated at 92 per cent and 8 per cent to the non-residential sector.

Approximately \$57.63 million of the development charges eligible capital program is deemed to benefit residential development. When this amount is divided by the ten-year growth in population in new housing units an unadjusted charge of \$12,069.61 per capita is the result. The non-residential share of the capital program totals \$3.69 million and when this amount is divided by the 10-year forecast of non-residential space growth, an unadjusted charge of \$180.42 per square metre is the result.

ii. Engineered Services

A summary of the “unadjusted” residential and non-residential development charges for engineered services of water and sanitary sewer is presented in Table 6.

TABLE 6
CITY OF CLARENCE-ROCKLAND
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
CAPITAL PROGRAM FOR ENGINEERING SERVICES: WATER AND SANITARY SEWER

23-Year Growth in Population in New Units	9,222
Employment Growth	956
23-Year Growth in Square Meters	47,800

Service	Development-Related Capital Program (2024 - 2046)						Residential Share		Non-Residential Share	
	Net Municipal Cost	Replacement & Benefit to Existing	Direct Developer Contributions	Available DC Reserves	Post-Period Benefit	Total DC Eligible Costs for Recovery	%	(\$000)	%	(\$000)
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)				
1.0 WATERWORKS	\$35,878.3	\$1,056.6	\$0.0	\$2,415.1	\$7,346.6	\$25,060.1	91%	\$22,804.7	9%	\$2,255.41
Unadjusted Development Charge Per Capita								\$2,472.85		
Unadjusted Development Charge Per Sq.M										\$47.18
2.0 SANITARY SEWER SERVICES	\$51,185.0	\$395.6	\$151.3	\$937.6	\$12,182.2	\$37,518.3	91%	\$34,141.6	9%	\$3,376.65
Unadjusted Development Charge Per Capita								\$3,702.19		
Unadjusted Development Charge Per Sq.M										\$70.64
TOTAL 23-YEAR ENGINEERED SERVICES	\$87,063.3	\$1,452.2	\$151.3	\$3,352.7	\$19,528.8	\$62,578.4		\$56,946.3		\$5,632.1
Unadjusted Development Charge Per Capita								\$6,175.04		
Unadjusted Development Charge Per Sq.M										\$117.82



Not all of the net municipal costs are to be recovered from new development by way of development charges. Table 6 shows that \$1.45 million of the capital program relates to replacement of existing capital works or for shares of projects that provide benefit to the existing community. This amount has been netted off the chargeable capital cost. Other costs not included in the development charges calculation include \$151,300 in direct developer contributions and \$3.35 million in available reserve fund balances. Post-period shares in the amount of \$19.53 million have also been netted out.

The remaining \$62.58 million is related to development in the 2024-2046 planning period and has been included in the development charge calculation.

The capital program eligible for recovery through development charges is allocated to the residential and non-residential sectors based on future shares of population in new units and employment growth over the planning period to 2046. On this basis, the allocation to the residential and non-residential sectors is also calculated at 91 per cent and 9 per cent, respectively.

Approximately \$56.95 million of the engineered services development charges eligible capital program is deemed to benefit residential development. When this amount is divided by the 23-year growth in population in new housing units an unadjusted charge of \$6,175.04 per capita is the result. The non-residential share of the capital program totals \$5.63 million and when this amount is divided by the 23-year forecast of non-residential space growth, an unadjusted charge of \$117.82 per square metre is the result.

iii. Adjusted Residential and Non-Residential Development Charges

Final adjustments to the “unadjusted” development charge rates summarized above are made through a cash flow analysis. The analysis, details of which are included in the Appendices, considers the borrowing cost and interest earnings associated with the timing of expenditures and development charge receipts for each service category.

Table 7 summarizes the results of the cash flow adjustments for the residential development charges rates. The adjusted per capita rate increases from \$18,244.66 per capita to \$19,598.87 per capita after the cash flow analysis for the residential charge.

Table 7 also provides the calculated rates by residential unit. The charge for a single or semi-detached unit is \$59,189 per unit, \$47,037 for a row or other type of multiple units, and \$31,358 for an apartment unit. The total charge represents a serviced unit (with water and sanitary sewer) in the City.

Table 8 shows the non-residential uniform charge also experiences an increase after cash flow considerations, from \$298.23 to \$331.70 per square metre.

TABLE 7

CITY OF CLARENCE-ROCKLAND
CITY-WIDE DEVELOPMENT CHARGES
RESIDENTIAL DEVELOPMENT CHARGES

Service	Unadjusted Charge Per Capita	Adjusted Charge After Cashflow Per Capita	Charge By Unit Type		
			Single & Semi-Detached	Rows & Other Multiples	Apartments
Library Services	\$218.93	\$220.79	\$667	\$530	\$353
Parks And Recreation	\$2,965.15	\$3,046.39	\$9,200	\$7,311	\$4,874
By-Law Services	\$9.93	\$11.80	\$36	\$28	\$19
Development Related Studies	\$57.87	\$63.65	\$192	\$153	\$102
Fire Services	\$391.83	\$411.77	\$1,244	\$988	\$659
Services Related to a Highway					
Public Works	\$284.52	\$289.23	\$873	\$694	\$463
Roads And Related	\$8,141.38	\$8,045.24	\$24,297	\$19,309	\$12,872
Waterworks	\$2,472.85	\$3,103.69	\$9,373	\$7,449	\$4,966
Sanitary Sewer Services	\$3,702.19	\$4,406.31	\$13,307	\$10,575	\$7,050
TOTAL RESIDENTIAL CHARGE (SERVICED)	\$18,244.66	\$19,598.87	\$59,189	\$47,037	\$31,358
(1) Based on Persons Per Unit of:			3.02	2.40	1.60



TABLE 8

CITY OF CLARENCE-ROCKLAND
 CITY-WIDE DEVELOPMENT CHARGES
 NON-RESIDENTIAL DEVELOPMENT CHARGES

Service	Unadjusted Charge (\$/sq.m)	Non-Residential (\$/sq.m)
Library Services	\$0.00	\$0.00
Parks And Recreation	\$0.00	\$0.00
By-Law Services	\$0.20	\$0.26
Development Related Studies	\$1.18	\$1.29
Fire Services	\$7.96	\$8.44
Services Related to a Highway		
Public Works	\$5.78	\$5.98
Roads And Related	\$165.30	\$164.95
Waterworks	\$47.18	\$62.28
Sanitary Sewer Services	\$70.64	\$88.50
TOTAL NON-RESIDENTIAL CHARGE PER SQ.M (SERVICED)	\$298.23	\$331.70

B. COMPARISON OF CALCULATED AND CURRENT DEVELOPMENT CHARGES

For illustration purposes, Tables 9 and 10 present a comparison of the newly calculated residential and non-residential development charges with currently imposed development charge rates. It illustrates that the residential development charge for a fully serviced single- or semi-detached unit increases by \$27,125 per unit, or 85 per cent.

The current development charge rate for fully serviced non-residential development increases from \$169.57 per square metre to \$331.70 per square metre (96 per cent or 162.13 per square metre). The rate increases can largely be attributed to the capital needs associated with emplacing necessary road, water and sanitary sewer infrastructure in the City.

TABLE 9
CITY OF CLARENCE-ROCKLAND
COMPARISON OF CURRENT AND CALCULATED
RESIDENTIAL UNSERVICED DEVELOPMENT CHARGES

Service	Current Residential Charge / SDU	Calculated Residential Charge / SDU	Difference in Charge	
Library Services	\$941	\$667	(\$274)	(29%)
Parks And Recreation	\$7,153	\$9,200	\$2,047	29%
By-Law Services	\$27	\$36	\$9	36%
Development Related Studies	\$124	\$192	\$68	54%
Fire Services	\$1,419	\$1,244	(\$175)	(12%)
Services Related to a Highway				
Public Works	\$1,258	\$873	(\$385)	(31%)
Roads And Related	\$12,075	\$24,297	\$12,222	101%
Waterworks	\$3,680	\$9,373	\$5,693	155%
Sanitary Sewer Services	\$5,387	\$13,307	\$7,920	147%
TOTAL RESIDENTIAL CHARGE (SERVICED)	\$32,064	\$59,189	\$27,125	85%

TABLE 10

CITY OF CLARENCE-ROCKLAND
 COMPARISON OF CURRENT AND CALCULATED
 NON-RESIDENTIAL UNSERVICED DEVELOPMENT CHARGES

Service	Current Non-Residential Charge / Sq.m	Calculated Non-Residential Charge / Sq.m	Difference in Charge	
Library Services	\$0.00	\$0.00	\$0.00	N/A
Parks And Recreation	\$0.00	\$0.00	\$0.00	N/A
By-Law Services	\$0.20	\$0.26	\$0.06	32%
Development Related Studies	\$0.86	\$1.29	\$0.43	50%
Fire Services	\$10.09	\$8.44	(\$1.65)	(16%)
Services Related to a Highway				
Public Works	\$8.94	\$5.98	(\$2.96)	(33%)
Roads And Related	\$85.70	\$164.95	\$79.25	92%
Waterworks	\$25.89	\$62.28	\$36.39	141%
Sanitary Sewer Services	\$37.89	\$88.50	\$50.61	134%
TOTAL NON-RESIDENTIAL CHARGE PER SQ.M (SERVICED)	\$169.57	\$331.70	\$162.13	96%



Proposed Development Charges are Calculated in Accordance
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8. COST OF GROWTH ANALYSIS

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

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

Table 11 summarizes the estimated increase in net operating costs that the City will experience for additions associated with the planned capital program. Additional details are included in Appendix E.

As shown in Table 11, by 2033, the City's net operating costs are estimated to increase by \$2.12 million. The most significant portion of this increase relates to the Parks and Recreation capital programs.

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

Table 11 also summarizes the components of the development-related capital program that will require funding from non-development charge sources as discussed in Sections 7. In total, \$21.86 million will need to be financed from non-development charge sources over the next ten years for general services and services related to a highway. A total of \$1.60 million will need to be financed from non-development charge sources for engineered services over a 23-year period. Most of the funding from non-growth sources is related to shares of the program that provide benefit to the existing community (\$16.69 for tax supported services and \$1.45 million for rate supported services of water and sanitary sewer). The remaining share can be attributed to contributions from developers to fund a portion of the program.

In addition, \$34.47 million in interim financing may be required for projects related to growth in the post-2033 period for general services and services related to a highway. For engineered services of water and sanitary sewer, the financing related to post-2046 growth-related projects total \$19.53 million. It is likely that most of these monies could be recovered from future development charges as the by-laws are revisited at least every ten years.

TABLE 11

**CITY OF CLARENCE-ROCKLAND
SUMMARY OF LONG TERM CAPITAL AND
OPERATING COST IMPACTS FOR TAX SUPPORTED SERVICES
(in thousands of constant dollars)**

	at 2033 (\$000)
Net Operating Impacts (1)	
Library Services	\$212.8
Parks and Recreation	\$717.0
By-law Services	\$0.0
Development-Related Studies	\$0.0
Fire Services	\$37.5
Services Related to a Highway - Public Works	\$616.5
Services Related to a Highway - Roads and Related	\$534.0
Waterworks	\$0.0
Sanitary Sewage	\$0.0
NET OPERATING IMPACTS	\$2,117.8
GENERAL SERVICES (2024-2033)	Total
Long-term Capital Impact (1)	
Total Net Cost	\$126,224.5
Net Cost From Development Charges	\$61,321.9
Prior Growth Share from DC Reserve Balances (2)	\$8,567.3
Portion for Post-2033 Development (3)	\$34,471.7
Funding From Non-DC Sources	
Other Contributions (4)	\$5,170.5
Replacement	\$16,693.1
FUNDING FROM NON-DC SOURCES	\$21,863.6
Utility Rate Supported	
ENGINEERED SERVICES (2024-2046)	Total
Long-term Capital Impact (1)	
Total Net Cost	\$87,063.3
Net Cost From Development Charges	\$62,578.4
Prior Growth Share from DC Reserve Balances (2)	\$3,352.7
Portion for Post-2046 Development (3)	\$19,528.8
Funding From Non-DC Sources	
Other Contributions (4)	\$151.3
Replacement	\$1,452.2
FUNDING FROM NON-DC SOURCES	\$1,603.5

Notes:

- (1) See Appendix E
- (2) Existing development charge reserve fund balances collected from growth prior to 2024 are applied to fund initial projects in development-related capital forecast
- (3) Post-period development-related net capital costs may be eligible for development charge funding in future DC by-laws
- (4) Other Contributions shown for engineered services includes Direct Developer Contributions.

B. ASSET MANAGEMENT PLAN

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

i. Annual Capital Provisions for Tax and Rate Supported Assets

Table 12 and 13 shows the annual capital provisions required to replace the development eligible and ineligible costs associated with the capital infrastructure identified in the DC Background Study for general and engineering services, respectively. This estimate is based on information obtained through discussions with municipal staff regarding useful life assumptions and the capital cost of acquiring and/or emplacing each asset.

For general services, table 12 illustrates that, by 2034, the City will need to fund an additional \$1.67 million per annum in order to properly fund the full life cycle costs of the new City-wide assets supported under the proposed Development Charges By-Law.

Table 12 Calculated Annual AMP Provisions				
General Services	2024-2033 Capital Program		Annual AMP Provision by 2034	
	DC-Eligible	Non DC-Eligible	DC-Related	Non DC-Related
LIBRARY SERVICES	\$1,425,000	\$1,628,000	\$34,000	\$56,000
PARKS AND RECREATION	\$16,080,000	\$3,923,000	\$345,000	\$345,000
BY-LAW SERVICES	\$52,000	\$120,000	\$0	\$11,000
DEVELOPMENT RELATED STUDIES	\$300,000	\$38,000	\$0	\$0
FIRE SERVICES	\$2,374,000	\$1,613,000	\$39,000	\$118,000
SERVICES RELATED TO A HIGHWAY				
PUBLIC WORKS	\$2,591,000	\$4,029,000	\$109,000	\$126,000
ROADS AND RELATED	\$47,067,000	\$47,915,000	\$1,147,000	\$1,079,000
TOTAL	\$69,889,000	\$59,266,000	\$1,674,000	\$1,735,000

Note: DC Eligible funding includes 10-year period funding from DCs and DC Reserve Funding

For engineering services of water and sanitary sewer, Table 13 illustrates that, by 2047, the City will need to fund an additional \$191,000 per annum in order to properly fund the full life cycle costs of the new City-wide assets supported under the proposed Development Charges By-Law.

Table 13 Calculated Annual AMP Provisions				
Engineering Services	2024-2046 Capital Program		Annual AMP Provision by 2047	
	DC-Eligible	Non DC-Eligible	DC-Related	Non DC-Related
WATERWORKS	\$27,475,000	\$70,019,000	\$29,000	\$81,000
SANITARY SEWER SERVICES	\$38,456,000	\$12,729,000	\$162,000	\$54,000
TOTAL	\$65,931,000	\$82,748,000	\$191,000	\$135,000

Note: DC Eligible funding includes 23-year period funding from DCs and DC Reserve Funding

ii. Future Revenue Growth

The calculated annual funding provision should be considered within the context of the City's projected growth. Over the next ten years, the City is projected to increase by approximately 1,780 households. In addition, the City will also add 409 new employees that will result in approximately 20,450 square metres of additional non-residential building space. Over the 23-year period, the City will increase by 3,437 households and add 956 employees, resulting in an increase of 47,800 square metres of non-residential building space.

This growth will have the effect of increasing the overall assessment base and additional user fee and charges revenue to offset the capital asset provisions required to replace the infrastructure proposed to be funded under the Development Charges By-law.

iii. Assets are Deemed to be Financial Sustainable

In summary, the asset management plan and long-term capital and operating analysis included in this appendix demonstrates that the City can afford to invest and operate the identified services infrastructure over the 10 and 23-year planning period. Importantly, the City's annual budget review allows staff to continue to monitor and implement mitigating measures should the program become less sustainable.

9. OTHER CONSIDERATIONS AND LEGISLATIVE REQUIREMENTS

A. DEVELOPMENT CHARGES ADMINISTRATION AND COLLECTION

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

i. Development Charges Amount Payable and Date of Payment

The total amount of a DC is the amount that would be determined under the by-law on the day of an application for site plan approval or the day of an application for rezoning or, if neither of these apply, the day of building permit issuance. Full details on determining the DCs payable in any particular case are provided in s.26, s.26.1 and s.26.2 of the *DCA*.

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

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

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

For required instalments, the City may charge interest from the date the DC would have been payable to the date the instalment is paid. Interest may accrue on each installment until the final payment has been made. Any skipped or late payments can be added to the tax roll (including interest). Full details on the prescribed payment plans are provided in s.26.1 of the *DCA*. In accordance with s.26.3 of the *DCA* the maximum interest rate a municipal can charge is prime plus 1%.

ii. Reserve Funds

Under the *DCA*, a municipality that has passed a development charge by-law must establish a separate reserve fund for each service to which the development charge relates and pay each development charge it collects into the respective reserve fund. Beginning in 2023 and each calendar year thereafter, a municipality shall spend or allocate at least 60% of the

monies in a reserve fund associated with Water supply, Wastewater services and Services Related to a Highway.

While the *DCA* does permit municipalities to borrow from the reserve fund, the amount borrowed is to be repaid with interest at a rate not less than the prescribed minimum interest rate. Additionally, money in the reserve fund is to be spent only on development-related capital costs.

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

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

B. CHANGES ARISING FROM BILL 23 AND BILL 185

As of November 28, 2022, there are several changes to the *DCA* due to the enactment and Royal Assent of Bill 23. A list of the changes that are now in force is provided below in Table 14.

Table 14: Recent Changes to the *DCA*

Section	Description
Section 2(1)	Exemptions for existing rental residential buildings and a range of residential units in existing and new houses.
Section 2(4)	Housing services are ineligible for DC funding (repeal of paragraph 17 of ss.2(4) of the <i>DCA</i>). Existing by-laws are deemed to be “amended” and no development charges can be collected for housing services from November 28, 2022 onward.
Section 4.1	Exemptions for affordable and attainable residential units as defined in the Affordable Residential Units Bulletin.
Section 4.2	Exemptions for non-profit housing development. This does not apply with respect to a DC payable before November 28, 2022.

Section	Description
Section 4.3	Exemption for inclusionary zoning residential units. This does not apply with respect to a DC payable before November 28, 2022.
Section 5(1)	Historical service level calculation period extended from 10 years to 15 years. Does not apply to by-laws in force prior to November 28, 2022.
Section 9(1)	Maximum life of a DC by-law extended from 5 years to 10 years. This does not apply to by-laws in-force before November 28, 2022.
Section 26.1	Deferral payments now apply to rental housing and institutional development. Interest on deferral payments is now capped at prime plus 1% in accordance with s.26.3.
Section 26.2	DCs for rental housing development are now discounted based on the number of bedrooms proposed. Interest on DC freeze now capped at prime plus 1% in accordance with section 26.3.
Section 26.3	Maximum interest rates are capped at prime plus 1%. This does not apply with respect to a DC that was payable before November 28, 2022.
Section 35	Municipalities are now required to spend or allocate at least 60% of reserve balances each year for Water Supply, Wastewater, and Services Related to a Highway beginning in 2023.
Section 44(4)	Rules for front ending agreements as they relate to affordable and attainable residential units.
Section 60(1)(s.4)	Additional services for which municipalities are required to spend or allocate at least 60% of reserve fund balances may be prescribed through Regulations (none are proposed as of yet).
Section 60(1)(d.2) and 9d.3)	Prescribes developments and criteria related to attainable residential units (section 4.1).

C. DEVELOPMENT CHARGES ADMINISTRATION

A draft copy of the development charges by-law will be made available on the City’s website at least two weeks before the scheduled public meeting for review. The by-law itself will contain a series of polices as it relates to the City’s policies and practices regarding development charge administration. In this regard, a few specific recommendations:

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

D. LOCAL SERVICE GUIDELINES

Local Service Guidelines are provided under Appendix F of this DC Background Study and are subject

APPENDIX A

DEVELOPMENT FORECAST

APPENDIX A – DEVELOPMENT FORECAST

This appendix provides details of the development forecast used to prepare the 2024 Development Charges Background Study for the City of Clarence-Rockland. Forecasts of population, households, employment and non-residential building space were prepared by Hemson with information provided by City planning staff and the United Counties of Prescott and Russell’s 2021 Growth Management Strategy (March 30, 2022). The tables take into consideration data from the 2021 Census, historical building permit and completion data and the current economic climate. The forecast results are provided in a series of tables.

Table A-1	Historical Population, Occupied Households and Employment Summary
Table A-2	Historical Annual Housing Completions by Type
Table A-3	Historical Households by Period of Construction Showing Household Size
Table A-4	Population, Household & Employment Forecast Summary
Table A-5	Forecast of Household Growth by Unit Type
Table A-6	Forecast of Population Growth in New Households by Unit Type
Table A-7	Non-Residential Space Forecast

A. FORECAST APPROACH AND KEY ASSUMPTIONS

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

In this study, a ten-year planning period from 2024-2033 has been used to calculate development charges for all general services and services related to a highway considered under this study. Additionally, a 23-year planning period from 2024-2046 has been used to calculate development charges for the engineered services of water and sanitary sewer.

B. HISTORICAL DEVELOPMENT IN THE CITY OF CLARENCE-ROCKLAND

The City of Clarence-Rockland has experienced steady household and population growth over the last fifteen years. Historical growth and development figures presented here are based on Statistics Canada Census data. A “Census-based” definition of population is used for the purpose of the development charges study. This definition does not include the Census net undercoverage, which is typically included in the definition of “total” population commonly used in municipal planning documents. For development charges purposes, a 15-year historical period of 2009 to 2023 is used for calculating historical service levels. Since 2021 was the last year of the Census, figures from 2022 to 2023 are estimated.

Table A-1 shows that over the historical period from 2008 to 2023, the City’s Census population increased by roughly 5,437 people (or 22%) to approximately 27,153 people by 2023. The number of occupied household units in the City increased at a higher rate than population (33% or 2,645 units) over the same period. This difference is the result of a decline in the average number of persons residing in household units.

Total employment numbers shown in Table A-1 are based on Statistics Canada place of work data. Place of work employment figures record where people work rather than place of residence. The employment figures shown in this table include workers with no fixed address. However, work-at-home employment is excluded from the figures, for development charge purposes, as this type of employment does not require building floorspace for its activities. Table A-1 shows that the City’s employment increased over the last fifteen years, from about 4,804 jobs in 2008 to 6,209 jobs in 2023. The rate of employment growth was, on average, fairly steady with population with the activity rate maintaining around 23% over the period.

Table A-2 provides historical annual housing completions from the Canada Mortgage and Housing Corporation between 2009 and 2023. The number of completions by household unit type is shown along with the resulting percentages. The vast majority, 65 per cent, of all housing completions over the historical period were single and semi-detached units. Apartment units accounted for 14 per cent of the unit mix and the remaining 20 per cent were for rows and other multiple unit types.

Table A-3 provides details on historical occupancy patterns for permanently occupied dwelling units in the City. The overall average occupancy level in the City for single and semi-detached units is 2.74 persons per housing unit (PPU). Occupancy levels for recently constructed units, between 2011 and 2021, are used in the development charges calculation

for single/semi detached units since they better reflect the number of people that are likely to reside in new development. The average PPU of permanent single and semi-detached units built in the City in the period 2011 to 2021 is 3.02. A similar approach is used for multiples and apartments, the average PPU of multiples and apartments built in the City in the period from 2011 to 2021 is 2.40 and 1.60 respectively. These PPU factors are used in the forecast calculations below.

C. FORECAST METHOD AND RESULTS

The forecast described herein is consistent with governing legislation and represents a best estimate of the amount and type of development that is likely to occur. Population, household unit and employment forecast numbers are generally based on the targets set for the City under the United Counties of Prescott-Russel's 2021 Growth Management Strategy¹. The forecast for population, occupied households, and employment are presented in Table A-4.

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

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

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

¹ Specifically related to the employment forecast used for the purposes of the DC Study, the forecast was adjusted to reflect the same growth increment as the UCPR Growth Management Strategy as the 2021 Census results were higher than what was initially outlined in the GMS. Additionally, adjustments were made to the work at home assumption to account for the impacts of COVID pandemic recorded in the 2021 Census. Therefore, the 2046 place of work employment figure in this DC Study is higher than the GMS projection.

i. Residential Forecast

The residential forecast is based on a forecast of population and household unit growth, as well as population in new units in the City. The allocation of development-related capital costs between the residential and non-residential sector is based on forecasts of population in new housing units and employment.

As detailed in Tables A-4 and A-5, the City's Census population is forecast to rise from 27,153 in 2023 to 30,435 in 2033 and 33,922 in 2046 – this represents an increase of approximately 3,282 persons in the 10-year forecast period and 6,769 persons in the 23-year forecast.

Over the 10-year planning period from 2024-2033, the total number of occupied household units is forecast to increase from 10,493 in 2023 to 12,273 in 2033 – this represents increases approximately 1,780 units. Over the 23-year forecast from 2024-2046, the total number of occupied household units is forecast to increase to 13,930 in 2046, representing an increase of approximately 3,437 units. Of the total household unit growth, approximately 65% of the units will be of single and semi-detached unit form, about 15% of units will be apartment units and the remaining will be related to rows & other multiple units (Table A-5).

In addition to the Census population forecast, a forecast of “population in new units” that will result from the addition of new housing units has been made. The population growth in new units is estimated by applying the following PPU to the dwelling unit forecast: 3.02 for single and semi-detached units; 2.40 for rows and other multiples; and 1.60 for apartments. The per capita residential development charge rates are calculated based on these estimates. As indicated in Table A-6, the forecasted population growth in the new household units is anticipated at 4,775 persons over the 10-year period and 9,222 persons over the 23-year period.

ii. Non-Residential Forecast

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 floor space in the City. As with the residential forecast, the GFA forecast covers the 10-year period from 2024 to 2033 for General Services and Services Related to a Highway. The 23-year period to 2046 is used for engineered services of water and sanitary sewer.

The floor space assumptions are based on historical floor space trends and averages. An assumed Floor Space per Worker (FSW) is applied to forecast employment numbers in order to estimate the growth in non-residential building space across the City of Clarence-Rockland. The FSW assumption used herein is 50 m² per employee. The employment and floor space forecasts for the City are summarized in Table A-7.

Total employment is forecast to grow by 409 employees over the ten-year forecast period from 2024 to 2033 and 956 employees over the 23-year forecast period to 2046. The total floor space growth is forecast at 20,450 square metres over the 10-year planning period and 47,800 square metres over the 23-year planning period.

APPENDIX A - TABLE A-1

CITY OF CLARENCE-ROCKLAND
HISTORICAL POPULATION, OCCUPIED HOUSEHOLDS & EMPLOYMENT SUMMARY

Mid-Year	Census Population	Growth	Occupied Households	Household Growth	PPU	Employment by Place of Work	Growth	Activity Rate
2008	21,716	468	7,931	223	2.74	4,804	292	22.1%
2009	22,195	479	8,161	230	2.72	5,115	311	23.0%
2010	22,684	489	8,397	236	2.70	5,446	331	24.0%
2011	23,185	501	8,641	244	2.68	5,799	353	25.0%
2012	23,445	260	8,774	133	2.67	5,667	-132	24.2%
2013	23,707	262	8,909	135	2.66	5,539	-128	23.4%
2014	23,972	265	9,047	138	2.65	5,413	-126	22.6%
2015	24,240	268	9,187	140	2.64	5,290	-123	21.8%
2016	24,512	272	9,329	142	2.63	5,171	-119	21.1%
2017	24,898	386	9,477	132	2.63	5,352	181	21.5%
2018	25,290	392	9,628	250	2.63	5,540	188	21.9%
2019	25,688	398	9,781	153	2.62	5,735	195	22.3%
2020	26,093	405	9,937	156	2.61	5,936	201	22.7%
2021	26,505	412	10,095	158	2.60	6,145	209	23.2%
2022	26,827	322	10,292	197	2.59	6,177	32	23.0%
2023	27,153	326	10,493	201	2.58	6,209	32	22.9%
Growth 2009 - 2023		5,437		2,645			1,405	

Source: Statistics Canada, Census of Canada

APPENDIX A - TABLE A-2

CITY OF CLARENCE-ROCKLAND
HISTORICAL ANNUAL HOUSING COMPLETIONS BY TYPE (CMHC)

Year	CMHC Annual Housing Completions - Units				Completions - Shares By Unit Type			
	Singles & Semis	Rows	Apts.	Total	Singles & Semis	Rows	Apts.	Total
2009	127	7	0	134	95%	5%	0%	100%
2010	198	37	46	281	70%	13%	16%	100%
2011	172	18	80	270	64%	7%	30%	100%
2012	145	23	24	192	76%	12%	13%	100%
2013	124	37	48	209	59%	18%	23%	100%
2014	87	43	0	130	67%	33%	0%	100%
2015	84	11	12	107	79%	10%	11%	100%
2016	85	9	20	114	75%	8%	18%	100%
2017	88	20	24	132	67%	15%	18%	100%
2018	144	46	60	250	58%	18%	24%	100%
2019	81	44	10	135	60%	33%	7%	100%
2020	134	55	20	209	64%	26%	10%	100%
2021	148	97	8	253	58%	38%	3%	100%
2022	153	95	78	326	47%	29%	24%	100%
2023	179	70	0	249	72%	28%	0%	100%
Growth 2009 - 2023	1,949	612	430	2,991	65%	20%	14%	100%
<i>5-Year Avg.</i>	<i>139</i>	<i>72</i>	<i>23</i>	<i>234</i>				

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

APPENDIX A - TABLE A-3

CITY OF CLARENCE-ROCKLAND
HISTORICAL HOUSEHOLDS BY PERIOD OF CONSTRUCTION SHOWING HOUSEHOLD SIZE

Dwelling Unit Type	Period of Construction											Period of Construction Summaries		
	Pre 1945	1946-1960	1961-1970	1971-1980	1981-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2016	2016-2021	Pre 2011	2011-2021	Total
Singles and Semis														
Household Population	1,445	665	940	2,770	3,870	2,675	1,540	1,760	2,400	1,885	1,975	18,065	3,860	21,925
Households	580	285	405	1,070	1,490	945	535	620	785	625	655	6,715	1,280	7,995
Household Size	2.49	2.33	2.32	2.59	2.60	2.83	2.88	2.84	3.06	3.02	3.02	2.69	3.02	2.74
Rows														
Household Population	0	0	0	40	95	195	95	145	195	310	255	765	565	1,330
Households	0	10	0	25	60	80	25	65	75	110	125	340	235	575
Household Size	0.00	0.00	0.00	1.60	1.58	2.44	3.80	2.23	2.60	2.82	2.04	2.25	2.40	2.31
Apartments (excl. Duplexes)														
Household Population	125	85	140	130	240	100	70	220	180	205	195	1,290	400	1,690
Households	70	70	90	95	180	55	65	115	125	130	120	865	250	1,115
Household Size	1.79	1.21	1.56	1.37	1.33	1.82	1.08	1.91	1.44	1.58	1.63	1.49	1.60	1.52
Duplexes														
Household Population	50	60	110	240	110	50	35	45	35	90	0	735	90	825
Households	40	35	60	95	35	20	25	15	15	25	15	340	40	380
Household Size	1.25	1.71	1.83	2.53	3.14	2.50	1.40	3.00	2.33	3.60	0.00	2.16	2.25	2.17
All Units														
Household Population	1,620	810	1,190	3,180	4,315	3,020	1,740	2,170	2,810	2,490	2,425	20,855	4,915	25,770
Households	690	400	555	1,285	1,765	1,100	650	815	1,000	890	915	8,260	1,805	10,065
Household Size	2.35	2.03	2.14	2.47	2.44	2.75	2.68	2.66	2.81	2.80	2.65	2.52	2.72	2.56

Source: Statistics Canada, 2021 National Household Survey Special Run.

