

Final Report

Prepared by Hemson for the City of Markham

2022 Development Charges Study

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

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Executive Summary

Hemson Consulting Ltd. was retained by the City of Markham to complete a Development Charges (DC) Background Study. The following summarizes the findings of the 2022 DC Background Study.

A. City of Markham Development Charges Regime

The City of Markham currently levies three types of development charges for the recovery of development-related capital costs:

- City-Wide Soft (CWS) Service Development Charges — for the recovery of development-related costs for the provision of general government, library, fire, indoor recreation, parks development and facilities, public works (building, equipment and fleet), waste management, and parking services.
- City-Wide Hard (CWH) Service Development Charges — for the recovery of development-related costs for the provision of major roads and related services, including structures, sidewalks, streetlights and special traffic management and design features, as well as storm water management projects (erosion control projects), special projects (streetscaping), and related studies.
- Area-Specific Development Charges (ASDC) — for the recovery of development-related costs for the provision of some roads, intersection improvements, streetlighting, watermains, sanitary sewers, storm water management facilities (storm water ponds), and related studies.

The first two types of development charges, the CWS and CWH, are levied on a uniform basis against all development in the City. The ASDCs are levied on a planning area-specific basis. This review of the DC Background Study will update all of the related CWS, CWH and ASDC by-laws.

B. Study Consistent with Development Charges Legislation

This study calculates development charges for the City of Markham in compliance with the provisions of the *Development Charges Act, 1997 (DCA)* and its associated regulation (*Ontario Regulation 82/98*).

The City needs to continue implementing development charges to fund capital projects related to growth throughout Markham so that 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.

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

- a forecast of the amount, type and location of housing units, population and non-residential development anticipated in the City;
- 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 to provide for the expected development, including the determination of the growth and non-growth-related components of the capital projects; and
- an examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-laws would relate.

This report identifies the growth-related net capital costs which are attributable to development that is forecast to occur in the City. These costs are apportioned to 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.

C. All Services with Development-Related Costs are Included in the Analysis

The following City services have been included in the development charge analysis:

- General Government
- Library
- Fire Services
- Indoor Recreation
- Parks Development and Facilities
- Public Works
- Waste Diversion
- City-Wide Hard (including roads and associated structures, sidewalks, streetlights, streetscaping, intersections, studies, storm water management, water mains, and related studies)
- Area-Specific (including illumination, intersections, roads, storm water management, structures, sanitary sewers, water mains, and related studies)

It is noted that parking is no longer an eligible service for DC funding and therefore is not included in this Background Study.

D. Two Approaches are Used to Calculate Development Charges

- A City-wide average cost approach is used to calculate development charges for general government, library, fire services, indoor recreation, parks development and facilities, public works, waste diversion and City-wide hard services. This approach results in uniform charges throughout the City.
- In addition, area-specific development charges are calculated for illumination, intersections, roads, storm water management, structures,

sanitary sewers, water mains, and related studies. The area-specific approach more closely aligns costs and benefits for services where benefits are more localized and can be identified.

E. The City of Markham is Anticipated to Grow by 90,070 People and 55,590 Employees Over Ten Years

- The table below provides a summary of the anticipated residential and non-residential growth over the ten-year period from mid-2022 to mid-2031. The development forecast is further discussed in Appendix A.

	2021 Estimate	Soft Services Planning Period 2022 - 2031	
		Growth	Total at 2031
Residential Development Forecast			
Total Occupied Dwellings	114,233	32,673	146,905
<i>Singles & Semis</i>		10,545	
<i>Rows & Other Multiples</i>		8,853	
<i>Apartments</i>		13,274	
Total Population			
Census	354,589	90,071	444,660
<i>Population In New Dwellings</i>		90,381	
Non-Residential Development Forecast			
Place of Work Employment	160,210	55,590	215,800
<i>Mixed-Use</i>		825	
<i>Retail</i>		15,679	
<i>Institutional</i>		10,210	
<i>Industrial</i>		8,870	
<i>Office</i>		19,990	
<i>Rural</i>		14	
Non-Residential Building Space (sq.m.)		2,550,244	
<i>Mixed-Use</i>		33,009	
<i>Retail</i>		627,176	
<i>Institutional</i>		680,685	
<i>Industrial</i>		709,619	
<i>Office</i>		499,755	
<i>Rural</i>		-	

F. Increase in Need for Service Based on Anticipated Development

- In accordance with the *DCA*, development charges have been calculated at a level no higher than the average service level provided in the City over the ten-year period immediately preceding the preparation of the background study, on a service by service basis.
- The increase in need for service required to service the anticipated development is based on the net population or net population and employment growth in the City. This is used to calculate the ten-year average historical service levels and the maximum permissible DC funding envelopes.
- This approach reflects the manner in which the City develops complete communities and plans for infrastructure and facilities to meet the servicing needs of development.

G. The Study Includes a \$965.50 Million Growth-Related Capital Program for Soft Services and \$1.82 Billion Growth-Related Capital Program for Hard Services

- The 2022 – 2031 growth-related capital program for soft services including General Government, Library, Fire, Indoor Recreation, Parks Development & Facilities, Public Works, and Waste Diversion totals \$965.50 million.
- The City-wide hard services net capital program totals an additional \$1.82 billion. This amount is estimated to provide for development-related infrastructure required to 2031.
- The *DCA* requires that the gross capital costs be reduced by grants, subsidies, and recoveries from other governments; as well as capital

replacements or other benefits provided to the existing community, existing reserve fund balances, and amounts that exceed historical service levels when calculating development charges.

- After these deductions the net growth-related hard services capital program is reduced to \$1.21 billion.
- Given no grants, subsidies, or replacement shares have been identified for any of projects included in the soft services capital program, the full amount of \$965.50 million has been carried forward to the development charges calculation.

H. Calculated Development Charges

- The following tables summarize the proposed residential and non-residential City-wide development charges.

Calculated Residential Charges for City-Wide Services

Service	Residential Charge By Unit Type (1)				Percentage of Charge
	Singles & Semis	Townhouses & Multiples	Large Apartments	Small Apartments	
General Government	\$898	\$696	\$548	\$385	1.5%
Library	\$2,232	\$1,730	\$1,362	\$957	3.8%
Fire Services	\$1,232	\$955	\$752	\$528	2.1%
Indoor Recreation	\$13,611	\$10,552	\$8,304	\$5,834	23.4%
Park Development & Facilities	\$7,491	\$5,807	\$4,570	\$3,211	12.9%
Public Works	\$1,196	\$927	\$729	\$512	2.1%
Waste Diversion	\$300	\$233	\$183	\$129	0.5%
Subtotal City-Wide Soft	\$26,960	\$20,900	\$16,448	\$11,556	46.3%
City-Wide Hard	\$31,268	\$24,239	\$19,076	\$13,402	53.7%
Total City-Wide	\$58,228	\$45,139	\$35,524	\$24,958	100.0%
(1) Based on Persons Per Unit Of:	3.73	2.89	2.28	1.60	

Calculated Non-Residential Charges for City-Wide Services

Service	Retail		Industrial/Office/Insitutional		Mixed-Use	
	Adjusted Charge per Square Metre	Percentage of Charge	Adjusted Charge per Square Metre	Percentage of Charge	Adjusted Charge per Square Metre	Percentage of Charge
General Government	\$6.52	2.7%	\$5.23	2.7%	\$3.03	2.6%
Library	\$0.00	0.0%	\$0.00	0.0%	\$0.00	0.0%
Fire Services	\$8.54	3.6%	\$6.85	3.6%	\$4.16	3.6%
Indoor Recreation	\$0.00	0.0%	\$0.00	0.0%	\$0.00	0.0%
Park Development & Facilities	\$0.00	0.0%	\$0.00	0.0%	\$0.00	0.0%
Public Works	\$8.28	3.5%	\$6.64	3.5%	\$4.04	3.5%
Waste Diversion	\$0.00	0.0%	\$0.00	0.0%	\$0.00	0.0%
Subtotal City-Wide Soft per Sq.M.	\$23.35	9.7%	\$18.72	9.7%	\$11.22	9.6%
City-Wide Hard	\$216.47	90.3%	\$173.68	90.3%	\$105.46	90.4%
Total City-Wide	\$239.82	100.0%	\$192.40	100.0%	\$116.68	100.0%

I. Area-Specific Charges

- Area-Specific Development Charges are proposed to provide for some roads, intersection improvements, streetlighting, watermain, sanitary sewers, storm water management facilities (storm water ponds), and related studies.
- The ASDCs calculated for the purposes of this background study are summarized below.

Area Name	Area	ASDC Charge \$/ha
Yonge Steeles Corridor	1B	\$ 1,467,253
Armadale	5	\$ 8,857
Armadale NE	7	\$ 15,489
PD 1-7	9	\$ 736,670
Rodick/Miller Road Planning District	17	\$ 662,823
Mount Joy	23	\$ 173,322
Markham Centre - South Unionville - Helen Ave	42A.1	\$ 176,576
Markham Centre	42B	\$ 7,997
Markham Centre - Clegg	42B.2	\$ 169,076
Markham Centre - Hotel	42B.4	\$ 895,820
Markham Centre - South Hwy 7	42B.6	\$ 1,236,921
Markham Centre - Sciberras	42B.8	\$ 1,490,071
Markham Centre - East Precinct	42B.9	\$ 236,433
Cathedral	46	\$ 9,522
York Downs	47B	\$ 8,210
404 North	49	\$ 18,167
Future Urban Area	50A	\$ 11,817
Future Urban Area - Employment Block	50A-1	\$ 115,835
Future Urban Area - Robinson Glen	50A-2	\$ 17,351
Future Urban Area - Berczy Glen Block	50A-3	\$ 204,076
Future Urban Area - Angus Glen Block	50A-4	\$ 70,310
Future Urban Area - Robinson Glen - South Block	50A-5	\$ 48,240

J. A Portion of Development-Related Costs Require Funding from Non-Development Charge Sources

- The *Development Charges Act, 1997* requires that funding from other sources be applied against the development-related capital program. Additionally, any share of the capital program that is deemed replacement or benefiting to the existing population will be excluded

from the development charges calculation and will require funding from non-development charge sources.

- No non-development related shares have been identified in the City-wide soft services capital program, however, \$245.41 million of the City-wide soft services capital program is deemed to benefit development beyond the 2031 planning horizon and will require funding from non-DC sources in the interim.
- Non-development charge funding for replacement or benefit to existing shares of the capital forecast of the CWH program total \$33.18 million and will need to be financed through non-DC sources. An additional \$129.41 million in interim financing will be required to fund a portion of the development-related capital program that is deemed to benefit development beyond the 10-year planning period.

K. Consideration for Area Rated Services

- In accordance with the *DCA*, Council must give consideration to the use of area rating, also known as area-specific development charges, as part of the development charges background study. The City of Markham has historically used both City-wide and area-specific charges and this practice is anticipated to continue into the future.

L. Asset Management Plan

- 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.
- By 2031, the City will need to fund an additional \$48.83 million per annum in order to properly fund the full life cycle costs of the new City-wide soft and City-wide hard assets supported under the 2022 Development Charges By-Law.

M. Modifications to the City’s Development Charges By-law and Local Service Definitions are Proposed

- The City is proposing to modify the current development charges by-laws to reflect legislative changes that have occurred since the passage of the current DC By-laws and to account for any policy and definition changes. The proposed draft by-laws will be made available, under separate cover, a minimum of two weeks in advance of the statutory public meeting.

1. Introduction

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

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

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

This study presents the results of the review which determines the development-related net capital costs which are attributable to development that is forecast to occur in the community. These development-related net capital costs are then apportioned among various types of sectors (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 arrives, therefore, at proposed development charges for various types of development.

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

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

Section II designates the services for which the development charges are proposed and the areas within the City to which the development charges will apply. It also briefly reviews the methodology that has been used in this background study.

Section III presents a summary of the forecast residential and non-residential development which is expected to occur within the City over the 2022 – 2031 period.

Section IV summarizes the historical ten-year average capital service levels that have been attained in the City which form the basis for the development charges soft services calculations.

In Section V, the development-related capital forecast that has been developed by various City departments and boards is reviewed.

Section VI summarizes the calculation of applicable development charges and the resulting proposed development charges by class and type of development as well as by geographic area in the City.

Section VII provides an examination of the long-term capital and operating costs for each service included in the development charge calculation.

Section VIII presents an Asset Management Plan for the City, demonstrating financial sustainability of assets over the life cycle of the 2022 Development Charges By-law and satisfying the new requirements implicated by the amendment to the *Development Charges Act*.

Section IX provides a review of development charges administrative matters and the City's local service policies.

2. The Methodology Combines a City-Wide and Area-Specific Approach to Align Development-Related Costs and Benefits

Several key steps are required in calculating any development charge. However, specific circumstances arise in each municipality which must be reflected in the calculation. In this study, therefore, we have tailored our approach to the City of Markham's unique circumstances. The approach to the proposed development charges is focussed on providing a reasonable alignment of growth-related costs with the development that necessitates them. This study combines a City-wide approach for soft and certain hard services which the City provides and with an area-specific approach for certain hard services.

A. Consideration for Area Rates Services

In accordance with the *DCA*, Council must give consideration to the use of area rating, also known as area-specific development charges, as part of the development charges background study. The City of Markham has historically used both City-wide and area-specific charges and this practice is anticipated to continue into the future.

The rationale for the City-wide and area-specific development charges are discussed further in following sections.

B. Both City-Wide and Area-specific Development Charges are Proposed

The City provides a wide range of services to the community it serves and has an extensive inventory of facilities, land, infrastructure, vehicles and

equipment. The *DCA* provides municipalities with the flexibility to define services that will be included in the development charge by-laws, provided that the other provisions of the Act and associated regulations are met. The *DCA* also requires that the by-laws designate the areas within which the by-laws shall be imposed. The development charges may apply to all lands in the municipality or to other designated development areas as specified in the by-laws.

i. Services Based on a City-Wide Approach

For the majority of services that the City provides, a range of capital facilities, land, equipment and infrastructure is available throughout the City; arenas, community centres, pools, libraries, fire stations, arterial roads, watermains, parks and so on. As new development occurs, new facilities will need to be added so that service levels in newly developing areas are provided for at levels enjoyed in existing communities. A widely accepted method for sharing the development-related capital costs for such City services is to apportion them over all new growth anticipated in the City.

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

- General Government;
- Library;
- Fire;
- Indoor Recreation;
- Park Development & Facilities;
- Public Works;
- Waste Diversion; and
- City-Wide Hard (including roads and associated structures, sidewalks, streetlights, streetscaping, intersections, studies, storm water management, water mains, and related studies).

These services form a reasonable basis on which to plan and administer the development charges. It is noted that the analysis of each of these services examines the individual capital facilities and equipment that make them up. For example, Indoor Recreation includes various indoor facilities such as community centres, pools, arenas; associated land requirements as allowed under the *DCA*.

The resulting development charge for these services would be imposed against all development anywhere in the City.

ii. Area-Specific Charges are Proposed

For some services that the City provides, the need for development-related capital additions to support anticipated development is more localized. For such services, where costs and benefits are more localized, an alternative technique — the area-specific approach — is employed.

The area-specific charges relate mainly to the provision of sanitary sewer collection trunks, roads and related improvements, storm water management works, trunk water mains, projects undertaken by credit agreements, and related studies. Charges for these services are called Area-Specific Development Charges (ASDC) and are consistent with the City's existing development charges for such works.

The area-specific approach for these services reflects the fact that the demand for, and benefit from, the projects provided by the City is much more localized than that for other City services. Area-specific charges result in a more accurate distribution of costs among developers than the city-wide approach. The geographic areas that are included coincide with the specific service area for each project.

The area-specific approach also facilitates front-end financing or credit agreements for the designated services if the City chooses to use these provisions of the *DCA*. As an alternative that is more commonly used in

Markham, the area-specific charges also facilitate the use of developer group agreements.

Map 1 illustrates the area-specific service areas that have been identified in the City. The areas recommended in this study are as follows:

- Area 1B – Yonge Steeles Corridor
- Area 5 – Armadale
- Area 7 – Armadale NE
- Area 9 – PD 1-7
- Area 17 – Rodick/Miller Road Planning District
- Area 23 – Mount Joy
- Area 42A.1 – Markham Centre – South Unionville – Helen Ave
- Area 42B – Markham Centre
- Area 42B-2 – Markham Centre – Clegg
- Area 42B-4 – Markham Centre – Hotel
- Area 42B-6 – Markham Centre – South Hwy 7
- Area 42B-8 – Markham Centre – Sciberras
- Area 42B-9 – Markham Centre – East Precinct
- Area 46 – Cathedral
- Area 47B – York Downs
- Area 49 – 404 North
- Area 50A – Future Urban Area
- Area 50A-1 – Future Urban Area – Employment Block
- Area 50A-2 – Future Urban Area – Robinson Glen
- Area 50A-3 – Future Urban Area – Berczy Glen Block
- Area 50A-4 – Future Urban Area – Angus Glen Block
- Area 50A-5 – Future Urban Area – Robinson Glen – South Block

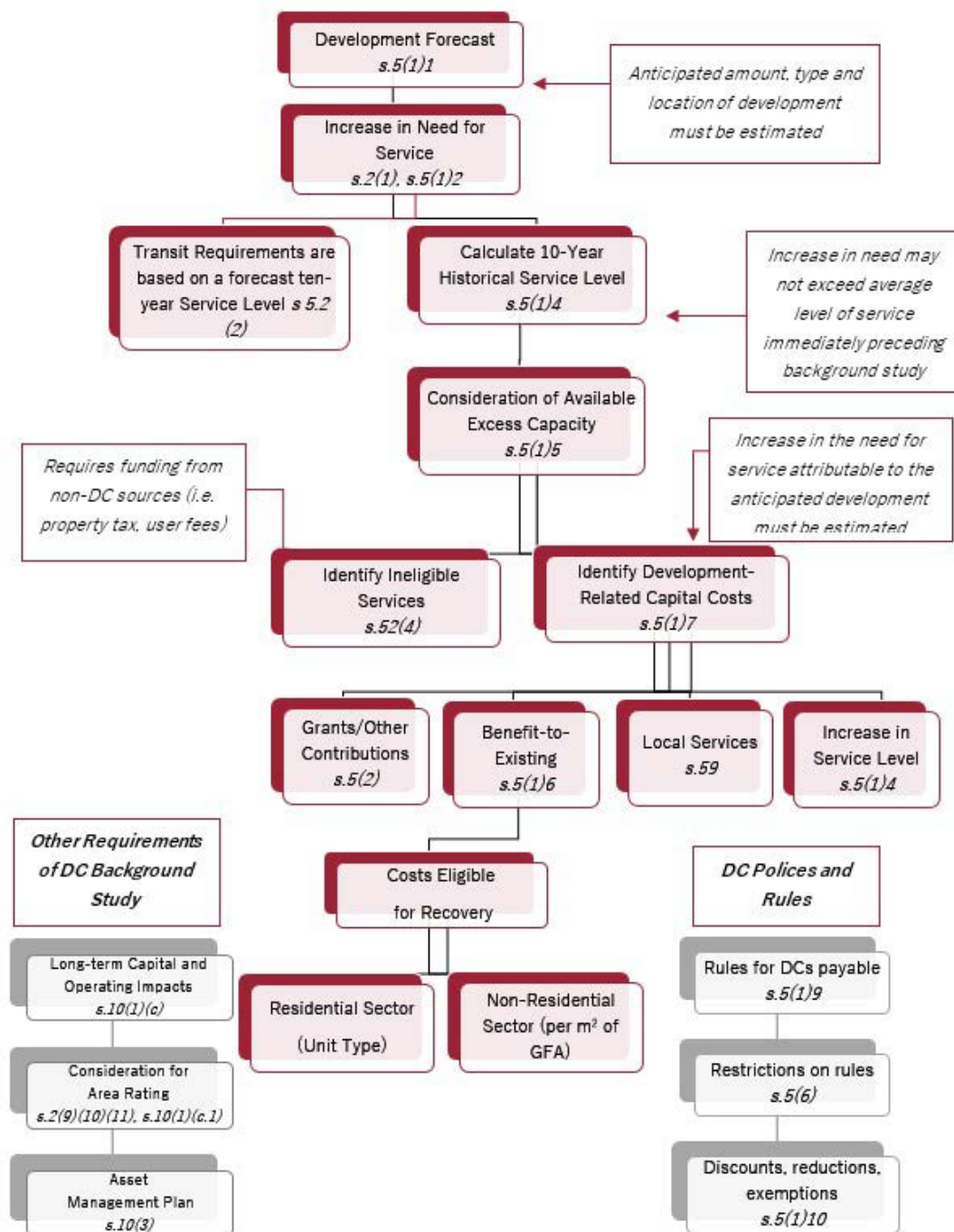
For other areas, development plans are not sufficiently known to be able to provide appropriate servicing plans and development charges. Area-specific development charges for these areas may be prepared by the City in the future as development plans become more advanced. There are some other

areas in which the ASDC work will be completed by the developers in which a letter of agreement would be required by 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 in Figure 1 and discussed further in the following sections.

Figure 1 – Key Steps in Calculating Development Charges



i. Development Forecast

The first step in the methodology requires a development forecast to be prepared for the ten-year study period, 2022 – 2031, for all services. The forecast of the future residential and non-residential development by location used in this study is based on growth anticipated to occur within York Region's 45 per cent intensification scenario used for the purposes of the Region's 2016 Development Charges Background Study. The forecast reflects 2031 targets, 2016 Census data as well as recent development activity.

For the residential portion of the forecast the new dwelling units, net population growth, and population growth in new units is estimated. Net population growth equals the population in new housing units reduced by the decline in the population in the existing base anticipated over the ten-year period and to build-out (due to reducing household sizes as the community ages). The net population change and growth in dwelling units is used in the calculation of the development charges funding envelopes. In calculating the per capita development charge, however, the population growth in new housing units is used.

The non-residential portion of the forecast estimates the gross floor area (GFA) of building space to be developed over the ten-year period, 2022 – 2031. The forecast provides estimates for five categories: retail, mixed-use, institutional, employment land, office and work at home. The forecast of GFA is based on the employment forecast for the City. Factors for floor space per worker by category are used to convert the employment forecast into gross floor areas for the purposes of the development charges study.

ii. Service Categories and Historical Service Levels

The *Development Charges Act* provides that the increase in the need for service attributable to anticipated development:

... must not include an increase that would result in the level of service exceeding the average level of that service provided in the municipality over the 10-year period immediately preceding the preparation of the background study...(s. 5. (1) 4.)

Historical ten-year average service levels thus form the basis for development charges. A detailed review of City's capital service levels for buildings, land, vehicles, and related infrastructure and facilities has been undertaken, and included in this study. This data and resulting ten-year historical service levels are used as a reference for the calculation to determine what 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 2012 – 2021.

In this study, the approach used to calculate service levels and maximum funding envelopes is described as follows.

For those services with only a residential impact (Library, Indoor Recreation, Park Development & Facilities, and Waste Diversion), the service level measure of population has been utilized. For those services which levy both a residential and non-residential charge (General Government, Public Works, and Fire), the service level measure of population + employment has been utilized.

For “hard” services, such as water, wastewater, storm drainage and roads (and road-related works), historical service levels are less applicable and reference is made to the City's engineering standards as well as Provincial health and environmental requirements. The historical service level for roads and related infrastructure has been included as part of Appendix C.

iii. **Development-Related Capital Forecast and Analysis of Net Capital Costs to be Included in the Development Charges**

A development-related capital forecast has been prepared by the City's departments and boards as part of the present study. The forecast identifies development-related projects and their gross and net costs, after allowing for capital grants, subsidies or other contributions as required by the Act (*DCA*, s. 5. (2)). The capital forecast 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 ten-year average service levels or the service levels embodied in future plans of the City. The development-related capital forecast 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, *Ontario Regulation 82/98*, s. 3 states that:

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

For some projects in the development-related capital forecast, 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 City funding for such non-growth shares of projects is also identified as part of the preparation of the development-related capital forecast.

iv. Attribution to Types of Development

For the city-wide development charge, 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. This is done by using different apportionments for different services in accordance with the demands which the two sectors would be expected to place on the various services and the different benefits derived from those services.

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

Additionally, the residential component of the city-wide development charge is applied to different housing types on the basis of average occupancy factors. The non-residential component is applied on the basis of gross building space in square metres.

The Area-Specific Development Charges are apportioned on the basis of net developable land area. This is the same approach as presently used by the City and is judged to equitably apply the charge only against lands that can be developed.

v. Final Adjustment

The final determination of the development charge results from adjustments made to growth-related net capital costs for each service and sector resulting from the application of any unallocated growth-related reserve fund balances that are available to finance the growth-related capital costs in the capital forecast. A cash flow analysis is also undertaken to account for the timing of projects and receipt of development charges. Interest earnings or borrowing costs are therefore accounted for in the calculation as allowed under the *DCA*.

3. Development Forecast

This section provides the basis for the development forecasts used in calculating the development charges and provides a summary of the forecast results. The development forecast in the Development Charges Background Study is based on estimates of growth occurring within approved Official Plan designated urban areas. This forecast is consistent with population and employment targets used in York Region's 2016 Development Charges Background Study which was based on the 45 per cent intensification scenario. The values have been adjusted in the initial years to reflect recent Census releases.

This section portrays a summary of the results of the housing unit and population forecast and of the non-residential employment and space forecast. Details of the forecasts are provided in Appendix A.

A. The Residential Forecast is Based on the 2011 and 2016 Census and Official Plan Targets

The residential growth forecast is based on development that is expected in designated urban areas of Markham's Official Plan. A description of the forecast methodology and more detailed tables of results are provided in Appendix A. Complete data from the 2021 Census is not available for inclusion in this DC Background Study. Table 1 provides a summary of the residential forecast for the 2022 – 2031 planning period.

TABLE 1

**CITY OF MARKHAM
SUMMARY OF RESIDENTIAL
DEVELOPMENT FORECAST**

	2021 Estimate	Soft Services Planning Period 2022 - 2031	
		Growth	Total at 2031
Residential Development Forecast			
Total Occupied Dwellings	114,233	32,673	146,905
<i>Singles & Semis</i>		<i>10,545</i>	
<i>Rows & Other Multiples</i>		<i>8,853</i>	
<i>Apartments</i>		<i>13,274</i>	
Total Population			
Census	354,589	90,071	444,660
<i>Population In New Dwellings</i>		<i>90,381</i>	

The City's population is expected to increase by about 25 per cent over the next ten years reaching approximately 444,660 by 2031.

The population figures referred to above reflect the "net" increase in population. This is the increase after taking into account the expected continuation of the decline in occupancy factors in existing housing units. The population residing in new housing units is expected to increase by 90,070 people over the 10-year planning period.

About 32,670 housing units are forecast to be developed between 2022 and 2031. The composition of the new units is forecast to be 32 per cent singles/semis, 27 per cent rows and other multiples, and 41 per cent apartments.

B. Non-Residential Space Forecast is Based on Forecast Employment Growth

The non-residential space forecast is based on the forecast of employment, since most new non-residential space is required to accommodate new employment growth.

Table 2 provides a summary of the employment forecast for the 2022 – 2031 period. Over the next ten years, employment is projected to grow by 55,590 employees, an increase of 35 per cent from the City's current employment base. The table also shows that about 2.55 million square metres of GFA is forecast to come on-stream over the next decade.

TABLE 2

CITY OF MARKHAM
SUMMARY OF NON-RESIDENTIAL
DEVELOPMENT FORECAST

	2021 Estimate	Soft Services Planning Period 2022 - 2031	
		Growth	Total at 2031
Non-Residential Development Forecast			
Place of Work Employment	160,210	55,590	215,800
<i>Mixed-Use</i>		825	
<i>Retail</i>		15,679	
<i>Institutional</i>		10,210	
<i>Industrial</i>		8,870	
<i>Office</i>		19,990	
<i>Rural</i>		14	
Non-Residential Building Space (sq.m.)		2,550,244	
<i>Mixed-Use</i>		33,009	
<i>Retail</i>		627,176	
<i>Institutional</i>		680,685	
<i>Industrial</i>		709,619	
<i>Office</i>		499,755	
<i>Rural</i>		-	

4. Summary of Historical Capital Service Levels

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

For non-engineering services such as Fire, Library, Indoor Recreation etc. the legislative requirement is met by documenting historical service levels for the preceding ten years, in this case, for the period 2012 to 2021. Service levels have been measured as a ratio of inputs per capita or per capita and employment. With city-wide hard services such as water and stormwater facilities, engineering and legislated environmental and health standards are used in lieu of inputs per capita and employment. A per capita and employment standard has been included for roads related infrastructure.

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 growth-related capital facilities that are to be charged to new growth 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 staff of the City and boards based on historical

records and their experience with costs to acquire or construct similar facilities, equipment and infrastructure as of 2022.

Table 3 summarizes service levels for all soft services included in the development charge calculation. Appendix B provides detailed historical inventory data upon which the calculation of service levels is based.

TABLE 3

CITY OF MARKHAM
SUMMARY OF AVERAGE HISTORIC SERVICE LEVELS 2012 - 2021
FOR SOFT SERVICES

Service	2012 - 2021 Service Level Indicator
1.0 General Government	N/A
2.0 Library	\$585.95 Per Capita
Buildings	\$274.91 Per Capita
Land	\$209.79 Per Capita
Materials	\$72.83 Per Capita
Fixtures, Furniture & Equipment	\$28.41 Per Capita
3.0 Fire Services	\$315.73 Per Population + Employment
Buildings	\$100.44 Per Population + Employment
Land	\$142.66 Per Population + Employment
Furniture & Equipment	\$28.26 Per Population + Employment
Vehicles	\$44.37 Per Population + Employment
4.0 Indoor Recreation	\$3,873.12 Per Capita
Halls And Meeting Rooms	\$332.97 Per Capita
Ice Pads	\$555.75 Per Capita
Indoor Soccer	\$48.27 Per Capita
Indoor Pool	\$356.28 Per Capita
Fitness Centres	\$79.14 Per Capita
Gymnasium	\$121.94 Per Capita
Senior Centres	\$25.65 Per Capita
Common Space - Major Community Ce	\$477.42 Per Capita
Parking Structures	\$32.22 Per Capita
Land	\$1,806.88 Per Capita
Furniture & Equipment	\$36.61 Per Capita
5.0 Park Development & Facilities	\$1,882.77 Per Capita
Outdoor Rec	\$311.15 Per Capita
Sports Fields	\$495.85 Per Capita
Parks	\$909.05 Per Capita
Bridges	\$166.72 Per Capita
6.0 Public Works	\$282.86 Per Population + Employment
Buildings	\$46.12 Per Population + Employment
Land	\$94.88 Per Population + Employment
Furniture & Equipment	\$3.18 Per Population + Employment
Fleet & Equipment	\$138.68 Per Population + Employment
8.0 Waste Diversion	\$73.98 Per Capita
Buildings	\$14.94 Per Capita
Land	\$25.67 Per Capita
Vehicles	\$30.26 Per Capita
9.0 Roads & Related	\$22,688.49 Per Population + Employment
Property ROW	\$17,117.06 Per Population + Employment
Roads	\$3,478.02 Per Population + Employment
Streetlights	\$448.62 Per Population + Employment
Bridges & Culverts	\$576.66 Per Population + Employment
Traffic Signals	\$149.69 Per Population + Employment
Sidewalks	\$918.44 Per Population + Employment

5. The Development-Related Capital Forecast

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

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 II, *Ontario Regulation 82/98*, s. 3 states that:

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

Based on the development forecasts summarized in Section III and detailed in Appendix A, staff of the City departments, in collaboration with the consultants, compiled a development-related capital forecast setting out those projects that are required to service anticipated growth over the planning period. For all city-wide services, the capital plan covers the ten-year period from 2022 to 2031.

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

B. The Development-Related Capital Forecast for City-Wide Soft Services

A summary of the development-related capital forecast for soft services is presented in Table 4. The full details of the soft services capital forecasts are included in Appendix B.