APPENDIX A - TABLE A-4

CITY OF CLARENCE-ROCKLAND
POPULATION, HOUSEHOLD & EMPLOYMENT FORECAST SUMMARY

Mid-Year	Census Population	Census Pop'n Growth	Occupied Households	Total Household Growth	Household Size	Employment by POW	Employment by POW Growth	Activity Rate
2023	27,153	326	10,493	201	2.59	6,209	32	23%
2024	27,483	330	10,698	205	2.57	6,241	32	23%
2025	27,817	334	10,907	209	2.55	6,273	32	23%
2026	28,153	336	11,120	213	2.53	6,305	32	22%
2027	28,489	336	11,289	169	2.52	6,350	45	22%
2028	28,829	340	11,460	171	2.52	6,396	46	22%
2029	29,173	344	11,634	174	2.51	6,442	46	22%
2030	29,521	348	11,811	177	2.50	6,488	46	22%
2031	29,872	351	11,990	179	2.49	6,535	47	22%
2032	30,152	280	12,131	141	2.49	6,576	41	22%
2033	30,435	283	12,273	142	2.48	6,618	42	22%
2034	30,720	285	12,417	144	2.47	6,660	42	22%
2035	31,008	288	12,563	146	2.47	6,702	42	22%
2036	31,300	292	12,710	147	2.46	6,745	43	22%
2037	31,561	261	12,835	125	2.46	6,786	41	22%
2038	31,825	264	12,962	127	2.46	6,828	42	21%
2039	32,091	266	13,090	128	2.45	6,870	42	21%
2040	32,359	268	13,219	129	2.45	6,912	42	21%
2041	32,630	271	13,350	131	2.44	6,955	43	21%
2042	32,885	255	13,464	114	2.44	6,997	42	21%
2043	33,141	256	13,579	115	2.44	7,039	42	21%
2044	33,399	258	13,695	116	2.44	7,081	42	21%
2045	33,659	260	13,812	117	2.44	7,123	42	21%
2046	33,922	263	13,930	118	2.44	7,165	42	21%
2024-2033		3,282		1,780			409	
2024- 2046		6,769		3,437			956	

Source: City of Clarence-Rockland and Hemson Consulting, 2024

APPENDIX A - TABLE A-5
 CITY OF CLARENCE-ROCKLAND
 FORECAST OF HOUSEHOLD GROWTH BY UNIT TYPE

Mid-Year	Annual Growth in Total Occupied Households				Shares By Unit Type			
	Singles & Semis	Rows & Other Multiples	Apartments	Total New Households	Singles & Semis	Rows & Other Multiples	Apartments	Total
2024	133	41	31	205	65%	20%	15%	100%
2025	136	42	31	209	65%	20%	15%	100%
2026	138	43	32	213	65%	20%	15%	100%
2027	110	34	25	169	65%	20%	15%	100%
2028	111	34	26	171	65%	20%	15%	100%
2029	113	35	26	174	65%	20%	15%	100%
2030	115	35	27	177	65%	20%	15%	100%
2031	116	36	27	179	65%	20%	15%	100%
2032	92	28	21	141	65%	20%	15%	100%
2033	92	28	21	142	65%	20%	15%	100%
2034	94	29	22	144	65%	20%	15%	100%
2035	95	29	22	146	65%	20%	15%	100%
2036	96	29	22	147	65%	20%	15%	100%
2037	81	25	19	125	65%	20%	15%	100%
2038	83	25	19	127	65%	20%	15%	100%
2039	83	26	19	128	65%	20%	15%	100%
2040	84	26	19	129	65%	20%	15%	100%
2041	85	26	20	131	65%	20%	15%	100%
2042	74	23	17	114	65%	20%	15%	100%
2043	75	23	17	115	65%	20%	15%	100%
2044	75	23	17	116	65%	20%	15%	100%
2045	76	23	18	117	65%	20%	15%	100%
2046	77	24	18	118	65%	20%	15%	100%
2024-2033	1,157	356	267	1,780	65%	20%	15%	100%
2024-2046	2,234	687	516	3,437	65%	20%	15%	100%

Source: Hemson Consulting Ltd. 2024

APPENDIX A - TABLE A-6

CITY OF CLARENCE-ROCKLAND
 FORECAST POPULATION GROWTH IN NEW HOUSEHOLDS BY UNIT TYPE*

Mid-Year	Singles & Semis	Rows & Other Multiples	Apartments	Total Population in New Households
2024	402	98	49	549
2025	410	100	50	560
2026	418	102	51	571
2027	332	81	41	454
2028	336	82	41	459
2029	342	84	42	468
2030	347	85	42	474
2031	351	86	43	480
2032	277	68	34	379
2033	279	68	34	381
2034	283	69	35	387
2035	287	70	35	392
2036	289	71	35	395
2037	245	60	30	335
2038	249	61	30	340
2039	251	61	31	343
2040	253	62	31	346
2041	257	63	31	351
2042	224	55	27	306
2043	226	55	28	309
2044	228	56	28	312
2045	230	56	28	314
2046	232	57	28	317
2024-2033	3,494	854	427	4,775
2024-2046	6,748	1,650	824	9,222

*Based on PPU's 3.02 2.40 1.60

Source: Hemson Consulting Ltd., 2024

APPENDIX A - TABLE A-7
CITY OF CLARENCE-ROCKLAND
NON-RESIDENTIAL SPACE FORECAST

Average Sq.M. Per Employee

50.0 m² per employee

Mid-Year	Place of Work Employment	Annual Growth	Growth in Space (m ²)
2024	6,241	32	1,600
2025	6,273	32	1,600
2026	6,305	32	1,600
2027	6,350	45	2,250
2028	6,396	46	2,300
2029	6,442	46	2,300
2030	6,488	46	2,300
2031	6,535	47	2,350
2032	6,576	41	2,050
2033	6,618	42	2,100
2034	6,660	42	2,100
2035	6,702	42	2,100
2036	6,745	43	2,150
2037	6,786	41	2,050
2038	6,828	42	2,100
2039	6,870	42	2,100
2040	6,912	42	2,100
2041	6,955	43	2,150
2042	6,997	42	2,100
2043	7,039	42	2,100
2044	7,081	42	2,100
2045	7,123	42	2,100
2046	7,165	42	2,100
2024-2033		409	20,450
2024-2046		956	47,800

Source: City of Clarence-Rockland and Hemson Consulting, 2024

APPENDIX B
GENERAL SERVICES
TECHNICAL APPENDIX

1. GENERAL SERVICES TECHNICAL APPENDIX

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

- Appendix B.1 Library
- Appendix B.2 Parks and Recreation
- Appendix B.3 By-law Services
- Appendix B.4 Development Related Studies
- Appendix B.5 Fire Services
- Appendix B.6 Services Related to a Highway – Public Works
- Appendix B.7 Services Related to a Highway – Roads and Related

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

TABLE 1 HISTORICAL SERVICE LEVELS

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

O. Reg. 82/98 requires that when defining and determining historical service levels, both the quantity and quality of service be taken into consideration. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet. The qualitative aspect is introduced by considering the monetary value of the facility or service. In the case of buildings, for example, the cost would be shown in terms of cost per square foot to replace or construct a facility of the same quality. This approach helps to ensure that the 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 City staff in consultation with Hemson Consulting Ltd. This information is generally based on historical records and experience with costs to acquire or construct similar facilities, equipment and infrastructure.

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

There is also a requirement in the *DCA* to consider “excess capacity” within the City’s existing infrastructure that may be available to partially meet future servicing requirements. If Council has expressed its intent before or at the time the capacity was created to recoup the cost of providing the capacity from new development, it is considered “committed excess capacity” under the *DCA*, and the associated capital cost is eligible for recovery. This requirement has been addressed through the use of “net” population and employment in the determination of maximum permissible funding envelopes.

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

TABLE 2 2024 – 2033 DEVELOPMENT-RELATED CAPITAL PROGRAM AND CALCULATION OF THE DEVELOPMENT CHARGES

The *DCA* requires that Council express its intent to provide capital facilities to support future development. Based on the development forecasts presented in Appendix A, City staff in collaboration with consultants, have created a development-related capital forecast that sets out the projects required to service anticipated development for the ten-year period from 2024 – 2033.

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

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

The capital program less any replacement shares or benefit to existing shares yields the development-related costs. Although deemed development-related, not all of the net development-related capital program may be recoverable from development charges in the period from 2024 to 2033. For some services, reserve fund balances may be available to fund a share of the program. In addition, a portion of the capital program may service growth occurring beyond 2033. This portion of the capital program is deemed “pre-built” service capacity and is considered as committed excess capacity to be recovered under future development charges or is a service level increase.

The remaining portion of the net capital program represents the development-related cost that may be included in the DC calculation. In all cases, as required, this amount is equal to or less than the maximum allowable capital amount as calculated at the end of Table 1. The result is the discounted development-related net capital costs eligible for recovery against growth over the forecast period from 2024 to 2033.

i. Calculation of the Development Charges Rates

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

The first step in determining the development charge rate is to allocate the development-related net capital cost between the residential and non-residential sectors. For all general services with the exception of Library Service and Parks & Recreation the development-related costs have been apportioned as 92 per cent residential and 8 per cent non-residential. This apportionment is based on the anticipated shares of population growth in new units and employment growth in new space over the ten-year forecast period.

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

The residential share of the 2024 – 2033 DC eligible costs is then divided by the forecasted population growth in new dwelling units. This gives the calculated residential development charge per capita. The non-residential development-related net capital costs are divided by the forecasted increase in non-residential gross floor area (GFA). This yields a charge per square metre of new non-residential development.

TABLE 3 CASH FLOW ANALYSIS

A cash flow analysis is also undertaken to account for the timing of projects and receipt of development charges. Interest earnings or borrowing costs are accounted for in the calculation as allowed under the DCA. Based on the development forecast, the analysis calculates the DC rate required to finance the net development-related capital spending plan, including provisions for any borrowing costs or interest earnings on the reserve funds. The cash flow analysis is designed so that the closing cash balance at the end of the planning period is as close to nil as possible.

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

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

APPENDIX B.1

LIBRARY SERVICE

The Clarence-Rockland Public Library provides library services from five branches in the City. The libraries offer an array of collection materials and delivers various community services such as virtual story time, summer youth clubs for children and teens, and virtual programs such as mindful meditation and book clubs.

TABLE B.1-1 HISTORICAL SERVICE LEVELS

Table B.1-1 displays the fifteen-year historical inventory for buildings, land, materials and furniture and equipment (excluding computer equipment) for Library Service in the City of Clarence-Rockland. At the end of 2023, the two library branches located in the City total approximately 10,800 square feet and are valued at \$5.41 million. The library occupies 0.15 hectares of land, which is worth approximately \$124,200. Collection materials total \$1.44 million and the total value of all furniture and equipment, other than computer equipment adds approximately \$379,000 to the total value of the inventory.

The combined replacement value of the inventory of capital assets in 2023 for Library Services is \$7.35 million, resulting in a fifteen-year historical average service level of \$318.52 per capita. This historical service level, multiplied by the ten-year net population growth (3,282), results in a fifteen-year maximum allowable funding envelope of \$1.05 million.

TABLE B.1-2 2024-2033 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE DEVELOPMENT CHARGES

The development-related capital program for Library Service totals \$3.05 million and provides for branch expansions, additional parking spaces, additional materials and equipment and a new book mobile. There is no additional funding or contributions and there are no items included in the capital program are not required as a result of new development, therefore, the entire amount will be eligible for development charge funding.

The City has approximately \$380,000 in DC reserves to offset a portion of the DC eligible capital costs. The share of eligible costs exceeding the maximum permissible funding envelope, \$1.63 million is determined to benefit development beyond 2033 and will be eligible for funding under subsequent development charge studies. The remaining share of \$1.05 million is eligible for recovery through development charges in the 2024 to 2033 period.

The development-related net capital cost is allocated entirely to residential development and, when divided by the ten-year growth in population in new dwelling units (4,775), a charge of \$218.93 per capita results.

TABLE B.1-3 CASH FLOW ANALYSIS

After cash flow consideration, the residential calculated charge increases to \$220.79 per capita. The following table summarizes the calculation of the Library Services development charge:

LIBRARY SERVICES SUMMARY						
15-year Hist. Service Level per capita	2024 - 2033		Unadjusted		Adjusted	
	Development-Related Capital Program		Development Charge		Development Charge	
	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$318.52	\$3,053,400	\$1,045,383	\$218.93	\$0.00	\$220.79	\$0.00

APPENDIX B.1
TABLE B.1-1

CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
LIBRARY SERVICES

BUILDINGS Branch Name	# of Square Feet															UNIT COST (\$/sq.ft.)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Rockland	8,980	8,980	8,980	8,980	8,980	8,980	8,980	8,980	8,980	8,980	8,980	8,980	8,980	8,980	8,980	\$500
Bourget	1,836	1,836	1,836	1,836	1,836	1,836	1,836	1,836	1,836	1,836	1,836	1,836	1,836	1,836	1,836	\$500
Clarence Creek	780	780	780	780	780	780	780	780	780	780	-	-	-	-	\$500	
Hammond	770	770	770	770	770	770	770	770	-	-	-	-	-	-	\$500	
Saint-Pascal de Baylon	83	83	83	83	83	83	83	83	83	83	-	-	-	-	\$500	
Total (sq.ft.)	12,449	12,449	12,449	12,449	12,449	12,449	12,449	12,449	11,679	11,679	10,816	10,816	10,816	10,816	10,816	
Total (\$000)	\$6,224.5	\$6,224.5	\$6,224.5	\$6,224.5	\$6,224.5	\$6,224.5	\$6,224.5	\$6,224.5	\$5,839.5	\$5,839.5	\$5,408.0	\$5,408.0	\$5,408.0	\$5,408.0	\$5,408.0	

LAND Branch Name	# of Hectares															UNIT COST (\$/ha)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Rockland	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	\$870,000
Bourget	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$235,000
Clarence Creek	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	\$235,000
Hammond	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	\$235,000
Saint-Pascal de Baylon	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.00	0.00	0.00	0.00	0.00	\$235,000
Total (ha)	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.15	0.15	0.15	0.15	0.15	
Total (\$000)	\$129.0	\$129.0	\$128.3	\$128.3	\$128.3	\$128.3	\$128.3	\$128.3	\$126.7	\$126.7	\$124.2	\$124.2	\$124.2	\$124.2	\$124.2	

MATERIALS Type of Collection	# of Collection Materials															UNIT COST (\$/item)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
All 5 Branches	55,980	57,834	57,834	52,180	52,909	53,762	46,879	37,275	43,404	48,180	48,310	48,810	45,412	49,399	52,873	\$27.03
Overdrive and Cantook Station	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$11,000
Total (#)	55,981	57,835	57,835	52,181	52,910	53,763	46,880	37,276	43,405	48,181	48,311	48,811	45,413	49,400	52,874	
Total (\$000)	\$1,524.1	\$1,574.3	\$1,574.3	\$1,421.4	\$1,441.1	\$1,464.2	\$1,278.1	\$1,018.5	\$1,184.2	\$1,313.3	\$1,316.8	\$1,330.3	\$1,238.5	\$1,346.3	\$1,440.2	

FURNITURE AND EQUIPMENT Branch Name	Total Value of Furniture and Equipment (\$)															UNIT COST (\$/item)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Rockland	\$314,300	\$314,300	\$314,300	\$314,300	\$314,300	\$314,300	\$314,300	\$314,300	\$314,300	\$314,300	\$314,300	\$314,300	\$314,300	\$314,300	\$314,300	\$35
Bourget	\$64,260	\$64,260	\$64,260	\$64,260	\$64,260	\$64,260	\$64,260	\$64,260	\$64,260	\$64,260	\$64,260	\$64,260	\$64,260	\$64,260	\$64,260	\$35
Clarence Creek	\$27,300	\$27,300	\$27,300	\$27,300	\$27,300	\$27,300	\$27,300	\$27,300	\$27,300	\$27,300	\$0	\$0	\$0	\$0	\$0	\$35
Hammond	\$26,950	\$26,950	\$26,950	\$26,950	\$26,950	\$26,950	\$26,950	\$26,950	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35
Saint-Pascal de Baylon	\$11,420	\$11,420	\$11,420	\$11,420	\$11,420	\$11,420	\$11,420	\$11,420	\$11,420	\$11,420	\$0	\$0	\$0	\$0	\$0	\$138
Total (\$000)	\$444	\$444	\$444	\$444	\$444	\$444	\$444	\$444	\$444	\$417	\$417	\$379	\$379	\$379	\$379	\$379



APPENDIX B.1
TABLE B.1-1

CITY OF CLARENCE-ROCKLAND
CALCULATION OF SERVICE LEVELS
LIBRARY SERVICES

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Historical Population	22,195	22,684	23,185	23,445	23,707	23,972	24,240	24,512	24,898	25,290	25,688	26,093	26,505	26,827	27,153

INVENTORY SUMMARY (\$000)

Buildings	\$6,224.5	\$6,224.5	\$6,224.5	\$6,224.5	\$6,224.5	\$6,224.5	\$6,224.5	\$6,224.5	\$5,839.5	\$5,839.5	\$5,408.0	\$5,408.0	\$5,408.0	\$5,408.0	\$5,408.0
Land	\$129.0	\$129.0	\$128.3	\$128.3	\$128.3	\$128.3	\$128.3	\$128.3	\$126.7	\$126.7	\$124.2	\$124.2	\$124.2	\$124.2	\$124.2
Materials	\$1,524.1	\$1,574.3	\$1,574.3	\$1,421.4	\$1,441.1	\$1,464.2	\$1,278.1	\$1,018.5	\$1,184.2	\$1,313.3	\$1,316.8	\$1,330.3	\$1,238.5	\$1,346.3	\$1,440.2
Furniture And Equipment	\$444.2	\$444.2	\$444.2	\$444.2	\$444.2	\$444.2	\$444.2	\$444.2	\$417.3	\$417.3	\$378.6	\$378.6	\$378.6	\$378.6	\$378.6
Total (\$000)	\$8,321.9	\$8,372.0	\$8,371.3	\$8,218.5	\$8,238.2	\$8,261.2	\$8,075.2	\$7,815.6	\$7,567.7	\$7,696.7	\$7,227.5	\$7,241.0	\$7,149.2	\$7,257.0	\$7,350.9

SERVICE LEVEL (\$/capita)

																Average Service Level
Buildings	\$280.45	\$274.40	\$268.47	\$265.49	\$262.56	\$259.66	\$256.79	\$253.94	\$234.54	\$230.90	\$210.53	\$207.26	\$204.04	\$201.59	\$199.17	\$240.65
Land	\$5.81	\$5.69	\$5.53	\$5.47	\$5.41	\$5.35	\$5.29	\$5.23	\$5.09	\$5.01	\$4.83	\$4.76	\$4.68	\$4.63	\$4.57	\$5.16
Materials	\$68.67	\$69.40	\$67.90	\$60.63	\$60.79	\$61.08	\$52.73	\$41.55	\$47.56	\$51.93	\$51.26	\$50.98	\$46.73	\$50.18	\$53.04	\$55.63
Furniture And Equipment	\$20.01	\$19.58	\$19.16	\$18.95	\$18.74	\$18.53	\$18.33	\$18.12	\$16.76	\$16.50	\$14.74	\$14.51	\$14.28	\$14.11	\$13.94	\$17.08
Total (\$/capita)	\$374.94	\$369.07	\$361.07	\$350.54	\$347.50	\$344.62	\$333.13	\$318.85	\$303.95	\$304.34	\$281.36	\$277.51	\$269.73	\$270.51	\$270.72	\$318.52

CITY OF CLARENCE-ROCKLAND
CALCULATION OF MAXIMUM ALLOWABLE
LIBRARY SERVICES

15-Year Funding Envelope Calculation	
15 Year Average Service Level 2009 - 2023	\$318.52
Net Population Growth 2024 - 2033	3,282
Maximum Allowable Funding Envelope	\$1,045,383

APPENDIX B.1

TABLE B.1-2

CITY OF CLARENCE-ROCKLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
LIBRARY SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Available DC Reserves	2024-2033	Post 2033
1.0 LIBRARY SERVICES										
1.1 Branch Expansion										
1.1.1 Rockland Branch Expansion - Design Study	2025	\$ 60,000	\$ -	\$ 60,000	0%	\$ -	\$ 60,000	\$ 60,000	\$ -	\$ -
1.1.2 Rockland Branch Expansion - 3,000 sq.ft	2028	\$ 1,500,000	\$ -	\$ 1,500,000	0%	\$ -	\$ 1,500,000	\$ 259,684	\$ 1,045,383	\$ 194,933
1.1.3 Rockland Branch Expansion - Furniture & Equipment	2028	\$ 104,000	\$ -	\$ 104,000	0%	\$ -	\$ 104,000	\$ -	\$ -	\$ 104,000
1.1.4 5 Additional Parking Spaces	2028	\$ 25,000	\$ -	\$ 25,000	0%	\$ -	\$ 25,000	\$ -	\$ -	\$ 25,000
1.1.5 Additional Library Space - Land	2031	\$ 121,800	\$ -	\$ 121,800	0%	\$ -	\$ 121,800	\$ -	\$ -	\$ 121,800
1.1.6 Additional Library Space - 2,000 sq.ft	2032	\$ 1,000,000	\$ -	\$ 1,000,000	0%	\$ -	\$ 1,000,000	\$ -	\$ -	\$ 1,000,000
Subtotal Branch Expansion		\$ 2,810,800	\$ -	\$ 2,810,800		\$ -	\$ 2,810,800	\$ 319,684	\$ 1,045,383	\$ 1,445,733
1.2 Materials and Equipment										
1.2.1 Additional Collections Materials	Various	\$ 182,600	\$ -	\$ 182,600	0%	\$ -	\$ 182,600	\$ 60,258	\$ -	\$ 122,342
Subtotal Materials and Equipment		\$ 182,600	\$ -	\$ 182,600		\$ -	\$ 182,600	\$ 60,258	\$ -	\$ 122,342
1.3 Materials and Equipment										
1.3.1 Book Mobile	2032	\$ 60,000	\$ -	\$ 60,000	0%	\$ -	\$ 60,000	\$ -	\$ -	\$ 60,000
Subtotal Materials and Equipment		\$ 60,000	\$ -	\$ 60,000		\$ -	\$ 60,000	\$ -	\$ -	\$ 60,000
TOTAL LIBRARY SERVICES		\$ 3,053,400	\$ -	\$ 3,053,400		\$ -	\$ 3,053,400	\$ 379,942	\$ 1,045,383	\$ 1,628,075

Residential Development Charge Calculation		
Residential Share of 2024 - 2033 DC Eligible Costs	100%	\$1,045,383
10-Year Growth in Population in New Units		4,775
Unadjusted Development Charge Per Capita		\$218.93
Non-Residential Development Charge Calculation		
Non-Residential Share of 2024 - 2033 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		20,450
Unadjusted Development Charge Per Square Metre		\$0.00

2024 - 2033 Net Funding Envelope	\$1,045,383
Reserve Fund Balance	
Balance as at December 31, 2023	\$379,942



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

**CITY OF CLARENCE-ROCKLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
LIBRARY SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

LIBRARY SERVICES	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
OPENING CASH BALANCE	\$379.9	\$510.4	\$588.1	\$735.8	\$863.2	(\$452.0)	(\$367.6)	(\$274.8)	(\$173.1)	(\$90.0)	
2024 - 2033 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth	\$6.0	\$66.0	\$6.0	\$6.0	\$265.7	\$6.0	\$6.0	\$6.0	\$6.0	\$6.0	\$379.9
- Library Services: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$1,045.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,045.4
- Library Services: Inflated	\$6.0	\$67.3	\$6.3	\$6.4	\$1,419.2	\$6.7	\$6.8	\$6.9	\$7.1	\$7.2	\$1,539.8
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	549	560	571	454	459	468	474	480	379	381	4,775
REVENUE											
- DC Receipts: Inflated	\$121.2	\$126.1	\$131.2	\$106.4	\$109.7	\$114.1	\$117.9	\$121.7	\$98.0	\$100.5	\$1,146.8
INTEREST											
- Interest on Opening Balance	\$13.3	\$17.9	\$20.6	\$25.8	\$30.2	(\$24.9)	(\$20.2)	(\$15.1)	(\$9.5)	(\$5.0)	\$33.1
- Interest on In-year Transactions	\$2.0	\$1.0	\$2.2	\$1.7	(\$36.0)	\$1.9	\$1.9	\$2.0	\$1.6	\$1.6	(\$20.0)
TOTAL REVENUE	\$136.5	\$145.0	\$153.9	\$133.9	\$103.9	\$91.1	\$99.6	\$108.6	\$90.1	\$97.2	\$1,159.9
CLOSING CASH BALANCE	\$510.4	\$588.1	\$735.8	\$863.2	(\$452.0)	(\$367.6)	(\$274.8)	(\$173.1)	(\$90.0)	(\$0.0)	

2024 Adjusted Charge Per Capita	\$220.79
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Allocation of Capital Program	
Residential Sector	100.0%
Non-Residential Sector	0.0%
Rates for 2024	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.2

PARKS & RECREATION

The City of Clarence-Rockland Parks, Facilities and Recreation Department is responsible for all indoor recreation facilities and programs, and all parks (including parkland and trails, and park facilities).

TABLE B.2-1 HISTORICAL SERVICE LEVELS

The fifteen-year historical inventory of capital assets for indoor recreation facilities includes 195,200 square feet of recreation building space located throughout the City¹. The total value of these facilities is \$93.40 million. The land associated with the various community centres, arenas, and multi-use facility totals 13.55 hectares, and is valued at \$8.58 million. The City owns and maintains a substantial amount of furniture and equipment used to provide indoor recreation services. The total replacement value of all indoor recreation equipment in 2023 is \$2.42 million.

The fifteen-year historical inventory of capital assets for Clarence-Rockland's parks includes 85.7 hectares of developed parkland. Various types of parks have been included in the inventory, including neighbourhood parks and an off-leash dog park. The combined value of all developed parkland amounts to \$8.33 million. A development cost of \$164,100 per hectare has been used in the inventory for most sites, which represents the site preparation and servicing costs to the City to develop basic land into a useable park.

The City also owns and maintains a variety of park facilities. The combined value of play fields, courts, and outdoor skating rinks in 2023 is \$7.97 million. Playgrounds and other park facilities such as waterparks, skateboard parks, boat launch and docks are value at \$3.06 million. Park buildings make up \$3.3 million of the inventory with 0.32 hectares of land for the Recreation Garage Help Centre valued at \$278,400. Additionally, the 2.6 kilometres of developed trails adds \$1.58 million to the value of the inventory. Lastly, parks fleet and equipment add \$842,700 to the value of the inventory.

The total combined value of capital assets for Parks and Recreation in the City of Clarence-Rockland amounts to \$129.76 million in 2023. The fifteen-year historical average service level is \$5,147.48 per capita, and this, multiplied by the ten-year net population growth (3,282), results in a fifteen-year maximum allowable funding envelope of \$16.89 million.

¹ Indoor Recreation space of 2,881 square feet associated with both the Recreation Complex and the Area (AETC) has been deducted from the building inventory to account for outstanding debt being recovered for.

TABLE B.2-2 2024-2033 DEVELOPMENT-RELATED PROGRAM & CALCULATION OF THE DEVELOPMENT CHARGES

The 2024-2033 development-related capital program for Parks and Recreation totals \$20.00 million and is largely related to the recovery of indoor recreation debt, new indoor recreation facilities, various park facilities, and updates to the Parks and Recreation Master Plan.

Of the gross capital costs of \$20.00 million, approximately \$2.93 million in grants, subsidies and other recoveries are assumed to help offset the cost of the soccer dome (assumed at 50% of the value). A share of 11 percent, or \$143,492, has been netted off as a benefit to existing share of the debt recovery for the complex. In addition, a benefit to existing share of 50 per cent (or \$550,000) related to the Bourget Train Station and Bourget Skate Park have also been netted off the net municipal cost resulting in total DC eligible costs of \$16.08 million. The City has \$1.92 million in DC reserves to offset a portion of the DC eligible capital costs. The 2024-2033 in-period DC eligible cost is \$14.16 million, resulting in an unadjusted development charge of \$2,965.15 per capita.