TABLE 4

CITY OF MARKHAM
SUMMARY OF DEVELOPMENT-RELATED CAPITAL FORECAST
FOR SOFT SERVICES 2022 - 2031
(in \$000)

Service	Gross Cost	Grants/ Subsidies	Net Cost	Total Net Capital Program									
				2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1.0 GENERAL GOVERNMENT	\$34,099.7	\$0.0	\$34,099.7	\$14,614.7	\$2,165.0	\$2,165.0	\$2,165.0	\$2,165.0	\$2,165.0	\$2,165.0	\$2,165.0	\$2,165.0	\$2,165.0
1.1 Recovery of Past Commitments	\$12,449.7	\$0.0	\$12,449.7	\$12,449.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
1.2 Development-Related Studies	\$21,650.0	\$0.0	\$21,650.0	\$2,165.0	\$2,165.0	\$2,165.0	\$2,165.0	\$2,165.0	\$2,165.0	\$2,165.0	\$2,165.0	\$2,165.0	\$2,165.0
2.0 LIBRARY	\$87,883.4	\$0.0	\$87,883.4	\$19,301.1	\$0.0	\$0.0	\$0.0	\$29,980.2	\$0.0	\$0.0	\$0.0	\$38,602.1	\$0.0
2.1 Library Buildings	\$55,350.0	\$0.0	\$55,350.0	\$12,300.0	\$0.0	\$0.0	\$0.0	\$18,450.0	\$0.0	\$0.0	\$0.0	\$24,600.0	\$0.0
2.2 Library Land	\$10,285.5	\$0.0	\$10,285.5	\$2,057.1	\$0.0	\$0.0	\$0.0	\$4,114.2	\$0.0	\$0.0	\$0.0	\$4,114.2	\$0.0
2.3 Library Furniture and Equipment	\$7,241.6	\$0.0	\$7,241.6	\$1,609.2	\$0.0	\$0.0	\$0.0	\$2,413.9	\$0.0	\$0.0	\$0.0	\$3,218.5	\$0.0
2.4 Library Collection Materials	\$15,006.3	\$0.0	\$15,006.3	\$3,334.7	\$0.0	\$0.0	\$0.0	\$5,002.1	\$0.0	\$0.0	\$0.0	\$6,669.5	\$0.0
3.0 FIRE SERVICES	\$51,537.0	\$0.0	\$51,537.0	\$12,075.5	\$12,101.1	\$900.0	\$12,075.5	\$0.0	\$0.0	\$0.0	\$0.0	\$14,384.9	\$0.0
3.1 Fire Buildings	\$22,396.0	\$0.0	\$22,396.0	\$5,090.0	\$5,090.0	\$0.0	\$5,090.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7,126.0	\$0.0
3.2 Land for Fire Buildings	\$21,942.4	\$0.0	\$21,942.4	\$5,485.6	\$5,485.6	\$0.0	\$5,485.6	\$0.0	\$0.0	\$0.0	\$0.0	\$5,485.6	\$0.0
3.3 Fire Furniture and Equipment	\$1,907.8	\$0.0	\$1,907.8	\$433.6	\$433.6	\$0.0	\$433.6	\$0.0	\$0.0	\$0.0	\$0.0	\$607.0	\$0.0
3.4 Firefighter Equipment	\$665.2	\$0.0	\$665.2	\$166.3	\$166.3	\$0.0	\$166.3	\$0.0	\$0.0	\$0.0	\$0.0	\$166.3	\$0.0
3.5 Fire Vehicles	\$4,625.7	\$0.0	\$4,625.7	\$900.0	\$925.7	\$900.0	\$900.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,000.0	\$0.0
4.0 INDOOR RECREATION	\$348,936.9	\$0.0	\$348,936.9	\$46,852.4	\$0.0	\$6,765.0	\$6,765.0	\$54,460.0	\$6,765.0	\$0.0	\$57,524.5	\$169,805.0	\$0.0
4.1 Recovery of Past Commitments	\$46,852.4	\$0.0	\$46,852.4	\$46,852.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
4.2 Major Facilities	\$175,326.0	\$0.0	\$175,326.0	\$0.0	\$0.0	\$6,150.0	\$6,150.0	\$24,600.0	\$6,150.0	\$0.0	\$27,726.0	\$104,550.0	\$0.0
4.3 Land for Major Facilities	\$109,600.0	\$0.0	\$109,600.0	\$0.0	\$0.0	\$0.0	\$0.0	\$27,400.0	\$0.0	\$0.0	\$27,400.0	\$54,800.0	\$0.0
4.4 Furniture & Equipment	\$17,158.5	\$0.0	\$17,158.5	\$0.0	\$0.0	\$615.0	\$615.0	\$2,460.0	\$615.0	\$0.0	\$2,398.5	\$10,455.0	\$0.0
5.0 PARK DEVELOPMENT & FACILITIES	\$325,989.9	\$0.0	\$325,989.9	\$28,586.6	\$15,156.2	\$65,935.4	\$34,363.5	\$67,906.2	\$37,124.4	\$42,656.9	\$14,605.8	\$11,924.0	\$7,731.0
5.1 Basketball - Full Court	\$1,297.6	\$0.0	\$1,297.6	\$81.1	\$0.0	\$486.6	\$0.0	\$324.4	\$243.3	\$0.0	\$162.2	\$0.0	\$0.0
5.2 Basketball - Half Court	\$524.0	\$0.0	\$524.0	\$43.7	\$0.0	\$131.0	\$131.0	\$43.7	\$131.0	\$0.0	\$43.7	\$0.0	\$0.0
5.3 Baseball Diamond - Major	\$748.6	\$0.0	\$748.6	\$0.0	\$0.0	\$748.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.4 Baseball Diamond - Major Lit	\$2,495.5	\$0.0	\$2,495.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,495.5	\$0.0	\$0.0	\$0.0
5.5 Cricket Pitch	\$827.6	\$0.0	\$827.6	\$827.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.6 Exercise Station	\$2,807.4	\$0.0	\$2,807.4	\$187.2	\$280.7	\$561.5	\$467.9	\$561.5	\$374.3	\$93.6	\$93.6	\$0.0	\$187.2
5.7 Gazebos & Shelters - Major	\$13,725.0	\$0.0	\$13,725.0	\$1,247.7	\$311.9	\$3,743.2	\$1,559.7	\$2,183.5	\$2,183.5	\$1,871.6	\$311.9	\$311.9	\$0.0
5.8 Gazebos & Shelters - Minor	\$8,229.9	\$0.0	\$8,229.9	\$896.3	\$407.4	\$1,874.1	\$733.4	\$1,548.2	\$1,140.8	\$1,140.8	\$244.5	\$163.0	\$81.5
5.9 Hard Surface - Plaza	\$1,185.2	\$0.0	\$1,185.2	\$235.5	\$22.4	\$79.9	\$14.9	\$515.4	\$77.1	\$156.5	\$14.9	\$46.4	\$22.4
5.10 Multipurpose Court	\$610.7	\$0.0	\$610.7	\$87.2	\$87.2	\$261.7	\$0.0	\$87.2	\$87.2	\$0.0	\$0.0	\$0.0	\$0.0
5.11 Parking Lot - Lighting	\$494.1	\$0.0	\$494.1	\$89.8	\$0.0	\$67.4	\$67.4	\$269.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.12 Parking Lot - Major	\$6,250.0	\$0.0	\$6,250.0	\$625.0	\$0.0	\$1,250.0	\$625.0	\$2,500.0	\$0.0	\$1,250.0	\$0.0	\$0.0	\$0.0
5.13 Parking Lot - Minor	\$1,162.5	\$0.0	\$1,162.5	\$262.5	\$525.0	\$187.5	\$187.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

TABLE 4

CITY OF MARKHAM
SUMMARY OF DEVELOPMENT-RELATED CAPITAL FORECAST
FOR SOFT SERVICES 2022 - 2031
(in \$000)

Service	Gross Cost	Grants/ Subsidies	Net Cost	Total Net Capital Program									
				2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
5.0 PARK DEVELOPMENT & FACILITIES													
5.14 Pedestrian Lighting	\$551.5	\$0.0	\$551.5	\$0.0	\$0.0	\$348.7	\$81.1	\$0.0	\$121.7	\$0.0	\$0.0	\$0.0	\$0.0
5.15 Playground - Junior	\$3,181.7	\$0.0	\$3,181.7	\$374.3	\$187.2	\$561.5	\$187.2	\$561.5	\$561.5	\$561.5	\$0.0	\$0.0	\$187.2
5.16 Playground - Senior	\$3,743.2	\$0.0	\$3,743.2	\$499.1	\$249.5	\$499.1	\$249.5	\$748.6	\$748.6	\$748.6	\$0.0	\$0.0	\$0.0
5.17 Playground - Junior & Senior	\$28,786.9	\$0.0	\$28,786.9	\$3,048.0	\$1,354.7	\$7,112.0	\$3,725.4	\$4,741.4	\$3,386.7	\$2,370.7	\$1,354.7	\$1,016.0	\$677.3
5.18 Seatwall & Feature Wall	\$579.5	\$0.0	\$579.5	\$97.6	\$18.3	\$97.6	\$24.4	\$122.0	\$67.1	\$134.2	\$12.2	\$6.1	\$0.0
5.19 Skateboard Park - Major	\$1,123.0	\$0.0	\$1,123.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,123.0	\$0.0	\$0.0	\$0.0
5.20 Skateboard Park - Minor	\$1,996.4	\$0.0	\$1,996.4	\$0.0	\$0.0	\$748.6	\$249.5	\$0.0	\$249.5	\$249.5	\$249.5	\$249.5	\$0.0
5.21 Soccer Field - Major	\$2,368.1	\$0.0	\$2,368.1	\$0.0	\$0.0	\$1,184.1	\$394.7	\$0.0	\$789.4	\$0.0	\$0.0	\$0.0	\$0.0
5.22 Soccer Field - Major Lit	\$10,480.9	\$0.0	\$10,480.9	\$0.0	\$0.0	\$1,497.3	\$0.0	\$5,989.1	\$0.0	\$2,994.5	\$0.0	\$0.0	\$0.0
5.23 Soccer Field - Mini Pitch	\$249.5	\$0.0	\$249.5	\$0.0	\$0.0	\$249.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.24 Soccer Field - Minor	\$203.7	\$0.0	\$203.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$203.7	\$0.0	\$0.0	\$0.0	\$0.0
5.25 Splash Pad - Major	\$4,491.8	\$0.0	\$4,491.8	\$998.2	\$0.0	\$1,497.3	\$499.1	\$499.1	\$499.1	\$499.1	\$0.0	\$0.0	\$0.0
5.26 Splash Pad - Minor	\$1,487.3	\$0.0	\$1,487.3	\$0.0	\$0.0	\$185.9	\$557.7	\$185.9	\$371.8	\$0.0	\$0.0	\$185.9	\$0.0
5.27 Tennis Court - Double (Unlit)	\$2,433.1	\$0.0	\$2,433.1	\$93.6	\$0.0	\$935.8	\$280.7	\$280.7	\$467.9	\$93.6	\$93.6	\$187.2	\$0.0
5.28 Trellis - Major	\$748.6	\$0.0	\$748.6	\$0.0	\$0.0	\$249.5	\$0.0	\$249.5	\$249.5	\$0.0	\$0.0	\$0.0	\$0.0
5.29 Trellis - Minor	\$1,190.4	\$0.0	\$1,190.4	\$0.0	\$0.0	\$541.1	\$0.0	\$0.0	\$324.7	\$0.0	\$108.2	\$108.2	\$108.2
5.30 Walkway & Paths - Asphalt	\$566.1	\$0.0	\$566.1	\$8.7	\$60.9	\$144.2	\$60.9	\$269.7	\$21.8	\$0.0	\$0.0	\$0.0	\$0.0
5.31 Walkway & Paths - Concrete	\$7,077.9	\$0.0	\$7,077.9	\$686.3	\$310.3	\$1,714.8	\$665.1	\$791.3	\$1,072.8	\$1,319.4	\$243.8	\$194.4	\$80.0
5.32 Walkway & Paths - Limestone	\$6.2	\$0.0	\$6.2	\$0.0	\$0.0	\$6.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.33 Washroom Facilities	\$6,953.5	\$0.0	\$6,953.5	\$731.9	\$0.0	\$3,293.8	\$731.9	\$731.9	\$0.0	\$1,463.9	\$0.0	\$0.0	\$0.0
5.34 Park Development - Community/City-Wide	\$207,412.6	\$0.0	\$207,412.6	\$17,465.3	\$11,340.7	\$35,676.9	\$22,869.4	\$44,702.0	\$23,751.5	\$24,091.0	\$11,673.0	\$9,455.4	\$6,387.3
6.0 PUBLIC WORKS	\$107,794.3	\$0.0	\$107,794.3	\$2,728.2	\$61,475.3	\$3,760.0	\$35,140.7	\$786.2	\$817.9	\$1,294.8	\$809.3	\$982.0	\$0.0
6.1 Recovery of Past Commitments	\$2,347.9	\$0.0	\$2,347.9	\$2,347.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
6.2 Public Works Buildings	\$34,095.3	\$0.0	\$34,095.3	\$0.0	\$0.0	\$0.0	\$34,095.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
6.3 Land for Public Works	\$63,660.4	\$0.0	\$63,660.4	\$0.0	\$60,904.6	\$2,755.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
6.4 Furniture & Equipment	\$285.6	\$0.0	\$285.6	\$0.0	\$0.0	\$0.0	\$285.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
6.5 Fleet	\$7,405.1	\$0.0	\$7,405.1	\$380.3	\$570.6	\$1,004.3	\$759.8	\$786.2	\$817.9	\$1,294.8	\$809.3	\$982.0	\$0.0
7.0 WASTE DIVERSION	\$9,254.0	\$0.0	\$9,254.0	\$2,057.1	\$1,040.4	\$0.0	\$3,606.1	\$1,001.4	\$0.0	\$0.0	\$0.0	\$1,549.0	\$0.0
7.1 Waste Buildings	\$1,591.8	\$0.0	\$1,591.8	\$0.0	\$795.9	\$0.0	\$0.0	\$795.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
7.2 Land for Waste Buildings	\$4,114.2	\$0.0	\$4,114.2	\$2,057.1	\$0.0	\$0.0	\$2,057.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
7.3 Furniture & Equipment	\$450.0	\$0.0	\$450.0	\$0.0	\$244.5	\$0.0	\$0.0	\$205.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
7.4 Fleet	\$3,098.0	\$0.0	\$3,098.0	\$0.0	\$0.0	\$0.0	\$1,549.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,549.0	\$0.0
TOTAL - 10 YEAR SOFT SERVICES	\$965,495.3	\$0.0	\$965,495.3	\$126,215.6	\$91,938.0	\$79,525.4	\$94,115.7	\$156,298.9	\$46,872.4	\$46,116.6	\$75,104.5	\$239,412.0	\$9,896.0

The development-related ten-year capital forecast for soft services estimates a total gross cost of \$965.50 million. No senior government grants are expected to be received over the ten-year period and, as such, \$965.50 million is brought forward as the net cost to the City.

This capital forecast incorporates those projects identified to be related to development anticipated in the next ten years. It is not implied that all of these costs are to be recovered from new development by way of development charges (see the following Section VI for the method and determination of net capital costs attributable to growth). Portions of this capital forecast may relate to providing servicing for growth which has occurred prior to 2022 (for which development charge reserve fund balances exist), or for growth anticipated to occur beyond the 2031 planning horizon.

Of the \$965.50 million, 36 per cent (\$348.94 million) is related to the provision of Indoor Recreation. The capital program includes the recovery of a negative reserve fund balance (\$46.85 million), the construction and/or expansion of eight major facilities (\$175.33 million), as well as the accompanying land (\$109.60 million), and furniture & equipment (17.16 million).

The next largest growth-related capital component is for Park Development & Related facilities at \$207.41 million (34 per cent). A variety of playing fields, tennis courts, indoor pools, playground equipment, basketball and other play courts are included in the capital program. This service category also provides for the development of various parks across the City.

An extensive growth-related capital servicing plan is forecast for Public Works at \$107.79 million (11 per cent). The development-related capital program includes the recovery of a negative reserve fund balance (\$2.35 million), the construction of three new buildings (\$34.10 million), the acquisition of land for a works yard expansion and land development (\$63.66 million), as well as furniture & equipment (\$0.29 million), and the acquisition of 53 fleet (\$7.41 million).

The net growth-related capital forecast for the Library service totals about \$87.88 million (9 per cent of total capital program for soft services). The program includes the addition of five new library facilities (\$55.35 million), as well as the associated land (\$10.29 million), furniture & equipment (\$7.24 million), and collection material (\$15.01 million).

The \$51.34 million capital program related to Fire Services (5 per cent) provides for four new fire stations (\$22.40 million), the associated land (\$21.94 million), furniture & equipment (\$1.91 million), equipment for 84 new firefighters (\$0.67 million), as well as six additional fleet (\$4.63 million).

General Government (growth studies) is included at \$34.10 million (4 per cent), and includes the recovery of a negative reserve fund balance (\$12.45 million), as well a provision for various growth-related studies (\$21.65 million).

Finally, Waste Diversion adds an additional \$9.25 million to the ten-year capital forecast. The Waste Diversion capital program includes a provision for two new depots (\$1.59 million), the associated land (\$4.11 million), furniture & equipment (\$0.45 million), as well as ten additional fleet (\$3.10 million).

C. The Development-Related Capital Forecast for City-Wide Hard Services

A summary of the development-related capital forecast for the City-wide hard services is presented in Table 5. The table provides a summary breakdown of the City-wide hard services. Further details on the capital plans for each individual service category are available in Appendix C.

The gross cost of the capital program totals \$1.83 billion. A local service or “internal” component is identified for some of the projects, reflecting the cost that a development would have to pay to provide for required local

servicing for a particular subdivision. The City will continue to require these contributions through the normal subdivision process, but excluding them from the development charges calculation ensures that only the oversized portion of costs is shared by other developments. The total recoveries anticipated from local costs are estimated at \$379.41 million. A further \$33.18 million has been identified as a non-growth or benefit to existing shares and will be recovered from other municipal funding sources. The remaining capital cost of \$1.41 billion is deemed development-related and recoverable from development charges.

Of the remaining share, \$18.50 million will be funded through portions of the projects that are allocated to the area-specific development charges proposed in this study. A further \$129.41 million is considered other development-related and will be considered for recovery under subsequent development charge studies. \$57.03 million has been identified as revenue from the collection of prior development charges related to projects included in the program.

The remaining \$1.21 forms the in-period City-wide development charge recoverable portion of the capital program for City-wide hard services. Of this amount, 31.7 per cent of the capital program relates to the provision of structures valued at \$382.76 million; roads, valued at \$274.96 million, make up 22.8 cent. Properties acquisition (\$245.04 million) accounts for approximately 20.3 per cent of the capital program.

TABLE 5

CITY OF MARKHAM
CITY-WIDE HARD SERVICES DEVELOPMENT-RELATED PROJECTS SUMMARY
2022 - 2031

<i>Service</i>	Total Gross Cost	Non-Development Charge Recoverable Costs		Area Specific & Other Development Charges Recovery	Prior Growth	Other Development-Related	City-Wide Development Charge Recoverable
		Local Costs	Non-Growth (Benefit to Existing)				
ILLUMINATION	\$ 44,640,000	\$ 217,114	\$ 3,721,999	\$ -	\$ -	\$ 1,776,168	\$ 38,924,718
INTERSECTION	\$ 43,111,194	\$ 403,999	\$ 4,272,330	\$ -	\$ -	\$ -	\$ 38,434,865
ROADS	\$ 604,538,439	\$ 243,553,583	\$ -	\$ -	\$ 11,125,155	\$ 74,895,469	\$ 274,964,232
PROPERTIES ACQUISITION	\$ 266,083,580	\$ 8,347,025	\$ -	\$ -	\$ 12,279,353	\$ 420,857	\$ 245,036,345
SIDEWALKS	\$ 72,400,047	\$ 244,164	\$ 6,036,536	\$ -	\$ -	\$ 6,036,536	\$ 60,082,811
STORM WATER MANAGEMENT	\$ 50,474,837	\$ -	\$ 7,311,950	\$ 16,039,216	\$ 3,801,032	\$ -	\$ 23,322,638
WATERMAIN	\$ 83,090,298	\$ 687,748	\$ 651,348	\$ 364,813	\$ 9,861,531	\$ -	\$ 71,524,858
STUDIES	\$ 18,003,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,003,000
SPECIAL PROJECTS	\$ 90,505,053	\$ 19,218,118	\$ 11,186,286	\$ -	\$ -	\$ 7,080,786	\$ 53,019,863
STRUCTURES	\$ 542,259,752	\$ 106,739,947	\$ -	\$ -	\$ 16,062,886	\$ 36,697,757	\$ 382,759,161
SANITARY SEWER	\$ 5,000,000	\$ -	\$ -	\$ -	\$ -	\$ 2,500,000	\$ 2,500,000
CREDIT AGREEMENT PROJECTS	\$ 5,989,298	\$ -	\$ -	\$ 2,093,566	\$ 3,895,732	\$ -	\$ -
TOTAL	\$ 1,826,095,497	\$ 379,411,698	\$ 33,180,448	\$ 18,497,595	\$ 57,025,690	\$ 129,407,574	\$ 1,208,572,492

The balance of the gross capital cost capital program is for watermain projects (\$71.52 million), special project (largely streetscaping) (\$53.02 million), illumination (\$38.92 million), intersections (\$38.43 million), studies (\$18.00 million), and sanitary sewer (\$2.50 million).

D. The Development-Related Capital Forecast for Area-Specific Services

Table 6 provides a summary of the development-related capital program for area-specific services (the projects included in the capital program for each area are identified in Appendix D).

Many of the area-specific projects provide benefits to multiple areas and City-wide hard services, and the recovery of the cost of these projects are shared amongst many areas. In addition, an internal component is identified for some of the projects, reflecting the cost that a development would have to pay to provide for required local servicing for a particular subdivision. The City will continue to require these contributions through the normal subdivision process, but excluding them from the development charges calculations ensures that only the oversized portion of costs is shared by other developments. A further share of some projects is identified as a non-growth or benefit to existing share to be funded from other municipal revenue sources. The costs shown in the column entitled, “growth-related costs” are net of the local costs and non-growth shares.

In total, \$136.53 million is identified as area-specific growth-related costs. However, not all of these costs are recovered through ASDC by-laws. Any available DC reserve fund balances have been applied to the growth-related costs. In addition, if there are any credits in agreement or any projects funded from reserves, these cost have been appropriately accounted for. After these adjustments, the ASDC recoverable is \$121.21 million, and this amount forms the basis for the area-specific development charges calculations.

TABLE 6

CITY OF MARKHAM
SUMMARY OF AREA-SPECIFIC DEVELOPMENT CHARGES
FOR AREA-SPECIFIC SERVICES 2022-2031

Area Name	Area	Growth-Related Costs	Adjustments			Total ASDC Recoverable
			Reserve Fund Balance	Credits in Agreement	Projects Funded From Reserve	
Yonge Steeles Corridor	1B	\$ 12,995,613	\$ 582,656	\$ -	\$ -	\$12,412,957.20
Armadales	5	\$ 1,213,831	\$ 675,358	\$ 293,988	\$ -	\$244,484.80
Armadales NE	7	\$ 521,486	\$ 121,641	\$ -	\$ -	\$399,844.81
PD 1-7	9	\$ 7,565,306	\$ 1,270,491	\$ 3,419,592	\$ -	\$2,875,222.11
Rodick/Miller Road Planning District	17	\$ 16,541,096	\$ (1,127,770)	\$ -	\$ -	\$17,668,865.79
Mount Joy	23	\$ 2,705,336	\$ 58,018	\$ -	\$ -	\$2,647,318.21
Markham Centre - South Unionville - Helen Ave	42A.1	\$ 3,137,837	\$ 1,347	\$ 2,063,068	\$ 691,311	\$382,111.42
Markham Centre	42B	\$ 881,933	\$ 74,313	\$ -	\$ -	\$807,620.00
Markham Centre - Clegg	42B.2	\$ 504,473	\$ (199,392)	\$ -	\$ -	\$703,865.17
Markham Centre - Hotel	42B.4	\$ 424,385	\$ (23,525)	\$ -	\$ -	\$447,909.93
Markham Centre - South Hwy 7	42B.6	\$ 10,582,519	\$ 814,222	\$ 3,795,207	\$ -	\$5,973,090.18
Markham Centre - Sciberras	42B.8	\$ 6,400,392	\$ (750,458)	\$ -	\$ -	\$7,150,850.27
Markham Centre - East Precinct	42B.9	\$ 3,125,352	\$ 1,663,489	\$ -	\$ -	\$1,461,862.97
Cathedral	46	\$ 1,041,155	\$ 198,589	\$ 290,350	\$ -	\$552,215.78
York Downs	47B	\$ 502,681	\$ 379,541	\$ -	\$ -	\$123,140.04
404 North	49	\$ 2,034,211	\$ 1,022,798	\$ -	\$ -	\$1,011,412.51
Future Urban Area	50A	\$ 7,587,159	\$ -	\$ -	\$ -	\$7,587,159.00
Future Urban Area - Employment Block	50A-1	\$ 25,533,491	\$ -	\$ -	\$ -	\$25,533,491.00
Future Urban Area - Robinson Glen	50A-2	\$ 2,683,382	\$ -	\$ -	\$ -	\$2,683,381.85
Future Urban Area - Berczy Glen Block	50A-3	\$ 19,150,464	\$ -	\$ -	\$ -	\$19,150,464.22
Future Urban Area - Angus Glen Block	50A-4	\$ 11,392,962	\$ -	\$ -	\$ -	\$11,392,962.16
Future Urban Area - Robinson Glen South Block	50A-5	\$ 534,985	\$ -	\$ -	\$ -	\$534,985
Total		\$137,060,049	\$4,761,318	\$9,862,205	\$691,311	\$121,745,214

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

This section summarizes the calculation of development charges for each service category and the resulting total development charge by type of development. For City-wide services, the calculation of the “unadjusted” per capita (residential) and per square metre and per square metre (non-residential) charges is reviewed. Adjustments to these amounts resulting from a cash flow analysis that takes interest earnings and borrowing costs into account are also discussed.

For the both City-wide soft and City-wide hard services, the charges are calculated and levied as follows. For residential development, the adjusted total per capita amount is then converted to a variable charge by housing unit type using various unit occupancy factors. For non-residential development, the calculated development charges rates are based on a gross floor area (GFA) of building space. Historically, the City has levied the CWS non-residential development charges on a differentiated basis and the CWH non-residential charges on a land area (per net developable hectare) basis. Through discussions with staff and Council it was determined that both the CWS and CWH non-residential charges should be levied on a GFA basis. However, for area-specific charges, the rates are proposed to continue to be calculated and levied on a per net hectare basis.

It is noted that the calculation of the city-wide development charges does not include any provision for exemptions required under the *DCA* such as the exemption for enlargements of up to 50 per cent on existing industrial buildings. Such legislated exemptions, or other exemptions which Council may choose to provide, will result in loss of development charge revenue for the affected types of development. Any such revenue loss may not be made

up, however, by offsetting increases in other portions of the calculated charge.

A. Development Charge Calculation for City-Wide and Area-Specific Services

A summary of the “unadjusted” residential and non-residential development charges for city-wide services is presented in Tables 7 and 8. Further details of the calculation for each individual City service category are available in Appendices B and C.

i. City-Wide Soft (CWS) Services

A summary of the “unadjusted” residential and non-residential development charges for the city-wide soft services is presented in Table 7.

The capital forecast for the soft services incorporates those projects identified to be related to growth anticipated in the next ten years. However, not all of the capital costs are to be recovered from new development by way of development charges. Table 7 shows that \$39.28 million has been identified as available DC reserves and represents the revenues collected from previous development charges. A further \$245.41 million has been deemed other development-related and represents the share of the capital program exceeds the ten-year historic service level maximum funding cap and maybe be consider for funding from other sources or, to the extend the works benefit growth occurring beyond the 2031 planning horizon, may therefore be recovered under future development charge studies. These amounts have been netted out of the 2022 - 2031 chargeable capital costs.

The total DC eligible cost for recovery over the 2022 -2031 planning period is \$680.80 million. This amount is allocated between the residential and non-residential sectors including retail, industrial/office/institutional (I.O.I) and mixed-use development, to derive unadjusted development charges. Library,

Indoor Recreation, Park Development and Facilities and Waste Diversion services are all deemed to benefit residential development only, while the General Government, Fire, and Public Works are allocated between both sectors based on shares of population and employment growth (see Appendix B for details). Approximately \$637.75 million of the soft services net discounted DC capital program is deemed to benefit residential development. When this amount is divided by the ten year population growth in new units (90,380) an unadjusted charge of \$7,056.29 per capita is derived.

The retail share of the general services capital program totals \$14.11 million and when this amount is divided by the ten-year forecast of new retail non-residential space growth (627,180 square metres), an unadjusted charge of \$22.48 per square metre is derived. For the mixed-use sector, the total share of the capital program amounts to \$0.24 million and when this amount is divided by the ten-year new mixed-use space growth (33,010 square metres), an unadjusted charge of \$7.27 per square metre is derived. Finally, the total industrial/office/institutional share amounts to \$22.74 million, and when divided by the anticipated growth in I.O.I. space (1,890,060 square metres) the unadjusted charge of \$12.03 square metres is derived.

TABLE 7

CITY OF MARKHAM
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
10-YEAR CAPITAL PROGRAM FOR SOFT SERVICES

10 Year Growth in Population in New Units	90,381
10 Year Growth in New Building Space (Sq.M)	2,550,244
Retail Space (sq.m)	627,176
Mixed-use (sq.m.)	33,009
Industrial/Office/Institutional (sq.m.)	1,890,059

Service	Development-Related Capital Program (2022 - 2031)						Residential Share		Non-Residential Share					
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Prior Growth Shares (\$000)	Available DC Reserves (\$000)	Post-2031 Benefit (\$000)	Total DC Eligible Costs for Recovery (\$000)								
	%	(\$000)	%	(\$000)	%	(\$000)								
1.0 GENERAL GOVERNMENT	\$34,099.7	\$0.0	\$0.0	\$0.0	\$0.0	\$34,099.7	65%	\$21,997.7	11%	\$3,759.19	0.3%	\$62.18	26.8%	\$5,890.11
Unadjusted Development Charge Per Capita								\$243.39						
Unadjusted Retail Development Charge Per Sq.M										\$5.99				
Unadjusted Mixed-Use Development Charge Per Sq.M												\$1.88		
Unadjusted I.O.I Development Charge Per Sq.M														\$3.12
2.0 LIBRARY	\$87,883.4	\$0.0	\$0.0	\$5,343.2	\$29,763.3	\$52,776.9	100%	\$52,776.9	0%	\$0.00	0%	\$0.00	0%	\$0.00
Unadjusted Development Charge Per Capita								\$583.94						
Unadjusted Retail Development Charge Per Sq.M										\$0.00				
Unadjusted Mixed-Use Development Charge Per Sq.M												\$0.00		
Unadjusted I.O.I Development Charge Per Sq.M														\$0.00
3.0 FIRE SERVICES	\$51,537.0	\$0.0	\$0.0	\$4,882.0	\$665.7	\$45,989.4	65%	\$29,667.8	11%	\$5,069.93	0.3%	\$83.86	26.8%	\$7,943.84
Unadjusted Development Charge Per Capita								\$328.25						
Unadjusted Retail Development Charge Per Sq.M										\$8.08				
Unadjusted Mixed-Use Development Charge Per Sq.M												\$2.54		
Unadjusted I.O.I Development Charge Per Sq.M														\$4.20
4.0 INDOOR RECREATION	\$348,936.9	\$0.0	\$0.0	\$0.0	\$18,450.0	\$330,486.9	100%	\$330,486.9	0%	\$0.00	0%	\$0.00	0%	\$0.00
Unadjusted Development Charge Per Capita								\$3,656.60						
Unadjusted Retail Development Charge Per Sq.M										\$0.00				
Unadjusted Mixed-Use Development Charge Per Sq.M												\$0.00		
Unadjusted I.O.I Development Charge Per Sq.M														\$0.00

TABLE 7

CITY OF MARKHAM
SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
10-YEAR CAPITAL PROGRAM FOR SOFT SERVICES

10 Year Growth in Population in New Units	90,381
10 Year Growth in New Building Space (Sq.M)	2,550,244
Retail Space (sq.m)	627,176
Mixed-use (sq.m.)	33,009
Industrial/Office/Institutional (sq.m.)	1,890,059

Service	Development-Related Capital Program (2022 - 2031)						Residential Share		Non-Residential Share					
	Net Municipal Cost	Replacement & Benefit to Existing	Prior Growth Shares	Available DC Reserves	Post-2031 Benefit	Total DC Eligible Costs for Recovery			Retail	Mixed-Use		I.O.I		
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	%	(\$000)	%	(\$000)	%	(\$000)	%	(\$000)
5.0 PARK DEVELOPMENT & FACILITIES	\$325,989.9	\$0.0	\$0.0	\$28,533.8	\$127,873.8	\$169,582.3	100%	\$169,582.3	0%	\$0.00	0%	\$0.00	0%	\$0.00
Unadjusted Development Charge Per Capita								\$1,876.30						
Unadjusted Retail Development Charge Per Sq.M										\$0.00				
Unadjusted Mixed-Use Development Charge Per Sq.M												\$0.00		\$0.00
Unadjusted I.O.I Development Charge Per Sq.M														\$0.00
6.0 PUBLIC WORKS	\$107,794.3	\$0.0	\$0.0	\$0.0	\$66,592.8	\$41,201.5	65%	\$26,579.1	11%	\$4,542.11	0.3%	\$75.13	26.8%	\$7,116.83
Unadjusted Development Charge Per Capita								\$294.08						
Unadjusted Retail Development Charge Per Sq.M										\$7.24				
Unadjusted Mixed-Use Development Charge Per Sq.M												\$2.28		\$3.77
Unadjusted I.O.I Development Charge Per Sq.M														\$0.94
7.0 WASTE DIVERSION	\$9,254.0	\$0.0	\$0.0	\$523.8	\$2,066.8	\$6,663.4	100%	\$6,663.4	11%	\$734.58	0.3%	\$18.84	26.8%	\$1,784.20
Unadjusted Development Charge Per Capita								\$73.73						
Unadjusted Retail Development Charge Per Sq.M										\$1.17				
Unadjusted Mixed-Use Development Charge Per Sq.M												\$0.57		\$0.94
Unadjusted I.O.I Development Charge Per Sq.M														\$0.94
TOTAL 10-YEAR SOFT SERVICES	\$965,495.3	\$0.0	\$0.0	\$39,282.8	\$245,412.3	\$680,800.1		\$637,754.2		\$14,105.8		\$240.0		\$22,735.0
Unadjusted Development Charge Per Capita								\$7,056.29						
Unadjusted Retail Development Charge Per Sq.M										\$22.48				
Unadjusted Mixed-Use Development Charge Per Sq.M												\$7.27		
Unadjusted I.O.I Development Charge Per Sq.M														\$12.03

ii. City-Wide Hard (CWH) Services

City-wide hard services include illumination, intersections, roads, properties acquisition, sidewalks, storm water management, structures, studies, water, special projects (mainly streetscaping), sanitary sewer, and credit agreement projects. The total gross capital cost estimated for City-wide hard services is \$1.83 billion (see Table 8). This infrastructure will be used to service the development of the lands within the City's currently designated urban areas to 2031.

Of the \$1.83 billion gross cost, a local service, or "internal" component, is identified for some of the projects, reflecting the cost that a development would have to pay to provide for required local servicing for a particular subdivision. The City will continue to require these contributions through the normal subdivision process, but excluding them from the development charges calculations ensures that only the oversized portion of costs is shared by other developments. The total recoveries anticipated from these sources are estimated at \$379.41 million. A further \$33.18 million has been identified as a non-growth or benefit to existing share; these costs will be recovered from other municipal funding sources. Another share of the city-wide hard program will be funded through portions of the projects that are allocated to the area-specific development charges proposed in this study and those shares amount to \$18.50 million. Finally, \$57.03 million has been identified as prior growth shares and \$129.41 million relates to costs that have been removed from this development charge calculation and maybe considered for funding from other mechanism and , to the extent the works benefit growth beyond 2021, will be considered for recovery under subsequent development charge study updates.

The total 2022 -2031 DC recoverable costs for the City-wide hard capital program amount to \$1.21 billion. This amount is allocated to the residential and non-residential sectors based on each sector's share of forecast future population in new units and employment growth to 2031. The total costs eligible for development charge recovery over the 2022 -2031 planning

period is allocated 61.9 per cent, or \$746.67 million, to the residential sector, 11.0 per cent, or \$132.94 million, to the retail sector, 26.8 per cent, or \$322.90 million, to the other industrial/office/institutional sector, and 0.3 per cent, or \$3.41 million, to the mixed-use sector. These allocations are based on shares of growth in population in new units and employment anticipated over the 2022 – 2031 planning horizon. The resulting unadjusted per capita residential charge is \$8,261.38 before cash flow adjustments. The non-residential retail unadjusted charge is \$211.97 per square metre, the industrial/office/institutional is \$170.84 per square metre and the mixed used charge is \$103.27 per square metre.

iii. Area-Specific Services

The proposed area-specific development charges are summarized in Table 9. The table shows the development-related capital cost for area-specific services of \$136.53 million. In total, there is an available reserve fund balance of \$4.76 million for all area-specific charges which have been applied to the area-specific capital programs. Agreement credits in the sum of \$9.86 million have been removed from the total eligible costs included for recovery in the ASDC calculation. In addition, a further \$0.69 million in projects already funded from reserves have also been removed. Therefore, on a collective basis, \$121.21 million is included in the development charges calculation for area-specific services.

The City's intention is to continue to calculate and collect the area-specific development charges on the basis of net developable land area. As shown in Table 9, the calculated area-specific charges range from a low of about \$7,997 per net hectare in Future Urban Area - Robinson Glen to a high of about \$1.49 million per net hectare for Markham Centre – Sciberras. Nevertheless, as shown, there are significantly different servicing costs associated with the various areas as well as the secured financing already approved by the City for some of the areas. Together, these factors contribute to the wide range of area-specific development charges.

TABLE 8

CITY OF MARKHAM
CITY-WIDE HARD SERVICES DEVELOPMENT-RELATED PROJECTS SUMMARY
2022 - 2031

Service	Total Gross Cost	Non-Development Charge Recoverable Costs		Area Specific & Other Development Charges Recovery	Prior Growth	Other Development-Related	City-Wide Development Charge Recoverable	Residential Share of CWH Development Charge Recoverable		Non-Residential Retail		Non-Residential I.O.I.		Non-Residential Mixed-Use	
		Local Costs	Non-Growth (Benefit to Existing)							Share of CWH Development Charge Recoverable		Share of CWH Development Charge Recoverable		Share of CWH Development Charge Recoverable	
ILLUMINATION	\$ 44,640,000	\$ 217,114	\$ 3,721,999	\$ -	\$ -	\$ 1,776,168	\$ 38,924,718	61.9%	\$ 24,101,096	11.0%	\$ 4,291,112	26.8%	\$ 10,422,482	0.3%	\$ 110,029
INTERSECTION	\$ 43,111,194	\$ 403,999	\$ 4,272,330	\$ -	\$ -	\$ -	\$ 38,434,865	61.9%	\$ 23,797,792	11.0%	\$ 4,237,110	26.8%	\$ 10,291,319	0.3%	\$ 108,644
ROADS	\$ 604,538,439	\$ 243,553,583	\$ -	\$ -	\$ 11,125,155	\$ 74,895,469	\$ 274,964,232	61.9%	\$ 170,250,156	11.0%	\$ 30,312,418	26.8%	\$ 73,624,417	0.3%	\$ 777,241
PROPERTIES ACQUISITION	\$ 266,083,580	\$ 8,347,025	\$ -	\$ -	\$ 12,279,353	\$ 420,857	\$ 245,036,345	61.9%	\$ 151,719,646	11.0%	\$ 27,013,128	26.8%	\$ 65,610,926	0.3%	\$ 692,644
SIDEWALKS	\$ 72,400,047	\$ 244,164	\$ 6,036,536	\$ -	\$ -	\$ 6,036,536	\$ 60,082,811	61.9%	\$ 37,201,595	11.0%	\$ 6,623,608	26.8%	\$ 16,087,772	0.3%	\$ 169,836
STORM WATER MANAGEMENT	\$ 50,474,837	\$ -	\$ 7,311,950	\$ 16,039,216	\$ 3,801,032	\$ -	\$ 23,322,638	61.9%	\$ 14,440,725	11.0%	\$ 2,571,118	26.8%	\$ 6,244,869	0.3%	\$ 65,926
WATERMAIN	\$ 83,090,298	\$ 687,748	\$ 651,348	\$ 364,813	\$ 9,861,531	\$ -	\$ 71,524,858	61.9%	\$ 44,286,190	11.0%	\$ 7,884,994	26.8%	\$ 19,151,494	0.3%	\$ 202,179
STUDIES	\$ 18,003,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,003,000	61.9%	\$ 11,146,954	11.0%	\$ 1,984,674	26.8%	\$ 4,820,483	0.3%	\$ 50,889
SPECIAL PROJECTS	\$ 90,505,053	\$ 19,218,118	\$ 11,186,286	\$ -	\$ -	\$ 7,080,786	\$ 53,019,863	61.9%	\$ 32,828,415	11.0%	\$ 5,844,979	26.8%	\$ 14,196,597	0.3%	\$ 149,871
STRUCTURES	\$ 542,259,752	\$ 106,739,947	\$ -	\$ -	\$ 16,062,886	\$ 36,697,757	\$ 382,759,161	61.9%	\$ 236,993,759	11.0%	\$ 42,195,872	26.8%	\$ 102,487,585	0.3%	\$ 1,081,945
SANITARY SEWER	\$ 5,000,000	\$ -	\$ -	\$ -	\$ -	\$ 2,500,000	\$ 2,500,000	61.9%	\$ 1,547,930	11.0%	\$ 275,603	26.8%	\$ 669,400	0.3%	\$ 7,067
CREDIT AGREEMENT PROJECTS	\$ 5,989,298	\$ -	\$ -	\$ 2,093,566	\$ 3,895,732	\$ -	\$ -	61.9%	\$ -	11.0%	\$ -	26.8%	\$ -	0.3%	\$ -
TOTAL	\$1,826,095,497	\$ 379,411,698	\$ 33,180,448	\$ 18,497,595	\$ 57,025,690	\$ 129,407,574	\$1,208,572,492	\$ 748,314,258		\$ 133,234,618		\$ 323,607,344		\$ 3,416,272	

Adjustments					
Less Existing Unallocated Reserve Fund Balances		61.9%	\$0	11.0%	\$0
Less Credit Agreements Paid	(\$2,652,776)	61.9%	(\$1,642,525)	11.0%	(\$292,446)
Projects Funded From Reserves		61.9%	\$0	11.0%	\$0
				26.8%	\$0
				26.8%	(\$710,307)
				26.8%	\$0
				0.3%	\$0
				0.3%	(\$7,499)
				0.3%	\$0
TOTAL CITY-WIDE HARD DEVELOPMENT CHARGE RECOVERABLE		\$1,205,919,716	\$ 746,671,734	\$ 132,942,172	\$ 322,897,037
					\$ 3,408,774

RESIDENTIAL DEVELOPMENT CHARGE	
Population in New Units 2022 - 2031	90,381
Unadjusted Development Charge Per Capita - Before Cash Flow	\$ 8,261.38
Charge per Single and Semi	3.73
City-Wide Hard Preliminary Draft Rate Calculation	\$30,811

NON-RESIDENTIAL DEVELOPMENT CHARGE			
Non-residential Growth in Square Metres (GFA) 2022-2031			
Unadjusted Development Charge Per Square Metre of GFA - Before Cash Flow			
	Retail	\$ 627,176	1,890,059
		211.97	170.84
	I.O.I.		
	Mixed-use		33,009
			103.27

TABLE 9

CITY OF MARKHAM
SUMMARY OF AREA-SPECIFIC DEVELOPMENT CHARGES
FOR AREA-SPECIFIC SERVICES 2022-2031

Area Name	Area	Growth-Related Costs	Adjustments			Total ASDC Recoverable	Land Area (Ha)	ASDC Charge \$/ha
			Reserve Fund Balance	Credits in Agreement	Projects Funded From Reserve			
Yonge Steeles Corridor	1B	\$ 12,995,613	\$ 582,656	\$ -	\$ -	\$12,412,957.20	8.46	\$ 1,467,253
Armadale	5	\$ 1,213,831	\$ 675,358	\$ 293,988	\$ -	\$244,484.80	27.60	\$ 8,857
Armadale NE	7	\$ 521,486	\$ 121,641	\$ -	\$ -	\$399,844.81	25.81	\$ 15,489
PD 1-7	9	\$ 7,565,306	\$ 1,270,491	\$ 3,419,592	\$ -	\$2,875,222.11	3.90	\$ 736,670
Rodick/Miller Road Planning District	17	\$ 16,541,096	\$ (1,127,770)	\$ -	\$ -	\$17,668,865.79	26.66	\$ 662,823
Mount Joy	23	\$ 2,705,336	\$ 58,018	\$ -	\$ -	\$2,647,318.21	15.27	\$ 173,322
Markham Centre - South Unionville - Helen Ave	42A.1	\$ 3,137,837	\$ 1,347	\$ 2,063,068	\$ 691,311	\$382,111.42	2.16	\$ 176,576
Markham Centre	42B	\$ 881,933	\$ 74,313	\$ -	\$ -	\$807,620.00	100.99	\$ 7,997
Markham Centre - Clegg	42B.2	\$ 504,473	\$ (199,392)	\$ -	\$ -	\$703,865.17	4.16	\$ 169,076
Markham Centre - Hotel	42B.4	\$ 424,385	\$ (23,525)	\$ -	\$ -	\$447,909.93	0.50	\$ 895,820
Markham Centre - South Hwy 7	42B.6	\$ 10,582,519	\$ 814,222	\$ 3,795,207	\$ -	\$5,973,090.18	4.83	\$ 1,236,921
Markham Centre - Sciberras	42B.8	\$ 6,400,392	\$ (750,458)	\$ -	\$ -	\$7,150,850.27	4.80	\$ 1,490,071
Markham Centre - East Precinct	42B.9	\$ 3,125,352	\$ 1,663,489	\$ -	\$ -	\$1,461,862.97	6.18	\$ 236,433
Cathedral	46	\$ 1,041,155	\$ 198,589	\$ 290,350	\$ -	\$552,215.78	57.99	\$ 9,522
York Downs	47B	\$ 502,681	\$ 379,541	\$ -	\$ -	\$123,140.04	15.00	\$ 8,210
404 North	49	\$ 2,034,211	\$ 1,022,798	\$ -	\$ -	\$1,011,412.51	55.67	\$ 18,167
Future Urban Area	50A	\$ 7,587,159	\$ -	\$ -	\$ -	\$7,587,159.00	642.05	\$ 11,817
Future Urban Area - Employment Block	50A-1	\$ 25,533,491	\$ -	\$ -	\$ -	\$25,533,491.00	220.43	\$ 115,835
Future Urban Area - Robinson Glen	50A-2	\$ 2,683,382	\$ -	\$ -	\$ -	\$2,683,381.85	154.65	\$ 17,351
Future Urban Area - Berczy Glen Block	50A-3	\$ 19,150,465	\$ -	\$ -	\$ -	\$19,150,464.51	93.84	\$ 204,076
Future Urban Area - Angus Glen Block	50A-4	\$ 11,392,962	\$ -	\$ -	\$ -	\$11,392,962.16	162.04	\$ 70,310
Future Urban Area - Robinson Glen - South Block	50A-5	\$ 534,985	\$ -	\$ -	\$ -	\$534,985.00	11.09	\$ 48,240
Total		\$137,060,049	\$4,761,318	\$9,862,205	\$691,311	\$121,745,215		

B. Adjusted Residential and Non-Residential Development Charges

Final adjustments to the “unadjusted” development charge rates summarized above for the city-wide hard and soft services 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.

Tables 10 and 11 summarize the results of the adjustment for the residential and non-residential components of the City-wide rates respectively. As shown in Table 10, the adjusted per capita rate for City-wide services increases from the unadjusted rate of \$15,282.87 to \$15,612.81 after the cash flow analysis.

Residential City-wide development charges are proposed to vary by dwelling unit type to reflect their different occupancy factors and resulting demand for services. The proposed residential charges for City-wide services are shown in Table 10. As shown, the proposed residential charge for City-wide services ranges from \$24,958 for small apartments to \$58,228 for single and semi-detached units. The proposed charge for townhouses (and other multiple units) is \$45,139 and \$35,524 for large apartments.

The calculated non-residential development charges rates are presented in Table 11. The calculated adjusted rate for retail commercial development is \$239.82 per square metre, which is an increase of \$6.53 from the unadjusted rate of \$233.29 per square metre. For industrial/office/institutional (I.O.I) development, the adjusted development charge amounts to \$192.40 per square metre which is an increase of \$4.38 from the unadjusted rate of \$188.02 per square metre. Finally, for mixed-use development, the adjusted development charge amounts to \$16.68 per square metre which is an increase of \$3.03 from the unadjusted rate of \$113.65 per square metre.

TABLE 10

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

Service	Unadjusted Charge Per Capita	Adjusted Charge Per Capita	Residential Charge By Unit Type (1)				Percentage of Charge
			Singles & Semis	Townhouses & Multiples	Large Apartments	Small Apartments	
General Government	\$233.61	\$240.66	\$898	\$696	\$548	\$385	1.5%
Library	\$583.94	\$598.39	\$2,232	\$1,730	\$1,362	\$957	3.8%
Fire Services	\$315.06	\$330.46	\$1,232	\$955	\$752	\$528	2.1%
Indoor Recreation	\$3,656.60	\$3,649.65	\$13,611	\$10,552	\$8,304	\$5,834	23.4%
Park Development & Facilities	\$1,876.30	\$2,008.68	\$7,491	\$5,807	\$4,570	\$3,211	12.9%
Public Works	\$282.26	\$320.59	\$1,196	\$927	\$729	\$512	2.1%
Waste Diversion	\$73.73	\$80.47	\$300	\$233	\$183	\$129	0.5%
Subtotal City-Wide Soft	\$7,021.49	\$7,228.90	\$26,960	\$20,900	\$16,448	\$11,556	46.3%
City-Wide Hard	\$8,261.38	\$8,383.90	\$31,268	\$24,239	\$19,076	\$13,402	53.7%
Total City-Wide	\$15,282.87	\$15,612.81	\$58,228	\$45,139	\$35,524	\$24,958	100.0%
(1) Based on Persons Per Unit Of:			3.73	2.89	2.28	1.60	

TABLE 11

CITY OF MARKHAM
CITY-WIDE DEVELOPMENT CHARGES
RETAIL, I.O.I. & MIXED-USE NON-RESIDENTIAL DEVELOPMENT CHARGES PER SQUARE METRE

Service	Retail			Industrial/Office/Insitutional			Mixed-Use		
	Unadjusted Charge per Square Metre	Adjusted Charge per Square Metre	Percentage of Charge	Unadjusted Charge per Square Metre	Adjusted Charge per Square Metre	Percentage of Charge	Unadjusted Charge per Square Metre	Adjusted Charge per Square Metre	Percentage of Charge
General Government	\$5.99	\$6.52	2.7%	\$4.83	\$5.23	2.7%	\$2.92	\$3.03	2.6%
Library	\$0.00	\$0.00	0.0%	\$0.00	\$0.00	0.0%	\$0.00	\$0.00	0.0%
Fire Services	\$8.08	\$8.54	3.6%	\$6.52	\$6.85	3.6%	\$3.94	\$4.16	3.6%
Indoor Recreation	\$0.00	\$0.00	0.0%	\$0.00	\$0.00	0.0%	\$0.00	\$0.00	0.0%
Park Development & Facilities	\$0.00	\$0.00	0.0%	\$0.00	\$0.00	0.0%	\$0.00	\$0.00	0.0%
Public Works	\$7.24	\$8.28	3.5%	\$5.84	\$6.64	3.5%	\$3.53	\$4.04	3.5%
Waste Diversion	\$0.00	\$0.00	0.0%	\$0.00	\$0.00	0.0%	\$0.00	\$0.00	0.0%
Subtotal City-Wide Soft per Sq.M.	\$21.32	\$23.35	9.7%	\$17.18	\$18.72	9.7%	\$10.39	\$11.22	9.6%
City-Wide Hard	\$211.97	\$216.47	90.3%	\$170.84	\$173.68	90.3%	\$103.27	\$105.46	90.4%
Total City-Wide	\$233.29	\$239.82	100.0%	\$188.02	\$192.40	100.0%	\$113.65	\$116.68	100.0%

C. Comparison of Calculated and Existing Development Charges

Tables 12 present a comparison of calculated City-wide hard and soft residential development charges with the City's current charges (as at January, 2022). Table 13, 14 and 15 presents a comparison of the city-wide soft non-residential development charges for retail, industrial/office/institutional and mixed-used with the City's current charges. A comparison to the city-wide hard has not been included as it is now calculated on a square metre basis rather than net developable land area.

Table 12 shows that the calculated charge, by service, per single/semi detached unit of \$58,228 will produce an increase of \$15,290 (36 per cent) over the present development charge of \$42,938.

Table 13 shows that the calculated charge, by service, for retail development of \$239.82 per square metre will produce an increase of \$62.05 per square metre (35 per cent) over the present development charge of \$177.77 per square metre.

Similarly, Table 14 identifies a calculated industrial/office/institutional development charge of \$192.40 per square metre, which represents an increase of \$56.62 per square metre (42 per cent) over the current charge of \$135.78 per square metre.

Finally, Table 15 presents the calculated mixed-use charge at \$116.68 per square metre over the current charge of \$86.61 per square metre, an increase of \$30.07 (35 per cent).

TABLE 12

**CITY OF MARKHAM
COMPARISON OF CURRENT AND CALCULATED
RESIDENTIAL DEVELOPMENT CHARGES**

Service	Current Residential Charge / SDU	Calculated Residential Charge / SDU	Difference in Charge	
General Government	\$850	\$898	\$48	6%
Library	\$2,032	\$2,232	\$200	10%
Fire Services	\$1,068	\$1,232	\$164	15%
Indoor Recreation	\$7,677	\$13,611	\$5,934	77%
Park Development & Facilities	\$6,307	\$7,491	\$1,184	19%
Public Works	\$841	\$1,196	\$355	42%
Parking*	\$45	\$0	(\$45)	-100%
Waste Diversion	\$268	\$300	\$32	12%
Subtotal City-Wide Soft	\$19,088	\$26,960	\$7,872	41%
City-Wide Hard	\$23,850	\$31,268	\$7,418	31%
Total City-Wide	\$42,938	\$58,228	\$15,290	36%

*Parking is no longer a service eligible for recovery under the DCA

TABLE 13

**CITY OF MARKHAM
COMPARISON OF CURRENT AND CALCULATED
NON-RESIDENTIAL DEVELOPMENT CHARGES (RETAIL)**

Service	Non-Residential (\$/Square Metre)			
	Current Non-Res Retail Charge	Calculated Non-Res Retail Charge	Difference in Charge	
General Government	\$5.68	\$6.52	\$0.84	15%
Library	\$0.00	\$0.00	\$0.00	0%
Fire Services	\$7.13	\$8.54	\$1.41	20%
Indoor Recreation	\$0.00	\$0.00	\$0.00	0%
Park Development & Facilities	\$0.00	\$0.00	\$0.00	0%
Public Works	\$5.62	\$8.28	\$2.66	47%
Parking*	\$0.30	\$0.00	(\$0.30)	-100%
Waste Diversion	\$0.00	\$0.00	\$0.00	0%
Subtotal City-wide Soft per Sq.M.	\$18.73	\$23.35	\$4.62	25%
City-wide Hard	\$159.04	\$216.47	\$57.43	36%
Total City-Wide	\$177.77	\$239.82	\$62.05	35%

*Parking is no longer a service eligible for recovery under the DCA

TABLE 14

**CITY OF MARKHAM
COMPARISON OF CURRENT AND CALCULATED
NON-RESIDENTIAL DEVELOPMENT CHARGES (I.O.I)**

Service	Non-Residential (\$/Square Metre)			
	Current Non-Res IOI Charge	Calculated Non-Res IOI Charge	Difference in Charge	
General Government	\$4.34	\$5.23	\$0.89	21%
Library	\$0.00	\$0.00	\$0.00	0%
Fire Services	\$5.44	\$6.85	\$1.41	26%
Indoor Recreation	\$0.00	\$0.00	\$0.00	0%
Park Development & Facilities	\$0.00	\$0.00	\$0.00	0%
Public Works	\$4.29	\$6.64	\$2.35	55%
Parking*	\$0.23	\$0.00	(\$0.23)	-100%
Waste Diversion	\$0.00	\$0.00	\$0.00	0%
Subtotal City-wide Soft per Sq.M.	\$14.30	\$18.72	\$4.42	31%
City-wide Hard	\$121.48	\$173.68	\$52.20	43%
Total City-Wide	\$135.78	\$192.40	\$56.62	42%

*Parking is no longer a service eligible for recovery under the DCA

TABLE 15

**CITY OF MARKHAM
COMPARISON OF CURRENT AND CALCULATED
NON-RESIDENTIAL DEVELOPMENT CHARGES (MIXED-USE)**

Service	Non-Residential (\$/Square Metre)			
	Current Non-Residential Mixed-Use Charge	Calculated Non-Residential Mixed-Use Charge	Difference in Charge	
General Government	\$2.77	\$3.03	\$0.26	9%
Library	\$0.00	\$0.00	\$0.00	0%
Fire Services	\$3.48	\$4.16	\$0.68	20%
Indoor Recreation	\$0.00	\$0.00	\$0.00	0%
Park Development & Facilities	\$0.00	\$0.00	\$0.00	0%
Public Works	\$2.74	\$4.04	\$1.30	47%
Parking*	\$0.14	\$0.00	(\$0.14)	-100%
Waste Diversion	\$0.00	\$0.00	\$0.00	0%
Subtotal City-wide Soft per Sq.M.	\$9.13	\$11.22	\$2.09	23%
City-wide Hard	\$77.48	\$105.46	\$27.98	36%
Total City-Wide	\$86.61	\$116.68	\$30.07	35%

*Parking is no longer a service eligible for recovery under the DCA

7. Long-Term Capital and Operating Costs

This section provides a brief examination of the long-term capital and operating costs for the capital facilities and infrastructure to be included in the development charges by-law. This examination is required as one of the features of the *Development Charges Act, 1997*.

A. Net Operating Costs for the City's Services Estimated to Increase by \$53.08 Million over the Forecast Period

Table 16 summarizes the estimated increase in net operating costs that the City will experience for additions associated with the planned capital program. These estimates are based on average costs informed based on the City's current operating costs.

As shown in Table 16, by 2032, the City's net operating costs are estimated to increase by \$53.08 million. Significant increases in net operating costs will be experienced as new facilities such as new indoor recreation centres, proposed new community centres and new libraries are opened. Operating and maintenance costs will increase also as additions to the City's road network and parkland and playing fields are made.

Given all projects included in the City-wide soft services capital program are fully related to new growth, no need for non-development charge sources have been identified.

TABLE 16

CITY OF MARKHAM
SUMMARY OF LONG-TERM CAPITAL AND
OPERATING COST IMPACTS FOR GENERAL SERVICES
(in thousands of constant dollars)

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Total
Net Operating Impacts (1)											
General Government	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	
Library	\$1,500.0	\$1,500.0	\$1,500.0	\$1,500.0	\$3,750.0	\$3,750.0	\$3,750.0	\$3,750.0	\$5,250.0	\$5,250.0	
Fire Services	\$4,600.0	\$9,200.0	\$9,200.0	\$13,800.0	\$13,800.0	\$13,800.0	\$13,800.0	\$13,800.0	\$13,800.0	\$21,160.0	
Indoor Recreation	\$0.0	\$0.0	\$200.0	\$400.0	\$1,200.0	\$1,400.0	\$1,400.0	\$2,180.0	\$5,580.0	\$5,580.0	
Park Development & Facilities	\$571.7	\$874.9	\$2,193.6	\$2,880.8	\$4,239.0	\$4,981.4	\$5,834.6	\$6,126.7	\$6,365.2	\$6,519.8	
Public Works	\$54.6	\$1,284.1	\$1,359.3	\$2,062.1	\$2,077.8	\$2,094.2	\$2,120.1	\$2,136.2	\$2,155.9	\$2,155.9	
Waste Diversion	\$175.6	\$355.6	\$540.3	\$729.7	\$924.0	\$1,121.0	\$1,323.0	\$1,530.1	\$1,742.5	\$1,960.4	
City-Wide Hard	\$936.4	\$1,896.7	\$2,881.7	\$3,891.9	\$4,927.8	\$5,978.6	\$7,056.1	\$8,160.7	\$9,293.5	\$10,455.2	
NET OPERATING IMPACTS	\$7,838.2	\$15,111.2	\$17,874.8	\$25,264.5	\$30,918.5	\$33,125.2	\$35,283.7	\$37,683.8	\$44,187.1	\$53,081.3	n/a
Long-term Capital Impact (1)											
Total Net Cost	\$126,215.6	\$91,938.0	\$79,525.4	\$94,115.7	\$156,298.9	\$46,872.4	\$46,116.6	\$75,104.5	\$239,412.0	\$9,896.0	\$965,495.3
Net Cost From Development Charges	\$92,173.9	\$60,817.2	\$77,597.7	\$59,502.6	\$128,719.9	\$12,794.3	\$2,165.0	\$59,689.5	\$185,175.0	\$2,165.0	\$680,800.1
Prior Growth	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
DC Reserve Balances (2)	\$34,041.6	\$3,313.5	\$1,927.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$39,282.8
Portion for Post-2030 Development (3)	\$0.0	\$27,807.3	\$0.0	\$34,613.1	\$27,579.1	\$34,078.0	\$43,951.6	\$15,415.0	\$54,237.1	\$7,731.0	\$245,412.3
Funding From Non-DC Sources											
Replacement	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
FUNDING FROM NON-DC SOURCES	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
TOTAL NET OPERATING & CAPITAL IMPACTS	\$7,838.2	\$15,111.2	\$17,874.8	\$25,264.5	\$30,918.5	\$33,125.2	\$35,283.7	\$37,683.8	\$44,187.1	\$53,081.3	n/a

Notes:

(1) See Appendix F

(2) Existing development charge reserve fund balances collected from growth prior to 2022 are applied to fund initial projects in development-related capital forecast

(3) Post 2032 development-related net capital costs may be eligible for development charge funding in future DC by-laws

8. Cost of Growth Analysis

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 G.

A. Annual Capital Provisions Will Reach \$48.83 Million by 2032

Table 17 summarizes the annual capital provisions required to replace the capital infrastructure proposed to be funded under the development charges by-law. 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.

Table 17 states that, by 2032, the City will need to fund an additional \$48.83 million per annum in order to properly fund the full life-cycle costs of the new city-wide soft and City-wide hard assets supported under this development charges by-law.

The calculated annual funding provision should be considered within the context of the City's projected growth; over the next ten years (to 2031) the City is projecting an increase of approximately 32,670 total private dwellings units as well as roughly 55,590 new employees. This growth will have the effect of increasing the overall assessment base and additional user fee and charges revenues to offset the capital asset provisions required to replace the infrastructure proposed to be funded under the development charges by-law.

In addition, as part of the annual budget update the City also undertakes analysis of the Life-cycle Reserve Fund. The analysis includes anticipated funding requirements and potential funding shortfalls resulting from inflation, past growth and new assets. Funding requirements are examined over a 25 year period and mitigation measures are proposed for Council's consideration. Examples of mitigating measures that have been used historically in the City include increased revenue sources (including projected dividends), allocation of Federal Gas Tax funding towards life-cycle costs and transferring additional funds into the Life-cycle Reserve Fund.

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

TABLE 17

**CITY OF MARKHAM
ANNUAL ASSET MANAGEMENT PROVISION BY 2032**

Service	2022 - 2031 Capital Program		Calculated AMP Annual Provision by 2032	
	DC Related	Non-DC Related*	DC Related	Non-DC Related*
General Government	\$34,099,685	\$0	\$0	\$0
Library	\$58,120,079	\$29,763,300	\$2,655,609	\$1,130,342
Fire Services	\$50,871,342	\$665,686	\$1,178,482	\$19,680
Indoor Recreation	\$330,486,932	\$18,450,000	\$6,489,988	\$545,443
Park Development & Facilities	\$198,116,166	\$127,873,767	\$6,170,758	\$5,318,051
Public Works	\$41,201,500	\$66,592,795	\$431,808	\$1,667,971
Waste Diversion	\$7,187,249	\$2,066,763	\$245,717	\$337,308
City-Wide Hard	\$1,265,598,182	\$560,497,315	31,660,320	\$19,615,571
TOTAL	\$1,985,681,136	\$805,909,625	\$48,832,682	\$28,634,367

* Includes costs that will be recovered under future development charges studies (i.e. other development-related).