TABLE B.2-3 CASH FLOW ANALYSIS

After cash flow consideration, the residential calculated charge increases to \$3,046.39 per capita largely associated to the timing of the capital projects. The following table summarizes the calculation of the Parks and Recreation development charge:

PARKS AND RECREATION SUMMARY						
15-year Hist.	2024 - 2033		Unadjusted		Adjusted	
Service Level per capita	Development-Related Capital Program Total	Net DC Recoverable	Development Charge \$/capita	Development Charge \$/sq.m	Development Charge \$/capita	Development Charge \$/sq.m
\$5,147.48	\$20,003,051	\$14,158,582	\$2,965.15	\$0.00	\$3,046.39	\$0.00

APPENDIX B.2
TABLE B.2-1

CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
INDOOR RECREATION

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	
Community Centres																
Bourget	10,686	10,686	10,686	10,686	10,686	10,686	10,686	10,686	10,686	10,686	10,686	10,686	10,686	10,686	10,686	\$300
Hammond (Alphonse-Carrière)	2,296	2,296	2,296	2,296	2,296	2,296	2,296	2,296	2,296	2,296	2,296	2,296	2,296	2,296	2,296	\$300
Saint-Pascal de Baylon (Ronald Lalonde)	5,756	5,756	5,756	5,756	5,756	5,756	5,756	5,756	5,756	5,756	5,756	5,756	5,756	5,756	5,756	\$300
Clarence Creek	7,012	7,012	7,012	7,012	7,012	7,012	7,012	7,012	7,012	7,012	7,012	7,012	7,012	7,012	7,012	\$500
Jean-Marc Lalonde	4,605	4,605	4,605	4,605	4,605	4,605	4,605	4,605	4,605	4,605	4,605	4,605	4,605	4,605	-	\$500
Recreation Complex	49,173	49,173	49,173	49,173	49,173	49,173	49,173	49,173	49,173	49,173	49,173	49,173	49,173	49,173	49,173	\$500
<i>Recreation Complex (Committed Excess Capacity)</i>	(2,251)	(2,251)	(2,251)	(2,251)	(2,251)	(2,251)	(2,251)	(2,251)	(2,251)	(2,251)	(2,251)	(2,251)	(2,251)	(2,251)	(2,251)	\$500
Centre Chamberland			2,128	2,128	2,128	2,128	2,128	2,128	2,128	2,128	2,128	2,128	2,128	2,128	2,128	\$300
Arenas																
Clarence Creek	20,978	20,978	20,978	20,978	20,978	20,978	20,978	20,978	20,978	20,978	20,978	20,978	20,978	20,978	20,978	\$500
Jean-Marc Lalonde (Arena)	26,767	26,767	26,767	26,767	26,767	-	-	-	-	-	-	-	-	-	-	\$500
Clarence-Rockland Arena (AETC)	-	-	-	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	\$500
<i>Committed Excess Capacity</i>			-	(630)	(630)	(630)	(630)	(630)	(630)	(630)	(630)	(630)	(630)	(630)	(630)	\$500
Others																
Jean-Marc Lalonde (Multi-Use Facility)	-	-	-	-	-	-	26,767	26,767	26,767	26,767	26,767	26,767	26,767	26,767	-	\$300
Total (sq.ft.)	125,022	125,022	127,150	226,520	226,520	199,753	226,520	226,520	226,520	226,520	226,520	226,520	226,520	226,520	195,148	
Total (\$000)	58,763	58,763	59,402	109,087	109,087	95,703	\$103,733.3	\$103,733.3	\$103,733.3	\$103,733.3	\$103,733.3	\$103,733.3	\$103,733.3	\$103,733.3	\$93,400.7	

LAND Facility Name	# of Hectares															UNIT COST (\$/ha)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Bourget	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$235,000
Hammond	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	\$235,000
Saint-Pascal de Baylon	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	\$235,000
Clarence Creek	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$235,000
Jean-Marc Lalonde (Arena/Multi-Use Facility)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$870,000
Recreation Complex	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	\$870,000
Clarence-Rockland arena AETC	-	-	-	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	\$870,000
Total (ha)	9	9	9	14	14	14	14	14	14	14	14	14	14	14	14	
Total (\$000)	4,232	4,232	4,232	8,582	8,582	8,582	\$8,581.8	\$8,581.8	\$8,581.8	\$8,581.8	\$8,581.8	\$8,581.8	\$8,581.8	\$8,581.8	\$8,581.8	



APPENDIX B.2
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CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
INDOOR RECREATION

FURNITURE & EQUIPMENT Facility Name	Total Value of Furniture & Equipment (\$)															UNIT COST
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Community Centres																
Bourget	\$267,150	\$267,150	\$267,150	\$267,150	\$267,150	\$267,150	\$267,150	\$267,150	\$267,150	\$267,150	\$267,150	\$267,150	\$267,150	\$267,150	\$267,150	\$25
Hammond (Alphonse-Carrière)	\$57,400	\$57,400	\$57,400	\$57,400	\$57,400	\$57,400	\$57,400	\$57,400	\$57,400	\$57,400	\$57,400	\$57,400	\$57,400	\$57,400	\$57,400	\$25
Saint-Pascal de Baylon (Ronald Lalonde)	\$143,900	\$143,900	\$143,900	\$143,900	\$143,900	\$143,900	\$143,900	\$143,900	\$143,900	\$143,900	\$143,900	\$143,900	\$143,900	\$143,900	\$143,900	\$25
Clarence Creek	\$175,300	\$175,300	\$175,300	\$175,300	\$175,300	\$175,300	\$175,300	\$175,300	\$175,300	\$175,300	\$175,300	\$175,300	\$175,300	\$175,300	\$175,300	\$25
Jean-Marc Lalonde (Arena)	\$115,125	\$115,125	\$115,125	\$115,125	\$115,125	\$115,125	\$115,125	\$115,125	\$115,125	\$115,125	\$115,125	\$115,125	\$115,125	\$115,125	\$115,125	\$0
Recreation Complex	\$1,229,325	\$1,229,325	\$1,229,325	\$1,229,325	\$1,229,325	\$1,229,325	\$1,229,325	\$1,229,325	\$1,229,325	\$1,229,325	\$1,229,325	\$1,229,325	\$1,229,325	\$1,229,325	\$1,229,325	\$25
Centre Chamberland	\$0	\$0	\$53,200	\$53,200	\$53,200	\$53,200	\$53,200	\$53,200	\$53,200	\$53,200	\$53,200	\$53,200	\$53,200	\$53,200	\$53,200	\$25
Clarence-Rockland Arena																
Clarence Arena Zamboni	\$233,600	\$233,600	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	
Rockland Arena Zamboni	\$233,600	\$233,600	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	\$208,000	
Clarence Arena Edger	\$2,500	\$3,800	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	
Rockland Arena Edger	\$2,500	\$3,800	\$7,000	\$7,000	\$7,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Electronic Board Clarence and JML Arena	\$50,500	\$50,500	\$66,300	\$66,300	\$66,300	\$66,300	\$66,300	\$66,300	\$66,300	\$66,300	\$66,300	\$66,300	\$66,300	\$66,300	\$66,300	
Total (\$000)	\$2,510.9	\$2,513.5	\$2,537.7	\$2,537.7	\$2,537.7	\$2,530.7	\$2,530.7	\$2,530.7	\$2,530.7	\$2,530.7	\$2,530.7	\$2,530.7	\$2,530.7	\$2,530.7	\$2,415.6	

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CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK FACILITIES

PARK LAND Park Name	# of Hectares															UNIT COST (\$/ha)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Du Moulin	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	1.93	\$300,300
Richelieu Grande Rivière	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	\$164,100
Patricia Charron	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	\$164,100
Laviolette	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	\$164,100
Dalrymple	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	\$164,100
Dutrisac	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	\$164,100
Simon	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	\$164,100
Alain Potvin	-	-	-	-	-	-	-	-	-	-	3.01	3.01	3.01	3.01	3.01	\$164,100
Mountainview	-	-	-	-	-	-	-	-	-	0.50	0.50	0.50	0.50	0.50	0.50	\$164,100
Deschamps	-	-	-	-	-	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	\$164,100
Bellevue	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	\$164,100
Clarence Creek	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	2.23	\$164,100
Jules-Saumure	-	-	-	-	-	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	\$164,100
St Pascal	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	\$164,100
Bourget	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	\$164,100
Cheney	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	\$164,100
Hammond	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	5.13	\$164,100
Cathy Cain	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	\$164,100
Naturel Lavigne	46.13	46.13	46.13	46.13	46.13	46.13	46.13	46.13	46.13	46.13	46.13	46.13	46.13	46.13	46.13	\$34,100
Parc de Chien sans laisse - Off leash dog park	-	-	-	-	-	-	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	\$164,100
James & Marie Fox	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	\$164,100
Héritage	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	\$164,100
Total (ha)	75.4	75.4	75.4	75.4	75.4	78.6	79.7	79.7	79.7	80.2	83.2	83.2	83.2	83.2	85.7	
Total (\$000)	\$6,630.9	\$6,630.9	\$6,630.9	\$6,630.9	\$6,630.9	\$7,164.2	\$7,346.4	\$7,346.4	\$7,346.4	\$7,428.4	\$7,922.4	\$7,922.4	\$7,922.4	\$7,922.4	\$8,332.6	

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CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK FACILITIES

BASEBALL DIAMONDS Park Name	# of Fields															UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Bourget	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	\$400,000
Clarence Creek	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$400,000
Hammond	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$400,000
Simon - (Not Lit, Mini)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$170,000
Simon - Lit	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	\$400,000
St Pascal (on School Property)	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$400,000
Total (#)	5	6	6	6	6	6	6	6	6	6	6	6	6	6.0	6.0	
Total (\$000)	\$1,770.0	\$2,170.0	\$2,170.0	\$2,170.0	\$2,170.0	\$2,170.0	\$2,170.0	\$2,170.0	\$2,170.0	\$2,170.0	\$2,170.0	\$2,170.0	\$2,170.0	\$2,170.0	\$2,170.0	

SOCCER FIELDS Park Name	# of Fields															UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Bourget	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$197,000
Cathy-Cain	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$197,000
Patricia-Charron	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$197,000
Cheney - (Lit)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$472,000
Clarence Creek	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-	\$197,000
Dutrisac	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$197,000
School Leased Fields (Un-lit) - RDHS	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	\$197,000
School Leased Fields (Lit) - L'Escale		0	1	1	1	1	1	1	1	1	1	1	1	1	1	\$472,000
Clarence-Rockland (AETC)	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	\$197,000
Total (#)	12	12	12	12	12	12	11	11	11	11	11	11	11	11.0	11.0	
Total (\$000)	\$2,914.0	\$2,914.0	\$3,189.0	\$3,189.0	\$3,189.0	\$3,189.0	\$2,992.0	\$2,992.0	\$2,992.0	\$2,992.0	\$2,992.0	\$2,992.0	\$2,992.0	\$2,992.0	\$2,992.0	

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CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK FACILITIES

TENNIS COURTS Park Name	# of Courts															UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Clarence Creek	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$163,800
Hammond	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$163,800
Simon	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	\$163,800
Total (#)	7	7	7	7	7	7	7	7	7	7	7	7	7	7.0	7.0	
Total (\$000)	\$1,146.6	\$1,146.6	\$1,146.6	\$1,146.6	\$1,146.6	\$1,146.6	\$1,146.6	\$1,146.6	\$1,146.6	\$1,146.6	\$1,146.6	\$1,146.6	\$1,146.6	\$1,146.6	\$1,146.6	

BASKETBALL COURTS Park Name	# of Courts															UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Bellevue	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
Cathy-Cain	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
Cheney	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
Clarence Creek	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
Hammond	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
Laviolette	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
Richelieu Grand Riv.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
Simon	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
Mountainview	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	\$90,000
Total (#)	8	8	8	8	8	8	8	9	9	9	9	9	9	9.0	9.0	
Total (\$000)	720	720	720	\$720.0	\$720.0	\$720.0	\$720.0	\$810.0	\$810.0	\$810.0	\$810.0	\$810.0	\$810.0	\$810.0	\$810.0	\$810.0

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CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK FACILITIES

PLAYGROUNDS Park Name	# of Playgrounds															UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Bellevue	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
Bourget	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$160,000
Cathy-Cain	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
Grand Tronc	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
Clarence Creek	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
Dalrymple	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
DuMoulin	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$150,000
Dutrisac	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
Hammond	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$145,000
Laviolette	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
Richelieu Grand Riv.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
Simon	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$150,000
Deschamps	0	0	-	1	1	1	1	1	1	1	1	1	1	1	1	\$90,000
Jules Saumure	0	0	-	1	1	1	1	1	1	1	1	1	1	1	1	\$150,000
Mountainview	0	0	-	-	-	-	-	1	1	1	1	1	1	1	1	\$90,000
St. Pascal	0	0	-	-	-	-	-	-	-	-	1	1	1	1	1	\$90,000
Total (#)	11	11	12	14	14	14	14	15	15	15	16	16	16	16	16	
Total (\$000)	\$1,235.0	\$1,235.0	\$1,325.0	\$1,565.0	\$1,565.0	\$1,565.0	\$1,565.0	\$1,655.0	\$1,655.0	\$1,655.0	\$1,700.0	\$1,700.0	\$1,700.0	\$1,700.0	\$1,700.0	\$1,700.0

APPENDIX B.2
TABLE B.2-1

CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK FACILITIES

OUTDOOR SKATING RINKS Park Name	# of Rinks															UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Bourget	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$133,800
Cathy-Cain	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$133,800
Grand Tronc (wood boards)	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	\$25,000
Dalrymple	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$133,800
Hammond	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$133,800
Laviolette	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$133,800
Richelieu Grand Riv.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$133,800
Simon	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	\$25,000
St-Pascal (wood boards)	-	-	1	1	1	1	1	1	1	1	1	1	1	1	1	\$25,000
Clarence Creek	-	-	1	1	1	1	1	1	-	-	-	-	-	-	-	\$12,500
Total (#)	7	7	10	10	10	10	10	10	8	8	8	8	8	8.0	8.0	
Total (\$000)	\$827.8	\$827.8	\$890.3	\$890.3	\$890.3	\$890.3	\$890.3	\$890.3	\$852.8	\$852.8	\$852.8	\$852.80	\$852.8	\$852.8	\$852.8	

OTHER PARK FACILITIES Park Name	# of Units															UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Waterparks																
Parc Simon	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	\$240,000
Parc Jules Saumure	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	\$240,000
Parc Bourget	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	\$240,000
Skateboard Parks																
Bourget	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$170,000
Rockland	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	\$340,000
Boat Launch and Docks																
DuMoulin	10	23	23	23	23	23	23	23	23	23	23	23	23	23	23	\$5,500
Total (#)	11	24	24	25	25	26	26	28	28	28	28	28	28	28.0	28.0	
Total (\$000)	\$225.0	\$296.5	\$296.5	\$636.5	\$636.5	\$876.5	\$876.5	\$1,356.5	\$1,356.5	\$1,356.5	\$1,356.5	\$1,356.50	\$1,356.5	\$1,356.5	\$1,356.5	

APPENDIX B.2
TABLE B.2-1

CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK FACILITIES

PARK BUILDINGS Description	# of Square Feet															UNIT COST (\$/sq.ft)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Bourget Pavillion	995	995	995	995	995	995	995	995	995	995	1,595	1,595	1,595	1,595	1,595	\$100
St. Pascal Pavillion	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	\$100
Fanfare Pavillion	756	756	756	756	756	756	756	756	756	756	756	756	756	756	756	\$200
Tennis Clubhouse	1,384	1,384	1,384	1,384	1,384	1,384	1,384	1,384	1,384	1,384	1,384	1,384	1,384	1,384	1,384	\$200
Chalet - Forest Hill Park	384	384	384	384	384	384	384	384	384	384	384	384	384	384	384	\$100
Chalet Dalrymple	384	384	384	384	384	384	384	384	384	384	384	384	384	384	384	\$100
Chalt Laviolette	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	\$100
Chalet Cheney	384	384	384	384	384	384	384	384	384	384	384	384	384	384	384	\$100
Recreation Garage HelpCentre	6,312	6,312	6,312	6,312	6,312	6,312	6,312	6,312	6,312	6,312	6,312	6,312	6,312	6,312	6,312	\$300
Soccer Offices Laurier St.	6,879	6,879	800	800	800	800	800	800	800	800	800	800	800	800	800	\$300
Shelter - Simon Park	-	-	-	-	-	-	-	-	600	600	600	600	600	600	600	\$100
Bourget Shelter	-	-	-	-	-	-	-	-	-	1,200	1,200	1,200	1,200	1,200	1,200	\$100
St-Pascal Baseball Field Shelter	-	-	-	-	-	-	-	-	-	-	600	600	600	600	600	\$100
Alain Potvin Park Shelter	-	-	-	-	-	-	-	-	-	-	-	900	900	900	900	\$100
Total (sq.ft)	18,798	18,798	12,719	12,719	12,719	12,719	12,719	12,719	13,319	14,519	15,719	16,619	16,619	16,619.0	16,619.0	
Total (\$000)	\$4,732.0	\$4,732.0	\$2,908.3	\$2,908.3	\$2,908.3	\$2,908.3	\$2,908.3	\$2,908.3	\$2,968.3	\$3,088.3	\$3,208.3	\$3,298.30	\$3,298.3	\$3,298.3	\$3,298.3	

PARK BUILDINGS LAND Description	# of Hectares															UNIT COST (\$/ha)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Recreation Garage HelpCentre	-	-	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	\$870,000
Total (ha)	-	-	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0	0.32	0.32	
Total (\$000)	\$0.0	\$0.0	\$278.4	\$278.4	\$278.4	\$278.4	\$278.4	\$278.4	\$278.4	\$278.4	\$278.4	\$278.40	\$278.4	\$278.4	\$278.4	

APPENDIX B.2
TABLE B.2-1

CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK FACILITIES

PARKS EQUIPMENT Description	# of Pieces of Equipment															UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Tools	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$68,000
Dumping Trailer	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$20,000
Covered Trailer + Electrical	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$14,000
Tym	-	-	1	-	1	1	1	1	1	1	-	-	-	-	-	\$68,000
Kubota - 50HP	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	\$96,000
Case - 80HP	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	\$123,000
John Deere	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	\$109,000
Sky Jack Lift	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$20,000
Flat bed trailer	-	1	-	1	1	1	1	1	1	1	1	1	1	1	1	\$8,000
Kubota Lawn mower	-	-	-	-	-	-	1	1	1	1	1	1	1	1	1	\$35,000
Kubota Sweeper	-	-	-	-	-	-	-	1	1	1	1	1	1	1	1	\$82,000
Total (#)	5	6	6	6	7	7	8	9	9	9	9	9	9	9.0	9.0	
Total (\$000)	\$231.0	\$239.0	\$299.0	\$239.0	\$307.0	\$307.0	\$342.0	\$424.0	\$424.0	\$438.0	\$466.0	\$466.00	\$466.0	\$466.0	\$466.0	

TRAILS Description	# of Km															UNIT COST (\$/km)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Paved - Dutrisac	-	-	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	\$608,800
Paved - Parc Jule Saumure	-	-	-	-	-	-	-	-	-	-	0.17	0.17	0.17	0.17	0.17	\$608,800
Paved - Parc Dalrymple	-	-	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$608,800
Paved - Parc Laviolette	-	-	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	\$608,800
Paved - Parc Richelieu Grande Rivière	-	-	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$608,800
Paved - Parc Simon	-	-	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	\$608,800
Paved - Parc Deschamps	-	-	-	-	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	\$608,800
Paved - Parc Bourget	-	-	-	-	-	-	-	-	-	-	0.11	0.11	0.11	0.11	0.11	\$608,800
Paved - Parc Hammond	-	-	-	-	-	-	-	-	-	-	0.33	0.33	0.33	0.33	0.33	\$608,800
Paved - Parc Alain Potvin	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$608,800
Paved - Morris village	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	\$608,800
Total (#)	-	-	0.98	0.98	1.29	1.29	1.29	1.29	1.29	1.29	2.60	2.60	2.60	2.6	2.60	
Total (\$000)	\$0.0	\$0.0	\$593.6	\$593.6	\$785.4	\$785.4	\$785.4	\$785.4	\$785.4	\$785.4	\$1,579.8	\$1,579.8	\$1,579.8	\$1,579.8	\$1,579.8	

APPENDIX B.2
TABLE B.2-1

CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
PARKS AND RECREATION
PARK FACILITIES

FLEET Description	# of Fleet															UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Pick up (1/2 ton)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$53,000
Pick up (3/4 ton)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$65,000
Pick up (1 ton)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$80,000
Cube Van	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	\$80,000
Service Van	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1	\$80,000
Skidoo	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	\$15,000
GPS	4	4	4	4	4	4	4	4	4	5	5	5	5	5	5	\$730
Total (#)	9	9	9	9	9	9	9	9	10	12	11	12	11	11.0	11.0	
Total (\$000)	\$295.9	\$295.9	\$295.9	\$295.9	\$295.9	\$295.9	\$295.9	\$295.9	\$375.9	\$456.7	\$376.7	\$391.7	\$376.7	\$376.7	\$376.7	

APPENDIX B.2
TABLE B.2-1

CITY OF CLARENCE-ROCKLAND
CALCULATION OF SERVICE LEVELS
PARKS AND RECREATION

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Historic Population	22,195	22,684	23,185	23,445	23,707	23,972	24,240	24,512	24,898	25,290	25,688	26,093	26,505	26,827	27,153

INVENTORY SUMMARY (\$000)

Indoor Recreation	\$65,506.1	\$65,508.7	\$66,171.3	\$120,206.2	\$120,206.2	\$106,815.7	\$114,845.8	\$114,845.8	\$114,845.8	\$114,845.8	\$114,845.8	\$114,845.8	\$114,845.8	\$114,845.8	\$104,398.1
Park Facilities	\$20,728.2	\$21,207.7	\$20,743.5	\$21,263.5	\$21,523.3	\$22,296.6	\$22,316.7	\$23,058.7	\$23,161.2	\$23,458.0	\$24,859.5	\$24,964.5	\$24,949.5	\$24,949.5	\$25,359.7
Total (\$000)	\$86,234.3	\$86,716.4	\$86,914.8	\$141,469.7	\$141,729.5	\$129,112.3	\$137,162.5	\$137,904.5	\$138,007.0	\$138,303.8	\$139,705.2	\$139,810.2	\$139,795.2	\$139,795.2	\$129,757.8

SERVICE LEVEL (\$/capita)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Average Service Level
Indoor Recreation	\$2,951.39	\$2,887.88	\$2,854.06	\$5,127.16	\$5,070.49	\$4,455.85	\$4,737.86	\$4,685.29	\$4,612.65	\$4,541.15	\$4,470.80	\$4,401.40	\$4,332.99	\$4,280.98	\$3,844.81	\$4,216.98
Park Facilities	\$933.91	\$934.92	\$894.69	\$906.95	\$907.89	\$930.11	\$920.66	\$940.71	\$930.25	\$927.56	\$967.75	\$956.75	\$941.31	\$930.01	\$933.96	\$930.50
Total (\$/capita)	\$3,885.30	\$3,822.80	\$3,748.75	\$6,034.11	\$5,978.38	\$5,385.96	\$5,658.52	\$5,626.00	\$5,542.90	\$5,468.72	\$5,438.54	\$5,358.15	\$5,274.30	\$5,210.99	\$4,778.76	\$5,147.48

CITY OF CLARENCE-ROCKLAND
CALCULATION OF MAXIMUM ALLOWABLE
PARKS AND RECREATION

15-Year Funding Envelope Calculation	
15 Year Average Service Level 2009 - 2023	\$5,147.48
Net Population 2024 - 2033	3,282
Maximum Allowable Funding Envelope	\$16,894,029

APPENDIX B.2
TABLE B.2-2

CITY OF CLARENCE-ROCKLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARKS AND RECREATION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Available DC Reserves	2024-2023	Post 2033
2.0 PARKS AND RECREATION										
2.1 Indoor Recreation Debt										
2.1.1 Complex Debt Recovery (Principal)	Various	\$ 1,268,974	\$ -	\$ 1,268,974	11%	\$ 143,492	\$ 1,125,482	\$ -	\$ 1,125,482	\$ -
2.1.2 Clarence-Rockland Arena Debt Recovery (Principal)	2024	\$ 155,940	\$ -	\$ 155,940	0%	\$ -	\$ 155,940	\$ -	\$ 155,940	\$ -
2.1.3 Clarence-Rockland Arena Debt Recovery (Principal)	2025	\$ 159,136	\$ -	\$ 159,136	0%	\$ -	\$ 159,136	\$ -	\$ 159,136	\$ -
Subtotal Indoor Recreation Debt		\$ 1,584,051	\$ -	\$ 1,584,051		\$ 143,492	\$ 1,440,559	\$ -	\$ 1,440,559	\$ -
2.2 Indoor Recreation Facilities										
2.2.1 Bourget Train Station	2024	\$ 900,000	\$ -	\$ 900,000	50%	\$ 450,000	\$ 450,000	\$ 450,000	\$ -	\$ -
2.2.2 Soccer Dome (turf)	2027	\$ 5,860,000	\$ 2,930,000	\$ 2,930,000	0%	\$ -	\$ 2,930,000	\$ 1,120,977	\$ 1,809,023	\$ -
Subtotal Indoor Recreation Facilities		\$ 6,760,000	\$ 2,930,000	\$ 3,830,000		\$ 450,000	\$ 3,380,000	\$ 1,570,977	\$ 1,809,023	\$ -

APPENDIX B.2
TABLE B.2-2

CITY OF CLARENCE-ROCKLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARKS AND RECREATION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Available DC Reserves	2024-2033	Post 2033
2.0 PARKS AND RECREATION CONTINUED										
2.3 Park Facilities										
2.3.1 Regional Group Park Development (Du Rivage)	2025	\$ 300,000	\$ -	\$ 300,000	0%	\$ -	\$ 300,000	\$ 300,000	\$ -	\$ -
2.3.2 Waterfront Development	2025	\$ 2,000,000	\$ -	\$ 2,000,000	0%	\$ -	\$ 2,000,000	\$ -	\$ 2,000,000	\$ -
2.3.3 Brigil Park Development	2026	\$ 400,000	\$ -	\$ 400,000	0%	\$ -	\$ 400,000	\$ -	\$ 400,000	\$ -
2.3.4 Bike Trails and Network	Various	\$ 400,000	\$ -	\$ 400,000	0%	\$ -	\$ 400,000	\$ -	\$ 400,000	\$ -
2.3.5 Bourget Skate Park	2025	\$ 200,000	\$ -	\$ 200,000	50%	\$ 100,000	\$ 100,000	\$ -	\$ 100,000	\$ -
2.3.6 Baseball Hub (Land)	2026	\$ 300,000	\$ -	\$ 300,000	0%	\$ -	\$ 300,000	\$ -	\$ 300,000	\$ -
2.3.7 Baseball Hub (2 soccer and 2 baseball - lit fields)	2030	\$ 1,444,000	\$ -	\$ 1,444,000	0%	\$ -	\$ 1,444,000	\$ -	\$ 1,444,000	\$ -
2.3.8 Bourget Baseball Diamond	2026	\$ 300,000	\$ -	\$ 300,000	100%	\$ 300,000	\$ -	\$ -	\$ -	\$ -
2.3.9 Rockland Splash Pad	2028	\$ 220,000	\$ -	\$ 220,000	0%	\$ -	\$ 220,000	\$ -	\$ 220,000	\$ -
2.3.10 Cheney Playground	2025	\$ 100,000	\$ -	\$ 100,000	0%	\$ -	\$ 100,000	\$ -	\$ 100,000	\$ -
2.3.11 Hammond Skate Park	2027	\$ 300,000	\$ -	\$ 300,000	0%	\$ -	\$ 300,000	\$ -	\$ 300,000	\$ -
2.3.12 St-Pascal Playground	2024	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ 50,000	\$ -	\$ -
2.3.13 Rockland Dog Park	2031	\$ 250,000	\$ -	\$ 250,000	0%	\$ -	\$ 250,000	\$ -	\$ 250,000	\$ -
2.3.14 Trillium Project - Park Development	2027	\$ 300,000	\$ -	\$ 300,000	0%	\$ -	\$ 300,000	\$ -	\$ 300,000	\$ -
2.3.15 Loda - Park development	2024	\$ 200,000	\$ -	\$ 200,000	0%	\$ -	\$ 200,000	\$ -	\$ 200,000	\$ -
2.3.16 Clarence-Crossing Parkette (Village 1)	2029	\$ 300,000	\$ -	\$ 300,000	0%	\$ -	\$ 300,000	\$ -	\$ 300,000	\$ -
2.3.17 Clarence-Crossing Community Park & Dog Park	2026	\$ 1,420,000	\$ -	\$ 1,420,000	0%	\$ -	\$ 1,420,000	\$ -	\$ 1,420,000	\$ -
2.3.18 Ottawa River Look-out Park	2026	\$ 125,000	\$ -	\$ 125,000	0%	\$ -	\$ 125,000	\$ -	\$ 125,000	\$ -
2.3.19 Ottawa River Look-out Park	2030	\$ 900,000	\$ -	\$ 900,000	0%	\$ -	\$ 900,000	\$ -	\$ 900,000	\$ -
2.3.20 Clarence-Creek Pago Look Out	2026	\$ 100,000	\$ -	\$ 100,000	0%	\$ -	\$ 100,000	\$ -	\$ 100,000	\$ -
2.3.21 Clarence-Creek Low Level Water Crossing	2026	\$ 450,000	\$ -	\$ 450,000	0%	\$ -	\$ 450,000	\$ -	\$ 450,000	\$ -
2.3.22 Morris Village Stage 6 Park	2027	\$ 300,000	\$ -	\$ 300,000	0%	\$ -	\$ 300,000	\$ -	\$ 300,000	\$ -
2.3.23 Secondary Plan Park Development	2031	\$ 1,000,000	\$ -	\$ 1,000,000	0%	\$ -	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -
Subtotal Park Facilities		\$ 11,359,000	\$ -	\$ 11,359,000		\$ 400,000	\$ 10,959,000	\$ 350,000	\$ 10,609,000	
2.4 Studies										
2.4.1 Parks and Recreation Master Plan	2024	\$ 150,000	\$ -	\$ 150,000	0%	\$ -	\$ 150,000	\$ -	\$ 150,000	\$ -
2.4.2 Parks and Recreation Master Plan	2030	\$ 150,000	\$ -	\$ 150,000	0%	\$ -	\$ 150,000	\$ -	\$ 150,000	\$ -
Subtotal Studies		\$ 300,000	\$ -	\$ 300,000		\$ -	\$ 300,000	\$ -	\$ 300,000	\$ -
TOTAL PARKS AND RECREATION		\$ 20,003,051	\$ 2,930,000	\$ 17,073,051		\$ 993,492	\$ 16,079,559	\$ 1,920,977	\$ 14,158,582	\$ -

Residential Development Charge Calculation		
Residential Share of 2024 - 2033 DC Eligible Costs	100%	\$14,158,582
10-Year Growth in Population in New Units		4,775
Unadjusted Development Charge Per Capita		\$2,965.15
Non-Residential Development Charge Calculation		
Non-Residential Share of 2024 - 2033 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		20,450
Unadjusted Development Charge Per Square Metre		\$0.00

2024 - 2033 Net Funding Envelope	\$16,894,029
Reserve Fund Balance	
Balance as at December 31, 2023	\$1,920,977



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

**CITY OF CLARENCE-ROCKLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PARKS AND RECREATION
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PARKS AND RECREATION	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
OPENING CASH BALANCE	\$1,920.98	\$2,519.26	\$1,465.89	\$244.46	(\$2,560.40)	(\$1,548.56)	(\$515.11)	(\$1,906.60)	(\$1,911.27)	(\$788.82)	
2024 - 2033 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth	\$500.0	\$300.0	\$0.0	\$1,121.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,921.0
- Principal Payments on Complex Debt	\$63.3	\$65.4	\$67.5	\$69.7	\$71.9	\$74.3	\$76.7	\$79.2	\$81.8	\$475.6	\$1,125.5
- Principal Payments on Clarence-Rockland Arena Debt	\$155.9	\$159.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$315.1
- Parks And Recreation: Non Inflated	\$390.0	\$2,240.0	\$2,835.0	\$2,749.0	\$260.0	\$340.0	\$2,534.0	\$1,290.0	\$40.0	\$40.0	\$12,718.0
- Parks And Recreation: Inflated	\$1,109.20	\$2,815.35	\$3,017.07	\$4,176.60	\$353.35	\$449.72	\$2,930.44	\$1,561.04	\$128.62	\$523.37	\$17,064.8
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	549	560	571	454	459	468	474	480	379	381	4,775
REVENUE											
- DC Receipts: Inflated	\$1,672.5	\$1,740.1	\$1,809.8	\$1,467.7	\$1,513.6	\$1,574.1	\$1,626.2	\$1,679.7	\$1,352.8	\$1,387.1	\$15,823.5
INTEREST											
- Interest on Opening Balance	\$67.2	\$88.2	\$51.3	\$8.6	(\$140.8)	(\$85.2)	(\$28.3)	(\$104.9)	(\$105.1)	(\$43.4)	(\$292.4)
- Interest on In-year Transactions	\$9.9	(\$29.6)	(\$33.2)	(\$74.5)	\$20.3	\$19.7	(\$35.9)	\$2.1	\$21.4	\$15.1	(\$84.7)
- Interest Payments on Complex Debt	(\$36.5)	(\$34.4)	(\$32.2)	(\$30.0)	(\$27.9)	(\$25.4)	(\$23.0)	(\$20.5)	(\$18.0)	(\$46.7)	(\$294.6)
- Interest Payments on Clarence-Rockland Arena Debt	(\$5.6)	(\$2.4)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$7.9)
TOTAL REVENUE	\$1,707.5	\$1,762.0	\$1,795.6	\$1,371.7	\$1,365.2	\$1,483.2	\$1,538.9	\$1,556.4	\$1,251.1	\$1,312.2	\$15,143.8
CLOSING CASH BALANCE	\$2,519.3	\$1,465.9	\$244.5	(\$2,560.4)	(\$1,548.6)	(\$515.1)	(\$1,906.6)	(\$1,911.3)	(\$788.8)	\$0.0	

2024 Adjusted Charge Per Capita	\$3,046.39
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Allocation of Capital Program	
Residential Sector	100.0%
Non-Residential Sector	0.0%
Rates for 2024	
Inflation Rate:	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.3

BY-LAW SERVICES

The Clarence-Rockland has enacted several by-laws to protect the health, safety and peace of every resident in the Municipality. These by-laws are enforced by Municipal Law Enforcement Officers and include animal control, property maintenance, and noise control.

TABLE B.3-1 HISTORICAL SERVICE LEVELS

Table B.3-1 displays the fifteen-year historical inventory for buildings, land, furniture and equipment for By-law services. The building area totals 120 square feet with a replacement value of \$66,000. The land associated with the facility is estimated is negligible. In addition, various types of equipment, including animal control, personal safety, office, vehicle, bike patrol, and technical equipment are also included in the service level calculations.

The 2023 combined replacement value of the inventory of capital assets for By-law services is \$410,400, resulting in a fifteen-year historical average service level of \$13.97 per capita and employee. The historical service level, multiplied by the ten-year net population and employment growth (3,691), results in a fifteen-year maximum allowable funding envelope of about \$51,563. The service level calculation has been adjusted to reflect the recovery of the existing negative reserve fund balance moving forward.

TABLE B.3-2 2024–2033 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE DEVELOPMENT CHARGES

The 2024 to 2033 development-related capital program includes the recovery of a negative reserve balance and additional vehicles and protective equipment.

In total, the By-law Services capital program amounts to \$171,609. There is negative balance of \$76,809 in DC reserves that will be partially recovered during the current planning period. As a result, the full maximum funding envelope of \$51,563 will be used for the recovery of the negative reserve balance. The remaining total DC eligible costs, approximately \$120,046, is deemed to provide benefit to development beyond 2033. This share of costs will be recovered through future DCs.