9. Development Charge Administration

A. Development Charges Policies and Practices

- There are not substantive changes recommended to the City's current development charge calculation approach, rate structure or policies. It is recommended that present practices regarding collection of development charges and by-law administration continue to the extent possible, having regard to any requirements of the DCA.
- As required under the DCA, the City should codify any rules regarding application of the by-laws and exemptions within the development charges by-laws proposed for adoption.
- It is recommended that the City continue to actively encourage the use of front-ending agreements or developer agreements (and services-in-lieu arrangements), whichever are practical and desirable by the development industry and the City.
- It is recommended that the by-laws permit the payment of development charges in cash or through services-in-lieu agreements. The municipality is not obligated to enter into services-in-lieu agreements.
- It is recommended that Council adopt the development-related capital forecast for city-wide and area-specific services included in this Background Study, subject to annual review through the City's normal capital budget process.

B. Development Charges By-law Provisions

The City is proposing to modify current the development charges by-laws to reflect recent legislative changes and updating of definitions to correspond with other City documents as well as accounting for legislative changes.. The proposed draft by-laws will be made available, under separate cover, a minimum of two weeks in advance of the statutory public meeting.

Appendix A

Development Forecast

Appendix A: Development Forecast

This appendix provides the details of the development forecast used to prepare the 2022 Development Charges (DC) Background Study for the City of Markham. The forecast method, key assumptions and results are presented in the following tables:

Historical Development

Table A-1	Historical Population, Occupied Dwellings and Employment Summary
Table A-2	Historical Annual Housing Completions (CMHC)
Table A-3	Historical Annual Residential Building Permits
Table A-4	Historical Occupied Households by Unit Type
Table A-5	Historical Households by Period of Construction Showing Household Size

Forecast Development

Table A-6	Forecast of Occupied Household and Employment Growth Summary
Table A-7	Forecast of Occupied Households by Unit Type
Table A-8	Growth in Households by Unit Type
Table A-9	Forecast Population in New Households by Unit Type
Table A-10	Forecast Place of Work Employment
Table A-11	Forecast Non-Residential Space (Square Metres of Gross Floor Area)

The forecasts of population, households and employment are based on the 2031 targets for the City as identified in the York Region 2017 Development Charges Background Study, which reflects a 45 per cent intensification scenario. The residential and non-residential forecasts incorporate recent historical data and has been informed through discussions with City staff.

A. Forecast Approach and Key Assumptions

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

A “Census-based” definition of population is used for the purpose of the Development Charges (DC) 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.

The forecast is based on Census years and is translated into the time periods required for DC purposes, generally pro-rating the census periods to the DC time period. A ten-year development forecast, from mid-year 2022 to mid-year 2031, has been used for all the DC eligible City-wide soft and City-wide hard services.

B. Historical Development in the City

Historical growth and development figures presented here are based on Statistics Canada Census data, Canada Mortgage Housing Corporation (CMHC) housing market information, and City building permit and development application data. For development charges purposes, the ten-year period of 2012 to 2021 is used for calculating historical service levels.

The City of Markham has experienced steady population growth over the last ten years. As shown in Table A-1, the City’s population increased from 306,970 people in 2012 to an estimated 354,590 in 2021 which represents an increase of 16 per cent. The number of occupied dwelling units in the City

also increased during the ten-year historical period, although at a much less steady pace. Increasing from 92,920 in 2012 to 114,230 in 2021, the City of Markham has realized a 23 per cent increase in occupied households since 2012. The difference between the growth rates of population and occupied dwelling units is the result of a decline in the average number of persons residing in housing units.

Historical employment figures are also shown in Table A-1 and are based on Statistics Canada place of work data. This data records where people work rather than their place of residence. The employment figures used for development charge calculations include workers with no fixed place of work, but exclude *work at home* employment. Similar to population, the City experienced an annual employment growth of 2 per cent over the 2012 to 2021 Census period. Over the ten-year historical period, employment in the City has grown from 135,100 employees in 2012 to 160,210 employees in 2021 which represents an increase of 19 per cent. The City's activity rate (the ratio of employment to population) has also remained stable at 44 per cent between 2012 and 2016; the activity rate increased modestly reaching 45.5 per cent in 2021.

Details on historical housing unit growth in the City as well as historical occupied households are provided in Tables A-2 (housing completions), A-3 (building permits issued), and A-4 (historical occupied households). The information in Table A-2 and A-4 is sourced from Canada Mortgage and Housing Corporation *Housing Market Information*. Overall, the dominant type of housing in Markham constructed since 2012 has been apartment units at 46 per cent. This is closely followed by single and semi-detached units (31 per cent) and rows and other multiple dwelling units (23 per cent).

Table A-5 provides details on historical occupancy patterns in the City. The overall average occupancy level in Markham for recently constructed single and semi-detached units, constructed between 2006 and 2016, is 3.73 persons per housing unit (PPU). Average PPUs for recently constructed row

housing, large apartments, (defined as greater than 700 square feet) and small apartments are 2.89, 2.28, and 1.60, respectively.

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 (sometimes referred to as “net population” growth)* as well as the *population in new housing units*, is required.

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

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

i. Residential Development Forecast

The residential development forecast is based on forecasts of population and households, consistent with the York Region 45 per cent intensification scenario used in the Region’s 2017 Development Charge Background Study update. The population and household growth determines the need for additional facilities and provides the foundation for the development-related capital program. Tables A-6, A-7, and A-8 summarize the population, household and employment growth forecast. The tables show that the City’s population is forecast to increase by roughly 90,070 over the ten-year planning period to 2031. The number of occupied dwellings will increase by 32,670 with the majority of growth expected to be among apartment units (41 per cent); the number of employees is projected to increase by 55,590 over the same period.

In addition to the net population forecast, a forecast of “population in new units” that will result from the addition of new housing units has been made (see Table A-9). Population growth in new units is estimated by applying the following PPUs to the housing unit forecast: 3.73 for single and semi-detached units; 2.89 for rows and other multiples; and 1.92 for apartments. The forecasted persons in newly constructed units are based upon the historical time series of population growth in housing in the last ten-year census period (2006-2016). In total, 90,380 is the forecasted population in new dwelling units over the ten-year planning period.

ii. Non-Residential Development Forecast

Non-residential development charges are calculated on a per unit of gross floor area (GFA) basis. Therefore, as per the *DCA*, a forecast of non-residential building space has been developed. As with the residential forecast, a ten-year development forecast, from mid-year 2022 to mid-year 2031, has been used for all the development charge eligible City-wide soft and hard services.

Employment densities have been used to convert the employment forecast into building space estimates. The following densities, by employment type, have been utilized in this study:

Retail:	40.0 square metres per employee
Mixed-Use Retail:	40.0 square metres per employee
Institutional:	66.7 square metres per employee
Industrial Employment Land:	80.0 square metres per employee
Office:	25.0 square metres per employee

The employment and GFA forecasts are provided in Tables A-10 and A-11. The total GFA growth is forecast at 2.55 million square metres over the ten-year period with an accompanying employment growth of 55,590 (excluding work at home employment).

APPENDIX A
TABLE A-1
CITY OF MARKHAM
HISTORICAL POPULATION, OCCUPIED DWELLINGS & EMPLOYMENT SUMMARY

Mid-Year	Census Population	Annual Growth	Occupied Households	Annual Growth	Av. Household Size (PPU)	Place of Work Employment	Annual Growth	Activity Rate
2012	306,973	5,264	92,921	2,386	3.30	135,104	2,179	44.0%
2013	312,329	5,356	95,843	2,922	3.26	137,357	2,253	44.0%
2014	317,779	5,450	99,568	3,725	3.19	139,685	2,328	44.0%
2015	323,324	5,545	102,583	3,015	3.15	142,092	2,407	43.9%
2016	328,966	5,642	102,680	97	3.20	144,582	2,490	44.0%
2017	333,938	4,972	103,667	987	3.22	147,517	2,935	44.2%
2018	338,985	5,047	106,132	2,465	3.19	150,539	3,022	44.4%
2019	344,109	5,124	107,278	1,146	3.21	153,654	3,114	44.7%
2020	349,310	5,201	108,598	1,320	3.22	156,862	3,209	44.9%
2021	354,589	5,279	114,233	5,635	3.10	160,210	3,348	45.2%
Growth 2012 - 2021		52,880		23,698			27,285	

Source: Statistics Canada, Census of Canada

APPENDIX A
TABLE A-2
CITY OF MARKHAM
HISTORICAL ANNUAL HOUSING COMPLETIONS (CMHC)

Year	CMHC Annual Housing Completions				Shares by Unit Type			
	Singles/Semis	Rows	Apts.	Total	Singles/Semis	Rows	Apts.	Total
2012	1,511	857	18	2,386	63%	36%	1%	100%
2013	1,426	776	720	2,922	49%	27%	25%	100%
2014	962	476	2,287	3,725	26%	13%	61%	100%
2015	800	464	1,751	3,015	27%	15%	58%	100%
2016	232	133	1,280	1,645	14%	8%	78%	100%
2017	318	283	386	987	32%	29%	39%	100%
2018	170	749	1,546	2,465	7%	30%	63%	100%
2019	294	298	554	1,146	26%	26%	48%	100%
2020	67	665	588	1,320	5%	50%	45%	100%
Growth 2012 - 2021	6,825	5,075	10,013	21,913	31%	23%	46%	100%

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

APPENDIX A
TABLE A-3
CITY OF MARKHAM
HISTORICAL ANNUAL RESIDENTIAL BUILDING PERMITS

Year	Building Permits				Building Permits			
	Singles/Semis	Rows	Apts.	Total	Singles/Semis	Rows	Apts.	Total
2012	1,458	1,272	2,261	4,991	29%	25%	45%	100%
2013	1,187	434	1,081	2,702	44%	16%	40%	100%
2014	843	444	1,466	2,753	31%	16%	53%	100%
2015	434	645	690	1,769	25%	36%	39%	100%
2016	295	625	1,433	2,353	13%	27%	61%	100%
2017	131	510	131	772	17%	66%	17%	100%
2018	298	1,021	1,125	2,444	12%	42%	46%	100%
2019	47	36	38	121	39%	30%	31%	100%
2020	241	397	398	1,036	23%	38%	38%	100%
Growth 2012 - 2021	6,571	6,013	9,554	22,138	30%	27%	43%	100%

Source: Statistics Canada

APPENDIX A
TABLE A-4
CITY OF MARKHAM
HISTORICAL OCCUPIED HOUSEHOLDS BY UNIT TYPE

Mid-Year	Occupied Households				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2012	64,646	11,792	16,483	92,921	70%	13%	18%	100%
2013	66,072	12,568	17,203	95,843	69%	13%	18%	100%
2014	67,034	13,044	19,490	99,568	67%	13%	20%	100%
2015	67,834	13,508	21,241	102,583	66%	13%	21%	100%
2016	67,415	13,970	21,295	102,680	66%	14%	21%	100%
2017	67,733	14,253	21,681	103,667	65%	14%	21%	100%
2018	67,903	15,002	23,227	106,132	64%	14%	22%	100%
2019	68,197	15,300	23,781	107,278	64%	14%	22%	100%
2020	68,264	15,965	24,369	108,598	63%	15%	22%	100%
2021	69,926	17,806	26,501	114,233	61%	16%	23%	100%

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

APPENDIX A
TABLE A-5
CITY OF MARKHAM
HISTORICAL HOUSEHOLDS BY PERIOD OF CONSTRUCTION SHOWING HOUSEHOLD SIZE

Dwelling Unit Type	Period of Construction										Period of Construction Summaries		
	Pre 1945	1946-1960	1961-1970	1971-1980	1981-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2016	Pre 2006	2006-2016	Total
<i>Singles</i>													
Household Population	1,580	4,100	11,665	23,850	54,790	14,665	25,525	36,475	25,220	16,465	172,650	41,685	214,335
Households	525	1,465	4,040	7,765	16,065	3,980	6,660	9,505	6,455	4,440	50,005	10,895	60,900
Household Size	3.01	2.80	2.89	3.07	3.41	3.68	3.83	3.84	3.91	3.71	3.45	3.83	3.52
<i>Semis</i>													
Household Population	0	145	320	1,415	865	130	1,485	7,155	5,445	4,915	11,515	10,360	21,875
Households	10	45	105	465	255	45	475	2,045	1,510	1,550	3,445	3,060	6,505
Household Size	n/a	3.22	3.05	3.04	3.39	2.89	3.13	3.50	3.61	3.17	3.34	3.39	3.36
<i>Singles and Semis</i>													
Household Population	1,580	4,245	11,985	25,265	55,655	14,795	27,010	43,630	30,665	21,380	184,165	52,045	236,210
Households	535	1,510	4,145	8,230	16,320	4,025	7,135	11,550	7,965	5,990	53,450	13,955	67,405
Household Size	2.95	2.81	2.89	3.07	3.41	3.68	3.79	3.78	3.85	3.57	3.45	3.73	3.50
<i>Rows</i>													
Household Population	70	235	1,145	5,260	1,770	1,130	5,480	9,560	7,840	9,030	24,650	16,870	41,520
Households	25	105	410	1,950	635	400	1,860	3,090	2,660	3,175	8,475	5,835	14,310
Household Size	2.80	2.24	2.79	2.70	2.79	2.83	2.95	3.09	2.95	2.84	2.91	2.89	2.90
<i>Apartments (excl. Duplexes): Bachelor or 1BR</i>													
Household Population	80	175	390	550	585	245	315	900	1,960	4,570	3,240	6,530	9,770
Households	55	120	265	420	435	185	225	630	1,260	2,825	2,335	4,085	6,420
Household Size	1.45	1.46	1.47	1.31	1.34	1.32	1.40	1.43	1.56	1.62	1.39	1.60	1.52
<i>Apartments (excl. Duplexes): 2BR or more</i>													
Household Population	135	350	1,150	2,575	2,725	1,495	995	1,870	4,025	4,280	11,295	8,305	19,600
Households	90	150	540	1,155	1,285	685	470	795	1,760	1,890	5,170	3,650	8,820
Household Size	1.50	2.33	2.13	2.23	2.12	2.18	2.12	2.35	2.29	2.26	2.18	2.28	2.22
<i>Apartments (excl. Duplexes) - Total</i>													
Household Population	215	525	1,540	3,125	3,310	1,740	1,310	2,770	5,985	8,850	14,535	14,835	29,370
Households	145	270	805	1,575	1,720	870	695	1,425	3,020	4,715	7,505	7,735	15,240
Household Size	1.48	1.94	1.91	1.98	1.92	2.00	1.88	1.94	1.98	1.88	1.94	1.92	1.93
<i>Duplexes</i>													
Household Population	60	340	730	2,270	8,460	2,260	2,525	1,655	730	550	18,300	1,280	19,580
Households	40	155	230	700	2,275	700	685	475	245	165	5,260	410	5,670
Household Size	1.50	2.19	3.17	3.24	3.72	3.23	3.69	3.48	2.98	3.33	3.48	3.12	3.45
<i>All Units</i>													
Household Population	1,925	5,345	15,400	35,920	69,195	19,925	36,325	57,615	45,220	39,810	241,650	85,030	326,680
Households	745	2,040	5,590	12,455	20,950	5,995	10,375	16,540	13,890	14,045	74,690	27,935	102,625
Household Size	2.58	2.62	2.75	2.88	3.30	3.32	3.50	3.48	3.26	2.83	3.24	3.04	3.18

Note: Population and household values in this table are based on National Household Survey response rates and may differ from Census values

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

APPENDIX A
TABLE A-6
CITY OF MARKHAM
FORECAST POPULATION, HOUSEHOLD & EMPLOYMENT GROWTH SUMMARY

Mid-Year	Census Population	Annual Growth	Total Occupied Dwellings	Annual Growth	Av. Household Size (PPU)	Place of Work Employment	Annual Growth	Activity Rate
2022	362,707	8,118	117,159	2,926	3.10	164,906	4,696	45.5%
2023	371,010	8,303	120,160	3,001	3.09	169,773	4,867	45.8%
2024	379,504	8,494	123,238	3,078	3.08	174,819	5,046	46.1%
2025	388,192	8,688	126,395	3,157	3.07	180,049	5,230	46.4%
2026	397,079	8,887	129,632	3,237	3.06	185,473	5,424	46.7%
2027	406,169	9,090	132,916	3,284	3.06	191,099	5,626	47.0%
2028	415,467	9,298	136,283	3,367	3.05	196,935	5,836	47.4%
2029	424,978	9,511	139,735	3,452	3.04	202,990	6,055	47.8%
2030	434,707	9,729	143,275	3,540	3.03	209,274	6,284	48.1%
2031	444,660	9,953	146,905	3,630	3.03	215,800	6,526	48.5%
Growth 2022 - 2031		90,071		32,673			55,590	

Source: York Region 2017 DC Study (45% Intensification Scenario), Hemson Consulting 2022

APPENDIX A
TABLE A-7
CITY OF MARKHAM
FORECAST OF OCCUPIED HOUSEHOLDS BY UNIT TYPE

Mid-Year	Occupied Households				Shares By Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2022	70,871	18,599	27,689	117,159	60%	16%	24%	100%
2023	71,839	19,412	28,909	120,160	60%	16%	24%	100%
2024	72,833	20,246	30,159	123,238	59%	16%	24%	100%
2025	73,852	21,102	31,442	126,395	58%	17%	25%	100%
2026	74,896	21,979	32,757	129,632	58%	17%	25%	100%
2027	75,956	22,869	34,091	132,916	57%	17%	26%	100%
2028	77,043	23,781	35,459	136,283	57%	17%	26%	100%
2029	78,157	24,716	36,861	139,735	56%	18%	26%	100%
2030	79,300	25,676	38,299	143,275	55%	18%	27%	100%
2031	80,472	26,660	39,774	146,905	55%	18%	27%	100%

Source: Hemson Consulting 2022

APPENDIX A
TABLE A-8
CITY OF MARKHAM
GROWTH IN HOUSEHOLDS BY UNIT TYPE

Mid-Year	Annual Growth in Occupied Households				Shares By Unit Type			
	Singles/Semis	Rows & Other Multiples	Apartments	Total	Singles/Semis	Rows & Other Multiples	Apartments	Total
2022	944	793	1,189	2,926	32%	27%	41%	100%
2023	969	813	1,219	3,001	32%	27%	41%	100%
2024	993	834	1,250	3,078	32%	27%	41%	100%
2025	1,019	855	1,283	3,157	32%	27%	41%	100%
2026	1,045	877	1,315	3,237	32%	27%	41%	100%
2027	1,060	890	1,334	3,284	32%	27%	41%	100%
2028	1,087	912	1,368	3,367	32%	27%	41%	100%
2029	1,114	935	1,402	3,452	32%	27%	41%	100%
2030	1,143	959	1,438	3,540	32%	27%	41%	100%
2031	1,172	984	1,475	3,630	32%	27%	41%	100%
Growth 2022 - 2031	10,545	8,853	13,274	32,673	32%	27%	41%	100%

Source: York Region 2017 DC Study (45% Intensification Scenario), Hemson Consulting 2022

APPENDIX A
TABLE A-9
CITY OF MARKHAM
FORECAST POPULATION IN NEW HOUSEHOLD BY UNIT TYPE

Mid-Year	Singles/Semis	Rows & Other Multiples	Apartments	Total	Singles/Semis	Rows & Other Multiples	Apartments	Population in New Dwellings
2022	3.73	2.89	1.92	2.77	3,522	2,292	2,280	8,094
2023	3.73	2.89	1.92	2.77	3,612	2,351	2,338	8,301
2024	3.73	2.89	1.92	2.77	3,705	2,411	2,398	8,514
2025	3.73	2.89	1.92	2.77	3,800	2,473	2,460	8,733
2026	3.73	2.89	1.92	2.77	3,897	2,536	2,522	8,955
2027	3.73	2.89	1.92	2.77	3,953	2,573	2,559	9,085
2028	3.73	2.89	1.92	2.77	4,053	2,638	2,624	9,315
2029	3.73	2.89	1.92	2.77	4,155	2,704	2,690	9,549
2030	3.73	2.89	1.92	2.77	4,261	2,773	2,758	9,792
2031	3.73	2.89	1.92	2.77	4,370	2,844	2,829	10,043
Growth 2022 - 2031	3.73	2.89	1.92	2.77	39,328	25,595	25,458	90,381

Source: Hemson Consulting 2022

APPENDIX A
TABLE A-10
CITY OF MARKHAM
FORECAST PLACE OF WORK EMPLOYMENT

Mid-Year	Retail				Industrial/Office/Institutional (I.O.I.)						Rural		Total for DC Study		Work at Home		Total with Work at Home	
	Retail	Annual Growth	Mixed-Use	Annual Growth	Institutional	Annual Growth	Emp. Land Industrial	Annual Growth	Office	Annual Growth	Rural	Annual Growth	Total for DC Study	Annual Growth	Total Emp	Annual Growth	Total with Work at Home	Annual Growth
2022	25,597	1,241	1,347	65	16,668	808	59,873	832	61,153	1,748	268	1	164,906	4,696	14,948	287	179,854	4,983
2023	26,901	1,304	1,416	69	17,517	849	60,717	844	62,953	1,800	269	1	169,773	4,867	15,241	293	185,014	5,160
2024	28,272	1,371	1,488	72	18,410	893	61,573	856	64,806	1,853	270	1	174,819	5,046	15,540	299	190,359	5,345
2025	29,712	1,440	1,564	76	19,348	938	62,441	868	66,713	1,907	271	1	180,049	5,230	15,844	304	195,893	5,534
2026	31,227	1,514	1,644	80	20,334	986	63,321	880	68,676	1,963	272	1	185,473	5,424	16,154	310	201,627	5,734
2027	32,818	1,591	1,727	84	21,370	1,036	64,214	893	70,697	2,021	273	1	191,099	5,626	16,471	317	207,570	5,943
2028	34,490	1,672	1,815	88	22,459	1,089	65,119	905	72,778	2,081	274	1	196,935	5,836	16,794	323	213,729	6,159
2029	36,247	1,758	1,908	93	23,603	1,144	66,037	918	74,920	2,142	275	1	202,990	6,055	17,123	329	220,113	6,384
2030	38,094	1,847	2,005	97	24,806	1,203	66,968	931	77,125	2,205	276	1	209,274	6,284	17,458	335	226,732	6,619
2031	40,035	1,941	2,107	102	26,070	1,264	67,911	943	79,395	2,270	281	5	215,800	6,526	17,800	342	233,600	6,868
Growth 2022 - 2031		15,679		825		10,210		8,870		19,990		14		55,590		3,139		58,729

Source: Hemson Consulting 2022

APPENDIX A
TABLE A-11
CITY OF MARKHAM
FORECAST NON-RESIDENTIAL SPACE (SQUARE METRES OF GROSS FLOOR AREA)

Employment Density	
Retail	40.0 m ² per employee
Mixed-Use	40.0 m ² per employee
Institutional	66.7 m ² per employee
Emp. Land Industrial	80.0 m ² per employee
Office	25.0 m ² per employee
Rural	0.0 m ² per employee

Mid-Year	Retail		Industrial/Office/Institutional (I.O.I)			Rural	Total for DC Study
	Retail	Mixed-Use	Institutional	Industrial	Office		
2022	49,648	2,613	53,857	66,587	43,701	0	216,406
2023	52,174	2,746	56,600	67,520	45,000	0	224,040
2024	54,834	2,886	59,533	68,480	46,325	0	232,058
2025	57,608	3,032	62,533	69,440	47,675	0	240,288
2026	60,572	3,188	65,733	70,400	49,075	0	248,968
2027	63,650	3,350	69,067	71,440	50,525	0	258,032
2028	66,880	3,520	72,600	72,400	52,025	0	267,425
2029	70,300	3,700	76,267	73,440	53,550	0	277,257
2030	73,872	3,888	80,200	74,480	55,125	0	287,565
2031	77,638	4,086	84,295	75,432	56,754	0	298,205
Growth 2022 - 2031	627,176	33,009	680,685	709,619	499,755	0	2,550,244

Source: Hemson Consulting 2022

Appendix B

Soft Services

Technical Appendix

Appendix B: Soft Services Technical Appendix

The following appendix provides the detailed analysis undertaken to establish the development charge rates for each of the soft services in the City of Markham. Seven soft services have been analysed as part of the development charges study:

- Appendix B.1 General Government
- Appendix B.2 Library
- Appendix B.3 Fire Services
- Appendix B.4 Indoor Recreation
- Appendix B.5 Park Development and Facilities
- Appendix B.6 Public Works
- Appendix B.7 Waste Diversion Services

Every service 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.

Tables B.1-1 to B.1-7 Historical Service Levels

Table 1 presents the data used to determine the ten-year historical service level. The *DCA* and *O. Reg. 82/98* require that development charges be set at a level no higher than the average service level provided in the City over the ten-year period immediately preceding the preparation of the background study, on a service-by-service basis. For the purpose of this study, the historical inventory period has been defined as 2012 to 2021.

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 municipal staff. This information is generally based on historical records and experience with costs to acquire or construct similar facilities, equipment and infrastructure.

The final page of Tables B.1-1 to B.7-1 shows the calculation of the maximum allowable funding envelope, net of uncommitted excess capacity. The maximum allowable funding envelope is defined as the ten-year historical service level (expressed as either \$/capita or \$/population & employment) multiplied by the forecast increase in net population growth, or net population and employment growth, over the planning period. The resulting figure is the value of capital infrastructure that must be constructed for that particular service such that the ten-year historical service level is maintained.

Tables B.1-2 to B.7-2 2022 – 2031 Development-Related Capital Program & Calculation of the Unadjusted Development Charge

The *DCA* requires that Council express its intent to provide future capital facilities to support future growth. Based on the development forecasts presented in Appendix A, Hemson Consulting in collaboration with City staff has developed a development-related capital program which sets out the projects required to service anticipated growth for the ten-year period from 2022 to 2031.

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

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

The capital program less any replacement or benefit to existing 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 within the 2022 to 2031 planning period. For some services, reserve fund balances collected from prior growth may be available to fund a share of the program. In addition, a portion of the capital program may service growth occurring beyond 2031. This portion of the capital program is deemed “other-development related” service capacity which may be eligible for recovery under future DCs.

The remaining portion of the net capital program represents the development-related cost that may be included in the development charge. In all cases, this amount is equal to or less than the maximum allowable funding envelope as calculated on the final page of Tables B.1- 1 to B.7-1. The result is the discounted development-related net capital cost that is eligible for recovery against development over the period from 2022 to 2031.

Calculation of the Unadjusted Development Charge Rates

The section below the capital program displays the calculation of the “unadjusted” development charge rates. The term “unadjusted” development charge is used to distinguish the charge that is calculated prior to cash flow financing considerations. The cash flow analysis is shown in Tables B.1-3 to B.7-3.

The first step when determining the unadjusted development charge rate is to allocate the development-related net capital cost between the residential and non-residential sectors. For General Government, Fire Services, and Public Works, the development-related costs have been apportioned as 62 per cent residential and 38 per cent non-residential.

The development-related costs associated with all other soft services (Library, Indoor Recreation, Park Development & Facilities, and Waste Diversion), have been allocated 100 per cent to the residential sector given the need for these services is generally driven by residential development.

The residential share of the 2022 - 2031 DC eligible costs are then divided by the forecast population growth in new units. This gives the unadjusted residential development charge per capita. The non-residential development-related net capital costs are divided by the forecast increase in non-residential gross floor area (GFA). This yields a charge per square metre of new non-residential GFA.

Tables B.1-3 to B.7-3 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, therefore, accounted for in the calculation as allowed under the *DCA*. Based on the growth forecast, the analysis calculates the development charges rate that is 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 charges 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 3.5 per cent is used for positive opening balances, and a rate of 5.5 per cent is used for negative opening balances.

Tables B.1-3 to B.7-3 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

General Government

Appendix B.1: General Government

The *DCA* allows the cost of development-related studies to be included in the calculation of the development charges as long as they are permitted under the legislation. 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.1-1 2012 - 2021 Historical Service Levels

Table B.1-1 provides a summary of the historical service level for the provision of general government (development-related studies). The service level is based on actual expenditures for development-related studies over the last ten years (2012 - 2021) divided by year-over-year population and employment growth.

Table B.1-1 identifies a ten-year average service level for the provision of development-related studies of \$245.27 per population and employment. When multiplied by the net population and employment growth over the 2022 to 2031 planning period (145,660), yields a maximum allowable funding envelope of \$35.73 million that can be included in the development charges calculation.

Table B.1-2 2022 – 2031 Development-Related Capital Program and Calculation of the Unadjusted Development Charges

As shown on Table B.1-2, the 2022 – 2031 development-related gross cost for General Government is \$34.10 million. This includes recovery of the negative reserve fund balance (\$12.45 million), as well as an annual provision of \$2.17 million for various studies. The annual provision is based

on the annual average over the previous ten years (\$1.96 million) and accounts for annual average CPI over the previous five years compounded over the next five years.

No grants or replacement shares have been identified, thus, the full amount of the capital program (34.10 million) has been brought forward to the development charge calculation. This amount is allocated 62 per cent, or \$21.11 million to the residential sector, and 38 per cent, or \$12.99 million to the non-residential sector; these shares are based on shares of ten-year growth in population in new units and employment.

The resulting unadjusted per capita residential charge is \$233.61 before cash flow adjustments. The non-residential unadjusted charge is further allocated between retail, industrial/office/institutional charges and mixed-use. The unadjusted retail rate is \$5.99 per square metre, the industrial/office/institutional (I.O.I.) amounts to \$4.83 per square metre and the unadjusted mixed-use charge is \$2.92 per square metre.

Table B.1-3 Cash Flow Analysis

After cash flow analysis, the residential charge increases to \$240.66 per capita. The non-residential retail charge increases to \$6.52 per square metre, while the industrial/office/institutional charge increases to \$5.23 per square metre, and mixed used increases to \$3.03 per square metre. This is a reflection of the timing of the capital program and development charges revenues.

The following table summarizes the calculation of the General Government development charge.