The development-related net capital cost is allocated 92 per cent to residential development (\$47,438) and 8 per cent (\$4,125) to non-residential development. The residential share of the net development-related capital cost is divided by the ten-year growth in population in new dwelling units to derive a charge of \$9.93 per capita. The non-

residential share of the net growth-related capital cost is divided by the ten-year forecast growth in floor space, resulting in a charge of \$0.20 per square metre.

TABLE B.3-3 CASH FLOW ANALYSIS

The cash-flow analysis is displayed in Table B.3-3 and considers the timing of the development charges revenues to determine the adjusted rates. After cash flow considerations, the residential development charge increases to \$11.80 per capita. The non-residential development charge increases to \$0.26 per square metre.

BY-LAW SERVICES SUMMARY						
15-year Hist.	2024 - 2033		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$13.97	\$171,609	\$51,563	\$9.93	\$0.20	\$11.80	\$0.26

APPENDIX B.3
TABLE B.3-1

CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
BY-LAW SERVICES

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	
Dog Pound Facility	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	\$550
Total (#)	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	
Total (\$000)	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0

LAND Facility Name	# of Hectares															UNIT COST (\$/ha)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Dog Pound Facility	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	\$235,000
Total (ha)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total (\$000)	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2

FURNITURE AND EQUIPMENT Description	Total Value of Furniture & Equipment (\$)														
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Animal Control	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Personel Safety & Equipment	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000	\$28,000
Office	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Vehicle Patrol - Off Road	\$10,300	\$15,900	\$21,200	\$21,200	\$21,200	\$24,400	\$24,400	\$24,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bike Patrol (8)	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000
Technical	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Vehicles (4)	\$0	\$0	\$360,000	\$360,000	\$360,000	\$360,000	\$360,000	\$360,000	\$360,000	\$360,000	\$360,000	\$360,000	\$360,000	\$360,000	\$360,000
Total (\$000)	\$71.3	\$76.9	\$442.2	\$442.2	\$442.2	\$445.4	\$445.4	\$445.4	\$421.0	\$421.0	\$421.0	\$421.0	\$421.0	\$421.0	\$421.0

APPENDIX B.3
TABLE B.3-1

CITY OF CLARENCE-ROCKLAND
CALCULATION OF SERVICE LEVELS
BY-LAW SERVICES

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Historic Population	22,195	22,684	23,185	23,445	23,707	23,972	24,240	24,512	24,898	25,290	25,688	26,093	26,505	26,827	27,153
Historical Employment	<u>5,115</u>	<u>5,446</u>	<u>5,799</u>	<u>5,667</u>	<u>5,539</u>	<u>5,413</u>	<u>5,290</u>	<u>5,171</u>	<u>5,352</u>	<u>5,540</u>	<u>5,735</u>	<u>5,936</u>	<u>6,145</u>	<u>6,177</u>	<u>6,209</u>
Total Historical Population & Employ	27,310	28,130	28,984	29,112	29,246	29,385	29,530	29,683	30,250	30,830	31,423	32,029	32,650	33,004	33,362

INVENTORY SUMMARY (\$000)

Buildings	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0	\$66.0
Land	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2
Furniture And Equipment	\$71.3	\$76.9	\$442.2	\$442.2	\$442.2	\$445.4	\$445.4	\$445.4	\$421.0	\$421.0	\$421.0	\$421.0	\$421.0	\$421.0	\$421.0
Committed Excess Capacity															
Total (\$000)	\$137.5	\$143.1	\$508.4	\$508.4	\$508.4	\$511.6	\$511.6	\$511.6	\$487.2	\$487.2	\$410.4	\$410.4	\$410.4	\$410.4	\$410.4

SERVICE LEVEL (\$/pop & emp)

																Average Service Level
Buildings	\$2.42	\$2.35	\$2.28	\$2.27	\$2.26	\$2.25	\$2.24	\$2.22	\$2.18	\$2.14	\$2.10	\$2.06	\$2.02	\$2.00	\$1.98	\$2.18
Land	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01
Furniture And Equipment	\$2.61	\$2.73	\$15.26	\$15.19	\$15.12	\$15.16	\$15.08	\$15.01	\$13.92	\$13.66	\$13.40	\$13.14	\$12.89	\$12.76	\$12.62	\$12.57
Committed Excess Capacity	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	(\$2.44)	(\$2.40)	(\$2.35)	(\$2.33)	(\$2.30)	(\$0.79)
Total (\$/pop & emp)	\$5.04	\$5.09	\$17.54	\$17.46	\$17.38	\$17.41	\$17.33	\$17.24	\$16.11	\$15.80	\$13.06	\$12.81	\$12.57	\$12.44	\$12.30	\$13.97

CITY OF CLARENCE-ROCKLAND
CALCULATION OF MAXIMUM ALLOWABLE
BY-LAW SERVICES

15-Year Funding Envelope Calculation	
15 Year Average Service Level 2009 - 2023	\$13.97
Net Population Growth 2024 - 2033	3,691
Maximum Allowable Funding Envelope	\$51,563

APPENDIX B.3
TABLE B.3-2

CITY OF CLARENCE-ROCKLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
BY-LAW SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Available DC Reserves	2024-2023	Post 2023
3.0 BY-LAW SERVICES										
3.1 Recovery of Negative Reserve Fund Balance										
3.1.1 Recovery of Negative Reserve Fund Balance	2024	\$ 76,809	\$ -	\$ 76,809	0%	\$ -	\$ 76,809	\$ -	\$ 51,563	\$ 25,246
Subtotal Recovery of Negative Reserve Fund Balance		\$ 76,809	\$ -	\$ 76,809		\$ -	\$ 76,809	\$ -	\$ 51,563	
3.2 Buildings & Equipment										
3.2.1 Additional Vehicle	2029	\$ 90,000	\$ -	\$ 90,000	0%	\$ -	\$ 90,000	\$ -	\$ -	\$ 90,000
3.2.2 Protective Equipment	2030	\$ 4,800	\$ -	\$ 4,800	0%	\$ -	\$ 4,800	\$ -	\$ -	\$ 4,800
Subtotal Buildings & Equipment		\$ 94,800	\$ -	\$ 94,800		\$ -	\$ 94,800	\$ -	\$ -	
TOTAL BY-LAW SERVICES		\$ 171,609	\$ -	\$ 171,609		\$ -	\$ 171,609	\$ -	\$ 51,563	\$ 120,046

Residential Development Charge Calculation		
Residential Share of 2024 - 2033 DC Eligible Costs	92%	\$47,438
10-Year Growth in Population in New Units		4,775
Unadjusted Development Charge Per Capita		\$9.93
Non-Residential Development Charge Calculation		
Non-Residential Share of 2024 - 2033 DC Eligible Costs	8%	\$4,125
10-Year Growth in Square Metres		20,450
Unadjusted Development Charge Per Square Metre		\$0.20

2024 - 2033 Net Funding Envelope	\$51,563
Reserve Fund Balance	
Balance as at December 31, 2023	(\$76,809)

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

**CITY OF CLARENCE-ROCKLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
BY-LAW SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

BY-LAW SERVICES	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
OPENING CASH BALANCE	(\$47.4)	(\$43.5)	(\$39.0)	(\$34.0)	(\$30.1)	(\$25.8)	(\$21.0)	(\$15.7)	(\$10.0)	(\$5.2)	
2024 - 2033 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- By-Law Services: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- By-Law Services: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	549	560	571	454	459	468	474	480	379	381	4,775
REVENUE											
- DC Receipts: Inflated	\$6.5	\$6.7	\$7.0	\$5.7	\$5.9	\$6.1	\$6.3	\$6.5	\$5.2	\$5.4	\$61.3
INTEREST											
- Interest on Opening Balance	(\$2.6)	(\$2.4)	(\$2.1)	(\$1.9)	(\$1.7)	(\$1.4)	(\$1.2)	(\$0.9)	(\$0.5)	(\$0.3)	(\$14.9)
- Interest on In-year Transactions	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$1.1
TOTAL REVENUE	\$4.0	\$4.5	\$5.0	\$3.9	\$4.3	\$4.8	\$5.3	\$5.8	\$4.8	\$5.2	\$47.4
CLOSING CASH BALANCE	(\$43.5)	(\$39.0)	(\$34.0)	(\$30.1)	(\$25.8)	(\$21.0)	(\$15.7)	(\$10.0)	(\$5.2)	\$0.0	

2024 Adjusted Charge Per Capita	\$11.80
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Allocation of Capital Program	
Residential Sector	92.0%
Non-Residential Sector	8.0%
Rates for 2024	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



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

**CITY OF CLARENCE-ROCKLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
BY-LAW SERVICES
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

BY-LAW SERVICES	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
OPENING CASH BALANCE	(\$4.13)	(\$3.93)	(\$3.72)	(\$3.48)	(\$3.05)	(\$2.56)	(\$2.03)	(\$1.46)	(\$0.83)	(\$0.25)	
2024 - 2033 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- By-Law Services: Non Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- By-Law Services: Inflated	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	1,600	1,600	1,600	2,250	2,300	2,300	2,300	2,350	2,050	2,100	20,450
REVENUE											
- DC Receipts: Inflated	\$0.4	\$0.4	\$0.4	\$0.6	\$0.6	\$0.7	\$0.7	\$0.7	\$0.6	\$0.6	\$5.8
INTEREST											
- Interest on Opening Balance	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.2)	(\$0.1)	(\$0.1)	(\$0.1)	(\$0.0)	(\$0.0)	(\$1.4)
- Interest on In-year Transactions	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.1
TOTAL REVENUE	\$0.2	\$0.2	\$0.2	\$0.4	\$0.5	\$0.5	\$0.6	\$0.6	\$0.6	\$0.6	\$4.5
CLOSING CASH BALANCE	(\$3.9)	(\$3.7)	(\$3.5)	(\$3.0)	(\$2.6)	(\$2.0)	(\$1.5)	(\$0.8)	(\$0.2)	\$0.4	

2024 Adjusted Charge Per Square Metre	\$0.26
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Allocation of Capital Program	
Residential Sector	92.0%
Non-Residential Sector	8.0%
Rates for 2024	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.4

DEVELOPMENT RELATED STUDIES

Subsection 7 (3) of the *DCA* allows for a development related studies class in respect of any service in subsection 2 (4). This appendix covers the costs included for recovery of development-related studies.

TABLE B.4-1 2024–2033 DEVELOPMENT-RELATED CAPITAL PROGRAM AND CALCULATION OF THE DEVELOPMENT CHARGES

As shown in Table B.4-1, the 2024–2033 development-related gross cost for this service area is \$337,872. The capital program relates to various development-related studies, including a special area secondary plan, DC background studies, a zoning by-law update, and an Official Plan update.

As many of these studies are related to growth in the City of Clarence-Rockland, most projects are entirely attributable to new development. However, benefit to existing shares have been considered for certain projects including the Zoning By-law and Official Plan updates, which total \$37,500. The resulting 2024-2033 DC eligible cost considered for recovery under this by-law is \$300,372.

This amount is apportioned 92 per cent (\$276,342) to residential development and 8 per cent (\$24,030) to non-residential development. The resulting development charges for Development Related Studies are \$57.87 per capita and \$1.18 per square metre of new non-residential building space.

TABLE B.4-2 CASH FLOW ANALYSIS

The cash-flow analysis is displayed in Table B.4-2 and considers the timing of the development charges revenues to determine the adjusted rates. After cash flow considerations, the residential development charge increases to \$63.65 per capita. The non-residential development charge increases to \$1.29 per square metre.

DEVELOPMENT RELATED STUDIES SUMMARY					
2024 - 2033		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$337,872	\$300,372	\$57.87	\$1.18	\$63.65	\$1.29

APPENDIX B.4
TABLE B.4-1

CITY OF CLARENCE-ROCKLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
DEVELOPMENT RELATED STUDIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Available DC Reserves	2024-2033	Post 2033
4.0 DEVELOPMENT RELATED STUDIES										
4.1 Negative Reserve Fund Balance										
4.1.1 Negative Reserve Fund Balance	2024	\$ 12,872	\$ -	\$ 12,872	0%	\$ -	\$ 12,872	\$ -	\$ 12,872	\$ -
4.2 Development-Related Studies										
4.1.1 Special Area Secondary Plan	2024	\$ 150,000	\$ -	\$ 150,000	0%	\$ -	\$ 150,000	\$ -	\$ 150,000	\$ -
4.1.2 Development Charges Study	2024	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -
4.1.3 Zoning By-law Update	2024	\$ 25,000	\$ -	\$ 25,000	50%	\$ 12,500	\$ 12,500	\$ -	\$ 12,500	\$ -
4.1.4 Development Charges Study	2033	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -
4.1.5 Official Plan Update	2026	\$ 50,000	\$ -	\$ 50,000	50%	\$ 25,000	\$ 25,000	\$ -	\$ 25,000	\$ -
Subtotal Development-Related Studies		\$ 325,000	\$ -	\$ 325,000		\$ 37,500	\$ 287,500	\$ -	\$ 287,500	\$ -
TOTAL DEVELOPMENT RELATED STUDIES		\$ 337,872	\$ -	\$ 337,872		\$ 37,500	\$ 300,372	\$ -	\$ 300,372	\$ -

Residential Development Charge Calculation		
Residential Share of 2024 - 2033 DC Eligible Costs	92%	\$276,342
10-Year Growth in Population in New Units		4,775
Unadjusted Development Charge Per Capita		\$57.87
Non-Residential Development Charge Calculation		
Non-Residential Share of 2024 - 2033 DC Eligible Costs	8%	\$24,030
10-Year Growth in Square Metres		20,450
Unadjusted Development Charge Per Square Metre		\$1.18

Reserve Fund Balance	
Balance as at December 31, 2023	(\$12,872)

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

**CITY OF CLARENCE-ROCKLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
DEVELOPMENT RELATED STUDIES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

DEVELOPMENT RELATED STUDIES	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
OPENING CASH BALANCE	(\$11.8)	(\$177.5)	(\$150.2)	(\$144.4)	(\$121.1)	(\$95.6)	(\$67.4)	(\$36.5)	(\$2.8)	\$25.8	
2024 - 2033 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Development Related Studies: Non Inflated	\$195.5	\$0.0	\$23.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$46.0	\$264.5
- Development Related Studies: Inflated	\$195.5	\$0.0	\$23.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$55.0	\$274.4
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	549	560	571	454	459	468	474	480	379	381	4,775
REVENUE											
- DC Receipts: Inflated	\$34.9	\$36.4	\$37.8	\$30.7	\$31.6	\$32.9	\$34.0	\$35.1	\$28.3	\$29.0	\$330.6
INTEREST											
- Interest on Opening Balance	(\$0.7)	(\$9.8)	(\$8.3)	(\$7.9)	(\$6.7)	(\$5.3)	(\$3.7)	(\$2.0)	(\$0.2)	\$0.9	(\$43.5)
- Interest on In-year Transactions	(\$4.4)	\$0.6	\$0.2	\$0.5	\$0.6	\$0.6	\$0.6	\$0.6	\$0.5	(\$0.7)	(\$0.9)
TOTAL REVENUE	\$29.9	\$27.2	\$29.8	\$23.3	\$25.5	\$28.2	\$30.9	\$33.7	\$28.6	\$29.2	\$286.2
CLOSING CASH BALANCE	(\$177.5)	(\$150.2)	(\$144.4)	(\$121.1)	(\$95.6)	(\$67.4)	(\$36.5)	(\$2.8)	\$25.8	\$0.0	

2024 Adjusted Charge Per Capita	\$63.65
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Allocation of Capital Program	
Residential Sector	92.0%
Non-Residential Sector	8.0%
Rates for 2024	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



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

**CITY OF CLARENCE-ROCKLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
DEVELOPMENT RELATED STUDIES
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

DEVELOPMENT RELATED STUDIES	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
OPENING CASH BALANCE	(\$1.03)	(\$16.44)	(\$15.20)	(\$15.90)	(\$13.64)	(\$11.13)	(\$8.42)	(\$5.49)	(\$2.26)	\$0.76	
2024 - 2033 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Development Related Studies: Non Inflated	\$17.0	\$0.0	\$2.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4.0	\$23.0
- Development Related Studies: Inflated	\$17.0	\$0.0	\$2.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4.0	\$23.0
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	1,600	1,600	1,600	2,250	2,300	2,300	2,300	2,350	2,050	2,100	20,450
REVENUE											
- DC Receipts: Inflated	\$2.1	\$2.1	\$2.1	\$3.1	\$3.2	\$3.3	\$3.3	\$3.5	\$3.1	\$3.2	\$29.0
INTEREST											
- Interest on Opening Balance	(\$0.1)	(\$0.9)	(\$0.8)	(\$0.9)	(\$0.8)	(\$0.6)	(\$0.5)	(\$0.3)	(\$0.1)	\$0.0	(\$4.9)
- Interest on In-year Transactions	(\$0.4)	\$0.0	\$0.0	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	(\$0.0)	(\$0.1)
TOTAL REVENUE	\$1.6	\$1.2	\$1.3	\$2.3	\$2.5	\$2.7	\$2.9	\$3.2	\$3.0	\$3.2	\$24.0
CLOSING CASH BALANCE	(\$16.4)	(\$15.2)	(\$15.9)	(\$13.6)	(\$11.1)	(\$8.4)	(\$5.5)	(\$2.3)	\$0.8	\$0.0	

2024 Adjusted Charge Per Square Metre	\$1.29
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Allocation of Capital Program	
Residential Sector	92.0%
Non-Residential Sector	8.0%
Rates for 2024	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.5

FIRE SERVICE

The Clarence-Rockland Fire Services protects the lives, property and environment of the people who live, work and visit the City. The department is responsible for fire prevention, public education and emergency preparedness programs.

TABLE B.5-1 HISTORICAL SERVICE LEVELS

Table B.5-1 displays the 15-year historical inventory for buildings, land, vehicles, furniture, and equipment for Fire Services. The City of Clarence-Rockland Fire Department operates out of three fire stations with a total building area of 28,632 square feet. The total replacement value of the stations is \$14.32 million². The land associated with all three fire stations totals 7.87 hectares and is valued at \$2.07 million. Station equipment, such as tools, pumps and gas detectors totals \$909,200. The 2023 Fire Department fleet totals 15 vehicles with a replacement value of \$7.34 million. Finally, personal equipment and gear, such as protective clothing, communications equipment and breathing apparatuses are valued at \$1.95 million.

The 2023 combined replacement value of the inventory of capital assets for Fire services is \$26.59 million, resulting in a 15-year historical average service level of \$550.99 per population and employment. The historical service level, multiplied by the ten-year net growth in population and employment (3,691), results in a fifteen-year maximum allowable funding envelope of \$2.03 million.

TABLE B.5-2 2024-2033 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE DEVELOPMENT CHARGES

The 2024 to 2033 development-related capital program recovers for existing debenture payments associated with the recent expansions, one new ladder truck, and a Fire Master Plan.

The development-related capital program includes the recovery of the principal payment of the debenture related to the expansion of the Rockland and Bourget Fire Stations totalling \$2.36 million over the 10-year planning period. The debt included in the capital program

² Fire space of 4,724 square feet of space associated with the stations has been deducted from the building inventory to account for outstanding debt being recovered for.

only included the principal portion of the payments and only the growth-related share³. Additionally, the department anticipates acquiring a new 100 foot ladder truck which will increase servicing capacity over the existing 75 foot ladder truck which will be replaced upon this asset coming into service. A Fire Master Plan Study is anticipated to occur over the ten-year planning period for a total of \$125,000.

Altogether, the ten-year capital program for Fire Services amounts to \$3.99 million. Non-growth shares relating to replacement and benefit to existing shares of the ladder truck total \$1.13 million.

The DC eligible costs exceed the funding envelope by \$488,030, which is deemed to provide benefit to development beyond 2033. This share will be eligible for funding under subsequent development charges studies. The City has \$340,413 in DC reserves to offset a portion of the DC eligible capital costs. The remaining \$2.03 million is related to development in the 2024–2033 planning period and is eligible for DC recovery. The development-related net capital cost is allocated 92 per cent to residential development (\$1.87 million) and 8 per cent to non-residential development (\$162,696). The residential share of the net development-related capital cost is divided by the 10-year growth in population in new housing units to derive an unadjusted charge of \$391.83 per capita. The non-residential share of the net growth-related capital cost is divided by the 10-year forecast growth in floor space, resulting in an unadjusted charge of \$7.96 per square metre.

TABLE B.5-3 CASH FLOW ANALYSIS

After cash flow consideration, both the residential and non-residential calculated charges increase to \$411.77 per capita and \$8.44 per square metre. This increase reflects the front-ended nature of the timing of anticipated capital projects. The following table summarizes the calculation of the Fire Services development charge:

FIRE SERVICES SUMMARY						
15-year Hist. Service Level per pop & emp	2024 - 2033		Unadjusted		Adjusted	
	Development-Related Capital Program		Development Charge		Development Charge	
	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$550.99	\$3,987,147	\$2,033,704	\$391.83	\$7.96	\$411.77	\$8.44

³ Interest Payments associated with the debt are included for recover in the cash flow analysis

APPENDIX B.5
TABLE B.5-1

CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

BUILDINGS Station Name	# of Square Feet															UNIT COST (\$/sq. ft.)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Bourget (#1)	2,331	2,331	2,331	2,331	2,331	2,331	2,331	2,331	2,331	2,331	2,331	10,542	10,542	10,542	10,542	\$500
Clarence Creek (#2)	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	\$500
Rockland (#3)	4,032	4,032	4,032	4,032	4,032	4,032	4,032	4,032	4,032	4,032	4,032	20,414	20,414	20,414	20,414	\$500
Excess Capacity	-	-	-	-	-	-	-	-	-	-	-	(4,724)	(4,724)	(4,724)	(4,724)	\$500
Total (sq.ft.)	8,763	8,763	8,763	8,763	8,763	8,763	8,763	8,763	8,763	8,763	8,763	28,632	28,632	28,632	28,632	
Total (\$000)	\$4,381.5	\$4,381.5	\$4,381.5	\$4,381.5	\$4,381.5	\$4,381.5	\$4,381.5	\$4,381.5	\$4,381.5	\$4,381.5	\$4,381.5	\$14,315.9	\$14,315.9	\$14,315.9	\$14,315.9	

LAND Station Name	# of Hectares															UNIT COST (\$/ha)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Bourget (#1)	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	7.23	7.23	7.23	7.23	\$235,000
Clarence Creek (#2)	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	\$235,000
Rockland (#3)	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.21	0.21	0.35	0.35	0.35	0.35	0.35	0.35	\$870,000
Total (ha)	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.62	0.62	0.76	0.76	7.87	7.87	7.87	7.87	
Total (\$000)	\$218.2	\$218.2	\$218.2	\$218.2	\$218.2	\$218.2	\$218.2	\$279.1	\$279.1	\$400.9	\$400.9	\$2,071.7	\$2,071.7	\$2,071.7	\$2,071.7	

FURNITURE & EQUIPMENT AT STATIONS Station Name	# of Pieces of Equipment															UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Heavy Hydraulics	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	\$60,000
Miscellaneous (Bourget)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$15,000
Miscellaneous (Clarence Creek)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$15,000
Miscellaneous (Rockland)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$15,000
Portable Pumps	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$4,400
Generators	7	8	7	8	8	8	8	6	6	6	6	6	11	11	11	\$20,000
Power tools	1	1	1	1	1	1	1	1	1	1	1	2	2	11	11	\$2,000
Thermal Imager	3	3	3	3	3	3	3	3	3	3	3	4	14	14	14	\$15,000
Gas detectors	4	4	4	4	4	4	4	4	4	4	4	4	6	6	6	\$1,000
Small tools	1	1	1	1	1	1	1	1	1	1	1	3	3	3	3	\$5,900
First aid equip	1	1	4	4	4	4	4	4	4	4	11	11	12	12	12	\$10,000
Forcible entry tool	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1	\$14,700
Fire extinguisher training simulator	-	-	-	-	-	-	-	-	1	1	1	1	2	2	2	\$17,600
Spare portable tank	-	-	-	-	-	-	-	1	1	1	1	1	2	2	2	\$5,000
Container for storage	-	-	-	-	-	-	-	-	-	-	1	1	3	3	3	\$6,600
Total (#)	24	25	27	28	28	28	28	27	30	30	39	42	73	73	73	
Total (\$000)	\$380.7	\$400.7	\$410.7	\$430.7	\$430.7	\$430.7	\$430.7	\$395.7	\$488.0	\$488.0	\$566.6	\$593.4	\$909.2	\$909.2	\$909.2	



APPENDIX B.5
TABLE B.5-1

CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

VEHICLES Vehicle Type	# of Vehicles															UNIT COST (\$/vehicle)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Triple Combo Pumper	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	\$850,000
Tanker	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	\$794,700
Service Vehicle	0	0	0	0	0	1	3	3	3	3	5	5	5	5	5	\$90,000
Rescue Van	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	\$500,000
Rehabilitation Truck						0	0	0	0	0	0	0	0	1	1	\$500,000
Boat	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$65,000
Ladder Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,200,000
Mobile air mangement trailer	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	\$45,000
Utility Trailer						0	0	0	0	0	0	0	0	1	1	\$10,000
Pumper tanker	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	\$900,000
Total (#)	9	9	9	9	10	11	13	13	13	13	15	15	15	15	15	
Total (\$000)	\$6,774.4	\$6,774.4	\$6,774.4	\$6,774.4	\$6,819.4	\$6,909.4	\$7,089.4	\$7,089.4	\$7,089.4	\$7,089.4	\$7,269.4	\$7,269.4	\$7,374.7	\$7,339.7	\$7,339.7	

EQUIPMENT AND GEAR Description	# of Pieces of Equipment and Gear															UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Fire Fighter Protective Clothing																
PPE	80	80	80	80	80	80	80	80	80	80	80	90	100	100	100	\$3,300
Station Wear	70	70	70	70	70	70	70	70	70	70	70	80	100	100	100	\$1,000
Communications Equipment																
Pagers*	70	70	70	70	70	70	70	70	70	70	80	80	90	-	-	\$800
Mobile Radios	12	12	12	12	12	12	12	12	12	12	14	14	14	-	-	\$1,500
Portable Radios*	20	50	20	50	72	72	72	72	72	72	80	80	90	-	-	\$1,500
Base Station	5	5	5	5	5	5	5	5	5	5	5	5	4	-	-	\$2,900
Station Receivers & Transmitters						3	3	3	3	3	3	3	3	3	3	\$125,000
Communcations Tower (Bourget)						-	-	-	-	-	-	-	-	-	1	\$130,000
Transmitters/Communications (Rockland)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$40,000
Transmitters/Communications (Bourget)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$40,000
Transmitters/Communications (Bouvier Road on Water Tower)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$70,000
Breathing Apparatus																
Harness & Regulator	30	30	30	30	30	40	40	40	40	40	40	40	40	40	40	\$7,500
Face pieces	70	72	70	72	72	72	72	72	72	72	80	80	80	80	80	\$2,000
Extra SCBA bottle	60	60	60	60	60	80	80	65	65	65	65	65	90	90	90	\$1,100
RIT Tool Bag	-	1	-	1	1	2	2	2	2	2	2	3	3	3	3	\$6,000
Air compressor (SCBA)	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	\$60,000
Extractor	-	-	-	-	-	-	-	-	-	-	1	1	5	5	5	\$5,000
Air Bags	-	-	-	-	-	-	-	2	2	2	2	2	2	2	2	\$10,000
Electric Fan						5	5	5	5	5	5	5	5	5	5	\$5,000
Car Stabilizer						-	-	-	-	-	-	2	2	2	2	\$12,000
Triaining Props**						-	-	-	-	-	-	-	0.25	0.25	0.25	\$300,000
Total (#)	421	454	421	454	476	515	515	502	502	502	523	554	633	435	436	
Total (\$000)	\$1,093.5	\$1,148.5	\$1,093.5	\$1,148.5	\$1,181.5	\$1,684.5	\$1,684.5	\$1,688.0	\$1,688.0	\$1,688.0	\$1,716.0	\$1,805.0	\$2,060.6	\$1,821.0	\$1,951.0	

* Leased from County

** includes props used by other agencies; 25% of time attributed to City Fire



APPENDIX B.5
TABLE B.5-1

CITY OF CLARENCE-ROCKLAND
CALCULATION OF SERVICE LEVELS
FIRE SERVICES

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Historical Population	22,195	22,684	23,185	23,445	23,707	23,972	24,240	24,512	24,898	25,290	25,688	26,093	26,505	26,827	27,153
Historical Employment	5,115	5,446	5,799	5,667	5,539	5,413	5,290	5,171	5,352	5,540	5,735	5,936	6,145	6,177	6,209
Total Historical Population & Employment	27,310	28,130	28,984	29,112	29,246	29,385	29,530	29,683	30,250	30,830	31,423	32,029	32,650	33,004	33,362

INVENTORY SUMMARY (\$000)

Buildings	\$4,381.5	\$4,381.5	\$4,381.5	\$4,381.5	\$4,381.5	\$4,381.5	\$4,381.5	\$4,381.5	\$4,381.5	\$4,381.5	\$4,381.5	\$14,315.9	\$14,315.9	\$14,315.9	\$14,315.9
Land	\$218.2	\$218.2	\$218.2	\$218.2	\$218.2	\$218.2	\$218.2	\$279.1	\$279.1	\$400.9	\$400.9	\$2,071.7	\$2,071.7	\$2,071.7	\$2,071.7
Furniture & Equipment At Stations	\$380.7	\$400.7	\$410.7	\$430.7	\$430.7	\$430.7	\$430.7	\$395.7	\$488.0	\$488.0	\$566.6	\$593.4	\$909.2	\$909.2	\$909.2
Vehicles	\$6,774.4	\$6,774.4	\$6,774.4	\$6,774.4	\$6,819.4	\$6,909.4	\$7,089.4	\$7,089.4	\$7,089.4	\$7,089.4	\$7,269.4	\$7,269.4	\$7,374.7	\$7,339.7	\$7,339.7
Equipment And Gear	\$1,093.5	\$1,148.5	\$1,093.5	\$1,148.5	\$1,181.5	\$1,684.5	\$1,684.5	\$1,688.0	\$1,688.0	\$1,688.0	\$1,716.0	\$1,805.0	\$2,060.6	\$1,821.0	\$1,951.0
Total (\$000)	\$12,848.3	\$12,923.3	\$12,878.3	\$12,953.3	\$13,031.3	\$13,624.3	\$13,804.3	\$13,833.7	\$13,926.0	\$14,047.8	\$14,334.4	\$26,055.4	\$26,732.1	\$26,457.5	\$26,587.5

SERVICE LEVEL (\$/pop & emp)

Average
Service
Level

Buildings	\$160.4	\$155.8	\$151.2	\$150.50	\$149.82	\$149.11	\$148.37	\$147.61	\$144.84	\$142.12	\$139.44	\$446.97	\$438.46	\$433.76	\$429.11	\$225.83
Land	\$7.99	\$7.76	\$7.53	\$7.49	\$7.46	\$7.42	\$7.39	\$9.40	\$9.22	\$13.00	\$12.76	\$64.68	\$63.45	\$62.77	\$62.10	\$23.36
Furniture & Equipment At Stations	\$13.94	\$14.24	\$14.17	\$14.79	\$14.73	\$14.66	\$14.59	\$13.33	\$16.13	\$15.83	\$18.03	\$18.53	\$27.85	\$27.55	\$27.25	\$17.71
Vehicles	\$248.06	\$240.82	\$233.73	\$232.70	\$233.17	\$235.13	\$240.07	\$238.84	\$234.36	\$229.95	\$231.34	\$226.96	\$225.87	\$222.39	\$220.00	\$232.89
Equipment And Gear	\$40.04	\$40.83	\$37.73	\$39.45	\$40.40	\$57.33	\$57.04	\$56.87	\$55.80	\$54.75	\$54.61	\$56.36	\$63.11	\$55.18	\$58.48	\$51.20
Total (\$/pop & emp)	\$470.46	\$459.41	\$444.33	\$444.95	\$445.57	\$463.65	\$467.47	\$466.05	\$460.36	\$455.65	\$456.17	\$813.49	\$818.75	\$801.64	\$796.94	\$550.99