GENERAL GOVERNMENT SUMMARY									
2022 - 2031		Unadjusted Development Charge				Adjusted Development Charge			
Development-Related Capital Program	Residential	Retail	I.O.I.	Mixed-Use	Residential	Retail	I.O.I.	Mixed-Use	
Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/sq.m	\$/sq.m	\$/capita	\$/sq.m	\$/sq.m	\$/sq.m
\$34,099,685	\$34,099,685	\$233.61	\$5.99	\$4.83	\$2.92	\$240.66	\$6.52	\$5.23	\$3.03

APPENDIX B.1

TABLE B.1-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
GENERAL GOVERNMENT

Growth-Related Studies Description	\$ Amount Spent										Total
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Various Studies	\$1,846,020	\$1,838,000	\$2,184,410	\$1,238,510	\$1,956,430	\$1,862,400	\$1,977,180	\$2,213,740	\$1,850,280	\$1,955,120	\$18,922,090
Development Charges Studies	\$316,530	\$135,000	\$0	\$25,000	\$0	\$109,890	\$0	\$0	\$0	\$109,890	\$696,310
Total (\$000)	\$2,162.6	\$1,973.0	\$2,184.4	\$1,263.5	\$1,956.4	\$1,972.3	\$1,977.2	\$2,213.7	\$1,850.3	\$2,065.0	

CITY OF MARKHAM
CALCULATION OF SERVICE LEVELS
INVENTORY OF CAPITAL ASSETS
GENERAL GOVERNMENT

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historic Population	306,973	312,329	317,779	323,324	328,966	333,938	338,985	344,109	349,310	354,589
Historic Employment	<u>135,104</u>	<u>137,357</u>	<u>139,685</u>	<u>142,092</u>	<u>144,582</u>	<u>147,517</u>	<u>150,539</u>	<u>153,654</u>	<u>156,862</u>	<u>160,210</u>
Total Population & Employment	442,077	449,686	457,464	465,416	473,548	481,455	489,524	497,763	506,172	514,800
Growth	7,443	7,609	7,778	7,952	8,132	7,907	8,069	8,238	8,410	8,627

INVENTORY SUMMARY (\$000)

Growth-Related Studies	\$2,162.6	\$1,973.0	\$2,184.4	\$1,263.5	\$1,956.4	\$1,972.3	\$1,977.2	\$2,213.7	\$1,850.3	\$2,065.0
Total (\$000)	\$2,162.6	\$1,973.0	\$2,184.4	\$1,263.5	\$1,956.4	\$1,972.3	\$1,977.2	\$2,213.7	\$1,850.3	\$2,065.0

CALCULATION OF SERVICE LEVELS
SERVICE LEVEL (\$/year)

Average
Service
Level

Growth-Related Studies	\$290.56	\$259.30	\$280.84	\$158.89	\$240.58	\$249.44	\$245.02	\$268.71	\$220.02	\$239.36	\$245.27
Total (\$000)	\$290.56	\$259.30	\$280.84	\$158.89	\$240.58	\$249.44	\$245.02	\$268.71	\$220.02	\$239.36	\$245.27

CITY OF MARKHAM
CALCULATION OF MAXIMUM ALLOWABLE
GENERAL GOVERNMENT

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2012 - 2021	\$245.27
Net Population + Employment Growth 2022 - 2031	145,660
Maximum Allowable Funding Envelope	\$35,726,125

APPENDIX B.1
TABLE B.1-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
GENERAL GOVERNMENT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement	BTE Shares		Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
1.0 GENERAL GOVERNMENT											
1.1 Recovery of Past Commitments											
1.1.1 Recovery of Negative Reserve Fund Balance	2022	\$ 12,449,685	\$ -	\$ 12,449,685	0%	\$ -	\$ 12,449,685	\$ -	\$ -	\$ 12,449,685	\$ -
Subtotal Recovery of Past Commitments		\$ 12,449,685	\$ -	\$ 12,449,685		\$ -	\$ 12,449,685	\$ -	\$ -	\$ 12,449,685	\$ -
1.1 Development-Related Studies											
1.1.1 Various Studies	2022	\$ 2,165,000	\$ -	\$ 2,165,000	0%	\$ -	\$ 2,165,000	\$ -	\$ -	\$ 2,165,000	\$ -
1.1.2 Various Studies	2023	\$ 2,165,000	\$ -	\$ 2,165,000	0%	\$ -	\$ 2,165,000	\$ -	\$ -	\$ 2,165,000	\$ -
1.1.3 Various Studies	2024	\$ 2,165,000	\$ -	\$ 2,165,000	0%	\$ -	\$ 2,165,000	\$ -	\$ -	\$ 2,165,000	\$ -
1.1.4 Various Studies	2025	\$ 2,165,000	\$ -	\$ 2,165,000	0%	\$ -	\$ 2,165,000	\$ -	\$ -	\$ 2,165,000	\$ -
1.1.5 Various Studies	2026	\$ 2,165,000	\$ -	\$ 2,165,000	0%	\$ -	\$ 2,165,000	\$ -	\$ -	\$ 2,165,000	\$ -
1.1.6 Various Studies	2027	\$ 2,165,000	\$ -	\$ 2,165,000	0%	\$ -	\$ 2,165,000	\$ -	\$ -	\$ 2,165,000	\$ -
1.1.7 Various Studies	2028	\$ 2,165,000	\$ -	\$ 2,165,000	0%	\$ -	\$ 2,165,000	\$ -	\$ -	\$ 2,165,000	\$ -
1.1.8 Various Studies	2029	\$ 2,165,000	\$ -	\$ 2,165,000	0%	\$ -	\$ 2,165,000	\$ -	\$ -	\$ 2,165,000	\$ -
1.1.9 Various Studies	2030	\$ 2,165,000	\$ -	\$ 2,165,000	0%	\$ -	\$ 2,165,000	\$ -	\$ -	\$ 2,165,000	\$ -
1.1.10 Various Studies	2031	\$ 2,165,000	\$ -	\$ 2,165,000	0%	\$ -	\$ 2,165,000	\$ -	\$ -	\$ 2,165,000	\$ -
Subtotal Development-Related Studies		\$ 21,650,000	\$ -	\$ 21,650,000		\$ -	\$ 21,650,000	\$ -	\$ -	\$ 21,650,000	\$ -
TOTAL GENERAL GOVERNMENT		\$ 34,099,685	\$ -	\$ 34,099,685		\$ -	\$ 34,099,685	\$ -	\$ -	\$ 34,099,685	\$ -

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	61.9%	\$21,113,570
10-Year Growth in Population in New Units		90,381
Unadjusted Development Charge Per Capita		\$233.61
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	38.1%	\$12,986,114
10-Year Growth in Square Metres		2,550,244
Unadjusted Development Charge Per Square Metre		\$5.09

Non-Residential Development Charge Calculation		
Retail		
Non-Residential Share of 2022-2031 DC Eligible Costs	11.0%	\$ 3,759,194.0
10-Year Growth in Square Metres		627,176
Unadjusted Development Charge Per Square Metre		\$5.99
Industrial/Office/Institutional		
Non-Residential Share of 2022-2031 DC Eligible Costs	26.8%	\$ 9,130,530.8
10-Year Growth in Square Metres		1,890,059
Unadjusted Development Charge Per Square Metre		\$4.83
Mixed-Use		
Non-Residential Share of 2022-2031 DC Eligible Costs	0.3%	\$ 96,389.6
10-Year Growth in Square Metres		33,009
Unadjusted Development Charge Per Square Metre		\$2.92

2022 - 2031 Net Funding Envelope	\$35,726,125
Reserve Fund Balance	(\$12,449,685)

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

**CITY OF MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
GENERAL GOVERNMENT
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

GENERAL GOVERNMENT	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	(\$7,708.50)	(\$7,514.46)	(\$7,218.41)	(\$6,810.35)	(\$6,279.55)	(\$5,615.33)	(\$4,831.97)	(\$3,892.97)	(\$2,785.13)	(\$1,492.92)	
2022 - 2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- General Government : Non Inflated	\$1,340.5	\$1,340.5	\$1,340.5	\$1,340.5	\$1,340.5	\$1,340.5	\$1,340.5	\$1,340.5	\$1,340.5	\$1,340.5	\$13,405.1
- General Government : Inflated	\$1,367.3	\$1,394.7	\$1,422.6	\$1,451.0	\$1,480.0	\$1,509.6	\$1,539.8	\$1,570.6	\$1,602.0	\$1,602.0	\$14,939.7
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	8,094	8,301	8,514	8,733	8,955	9,085	9,315	9,549	9,792	10,043	90,381
REVENUE											
- DC Receipts: Inflated	\$1,947.9	\$2,037.7	\$2,131.7	\$2,230.3	\$2,332.7	\$2,413.9	\$2,524.5	\$2,639.7	\$2,761.0	\$2,888.4	\$23,908.0
INTEREST											
- Interest on Opening Balance	(\$424.0)	(\$413.3)	(\$397.0)	(\$374.6)	(\$345.4)	(\$308.8)	(\$265.8)	(\$214.1)	(\$153.2)	(\$82.1)	(\$2,978.2)
- Interest on In-year Transactions	\$10.6	\$12.2	\$13.8	\$15.6	\$17.4	\$18.8	\$20.7	\$22.7	\$24.9	\$27.1	\$183.8
TOTAL REVENUE	\$1,534.5	\$1,636.6	\$1,748.6	\$1,871.3	\$2,004.7	\$2,123.9	\$2,279.5	\$2,448.3	\$2,632.7	\$2,833.4	\$21,113.6
CLOSING CASH BALANCE	(\$7,514.5)	(\$7,218.4)	(\$6,810.3)	(\$6,279.6)	(\$5,615.3)	(\$4,832.0)	(\$3,893.0)	(\$2,785.1)	(\$1,492.9)	\$0.0	

2022 Adjusted Charge Per Capita

\$240.66

Allocation of Capital Program

Residential Sector	61.9%
Non-Residential Sector	38.1%

Rates for 2022

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

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

**CITY OF MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
GENERAL GOVERNMENT
RETAIL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

GENERAL GOVERNMENT	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	(\$1,372.47)	(\$1,361.25)	(\$1,330.59)	(\$1,277.75)	(\$1,199.95)	(\$1,093.61)	(\$955.42)	(\$781.52)	(\$567.44)	(\$308.67)	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- General Government : Non Inflated	\$238.7	\$238.7	\$238.7	\$238.7	\$238.7	\$238.7	\$238.7	\$238.7	\$238.7	\$238.7	\$2,386.7
- General Government : Inflated	\$238.7	\$243.4	\$248.3	\$253.3	\$258.3	\$263.5	\$268.8	\$274.2	\$279.6	\$285.2	\$2,613.4
NON-RESIDENTIAL SPACE GROWTH - RETAIL											
- Growth in Square Metres	49,648	52,174	54,834	57,608	60,572	63,650	66,880	70,300	73,872	77,638	627,176.00
REVENUE											
- DC Receipts: Inflated	\$323.9	\$347.2	\$372.2	\$398.8	\$427.7	\$458.4	\$491.3	\$526.8	\$564.6	\$605.3	\$4,516.2
INTEREST											
- Interest on Opening Balance	(\$75.5)	(\$74.9)	(\$73.2)	(\$70.3)	(\$66.0)	(\$60.1)	(\$52.5)	(\$43.0)	(\$31.2)	(\$17.0)	(\$563.7)
- Interest on In-year Transactions	\$1.5	\$1.8	\$2.2	\$2.5	\$3.0	\$3.4	\$3.9	\$4.4	\$5.0	\$5.6	\$33.3
TOTAL REVENUE	\$249.9	\$274.1	\$301.2	\$331.1	\$364.7	\$401.7	\$442.7	\$488.2	\$538.4	\$593.9	\$3,985.9
CLOSING CASH BALANCE	(\$1,361.3)	(\$1,330.6)	(\$1,277.8)	(\$1,199.9)	(\$1,093.6)	(\$955.4)	(\$781.5)	(\$567.4)	(\$308.7)	\$0.0	

2022 Adjusted Charge Per Square Metre

\$6.52

Allocation of Capital Program

Retail Sector 11.0%

Industrial/Office/Institutional Sector 26.8%

Mixed-Use 0.3%

Rates for 2022

Inflation Rate 2.0%

Interest Rate on Positive Balances 3.5%

Interest Rate on Negative Balances 5.5%

APPENDIX B.1

TABLE B.1-3

**CITY OF MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
GENERAL GOVERNMENT
INDUSTRIAL/OFFICE/INSTITUTIONAL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

GENERAL GOVERNMENT	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	(\$3,333.53)	(\$3,233.17)	(\$3,094.62)	(\$2,913.23)	(\$2,684.84)	(\$2,404.10)	(\$2,065.12)	(\$1,662.15)	(\$1,188.60)	(\$636.87)	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- General Government : Non Inflated	\$579.7	\$579.7	\$579.7	\$579.7	\$579.7	\$579.7	\$579.7	\$579.7	\$579.7	\$579.7	\$5,797.0
- General Government : Inflated	\$579.7	\$591.3	\$603.1	\$615.2	\$627.5	\$640.0	\$652.8	\$665.9	\$679.2	\$692.8	\$6,347.6
NON-RESIDENTIAL SPACE GROWTH - I.O.I.											
- Growth in Square Metres	164,145	169,120	174,338	179,648	185,208	191,032	197,025	203,257	209,805	216,481	1,890,059
REVENUE											
- DC Receipts: Inflated	\$858.5	\$902.2	\$948.7	\$997.1	\$1,048.5	\$1,103.1	\$1,160.5	\$1,221.1	\$1,285.7	\$1,353.1	\$10,878.7
INTEREST											
- Interest on Opening Balance	(\$183.3)	(\$177.8)	(\$170.2)	(\$160.2)	(\$147.7)	(\$132.2)	(\$113.6)	(\$91.4)	(\$65.4)	(\$35.0)	(\$1,276.9)
- Interest on In-year Transactions	\$4.9	\$5.4	\$6.0	\$6.7	\$7.4	\$8.1	\$8.9	\$9.7	\$10.6	\$11.6	\$79.3
TOTAL REVENUE	\$680.1	\$729.8	\$784.5	\$843.6	\$908.2	\$979.0	\$1,055.8	\$1,139.4	\$1,230.9	\$1,329.7	\$9,681.1
CLOSING CASH BALANCE	(\$3,233.2)	(\$3,094.6)	(\$2,913.2)	(\$2,684.8)	(\$2,404.1)	(\$2,065.1)	(\$1,662.2)	(\$1,188.6)	(\$636.9)	\$0.0	

2022 Adjusted Charge Per Square Metre

\$5.23

Allocation of Capital Program

Retail Sector 11.0%

Industrial/Office/Institutional Sector 26.8%

Mixed-Use 0.3%

Rates for 2022

Inflation Rate 2.0%

Interest Rate on Positive Balances 3.5%

Interest Rate on Negative Balances 5.5%

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

**CITY OF MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
GENERAL GOVERNMENT
MIXED-USE NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

GENERAL GOVERNMENT	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	(\$35.19)	(\$35.31)	(\$34.73)	(\$33.62)	(\$31.79)	(\$29.14)	(\$25.58)	(\$21.01)	(\$15.31)	(\$8.35)	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- General Government : Non Inflated	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$61.2
- General Government : Inflated	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$6.1	\$61.2
NON-RESIDENTIAL SPACE GROWTH - MIXED-USE											
- Growth in Square Metres	2,613	2,746	2,886	3,032	3,188	3,350	3,520	3,700	3,888	4,086	33,009
REVENUE											
- DC Receipts: Inflated	\$7.9	\$8.5	\$9.1	\$9.7	\$10.4	\$11.2	\$12.0	\$12.9	\$13.8	\$14.8	\$110.3
INTEREST											
- Interest on Opening Balance	(\$1.9)	(\$1.9)	(\$1.9)	(\$1.8)	(\$1.7)	(\$1.6)	(\$1.4)	(\$1.2)	(\$0.8)	(\$0.5)	(\$14.8)
- Interest on In-year Transactions	\$0.0	\$0.0	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1	\$0.2	\$0.9
TOTAL REVENUE	\$6.0	\$6.6	\$7.2	\$8.0	\$8.8	\$9.7	\$10.7	\$11.8	\$13.1	\$14.5	\$96.3
CLOSING CASH BALANCE	(\$35.3)	(\$34.7)	(\$33.6)	(\$31.8)	(\$29.1)	(\$25.6)	(\$21.0)	(\$15.3)	(\$8.3)	\$0.0	

2022 Adjusted Charge Per Square Metre

\$3.03

Allocation of Capital Program

Retail Sector	11.0%
Industrial/Office/Institutional Sector	26.8%
Mixed-Use	0.3%

Rates for 2022

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

Appendix B.2

Library Services

Appendix B.2: Library Services

The Markham Public Library provides library services from eight branches. The library offers a wide array of adult and children’s services, library programs and room rentals. Each branch has a variety of collection materials available for the community’s use.

Table B.2-1 2012 - 2021 Historical Service Levels

Table B.2-1 displays the Library’s ten-year historical inventory for buildings, land, materials, and furniture and equipment (excluding computer equipment). The building space amounts to 166,050 square feet which is valued at \$98.73 million. The library buildings occupy approximately 5.21 hectares of land worth \$71.49 million. The collection materials are valued at \$26.23 million and furniture and equipment associated with the branch is valued at \$10.57 million.

The 2021 full replacement value of the inventory of capital assets amounts to \$207.01 million which yields a the ten-year historical average service level is \$585.95 per capita. The historical service level multiplied by the ten-year forecast of net population growth (90,070) results in a ten-year maximum allowable funding envelope of \$52.78 million.

Table B.2-2 2022 – 2031 Development-Related Capital Program & Calculation of the Unadjusted Development Charge

The Library Services capital program includes a provision for five new library facilities: Markham Centre, Thornhill, West Markham, East Markham, as well as a 20,000 sq.ft. future facility. Each of the five facilities require \$2.06 million for the acquisition of land, as well as a total cost of \$55.35 million for construction, \$7.24 million for furnishings, and \$15.01 million for library collection materials.

The total gross cost of the Library DC capital program is \$87.88 million. No grants, subsidies, or other recoveries are anticipated to fund any shares of the above mentioned projects, as such, the net cost to the municipality remains at \$87.88 million. No shares of the projects are deemed to be a replacement as they are net additions to the current Library service level.

The existing reserve fund balance of \$5.34 million has been applied against the net municipal cost of the library capital program. A share of the development-related capital program, \$29.76 million, is above the 10-year historical service level net funding envelope; this amount has been categorized as “other development-related” and will not be recovered under this development charges by-law. Other development-related shares, however, will be considered in future development charge studies (subject to service level restrictions), other growth-funding tools or other funding sources.

After these adjustments, the 2022 – 2031 DC costs eligible for recovery amounts to \$52.78 million which is allocated entirely against future residential development in the City of Markham. This results in an unadjusted development charge of \$583.94 per capita.

Table B.2-3 Cash Flow Analysis

After cash flow, the residential calculated charge increases to \$598.39 per capita. The increase reflects the front-ended nature of the capital program.

The following table summarizes the calculation of the Library development charge:

LIBRARY SUMMARY										
10-year Hist. Service Level per capita	2022 - 2031		Unadjusted Development Charge				Adjusted Development Charge			
	Development-Related Capital Program		Residential	Retail	I.O.I.	Mixed-Use	Residential	Retail	I.O.I.	Mixed-Use
	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/sq.m	\$/sq.m	\$/capita	\$/sq.m	\$/sq.m	\$/sq.m
\$585.95	\$87,883,379	\$52,776,897	\$583.94	\$0.00	\$0.00	\$0.00	\$598.39	\$0.00	\$0.00	\$0.00

APPENDIX B.2
TABLE B.2-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
LIBRARY

BUILDINGS Branch Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Aaniin Community Centre	-	-	-	-	-	20,000	20,000	20,000	20,000	20,000	\$615
Angus Glen Library - 3990 Major Mackenzie Drive East, Markham	29,700	29,700	29,700	29,700	29,700	29,700	29,700	29,700	29,700	29,700	\$615
Cornell Library - 3201 Bur Oak Drive, Markham	-	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	23,000	\$615
Markham Village Library - 6031 Hwy #7, Markham	32,510	32,510	32,510	32,510	32,510	32,510	32,510	32,510	32,510	32,510	\$615
Milliken Mills Library - Unit 1, 7600 Kennedy Rd., Unionville	16,865	16,865	16,865	16,865	16,865	16,865	16,865	16,865	16,865	16,865	\$615
Thornhill CC Library - 7755 Bayview Ave., Thornhill	26,053	26,053	26,053	26,053	26,053	26,053	26,053	26,053	26,053	26,053	\$615
Thornhill Village Library - 10 Colbourne St., Thornhill	4,283	4,283	4,283	4,283	4,283	4,283	4,283	4,283	4,283	4,283	\$476
Unionville Library - 15 Library Lane, Unionville	13,640	13,640	13,640	13,640	13,640	13,640	13,640	13,640	13,640	13,640	\$410
Total (sq.ft.)	123,051	146,051	146,051	146,051	146,051	166,051	166,051	166,051	166,051	166,051	
Total (\$000)	\$72,284.8	\$86,429.8	\$86,429.8	\$86,429.8	\$86,429.8	\$98,729.8	\$98,729.8	\$98,729.8	\$98,729.8	\$98,729.8	

LAND Branch Name	# of Hectares										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Aaniin Community Centre	-	-	-	-	-	0.55	0.55	0.55	0.55	0.55	\$13,714,000
Angus Glen Library - 3990 Major Mackenzie Drive East, Markham	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	\$13,714,000
Cornell Library - 3201 Bur Oak Drive, Markham	-	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	\$13,714,000
Markham Village Library - 6031 Hwy #7, Markham	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	\$13,714,000
Milliken Mills Library - Unit 1, 7600 Kennedy Rd., Unionville	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	\$13,714,000
Thornhill CC Library - 7755 Bayview Ave., Thornhill	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	\$13,714,000
Thornhill Village Library - 10 Colbourne St., Thornhill	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$13,714,000
Unionville Library - 15 Library Lane, Unionville	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.67	0.67	0.67	\$13,714,000
Total (ha)	4.48	4.90	4.90	4.90	4.90	5.45	5.45	5.21	5.21	5.21	
Total (\$000)	\$61,444.3	\$67,237.1	\$67,237.1	\$67,237.1	\$67,237.1	\$74,779.8	\$74,779.8	\$71,488.4	\$71,488.4	\$71,488.4	

APPENDIX B.2

TABLE B.2-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
LIBRARY

MATERIALS Type of Collection	# of Collection Materials										UNIT COST (\$/item)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Collection Materials											
- Talking Books	14,169	13,172	12,175	14,990	14,919	14,965	14,858	14,613	15,362	15,362	\$51
- Talking Books (kits)	3,552	2,091	629	592	95	-	-	-	-	-	\$81
- Books	556,726	563,300	573,357	583,414	594,797	619,199	618,554	607,706	620,832	620,832	\$31
- Browsing PB	80,268	48,209	-	-	-	-	-	-	-	-	\$12
- CD-ROM Software	2,488	1,255	22	5	4	-	-	-	-	-	\$45
- Compact Discs	20,147	17,003	13,859	17,656	17,487	15,783	16,224	15,645	15,948	15,948	\$21
- Daisy Players	-	-	-	-	-	4	8	8	8	8	\$541
- DML Lendable Equipment	-	-	28	27	26	26	112	129	109	109	\$151
- DVDs	50,071	58,571	67,071	91,037	93,801	99,035	104,227	108,259	113,133	113,133	\$34
- Energy Meters	-	-	43	43	41	13	13	53	53	53	\$60
- Enviropacks	-	-	24	27	28	29	34	30	30	30	\$94
- Equipment	-	-	-	-	-	2	13	59	78	78	\$8
- Instruments	-	-	-	-	-	-	-	67	67	67	\$147
- Launchpads	-	-	-	-	-	-	-	-	112	112	\$229
- Lendery	-	-	-	-	-	-	-	71	71	71	\$37
- Microfiche	500	500	500	500	500	500	500	500	500	500	\$75
- Microfilms	457	481	493	505	517	529	541	553	565	565	\$294
- Newspapers	61	73	85	91	88	83	70	70	68	68	\$241
- Pedometers	-	-	87	83	73	67	65	59	58	58	\$6
- Periodicals	1,072	1,059	1,046	1,058	1,034	989	969	1,003	967	967	\$88
- Toys	-	-	-	-	-	77	454	417	413	413	\$52
- Videocassettes	265	140	15	-	-	-	-	-	-	-	\$26
- Videogames	2,079	2,006	1,932	2,092	2,250	2,992	3,632	4,099	4,698	4,698	\$78
Electronic Resources											
- Electronic Resources	\$359,781	\$338,817	\$367,525	\$510,080	\$532,443	\$717,841	\$844,391	\$1,052,580	\$1,223,608	\$1,260,316	
Total (#)	731,855	707,860	671,366	712,120	725,660	754,293	760,274	753,341	773,072	773,072	
Total (\$000)	\$22,279.24	\$22,075.53	\$21,841.56	\$23,348.49	\$23,783.01	\$24,922.31	\$25,293.06	\$25,335.81	\$26,193.19	\$26,229.90	

FIXTURES, FURNITURE & EQUIPMENT Branch Name	Total Value of Furniture and Equipment (\$)									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Aaniin Community Centre	-	-	-	-	-	\$782,209	\$784,145	\$852,887	\$852,887	\$852,887
Automated Library Collection System	\$2,974,577	\$3,009,778	\$3,085,673	\$3,133,646	\$3,197,584	\$3,215,547	\$3,450,659	\$3,457,847	\$3,457,847	\$3,457,847
Angus Glen Library - 3990 Major Mackenzie Drive East, Markham	\$841,483	\$841,776	\$847,519	\$850,136	\$851,984	\$856,636	\$858,839	\$949,901	\$969,165	\$969,620
Cornell Library - 3201 Bur Oak Ave, Markham	-	\$763,586	\$782,840	\$795,011	\$811,232	\$813,069	\$818,807	\$827,091	\$827,091	\$827,091
Markham Village Library - 6031 Hwy #7, Markham	\$722,319	\$734,126	\$735,435	\$738,633	\$753,704	\$763,500	\$770,240	\$800,029	\$816,693	\$835,706
Milliken Mills Library - Unit 1, 7600 Kennedy Rd., Unionville	\$1,000,044	\$1,042,992	\$1,046,497	\$1,062,767	\$1,084,451	\$1,090,006	\$1,098,413	\$1,103,693	\$1,103,693	\$1,103,693
Thornhill CC Library - 7755 Bayview Ave., Thornhill	\$1,015,323	\$978,163	\$980,162	\$995,400	\$1,015,710	\$1,031,460	\$1,044,042	\$1,070,895	\$1,082,882	\$1,110,070
Thornhill Village Library - 10 Colbourne St., Thornhill	\$186,325	\$154,693	\$155,862	\$158,285	\$161,515	\$161,515	\$161,765	\$169,973	\$169,973	\$169,973
Unionville Library - 15 Library Lane, Unionville	\$1,027,312	\$1,019,312	\$1,020,907	\$1,023,420	\$1,044,302	\$1,139,829	\$1,239,183	\$1,239,183	\$1,239,183	\$1,239,183
Total (\$000)	\$7,767.4	\$8,544.4	\$8,654.9	\$8,757.3	\$8,920.5	\$9,853.8	\$10,226.1	\$10,471.5	\$10,519.4	\$10,566.1

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

**CITY OF MARKHAM
CALCULATION OF SERVICE LEVELS
LIBRARY**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historical Population	306,973	312,329	317,779	323,324	328,966	333,938	338,985	344,109	349,310	354,589
INVENTORY SUMMARY (\$000)										

Buildings	\$72,284.8	\$86,429.8	\$86,429.8	\$86,429.8	\$86,429.8	\$98,729.8	\$98,729.8	\$98,729.8	\$98,729.8	\$98,729.8
Land	\$61,444.3	\$67,237.1	\$67,237.1	\$67,237.1	\$67,237.1	\$74,779.8	\$74,779.8	\$71,488.4	\$71,488.4	\$71,488.4
Materials	\$22,279.2	\$22,075.5	\$21,841.6	\$23,348.5	\$23,783.0	\$24,922.3	\$25,293.1	\$25,335.8	\$26,193.2	\$26,229.9
Fixtures, Furniture & Equipment	\$7,767.4	\$8,544.4	\$8,654.9	\$8,757.3	\$8,920.5	\$9,853.8	\$10,226.1	\$10,471.5	\$10,519.4	\$10,566.1
Total (\$000)	\$163,775.7	\$184,286.9	\$184,163.4	\$185,772.7	\$186,370.4	\$208,285.7	\$209,028.8	\$206,025.6	\$206,930.8	\$207,014.2

SERVICE LEVEL (\$/capita)											Average Service Level
Buildings	\$235.48	\$276.73	\$271.98	\$267.32	\$262.73	\$295.65	\$291.25	\$286.91	\$282.64	\$278.43	\$274.91
Land	\$200.16	\$215.28	\$211.58	\$207.96	\$204.39	\$223.93	\$220.60	\$207.75	\$204.66	\$201.61	\$209.79
Materials	\$72.58	\$70.68	\$68.73	\$72.21	\$72.30	\$74.63	\$74.61	\$73.63	\$74.99	\$73.97	\$72.83
Fixtures, Furniture & Equipment	\$25.30	\$27.36	\$27.24	\$27.09	\$27.12	\$29.51	\$30.17	\$30.43	\$30.11	\$29.80	\$28.41
Total (\$/capita)	\$533.52	\$590.04	\$579.53	\$574.57	\$566.53	\$623.73	\$616.63	\$598.72	\$592.40	\$583.81	\$585.95

**CITY OF MARKHAM
CALCULATION OF MAXIMUM ALLOWABLE
LIBRARY**

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2012 - 2021	\$585.95
Net Population Growth 2022 - 2031	90,071
Maximum Allowable Funding Envelope	\$52,776,897

APPENDIX B.2
TABLE B.2-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
LIBRARY

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022- 2031	Other Dev. Related Costs
2.0 LIBRARY											
2.1 Library Buildings											
2.2.1 Markham Centre (20,000 sq. ft)	2022	\$ 12,300,000	\$ -	\$ 12,300,000	0%	\$ -	\$ 12,300,000	\$ -	\$ 5,343,182	\$ 6,956,818	\$ -
2.2.2 Thornhill (10,000 sq.ft)	2026	\$ 6,150,000	\$ -	\$ 6,150,000	0%	\$ -	\$ 6,150,000	\$ -	\$ -	\$ 3,690,000	\$ 2,460,000
2.2.3 West Markham (20,000 sq. ft)	2026	\$ 12,300,000	\$ -	\$ 12,300,000	0%	\$ -	\$ 12,300,000	\$ -	\$ -	\$ 9,225,000	\$ 3,075,000
2.2.4 East Markham (20,000 sq. ft)	2030	\$ 12,300,000	\$ -	\$ 12,300,000	0%	\$ -	\$ 12,300,000	\$ -	\$ -	\$ 6,150,000	\$ 6,150,000
2.2.5 Provision for Future Library Building (20,000 sq.ft.)	2030	\$ 12,300,000	\$ -	\$ 12,300,000	0%	\$ -	\$ 12,300,000	\$ -	\$ -	\$ 4,920,000	\$ 7,380,000
Subtotal Library Buildings		\$ 55,350,000	\$ -	\$ 55,350,000		\$ -	\$ 55,350,000	\$ -	\$ 5,343,182	\$ 30,941,818	\$ 19,065,000
2.2 Library Land											
2.2.1 Markham Centre	2022	\$ 2,057,100	\$ -	\$ 2,057,100	0%	\$ -	\$ 2,057,100	\$ -	\$ -	\$ 2,057,100	\$ -
2.2.2 Thornhill	2026	\$ 2,057,100	\$ -	\$ 2,057,100	0%	\$ -	\$ 2,057,100	\$ -	\$ -	\$ 1,234,260	\$ 822,840
2.2.3 West Markham	2026	\$ 2,057,100	\$ -	\$ 2,057,100	0%	\$ -	\$ 2,057,100	\$ -	\$ -	\$ 1,542,825	\$ 514,275
2.2.4 East Markham	2030	\$ 2,057,100	\$ -	\$ 2,057,100	0%	\$ -	\$ 2,057,100	\$ -	\$ -	\$ 1,028,550	\$ 1,028,550
2.2.5 Provision for Future Library Building	2030	\$ 2,057,100	\$ -	\$ 2,057,100	0%	\$ -	\$ 2,057,100	\$ -	\$ -	\$ 822,840	\$ 1,234,260
Subtotal Library Land		\$ 10,285,500	\$ -	\$ 10,285,500		\$ -	\$ 10,285,500	\$ -	\$ -	\$ 6,685,575	\$ 3,599,925
2.3 Library Furniture and Equipment											
2.3.1 Markham Centre	2022	\$ 1,609,244	\$ -	\$ 1,609,244	0%	\$ -	\$ 1,609,244	\$ -	\$ -	\$ 1,609,244	\$ -
2.3.2 Thornhill	2026	\$ 804,622	\$ -	\$ 804,622	0%	\$ -	\$ 804,622	\$ -	\$ -	\$ 482,773	\$ 321,849
2.3.3 West Markham	2026	\$ 1,609,244	\$ -	\$ 1,609,244	0%	\$ -	\$ 1,609,244	\$ -	\$ -	\$ 1,206,933	\$ 402,311
2.3.4 East Markham	2030	\$ 1,609,244	\$ -	\$ 1,609,244	0%	\$ -	\$ 1,609,244	\$ -	\$ -	\$ 804,622	\$ 804,622
2.3.5 Provision for Future Library Building	2030	\$ 1,609,244	\$ -	\$ 1,609,244	0%	\$ -	\$ 1,609,244	\$ -	\$ -	\$ 643,698	\$ 965,546
Subtotal Library Furniture and Equipment		\$ 7,241,598	\$ -	\$ 7,241,598		\$ -	\$ 7,241,598	\$ -	\$ -	\$ 4,747,270	\$ 2,494,328
2.4 Library Collection Materials											
2.4.1 Markham Centre	2022	\$ 3,334,729	\$ -	\$ 3,334,729	0%	\$ -	\$ 3,334,729	\$ -	\$ -	\$ 3,334,729	\$ -
2.4.2 Thornhill	2026	\$ 1,667,365	\$ -	\$ 1,667,365	0%	\$ -	\$ 1,667,365	\$ -	\$ -	\$ 1,000,419	\$ 666,946
2.4.3 West Markham	2026	\$ 3,334,729	\$ -	\$ 3,334,729	0%	\$ -	\$ 3,334,729	\$ -	\$ -	\$ 2,501,047	\$ 833,682
2.4.4 East Markham	2030	\$ 3,334,729	\$ -	\$ 3,334,729	0%	\$ -	\$ 3,334,729	\$ -	\$ -	\$ 1,667,365	\$ 1,667,365
2.4.5 Provision for Future Library Building	2030	\$ 3,334,729	\$ -	\$ 3,334,729	0%	\$ -	\$ 3,334,729	\$ -	\$ -	\$ 1,898,675	\$ 1,436,054
Subtotal Library Collection Materials		\$ 15,006,281	\$ -	\$ 15,006,281		\$ -	\$ 15,006,281	\$ -	\$ -	\$ 10,402,234	\$ 4,604,047
TOTAL LIBRARY		\$ 87,883,379	\$ -	\$ 87,883,379		\$ -	\$ 87,883,379	\$ -	\$ 5,343,182	\$ 52,776,897	\$ 29,763,300

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	100%	\$52,776,897
10-Year Growth in Population in New Units		90,381
Unadjusted Development Charge Per Capita		\$583.94
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		2,550,244
Unadjusted Development Charge Per Square Metre		\$0.00

2022 - 2031 Net Funding Envelope	\$52,776,897
Reserve Fund Balance	\$5,343,182

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

**CITY OF MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
LIBRARY
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

LIBRARY	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$5,343.18	(\$9,325.1)	(\$4,682.7)	\$453.1	\$6,111.7	(\$10,940.9)	(\$5,435.4)	\$652.8	\$7,354.2	(\$6,926.8)	
2022 - 2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$5,343.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$5,343.2
- Library Services: Non Inflated	\$13,957.9	\$0.0	\$0.0	\$0.0	\$20,883.3	\$0.0	\$0.0	\$0.0	\$17,935.7	\$0.0	\$52,776.9
- Library Services: Inflated	\$19,301.1	\$0.0	\$0.0	\$0.0	\$22,604.7	\$0.0	\$0.0	\$0.0	\$21,014.6	\$0.0	\$62,920.4
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	8,094	8,301	8,514	8,733	8,955	9,085	9,315	9,549	9,792	10,043	90,381
REVENUE											
- DC Receipts: Inflated	\$4,843.4	\$5,066.6	\$5,300.6	\$5,545.6	\$5,800.3	\$6,002.2	\$6,277.3	\$6,563.7	\$6,865.3	\$7,182.1	\$59,447.2
INTEREST											
- Interest on Opening Balance	\$187.0	(\$512.9)	(\$257.5)	\$15.9	\$213.9	(\$601.8)	(\$298.9)	\$22.8	\$257.4	(\$381.0)	(\$1,355.1)
- Interest on In-year Transactions	(\$397.6)	\$88.7	\$92.8	\$97.0	(\$462.1)	\$105.0	\$109.9	\$114.9	(\$389.1)	\$125.7	(\$514.9)
TOTAL REVENUE	\$4,632.8	\$4,642.4	\$5,135.8	\$5,658.5	\$5,552.1	\$5,505.5	\$6,088.2	\$6,701.4	\$6,733.6	\$6,926.8	\$57,577.2
CLOSING CASH BALANCE	(\$9,325.1)	(\$4,682.7)	\$453.1	\$6,111.7	(\$10,940.9)	(\$5,435.4)	\$652.8	\$7,354.2	(\$6,926.8)	\$0.0	

2022 Adjusted Charge Per Capita **\$598.39**

Allocation of Capital Program	
Residential Sector	100.0%
Non-Residential Sector	0.0%
Rates for 2022	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

Appendix B.3

Fire Services

Appendix B.3: Fire Services

The Markham Fire Department operates from nine stations and one training centre. The Department is responsible for fire prevention inspections, public education sessions, communications (including dispatching), and fire suppression.