CITY OF CLARENCE-ROCKLAND
CALCULATION OF MAXIMUM ALLOWABLE
FIRE SERVICES

15-Year Funding Envelope Calculation	
15 Year Average Service Level 2009 - 2023	\$550.99
Net Population & Employment Growth 2024 - 2033	3,691
Maximum Allowable Funding Envelope	\$2,033,704

APPENDIX B.5

TABLE B.5-2

CITY OF CLARENCE-ROCKLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
FIRE SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Available DC Reserves	2024-2033	Post 2033
5.0 FIRE SERVICES										
5.1 Buildings, Land & Furnishings										
5.1.1 Fire Hall Expansion - DC Debenture (Principal)	Various	\$ 2,362,147	\$ -	\$ 2,362,147	0%	\$ -	\$ 2,362,147	\$ -	\$ 1,874,117	\$ 488,030
Subtotal Buildings, Land & Furnishings		\$ 2,362,147	\$ -	\$ 2,362,147		\$ -	\$ 2,362,147	\$ -	\$ 1,874,117	\$ 488,030
5.2 Vehicles										
5.2.1 Ladder Truck (100ft)	2026	\$ 1,500,000	\$ -	\$ 1,500,000	75%	\$ 1,125,000	\$ 375,000	\$ 340,413	\$ 34,587	\$ -
Subtotal Vehicles		\$ 1,500,000	\$ -	\$ 1,500,000		\$ 1,125,000	\$ 375,000	\$ 340,413	\$ 34,587	\$ -
5.3 Equipment & Studies										
5.3.1 Fire Master Plan	2027	\$ 125,000	\$ -	\$ 125,000	0%	\$ -	\$ 125,000	\$ -	\$ 125,000	\$ -
Subtotal Equipment & Studies		\$ 125,000	\$ -	\$ 125,000		\$ -	\$ 125,000	\$ -	\$ 125,000	\$ -
TOTAL FIRE SERVICES		\$ 3,987,147	\$ -	\$ 3,987,147		\$ 1,125,000	\$ 2,862,147	\$ 340,413	\$ 2,033,704	\$ 488,030

Residential Development Charge Calculation		
Residential Share of 2024 - 2033 DC Eligible Costs	92%	\$1,871,008
10-Year Growth in Population in New Units		4,775
Unadjusted Development Charge Per Capita		\$391.83
Non-Residential Development Charge Calculation		
Non-Residential Share of 2024 - 2033 DC Eligible Costs	8%	\$162,696
10-Year Growth in Square Metres		20,450
Unadjusted Development Charge Per Square Metre		\$7.96

2024 - 2033 Net Funding Envelope	\$2,033,704
Reserve Fund Balance	
Balance as at December 31, 2023	\$340,413

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

**CITY OF CLARENCE-ROCKLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE SERVICES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

FIRE SERVICES	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
OPENING CASH BALANCE	\$313.2	\$402.6	\$504.0	\$250.4	\$183.2	\$244.1	\$314.8	\$394.5	\$483.9	\$530.7	
2024 - 2033 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth	\$0.0	\$0.0	\$313.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$313.2
- Fire Debt Principal	\$111.0	\$113.3	\$115.8	\$118.2	\$120.7	\$123.3	\$125.9	\$128.6	\$131.4	\$635.9	\$1,724.2
- Fire Services: Non Inflated	\$0.0	\$0.0	\$31.8	\$115.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$146.8
- Fire Services: Inflated	\$111.0	\$113.3	\$474.7	\$240.3	\$120.7	\$123.3	\$125.9	\$128.6	\$131.4	\$635.9	\$2,205.2
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	549	560	571	454	459	468	474	480	379	381	4,775
REVENUE											
- DC Receipts: Inflated	\$226.1	\$235.2	\$244.6	\$198.4	\$204.6	\$212.8	\$219.8	\$227.0	\$182.8	\$187.5	\$2,138.8
INTEREST											
- Fire Debt - Interest	(38.6)	(36.8)	(34.8)	(32.9)	(30.9)	(28.8)	(26.8)	(24.6)	(22.4)	(88.5)	(\$365.2)
- Interest on Opening Balance	\$11.0	\$14.1	\$17.6	\$8.8	\$6.4	\$8.5	\$11.0	\$13.8	\$16.9	\$18.6	\$126.7
- Interest on In-year Transactions	\$2.0	\$2.1	(\$6.3)	(\$1.2)	\$1.5	\$1.6	\$1.6	\$1.7	\$0.9	(\$12.3)	(\$8.4)
TOTAL REVENUE	\$200.4	\$214.7	\$221.1	\$173.1	\$181.6	\$194.0	\$205.7	\$217.9	\$178.2	\$105.2	\$1,892.0
CLOSING CASH BALANCE	\$402.6	\$504.0	\$250.4	\$183.2	\$244.1	\$314.8	\$394.5	\$483.9	\$530.7	\$0.0	

2024 Adjusted Charge Per Capita	\$411.77
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Allocation of Capital Program	
Residential Sector	92.0%
Non-Residential Sector	8.0%
Rates for 2024	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



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

**CITY OF CLARENCE-ROCKLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE SERVICES
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

FIRE SERVICES	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
OPENING CASH BALANCE	\$27.23	\$28.75	\$30.54	\$0.61	(\$2.99)	\$4.85	\$13.41	\$22.65	\$33.10	\$41.31	
2024 - 2033 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth	\$0.0	\$0.0	\$27.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$27.2
- Fire Debt Principal	\$9.6	\$9.9	\$10.1	\$10.3	\$10.5	\$10.7	\$11.0	\$11.2	\$11.4	\$55.3	\$149.9
- Fire Services: Non Inflated	\$0.0	\$0.0	\$2.8	\$10.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$12.8
- Fire Services: Inflated	\$9.6	\$9.9	\$41.3	\$20.9	\$10.5	\$10.7	\$11.0	\$11.2	\$11.4	\$55.3	\$191.8
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	1,600	1,600	1,600	2,250	2,300	2,300	2,300	2,350	2,050	2,100	20,450
REVENUE											
- DC Receipts: Inflated	\$13.5	\$13.8	\$14.0	\$20.2	\$21.0	\$21.4	\$21.9	\$22.8	\$20.3	\$21.2	\$190.0
INTEREST											
- Fire Debt Interest	(3.36)	(3.20)	(3.03)	(2.86)	(2.69)	(2.51)	(2.33)	(2.14)	(1.95)	(7.70)	(\$31.8)
- Interest on Opening Balance	\$1.0	\$1.0	\$1.1	\$0.0	(\$0.2)	\$0.2	\$0.5	\$0.8	\$1.2	\$1.4	\$6.9
- Interest on In-year Transactions	\$0.1	\$0.1	(\$0.7)	(\$0.0)	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	(\$0.9)	(\$0.7)
TOTAL REVENUE	\$11.2	\$11.7	\$11.3	\$17.3	\$18.3	\$19.3	\$20.2	\$21.6	\$19.6	\$14.0	\$164.5
CLOSING CASH BALANCE	\$28.7	\$30.5	\$0.6	(\$3.0)	\$4.9	\$13.4	\$22.7	\$33.1	\$41.3	\$0.0	

2024 Adjusted Charge Per Square Metre	\$8.44
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Allocation of Capital Program	
Residential Sector	92.0%
Non-Residential Sector	8.0%
Rates for 2024	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.6

**SERVICES RELATED TO A HIGHWAY – PUBLIC
WORKS**

The Clarence-Rockland Infrastructure and Engineering Department provides Public Works servicing to the City. The department is responsible for maintaining and repairing municipal roads, sidewalks, shoulders, bridges, culverts, and drainage ditches. Another key component of the department is the maintenance of municipal drains. It is also responsible for winter maintenance such as salting, plowing, and removing snow.

TABLE B.6-1 HISTORICAL SERVICE LEVELS

The current inventory of capital assets for Public Works includes approximately 22,180 square feet of building space with a total replacement value of \$3.94 million. The 2.25 hectares of land associated with Public Works buildings are valued at \$528,800. Furniture and equipment total \$137,500. Tools required to provide the municipal services are worth approximately \$186,100. The 42 vehicles in the Public Works fleet add an additional \$7.70 million to the value of capital assets. Additional fleet contracted services add \$140,000.

The total value of the Public Works capital inventory is \$12.63 million. The 15-year historical average service level is \$400.09 per population and employment, and this, multiplied by the 10-year net growth in population and employment, results in a maximum allowable funding envelope of \$1.48 million.

TABLE B.6-2 2024-2033 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE DEVELOPMENT CHARGES

The 10-year development-related capital program for Public Works totals \$6.62 million. This provides for an expansion of the municipal public works garage, two snow depots (including land), and various fleet and equipment acquisitions.

Replacement shares in the amount of \$2.51 million have been identified and netted off the capital program. This share of costs represents 50 per cent of the project cost for the public work garage expansion and new snow dumps in Rockland and Bourget. The eligible DC reserve fund balance of \$1.11 million has been applied to the capital program. A portion of the program totalling \$1.52 million cannot be funded through this development charges by-law due to funding envelope restrictions and will be considered in future studies.

The remaining \$1.48 million is related to development in the 2024 to 2033 planning period and is eligible for DC recovery in this period. This development related cost is allocated 92 per cent or \$1.36 million against new residential development, and 8 per cent or \$118,139

against new non-residential development. This yields an unadjusted residential development charge of \$284.52 per capita and \$5.78 per square metre of new non-residential development.

TABLE B.6-3 CASH FLOW ANALYSIS

After cash flow consideration, both the residential and non-residential calculated charges increase to \$289.23 per capita and \$5.98 per square metre, respectively. The following table summarizes the calculation of the Public Works development charge:

PUBLIC WORKS SUMMARY						
15-year Hist.	2024 - 2033		Unadjusted		Adjusted	
Service Level	Development-Related Capital Program		Development Charge		Development Charge	
per pop & emp	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$400.09	\$6,620,000	\$1,476,732	\$284.52	\$5.78	\$289.23	\$5.98

APPENDIX B.6
TABLE B.6-1

CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

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	
Garage Lemay St.	6,780	6,780	6,780	6,780	6,780	6,780	6,780	6,780	6,780	6,780	6,780	6,780	6,780	6,780	6,780	\$360
Garage Lemay St. Office & Lunch room	620	620	620	620	620	620	620	620	620	620	620	620	620	620	620	\$360
Clarence Creek Container	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	\$40
Town Hall Container	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	\$40
Sewage Plant (PW Storage)	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150	2,150	\$360
Salt Dome	-	-	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	\$40
Sand Dome	-	-	-	-	-	-	-	-	-	-	4,200	4,200	4,200	4,200	4,200	\$40
Total (#)	9,980	9,980	17,980	17,980	17,980	17,980	17,980	17,980	17,980	17,980	22,180	22,180	22,180	22,180	22,180	
Total (\$000)	\$3,455.2	\$3,455.2	\$3,775.2	\$3,775.2	\$3,775.2	\$3,775.2	\$3,775.2	\$3,775.2	\$3,775.2	\$3,775.2	\$3,943.2	\$3,943.2	\$3,943.2	\$3,943.2	\$3,943.2	

LAND Facility Name	# of Hectares															UNIT COST (\$/ha)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Garage Lemay St. Office & Lunch room	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	\$235,000
Sewage Plant (PW Storage)	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	\$235,000
Total (ha)	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	
Total (\$000)	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	

FURNITURE AND EQUIPMENT Description	Total Value of Furniture & Equipment (\$)														
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Garage Lemay Street	\$7,600	\$7,600	\$7,800	\$7,800	\$7,800	\$7,800	\$7,800	\$7,800	\$7,800	\$7,800	\$7,800	\$7,800	\$7,800	\$7,800	\$7,800
Garage Laurier	\$116,000	\$116,000	\$129,700	\$129,700	\$129,700	\$129,700	\$129,700	\$129,700	\$129,700	\$129,700	\$129,700	\$129,700	\$129,700	\$129,700	\$129,700
Total (\$000)	\$123.6	\$123.6	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5

APPENDIX B.6
TABLE B.6-1

CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

SMALL TOOLS Description	# of Tools																	UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2023		
Quick Saw	3	2	2	1	1	1	1	1	1	1	1	1	2	2	2	2	\$1,380	
Chain Saw	3	4	3	4	4	4	4	4	4	4	4	4	9	9	9	9	\$863	
Compactor	3	2	3	2	2	2	2	1	1	1	1	1	1	1	1	1	\$3,335	
Weed Eater	4	5	4	5	5	6	6	3	3	3	3	3	5	5	5	5	\$426	
Generator	3	3	3	3	3	3	3	3	3	3	4	4	2	2	2	2	\$1,461	
Water Pump Gas	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	\$5,980	
Water Pump Electric	2	2	2	2	3	3	3	-	-	-	-	-	2	2	2	2	\$403	
Lawn Mower	2	2	2	2	2	2	2	1	1	1	1	1	-	-	-	-	\$863	
Crack Sealer	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	\$1,840	
Pole Saw	1	1	1	1	2	2	2	2	3	3	3	3	3	3	3	3	\$667	
Gas Boom	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	\$598	
Traffic Counter	3	3	3	3	2	2	2	2	2	4	4	4	4	4	4	4	\$2,921	
GPS	4	5	27	27	30	32	32	23	25	27	28	32	50	50	50	50	\$575	
Light Tower	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	\$13,260	
ASP Cutting Saw	-	-	-	-	-	1	1	1	2	2	2	2	1	1	1	1	\$2,657	
Hydraulic Jack Hammer	-	-	-	-	1	1	1	1	1	1	1	1	1	1	1	1	\$10,603	
Jumping Jack	-	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	\$1,990	
Pressure Washer	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	\$9,200	
Electronic Speed controller	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	\$3,450	
Wood Chipper	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	\$63,250	
Diesel Welder	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	\$6,325	
Diesel plate	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	\$6,000	
Total (#)	32	33	54	54	60	64	64	46	50	54	56	64	90	90	90	90		
Total (\$000)	\$51.5	\$48.8	\$63.3	\$60.1	\$83.8	\$88.0	\$88.0	\$70.2	\$74.7	\$81.6	\$83.7	\$168.2	\$186.1	\$186.1	\$186.1	\$186.1		

APPENDIX B.6
TABLE B.6-1

CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

FLEET Description	# of Vehicles																	UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023			
Pick ups	15	15	13	13	13	13	13	14	14	14	14	14	14	8	8	8	\$45,000	
Tandem Axel Trucks	4	4	6	6	6	6	6	7	7	8	8	8	7	7	7	\$400,000		
Back Hoe	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$185,000		
Front End Loader	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	\$300,000		
Grader	1	2	1	2	2	2	2	2	2	2	2	2	2	2	2	\$750,000		
Steamer	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	\$25,000		
Sewer Cleaner Flusher	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	\$162,000		
Snow Machine Trackless & Equip.	1	1	1	1	1	2	2	2	2	2	2	2	3	3	3	\$160,000		
Tractor	2	2	2	2	2	2	2	3	3	3	3	3	1	1	1	\$110,000		
Bomag	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	\$950,000		
Cube Van	1	1	1	1	1	1	1	1	1	1	1	1	-	-	-	\$110,000		
Excavator	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	\$344,000		
4 Wheeler	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	\$29,000		
Enclosed Trailer	-	1	-	1	1	1	1	1	1	1	1	1	1	1	1	\$25,000		
Boom flail	-	-	-	-	-	1	1	1	1	1	1	1	1	-	-	\$63,000		
SUV	-	-	-	-	-	-	1	1	2	2	2	2	1	1	1	\$35,000		
Service Van	-	-	-	-	-	-	-	-	-	-	2	2	1	1	1	\$125,000		
Line Painter	-	-	1	1	1	1	1	1	1	1	1	1	2	2	2	\$40,000		
Plow & Salt Spreader	-	-	-	-	-	1	1	1	1	1	1	1	1	1	1	\$30,000		
Tilt Truck Bed	-	-	-	-	-	-	-	-	-	1	1	1	1	1	1	\$10,000		
Hot Box	-	-	-	-	-	-	-	-	-	-	1	1	1	1	1	\$60,000		
Snow Blower - Case	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	\$10,000		
Snow Blower Larue	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	\$185,000		
Asphalt Roller	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	\$25,000		
Trailer	-	-	-	-	-	-	-	-	-	-	-	-	5	5	5	\$20,000		
Total (#)	33	35	34	36	37	38	40	40	41	43	46	46	42	42	42			
Total (\$000)	\$5,835.0	\$6,610.0	\$6,585.0	\$7,360.0	\$7,423.0	\$7,269.0	\$7,349.0	\$7,668.0	\$7,703.0	\$8,113.0	\$8,423.0	\$8,423.0	\$7,695.0	\$7,695.0	\$7,695.0			

FLEET CONTRACTED SERVICES Description	# of Vehicles and Equipment																	UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023			
Grader	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	\$80,000		
Snow Clearing	2	1	-	-	-	-	-	-	-	-	1	1	1	1	1	\$60,000		
Total (#)	4	2	2	1	1	1	1	1	1	1	2	2	2	2	2			
Total (\$000)	\$280.0	\$140.0	\$160.0	\$80.0	\$80.0	\$80.0	\$80.0	\$80.0	\$80.0	\$80.0	\$140.0	\$140.0	\$140.0	\$140.0	\$140.0			



APPENDIX B.6
TABLE B.6-1

CITY OF CLARENCE-ROCKLAND
CALCULATION OF SERVICE LEVELS
PUBLIC WORKS

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Historic Population	22,195	22,684	23,185	23,445	23,707	23,972	24,240	24,512	24,898	25,290	25,688	26,093	26,505	26,827	27,153
Historic Employment	5,115	5,446	5,799	5,667	5,539	5,413	5,290	5,171	5,352	5,540	5,735	5,936	6,145	6,177	6,209
Total Historic Population & Employer	27,310	28,130	28,984	29,112	29,246	29,385	29,530	29,683	30,250	30,830	31,423	32,029	32,650	33,004	33,362

INVENTORY SUMMARY (\$000)

Buildings	\$3,455.2	\$3,455.2	\$3,775.2	\$3,775.2	\$3,775.2	\$3,775.2	\$3,775.2	\$3,775.2	\$3,775.2	\$3,775.2	\$3,943.2	\$3,943.2	\$3,943.2	\$3,943.2	\$3,943.2
Land	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8	\$528.8
Furniture And Equipment	\$123.6	\$123.6	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5	\$137.5
Small Tools	\$51.5	\$48.8	\$63.3	\$60.1	\$83.8	\$88.0	\$88.0	\$70.2	\$74.7	\$81.6	\$83.7	\$168.2	\$186.1	\$186.1	\$186.1
Fleet	\$5,835.0	\$6,610.0	\$6,585.0	\$7,360.0	\$7,423.0	\$7,269.0	\$7,349.0	\$7,668.0	\$7,703.0	\$8,113.0	\$8,423.0	\$8,423.0	\$7,695.0	\$7,695.0	\$7,695.0
Fleet Contracted Services	\$280.0	\$140.0	\$160.0	\$80.0	\$80.0	\$80.0	\$80.0	\$80.0	\$80.0	\$80.0	\$140.0	\$140.0	\$140.0	\$140.0	\$140.0
Total (\$000)	\$10,274.0	\$10,906.3	\$11,249.8	\$11,941.5	\$12,028.2	\$11,878.5	\$11,958.5	\$12,259.6	\$12,299.1	\$12,716.1	\$13,256.1	\$13,340.7	\$12,630.5	\$12,630.5	\$12,630.5

SERVICE LEVEL (\$/pop & emp)

Average
Service
Level

Buildings	\$126.52	\$122.83	\$130.25	\$129.68	\$129.08	\$128.47	\$127.84	\$127.19	\$124.80	\$122.45	\$125.49	\$123.11	\$120.77	\$119.48	\$118.19	\$125.08
Land	\$19.36	\$18.80	\$18.24	\$18.16	\$18.08	\$17.99	\$17.91	\$17.81	\$17.48	\$17.15	\$16.83	\$16.51	\$16.19	\$16.02	\$15.85	\$17.49
Furniture And Equipment	\$4.53	\$4.39	\$4.74	\$4.72	\$4.70	\$4.68	\$4.66	\$4.63	\$4.55	\$4.46	\$4.38	\$4.29	\$4.21	\$4.17	\$4.12	\$4.48
Small Tools	\$1.89	\$1.73	\$2.18	\$2.06	\$2.86	\$3.00	\$2.98	\$2.36	\$2.47	\$2.65	\$2.66	\$5.25	\$5.70	\$5.64	\$5.58	\$3.27
Fleet	\$213.66	\$234.98	\$227.20	\$252.82	\$253.81	\$247.37	\$248.87	\$258.33	\$254.64	\$263.15	\$268.05	\$262.98	\$235.68	\$233.15	\$230.65	\$245.69
Fleet Contracted Services	\$10.25	\$4.98	\$5.52	\$2.75	\$2.74	\$2.72	\$2.71	\$2.70	\$2.64	\$2.59	\$4.46	\$4.37	\$4.29	\$4.24	\$4.20	\$4.08
Total (\$/pop & emp)	\$376.20	\$387.71	\$388.14	\$410.19	\$411.28	\$404.24	\$404.96	\$413.02	\$406.58	\$412.46	\$421.86	\$416.52	\$386.85	\$382.70	\$378.59	\$400.09

CITY OF CLARENCE-ROCKLAND
CALCULATION OF MAXIMUM ALLOWABLE
PUBLIC WORKS

15-Year Funding Envelope Calculation	
15 Year Average Service Level 2009 - 2023	\$400.09
Net Population & Employment Growth 2024 - 2033	3,691
Maximum Allowable Funding Envelope	\$1,476,732.19



APPENDIX B.6
TABLE B.6-2

CITY OF CLARENCE-ROCKLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
PUBLIC WORKS

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					BTE (%)	Replacement & BTE Shares		Available DC Reserves	2024-2033	Post 2033
6.0 PUBLIC WORKS										
6.1 Buildings & Equipment										
6.1.1 Snow Depot (including Land) - Rockland	2025	\$ 2,140,000	\$ -	\$ 2,140,000	50%	\$ 1,070,000	\$ 1,070,000	\$ 1,070,000	\$ -	\$ -
6.1.2 Snow Dump (including Land) - Bourget	2030	\$ 880,000	\$ -	\$ 880,000	50%	\$ 440,000	\$ 440,000	\$ -	\$ -	\$ 440,000
6.1.3 Garage Renovation and Expansion	2029	\$ 2,000,000	\$ -	\$ 2,000,000	50%	\$ 1,000,000	\$ 1,000,000	\$ -	\$ 721,461	\$ 278,539
Subtotal Buildings & Equipment		\$ 5,020,000	\$ -	\$ 5,020,000		\$ 2,510,000	\$ 2,510,000	\$ 1,070,000	\$ 721,461	\$ 718,539
6.2 Fleet & Equipment										
6.2.1 Sidewalk Machine	2025	\$ 200,000	\$ -	\$ 200,000	0%	\$ -	\$ 200,000	\$ 44,729	\$ 155,271	\$ -
6.2.2 Tandem	2025	\$ 400,000	\$ -	\$ 400,000	0%	\$ -	\$ 400,000	\$ -	\$ 400,000	\$ -
6.2.3 New Vehicles and Equipment	Various	\$ 1,000,000	\$ -	\$ 1,000,000	0%	\$ -	\$ 1,000,000	\$ -	\$ 200,000	\$ 800,000
Subtotal Fleet & Equipment		\$ 1,600,000	\$ -	\$ 1,600,000		\$ -	\$ 1,400,000	\$ 44,729	\$ 755,271	\$ 800,000
TOTAL PUBLIC WORKS		\$ 6,620,000	\$ -	\$ 6,620,000		\$ 2,510,000	\$ 4,110,000	\$ 1,114,729	\$ 1,476,732	\$ 1,518,539

Residential Development Charge Calculation		
Residential Share of 2024 - 2033 DC Eligible Costs	92%	\$1,358,594
10-Year Growth in Population in New Units		4,775
Unadjusted Development Charge Per Capita		\$284.52
Non-Residential Development Charge Calculation		
Non-Residential Share of 2024 - 2033 DC Eligible Costs	8%	\$118,139
10-Year Growth in Square Metres		20,450
Unadjusted Development Charge Per Square Metre		\$5.78

2024 - 2033 Net Funding Envelope	\$1,476,732
Reserve Fund Balance	
Balance as at December 31, 2023	\$1,114,729

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

**CITY OF CLARENCE-ROCKLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC WORKS
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PUBLIC WORKS	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
OPENING CASH BALANCE	\$1,025.6	\$1,204.3	(\$213.3)	(\$69.7)	\$48.4	\$176.0	(\$438.1)	(\$326.2)	(\$203.4)	(\$105.8)	
2024 - 2033 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth	\$0.0	\$1,025.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,025.6
- Public Works: Non Inflated	\$18.4	\$529.2	\$18.4	\$18.4	\$18.4	\$682.1	\$18.4	\$18.4	\$18.4	\$18.4	\$1,358.6
- Public Works: Inflated	\$18.4	\$1,585.9	\$19.1	\$19.5	\$19.9	\$753.1	\$20.7	\$21.1	\$21.6	\$22.0	\$2,501.4
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	549	560	571	454	459	468	474	480	379	381	4,775
REVENUE											
- DC Receipts: Inflated	\$158.8	\$165.2	\$171.8	\$139.3	\$143.7	\$149.4	\$154.4	\$159.5	\$128.4	\$131.7	\$1,502.3
INTEREST											
- Interest on Opening Balance	\$35.9	\$42.2	(\$11.7)	(\$3.8)	\$1.7	\$6.2	(\$24.1)	(\$17.9)	(\$11.2)	(\$5.8)	\$11.3
- Interest on In-year Transactions	\$2.5	(\$39.1)	\$2.7	\$2.1	\$2.2	(\$16.6)	\$2.3	\$2.4	\$1.9	\$1.9	(\$37.7)
TOTAL REVENUE	\$197.1	\$168.3	\$162.8	\$137.6	\$147.6	\$139.0	\$132.6	\$144.0	\$119.1	\$127.8	\$1,475.9
CLOSING CASH BALANCE	\$1,204.3	(\$213.3)	(\$69.7)	\$48.4	\$176.0	(\$438.1)	(\$326.2)	(\$203.4)	(\$105.8)	\$0.0	

2024 Adjusted Charge Per Capita	\$289.23
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Allocation of Capital Program	
Residential Sector	92.0%
Non-Residential Sector	8.0%
Rates for 2024	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



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

**CITY OF CLARENCE-ROCKLAND
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC WORKS
NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PUBLIC WORKS	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
OPENING CASH BALANCE	\$89.18	\$100.41	(\$27.75)	(\$20.84)	(\$9.18)	\$3.70	(\$47.86)	(\$36.56)	(\$24.02)	(\$12.63)	
2024 - 2033 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth	\$0.0	\$89.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$89.2
- Public Works: Non Inflated	\$1.6	\$46.0	\$1.6	\$1.6	\$1.6	\$59.3	\$1.6	\$1.6	\$1.6	\$1.6	\$118.1
- Public Works: Inflated	\$1.6	\$137.9	\$1.7	\$1.7	\$1.7	\$65.5	\$1.8	\$1.8	\$1.9	\$1.9	\$217.5
NON-RESIDENTIAL SPACE GROWTH											
- Growth in Square Metres	1,600	1,600	1,600	2,250	2,300	2,300	2,300	2,350	2,050	2,100	20,450
REVENUE											
- DC Receipts: Inflated	\$9.6	\$9.8	\$10.0	\$14.3	\$14.9	\$15.2	\$15.5	\$16.1	\$14.4	\$15.0	\$134.6
INTEREST											
- Interest on Opening Balance	\$3.1	\$3.5	(\$1.5)	(\$1.1)	(\$0.5)	\$0.1	(\$2.6)	(\$2.0)	(\$1.3)	(\$0.7)	(\$3.1)
- Interest on In-year Transactions	\$0.1	(\$3.5)	\$0.1	\$0.2	\$0.2	(\$1.4)	\$0.2	\$0.3	\$0.2	\$0.2	(\$3.2)
TOTAL REVENUE	\$12.8	\$9.8	\$8.6	\$13.4	\$14.6	\$13.9	\$13.1	\$14.4	\$13.3	\$14.5	\$128.3
CLOSING CASH BALANCE	\$100.4	(\$27.7)	(\$20.8)	(\$9.2)	\$3.7	(\$47.9)	(\$36.6)	(\$24.0)	(\$12.6)	\$0.0	

2024 Adjusted Charge Per Square Metre	\$5.98
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Allocation of Capital Program	
Residential Sector	92.0%
Non-Residential Sector	8.0%
Rates for 2024	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX B.7

**SERVICES RELATED TO A HIGHWAY – ROADS AND
RELATED**

The Infrastructure and Engineering Department, maintains approximately 272 kilometres of road surfaces, and maintains the sidewalks, shoulders, bridges, culverts, surface drainage ditches and winter maintenance each year in the City of Clarence-Rockland. The capital program contained herein was largely prepared using the City’s ongoing transportation master plan with input from City staff and with some input from the development community thus far. The program is designed to serve the population and employment growth between 2024 and 2033 with some projects deemed to have an extended benefit over the longer-term. Furthermore, in some instances, the capital projects costs and timing have been revised to reflect recent project tendering.

TABLE B.7-1 HISTORICAL SERVICE LEVELS

The City has 272 kilometers of roads valued at \$638 million, as well as 24 bridges and culverts worth \$35.46 million. Streetlights have a replacement cost of \$13.77 million, while the 36.8 kilometers of sidewalks are valued at \$14.72 million.

The total 2023 value of the Roads and Related inventory is \$701.95 million, which provides a 15-year average service level of \$16.536.03 per population and employment. When multiplied by the expected net population and employment growth between 2024 and 2033, this results in a maximum allowable funding envelope of \$61.03 million.

TABLES B.7-2 & B.7-3 2024-2033 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF THE DEVELOPMENT CHARGES

The 2024-2033 Roads and Related capital program totals \$94.98 million and provides for various cycling and multi-use paths, roadway improvements, sidewalk projects, intersection improvements and development-related studies. The details and timing of each road project and the cost breakdown are shown on Table B.7-2.

Replacement and benefit to existing shares been identified and total \$12.03 million. This total share of cost includes 50 per cent shares for all cycling projects, 25 per cent related to the Clarence Crossing Muti-Use Path project, as well as 20 per cent for various roadway improvements, 30 per cent for the Caron Street road widening, 50 per cent for sidewalks on Sterling Avenue and 20 per cent reductions to the costs of a TMP update and a Master Transportation Study. No benefit to existing shares have been applied to the other projects which are entirely driven by new growth and needed to support the development occurring in period.

Finally, direct developer contributions of \$5.17 million have been identified for various roadway projects. Lastly, a 52% post-period benefit allocation has been attributed to a series of projects which are deemed to service development occurring beyond the ten-year planning period – this share represents \$30.72 million and will be considered for recovery in subsequent DC by-laws. The remaining net capital costs eligible for DC recovery between 2024 and 2033 total \$47.07 million (prior to reserve fund adjustments).

Table B.7-3 provides an overview of the calculation of the unadjusted development charge with consideration of the existing DC reserve fund balance of \$4.81million. Of the total gross program cost of \$94.98 million, about \$42.26 million is considered to be the remaining net DC costs eligible for recovery in the 2024-2033 period after all reductions described have been considered. The total \$42.26 million is then allocated: 92 per cent residential and 8 per cent non-residential. The allocation of costs is based on the future shares of population in new units and employment growth to 2033.

The residential share of the capital program totals \$38.88 million and, when divided by the forecast growth in population in new units (4,775), an unadjusted charge of \$8,141.38 per capita results. The non-residential share of \$3.38 million is applied against the forecast increase in square metres of non-residential floor space (20,450), yielding an unadjusted charge of \$165.30 per square metre.