Table B.3-1 2012 - 2021 Historical Service Levels

The combined area of the fire stations is 93,400 square feet and is valued at \$47.88 million. The land area associated with the buildings is roughly 4.96 hectares and is valued at \$68.00 million. The 51 vehicles associated with the stations have a replacement value of \$22.61 million. Finally, personal firefighting equipment, communications equipment, and other station equipment add another \$13.48 million to the value of the inventory.

The current replacement value of the Fire Services capital infrastructure is \$151.97 million. It has provided the City with a ten-year average service level of \$315.73 per population and employment. When multiplied by the net population and employment (145,660), the result is a maximum allowable funding envelope of \$45.99 million.

Table B.3-2 2022 – 2031 Development-Related Capital Program & Calculation of the Unadjusted Development Charge

The Fire Services capital program includes a provision for four new fire stations: Thornhill, Markham Centre, FUA North, as well as a 16,000 sq.ft. future facility. The four fire stations require \$21.94 million for the acquisition of land, as well as costs of \$23.41 million for construction and \$1.95 million for furnishings.

Each of the new stations will require a crew of 21 new firefighters. The equipment required to service these firefighters amounts to \$166,299 per station. Lastly, four new fire apparatus vehicles, a prevention car and a pumper truck will be added to the fleet at a cost of \$4.63 million.

The ten-year capital program for Fire Services amounts to \$51.34 million. No grants or replacement shares have been identified for this service; as such, the entire program is deemed to be DC eligible.

After accounting for the \$4.88 million in reserves and the share of \$665,686 which has been deemed other development-related, the resulting amount of \$45.99 million is related to development occurring between the 2022 and 2031 planning period and eligible for DC recovery

The ten-year development-related net capital cost is allocated 62 per cent, or \$28.48 million, against residential development, and 38 per cent, or \$17.51 million, against non-residential development. The allocation between residential and non-residential development is based on shares of forecasted growth. The resulting unadjusted residential development charge is \$315.06 per capita. The non-residential unadjusted charge is allocated between retail, industrial/office/institutional (I.O.I.) and mixed use charges, at rates of \$8.08 per square metre, \$6.52 per square metre, and \$3.94 per square metre respectively.

Table B.3-3 Cash Flow Analysis

After cash flow consideration, the residential charge increases to \$330.46 per capita. The non-residential retail charge increases to \$8.54 per square metre, while the I.O.I. charge increases to \$6.85 per square metre, and the mixed use charge increases to \$4.16 per square metre.

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

FIRE SERVICES SUMMARY										
10-year Hist. Service Level per pop & emp	2022 - 2031		Residential \$/capita	Unadjusted Development Charge			Residential \$/capita	Adjusted Development Charge		
	Total	Net DC Recoverable		Retail \$/sq.m	I.O.I. \$/sq.m	Mixed-Use \$/sq.m		Retail \$/sq.m	I.O.I. \$/sq.m	Mixed-Use \$/sq.m
\$315.73	\$51,537,029	\$45,989,357	\$315.06	\$8.08	\$6.52	\$3.94	\$330.46	\$8.54	\$6.85	\$4.16

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

**CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES**

BUILDINGS Station Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Fire Training Centre - 436 John Street, Thornhill	5,531	5,531	5,531	5,531	5,531	5,531	5,531	5,531	5,531	5,531	\$509
Firehall 91 - 7801 Bayview Ave., Thornhill	8,348	8,348	8,348	8,348	8,348	8,348	8,348	8,348	8,348	8,348	\$509
Firehall 92 - 10 Riviera Drive, Markham	10,800	10,800	10,800	10,800	10,800	10,800	10,800	10,800	10,800	10,800	\$509
Firehall 93 - 2930 Major Mackenzie, Markham	9,990	9,990	9,990	9,990	9,990	9,990	9,990	9,990	9,990	9,990	\$509
Firehall 94 - 7300 Birchmount, Milliken Mills	7,142	7,142	7,142	7,142	7,142	7,142	7,142	7,142	7,142	7,142	\$509
Firehall 95 - 316 Main Street, Markham	11,846	11,846	11,846	11,846	11,846	11,846	11,846	11,846	11,846	11,846	\$509
Firehall 96 - 5567 14th Avenue, Milliken	8,933	8,933	8,933	8,933	8,933	8,933	8,933	8,933	8,933	8,933	\$509
Firehall 97 - 209 Main Street, Markham	7,669	7,669	7,669	7,669	7,669	7,669	7,669	7,669	7,669	7,669	\$509
Firehall 98 - 650 Bur Oak Avenue, Markham	9,990	9,990	9,990	9,990	9,990	9,990	9,990	9,990	9,990	9,990	\$509
Firehall 99 - 3255 Bur Oak (Cornell)	9,990	9,990	9,990	9,990	9,990	9,990	9,990	9,990	9,990	9,990	\$509
8100 Warden	3,165	3,165	3,165	3,165	3,165	3,165	3,165	3,165	3,165	3,165	\$615
Total (sq.ft.)	93,404	93,404	93,404	93,404	93,404	93,404	93,404	93,404	93,404	93,404	
Total (\$000)	\$47,878.1	\$47,878.1	\$47,878.1	\$47,878.1	\$47,878.1	\$47,878.1	\$47,878.1	\$47,878.1	\$47,878.1	\$47,878.1	

LAND Station Name	# of Hectares										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Firehall 91 - 7801 Bayview Ave., Thornhill	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	\$13,714,000
Fire Training Centre - 436 John Street, Thornhill	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	\$13,714,000
Firehall 94 - 7300 Birchmount, Milliken Mills	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	\$13,714,000
Firehall 93 - Cathedral	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$13,714,000
Firehall 95 - 316 Main Street, Markham	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	\$13,714,000
Firehall 96 - 5567 14th Avenue, Milliken	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	\$13,714,000
Firehall 97 - 209 Main Street, Markham	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	\$13,714,000
Firehall 92 - 10 Riviera Drive, Markham	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	\$13,714,000
Firehall 98 - 650 Bur Oak Avenue, Markham	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	\$13,714,000
Firehall 99 - Bur Oak (Cornell)	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	\$13,714,000
8100 Warden	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$13,714,000
Total (ha)	4.96	4.96	4.96	4.96	4.96	4.96	4.96	4.96	4.96	4.96	
Total (\$000)	\$68,002.1	\$68,002.1	\$68,002.1	\$68,002.1	\$68,002.1	\$68,002.1	\$68,002.1	\$68,002.1	\$68,002.1	\$68,002.1	

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

**CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES**

VEHICLES Vehicle Type	# of Vehicles										UNIT COST (\$/vehicle)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Aerial Truck	3	3	3	3	3	3	3	3	3	3	\$1,690,000
Aerial Platform	-	-	-	1	1	1	1	1	1	1	\$1,770,000
Battalion Chief Vehicle	2	2	2	2	2	2	2	2	2	2	\$151,812
Command Trailer	1	1	1	1	1	1	1	1	1	1	\$144,500
Flashover Simulator	1	1	1	1	1	1	1	1	1	1	\$87,000
Incident Command Simulator (Smokehouse)	1	1	1	1	1	1	1	1	1	1	\$26,893
Mechanical Vehicles	1	1	1	1	1	1	1	1	1	1	\$32,460
Personnel/ Rehabilitation	1	1	1	1	1	1	1	1	1	1	\$110,941
Propane Simulator Props	2	2	2	2	2	1	1	1	1	1	\$21,400
Pumpers	12	12	12	12	12	12	12	12	12	13	\$1,000,000
Tankers	1	1	1	1	1	1	1	1	1	1	\$493,257
Telesquirts	-	-	-	-	-	-	-	-	-	-	\$975,000
Training Vehicles	4	4	4	4	4	4	4	4	4	4	\$53,590
Fire Prevention Cars	13	14	14	14	14	14	14	14	14	14	\$25,650
Fire Investigation Truck	1	1	1	1	1	1	1	1	1	1	\$31,630
Deputy Fire Chief and Fire Chief Vehicle	3	3	3	3	3	3	3	3	3	3	\$40,800
Supply Van	1	1	1	1	1	1	1	1	1	1	\$50,110
Air Light Truck	1	1	1	1	1	1	1	1	1	1	\$720,000
Hazmat Trailer	1	1	1	1	1	1	1	1	1	1	\$52,530
Total (#)	49	50	50	51	51	50	50	50	50	51	
Total (\$000)	\$19,836.0	\$19,861.6	\$19,861.6	\$21,631.6	\$21,631.6	\$21,610.2	\$21,610.2	\$21,610.2	\$21,610.2	\$22,610.2	

FURNITURE & EQUIPMENT Description	Total Value of Furniture & Equipment (\$)										UNIT COST (\$/outfit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Dispatch Centre	\$1,904,882	\$1,904,882	\$1,904,882	\$1,904,882	\$1,904,882	\$1,904,882	\$1,904,882	\$1,904,882	\$1,904,882	\$1,904,882	
Equipment for vehicles	\$4,573,509	\$4,573,509	\$4,573,509	\$4,573,509	\$4,573,509	\$4,573,509	\$4,573,509	\$4,573,509	\$4,573,509	\$4,573,509	
Other Vehicle Equipment	\$460,101	\$460,101	\$460,101	\$460,101	\$460,101	\$460,101	\$460,101	\$460,101	\$460,101	\$460,101	
Fire Training Centre	\$111,446	\$111,446	\$111,446	\$111,446	\$111,446	\$111,446	\$111,446	\$111,446	\$111,446	\$111,446	
Station 91	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	
Station 92	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	
Station 93	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	
Station 94	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	
Station 95	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	
Station 96	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	\$489,353	
Station 97	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	
Station 98	\$578,551	\$578,551	\$578,551	\$578,551	\$578,551	\$578,551	\$578,551	\$578,551	\$578,551	\$578,551	
Station 99	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	\$433,630	
Number of Firefighters	278	278	278	278	278	278	278	278	280	280	\$7,919
Total (\$000)	\$13,466.2	\$13,466.2	\$13,466.2	\$13,466.2	\$13,466.2	\$13,466.2	\$13,466.2	\$13,466.2	\$13,482.0	\$13,482.0	

APPENDIX B.3

TABLE B.3-1

CITY OF MARKHAM
CALCULATION OF SERVICE LEVELS
FIRE SERVICES

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historic Population	306,973	312,329	317,779	323,324	328,966	333,938	338,985	344,109	349,310	354,589
Historic Employment	<u>135,104</u>	<u>137,357</u>	<u>139,685</u>	<u>142,092</u>	<u>144,582</u>	<u>147,517</u>	<u>150,539</u>	<u>153,654</u>	<u>156,862</u>	<u>160,210</u>
Total Population & Employment	442,077	449,686	457,464	465,416	473,548	481,455	489,524	497,763	506,172	514,800

INVENTORY SUMMARY (\$000)

Buildings	\$47,878.1	\$47,878.1	\$47,878.1	\$47,878.1	\$47,878.1	\$47,878.1	\$47,878.1	\$47,878.1	\$47,878.1	\$47,878.1
Land	\$68,002.1	\$68,002.1	\$68,002.1	\$68,002.1	\$68,002.1	\$68,002.1	\$68,002.1	\$68,002.1	\$68,002.1	\$68,002.1
Furniture & Equipment	\$13,466.2	\$13,466.2	\$13,466.2	\$13,466.2	\$13,466.2	\$13,466.2	\$13,466.2	\$13,466.2	\$13,482.0	\$13,482.0
Vehicles	\$19,836.0	\$19,861.6	\$19,861.6	\$21,631.6	\$21,631.6	\$21,610.2	\$21,610.2	\$21,610.2	\$21,610.2	\$22,610.2
Total (\$000)	\$149,182.4	\$149,208.0	\$149,208.0	\$150,978.0	\$150,978.0	\$150,956.6	\$150,956.6	\$150,956.6	\$150,972.5	\$151,972.5

SERVICE LEVEL (\$/pop & emp)

Average
Service
Level

Buildings	\$108.30	\$106.47	\$104.66	\$102.87	\$101.11	\$99.44	\$97.81	\$96.19	\$94.59	\$93.00	\$100.44
Land	\$153.82	\$151.22	\$148.65	\$146.11	\$143.60	\$141.24	\$138.91	\$136.62	\$134.35	\$132.09	\$142.66
Furniture & Equipment	\$30.46	\$29.95	\$29.44	\$28.93	\$28.44	\$27.97	\$27.51	\$27.05	\$26.64	\$26.19	\$28.26
Vehicles	\$44.87	\$44.17	\$43.42	\$46.48	\$45.68	\$44.89	\$44.15	\$43.41	\$42.69	\$43.92	\$44.37
Total (\$/pop & emp)	\$337.46	\$331.80	\$326.16	\$324.39	\$318.82	\$313.54	\$308.37	\$303.27	\$298.26	\$295.21	\$315.73

CITY OF MARKHAM
CALCULATION OF MAXIMUM ALLOWABLE
FIRE SERVICES

10-Year Funding Envelope Calculation

10 Year Average Service Level 2012 - 2021	\$315.73
Net Population + Employment Growth 2022 -	145,660
Maximum Allowable Funding Envelope	\$45,989,357

APPENDIX B.3
TABLE B.3-2

CITY OF MARKHAM
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			
						Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022- 2031	Other Dev. Related Costs
3.0 FIRE SERVICES												
3.1 Fire Buildings												
3.1.1	New Fire Station (10,000 sq. ft.) - Thornhill	2022	\$ 5,090,000	\$ -	\$ 5,090,000	0%	\$ -	\$ 5,090,000	\$ -	\$ 4,881,985	\$ 208,015	\$ -
3.1.2	New Fire Station (10,000 sq. ft.) - Markham Centre	2023	\$ 5,090,000	\$ -	\$ 5,090,000	0%	\$ -	\$ 5,090,000	\$ -	\$ -	\$ 5,090,000	\$ -
3.1.3	New Fire Station (10,000 sq. ft.) - FUA (North)	2025	\$ 5,090,000	\$ -	\$ 5,090,000	0%	\$ -	\$ 5,090,000	\$ -	\$ -	\$ 5,090,000	\$ -
3.1.4	Provision for New Fire Station (14,000 sq. ft.)	2030	\$ 7,126,000	\$ -	\$ 7,126,000	0%	\$ -	\$ 7,126,000	\$ -	\$ -	\$ 6,460,314	\$ 665,686
Subtotal Fire Buildings			\$ 22,396,000	\$ -	\$ 22,396,000		\$ -	\$ 22,396,000	\$ -	\$ 4,881,985	\$ 16,848,328	\$ 665,686
3.2 Land for Fire Buildings												
3.2.1	New Fire Station (0.4 ha) - Thornhill	2022	\$ 5,485,600	\$ -	\$ 5,485,600	0%	\$ -	\$ 5,485,600	\$ -	\$ -	\$ 5,485,600	\$ -
3.2.2	New Fire Station (0.4 ha) - Markham Centre	2023	\$ 5,485,600	\$ -	\$ 5,485,600	0%	\$ -	\$ 5,485,600	\$ -	\$ -	\$ 5,485,600	\$ -
3.2.3	New Fire Station (0.4 ha) - FUA (North)	2025	\$ 5,485,600	\$ -	\$ 5,485,600	0%	\$ -	\$ 5,485,600	\$ -	\$ -	\$ 5,485,600	\$ -
3.2.4	Provision for New Fire Station (0.4ha)	2030	\$ 5,485,600	\$ -	\$ 5,485,600	0%	\$ -	\$ 5,485,600	\$ -	\$ -	\$ 5,485,600	\$ -
Subtotal Land for Fire Buildings			\$ 21,942,400	\$ -	\$ 21,942,400		\$ -	\$ 21,942,400	\$ -	\$ -	\$ 21,942,400	\$ -
3.3 Fire Furniture and Equipment												
3.3.1	New Fire Station - Thornhill	2022	\$ 433,587	\$ -	\$ 433,587	0%	\$ -	\$ 433,587	\$ -	\$ -	\$ 433,587	\$ -
3.3.2	New Fire Station - Markham Centre	2023	\$ 433,587	\$ -	\$ 433,587	0%	\$ -	\$ 433,587	\$ -	\$ -	\$ 433,587	\$ -
3.3.3	New Fire Station - FUA (North)	2025	\$ 433,587	\$ -	\$ 433,587	0%	\$ -	\$ 433,587	\$ -	\$ -	\$ 433,587	\$ -
3.3.4	Provision for New Fire Station	2030	\$ 607,022	\$ -	\$ 607,022	0%	\$ -	\$ 607,022	\$ -	\$ -	\$ 607,022	\$ -
Subtotal Fire Furniture and Equipment			\$ 1,907,783	\$ -	\$ 1,907,783		\$ -	\$ 1,907,783	\$ -	\$ -	\$ 1,907,783	\$ -
3.4 Firefighter Equipment												
3.4.1	New Fire Station - Thornhill (21 firefighters)	2022	\$ 166,299	\$ -	\$ 166,299	0%	\$ -	\$ 166,299	\$ -	\$ -	\$ 166,299	\$ -
3.4.2	New Fire Station - Markham Centre (21 firefighters)	2023	\$ 166,299	\$ -	\$ 166,299	0%	\$ -	\$ 166,299	\$ -	\$ -	\$ 166,299	\$ -
3.4.3	New Fire Station - FUA (North) (21 firefighters)	2025	\$ 166,299	\$ -	\$ 166,299	0%	\$ -	\$ 166,299	\$ -	\$ -	\$ 166,299	\$ -
3.4.4	New Fire Station - FUA (North) (21 firefighters)	2030	\$ 166,299	\$ -	\$ 166,299	0%	\$ -	\$ 166,299	\$ -	\$ -	\$ 166,299	\$ -
Subtotal Firefighter Equipment			\$ 665,196	\$ -	\$ 665,196		\$ -	\$ 665,196	\$ -	\$ -	\$ 665,196	\$ -
3.5 Fire Vehicles												
3.5.1	1 Fire Apparatus Vehicle	2022	\$ 900,000	\$ -	\$ 900,000	0%	\$ -	\$ 900,000	\$ -	\$ -	\$ 900,000	\$ -
3.5.2	1 Fire Prevention Car	2023	\$ 25,650	\$ -	\$ 25,650	0%	\$ -	\$ 25,650	\$ -	\$ -	\$ 25,650	\$ -
3.5.3	1 Fire Apparatus Vehicle	2023	\$ 900,000	\$ -	\$ 900,000	0%	\$ -	\$ 900,000	\$ -	\$ -	\$ 900,000	\$ -
3.5.4	1 Fire Apparatus Vehicle	2024	\$ 900,000	\$ -	\$ 900,000	0%	\$ -	\$ 900,000	\$ -	\$ -	\$ 900,000	\$ -
3.5.5	1 Fire Apparatus Vehicle	2025	\$ 900,000	\$ -	\$ 900,000	0%	\$ -	\$ 900,000	\$ -	\$ -	\$ 900,000	\$ -
3.5.6	1 Pumper Truck	2030	\$ 1,000,000	\$ -	\$ 1,000,000	0%	\$ -	\$ 1,000,000	\$ -	\$ -	\$ 1,000,000	\$ -
Subtotal Fire Vehicles			\$ 4,625,650	\$ -	\$ 4,625,650		\$ -	\$ 4,625,650	\$ -	\$ -	\$ 4,625,650	\$ -
TOTAL FIRE SERVICES			\$ 51,537,029	\$ -	\$ 51,537,029		\$ -	\$ 51,537,029	\$ -	\$ 4,881,985	\$ 45,989,357	\$ 665,686

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	61.9%	\$28,475,323
10-Year Growth in Population in New Units		90,381
Unadjusted Development Charge Per Capita		\$315.06
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	38.1%	\$17,514,034
10-Year Growth in Square Metres		2,550,244
Unadjusted Development Charge Per Square Metre		\$6.87

2022 - 2031 Net Funding Envelope	\$45,989,357
Reserve Fund Balance	\$4,881,985

Non-Residential Development Charge Calculation		
Retail Commercial		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	11.0%	\$ 5,069,927.1
10-Year Growth in Square Metres		627,176
Unadjusted Development Charge Per Square Metre		\$8.08
Industrial/Office/Institutional		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	26.8%	\$ 12,314,109.2
10-Year Growth in Square Metres		1,890,059
Unadjusted Development Charge Per Square Metre		\$6.52
Mixed-Use		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	0.3%	\$ 129,998.1
10-Year Growth in Square Metres		33,009
Unadjusted Development Charge Per Square Metre		\$3.94

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

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

FIRE SERVICES	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$3,022.79	(\$1,805.5)	(\$6,882.6)	(\$4,872.6)	(\$10,146.5)	(\$7,445.3)	(\$4,482.0)	(\$1,201.3)	\$2,420.8	(\$3,825.3)	
2022 - 2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$3,022.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3,022.8
- Fire Services: Non Inflated	\$4,454.0	\$7,492.7	\$557.3	\$7,476.8	\$0.0	\$0.0	\$0.0	\$0.0	\$8,494.6	\$0.0	\$28,475.3
- Fire Services: Inflated	\$7,476.8	\$7,642.5	\$579.8	\$7,934.4	\$0.0	\$0.0	\$0.0	\$0.0	\$9,952.7	\$0.0	\$33,586.3
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	8,094	8,301	8,514	8,733	8,955	9,085	9,315	9,549	9,792	10,043	90,381
REVENUE											
- DC Receipts: Inflated	\$2,674.7	\$2,798.0	\$2,927.2	\$3,062.5	\$3,203.2	\$3,314.7	\$3,466.6	\$3,624.8	\$3,791.3	\$3,966.3	\$32,829.4
INTEREST											
- Interest on Opening Balance	\$105.8	(\$99.3)	(\$378.5)	(\$268.0)	(\$558.1)	(\$409.5)	(\$246.5)	(\$66.1)	\$84.7	(\$210.4)	(\$2,045.8)
- Interest on In-year Transactions	(\$132.1)	(\$133.2)	\$41.1	(\$134.0)	\$56.1	\$58.0	\$60.7	\$63.4	(\$169.4)	\$69.4	(\$220.0)
TOTAL REVENUE	\$2,648.5	\$2,565.5	\$2,589.7	\$2,660.6	\$2,701.2	\$2,963.2	\$3,280.7	\$3,622.1	\$3,706.6	\$3,825.3	\$30,563.5
CLOSING CASH BALANCE	(\$1,805.5)	(\$6,882.6)	(\$4,872.6)	(\$10,146.5)	(\$7,445.3)	(\$4,482.0)	(\$1,201.3)	\$2,420.8	(\$3,825.3)	\$0.0	

2022 Adjusted Charge Per Capita **\$330.46**

Allocation of Capital Program

Residential Sector	61.9%
Non-Residential Sector	38.1%

Rates for 2022

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 MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE SERVICES
RETAIL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

FIRE SERVICES	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$538.20	(\$375.21)	(\$1,327.09)	(\$1,009.47)	(\$1,980.18)	(\$1,519.46)	(\$992.49)	(\$392.71)	\$287.27	(\$764.09)	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$538.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$538.2
- Fire Services: Non Inflated	\$793.0	\$1,334.0	\$99.2	\$1,331.2	\$0.0	\$0.0	\$0.0	\$0.0	\$1,512.4	\$0.0	\$5,069.9
- Fire Services: Inflated	\$1,331.2	\$1,360.7	\$103.2	\$1,412.7	\$0.0	\$0.0	\$0.0	\$0.0	\$1,772.0	\$0.0	\$5,979.9
NON-RESIDENTIAL SPACE GROWTH - RETAIL											
- Growth in Square Metres	49,648	52,174	54,834	57,608	60,572	63,650	66,880	70,300	73,872	77,638	627,176.00
REVENUE											
- DC Receipts: Inflated	\$423.9	\$454.4	\$487.1	\$522.0	\$559.8	\$600.0	\$643.1	\$689.5	\$739.0	\$792.3	\$5,911.2
INTEREST											
- Interest on Opening Balance	\$18.8	(\$20.6)	(\$73.0)	(\$55.5)	(\$108.9)	(\$83.6)	(\$54.6)	(\$21.6)	\$10.1	(\$42.0)	(\$430.9)
- Interest on In-year Transactions	(\$25.0)	(\$24.9)	\$6.7	(\$24.5)	\$9.8	\$10.5	\$11.3	\$12.1	(\$28.4)	\$13.9	(\$38.6)
TOTAL REVENUE	\$417.8	\$408.8	\$420.8	\$442.0	\$460.7	\$527.0	\$599.8	\$680.0	\$720.7	\$764.1	\$5,441.7
CLOSING CASH BALANCE	(\$375.2)	(\$1,327.1)	(\$1,009.5)	(\$1,980.2)	(\$1,519.5)	(\$992.5)	(\$392.7)	\$287.3	(\$764.1)	(\$0.0)	

2022 Adjusted Charge Per Square Metre

\$8.54

Allocation of Capital Program

Retail Sector	11.0%
Industrial/Office/Institutional Sector	26.8%
Mixed-Use	0.3%

Rates for 2022

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 MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE SERVICES
INDUSTRIAL/OFFICE/INSTITUTIONAL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

FIRE SERVICES	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$1,307.20	(\$814.48)	(\$3,041.56)	(\$2,200.30)	(\$4,505.68)	(\$3,356.81)	(\$2,072.02)	(\$640.17)	\$951.23	(\$1,708.46)	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$1,307.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1,307.2
- Fire Services: Non Inflated	\$1,926.1	\$3,240.2	\$241.0	\$3,233.3	\$0.0	\$0.0	\$0.0	\$0.0	\$3,673.5	\$0.0	\$12,314.1
- Fire Services: Inflated	\$3,233.3	\$3,305.0	\$250.7	\$3,431.2	\$0.0	\$0.0	\$0.0	\$0.0	\$4,304.0	\$0.0	\$14,524.3
NON-RESIDENTIAL SPACE GROWTH - I.O.I.											
- Growth in Square Metres	164,145	169,120	174,338	179,648	185,208	191,032	197,025	203,257	209,805	216,481	1,890,059
REVENUE											
- DC Receipts: Inflated	\$1,123.9	\$1,181.1	\$1,241.9	\$1,305.3	\$1,372.7	\$1,444.1	\$1,519.2	\$1,598.6	\$1,683.1	\$1,771.4	\$14,241.5
INTEREST											
- Interest on Opening Balance	\$45.8	(\$44.8)	(\$167.3)	(\$121.0)	(\$247.8)	(\$184.6)	(\$114.0)	(\$35.2)	\$33.3	(\$94.0)	(\$929.6)
- Interest on In-year Transactions	(\$58.0)	(\$58.4)	\$17.3	(\$58.5)	\$24.0	\$25.3	\$26.6	\$28.0	(\$72.1)	\$31.0	(\$94.8)
TOTAL REVENUE	\$1,111.6	\$1,077.9	\$1,092.0	\$1,125.9	\$1,148.9	\$1,284.8	\$1,431.9	\$1,591.4	\$1,644.4	\$1,708.5	\$13,217.1
CLOSING CASH BALANCE	(\$814.5)	(\$3,041.6)	(\$2,200.3)	(\$4,505.7)	(\$3,356.8)	(\$2,072.0)	(\$640.2)	\$951.2	(\$1,708.5)	\$0.0	

2022 Adjusted Charge Per Square Metre

\$6.85

Allocation of Capital Program

Retail Sector	11.0%
Industrial/Office/Institutional Sector	26.8%
Mixed-Use	0.3%

Rates for 2022

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 MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
FIRE SERVICES
MIXED-USE NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

FIRE SERVICES	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$13.80	(\$9.62)	(\$34.03)	(\$25.88)	(\$50.77)	(\$38.96)	(\$25.45)	(\$10.07)	\$7.37	(\$19.59)	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$13.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$13.8
- Fire Services: Non Inflated	\$20.3	\$34.2	\$2.5	\$34.1	\$0.0	\$0.0	\$0.0	\$0.0	\$38.8	\$0.0	\$130.0
- Fire Services: Inflated	\$34.1	\$34.9	\$2.6	\$36.2	\$0.0	\$0.0	\$0.0	\$0.0	\$45.4	\$0.0	\$153.3
NON-RESIDENTIAL SPACE GROWTH - MIXED-USE											
- Growth in Square Metres	2,613	2,746	2,886	3,032	3,188	3,350	3,520	3,700	3,888	4,086	33,009
REVENUE											
- DC Receipts: Inflated	\$10.9	\$11.7	\$12.5	\$13.4	\$14.4	\$15.4	\$16.5	\$17.7	\$18.9	\$20.3	\$151.6
INTEREST											
- Interest on Opening Balance	\$0.5	(\$0.5)	(\$1.9)	(\$1.4)	(\$2.8)	(\$2.1)	(\$1.4)	(\$0.6)	\$0.3	(\$1.1)	(\$11.0)
- Interest on In-year Transactions	(\$0.6)	(\$0.6)	\$0.2	(\$0.6)	\$0.3	\$0.3	\$0.3	\$0.3	(\$0.7)	\$0.4	(\$1.0)
TOTAL REVENUE	\$10.7	\$10.5	\$10.8	\$11.3	\$11.8	\$13.5	\$15.4	\$17.4	\$18.5	\$19.6	\$139.5
CLOSING CASH BALANCE	(\$9.6)	(\$34.0)	(\$25.9)	(\$50.8)	(\$39.0)	(\$25.4)	(\$10.1)	\$7.4	(\$19.6)	\$0.0	

2022 Adjusted Charge Per Square Metre

\$4.16

Allocation of Capital Program

Retail Sector	11.0%
Industrial/Office/Institutional Sector	26.8%
Mixed-Use	0.3%

Rates for 2022

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

Appendix B.4

Indoor Recreation

Appendix B.4: Indoor Recreation

The City of Markham Recreation Department is responsible for the indoor recreation and leisure needs of the community, including the provision and maintenance of arenas, facilities, recreation services and programs to the residents of Markham.

Table B.4-1 2012 - 2021 Historical Service Levels

Table B.4-1 displays the Indoor Recreation ten-year historical inventory for buildings, land, and equipment. The building space, which is categorized by Halls and Meeting Rooms, Ice Pads, Indoor Soccer, Indoor Pools, Fitness Centres, Gymnasiums, Senior Centres, and Common Space in Major Community Centres, totals almost 1.29 million square feet of Indoor Recreation space, which is valued at \$730.92 million. The land associated with the buildings amounts to 46.17 hectares and is valued at \$633.20 million. The equipment found in the facilities has a total value of \$14.64 million and the 305 parking spaces adds an additional \$11.93 million to the total value of the inventory.

A portion of the Markham Pan Am Centre is related to the Indoor Recreation negative DC reserve fund balance included for recovery in the capital program. As such, a portion of the facility, including buildings, land and equipment has been removed from the historical inventory calculated.

This share has been calculated by dividing the value of the negative reserve fund balance (\$46.86 million) by the total value of the (\$165.02 million) to yield an adjustment factor of 28 per cent. The adjustment factor is then multiplied by the total GFA of the Markham Pan Am Facility to compute the space that has been allocated to excess capacity.

After the adjustment for the Markham Pan Am Centre, the 2021 full replacement value of the inventory of capital assets for Indoor Recreation amounts to \$1.39 billion and a ten-year historical average service level is \$3,873.12 per capita.

The historical service level multiplied by the ten-year forecast of net population growth (90,070) to yield a ten-year maximum allowable funding envelope of \$348.85 million.

Table B.4-2 2022 – 2031 Development-Related Capital Program & Calculation of the Unadjusted Development Charge

The capital program for Indoor Recreation totals \$348.94 million and includes the recovery of the negative reserve fund balance of \$46.85 million. Construction and/or expansion of eight major facilities as well as the accompanying land, furniture and equipment are also included.

Of the \$175.33 million associated with the construction and/or expansion of major facilities, the largest share (\$73.80 million) is associated with the new 120,000 square foot indoor rec facility in East Markham which is slated to open in 2030. A 39,000 square foot expansion of the Milken Mills Facility (totaling \$23.99 million) and a two-phase future facility in the FUA (totaling \$55.35 million) are other notable facility works expected to take place over the 2022 – 2031 planning period.

The land included in the capital program totals eight hectares of land amounting to \$109.60 million and \$17.16 million in costs allocated to furniture and equipment.

No grants, subsidies, replacement shares, or other recoveries are anticipated to fund any shares of the above mentioned projects and, as such, the net cost to the municipality remains at \$348.94 million.

A share of \$18.45 million associated with the East Markham Facility has been allocated to other development-related costs and will be examined for recovery in subsequent DC studies, subject to service level restrictions, other growth-funding tools or other funding sources.

The 2022 - 2031 DC costs eligible for recovery amount to \$330.49 million which is allocated entirely against future residential development in the City of Markham. When divided by the 10-year population growth in new units (90,380), an unadjusted development charge of \$3,656.60 per capita is the result.

Table B.4-3 Cash Flow Analysis

After cash flow consideration, the residential calculated charge decreases slightly to \$3,649.65 per capita. This is a reflection of the timing of the capital program and development charges revenues.

The following table summarizes the calculation of the indoor recreation development charge:

INDOOR RECREATION SUMMARY										
10-year Hist. Service Level per capita	2022 - 2031		Unadjusted Development Charge				Adjusted Development Charge			
	Development-Related	Capital Program	Residential	Retail	I.O.I.	Mixed-Use	Residential	Retail	I.O.I.	Mixed-Use
	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/sq.m	\$/sq.m	\$/capita	\$/sq.m	\$/sq.m	\$/sq.m
\$3,873.12	\$348,936,932	\$330,486,932	\$3,656.60	\$0.00	\$0.00	\$0.00	\$3,649.65	\$0.00	\$0.00	\$0.00

APPENDIX B.4

TABLE B.4-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
INDOOR RECREATION

HALLS AND MEETING ROOMS Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Aaniin Community Centre	-	-	-	-	-	18,536	18,536	18,536	18,536	18,536	\$615
Aaniin Community Centre (excess capacity)	-	-	-	-	-	-	-	-	-	-	\$615
Angus Glen Community Centre	12,498	12,498	12,498	12,498	12,498	12,498	12,498	12,498	12,498	12,498	\$615
Angus Glen Tennis Centre	350	350	350	350	350	350	350	350	350	350	\$440
Armada Community Centre	5,460	5,460	5,460	5,460	5,460	5,460	5,460	5,460	5,460	5,460	\$440
Box Grove Community Centre	5,920	5,920	5,920	5,920	5,920	5,920	5,920	5,920	5,920	5,920	\$410
Buttonville Women's Institute	5,360	5,360	5,360	5,360	5,360	5,360	5,360	5,360	5,360	5,360	\$410
Cedar Grove Community Centre	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	\$410
Centennial Community Centre	9,173	9,173	9,173	9,173	9,173	9,173	9,173	9,173	9,173	9,173	\$615
Cornell Community Centre	-	20,868	20,868	20,868	20,868	20,868	20,868	20,868	20,868	20,868	\$615
Crosby Memorial Community Centre	5,521	5,521	5,521	5,521	5,521	5,521	5,521	5,521	5,521	5,521	\$440
German Mills Community Centre	1,983	1,983	1,983	1,983	1,983	1,983	1,983	1,983	1,983	1,983	\$410
Heintzman House	14,266	14,266	14,266	14,266	14,266	14,266	14,266	14,266	14,266	14,266	\$656
Main St. Markham Craft Guild	3,702	3,702	3,702	3,702	3,702	3,702	3,702	3,702	3,702	3,702	\$410
Markham Pan Am Centre	-	-	-	5,618	5,618	5,618	5,618	5,618	5,618	5,618	\$615
Markham Pan Am Centre (excess capacity)	-	-	-	(1,595)	(1,595)	(1,595)	(1,595)	(1,595)	(1,595)	(1,595)	\$615
Markham Train Station	2,262	2,262	2,262	2,262	2,262	2,262	2,262	2,262	2,262	2,262	\$656
Markham Village Community Centre	6,568	6,568	6,568	6,568	6,568	6,568	6,568	6,568	6,568	6,568	\$440
McKay House	3,116	3,116	3,116	3,116	3,116	3,116	3,116	3,116	3,116	3,116	\$656
Milliken Mills Community Centre	9,956	9,956	9,956	9,956	9,956	9,956	9,956	9,956	9,956	9,956	\$615
Museum Education Building	1,167	1,167	1,167	1,167	1,167	1,167	1,167	1,167	1,167	1,167	\$382
Old Unionville Library Community Centre	3,369	3,369	3,369	3,369	3,369	3,369	3,369	3,369	3,369	3,369	\$440
Rouge River Community Centre	12,160	12,160	12,160	12,160	12,160	12,160	12,160	12,160	12,160	12,160	\$440
Thornhill Community Centre	20,808	20,808	20,808	20,808	20,808	20,808	20,808	20,808	20,808	20,808	\$615
Unionville Stiver Mill Community Centre	-	-	4,715	4,715	4,715	4,715	4,715	4,715	4,715	4,715	\$656
Unionville Train Station	1,514	1,514	1,514	1,514	1,514	1,514	1,514	1,514	1,514	1,514	\$656
Varley Art Gallery (meeting room)	1,695	1,695	1,695	1,695	1,695	1,695	1,695	1,695	1,695	1,695	\$492
Victoria Square Community Centre	8,774	8,774	8,774	8,774	8,774	8,774	8,774	8,774	8,774	8,774	\$410
Warden House	5,296	5,296	5,296	5,296	5,296	5,296	5,296	5,296	5,296	5,296	\$656
YMCA	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	\$567
Total (sq.ft.)	164,480	185,348	190,063	194,085	194,085	212,621	212,621	212,621	212,621	212,621	
Total (\$000)	\$88,942.8	\$101,776.6	\$104,869.4	\$107,343.5	\$107,343.5	\$118,743.1	\$118,743.1	\$118,743.1	\$118,743.1	\$118,743.1	

APPENDIX B.4

TABLE B.4-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
INDOOR RECREATION

ICE PADS Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Angus Glen Community Centre	69,126	69,126	69,126	69,126	69,126	69,126	69,126	69,126	69,126	69,126	\$552
Centennial Community Centre	45,187	45,187	45,187	45,187	45,187	45,187	45,187	45,187	45,187	45,187	\$552
Crosby Memorial Community Centre	26,166	26,166	26,166	26,166	26,166	26,166	26,166	26,166	26,166	26,166	\$552
Markham Village Community Centre	28,889	28,889	28,889	28,889	28,889	28,889	28,889	28,889	28,889	28,889	\$552
Milliken Mills Community Centre	33,054	33,054	33,054	33,054	33,054	33,054	33,054	33,054	33,054	33,054	\$552
Mt. Joy Community Centre	29,309	29,309	29,309	29,309	29,309	29,309	29,309	29,309	29,309	29,309	\$552
R.J. Clatworthy Arena	32,329	32,329	32,329	32,329	32,329	32,329	32,329	32,329	32,329	32,329	\$552
Thornhill Community Centre	68,520	68,520	68,520	68,520	68,520	68,520	68,520	68,520	68,520	68,520	\$552
Total (sq.ft.)	332,580	332,580	332,580	332,580	332,580	332,580	332,580	332,580	332,580	332,580	
Total (\$000)	\$183,584.2	\$183,584.2	\$183,584.2	\$183,584.2	\$183,584.2	\$183,584.2	\$183,584.2	\$183,584.2	\$183,584.2	\$183,584.2	

INDOOR SOCCER Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Milliken Soccer Dome	29,651	29,651	29,651	29,651	29,651	29,651	29,651	29,651	29,651	29,651	\$164
Mt. Joy Community Centre	24,178	24,178	24,178	24,178	24,178	24,178	24,178	24,178	24,178	24,178	\$295
St. Robert Soccer Dome	-	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	27,000	\$164
Total (sq.ft.)	53,829	80,829	80,829	80,829	80,829	80,829	80,829	80,829	80,829	80,829	
Total (\$000)	\$11,995.3	\$16,423.3	\$16,423.3	\$16,423.3	\$16,423.3	\$16,423.3	\$16,423.3	\$16,423.3	\$16,423.3	\$16,423.3	

Indoor Pool Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Aaniin Community Centre	-	-	-	-	-	24,593	24,593	24,593	24,593	24,593	\$718
Angus Glen Community Centre	24,364	24,364	24,364	24,364	24,364	24,364	24,364	24,364	24,364	24,364	\$718
Centennial Community Centre	19,062	19,062	19,062	19,062	19,062	19,062	19,062	19,062	19,062	19,062	\$718
Cornell Community Centre	-	26,303	26,303	26,303	26,303	26,303	26,303	26,303	26,303	26,303	\$718
Markham Pan Am Centre	-	-	-	45,803	45,803	45,803	45,803	45,803	45,803	45,803	\$1,440
Markham Pan Am Centre (excess capacity)	-	-	-	(13,005)	(13,005)	(13,005)	(13,005)	(13,005)	(13,005)	(13,005)	\$1,440
Milliken Mills Community Centre	23,950	23,950	23,950	23,950	23,950	23,950	23,950	23,950	23,950	23,950	\$718
Thornlea Pool	16,352	16,352	16,352	16,352	16,352	16,352	16,352	16,352	16,352	16,352	\$718
Total (sq.ft.)	83,728	110,031	110,031	142,829	142,829	167,422	167,422	167,422	167,422	167,422	
Total (\$000)	\$60,116.7	\$79,002.3	\$79,002.3	\$126,231.9	\$126,231.9	\$143,889.7	\$143,889.7	\$143,889.7	\$143,889.7	\$143,889.7	

APPENDIX B.4

TABLE B.4-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
INDOOR RECREATION

Fitness Centres Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Aaniin Community Centre	-	-	-	-	-	6,476	6,476	6,476	6,476	6,476	\$615
Centennial Community Centre	9,229	9,229	9,229	9,229	9,229	9,229	9,229	9,229	9,229	9,229	\$615
Cornell Community Centre	-	8,616	8,616	8,616	8,616	8,616	8,616	8,616	8,616	8,616	\$615
Markham Pan Am Centre	-	-	-	5,564	5,564	5,564	5,564	5,564	5,564	5,564	\$615
<i>Markham Pan Am Centre (excess capacity)</i>	-	-	-	(1,580)	(1,580)	(1,580)	(1,580)	(1,580)	(1,580)	(1,580)	\$615
Thornhill Community Centre	19,762	19,762	19,762	19,762	19,762	19,762	19,762	19,762	19,762	19,762	\$615
Total (sq.ft.)	28,991	37,607	37,607	41,591	41,591	48,067	48,067	48,067	48,067	48,067	
Total (\$000)	\$17,829.5	\$23,128.3	\$23,128.3	\$25,578.6	\$25,578.6	\$29,561.4	\$29,561.4	\$29,561.4	\$29,561.4	\$29,561.4	

Gymnasium Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Aaniin Community Centre	-	-	-	-	-	13,960	13,960	13,960	13,960	13,960	\$395
Angus Glen Community Centre	9,598	9,598	9,598	9,598	9,598	9,598	9,598	9,598	9,598	9,598	\$395
Angus Glen Tennis Centre	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	\$395
Armada Community Centre	10,858	10,858	10,858	10,858	10,858	10,858	10,858	10,858	10,858	10,858	\$395
Centennial Community Centre	3,890	3,890	3,890	3,890	3,890	3,890	3,890	3,890	3,890	3,890	\$395
Cornell Community Centre	-	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,000	\$395
Flowervale Public School	4,060	4,060	4,060	4,060	4,060	4,060	4,060	4,060	4,060	4,060	\$395
Markham Pan Am Centre	-	-	-	33,727	33,727	33,727	33,727	33,727	33,727	33,727	\$395
<i>Markham Pan Am Centre (excess capacity)</i>	-	-	-	(9,576)	(9,576)	(9,576)	(9,576)	(9,576)	(9,576)	(9,576)	\$395
Reesor Park Public School	3,320	3,320	3,320	3,320	3,320	3,320	3,320	3,320	3,320	3,320	\$395
Thornhill Community Centre	3,809	3,809	3,809	3,809	3,809	3,809	3,809	3,809	3,809	3,809	\$395
Thornlea	10,648	10,648	10,648	10,648	10,648	10,648	10,648	10,648	10,648	10,648	\$395
Total (sq.ft.)	67,183	80,183	80,183	104,334	104,334	118,294	118,294	118,294	118,294	118,294	
Total (\$000)	\$26,537.3	\$31,672.3	\$31,672.3	\$41,212.0	\$41,212.0	\$46,726.2	\$46,726.2	\$46,726.2	\$46,726.2	\$46,726.2	

APPENDIX B.4

TABLE B.4-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
INDOOR RECREATION

Senior Centres Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Aaniin Community Centre	-	-	-	-	-	1,723	1,723	1,723	1,723	1,723	\$615
Cornell Community Centre	-	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	1,055	\$615
Markham Seniors Activity Centre	14,139	14,139	14,139	14,139	14,139	14,139	14,139	14,139	14,139	14,139	\$230
Thornhill Seniors Centre	6,720	6,720	6,720	6,720	6,720	6,720	6,720	6,720	6,720	6,720	\$615
Total (sq.ft.)	20,859	21,914	21,914	21,914	21,914	23,637	23,637	23,637	23,637	23,637	
Total (\$000)	\$7,384.8	\$8,033.6	\$8,033.6	\$8,033.6	\$8,033.6	\$9,093.2	\$9,093.2	\$9,093.2	\$9,093.2	\$9,093.2	

Common Space - Major Community Centres Facility Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Aaniin Community Centre	-	-	-	-	-	41,780	41,780	41,780	41,780	41,780	\$615
Angus Glen Community Centre	33,905	33,905	33,905	33,905	33,905	33,905	33,905	33,905	33,905	33,905	\$615
Angus Glen Tennis Centre	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500	\$440
Armadale Community Centre	7,239	7,239	7,239	7,239	7,239	7,239	7,239	7,239	7,239	7,239	\$440
Centennial Community Centre	26,406	26,406	26,406	26,406	26,406	26,406	26,406	26,406	26,406	26,406	\$615
Cornell Community Centre	-	58,118	58,118	58,118	58,118	58,118	58,118	58,118	58,118	58,118	\$615
Crosby Community Centre	2,606	2,606	2,606	2,606	2,606	2,606	2,606	2,606	2,606	2,606	\$440
Heintzman House	1,660	1,660	1,660	1,660	1,660	1,660	1,660	1,660	1,660	1,660	\$656
Markham Pan Am Centre	-	-	-	56,288	56,288	56,288	56,288	56,288	56,288	56,288	\$615
<i>Markham Pan Am Centre (excess capacity)</i>	-	-	-	(15,982)	(15,982)	(15,982)	(15,982)	(15,982)	(15,982)	(15,982)	\$615
Markham Village Community Centre	11,096	11,096	11,096	11,096	11,096	11,096	11,096	11,096	11,096	11,096	\$440
Milliken Mills Community Centre	19,613	19,613	19,613	19,613	19,613	19,613	19,613	19,613	19,613	19,613	\$615
Milliken Mills Soccer Dome Facility	3,731	3,731	3,731	3,731	3,731	3,731	3,731	3,731	3,731	3,731	\$440
Mount Joy Community Centre	4,295	4,295	4,295	4,295	4,295	4,295	4,295	4,295	4,295	4,295	\$440
Rouge River Community Centre	6,180	6,180	6,180	6,180	6,180	6,180	6,180	6,180	6,180	6,180	\$440
St. Robert Soccer Dome Facility	-	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	\$440
Thornhill Community Centre	41,048	41,048	41,048	41,048	41,048	41,048	41,048	41,048	41,048	41,048	\$615
Total (sq.ft.)	168,279	228,897	228,897	269,203	269,203	310,983	310,983	310,983	310,983	310,983	
Total (\$000)	\$95,571.4	\$132,414.0	\$132,414.0	\$157,202.4	\$157,202.4	\$182,897.1	\$182,897.1	\$182,897.1	\$182,897.1	\$182,897.1	

APPENDIX B.4

TABLE B.4-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
INDOOR RECREATION

Parking Structures Facility Name	# of Parking Spaces										UNIT COST (\$/space)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Cornell Community Centre	-	305	305	305	305	305	305	305	305	305	\$39,100
Total (#)	-	305	305	305	305	305	305	305	305	305	
Total (\$000)	\$0.0	\$11,925.5	\$11,925.5	\$11,925.5	\$11,925.5	\$11,925.5	\$11,925.5	\$11,925.5	\$11,925.5	\$11,925.5	

Land Facility Name	# of Hectares										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Aanlin Community Centre	-	-	-	-	-	2.93	2.93	2.93	2.93	2.93	\$13,714,000
Angus Glen Community Centre	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	\$13,714,000
Armada Community Centre	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	\$13,714,000
Box Grove Community Centre	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	\$13,714,000
Buttonville Women's Institute	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	\$13,714,000
Cedar Grove Community Centre	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	\$13,714,000
Centennial Community Centre	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	\$13,714,000
Cornell Community Centre	-	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	\$13,714,000
Crosby Memorial Community Centre	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	\$13,714,000
German Mills Community Centre	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$13,714,000
Heintzman House	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	\$13,714,000
Rouge River Community Centre	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	\$13,714,000
Markham Village Community Centre	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	\$13,714,000
Markham Pan Am Centre	-	-	-	3.10	3.10	3.10	3.10	3.10	3.10	3.10	\$13,714,000
<i>Markham Pan Am Centre (excess capacity)</i>	-	-	-	(0.88)	(0.88)	(0.88)	(0.88)	(0.88)	(0.88)	(0.88)	\$13,714,000
Markham Seniors Activity Centre	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$13,714,000
Markham Train Station	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$13,714,000
McKay House	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$13,714,000
Milliken Mills Community Centre	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	\$13,714,000
Milliken Soccer Dome	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	\$13,714,000
Mt. Joy Community Centre	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	\$13,714,000
Museum Education Building	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$13,714,000
Old Unionville Library Community Centre	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.17	0.17	0.17	\$13,714,000
R.J. Clatworthy Arena	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	\$13,714,000
St. Robert Catholic High School	-	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	\$13,714,000
Thornhill Community Centre	2.96	2.96	2.96	2.96	2.96	2.96	2.96	2.96	2.96	2.96	\$13,714,000
Unionville Stiver Mill Community Centre	-	-	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	\$13,714,000
Unionville Train Station	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$13,714,000
Varley Art Gallery (Meeting room)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	\$13,714,000
Victoria Square Community Centre	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$13,714,000
Warden House	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	\$13,714,000
Total (ha)	37.04	40.80	41.08	43.30	43.30	46.23	46.23	46.17	46.17	46.17	
Total (\$000)	\$508,025.1	\$559,556.8	\$563,396.7	\$593,839.5	\$593,839.5	\$634,021.5	\$634,021.5	\$633,198.7	\$633,198.7	\$633,198.7	

**APPENDIX B.4
TABLE B.4-1**

**CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
INDOOR RECREATION**

Furniture & Equipment Facility Name	Total Value of Furniture & Equipment (\$)									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Aaniin Community Centre	-	-	-	-	-	\$3,561,637	\$3,561,637	\$3,561,637	\$3,561,637	\$3,561,637
Angus Glen Community Centre	\$1,385,350	\$1,385,350	\$1,385,350	\$1,385,350	\$1,385,350	\$1,385,350	\$1,385,350	\$1,385,350	\$1,385,350	\$1,385,350
Armada Community Centre	\$230,514	\$230,514	\$230,514	\$230,514	\$230,514	\$230,514	\$230,514	\$230,514	\$230,514	\$230,514
Box Grove Community Centre	\$4,944	\$4,944	\$4,944	\$4,944	\$4,944	\$4,944	\$4,944	\$4,944	\$4,944	\$4,944
Buttonville Women's Institute	\$7,313	\$7,313	\$7,313	\$7,313	\$7,313	\$7,313	\$7,313	\$7,313	\$7,313	\$7,313
Cedar Grove Community Centre	\$39,449	\$39,449	\$39,449	\$39,449	\$39,449	\$39,449	\$39,449	\$39,449	\$39,449	\$39,449
Centennial Community Centre	\$1,140,519	\$1,140,519	\$1,140,519	\$1,140,519	\$1,140,519	\$1,140,519	\$1,140,519	\$1,140,519	\$1,140,519	\$1,140,519
Cornell Community Centre	-	\$2,768,022	\$2,768,022	\$2,768,022	\$2,768,022	\$2,768,022	\$2,768,022	\$2,768,022	\$2,768,022	\$2,768,022
Crosby Memorial Community Centre	\$252,453	\$252,453	\$252,453	\$252,453	\$252,453	\$252,453	\$252,453	\$252,453	\$252,453	\$252,453
German Mills Community Centre	\$13,081	\$13,081	\$13,081	\$13,081	\$13,081	\$13,081	\$13,081	\$13,081	\$13,081	\$13,081
Heintzman House	\$38,934	\$38,934	\$38,934	\$38,934	\$38,934	\$38,934	\$38,934	\$38,934	\$38,934	\$38,934
Markham Village Community Centre	\$348,037	\$348,037	\$348,037	\$348,037	\$348,037	\$348,037	\$348,037	\$348,037	\$348,037	\$348,037
Markham Pan Am Centre	-	-	-	\$1,730,812	\$1,730,812	\$1,730,812	\$1,730,812	\$1,730,812	\$1,730,812	\$1,730,812
<i>Markham Pan Am Centre (excess capacity)</i>	-	-	-	<i>(\$491,421)</i>	<i>(\$491,421)</i>	<i>(\$491,421)</i>	<i>(\$491,421)</i>	<i>(\$491,421)</i>	<i>(\$491,421)</i>	<i>(\$491,421)</i>
Milliken Mills Community Centre	\$786,714	\$786,714	\$786,714	\$786,714	\$786,714	\$786,714	\$786,714	\$786,714	\$786,714	\$786,714
Mount Joy Community Centre	\$793,615	\$793,615	\$793,615	\$793,615	\$793,615	\$793,615	\$793,615	\$793,615	\$793,615	\$793,615
Old Unionville Library Community Centre	\$40,685	\$40,685	\$40,685	\$40,685	\$40,685	\$40,685	\$40,685	\$40,685	\$40,685	\$40,685
R.J. Clatworthy Arena	\$283,559	\$283,559	\$283,559	\$283,559	\$283,559	\$283,559	\$283,559	\$283,559	\$283,559	\$283,559
Rouge River Community Centre	\$125,557	\$125,557	\$125,557	\$125,557	\$125,557	\$125,557	\$125,557	\$125,557	\$125,557	\$125,557
St. Robert Catholic High School	\$0	\$45,526	\$45,526	\$45,526	\$45,526	\$45,526	\$45,526	\$45,526	\$45,526	\$45,526
Thornhill Community Centre	\$1,080,264	\$1,080,264	\$1,080,264	\$1,080,264	\$1,080,264	\$1,080,264	\$1,080,264	\$1,080,264	\$1,080,264	\$1,080,264
Thornlea Pool	\$102,588	\$102,588	\$102,588	\$102,588	\$102,588	\$102,588	\$102,588	\$102,588	\$102,588	\$102,588
Unionville Stiver Mill Community Centre	-	-	\$4,635	\$4,635	\$4,635	\$4,635	\$4,635	\$4,635	\$4,635	\$4,635
Unionville Train Station	\$5,665	\$5,665	\$5,665	\$5,665	\$5,665	\$5,665	\$5,665	\$5,665	\$5,665	\$5,665
Victoria Square	\$10,815	\$10,815	\$10,815	\$10,815	\$10,815	\$10,815	\$10,815	\$10,815	\$10,815	\$10,815
Warden House	\$38,728	\$38,728	\$38,728	\$38,728	\$38,728	\$38,728	\$38,728	\$38,728	\$38,728	\$38,728
Water Street Seniors Centre	\$74,675	\$74,675	\$74,675	\$74,675	\$74,675	\$74,675	\$74,675	\$74,675	\$74,675	\$74,675
Other	\$218,772	\$218,772	\$218,772	\$218,772	\$218,772	\$218,772	\$218,772	\$218,772	\$218,772	\$218,772
Total (\$000)	\$7,022.2	\$9,835.8	\$9,840.4	\$11,079.8	\$11,079.8	\$14,641.4	\$14,641.4	\$14,641.4	\$14,641.4	\$14,641.4

APPENDIX B.4

TABLE B.4-1

CITY OF MARKHAM
CALCULATION OF SERVICE LEVELS
INDOOR RECREATION

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historical Population	306,973	312,329	317,779	323,324	328,966	333,938	338,985	344,109	349,310	354,589

INVENTORY SUMMARY (\$000)

Halls And Meeting Rooms	\$88,942.8	\$101,776.6	\$104,869.4	\$107,343.5	\$107,343.5	\$118,743.1	\$118,743.1	\$118,743.1	\$118,743.1	\$118,743.1
Ice Pads	\$183,584.2	\$183,584.2	\$183,584.2	\$183,584.2	\$183,584.2	\$183,584.2	\$183,584.2	\$183,584.2	\$183,584.2	\$183,584.2
Indoor Soccer	\$11,995.3	\$16,423.3	\$16,423.3	\$16,423.3	\$16,423.3	\$16,423.3	\$16,423.3	\$16,423.3	\$16,423.3	\$16,423.3
Indoor Pool	\$60,116.7	\$79,002.3	\$79,002.3	\$126,231.9	\$126,231.9	\$143,889.7	\$143,889.7	\$143,889.7	\$143,889.7	\$143,889.7
Fitness Centres	\$17,829.5	\$23,128.3	\$23,128.3	\$25,578.6	\$25,578.6	\$29,561.4	\$29,561.4	\$29,561.4	\$29,561.4	\$29,561.4
Gymnasium	\$26,537.3	\$31,672.3	\$31,672.3	\$41,212.0	\$41,212.0	\$46,726.2	\$46,726.2	\$46,726.2	\$46,726.2	\$46,726.2
Senior Centres	\$7,384.8	\$8,033.6	\$8,033.6	\$8,033.6	\$8,033.6	\$9,093.2	\$9,093.2	\$9,093.2	\$9,093.2	\$9,093.2
Common Space - Major Community Centres	\$95,571.4	\$132,414.0	\$132,414.0	\$157,202.4	\$157,202.4	\$182,897.1	\$182,897.1	\$182,897.1	\$182,897.1	\$182,897.1
Parking Structures	\$0.0	\$11,925.5	\$11,925.5	\$11,925.5	\$11,925.5	\$11,925.5	\$11,925.5	\$11,925.5	\$11,925.5	\$11,925.5
Land	\$508,025.1	\$559,556.8	\$563,396.7	\$593,839.5	\$593,839.5	\$634,021.5	\$634,021.5	\$633,198.7	\$633,198.7	\$633,198.7
Furniture & Equipment	\$7,022.2	\$9,835.8	\$9,840.4	\$11,079.8	\$11,079.8	\$14,641.4	\$14,641.4	\$14,641.4	\$14,641.4	\$14,641.4
Total (\$000)	\$1,007,009.2	\$1,157,352.6	\$1,164,289.9	\$1,282,454.2	\$1,282,454.2	\$1,391,506.6	\$1,391,506.6	\$1,390,683.7	\$1,390,683.7	\$1,390,683.7

SERVICE LEVEL (\$/capita)

Average
Service
Level

Halls And Meeting Rooms	\$289.74	\$325.86	\$330.01	\$332.00	\$326.31	\$355.58	\$350.29	\$345.07	\$339.94	\$334.88	\$332.97
Ice Pads	\$598.05	\$587.79	\$577.71	\$567.80	\$558.06	\$549.76	\$541.57	\$533.51	\$525.56	\$517.74	\$555.75
Indoor Soccer	\$39.08	\$52.58	\$51.68	\$50.80	\$49.92	\$49.18	\$48.45	\$47.73	\$47.02	\$46.32	\$48.27
Indoor Pool	\$195.84	\$252.95	\$248.61	\$390.42	\$383.72	\$430.89	\$424.47	\$418.15	\$411.93	\$405.79	\$356.28
Fitness Centres	\$58.08	\$74.05	\$72.78	\$79.11	\$77.75	\$88.52	\$87.21	\$85.91	\$84.63	\$83.37	\$79.14
Gymnasium	\$86.45	\$101.41	\$99.67	\$127.46	\$125.28	\$139.92	\$137.84	\$135.79	\$133.77	\$131.78	\$121.94
Senior Centres	\$24.06	\$25.72	\$25.28	\$24.85	\$24.42	\$27.23	\$26.82	\$26.43	\$26.03	\$25.64	\$25.65
Common Space - Major Community Centres	\$311.33	\$423.96	\$416.69	\$486.21	\$477.87	\$547.70	\$539.54	\$531.51	\$523.60	\$515.80	\$477.42
Parking Structures	\$0.00	\$38.18	\$37.53	\$36.88	\$36.25	\$35.71	\$35.18	\$34.66	\$34.14	\$33.63	\$32.22
Land	\$1,654.95	\$1,791.56	\$1,772.92	\$1,836.67	\$1,805.17	\$1,898.62	\$1,870.35	\$1,840.11	\$1,812.71	\$1,785.72	\$1,806.88
Furniture & Equipment	\$22.88	\$31.49	\$30.97	\$34.27	\$33.68	\$43.84	\$43.19	\$42.55	\$41.92	\$41.29	\$36.61
Total (\$/capita)	\$3,280.45	\$3,705.56	\$3,663.84	\$3,966.47	\$3,898.44	\$4,166.96	\$4,104.92	\$4,041.40	\$3,981.23	\$3,921.96	\$3,873.12