TABLE B.7-4 CASH FLOW ANALYSIS

The cash flow analysis is shown on Table B.7-4. The analysis takes into consideration expenditure timing and DC revenue projections. After cash flow considerations, both the residential and non-residential charges modestly decrease to \$8,045.24 per capita and \$164.95 per square metre, respectively.

15-year Hist. Service Level per pop & emp	ROADS AND RELATED SUMMARY				Adjusted	
	2024 - 2033		Unadjusted		Development Charge	
	Development-Related Capital Program		Development Charge		\$/capita	\$/sq.m
\$16,536.03	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$8,045.24	\$164.95
	\$94,981,392	\$42,255,548	\$8,141.38	\$165.30		

APPENDIX B.7
TABLE B.7-1

CITY OF CLARENCE-ROCKLAND
INVENTORY OF CAPITAL ASSETS
ROADS AND RELATED

ROADS Type of Road	# of Kilometres															UNIT COST (\$/km)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Gravel Roads	39	39	39	41	95	96	101	108	101	99	89	81	89	89	89	
Asphalt Roads	51	51	51	54	126	127	134	143	151	153	164	171	180	181	183	
Total (km)	90	90	90	95	221	223	235	251	252	252	252	252	269	270	272	
Total (\$000)	\$192,000.0	\$192,000.0	\$192,000.0	\$203,000.0	\$473,000.0	\$477,000.0	\$503,000.0	\$537,000.0	\$554,000.0	\$558,000.0	\$579,000.0	\$594,118.0	\$629,000.0	\$632,000.0	\$638,000.0	

BRIDGES & CULVERTS Description	# of Bridges & Culverts															UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Bridges	4	4	4	4	10	10	10	11	11	11	11	11	11	11	11	
Culverts	2	2	2	2	4	4	5	5	5	5	15	15	15	15	13	
Total (#)	6	6	6	6	14	14	15	16	16	16	26	26	26	26	24	
Total (\$000)	\$8,884.0	\$8,884.0	\$8,884.0	\$8,884.0	\$20,740.0	\$20,740.0	\$22,210.0	\$23,696.0	\$23,696.0	\$23,696.0	\$38,396.0	\$38,396.0	\$38,396.0	\$38,396.0	\$35,456.0	

STREETLIGHTS Description	# of Units															UNIT COST (\$/unit)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Streetlights	476	476	476	507	1,171	1,186	1,244	1,332	1,332	1,352	1,355	1,363	1,543	1,563	1,603	
Traffic Lights	4	4	4	4	4	4	4	5	6	7	7	7	7	7	7	
Total (#)	480	480	480	511	1,175	1,190	1,248	1,337	1,338	1,359	1,362	1,370	1,550	1,570	1,610	
Total (\$000)	\$4,570.0	\$4,570.0	\$4,570.0	\$4,802.5	\$9,782.5	\$9,895.0	\$10,330.0	\$11,240.0	\$11,490.0	\$11,890.0	\$11,912.5	\$11,972.5	\$13,322.5	\$13,472.5	\$13,772.5	

SIDEWALKS Description	# of Kilometres															UNIT COST (\$/km)
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
Sidewalk	12.6	12.6	12.6	13.5	31.1	31.9	32.4	34.3	36.1	36.6	37.9	38.4	36.8	36.8	36.8	
Total (km)	12.6	12.6	12.6	13.5	31.1	31.9	32.4	34.3	36.1	36.6	37.9	38.4	36.8	36.8	36.8	
Total (\$000)	\$5,040.0	\$5,040.0	\$5,040.0	\$5,400.0	\$12,449.2	\$12,760.4	\$12,974.0	\$13,705.2	\$14,457.6	\$14,644.0	\$15,175.2	\$15,355.2	\$14,720.0	\$14,720.0	\$14,720.0	

APPENDIX B.7
TABLE B.7-1

CITY OF CLARENCE-ROCKLAND
CALCULATION OF SERVICE LEVELS
ROADS AND RELATED

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Historical Population	22,195	22,684	23,185	23,445	23,707	23,972	24,240	24,512	24,898	25,290	25,688	26,093	26,505	26,827	27,153
Historical Employment	5,115	5,446	5,799	5,667	5,539	5,413	5,290	5,171	5,352	5,540	5,735	5,936	6,145	6,177	6,209
Total Historical Pop. & Emp.	27,310	28,130	28,984	29,112	29,246	29,385	29,530	29,683	30,250	30,830	31,423	32,029	32,650	33,004	33,362

INVENTORY SUMMARY (\$000)

Roads	\$192,000.0	\$192,000.0	\$192,000.0	\$203,000.0	\$473,000.0	\$477,000.0	\$503,000.0	\$537,000.0	\$554,000.0	\$558,000.0	\$579,000.0	\$594,118.0	\$629,000.0	\$632,000.0	\$638,000.0
Bridges & Culverts	\$8,884.0	\$8,884.0	\$8,884.0	\$8,884.0	\$20,740.0	\$20,740.0	\$22,210.0	\$23,696.0	\$23,696.0	\$38,396.0	\$38,396.0	\$38,396.0	\$38,396.0	\$38,396.0	\$35,456.0
Streetlights	\$4,570.0	\$4,570.0	\$4,570.0	\$4,802.5	\$9,782.5	\$9,895.0	\$10,330.0	\$11,240.0	\$11,490.0	\$11,890.0	\$11,912.5	\$11,972.5	\$13,322.5	\$13,472.5	\$13,772.5
Sidewalks	\$5,040.0	\$5,040.0	\$5,040.0	\$5,400.0	\$12,449.2	\$12,760.4	\$12,974.0	\$13,705.2	\$14,457.6	\$14,644.0	\$15,175.2	\$15,355.2	\$14,720.0	\$14,720.0	\$14,720.0
Total (\$000)	\$210,494.0	\$210,494.0	\$210,494.0	\$222,086.5	\$515,971.7	\$520,395.4	\$548,514.0	\$585,641.2	\$603,643.6	\$608,230.0	\$644,483.7	\$659,841.7	\$695,438.5	\$698,588.5	\$701,948.5

Average
Service
Level

SERVICE LEVEL (\$/pop & emp)

Roads	\$7,030.39	\$6,825.45	\$6,624.39	\$6,973.07	\$16,173.15	\$16,232.77	\$17,033.53	\$18,091.36	\$18,314.05	\$18,099.25	\$18,425.99	\$18,549.38	\$19,264.93	\$19,149.19	\$19,123.55	\$15,060.70
Bridges & Culverts	\$325.3	\$315.8	\$306.5	\$305.2	\$709.2	\$705.8	\$752.1	\$798.3	\$783.3	\$768.6	\$1,221.9	\$1,198.8	\$1,176.0	\$1,163.4	\$1,062.8	\$772.86
Streetlights	\$167.3	\$162.5	\$157.7	\$165.0	\$334.5	\$336.7	\$349.8	\$378.7	\$379.8	\$385.7	\$379.1	\$373.8	\$408.0	\$408.2	\$412.8	\$319.97
Sidewalks	\$184.5	\$179.2	\$173.9	\$185.5	\$425.7	\$434.2	\$439.3	\$461.7	\$477.9	\$475.0	\$482.9	\$479.4	\$450.8	\$446.0	\$441.2	\$382.50
Total (\$/pop & emp)	\$7,707.58	\$7,482.90	\$7,262.47	\$7,628.69	\$17,642.47	\$17,709.56	\$18,574.81	\$19,730.07	\$19,955.16	\$19,728.51	\$20,509.94	\$20,601.38	\$21,299.80	\$21,166.78	\$21,040.36	\$16,536.03

CITY OF CLARENCE-ROCKLAND
CALCULATION OF MAXIMUM ALLOWABLE
ROADS AND RELATED

15-Year Funding Envelope Calculation	
15 Year Average Service Level 2009 - 2023	\$16,536.03
Net Population & Employment Growth 2024 - 2033	3,691
Maximum Allowable Funding Envelope	\$61,034,487



APPENDIX B.7
TABLE B.7-2

CITY OF CLARENCE-ROCKLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED (2024-2033)

NO.	Infrastructure Requirement	Description / Remarks	Limits	Term	Timing		Estimated Project Costs				
					From	To	Gross Cost	Benefit to Existing Share	Other Contributions	Post Period Allocation ¹	Net Growth-Related
City-Wide Roads Projects											
Cycling											
1	Bronze Avenue Extension	Painted bike lane with signage and cycling lane markings both directions.	Between Caron Street in the west and David Street in the East	Mid-Term	2029	- 2033	\$462,599	50%	\$231,300		\$231,300
2	David Street	Buffered paved shoulder with signage on both sides	Between County Road 17 in the north and Richelieu Street in the South	Mid-Term	2029	- 2033	\$324,624	50%	\$162,312		\$162,312
3	Expansion Lands Street B	Painted bike lane with signage and cycling lane markings both directions.	Between David Street in the north and the urban area boundary in the South	Mid-Term	2029	- 2033	\$358,660	50%	\$179,330		\$179,330
4	Heritage Drive	Painted bike lane with signage and cycling lane markings both directions.	Between the proposed connection to Sylvain Street in the south and Laurier Street in the north.	Mid-Term	2029	- 2033	\$18,444	50%	\$9,222		\$9,222
5	La Berge Street	Painted bike lane with signage and cycling lane markings both directions.	Between County Road 17 in the north and the existing Laurier Street in the South	Mid-Term	2029	- 2033	\$97,717	50%	\$48,859		\$48,859
6	Laurier Street	Buffered bike lane with flex bollards with signage and cycling lane markings both directions.	Between Richelieu Street in the west, and Heritage Drive in the east	Mid-Term	2029	- 2033	\$536,336	50%	\$268,168		\$268,168
7	Laurier Street	Painted bike lane with signage and cycling lane markings both directions.	Between Heritage Drive in the west and County Road 17 in the east	Mid-Term	2029	- 2033	\$112,039	50%	\$56,020		\$56,020
8	Patricia Street	Painted bike lane with signage and cycling lane markings both directions.	Between St. Joseph Street in the east and Heritage Drive in the west.	Short-Term	2024	- 2028	\$38,329	50%	\$19,165		\$19,165
Multi-Use Path											
9	Caron Street	New Multi-Use Path to provide neighborhood internal bicycle and pedestrian connections	Between David Street in the north and the new Bronze Avenue in the south	Mid-Term	2029	- 2033	\$133,817	0%	\$0		\$133,817
10	Des Pins Avenue	New Multi-Use Path to provide neighborhood internal bicycle and pedestrian connections	Between Dalrymple Drive in the east and the existing school pathway in the west	Mid-Term	2029	- 2033	\$224,765	0%	\$0		\$224,765
11	Laporte Street	Replace existing sidewalk with multi-use path to provide neighbourhood with integrated bike connections	Between Laurier Street in the west and Sylvain Street in the east	Mid-Term	2029	- 2033	\$165,468	0%	\$0		\$165,468
12	Poupart Road	New multi-use path on the north side of Poupart Road built as part of the Poupart Road widening.	Between St-Jean Street in the east and the proposed West Roadway extension.	Mid-Term	2029	- 2033	\$428,696	0%	\$0		\$428,696
13	Poupart Road	New multi-use path on the east side of Poupart Road built as part of the Poupart Road widening.	Between the proposed West Roadway extension in the south and Richelieu Street in the north.	Short-term	2024	- 2028	\$174,283	0%	\$0		\$174,283
14	Richelieu Street	New Multi-Use Path to provide neighborhood internal bicycle and pedestrian connections	Between Poupart Road in the west and Descôtes Circle in the east	Mid-Term	2029	- 2033	\$90,948	0%	\$0		\$90,948
15	Saint Jean Street	New multi-use path on the north side of St. Jean Street built as part of development.	Between the new Bronze Avenue in the east and Poupart Road in the west.	Short-term	2024	- 2028	\$235,582	0%	\$0		\$235,582
16	Clarence Crossing Multi Use Path				2025	- 2025	\$500,000	25%	\$125,000		\$375,000
17	Clarence Crossing Multi Use Path				2028	- 2028	\$450,000	25%	\$112,500		\$337,500

APPENDIX B.7
TABLE B.7-2

CITY OF CLARENCE-ROCKLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED (2024-2033)

NO.	Infrastructure Requirement	Description / Remarks	Limits	Term	Timing		Estimated Project Costs					
					From	To	Gross Cost	Benefit to Existing Share	Other Contributions	Post Period Allocation ¹	Net Growth-Related	
City-Wide Roads Projects												
Roadway												
18	La Berge Street Extension (Proposed)	Extension of La Berge Street with painted bike lanes and sidewalks on both sides of the road.	Between County Road 17 in the north and the existing Laurier Street in the south.	Mid-Term	2029	- 2033	\$1,284,290	0%	\$0		\$667,831	\$616,459
20	Poupart Road	Road widening from two lanes to four. Will include a multi-use pathway on the north side of the roadway.	Between the proposed West Roadway in the west and St-Jean/Poupart intersection	Mid-Term	2029	- 2033	\$19,000,000	20%	\$3,800,000		\$7,904,000	\$7,296,000
27	Saint Jean Street	Road widening from two lanes to four south of new roundabout.	Between Poupart Road in the north and the urban area boundary in the south.	Short-term	2024	- 2028	\$2,100,236	20%	\$420,047		\$0	\$1,680,189
28	Saint Jean Street	Road widening from two lanes to four. Will include a multi-use pathway on the north side of the roadway. east of new roundabout	Between St-Jean/Poupart Road intersection in the west and the new Bronze Avenue in the east.	Short-term	2024	- 2028	\$15,000,000	20%	\$3,000,000		\$0	\$12,000,000
29	Caron Street	Road widening from three lanes to four		Mid-Term	2029	- 2033	\$8,400,000	30%	\$2,520,000		\$5,880,000	\$0
30	David Street	Road widening from three lanes to four		Mid-Term	2029	- 2033	\$4,620,000	20%	\$924,000		\$3,696,000	\$0
31	Saint Jean Street	Painted bike lane with signage and cycling lane markings both directions	Between Laurier Street in the north and Patricia Street in the south.	Mid-Term	2029	- 2033	\$13,825	0%	\$0		\$7,189	\$6,636
Intersections												
19	La Berge Street/County Road 17	Upgrade existing stop controlled intersection with a signalized intersection.	At the intersection of La Berge Street, County Road 17, and the proposed La Berge Street extension.	Short-term	2024	- 2028	\$400,000	0%	\$0		\$0	\$400,000
21	Poupart Road	New roundabout at new intersection.	At the entrance to the future Stewart Village development	Mid-Term	2029	- 2033	\$5,000,000	0%	\$0	\$2,500,000	\$1,300,000	\$1,200,000
22	Poupart Road/Richilieu Street	Upgrade existing stop controlled intersection with a signalized intersection	At the intersection of Poupart Road and Richilieu Street.	Mid-Term	2029	- 2033	\$750,000	0%	\$0		\$390,000	\$360,000
23	Poupart Street/Saint Jean Street	New roundabout to replace the existing STOP controlled intersections.	At the intersection of St-Jean Street and Poupart Road. (hydro station)	Short-term	2024	- 2028	\$5,000,000	0%	\$0		\$2,600,000	\$2,400,000
24	Poupart Street/New West Roadway	New roundabout at new intersection.	At the future intersection of Poupart Road and the New West Roadway.	Mid-Term	2029	- 2033	\$5,000,000	0%	\$0		\$2,600,000	\$2,400,000
25	Richilieu Street/Carmen Bergeron Street	Upgrade existing stop controlled intersection with a signalized intersection	At the intersection of Richilieu Street and Carmen Bergeron Street	Mid-Term	2029	- 2033	\$750,000	0%	\$0		\$390,000	\$360,000
26	Saint Jean Street/Bronze Avenue	New roundabout at new intersection.	At the future intersection of St-Jean and the new Bronze Avenue servicing the southern end of Morris Village.	Short-term	2024	- 2028	\$5,000,000	0%	\$0		\$0	\$5,000,000
32	County Road 17	Intersection modification and roundabout. Relocates the Pago Road access for the Clarence Crossing subdivision, and future development potential of the Scott Parcel, and Bedard Parcel	Street 1 at CR17	Mid-Term	2029	- 2033	\$3,500,000	0%	\$0		\$1,820,000	\$1,680,000

APPENDIX B.7
TABLE B.7-2

CITY OF CLARENCE-ROCKLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
ROADS AND RELATED (2024-2033)

NO.	Infrastructure Requirement	Description / Remarks	Limits	Term	Timing		Estimated Project Costs					
					From	To	Gross Cost	Benefit to Existing Share	Other Contributions	Post Period Allocation ¹	Net Growth-Related	
City-Wide Roads Projects												
Pedestrian (Sidewalk)												
33	Caron Street	Build sidewalk on the west side of the street to complement the proposed Multi-Use Path.	Between David Street in the north and the new Bronze Avenue in the south	Mid-Term	2029	- 2033	\$132,605	0%	\$0		\$132,605	
34	David Street	Build sidewalks on both sides of the street.	Between Caron Street in the west and the new Bronze Avenue in the east	Mid-Term	2029	- 2033	\$704,313	0%	\$0		\$704,313	
35	Industrielle Street	Sidewalk on both sides of the street	Between County Road 17 in the south and the roundabout in the east	Mid-Term	2029	- 2033	\$399,402	0%	\$0		\$399,402	
36	La Berge Street Extension (Proposed)	Sidewalk on both sides of the street	Between County Road 17 In the north and the existing Laurier Street in the south.	Mid-Term	2029	- 2033	\$106,004	0%	\$0		\$106,004	
37	Patricia Street	Build sidewalk on the south side of the street to continue existing sidewalk.	Between St-Jacques Street In The East To Heritage Drive In The West	Short-term	2024	- 2028	\$281,090	0%	\$0		\$281,090	
38	Poupart Road	Sidewalk on one side of the street on the south side.	Between St Jean Street in the east to the proposed West Roadway in the west.	Mid-Term	2029	- 2033	\$424,811	0%	\$0		\$424,811	
39	Poupart Road	Sidewalk on one side of the street on the west side.	Between the proposed West Roadway in the south and Richelieu Street in the north.	Mid-Term	2029	- 2033	\$172,704	0%	\$0		\$172,704	
40	Saint Jean Street	Sidewalk on one side of the street on the south side.	Between the new Bronze Avenue in the east and Poupart Road in the west	Short-term	2024	- 2028	\$233,448	0%	\$0		\$233,448	
41	Sterling Avenue	Add sidewalk on the other side of the street so that both sides of the road have a sidewalk.	Between Silver Lane In The North To Docteur Corbeil Boulevard In The South	Short-Term	2024	- 2028	\$162,381	50%	\$81,191		\$81,191	
42	Clarence Crossing Pedestrian Bridge				2028	- 2028	\$3,500,000	0%	\$0	\$1,820,000	\$1,680,000	
Developer												
43	Bronze Avenue (New)	Complete two-lane roadway construction (Major Collector).	Between Caron Street in the east and Cobalt Street in the west, Granite Street in the east and St-Jean Street in the west.	Short-Term	2024	- 2028	\$2,094,339		\$0	\$2,094,339	\$0	
44	Bronze Avenue (New)	Multi-Use pathway built on the north side of the roadway as part of the construction of the New east-west roadway to service a new subdivision in south Rockland	Between Caron Street in the east and Cobalt Street in the west, Granite Street in the east and St-Jean Street in the west	Short-Term	2024	- 2028	\$260,423		\$0	\$260,423	\$0	
45	Bronze Avenue (New)	Build sidewalk on one side of the street (south).	Between Caron Street in the east and Cobalt Street in the west, Granite Street in the east and St-Jean Street in the west.	Short-Term	2024	- 2028	\$258,063		\$0	\$258,063	\$0	
46	Sylvain Street	New Multi-Use Path to provide neighborhood internal bicycle and pedestrian connections	Between Laporte Street in the north and the proposed connection to Heritage Drive in the south.	Mid-Term	2029	- 2033	\$57,694		\$0	\$57,694	\$0	
47	Expansion Lands Street "B"	New two-lane north-south roadway to service the new expansion lands area. Will have sidewalks and on-street bike lanes on both sides of the road	Between David Street in the north and the urban boundary in the south	Mid-Term	2029	- 2033	\$3,157,619		\$0	\$1,641,962	\$1,515,657	
County												
48	County Road 17	Bi-directional multi-use path on the south side of County Road 17 for pedestrian and cyclist use.	Between Laurier Street in the east and the proposed West Roadway in the west.	Mid-Term	2029	- 2033	\$2,365,838		\$0		\$2,365,838	
Studies												
49	TMP Update				2027	- 2027	\$100,000	20%	\$20,000		\$80,000	
50	Master Transportation Study				2031	- 2031	\$250,000	20%	\$50,000		\$200,000	
51	Provision for other Development-Related Studies	Includes signalized intersections			2024	- 2033	\$150,000	0%	\$0		\$150,000	
Total Roads Projects: 2024-2033							\$94,981,392		\$12,027,112	\$5,170,519	\$30,716,982	\$47,066,780

Notes
1) The post period allocation are based on share of population and employment growth to 2046. The post-period share is:
2) Available DC Reserve Funds have been accounted for through the cash flow analysis

52%



APPENDIX B.7
TABLE B.7-3

CITY OF CLARENCE-ROCKLAND
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
ROADS AND RELATED 2024-2033

10-Year Growth in Population in New Units	4,775
Employment Growth	409
10-Year Growth in Square Meters	20,450

	Development-Related Capital Forecast						Residential Share		Non-Residential Share	
	Gross Project Cost (\$000)	Benefit to Existing Share (\$000)	Other Contributions (\$000)	Available DC Reserves (\$000)	Post Period Allocation (\$000)	Total DC Eligible Costs for Recovery (\$000)	%	\$000	%	\$000
	ROADS AND RELATED 2024-2033									
City-Wide Roads Projects	\$94,981.39	\$12,027.11	\$5,170.52	\$4,811.23	\$30,716.98	\$42,255.55	92%	\$38,875.10	8%	\$3,380.44
TOTAL ROADS AND RELATED 2024-2033	\$94,981.39	\$12,027.11	\$5,170.52	\$4,811.23	\$30,716.98	\$42,255.55		\$38,875.10		\$3,380.44
Unadjusted Development Charge Per Capita (\$)						\$42,255.55		\$8,141.38		
Unadjusted Development Charge Per Sq. M. (\$)										\$165.30

**APPENDIX B.7
TABLE B.7-4**

**CITY OF CLARENCE-ROCKLAND
ROADS AND RELATED 2024-2033
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE**

ROADS: RESIDENTIAL	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
OPENING CASH BALANCE (\$000)	\$4,426.3	\$4,848.0	\$5,023.5	\$5,664.2	\$5,234.6	\$2,839.7	\$2,657.0	\$2,518.1	\$2,209.5	\$1,125.5	
2024 - 2033 RESIDENTIAL FUNDING REQUIREMENTS											
Roads: Residential: Non Inflated	\$4,154.7	\$4,499.7	\$4,154.7	\$4,228.3	\$6,010.8	\$4,013.8	\$4,013.8	\$4,197.8	\$4,013.8	\$4,013.8	\$43,301.4
Roads: Residential: Inflated	\$4,154.7	\$4,589.7	\$4,322.6	\$4,487.1	\$6,506.3	\$4,431.6	\$4,520.2	\$4,822.0	\$4,702.9	\$4,796.9	\$47,334.0
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	549	560	571	454	459	468	474	480	379	381	4,775
REVENUE											
- DC Receipts: Inflated	\$4,416.8	\$4,595.4	\$4,779.4	\$3,876.1	\$3,997.2	\$4,157.1	\$4,294.6	\$4,435.9	\$3,572.6	\$3,663.2	\$41,788.3
INTEREST											
- Interest on Opening Balance	\$154.9	\$169.7	\$175.8	\$198.2	\$183.2	\$99.4	\$93.0	\$88.1	\$77.3	\$39.4	\$1,279.1
- Interest on In-year Transactions	\$4.6	\$0.1	\$8.0	(\$16.8)	(\$69.0)	(\$7.6)	(\$6.2)	(\$10.6)	(\$31.1)	(\$31.2)	(\$159.8)
TOTAL REVENUE	\$4,576.3	\$4,765.2	\$4,963.2	\$4,057.5	\$4,111.4	\$4,248.9	\$4,381.3	\$4,513.4	\$3,618.8	\$3,671.5	\$42,907.6
CLOSING CASH BALANCE	\$4,848.0	\$5,023.5	\$5,664.2	\$5,234.6	\$2,839.7	\$2,657.0	\$2,518.1	\$2,209.5	\$1,125.5	\$0.0	

2024 Adjusted Charge Per Capita	\$8,045.24
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Allocation of Capital Program	
Residential Sector	92.0%
Non-Residential Sector	8.0%
Rates for 2024	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



**APPENDIX B.7
TABLE B.7-4**

**CITY OF CLARENCE-ROCKLAND
ROADS AND RELATED 2024-2033
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE**

ROADS: NON-RESIDENTIAL	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
OPENING CASH BALANCE (\$000)	\$384.9	\$298.3	\$175.3	\$77.3	\$83.8	(\$72.7)	(\$42.6)	(\$10.2)	\$15.7	\$3.1	
2024 - 2033 NON-RESIDENTIAL FUNDING REQUIREMENTS											
Roads: Non-Residential: Non: Inflated	\$361.3	\$391.3	\$361.3	\$367.7	\$522.7	\$349.0	\$349.0	\$365.0	\$349.0	\$349.0	\$3,765.3
Roads: Non-Residential: Inflated	\$361.3	\$399.1	\$375.9	\$390.2	\$565.8	\$385.4	\$393.1	\$419.3	\$408.9	\$417.1	\$4,116.0
NEW NON-RESIDENTIAL DEVELOPMENT											
- New Building GFA - square metres	1,600	1,600	1,600	2,250	2,300	2,300	2,300	2,350	2,050	2,100	20,450
REVENUE											
- DC Receipts: Inflated	\$263.9	\$269.2	\$274.6	\$393.8	\$410.6	\$418.9	\$427.2	\$445.3	\$396.2	\$414.0	\$3,713.7
INTEREST											
- Interest on Opening Balance	\$13.5	\$10.4	\$6.1	\$2.7	\$2.9	(\$4.0)	(\$2.3)	(\$0.6)	\$0.5	\$0.1	\$29.4
- Interest on In-year Transactions	(\$2.7)	(\$3.6)	(\$2.8)	\$0.1	(\$4.3)	\$0.6	\$0.6	\$0.5	(\$0.4)	(\$0.1)	(\$12.0)
TOTAL REVENUE	\$274.7	\$276.1	\$277.9	\$396.6	\$409.3	\$415.5	\$425.5	\$445.2	\$396.4	\$414.0	\$3,731.1
CLOSING CASH BALANCE	\$298.3	\$175.3	\$77.3	\$83.8	(\$72.7)	(\$42.6)	(\$10.2)	\$15.7	\$3.1	\$0.0	

2024 Adjusted Charge Per Square Metre	\$164.95
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Allocation of Capital Program	
Residential Sector	92.0%
Non-Residential Sector	8.0%
Rates for 2024	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX C
ENGINEERED SERVICES
TECHNICAL APPENDIX

1. ENGINEERED SERVICES TECHNICAL APPENDIX

The Clarence-Rockland Roads, Traffic and Sidewalks and Public Works teams provides public works and engineered infrastructure to the City. The departments are responsible for the services of roads, sidewalks, municipal drains, sanitary sewers, environmental protection and waterworks. This appendix provides the detailed analysis undertaken to establish the development charge rates for the eligible municipal-wide engineered services of waterworks and sanitary sewerage for the City of Clarence-Rockland.

The following tables set out the 2024 to 2046 development-related capital forecast and the calculation of the development charges for City-wide Waterworks and Sanitary Sewer services. The basis of the development-related capital program is the City's capital budget, detailed discussions with City staff and the results of master servicing studies prepared by the City's engineering consultants. The projects identified in the capital program are required to service the demands of new development between 2024 and 2046 and beyond, subject to annual capital budget reviews.

APPENDIX C.1

WATERWORKS SERVICES

The capital program contained herein was assembled by the City’s engineering staff in consultation with Hemson based on the Master Servicing Plan recently completed. The projects outlined in this capital program are designed to serve the population and employment growth between 2024 and 2046 while some projects can benefit to development occurring beyond the planning period. The following tables provide details of the projects included in the City-wide Waterworks development charges calculation.

Waterworks 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 fire standards. As such, in accordance with section 4(3) of O.Reg. 82/98, the 15-year historical service level does not apply.

TABLE C.1-1 2024-2046 DEVELOPMENT-RELATED CAPITAL PROGRAM

The 2024-2046 capital program totals \$97.49 million and related to water projects in four categories: Water Treatment Plant, Studies, Watermains and Pumping Station projects. Of the total gross program, \$34.77 million is related to treatment plant projects, \$3.15 million for Studies, \$49.95 million related to watermains and \$9.64 million to water pumping stations.

The single largest project in the capital program can be related to the Rockland Water Treatment Plant capacity expansion that is estimated to cost \$33.07 million. In addition, new transmissions from Caron Booster Station to Baseline Road and from Bourget to Cheney Tower total \$21.16 million and \$16.02 million, respectively. A significant share of the City waterworks capital program will be funded from other sources, which includes grants and funding from neighbouring communities for the benefitting infrastructure. As outlined in the table, about \$61.62 million of the total gross program will be funded from these parties with different contribution levels for each project set relative to existing agreements and discussions with those communities. As a result, this \$61.62 million in funding has been considered in the calculation and used to reduce the net DC eligible share for recovery.

A benefit to existing share of 50 per cent has been applied to some of the water treatment plant projects, as well as a 43 per cent benefit to existing share has been applied to the replacement of water mains from the WTP to Highway 17. As a result, the total benefit to existing share amounts to \$1.06 million and has been removed from the calculation. Lastly, it is assumed that most of the projects outlined in the capital program can benefit development occurring outside the planning period (to 2046), as a result, a 25% post period allocation has been applied to most projects in the capital program which are assumed to

service development beyond the planning horizon. This post period allocation amounts to \$7.35 million and this amount can be considered for recovery in a subsequent development charges by-law. This share of costs is not included for recovery in this planning period.

TABLE C.1-2 CALCULATION OF THE DEVELOPMENT CHARGES

Table C.1-2 provides an overview of the calculation of the unadjusted development charge with consideration of the existing DC reserve fund balance of \$2.42 million. Of the total gross program cost of \$97.50 million, about \$25.06 million is considered to be the remaining net DC costs eligible for recovery in the 2024-2046 period after all reductions described have been considered. The total \$25.06 million is then allocated: 91 per cent residential and 9 per cent non-residential. The allocation of costs is based on the future shares of population in new units and employment growth to 2046.

The residential share of the capital program totals \$22.80 million and, when divided by the forecast growth in population in new units (9,222) to 2046, an unadjusted charge of \$2,472.85 per capita results. The non-residential share of \$2.26 million is applied against the forecast increase in square metres of non-residential floor space (47,800), yielding an unadjusted charge of \$47.18 per square metre.

TABLE C.1-3 CASH FLOW ANALYSIS

The cash flow analysis is shown on Table 3. The analysis takes into consideration expenditure timing and DC revenue projections.

After cash flow considerations, both the residential and non-residential charges increase to \$3,103.69 per capita and \$62.28 per square metre, respectively.

WATERWORKS SUMMARY					
2024 - 2033		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$97,494,283	\$25,060,070	\$2,472.85	\$47.18	\$3,103.69	\$62.28

APPENDIX C.1
TABLE C.1-1

CITY OF CLARENCE-ROCKLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
WATERWORKS (2024-2046)

Project NO.	Water Master Plan Ref	Infrastructure Requirement	Timing From - To	Estimated Project Costs							
				Gross Cost	Grants/ Subsidies & Contributions	Net Municipal Costs	Benefit to Existing Share	Direct Developer Contribution	Post Period Allocation	Net Growth- Related	
Water Treatment Plant Projects											
1	W-1	13.5 ML/d Treatment Expansion for Rockland WTP	2025 - 2028	\$33,065,000	\$11,242,100	\$21,822,900	0%	\$0	\$0	\$5,455,725	\$16,367,175
2	W-4	WTP - PLC (and panel), local control panels, and network communication Upgrades	2025 - 2025	\$1,089,000	\$0	\$1,089,000	50%	\$544,500	\$0	\$0	\$544,500
3	W-5	WTP - SCADA software & hardware upgrades	2025 - 2025	\$290,000	\$0	\$290,000	50%	\$145,000	\$0	\$0	\$145,000
4	W-6	WTP - PLC, SCADA Software & hardware upgrades	2025 - 2025	\$326,000	\$0	\$326,000	50%	\$163,000	\$0	\$0	\$163,000
Subtotal Water Treatment Plant Projects				\$34,770,000	\$11,242,100	\$23,527,900		\$852,500	\$0	\$5,455,725	\$17,219,675
Studies											
5	W-1	Water Treatment Plant Capacity Study	2024 - 2025	\$3,000,000	\$1,020,000	\$1,980,000	0%	\$0	\$0	\$0	\$1,980,000
6		Water Master Plan Update	2026 - 2027	\$150,000	\$0	\$150,000	0%	\$0	\$0	\$0	\$150,000
Subtotal Studies				\$3,150,000	\$1,020,000	\$2,130,000		\$0	\$0	\$0	\$2,130,000
Watermains											
7	W-28	Replace existing 300 WM with a 600 - on Edwards from WTP to Hwy 17	2025 - 2026	\$2,292,465	\$1,815,861	\$476,604	43%	\$204,050	\$0	\$68,139	\$204,416
8	W-29	New Transmission from Caron BS to 10.0km south of Baseline Road (elevated tower on Bouvier)	2025 - 2026	\$23,573,918	\$21,155,234	\$2,418,684	0%	\$0	\$0	\$604,671	\$1,814,013
9	W-31	New Transmission from Bouvier BS to Bourget (Bouvier Rd and Lacroix)	2029 - 2029	\$5,021,000	\$4,769,950	\$251,050	0%	\$0	\$0	\$62,763	\$188,288
10	W-32	Install 2 PRVs on the existing transmission main before and after Bouvier BS for Pressure Control	2029 - 2029	\$134,000	\$127,300	\$6,700	0%	\$0	\$0	\$1,675	\$5,025
11	W-33	New Transmission from Bourget (Bouvier Rd. and Lacroix) to Cheney Tower	2029 - 2029	\$16,024,000	\$15,222,800	\$801,200	0%	\$0	\$0	\$200,300	\$600,900
12	W-34	Install 1 PRV on the existing transmission main for Pressure Management in Hammond	2034 - 2034	\$67,000	\$63,650	\$3,350	0%	\$0	\$0	\$838	\$2,513
13	W-35	Twin watermains on Caron St. from Dr Corbeil to Caron BS	2034 - 2034	\$385,000	\$188,650	\$196,350	0%	\$0	\$0	\$49,088	\$147,263
14	-	St-Jean & Poupart (from PS #9 to Walmart)									
a	-	400mm dia W/M from PS#9 to Hydro Station (585 Metres)	2026 - 2026	\$472,000	\$0	\$472,000	0%	\$0	\$0	\$0	\$472,000
b	-	400mm dia W/M from St-Jean Hydro Station to Richelieu (1490 metres)	2026 - 2026	\$1,203,000	\$0	\$1,203,000	0%	\$0	\$0	\$0	\$1,203,000
15	-	400mm dia W/M from Bronze Avenue Crossing - Morris Village Stage 6 (400 Metres) (Cobalt to Caron)	2026 - 2026	\$323,000	\$0	\$323,000	0%	\$0	\$0	\$0	\$323,000
16	-	400mm dia W/M from Bronze Ave. (Caron - 400 metres East)	2026 - 2026	\$323,000	\$0	\$323,000	0%	\$0	\$0	\$0	\$323,000
17	-	400mm dia W/M from Rockland East (Laurier - County Road 17)	2025 - 2025	\$44,000	\$0	\$44,000	0%	\$0	\$0	\$0	\$44,000

APPENDIX C.1
TABLE C.1-1

CITY OF CLARENCE-ROCKLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
WATERWORKS (2024-2046)

Project NO.	Water Master Plan Ref	Infrastructure Requirement	Timing From - To	Estimated Project Costs							
				Gross Cost	Grants/ Subsidies & Contributions	Net Municipal Costs	Benefit to Existing Share	Direct Developer Contribution	Post Period Allocation	Net Growth- Related	
18	-	Watermain transmission main through Honeywell Sub (Water Plant to 17) Oversizing (±700m)	2028 - 2033	\$87,900	\$0	\$87,900	0%	\$0	\$0	\$0	\$87,900
Subtotal Water Treatment Plant Projects				\$49,950,283	\$43,343,445	\$6,606,838		\$204,050	\$0	\$987,472	\$5,415,316

**APPENDIX C.1
TABLE C.1-1**

**CITY OF CLARENCE-ROCKLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
WATERWORKS (2024-2046)**

Project NO.	Water Master Plan Ref	Infrastructure Requirement	Timing From - To	Estimated Project Costs							
				Gross Cost	Grants/ Subsidies & Contributions	Net Municipal Costs	Benefit to Existing Share	Direct Developer Contribution	Post Period Allocation	Net Growth- Related	
Water Pumping Station and Storage											
19	W-23	Caron Booster Station - Zone 2 Pumping Capacity Expansion	2025 - 2025	\$ 5,000,000	\$ 2,450,000	\$2,550,000	\$0	\$0	\$0	\$637,500	\$1,912,500
20	W-24	Bouvier Booster Station - Zone 3 Pumping Capacity Expansion	2030 - 2030	\$4,624,000	\$ 3,560,480	\$1,063,520	\$0	\$0	\$0	\$265,880	\$797,640
Subtotal Water Pumping Station and Storage				\$ 9,624,000	\$ 6,010,480	\$ 3,613,520	\$ -	\$ -	\$ -	\$ 903,380	\$ 2,710,140
Total Water Projects				\$ 97,494,283	\$ 61,616,025	\$ 35,878,258	\$ 1,056,550	\$ -	\$ -	\$7,346,577	\$ 27,475,131

Notes										
1)	The post period allocation are based on share of population growth to 2046 relative to the projections in the Water and Wastewater Master Plan . The post-period share is: 25%									
2)	Available DC Reserve Funds have been accounted for through the cash flow analysis									

APPENDIX C.1
TABLE C.1-2

CITY OF CLARENCE-ROCKLAND
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
WATERWORKS 2024-2046

23-Year Growth in Population in New Units	9,222
Employment Growth	956
23-Year Growth in Square Meters	47,800

	Development-Related Capital Forecast							Residential Share		Non-Residential Share	
	Gross Project Cost (\$000)	Grants Subsidies & Other Contrib. (\$000)	Benefit to Existing Share (\$000)	Direct Developer Contributions (\$000)	Available DC Reserves (\$000)	Post Period Allocation (\$000)	Total DC Eligible Costs for Recovery (\$000)	%	\$000	%	\$000
WATERWORKS 2024-2046											
Water Treatment Plant Projects	\$34,770.00	\$11,242.10	\$852.50	\$0.00	\$2,415.06	\$5,455.73	\$14,804.61	91%	\$13,472.20	9%	\$1,332.42
Studies	\$3,150.00	\$1,020.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,130.00	91%	\$1,938.30	9%	\$191.70
Watermains	\$49,950.28	\$43,343.45	\$204.05	\$0.00	\$0.00	\$987.47	\$5,415.32	91%	\$4,927.94	9%	\$487.38
Water Pumping Station and Storage	\$9,624.00	\$6,010.48	\$0.00	\$0.00	\$0.00	\$903.38	\$2,710.14	91%	\$2,466.23	9%	\$243.91
TOTAL WATERWORKS 2024-2046	\$97,494.28	\$61,616.03	\$1,056.55	\$0.00	\$2,415.06	\$7,346.58	\$25,060.07		\$22,804.66		\$2,255.41
Unadjusted Development Charge Per Capita (\$)									\$2,472.85		
Unadjusted Development Charge Per Sq. M. (\$)											\$47.18

Note: As many of the works are being designed to benefit growth both in this period and beyond the 2046-year planning period, a share of the costs are considered to be recovered from future DCs outside this planning period

**APPENDIX C.1
TABLE C.1-3**

**CITY OF CLARENCE-ROCKLAND
WATERWORKS 2024-2046
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE**

WATER: RESIDENTIAL	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
OPENING CASH BALANCE (\$000)	\$2,197.7	\$3,091.7	(\$3,466.7)	(\$9,055.9)	(\$12,152.1)	(\$15,392.2)	(\$15,433.8)	(\$15,444.0)	(\$14,567.7)	(\$13,982.5)	
2024-2046 RESIDENTIAL FUNDING REQUIREMENTS											
Water: Residential: Non Inflated	\$900.9	\$8,099.0	\$6,822.3	\$3,791.8	\$3,736.9	\$736.1	\$739.2	\$13.3	\$13.3	\$13.3	\$24,866.1
Water: Residential: Inflated	\$900.9	\$8,261.0	\$7,097.9	\$4,023.9	\$4,044.9	\$812.7	\$832.4	\$15.3	\$15.6	\$15.9	\$26,020.5
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	\$549.0	\$560.0	\$571.0	\$454.0	\$459.0	\$468.0	\$474.0	\$480.0	\$379.0	\$381.0	\$4,775.0
REVENUE											
- DC Receipts: Inflated	\$1,703.9	\$1,772.8	\$1,843.8	\$1,495.3	\$1,542.0	\$1,603.7	\$1,656.8	\$1,711.3	\$1,378.2	\$1,413.2	\$16,121.1
INTEREST											
- Interest on Opening Balance	\$76.9	\$108.2	(\$190.7)	(\$498.1)	(\$668.4)	(\$846.6)	(\$848.9)	(\$849.4)	(\$801.2)	(\$769.0)	(\$5,287.1)
- Interest on In-year Transactions	\$14.1	(\$178.4)	(\$144.5)	(\$69.5)	(\$68.8)	\$13.8	\$14.4	\$29.7	\$23.8	\$24.5	(\$341.0)
TOTAL REVENUE	\$1,794.9	\$1,702.6	\$1,508.6	\$927.7	\$804.8	\$771.0	\$822.3	\$891.5	\$600.8	\$668.6	\$10,493.0
CLOSING CASH BALANCE	\$3,091.7	(\$3,466.7)	(\$9,055.9)	(\$12,152.1)	(\$15,392.2)	(\$15,433.8)	(\$15,444.0)	(\$14,567.7)	(\$13,982.5)	(\$13,329.8)	

**APPENDIX C.1
TABLE C.1-3**

**CITY OF CLARENCE-ROCKLAND
WATERWORKS 2024-2046
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE**

WATER: RESIDENTIAL	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046 TOTAL	
OPENING CASH BALANCE (\$000)	(\$13,329.8)	(\$12,742.2)	(\$11,903.9)	(\$10,976.5)	(\$10,211.7)	(\$9,356.6)	(\$8,413.4)	(\$7,376.1)	(\$6,229.7)	(\$5,192.1)	(\$4,056.1)	(\$2,815.1)	(\$1,467.0)	
2024-2046 RESIDENTIAL FUNDING REQUIREMENTS														
Water: Residential: Non Inflated	\$136.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$136.3
Water: Residential: Inflated	\$166.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$166.1
NEW RESIDENTIAL DEVELOPMENT														
- Population Growth in New Units	\$387.0	\$392.0	\$395.0	\$335.0	\$340.0	\$343.0	\$346.0	\$351.0	\$306.0	\$309.0	\$312.0	\$314.0	\$317.0	\$4,447.0
REVENUE														
- DC Receipts: Inflated	\$1,464.2	\$1,512.7	\$1,554.8	\$1,345.0	\$1,392.4	\$1,432.8	\$1,474.2	\$1,525.4	\$1,356.4	\$1,397.1	\$1,438.9	\$1,477.1	\$1,521.0	\$18,892.1
INTEREST														
- Interest on Opening Balance	(\$733.1)	(\$700.8)	(\$654.7)	(\$603.7)	(\$561.6)	(\$514.6)	(\$462.7)	(\$405.7)	(\$342.6)	(\$285.6)	(\$223.1)	(\$154.8)	(\$80.7)	(\$5,723.9)
- Interest on In-year Transactions	\$22.7	\$26.5	\$27.2	\$23.5	\$24.4	\$25.1	\$25.8	\$26.7	\$23.7	\$24.4	\$25.2	\$25.8	\$26.6	\$327.7
TOTAL REVENUE	\$753.7	\$838.4	\$927.3	\$764.8	\$855.1	\$943.2	\$1,037.3	\$1,146.4	\$1,037.6	\$1,136.0	\$1,241.0	\$1,348.1	\$1,467.0	\$13,496.0
CLOSING CASH BALANCE	(\$12,742.2)	(\$11,903.9)	(\$10,976.5)	(\$10,211.7)	(\$9,356.6)	(\$8,413.4)	(\$7,376.1)	(\$6,229.7)	(\$5,192.1)	(\$4,056.1)	(\$2,815.1)	(\$1,467.0)	\$0.0	

2024 Adjusted Charge Per Capita	\$ 3,103.69
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Allocation of Capital Program	
Residential Sector	91.0%
Non-Residential Sector	9.0%
Rates for 2024	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX C.1
TABLE C.1-3

CITY OF CLARENCE-ROCKLAND
WATERWORKS 2024-2046
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE

WATER: NON-RESIDENTIAL	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
OPENING CASH BALANCE (\$000)	\$217.4	\$235.7	(\$491.1)	(\$1,132.9)	(\$1,451.3)	(\$1,782.9)	(\$1,801.8)	(\$1,820.5)	(\$1,751.2)	(\$1,696.8)	
2024-2046 NON-RESIDENTIAL FUNDING REQUIREMENTS											
Water: Non-Residential: Non: Inflated	\$89.1	\$801.0	\$674.7	\$375.0	\$369.6	\$72.8	\$73.1	\$1.3	\$1.3	\$1.3	\$2,459.3
Water: Non-Residential: Inflated	\$89.1	\$817.0	\$702.0	\$398.0	\$400.0	\$80.4	\$82.3	\$1.5	\$1.5	\$1.6	\$2,573.5
NEW NON-RESIDENTIAL DEVELOPMENT											
- New Building GFA - square metres	\$1,600	\$1,600	\$1,600	\$2,250	\$2,300	\$2,300	\$2,300	\$2,350	\$2,050	\$2,100	\$20,450.0
REVENUE											
- DC Receipts: Inflated	\$100	\$102	\$104	\$149	\$155	\$158	\$161	\$168	\$150	\$156	\$1,402.2
INTEREST											
- Interest on Opening Balance	\$8	\$8	(\$27)	(\$62)	(\$80)	(\$98)	(\$99)	(\$100)	(\$96)	(\$93)	(\$640.2)
- Interest on In-year Transactions	\$0	(\$20)	(\$16)	(\$7)	(\$7)	\$1	\$1	\$3	\$3	\$3	(\$38.6)
TOTAL REVENUE	\$107	\$90	\$60	\$80	\$68	\$61	\$64	\$71	\$56	\$66	\$723.4
CLOSING CASH BALANCE	\$236	(\$491)	(\$1,133)	(\$1,451)	(\$1,783)	(\$1,802)	(\$1,821)	(\$1,751)	(\$1,697)	(\$1,633)	

**APPENDIX C.1
TABLE C.1-3**

**CITY OF CLARENCE-ROCKLAND
WATERWORKS 2024-2046
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE**

WATER: NON-RESIDENTIAL	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046 TOTAL	
OPENING CASH BALANCE (\$000)	(\$1,633)	(\$1,577)	(\$1,498)	(\$1,408)	(\$1,317)	(\$1,214)	(\$1,102)	(\$980)	(\$843)	(\$699)	(\$544)	(\$376)	(\$195)	
2024-2046 NON-RESIDENTIAL FUNDING REQUIREMENTS														
Water: Non-Residential: Non: Inflated	\$13	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13
Water: Non-Residential: Inflated	\$16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16
NEW NON-RESIDENTIAL DEVELOPMENT														
- New Building GFA - square metres	\$2,100	\$2,100	\$2,150	\$2,050	\$2,100	\$2,100	\$2,100	\$2,150	\$2,100	\$2,100	\$2,100	\$2,100	\$2,100	\$27,350
REVENUE														
- DC Receipts: Inflated	\$159	\$163	\$170	\$165	\$173	\$176	\$180	\$187	\$187	\$191	\$194	\$198	\$202	\$2,345
INTEREST														
- Interest on Opening Balance	(\$90)	(\$87)	(\$82)	(\$77)	(\$72)	(\$67)	(\$61)	(\$54)	(\$46)	(\$38)	(\$30)	(\$21)	(\$11)	(\$736)
- Interest on In-year Transactions	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$3	\$4	\$41
TOTAL REVENUE	\$72	\$79	\$90	\$91	\$103	\$112	\$122	\$137	\$144	\$155	\$168	\$181	\$195	\$1,649
CLOSING CASH BALANCE	(\$1,577)	(\$1,498)	(\$1,408)	(\$1,317)	(\$1,214)	(\$1,102)	(\$980)	(\$843)	(\$699)	(\$544)	(\$376)	(\$195)	\$0	

2024 Adjusted Charge Per Square Metre	\$ 62.28
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Allocation of Capital Program	
Residential Sector	91.0%
Non-Residential Sector	9.0%
Rates for 2024	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

APPENDIX C.2

SANITARY SEWER SERVICES

Sanitary sewage and wastewater treatment services are provided through sewer system and a central Wastewater Treatment Plant in Rockland. The capital program contained herein was assembled by the City’s engineering staff as well as the City’s engineering consultants and is designed to serve the population and employment growth between 2024 and 2046.

Sanitary Sewage works 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 fifteen-year historical service level does not apply.

TABLE C.2-1 2024-2046 DEVELOPMENT-RELATED CAPITAL PROGRAM

The 2024-2046 capital program totals \$51.19 million and related to projects in four categories: Water Pollution Control Plant Projects, Studies, Sewer Pumping Stations and Sewer mains. Of the total gross program, \$30.33 million is related to WPCP projects, \$300,000 for Studies, \$18.55 for SPS works and \$2.00 million to sewer mains. The details and timing of each project, and the cost breakdown are shown on Table

The single largest project in the capital program can be related to the Rockland WPCP capacity expansions (Phase 1 and 2) that is estimated to cost \$30.33 million. In addition, new sewage pumping stations #1, 6 and 10 add a further \$16.52 million to the total gross program cost. Unlike water, no share of the sanitary sewer program is anticipated to be offset by funding contributions from other municipalities nor is any confirmed grant funding for these projects anticipated.

The total gross cost of the capital program is not to be entirely recovered through future development charges. Approximately \$395,000 of the program has been identified as a benefit to existing, or non-growth share and has been removed from the calculation. The total non-growth share relates to the replacement component of the sanitary sewer from Laurier Trunk Sewer to Pump Station #1.

Lastly, it is expected that the capacity upgrade and additional flow monitoring and calibration associated with Pump Station #6 be partially paid for by the developers, therefore, \$151,300 has been removed from the calculation. Lastly, it is assumed that the WPCP projects and Sewage Pumping Station Projects outlined in the capital program can benefit development occurring outside the planning period (to 2046). As a result, a 25% post period allocation has been applied to these specific projects in the capital program which

are assumed to service development beyond the planning horizon. This post period allocation amounts to \$12.18 million and this amount can be considered for recovery in a subsequent development charges by-law. This share of costs is not included for recovery in this planning period.

TABLE C.2-2 CALCULATION OF THE DEVELOPMENT CHARGES

Table C.2-2 provides an overview of the calculation of the unadjusted development charge with consideration of the existing DC reserve fund balance of approximately \$937,640. Of the total gross program cost of \$51.19 million, about \$37.52 million is considered to be the remaining net DC costs eligible for recovery in the 2024-2046 period after all reductions described have been considered. The total \$37.52 million is then allocated: 91 per cent residential and 9 per cent non-residential. The allocation of costs is based on the future shares of population in new units and employment growth to 2046.

The residential share of the capital program totals \$34.14 million and, when divided by the forecast growth in population in new units (9,222) to 2046, an unadjusted charge of \$3,702.19 per capita results. The non-residential share of \$3.38 million is applied against the forecast increase in square metres of non-residential floor space (47,800) to 2046, yielding an unadjusted charge of \$70.64 per square metre.

TABLE C.2-3 CASH FLOW ANALYSIS

After cash flow considerations, both the residential and non-residential charges increase to \$4,406.31 per capita and \$88.50 per square metre, respectively.

SANITARY SEWER SERVICES SUMMARY					
2024 - 2033		Unadjusted		Adjusted	
Development-Related Capital Program		Development Charge		Development Charge	
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$51,185,008	\$37,518,287	\$3,702.19	\$70.64	\$4,406.31	\$88.50

**APPENDIX C.2
TABLE C.2-1**

**CITY OF CLARENCE-ROCKLAND
DEVELOPMENT-RELATED CAPITAL PROGRAM
SANITARY SEWAGE (2024-2046)**

NO.	WW Master Plan Ref	Infrastructure Requirement	Timing From - To	Estimated Project Costs						
				Gross Cost	Grants/ Subsidies & Contributions	Benefit to Existing Share	Direct Developer Contribution	Post Period Allocation	Net Growth-Related	
Water Pollution Control Plant Projects										
1	3	Rockland WPCP Phase 1 Expansion	2024 - 2029	\$24,546,000	\$0	0%	\$0	\$0	\$6,136,500	\$18,409,500
2	6	Rockland WPCP Phase 2 Expansion	2029 - 2033	\$5,783,000	\$0	0%	\$0	\$0	\$1,445,750	\$4,337,250
Subtotal Water Pollution Control Plant Projects				\$30,329,000	\$0		\$0	\$0	\$7,582,250	\$22,746,750
Studies										
3	-	Sanitary System Master Plan	2026 - 2027	\$150,000	\$0	0%	\$0	\$0	\$0	\$150,000
4	-	Provision for other Development-Related Studies	2024 - 2024	\$150,000	\$0	0%	\$0	\$0	\$0	\$150,000
Subtotal Studies				\$300,000	\$0		\$0	\$0	\$0	\$300,000
Sewage Pumping Stations										
5	WW-1	SPS-1 - Upgrade Capacity to 670 L/s (Pump Station #1)	2033 - 2040	\$5,552,000	\$0	0%	\$0	\$0	\$1,388,000	\$4,164,000
6	WW-10	SPS-4 - Pump 2 Replacement for Capacity	2026 - 2027	\$511,000	\$0	0%	\$0	\$0	\$127,750	\$383,250
7	WW-14	SPS-5 - Capacity Upgrade to 34L/s	2024 - 2024	\$1,462,000	\$0	0%	\$0	\$0	\$365,500	\$1,096,500
8	WW-19	SPS-6 - Additional Flow monitoring and recalibration	2024 - 2024	\$58,000	\$0	0%	\$0	\$2,900	\$13,775	\$41,325
9	WW-20	SPS-6 - Capacity Upgrade to 57L/s	2026 - 2026	\$2,968,008	\$0	0%	\$0	\$148,400	\$704,902	\$2,114,706
10	WW-31	SPS-10 - New (Caron Expansion Lands)	2027 - 2028	\$8,000,000	\$0	0%	\$0	\$0	\$2,000,000	\$6,000,000
Subtotal Sewage Pumping Stations				\$18,551,008	\$0		\$0	\$151,300	\$4,599,927	\$13,799,781
Sewers										
11	-	Replace Sanitary Sewers - Laurier Trunk Sewer to Pump Station #1	2024 - 2024	\$920,000	\$0	43%	\$395,600	\$0	\$0	\$524,400
12	-	Mtée Poupart (St-Jean - End Asphalt W-Mart)	2025 - 2025	\$228,000	\$0	0%	\$0	\$0	\$0	\$228,000
13	WW-40	Dalrymple Drive Sewer - Increase Capacity	2027 - 2027	\$332,000	\$0	0%	\$0	\$0	\$0	\$332,000
14	-	Clarence Creek Sanitary Siphon Crossing	2024 - 2025	\$525,000	\$0	0%	\$0	\$0	\$0	\$525,000
Subtotal Sewers				\$2,005,000	\$0		\$395,600	\$0	\$0	\$1,609,400
Total Sanitary Sewer Projects				\$51,185,008	\$0		\$395,600	\$151,300	\$12,182,177	\$38,455,931

Notes

- 1) The post period allocation are based on share of population growth to 2046 relative to the projections in the Water and Wastewater Master Plan . The post-period share is:
 2) Available DC Reserve Funds have been accounted for through the cash flow analysis

25%



APPENDIX C.2
TABLE C.2-2

CITY OF CLARENCE-ROCKLAND
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
SANITARY SEWAGE 2024-2046

23-Year Growth in Population in New Units	9,222
Employment Growth	956
23-Year Growth in Square Meters	47,800

	Development-Related Capital Forecast										
	Gross Project Cost (\$000)	Grants Subsidies & Other Contrib. (\$000)	Benefit to Existing Share (\$000)	Direct Developer Contributions (\$000)	Available DC Reserves (\$000)	Post Period Allocation (\$000)	Total DC Eligible Costs for Recovery (\$000)	Residential Share		Non-Residential Share	
								%	\$000	%	\$000
SANITARY SEWAGE 2024-2046											
Water Pollution Control Plant Projects	\$30,329.0	\$0.0	\$0.00	\$0.00	\$937.64	\$7,582.25	\$21,809.11	91%	\$19,846.29	9%	\$1,962.82
Studies	\$300.0	\$0.0	\$0.00	\$0.00	\$0.00	\$0.00	\$300.00	91%	\$273.00	9%	\$27.00
Sewage Pumping Stations	\$18,551.0	\$0.0	\$0.00	\$151.30	\$0.00	\$4,599.93	\$13,799.78	91%	\$12,557.80	9%	\$1,241.98
Sewers	\$2,005.0	\$0.0	\$395.60	\$0.00	\$0.00	\$0.00	\$1,609.40	91%	\$1,464.55	9%	\$144.85
TOTAL SANITARY SEWAGE 2024-2046	\$51,185.01	\$0.00	\$395.60	\$151.30	\$937.64	\$12,182.18	\$37,518.29		\$34,141.64		\$3,376.65
Unadjusted Development Charge Per Capita (\$)									\$3,702.19		
Unadjusted Development Charge Per Sq. M. (\$)											\$70.64

Note: As many of the works are being designed to benefit growth both in this period and beyond the 2046-year planning period, a share of the costs are considered to be recovered from future DCs outside this planning period

**APPENDIX C.2
TABLE C.2-3**

**CITY OF CLARENCE-ROCKLAND
SANITARY SEWAGE 2024-2046
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE**

SEWAGE: RESIDENTIAL	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
OPENING CASH BALANCE (\$000)	\$853.3	(\$1,440.1)	(\$2,327.3)	(\$5,067.0)	(\$9,779.6)	(\$14,209.8)	(\$16,714.9)	(\$16,145.5)	(\$15,484.1)	(\$15,285.9)	
2024-2046 RESIDENTIAL FUNDING REQUIREMENTS											
Sewage: Residential: Non Inflated	\$4,680.1	\$3,238.5	\$4,959.1	\$6,066.9	\$5,522.1	\$3,581.5	\$789.4	\$789.4	\$789.4	\$1,263.0	\$31,679.3
Sewage: Residential: Inflated	\$4,680.1	\$3,303.2	\$5,159.5	\$6,438.2	\$5,977.3	\$3,954.3	\$889.0	\$906.7	\$924.9	\$1,509.4	\$33,742.6
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	\$549.0	\$560.0	\$571.0	\$454.0	\$459.0	\$468.0	\$474.0	\$480.0	\$379.0	\$381.0	\$4,775.0
REVENUE											
- DC Receipts: Inflated	\$2,419.1	\$2,516.9	\$2,617.6	\$2,122.9	\$2,189.2	\$2,276.8	\$2,352.1	\$2,429.5	\$1,956.7	\$2,006.3	\$22,887.1
INTEREST											
- Interest on Opening Balance	\$29.9	(\$79.2)	(\$128.0)	(\$278.7)	(\$537.9)	(\$781.5)	(\$919.3)	(\$888.0)	(\$851.6)	(\$840.7)	(\$5,275.1)
- Interest on In-year Transactions	(\$62.2)	(\$21.6)	(\$69.9)	(\$118.7)	(\$104.2)	(\$46.1)	\$25.6	\$26.6	\$18.1	\$8.7	(\$343.7)
TOTAL REVENUE	\$2,386.7	\$2,416.1	\$2,419.7	\$1,725.6	\$1,547.2	\$1,449.1	\$1,458.4	\$1,568.1	\$1,123.1	\$1,174.3	\$17,268.3
CLOSING CASH BALANCE	(\$1,440.1)	(\$2,327.3)	(\$5,067.0)	(\$9,779.6)	(\$14,209.8)	(\$16,714.9)	(\$16,145.5)	(\$15,484.1)	(\$15,285.9)	(\$15,621.1)	

**APPENDIX C.2
TABLE C.2-3**

**CITY OF CLARENCE-ROCKLAND
SANITARY SEWAGE 2024-2046
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE**

SEWAGE: RESIDENTIAL	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046 TOTAL	
OPENING CASH BALANCE (\$000)	(\$15,621.1)	(\$14,952.7)	(\$14,189.1)	(\$13,334.7)	(\$12,748.6)	(\$12,074.3)	(\$11,317.4)	(\$10,471.9)	(\$8,844.3)	(\$7,371.3)	(\$5,758.5)	(\$3,996.6)	(\$2,082.7)	
2024-2046 RESIDENTIAL FUNDING REQUIREMENTS														
Sewage: Residential: Non Inflated	\$473.7	\$473.7	\$473.7	\$473.7	\$473.7	\$473.7	\$473.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3,315.6
Sewage: Residential: Inflated	\$577.4	\$588.9	\$600.7	\$612.7	\$625.0	\$637.5	\$650.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,292.4
NEW RESIDENTIAL DEVELOPMENT														
- Population Growth in New Units	\$387.0	\$392.0	\$395.0	\$335.0	\$340.0	\$343.0	\$346.0	\$351.0	\$306.0	\$309.0	\$312.0	\$314.0	\$317.0	\$4,447.0
REVENUE														
- DC Receipts: Inflated	\$2,078.7	\$2,147.6	\$2,207.4	\$1,909.5	\$1,976.8	\$2,034.1	\$2,092.9	\$2,165.6	\$1,925.7	\$1,983.5	\$2,042.8	\$2,097.0	\$2,159.4	\$26,821.2
INTEREST														
- Interest on Opening Balance	(\$859.2)	(\$822.4)	(\$780.4)	(\$733.4)	(\$701.2)	(\$664.1)	(\$622.5)	(\$576.0)	(\$486.4)	(\$405.4)	(\$316.7)	(\$219.8)	(\$114.5)	(\$7,302.0)
- Interest on In-year Transactions	\$26.3	\$27.3	\$28.1	\$22.7	\$23.7	\$24.4	\$25.2	\$37.9	\$33.7	\$34.7	\$35.7	\$36.7	\$37.8	\$394.3
TOTAL REVENUE	\$1,245.8	\$1,352.5	\$1,455.1	\$1,198.8	\$1,299.3	\$1,394.4	\$1,495.7	\$1,627.6	\$1,473.0	\$1,612.8	\$1,761.9	\$1,913.9	\$2,082.7	\$19,913.5
CLOSING CASH BALANCE	(\$14,952.7)	(\$14,189.1)	(\$13,334.7)	(\$12,748.6)	(\$12,074.3)	(\$11,317.4)	(\$10,471.9)	(\$8,844.3)	(\$7,371.3)	(\$5,758.5)	(\$3,996.6)	(\$2,082.7)	(\$0.0)	

2024 Adjusted Charge Per Capita	\$ 4,406.31
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Allocation of Capital Program	
Residential Sector	91%
Non-Residential Sector	9%
Rates for 2024	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



**APPENDIX C.2
TABLE C.2-3**

**CITY OF CLARENCE-ROCKLAND
SANITARY SEWAGE 2024-2046
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE**

SEWAGE: NON-RESIDENTIAL	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	TOTAL
OPENING CASH BALANCE (\$000)	\$84.4	(\$242.8)	(\$443.4)	(\$840.7)	(\$1,324.1)	(\$1,777.9)	(\$2,046.6)	(\$2,015.4)	(\$1,974.4)	(\$1,959.8)	
2024-2046 NON-RESIDENTIAL FUNDING REQUIREMENTS											
Sewage: Non-Residential: Non: Inflated	\$462.9	\$320.3	\$490.5	\$600.0	\$546.1	\$354.2	\$78.1	\$78.1	\$78.1	\$124.9	\$3,133.1
Sewage: Non-Residential: Inflated	\$462.9	\$326.7	\$510.3	\$636.7	\$591.2	\$391.1	\$87.9	\$89.7	\$91.5	\$149.3	\$3,337.2
NEW NON-RESIDENTIAL DEVELOPMENT											
- New Building GFA - square metres	\$1,600.0	\$1,600.0	\$1,600.0	\$2,250.0	\$2,300.0	\$2,300.0	\$2,300.0	\$2,350.0	\$2,050.0	\$2,100.0	\$20,450.0
REVENUE											
- DC Receipts: Inflated	\$141.6	\$144.4	\$147.3	\$211.3	\$220.3	\$224.7	\$229.2	\$238.9	\$212.6	\$222.1	\$1,992.5
INTEREST											
- Interest on Opening Balance	\$3.0	(\$13.4)	(\$24.4)	(\$46.2)	(\$72.8)	(\$97.8)	(\$112.6)	(\$110.8)	(\$108.6)	(\$107.8)	(\$691.4)
- Interest on In-year Transactions	(\$8.8)	(\$5.0)	(\$10.0)	(\$11.7)	(\$10.2)	(\$4.6)	\$2.5	\$2.6	\$2.1	\$1.3	(\$41.8)
TOTAL REVENUE	\$135.7	\$126.1	\$113.0	\$153.4	\$137.3	\$122.4	\$119.1	\$130.7	\$106.1	\$115.6	\$1,259.3
CLOSING CASH BALANCE	(\$242.8)	(\$443.4)	(\$840.7)	(\$1,324.1)	(\$1,777.9)	(\$2,046.6)	(\$2,015.4)	(\$1,974.4)	(\$1,959.8)	(\$1,993.5)	

**APPENDIX C.2
TABLE C.2-3**

**CITY OF CLARENCE-ROCKLAND
SANITARY SEWAGE 2024-2046
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE**

SEWAGE: NON-RESIDENTIAL	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	TOTAL
OPENING CASH BALANCE (\$000)	(\$1,993.5)	(\$1,930.8)	(\$1,861.1)	(\$1,778.4)	(\$1,699.0)	(\$1,605.9)	(\$1,503.8)	(\$1,392.4)	(\$1,197.9)	(\$993.7)	(\$772.8)	(\$534.3)	(\$277.1)	
2024-2046 NON-RESIDENTIAL FUNDING REQUIREMENTS														
Sewage: Non-Residential: Non: Inflated	\$46.8	\$46.8	\$46.8	\$46.8	\$46.8	\$46.8	\$46.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$327.9
Sewage: Non-Residential: Inflated	\$57.1	\$58.2	\$59.4	\$60.6	\$61.8	\$63.0	\$64.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$424.5
NEW NON-RESIDENTIAL DEVELOPMENT														
- New Building GFA - square metres	\$2,100.0	\$2,100.0	\$2,150.0	\$2,050.0	\$2,100.0	\$2,100.0	\$2,100.0	\$2,150.0	\$2,100.0	\$2,100.0	\$2,100.0	\$2,100.0	\$2,100.0	\$27,350.0
REVENUE														
- DC Receipts: Inflated	\$226.5	\$231.1	\$241.3	\$234.7	\$245.2	\$250.1	\$255.1	\$266.4	\$265.4	\$270.7	\$276.2	\$281.7	\$287.3	\$3,331.9
INTEREST														
- Interest on Opening Balance	(\$109.6)	(\$106.2)	(\$102.4)	(\$97.8)	(\$93.4)	(\$88.3)	(\$82.7)	(\$76.6)	(\$65.9)	(\$54.7)	(\$42.5)	(\$29.4)	(\$15.2)	(\$964.7)
- Interest on In-year Transactions	\$3.0	\$3.0	\$3.2	\$3.0	\$3.2	\$3.3	\$3.3	\$4.7	\$4.6	\$4.7	\$4.8	\$4.9	\$5.0	\$50.9
TOTAL REVENUE	\$119.9	\$127.9	\$142.1	\$139.9	\$155.0	\$165.1	\$175.8	\$194.5	\$204.2	\$220.8	\$238.5	\$257.2	\$277.1	\$2,418.0
CLOSING CASH BALANCE	(\$1,930.8)	(\$1,861.1)	(\$1,778.4)	(\$1,699.0)	(\$1,605.9)	(\$1,503.8)	(\$1,392.4)	(\$1,197.9)	(\$993.7)	(\$772.8)	(\$534.3)	(\$277.1)	\$0.0	

2024 Adjusted Charge Per Square Metre	\$ 88.50
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Allocation of Capital Program	
Residential Sector	91.0%
Non-Residential Sector	9.0%
Rates for 2024	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%



APPENDIX D

RESERVE FUNDS

APPENDIX D – DEVELOPMENT CHARGES RESERVE FUNDS

The Development Charges Act requires that a reserve fund be established for each service for which development charges are collected. Table 1 presents the uncommitted reserve fund balances, as at December 31, 2023, that are available to help fund the development-related net capital costs identified in this study.

As shown in Table D-1, the December 2023 total reserve fund balance was in a positive position of \$11.83 million. These funds are typically assigned to projects in the initial years of the capital program for each service. This has the effect of reducing and deferring capital costs brought forward to the development charge calculation and the cash flow analysis. Where there is a negative balance, as in the case of by-law services and development-related studies) the amount is brought forward in the DC capital program for recovery through future development charges.

**APPENDIX D
TABLE D-1**

**CITY OF CLARENCE-ROCKLAND
DEVELOPMENT CHARGE RESERVE FUND BALANCE BY ACCOUNT
YEAR ENDING DECEMBER 31, 2023**

Service	Uncommitted Reserve Funds
Library Services	\$379,942
Parks And Recreation	\$1,920,977
By-Law Services	(\$76,809)
Development Related Studies	(\$12,872)
Fire Services	\$340,413
Public Works	\$1,114,729
Roads And Related	\$4,811,232
Waterworks	\$2,415,061
Sanitary Sewer Services	\$937,644
Total Development Charge Reserves	\$11,830,316

APPENDIX E

COST OF GROWTH ANALYSIS

APPENDIX E – COST OF GROWTH ANALYSIS

A. ASSET MANAGEMENT PLAN

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

i. Asset Types

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

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

Table E-1 – Summary of Municipal Assets Useful Lives

Service	Estimated Useful Life
Library Services	
Buildings	50 years
Parking Spaces	10 years
Furniture, Equipment, and Materials	10-15 years
Parks and Recreation	
Indoor Recreation Facilities	30-50 years
Debentures	0 years
Studies	0 years
By-Law Services	
Recovery of Negative Reserve Balance	0 years
Vehicles and Equipment	10 years
Development Related Studies	
Recovery of Negative Reserve Balance	0 years
Growth Studies	0 years
Fire Services	
Debentures	0 years
Vehicles	10 years
Studies	0 years
Services Related to a Highway – Public Works	
Buildings	50-75 years
Fleet and Equipment	10 years
Services Related to a Highway – Roads and Related	
Cycling	25 years
Multi-Use Path	25-75 years
Roadways	25-50 years
Intersections	50 years
Pedestrian Sidewalks	25 years
Developer Projects	25-50 years
County Roadworks	25 years
Studies	0 years
Waterworks Services	
Treatment Plant	100 years
Studies	0 years
Watermains	100 years
Pumping Station and Storage	100 years

Service	Estimated Useful Life
Sanitary Sewer Services	
Water Pollution Control Plant	50-100 years
Studies	0 years
Sewage Pumping Station	50-100 years
Sewer mains	100 years

ii. Annual Provision

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

Based on the useful life assumptions and the capital cost of acquiring and/or replacing 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 forms the required annual capital provision. In calculating the annual provisions, a number of assumptions are made to account for inflation (2.0 per cent) and interest (3.5 per cent).

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

Table E-2 provides the calculated annual asset management contribution for both the gross capital expenditures and the share related to the 2024 to 2034 DC recoverable portion for all general services and services related to a highway. The year 2034 has been included to calculate the annual contribution for the planning periods 2024 to 2033 and as the expenditures in 2033 will not trigger asset management contributions until 2034. As shown, by 2034, the City will need to fund an additional \$1.67 million per annum in order to properly fund the full life cycle costs of the new assets related to the general services and services related to a highway works supported under the development charges by-law.

Table E-2 Calculated Annual AMP Provisions				
General Services	2024-2033 Capital Program		Annual AMP Provision by 2034	
	DC-Eligible	Non DC-Eligible	DC-Related	Non DC-Related
LIBRARY SERVICES	\$1,425,000	\$1,628,000	\$34,000	\$56,000
PARKS AND RECREATION	\$16,080,000	\$3,923,000	\$345,000	\$345,000
BY-LAW SERVICES	\$52,000	\$120,000	\$0	\$11,000
DEVELOPMENT RELATED STUDIES	\$300,000	\$38,000	\$0	\$0
FIRE SERVICES	\$2,374,000	\$1,613,000	\$39,000	\$118,000
SERVICES RELATED TO A HIGHWAY				
PUBLIC WORKS	\$2,591,000	\$4,029,000	\$109,000	\$126,000
ROADS AND RELATED	\$47,067,000	\$47,915,000	\$1,147,000	\$1,079,000
TOTAL	\$69,889,000	\$59,266,000	\$1,674,000	\$1,735,000

Table E-3 provides the calculated annual asset management contribution for both the gross capital expenditures and the share related to the 2024 to 2046 DC recoverable portion for the engineered services. The year 2047 has been included to calculate the annual contribution for the planning periods 2024 to 2046 and as the expenditures in 2046 will not trigger asset management contributions until 2047. As shown, by 2047, the City will need to fund an additional \$191,000 per annum in order to properly fund the full life cycle costs of the new assets related to the general services supported under the development charges by-law.

Table E-3 Calculated Annual AMP Provisions				
Engineering Services	2024-2046 Capital Program		Annual AMP Provision by 2047	
	DC-Eligible	Non DC-Eligible	DC-Related	Non DC-Related
WATERWORKS	\$27,475,000	\$70,019,000	\$29,000	\$81,000
SANITARY SEWER SERVICES	\$38,456,000	\$12,729,000	\$162,000	\$54,000
TOTAL	\$65,931,000	\$82,748,000	\$191,000	\$135,000

iii. Future Revenue Growth

The calculated annual funding provision should be considered within the context of the City's projected growth. Over the next ten years, the City's census population is projected to increase by 3,282. In addition, the City will also add 409 employees that will result in approximately 20,450 square metres of additional non-residential building space. Over the 23-year period, the City's census population is projected to increase by 6,769 and employment will grow by 956 employees resulting in an increase of 47,800 square metres of non-residential space.

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

B. LONG-TERM CAPITAL AND OPERATING IMPACT ANALYSIS

As shown in Table E-4, by 2034 the City's net operating costs are estimated to increase by \$2.12 million for property tax supported services. Increases in net operating costs will be experienced as there are operational costs associated with additional capital.

Table E-5 and E-6 summarizes the components of the development-related capital forecast that will require funding from non-DC sources (e.g. property tax) for the planning period 2024 to 2033 for general services and services related to a highway and from 2024 to 2046 for engineering services of water and sanitary sewer.

For the services under the 10-year planning horizon, \$16.69 million will need to be funded from non-DC sources over a 10-year planning period and is related to facilities and infrastructure that will benefit the existing community. In addition, \$34.47 million in interim DC financing related to post-period shares of projects may be required or these costs may be recovered from other growth funding tools.

For the engineered services of water and sanitary sewer, \$1.45 million will need to be funded from non-DC sources over a 23-year planning period and is related to infrastructure that will benefit the existing community. In addition, \$19.53 million in interim DC financing related to post-period shares of projects may be required or these costs may be recovered from other growth funding tools.

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

**APPENDIX E
TABLE E-4**

**CITY OF CLARENCE-ROCKLAND
ESTIMATED NET OPERATING COST OF THE PROPOSED
DEVELOPMENT-RELATED CAPITAL PROGRAM
(in constant 2024 dollars)**

Category	Cost Driver (in 2024 \$)		Additional Operating Costs at 2033 (\$000)
	\$	unit measure	
Library Services			\$212.8
- New Library Materials	\$0.01	per \$1.00 of add'l capital	\$2.4
- New Furniture and Equipment	\$0.10	per \$1.00 of new infrastructure	\$10.4
- Rockland Branch Expansion (3,000 sqft)	\$40	per sq.ft. added	\$120.0
- Bourget Branch Expansion (2,000 sqft)	\$40	per sq.ft. added	\$80.0
Parks and Recreation			\$717.0
- Development-Related Capital Projects Parks	\$0.05	per \$1.00 of add'l capital	\$717.0
- Excludes debt payments			
By-law Services			\$0.0
- no additional op costs	N/A		\$0.0
Development Related Studies			\$0.0
- Development-Related Capital Projects	N/A		\$0.0
Fire Services			\$37.5
- New Additional Space, Equipment and Vehicles	\$0.10	per \$1.00 of new infrastructure	\$37.5
- Excludes debt payments and study			
Public Works			\$616.5
- New Additional Space, Equipment and Vehicles	\$0.15	per \$1.00 of new infrastructure	\$616.5
Roads and Related			\$534.0
- Development-Related Roads Infrastructure	\$300	per household	\$534.0
Waterworks			\$0.0
- Rate supported service - no additional op costs			\$0.0
Sanitary Sewage			\$0.0
- Rate supported service - no additional op costs			\$0.0
TOTAL ESTIMATED OPERATING COSTS			\$2,117.8

APPENDIX E
TABLE E-5

CITY OF CLARENCE-ROCKLAND
SUMMARY OF TAX AND RATE SUPPORTED FUNDING REQUIREMENTS
CAPITAL PROGRAM FOR GENERAL SERVICES AND SERVICES RELATED TO A HIGHWAY (10-YEAR)

Service	Development-Related Capital Program (2024 - 2033)					Total DC Eligible Costs for Recovery (\$000)
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Other Contributions (\$000)	Available DC Reserves (\$000)	Post-Period Benefit (\$000)	
1.0 LIBRARY SERVICES	\$3,053.4	\$0.0	\$0.0	\$379.9	\$1,628.1	\$1,045.4
2.0 PARKS AND RECREATION	\$17,073.1	\$993.5	\$0.0	\$1,921.0	\$0.0	\$14,158.6
3.0 BY-LAW SERVICES	\$171.6	\$0.0	\$0.0	\$0.0	\$120.0	\$51.6
4.0 DEVELOPMENT RELATED STUDIES	\$337.9	\$37.5	\$0.0	\$0.0	\$0.0	\$300.4
5.0 FIRE SERVICES	\$3,987.1	\$1,125.0	\$0.0	\$340.4	\$488.0	\$2,033.7
SERVICES RELATED TO A HIGHWAY						
6.0 PUBLIC WORKS	\$6,620.0	\$2,510.0	\$0.0	\$1,114.7	\$1,518.5	\$1,476.7
7.0 ROADS AND RELATED	\$94,981.4	\$12,027.1	\$5,170.5	\$4,811.2	\$30,717.0	\$42,255.5
TOTAL 10-YEAR PROGRAM	\$126,224.5	\$16,693.1	\$5,170.5	\$8,567.3	\$34,471.7	\$61,321.9

APPENDIX E
TABLE E-6

CITY OF CLARENCE-ROCKLAND
SUMMARY OF TAX AND RATE SUPPORTED FUNDING REQUIREMENTS
CAPITAL PROGRAM FOR ENGINEERED SERVICES: WATER AND SANITARY SEWER

Service	Development-Related Capital Program (2024 - 2046)					Total DC Eligible Costs for Recovery (\$000)
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Direct Developer Contributions (\$000)	Available DC Reserves (\$000)	Post-Period Benefit (\$000)	
1.0 WATERWORKS	\$35,878.3	\$1,056.6	\$0.0	\$2,415.1	\$7,346.6	\$25,060.1
2.0 SANITARY SEWER SERVICES	\$51,185.0	\$395.6	\$151.3	\$937.6	\$12,182.2	\$37,518.3
TOTAL 23-YEAR PROGRAM	\$87,063.3	\$1,452.2	\$151.3	\$3,352.7	\$19,528.8	\$62,578.4

C. THE PROGRAM IS DEEMED FINANCIALLY SUSTAINABLE

In summary, the Asset Management Plan and long-term capital and operating analysis included in this appendix demonstrates that the City can afford to invest and operate the identified general and engineered services infrastructure over the 10-year and 23-year planning periods.

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

APPENDIX F

LOCAL SERVICE POLICY

CITY OF CLARENCE-ROCKLAND

LOCAL SERVICE GUIDELINES

GENERAL POLICY GUIDELINES ON DEVELOPMENT CHARGES AND LOCAL SERVICE FUNDING FOR CITY-WIDE GROWTH-RELATED WORKS

The following guidelines set out, in general terms, the size and nature of the engineered infrastructure that is included in the City of Clarence-Rockland Development Charges (DC) Background Study, which is eligible to be funded in part by DCs. In order for a project to be partially funded through DCs, the following will apply:

1. The project will be listed in the most current City of Clarence-Rockland Development Cost Background Study.
 - a. The City, at its sole discretion, may deem a project not listed in the most current DC Study to be development-related and potentially fundable, in whole or in part, from DCs. Inclusion of the new project may require the substitution (removal) of a similar project from the related service project list, as contained in the most current DC Study, or require consideration for future DC funding pending a DC Background Study update or amendment.
 - b. The City, at its sole discretion, may deem a project not specifically listed in the most recent DC Study to be part of the “unallocated improvements” referenced in the most current DC Study. Therefore, the project may be considered development related and potentially fundable, in whole or in part from DC’s.
2. The project will add additional capacity to the servicing network. If the proposed infrastructure does not add any additional capacity beyond the

servicing requirement for a particular development, the projects are assumed the sole responsibility of the developer.

- a. The City may require larger infrastructure than what may be necessitated by a given development in order to conform to the standard infrastructure sizes and capacity as per the City's design criteria. This is not considered "excess" capacity and will be required at the direct expense of the developer and no share of the cost will be eligible for DC credits.
- b. Projects eligible to be funded in part by development charges include infrastructure that provides servicing or capacity for more than one development is not necessarily fully or partially funded from development charges. If a project is considered fully or partially local in nature, the City will require the benefitting land owners to fund the works directly.

The following policy guidelines are general principles by which staff will be guided in considering development applications. However, each application will be considered on its own merits having regard to, among other factors, the nature, type and location of the development in any existing development and proposed development in its surrounding area these policy guidelines, the location and type of services required and their relationship to the proposed development and to existing and proposed development in the area, and subsection 59(2) of the *Development Charges Act, 1997*.

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

The detailed engineering requirements for all work and/or development are governed by the City of Clarence-Rockland Official Plan, or if not specified in the Official Plan, by the approved detailed engineering standards and/or related master plans.

DEFINITIONS

A local service is defined as an infrastructure service that is:

Internal to a development, or external to a development, in order to support a specific development or required to link with the area to which the plan relates.

"Local service" funding is specifically considered for the following services:

- 1.0 Water Services
- 2.0 Sanitary Sewer Services
- 3.0 Storm Sewer Services
- 4.0 Transportation

1.0 WATER

1.1 Water Supply, Storage and Booster Pumping Stations

- 1.1.1 All projects related to upgrading, expanding or constructing water supply and treatment facilities (plants and water conservation), storage facilities (storage tanks, etc.), and pumping stations, including costs to acquire/expropriate land, considered to be in whole or in part related to development, are considered to be a DC project.
- 1.1.2 New or expanded local pumping stations, including upgrades identified through a development proposal, servicing a localized area and needs (specific development) are a local service and a direct developer responsibility.
- 1.1.3 Upgrades to, or construction of, temporary water booster pumping stations and reservoir projects are considered to be the developer's responsibility.

- 1.1.4 Upgrades to, or construction of, permanent water booster pumping stations and reservoir projects may be considered development charge eligible projects. Included in the cost of these projects is a 12% engineering fee.
- 1.1.5 Where a temporary facility precedes the construction of a permanent facility, the developer that requires the temporary facility will be required to also assist in making provision for the permanent facility (e.g. secure land for permanent facility) as a condition of approval for the temporary facility.

1.2 *Watermains*

- 1.2.1 Watermains that are required to service a specific development, either internal or external to the site, are considered to be the developer's responsibility.
- 1.2.2 Connections to transmission watermains and pumping stations to service specific areas are considered to be a direct developer responsibility.
- 1.2.3 Transmission watermains (generally located outside the development area) may be required to provide network integrity, security or reliability to the distribution system. Where such transmission watermains are identified by a Class Environmental Assessment, Servicing Study or listed in the City's most current DC Study, they are considered to be a DC project.
- 1.2.4 A developer-implemented infrastructure upgrade required to service the needs of a specific development will not be eligible for City reimbursement or DC credits when it provides some

additional capacity as a by-product (i.e. due to the selection of standard pipe sizes).

1.2.5 Watermains within and external to the development that are larger than 300 mm and service other development areas are to be included in the development charge calculation. The amount of cost contribution for watermains within a development shall be calculated using tendered unit prices or the City’s unit cost at the time of construction and shall be the difference between the cost of the actual pipe diameter and the cost of a 300 mm pipe diameter including a 12% engineering fee. Only watermain and valves will be included in the calculation. Any costs related to the depth of pipe are the responsibility of the developer.

Watermain Size	Charged to DCs
300 mm	NIL
405 mm	cost of 405 mm - cost of 300 mm
610 mm	cost of 610 mm – cost of 300 mm
750 mm	cost of 750 mm – cost of 300 mm
900 mm	cost of 900 mm – cost of 300 mm
1050 mm	cost of 1050 mm – cost of 300 mm
1200 mm	cost of 1200 mm – cost of 300mm

2.0 SANITARY SYSTEMS

2.1 Wastewater Treatment

2.1.1 All projects providing for the upgrading, improvement and/or expansion of existing wastewater treatment facilities, including the cost to acquire/convey land, are considered in

whole or in part to be related to development are considered to be a DC project.

2.2 *Sanitary Sewers*

- 2.2.1 A developer will be solely responsible for the cost and implementation of new or upgraded sewer infrastructure, either internal or external, that are required to adequately service a specific development in accordance with applicable City policies, standards and criteria.
- 2.2.2 A developer-implemented infrastructure upgrade required to service the needs of a specific development will not be eligible for DC credits when it provides some additional capacity as a by-product (i.e. due to the selection of standard pipe sizes).
- 2.2.3 Sanitary sewers within and external to the development that are larger than 375 mm and service other development areas are to be included in the development charge calculation. The amount of cost contribution for Sanitary sewers within a development shall be calculated using tendered unit prices or the City's unit cost at the time of construction and shall be the difference between the cost of the actual pipe diameter and the cost of a 375 mm pipe diameter including a 12% engineering fee. Only Sanitary sewers, and appurtenances will be included in the calculation. Any costs related to the depth of pipe are the responsibility of the developer.
- 2.2.4 A sanitary or combined sewer, of any size, required to connect a specific development to a major pumping station to service development, is considered the sole responsibility of a developer.

- 2.2.5 Trunk sanitary sewers, external to the development, and major pumping stations serving more than one development are to be included in the development charge calculation. These services will be identified through a Class Environmental Assessment, Servicing Study or by City staff.
- 2.2.6 Development Charges funding will also extend to correct a health related and/or environmental concern with a growth-related component.
- 2.2.7 Over-depth costs for upstream lands and rock excavation will be considered on an individual project basis, up to a maximum allowance of 15% of the over-sizing costs.

2.3 Pumping Stations

- 2.3.1 Pumping Stations
- 2.3.2 Upgrades to, or construction of, temporary sanitary pumping stations are considered to be the developer's responsibility.
- 2.3.3 Upgrades to, or construction of, permanent pumping stations that are required as a result of an approved serviceability study, service more than one developer, and have a tributary flow greater than 80 L/s are considered to be development charges projects. The flow criteria is used to identify development charges eligible projects with reimbursement made upon acceptance of the work by the City and all the proper documentation received.

- 2.3.4 New or expanded pumping stations that do not qualify as development charges projects are the developer's responsibility.

3.0 Stormwater

3.1 Storm Sewers

- 3.1.1 Storm sewers that are required for a development, either internal or external, are considered to be the developer's responsibility.
- 3.1.2 If a storm sewer upgrade is required based on existing flows from the storm sewer service area as well as proposed flows generated by the development according to applicable City policies, guidelines and standard, the developer will be responsible for the cost of the sewer upgrade.
- 3.1.3 Watermains within and external to the development that are larger than 300 mm and service other development areas are to be included in the development charge calculation. The amount of cost contribution for watermains within a development shall be calculated using tendered unit prices or the City's unit cost at the time of construction and shall be the difference between the cost of the actual pipe diameter and the cost of a 300 mm pipe diameter including a 12% engineering fee.

3.2 Stormwater Management Facilities

- 3.2.1 Stormwater quality and quantity works required to service a specific development, either internal or external, are a direct developer responsibility.

- 3.2.2 Stormwater management facilities that benefit multiple developments will be subject to “collect back agreements” and will be detailed in conditions of subdivision approval.

4.0 TRANSPORTATION

4.1 Overriding Principals

- 4.1.1 Transportation infrastructure needs that are within, adjacent to, or related to, a specific development application, including rezonings, are considered to be a local service and direct responsibility of the developer as a condition of development approval process;
- 4.1.2 Transportation infrastructure needs that are driven by overall City wide development and are external to a development site will be considered as “non-local” and potentially funded by DCs. Included in the cost of these projects is a 12% engineering fee.

4.2 Definitions

Table 1 (see attached) provides a summary of the characteristics of local roadways; major and minor collectors; industrial and arterial roadways.

4.3 Arterial Roads

- 4.3.1 New Arterial Roads:

The cost of constructing an arterial roadway beyond 11 m represents an eligible DC expenditure.

When development proceeds construction of a new arterial road and the road is either adjacent to or runs through the development plans, the developer is responsible for the cost equivalent of a collector road [11 m pavement surface] which will include streetlights, landscaping elements, sidewalks etc.

The timing of the arterial road construction will be dependent on growth demands and may have to be included in a subsequent DC study.

Multi-Use Paths within the road allowance and part of a local service project will be considered as a local service.

4.3.2 Widening of Existing Arterial Roads

For existing arterial roadways, the oversizing costs associated with any additional width beyond 11 m of pavement will be considered as a DC eligible expense.

4.4 *Collector Roads*

4.4.1 The cost of the first 11 m of asphalt for new major and minor collector roads is the financial responsibility of the developer(s).

4.4.2 For existing collector roadways, the oversizing cost associated with any additional width beyond 11 m of pavement width shall be deemed a DC eligible expense.

4.5 *Internal Roads*

- 4.5.1 All local and collector roads internal to a development (including road base and surface, street lighting, storm sewers, bridges, culverts, sidewalks, bike lanes, bike paths, noise walls, utilities, turning lanes, line painting, signage, etc.) – are the direct responsibility of the developer.

4.6 *Road Reconstruction*

- 4.6.1 Road reconstruction projects are projects that are intended to maintain the same number of basic lanes. However, if the existing roadway is required to be significantly rehabilitated [i.e. full depth granular replacement] in order to accommodate current and future transportation needs or requires upgrading such as urbanization to engineering standards, the cost of these works shall be deemed to be a DC eligible expenditures. These projects may also include the construction of appropriate turning lanes as required to service future growth. The cost of these works again will be considered to be a DC related costs.

4.7 *Road Resurfacing*

- 4.7.1 Road resurfacing projects are those that are intended to maintain the same number of basic lanes. However, if the asphalt requires partial or full depth replacement in order to support growth related traffic, the cost of these works will be included in the Background Development Charge Study and will be considered as a DC eligible cost.

4.8 *Bridges*

- 4.8.1 New bridges that are required to service future growth [as identified in the city's Master Transportation Plan] are considered to be DC eligible expenditures.

4.9 Traffic Signals and Intersection Improvements

- 4.9.1 Traffic signals required for private site entrances and/or road intersections external to a development that are warranted due to the development are considered a direct developer responsibility.

Other traffic signals that are required on any type of roadway as a result of increasing growth related traffic volumes are considered to be DC eligible projects.

4.10 Streetlights

- 4.10.1 Streetlights on arterial roads and for the oversized portion of major collector roads are considered to be development charge projects.
- 4.10.2 Streetlights on all other roads are considered to be a developer financial responsibility.

4.11 Sidewalks

- 4.11.1 Sidewalks on arterial roads will be considered a development charge related expenditure.

- 4.11.2 Sidewalks on one or both sides of all other new roadways are not development charges projects and are considered to be the developers' financial responsibility.
- 4.11.3 Sidewalks that are external to a development and are necessary to connect the development to public spaces are considered to be the developers' financial responsibility.
- 4.11.4 The cost of sidewalks on arterial and collector roadways will be considered as an eligible expense for DC funding

4.12 Cycling Facilities

- 4.12.1 Bike lanes within the road allowance are considered to be part of the road construction and should follow the guidelines explained in the road construction section.
- 4.12.2 Bike paths outside of road allowances are considered to be the developers' financial responsibility if they are identified as part of a plan of subdivision.
- 4.12.3 Mixed use trails located outside of a road allowance and provide benefit to users beyond the development under consideration, may be considered as a DC eligible expense.

4.13 Land Acquisition from Road Works

- 4.13.1 Land acquisitions for Arterial or Major Collector roads that are to be constructed to approved engineering standard widths are primarily acquired by dedications under the Planning Act. In instances where limited or no development is anticipated and direct dedication is unlikely, the land acquisition is considered

to be part of the capital cost of the related development charge project.

- 4.13.2 Land Acquisition for Grade Separations (beyond normal dedication requirements) is considered to be included in the capital cost of the related development charge project.

TABLE 1

City of Clarence-Rockland Roadway Classifications						
Characteristic	Local	Collector		Industrial		Arterial
		Minor	Major	Standard	Collector	
Traffic move / Property access	Primary – Property access	Property access & Traffic movement equal	Primary – Traffic movement	Primary – Property Access	Property Access / Traffic movement equal	Primary – Traffic movement
AADT	<1,000	1,000-5,000	>5,000	<1,000	1,000-12,000	5,000-30,000
Peak Period Lanes	2	2	2 – 4	2	2-4	4
Connections	Locals, collectors	Locals, collectors	Locals, collectors, and arterials	Locals, collectors	Locals, collectors, arterials	Collectors, arterials
Flow Character	Interrupted	Interrupted	Interrupted	Interrupted	Interrupted	Uninterrupted
Speed Limit (km/h)	40-50	40-50	50-80	40-50	40-50	80-100
Sidewalks	As required	One side	Both sides	As required	As required	As required
Cyclists	No Cycling lanes	Widen Curb Lanes	Widen Curb Lanes	No cycling Lanes	Cycling Lanes as required	Cycling Lanes as required
Transit	Generally not permitted	Permitted	Permitted	Generally not provided	Permitted	Permitted
Truck restrictions	Restrictions preferred	Restrictions permitted	Restrictions permitted	No restrictions	No restrictions	No restrictions
Row width (m)	15-22	40-50	40-60	20-30	40-60	>30

APPENDIX G

AVAILABLE UNDER SEPARATE COVER:

DEVELOPMENT CHARGE BY-LAW