CITY OF MARKHAM
CALCULATION OF MAXIMUM ALLOWABLE
INDOOR RECREATION

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2012 - 2021	\$3,873.12
Net Population Growth 2022 - 2031	90,071
Maximum Allowable Funding Envelope	\$348,854,435

APPENDIX B.4

TABLE B.4-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
INDOOR RECREATION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022- 2031	Other Dev. Related Costs
4.0 INDOOR RECREATION											
4.1 Recovery of Past Commitments											
4.1.1 Recovery of Negative Reserve Fund Balance	2022	\$ 46,852,432	\$ -	\$ 46,852,432	0%	\$ -	\$ 46,852,432	\$ -	\$ -	\$ 46,852,432	\$ -
Subtotal Recovery of Past Commitments		\$ 46,852,432	\$ -	\$ 46,852,432		\$ -	\$ 46,852,432	\$ -	\$ -	\$ 46,852,432	\$ -
4.2 Major Facilities											
4.2.1 Leitchcroft (10,000 sf)	2024	\$ 6,150,000	\$ -	\$ 6,150,000	0%	\$ -	\$ 6,150,000	\$ -	\$ -	\$ 6,150,000	\$ -
4.2.2 Markham Centre (10,000 sf)	2025	\$ 6,150,000	\$ -	\$ 6,150,000	0%	\$ -	\$ 6,150,000	\$ -	\$ -	\$ 6,150,000	\$ -
4.2.3 Future Facility - FUA Phase 1 (40,000 sf)	2026	\$ 24,600,000	\$ -	\$ 24,600,000	0%	\$ -	\$ 24,600,000	\$ -	\$ -	\$ 24,600,000	\$ -
4.2.4 Future Facility - Co-location in Robinson Glen (10,000 sf)	2027	\$ 6,150,000	\$ -	\$ 6,150,000	0%	\$ -	\$ 6,150,000	\$ -	\$ -	\$ 6,150,000	\$ -
4.2.5 Milliken Mills Expansion (39,000 sf)	2029	\$ 23,985,000	\$ -	\$ 23,985,000	0%	\$ -	\$ 23,985,000	\$ -	\$ -	\$ 23,985,000	\$ -
4.2.6 Indoor Turf Facility	2029	\$ 3,741,000	\$ -	\$ 3,741,000	0%	\$ -	\$ 3,741,000	\$ -	\$ -	\$ 3,741,000	\$ -
4.2.7 Future Facility - FUA Phase 2 (50,000 sf)	2030	\$ 30,750,000	\$ -	\$ 30,750,000	0%	\$ -	\$ 30,750,000	\$ -	\$ -	\$ 30,750,000	\$ -
4.2.8 East Markham Facility (120,000 sft)	2030	\$ 73,800,000	\$ -	\$ 73,800,000	0%	\$ -	\$ 73,800,000	\$ -	\$ -	\$ 55,350,000	\$ 18,450,000
Subtotal Major Facilities		\$ 175,326,000	\$ -	\$ 175,326,000		\$ -	\$ 175,326,000	\$ -	\$ -	\$ 156,876,000	\$ 18,450,000
4.3 Land for Major Facilities											
4.3.1 Provision for Land for Indoor Rec Facility (2 ha)	2026	\$ 27,400,000	\$ -	\$ 27,400,000	0%	\$ -	\$ 27,400,000	\$ -	\$ -	\$ 27,400,000	\$ -
4.3.2 Provision for Land for Indoor Rec Facility (2 ha)	2029	\$ 27,400,000	\$ -	\$ 27,400,000	0%	\$ -	\$ 27,400,000	\$ -	\$ -	\$ 27,400,000	\$ -
4.3.3 Provision for Land for Indoor Rec Facility (2 ha)	2030	\$ 27,400,000	\$ -	\$ 27,400,000	0%	\$ -	\$ 27,400,000	\$ -	\$ -	\$ 27,400,000	\$ -
4.3.4 Provision for Land for Indoor Rec Facility (2 ha)	2030	\$ 27,400,000	\$ -	\$ 27,400,000	0%	\$ -	\$ 27,400,000	\$ -	\$ -	\$ 27,400,000	\$ -
Subtotal Land for Major Facilities		\$ 109,600,000	\$ -	\$ 109,600,000		\$ -	\$ 109,600,000	\$ -	\$ -	\$ 109,600,000	\$ -
4.4 Furniture & Equipment											
4.4.1 Leitchcroft	2024	\$ 615,000	\$ -	\$ 615,000	0%	\$ -	\$ 615,000	\$ -	\$ -	\$ 615,000	\$ -
4.4.2 Markham Centre	2025	\$ 615,000	\$ -	\$ 615,000	0%	\$ -	\$ 615,000	\$ -	\$ -	\$ 615,000	\$ -
4.4.3 Future Facility - FUA Phase 1	2026	\$ 2,460,000	\$ -	\$ 2,460,000	0%	\$ -	\$ 2,460,000	\$ -	\$ -	\$ 2,460,000	\$ -
4.4.4 Future Facility - Co-location in Robinson Glen	2027	\$ 615,000	\$ -	\$ 615,000	0%	\$ -	\$ 615,000	\$ -	\$ -	\$ 615,000	\$ -
4.4.5 Milliken Mills Expansion	2029	\$ 2,398,500	\$ -	\$ 2,398,500	0%	\$ -	\$ 2,398,500	\$ -	\$ -	\$ 2,398,500	\$ -
4.4.6 Future Facility - FUA Phase 2	2030	\$ 3,075,000	\$ -	\$ 3,075,000	0%	\$ -	\$ 3,075,000	\$ -	\$ -	\$ 3,075,000	\$ -
4.4.7 East Markham Facility	2030	\$ 7,380,000	\$ -	\$ 7,380,000	0%	\$ -	\$ 7,380,000	\$ -	\$ -	\$ 7,380,000	\$ -
Subtotal Furniture & Equipment		\$ 17,158,500	\$ -	\$ 17,158,500		\$ -	\$ 17,158,500	\$ -	\$ -	\$ 17,158,500	\$ -
TOTAL INDOOR RECREATION		\$ 348,936,932	\$ -	\$ 348,936,932		\$ -	\$ 348,936,932	\$ -	\$ -	\$ 330,486,932	\$ 18,450,000

Residential Development Charge Calculation

Residential Share of 2022 - 2031 DC Eligible Costs	100%	\$330,486,932
10-Year Growth in Population in New Units		90,381
Unadjusted Development Charge Per Capita		\$3,656.60

Non-Residential Development Charge Calculation

Non-Residential Share of 2022 - 2031 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		2,550,244
Unadjusted Development Charge Per Square Metre		\$0.00

2022 - 2031 Net Funding Envelope

\$348,854,435

Reserve Fund Balance

(\$46,852,432)

**APPENDIX B.4
TABLE B.4-3**

**CITY OF MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
INDOOR RECREATION
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

INDOOR RECREATION	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	(\$46,852.43)	(\$19,372.1)	\$11,004.9	\$37,122.8	\$65,532.6	\$43,605.4	\$74,780.5	\$116,353.4	\$93,664.3	(\$42,247.2)	
2022 - 2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Indoor Recreation: Non Inflated	\$0.00	\$0.00	\$6,765.00	\$6,765.00	\$54,460.00	\$6,765.00	\$0.00	\$57,524.50	\$151,355.00	\$0.00	\$283,634.5
- Indoor Recreation: Inflated(1)	\$0.0	\$0.0	\$7,038.3	\$7,179.1	\$58,949.3	\$7,469.1	\$0.0	\$66,077.6	\$177,336.5	\$0.0	
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	8,094	8,301	8,514	8,733	8,955	9,085	9,315	9,549	9,792	10,043	90,381
REVENUE											
- DC Receipts: Inflated	\$29,540.3	\$30,901.7	\$32,328.5	\$33,823.2	\$35,376.7	\$36,608.1	\$38,285.6	\$40,032.3	\$41,872.0	\$43,804.3	\$362,572.6
INTEREST											
- Interest on Opening Balance	(\$2,576.9)	(\$1,065.5)	\$385.2	\$1,299.3	\$2,293.6	\$1,526.2	\$2,617.3	\$4,072.4	\$3,278.2	(\$2,323.6)	\$9,506.3
- Interest on In-year Transactions	\$517.0	\$540.8	\$442.6	\$466.3	(\$648.2)	\$509.9	\$670.0	(\$716.2)	(\$3,725.3)	\$766.6	(\$1,176.7)
TOTAL REVENUE	\$27,480.3	\$30,377.0	\$33,156.2	\$35,588.8	\$37,022.1	\$38,644.2	\$41,572.9	\$43,388.4	\$41,425.0	\$42,247.2	\$370,902.2
CLOSING CASH BALANCE	(\$19,372.1)	\$11,004.9	\$37,122.8	\$65,532.6	\$43,605.4	\$74,780.5	\$116,353.4	\$93,664.3	(\$42,247.2)	\$0.0	

Note 1: Borrowed funds are not inflated.

2022 Adjusted Charge Per Capita	\$3,649.65
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Allocation of Capital Program	
Residential Sector	100.0%
Non-Residential Sector	0.0%
Rates for 2022	
Inflation Rate	2.0%
Interest Rate on Positive Balances	3.5%
Interest Rate on Negative Balances	5.5%

Appendix B.5

Park Development & Facilities

Appendix B.5: Park Development & Facilities

The City of Markham Parks Department is responsible for the recreation and leisure needs of the community, including the provision and maintenance of parks, to the residents of Markham. The City offers over 680 hectares of developed parkland and an array of parks facilities including playgrounds, soccer fields, and baseball diamonds.

Table B.5-1 2012 - 2021 Historical Service Levels

Table B.5-1 displays the Parks ten-year historical inventory for outdoor recreation facilities, sports fields, parks, and bridges. Outdoor recreation facilities, including maintenance and storage buildings, tennis clubhouses, washrooms, fountains, shelters, and other urban park features, amount to \$110.14 million.

Outdoor sports fields, which include a variety of junior and senior, as well as lit unlit facilities, amount to \$177.80 million. The City of Markham currently has 738 hectares of developed parkland which is valued at \$321.56 million. Finally, bridges, illumination, landscaping and parking lots add another \$73.57 million to the Park Development & Facilities inventory.

The 2021 full replacement value of the inventory of capital assets for the Park Development & Facilities amounts to \$682.88 million which yields a service level of \$1,882.77 per capita. When multiplied by the forecasted net population growth over the 2022 – 2031 planning period, a maximum funding envelope of \$169.58 million is the result.

Table B.5-2 2022 – 2031 Development-Related Capital Program & Calculation of the Unadjusted Development Charge

The 2022 – 2031 gross development-related capital program for the Parks department amounts to \$325.99 million.

The Park Development and Facilities capital program is a very detailed list of development-related capital projects by type, and location. The type of facilities included in the capital program include: basketball courts, baseball diamonds, cricket pitches, exercise stations, gazebos & shelters, concrete plaza spaces, parking lots, lighting, playgrounds, skate parks, soccer fields, splash pads, tennis courts, walkways & paths, washrooms, and park development.

No grants or replacement shares have been identified for this service as the capital program only includes net new facilities. There is \$28.53 million currently in the Parks DC reserve fund balance which has been applied to the capital projects occurring in the initial years of the program. A significant share of the development-related capital program, \$127.87 million, is above the 10-year historical service level net funding envelope this amount and as such, has been removed from the 2022 – 2031 development charges calculation and will be examined for recovery under subsequent DC by-law updates(subject to service level restrictions), other growth-funding tools or other funding sources.

The DC costs eligible for recovery within the 2022 – 2031 period amount to \$169.58 million which is allocated entirely against future residential development in the City of Markham. This results in an unadjusted development charge of \$1,876.30 per capita.

Table B.5-3 Cash Flow Analysis

After cash flow and reserve fund consideration, the residential calculated charge increases to \$2,008.68 per capita. This is a reflection of the timing of the capital program and development charges revenues.

The following table summarizes the calculation of the indoor recreation development charge:

PARK DEVELOPMENT & FACILITIES SUMMARY										
10-year Hist. Service Level per capita	2022 - 2031		Residential \$/capita	Unadjusted Development Charge			Residential \$/capita	Adjusted Development Charge		
	Development-Related	Capital Program		Retail	I.O.I.	Mixed-Use		Retail	I.O.I.	Mixed-Use
	Total	Net DC Recoverable		\$/sq.m	\$/sq.m	\$/sq.m		\$/sq.m	\$/sq.m	\$/sq.m
\$1,882.77	\$325,989,933	\$169,582,317	\$1,876.30	\$0.00	\$0.00	\$0.00	\$2,008.68	\$0.00	\$0.00	\$0.00

APPENDIX B.5

TABLE B.5-1

CITY OF MARKHAM

INVENTORY OF CAPITAL ASSETS

PARK DEVELOPMENT & FACILITIES

PARKS BUILDINGS

Maintenance and Storage Buildings Park Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
14th Avenue Central Parks Workshop	7,259	7,259	7,259	7,259	7,259	7,259	7,259	7,259	7,259	7,259	\$379
428 John Street - West Parks Workshop	2,719	2,719	2,719	2,719	2,719	2,719	2,719	2,719	2,719	2,719	\$379
Answell Park Well Shed	80	80	80	80	80	80	80	80	80	80	\$123
Bishop Cross	600	600	600	600	600	600	600	600	600	600	\$379
Centennial Park Storage Bldg	830	830	830	830	830	830	830	830	830	830	\$379
Civic Center Skating Rink Bldg	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820	1,820	\$379
Crosby Park Food Booth	1,345	1,345	1,345	1,345	1,345	1,345	1,345	1,345	1,345	1,345	\$379
Crosby Park Storage Shed	100	100	100	100	100	100	100	100	100	100	\$123
Greenhouses 4415 14th Avenue	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600	\$379
Main St Markham Storage Building	300	300	300	300	300	300	300	300	300	300	\$379
Miller Works Yard -Urban Forest	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	\$379
Milliken Mills Park Concession	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	\$379
Milne Park Concession	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	\$379
Milne Park Lean Tos	1,900	1,900	1,900	1,900	1,900	1,900	1,900	1,900	1,900	1,900	\$123
Milne Park Storage Building	100	100	100	100	100	100	100	100	100	100	\$379
Milne Park Ticket Booth	25	25	25	25	25	25	25	25	25	25	\$379
Morgan Pool Changerooms	856	856	856	856	856	856	856	856	856	856	\$379
Morgan Pool Filter Room	315	315	315	315	315	315	315	315	315	315	\$379
Morgan Pool Lifeguard Room	209	209	209	209	209	209	209	209	209	209	\$379
Paint Shop, 440 John Street	580	580	-	-	-	-	-	-	-	-	\$379
Princess Street	960	960	960	960	960	960	960	960	960	960	\$379
Rouge River Brown Building	1,750	1,750	1,750	1,750	1,750	1,750	1,750	1,750	1,750	1,750	\$379
Rouge River Green Building	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	\$379
Rouge River Pesticide Storage	80	80	80	80	80	80	80	80	80	80	\$379
Rouge River Pump House	300	300	300	300	300	300	300	300	300	300	\$379
Springdale Park Storage Shed	200	200	200	200	-	-	-	-	-	-	\$123
Storage Building 14th Avenue	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	\$379
Storage Shed, 440 John Street	1,440	1,440	-	-	-	-	-	-	-	-	\$379
The Arboretum and Heritage Orchard Maintenance building	128	128	128	128	128	128	128	128	128	128	\$379
Tower Storage, 440 John Street	13,270	13,270	-	-	-	-	-	-	-	-	\$379
Unionville Bandstand	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	\$379
West Parks Quonset Hut	2,002	2,002	2,002	2,002	2,002	2,002	2,002	2,002	2,002	2,002	\$123
Total (sq.ft.)	62,144	62,144	46,854	46,854	46,654	46,654	46,654	46,654	46,654	46,654	
Total (\$000)	\$22,456.4	\$22,456.4	\$16,661.5	\$16,661.5	\$16,636.9	\$16,636.9	\$16,636.9	\$16,636.9	\$16,636.9	\$16,636.9	

APPENDIX B.5

TABLE B.5-1

CITY OF MARKHAM

INVENTORY OF CAPITAL ASSETS

PARK DEVELOPMENT & FACILITIES

PARKS BUILDINGS

Tennis Clubhouses Park Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Armada Park Tennis Clubhouse	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	1,150	\$475
Box Grove Park Tennis Clubhouse	60	60	60	60	60	60	60	60	60	60	\$475
German Mills Tennis Clubhouse	700	700	700	700	700	700	700	700	700	700	\$475
Markham Tennis Clubhouse	624	624	624	624	624	624	624	624	624	624	\$475
Pomona Mills Park Tennis Club	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	\$475
Unionville Tennis Clubhouse	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	\$475
Total (sq.ft.)	5,534	5,534	5,534	5,534	5,534	5,534	5,534	5,534	5,534	5,534	
Total (\$000)	\$2,628.7	\$2,628.7	\$2,628.7	\$2,628.7	\$2,628.7	\$2,628.7	\$2,628.7	\$2,628.7	\$2,628.7	\$2,628.7	

Buildings with Washrooms Park Name	# of Square Feet										UNIT COST (\$/sq. ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Berczy Park North	-	1,246	1,246	1,246	1,246	1,246	1,246	1,246	1,246	1,246	\$379
Berczy Park South	-	2,098	2,098	2,098	2,098	2,098	2,098	2,098	2,098	2,098	\$379
Box Grove Park	-	-	-	-	-	-	-	-	-	2,067	\$379
Calvert Park	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299	1,299	\$379
Gordon Stollery Park	-	-	-	-	28	28	28	28	28	28	\$379
Grandview Park	-	-	-	-	-	-	-	-	420	420	\$379
Main St Markham	450	450	450	450	450	450	450	450	450	450	\$379
Millennium Park	340	340	340	340	340	340	340	340	340	340	\$379
Milliken Mills Community Park	1,827	1,827	1,827	1,827	1,827	1,827	1,827	1,827	1,827	1,827	\$379
Milne Dam Conservation Park	1,048	1,048	1,048	1,048	1,048	1,048	1,048	1,048	1,048	1,048	\$379
Mintleaf Park	93	93	93	93	93	93	93	93	93	93	\$379
Risebrough Park	75	75	75	75	75	75	75	75	75	75	\$379
St Robert Chs	2,848	2,848	2,848	2,848	2,848	2,848	2,848	2,848	2,848	2,848	\$379
Toogood Pond	881	881	881	881	881	881	881	881	881	881	\$379
Victoria Square Park	607	607	607	607	607	607	607	607	607	607	\$379
Yarl Cedarwood Park	-	-	-	693	693	693	693	693	693	693	\$379
Total (sq.ft.)	9,468	12,812	12,812	13,505	13,533	13,533	13,533	13,533	13,953	16,020	
Total (\$000)	\$3,588.36	\$4,855.76	\$4,855.76	\$5,118.35	\$5,129.00	\$5,129.02	\$5,129.02	\$5,128.96	\$5,288.18	\$6,071.58	

APPENDIX B.5

TABLE B.5-1

CITY OF MARKHAM

INVENTORY OF CAPITAL ASSETS

PARK DEVELOPMENT & FACILITIES

PARKS BUILDINGS

Land for Outdoor Recreation Buildings Park Name	# of Hectares										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
14th Avenue Central Parks Workshop	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	\$13,714,000
428 John Street - West Parks Workshop	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	\$13,714,000
440 John Street	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	\$13,714,000
Bishops Cross	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$13,714,000
Centennial	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$13,714,000
Civic Center Park	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$13,714,000
Milliken Mills Park	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$13,714,000
Milne Dam	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$13,714,000
Princess Street	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	\$13,714,000
Toogood Pavilion	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$13,714,000
Total (ha)	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	
Total (\$000)	\$50,344.1	\$50,344.1	\$50,344.1	\$50,344.1	\$50,344.1	\$50,344.1	\$50,344.1	\$50,344.1	\$50,344.1	\$50,344.1	

Clock Towers Park Name	# of Clock Towers										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
BERCZY SQUARE	-	-	-	-	1	1	1	1	1	1	\$449,182
GRAND CORNELL PARK	1	1	1	1	1	1	1	1	1	1	\$449,182
MARKHAM MAIN ST. (SOUTH OF HWY7)	-	-	-	-	-	-	-	1	1	1	\$46,350
Total (#)	1	1	1	1	2	2	2	3	3	3	
Total (\$000)	\$449.18	\$449.18	\$449.18	\$449.18	\$898.36	\$898.36	\$898.36	\$944.71	\$944.71	\$944.71	

Fountains Park Name	# of Fountains										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
BENJAMIN THORNE PARK	-	-	1	1	1	1	1	1	1	1	\$536,523
JOHN DANIELS PARK	1	1	1	1	1	1	1	1	1	1	\$536,523
PARK SQUARE	-	-	-	-	-	-	-	1	1	1	\$536,523
Total (#)	1	1	2	2	2	2	2	3	3	3	
Total (\$000)	\$536.52	\$536.52	\$1,073.05	\$1,073.05	\$1,073.05	\$1,073.05	\$1,073.05	\$1,609.57	\$1,609.57	\$1,609.57	

APPENDIX B.5

TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
PARKS BUILDINGS

Shelters Park Name	# of Shelters										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Minor Trellis											
BENJAMIN MARR PARK SOUTH	1	1	1	1	1	1	1	1	1	1	\$108,221
BERCZY PARK NORTH	-	-	1	1	1	1	1	1	1	1	\$108,221
JOHN FERRERA PARK	-	-	-	-	-	1	1	1	1	1	\$108,221
JOHN STEGMAN WOODS	1	1	1	1	1	1	1	1	1	1	\$108,221
JOHN STREET PARKETTE		1	1	1	1	1	1	1	1	1	\$108,221
LEIGHLAND PARK	1	1	1	1	1	1	1	1	1	1	\$108,221
MILLENNIUM PARK	1	1	1	1	1	1	1	1	1	1	\$108,221
NORDINGLEN PARK		2	2	2	2	2	2	2	2	2	\$108,221
PEACE PARK	1	1	1	1	1	1	1	1	1	1	\$108,221
SINCLAIR HOLDEN PARK	1	1	1	1	1	1	1	1	1	1	\$108,221
SIR ROBERT WATSON			1	1	1	1	1	1	1	1	\$108,221
WISMER PARK	9	9	9	9	9	9	9	9	9	9	\$108,221

APPENDIX B.5

TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
PARKS BUILDINGS

Shelters Park Name	# of Shelters										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Major Trellis											
BEAUPRE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
BERCZY PARK NORTH	-	-	2	2	2	2	2	2	2	2	\$249,545
BERCZY PARK SOUTH	2	2	2	2	2	2	2	2	2	2	\$249,545
BERCZY SQUARE PARK						2	2	2	2	2	\$249,545
BRIAN CHATLAND PARK	-	-	-	1	1	1	1	1	1	1	\$249,545
CABOTO TRAIL PARKETTE	1	1	1	1	1	1	1	1	1	1	\$249,545
CHELSEA PARK	2	2	2	2	2	2	2	2	2	2	\$249,545
CLARENCE CHANT PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
COLEDALE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
CORNELL COMMUNITY CENTRE	-	1	1	1	1	1	1	1	1	1	\$249,545
CORNELL ROUGE WOODS	1	1	1	1	1	1	1	1	1	1	\$249,545
CORNELL WOODLOT PARK	-	-	-	-	-	-	-	-	1	1	\$249,545
GRAND CORNELL PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
GREENSBOROUGH TOWN CENTRE	2	2	2	2	2	2	2	2	2	2	\$249,545
JOHN DANIELS PARK	2	2	2	2	2	2	2	2	2	2	\$249,545
KAMIL SADIQ PARK	-	-	1	1	1	1	1	1	1	1	\$249,545
MCCOWAN FREEMAN PARKETTE	-	-	1	1	1	1	1	1	1	1	\$249,545
MILLENNIUM PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
NICHOLAS MILLER PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
NORDINGLEN PARK	-	1	1	1	1	1	1	1	1	1	\$249,545
PETER BAWDEN PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
RAY STREET PARK	-	-	1	1	1	1	1	1	1	1	\$249,545
ROSEBERRY PARK	-	-	1	1	1	1	1	1	1	1	\$249,545
ROUGEHAVEN PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
ROXBURY PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
SIMONSTON PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
SOUTH UNIONVILLE PARK WEST	-	-	-	-	1	1	1	1	1	1	\$249,545
SPEIGHT PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
THE VILLAGE GREEN	1	1	1	1	1	1	1	1	1	1	\$249,545
THOMAS MCQUAY PARK	2	2	2	2	2	2	2	2	2	2	\$249,545
UNITY PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
WILLIAMSTOWN PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
WILMOT PARKETTE	1	1	1	1	1	1	1	1	1	1	\$249,545
WISMER PARK	2	2	2	2	2	2	2	2	2	2	\$249,545
YARL CEDARWOOD PARK	2	2	2	2	2	2	2	2	2	2	\$249,545

APPENDIX B.5

TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
PARKS BUILDINGS

Shelters Park Name	# of Shelters										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Minor Gazebo											
ANGUS GLEN VILLAGE GREEN PARK	-	-	-	-	-	-	-	1	1	1	\$81,484
ASHTON MEADOWS	-	-	-	-	-	-	1	1	1	1	\$81,484
AVIDA POND	-	-	-	-	-	1	1	1	1	1	\$81,484
ALFRED PATTERSON POND	1	1	1	1	1	1	1	1	1	1	\$81,484
BEAUPRE PARK	1	1	1	1	1	1	1	1	1	1	\$81,484
BENJAMIN MARR PARK NORTH	1	1	1	1	1	1	1	1	1	1	\$81,484
IVAN REESOR PARKETTE	-	-	-	-	1	1	1	1	1	1	\$81,484
BLAKE LAZENBY PARK	1	1	1	1	1	1	1	1	1	1	\$81,484
CHURCH STREET PARKETTE	1	1	1	1	1	1	1	1	1	1	\$81,484
COLTYS CORNER	-	-	-	-	-	-	-	1	1	1	\$81,484
DENISON PARK	1	1	1	1	1	1	1	1	1	1	\$81,484
GEORGE COUPERWAITE PARK - EAST	-	1	1	1	1	1	1	1	1	1	\$81,484
GEORGE COUPERWAITE PARK - WEST	-	1	1	1	1	1	1	1	1	1	\$81,484
GEORGE COATHUP PARK	-	3	3	3	3	3	3	3	3	3	\$81,484
GORDON STOLLERY PARK	-	-	-	-	2	2	2	2	2	2	\$81,484
HAROLD HUMPHREYS PARK	1	1	1	1	1	1	1	1	1	1	\$81,484
HENRY WHITE PARK	1	1	1	1	1	1	1	1	1	1	\$81,484
INNIS MACDONALD PARK	1	1	1	1	1	1	1	1	1	1	\$81,484
JAMES EDWARD PARK	1	1	1	1	1	1	1	1	1	1	\$81,484
JEANNE-CHARLOTTE ALLAMAND PARK	-	-	-	-	-	1	1	1	1	1	\$81,484
JOHN BAIRD WOODS	-	-	-	-	1	1	1	1	1	1	\$81,484
JOHN MAPES PARKETTE	1	1	1	1	1	1	1	1	1	1	\$81,484
JOSEPH ELLERBY PARK	1	1	1	1	1	1	1	1	1	1	\$81,484
LEITCHCROFT PARK	1	1	1	1	1	1	1	1	1	1	\$81,484
MONARCH PARK	1	1	1	1	1		1	1	1	1	\$81,484
PAT WHEELER PARK	-	-	-	-	-	-	1	1	1	1	\$81,484
PEACE PARK	1	1	1	1	1	1	1	1	1	1	\$81,484
POTTERY PARK	-	-	-	-	-	-	-	-	1	1	\$81,484
RANDALL PARK	-	-	-	-	-	1	1	1	1	1	\$81,484
READ'S CORNER PARK	-	-	-	-	1	1	1	1	1	1	\$81,484
ROUGEHAVEN PARK	1	1	1	1	1	1	1	1	1	1	\$81,484
ROXBURY PARK	1	1	1	1	1	1	1	1	1	1	\$81,484
SCHOOL HOUSE PARK	-	-	-	-	-	-	1	1	1	1	\$81,484
SOUTH UNIONVILLE PARK	1	1	1	1	1	1	1	1	1	1	\$81,484
TOOGOOD POND PARK	-	-	-	-	-	1	1	1	1	1	\$81,484
UPPER CORNELL PARK	1	1	1	1	1	1	1	1	1	1	\$81,484
VICTORIA SQUARE PARK	-	3	3	3	3	3	3	3	3	3	\$81,484

APPENDIX B.5

TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
PARKS BUILDINGS

Shelters Park Name	# of Shelters										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Major Gazebo											
AANIIN PARK	-	-	-	-	-	-	1	1	1	1	\$311,932
ABRAHAM STRICKLER PARK	-	-	-	-	-	1	1	1	1	1	\$311,932
ADA MACKENZIE PARK	-	-	2	2	2	2	2	2	2	2	\$311,932
ART LATCHAM PARK	-	-	-	-	1	1	1	1	1	1	\$311,932
BECKETT FARM	-	-	-	-	-	-	-	1	1	1	\$311,932
BERCZY PARK SOUTH	1	1	1	1	1	1	1	1	1	1	\$311,932
BOX GROVE PARK	-	-	-	-	-	-	-	-	-	2	\$311,932
ERNEST WIDEMAN	-	-	-	-	-	1	1	1	1	1	\$311,932
FLORENCE & DONALD DEACON PARK	-	-	-	-	-	-	1	1	1	1	\$311,932
FREDERICK BAGG PARK	1	1	1	1	1	1	1	1	1	1	\$311,932
FRISBY PARK	-	-	-	-	1	1	1	1	1	1	\$311,932
GORDON LEITCH PARK	-	-	-	-	-	-	-	-	-	1	\$311,932
GORDON STOLLERY PARK	-	-	-	-	1	1	1	1	1	1	\$311,932
GRANDVIEW PARK	-	-	-	-	-	-	-	-	1	1	\$311,932
GREENSBOROUGH TOWN CENTRE	1	1	1	1	1	1	1	1	1	1	\$311,932
HARMONY PARK	-	-	-	-	-	-	1	1	1	1	\$311,932
HUNTINGTON PARK	1	1	1	1	1	1	1	1	1	1	\$311,932
JOHN DANIELS PARK	1	1	1	1	1	1	1	1	1	1	\$311,932
JOHN PAYNE PARK	1	1	1	1	1	1	1	1	1	1	\$311,932
LAURA & ALF WEAVER PARK	-	-	-	-	-	1	1	1	1	1	\$311,932
LEGACY PARK	1	1	1	1	1	1	1	1	1	1	\$311,932
MILLENNIUM SQUARE	-	-	1	1	1	1	1	1	1	1	\$311,932
MILLIKEN MILLS PARK	1	1	1	1	1	1	1	1	1	1	\$311,932
MOUNT JOY PARK	1	1	1	1	1	1	1	1	1	1	\$311,932
RAY STREET PARK	-	-	1	1	1	1	1	1	1	1	\$311,932
RAY STREET PARK	-	-	1	1	1	1	1	1	1	1	\$311,932
RISEBROUGH PARK	1	1	1	1	1	1	1	1	1	1	\$311,932
RIVERWALK PARK	1	1	1	1	1	1	1	1	1	1	\$311,932
ROBERT SPINDLOE	-	-	-	-	-	-	-	-	-	1	\$311,932
ROY RAMER PARK	-	-	-	-	-	-	-	-	-	1	\$311,932
RUSSELL CART TEFFT PARK	-	-	-	-	-	-	-	-	1	1	\$311,932
SOUTH UNIONVILLE PARK WEST	-	-	-	-	1	1	1	1	1	1	\$311,932
SWAN LAKE PARK	1	1	1	1	1	1	1	1	1	1	\$311,932
THE ARBORETUM AND HERITAGE ORCHARD	1	1	1	1	1	1	1	1	1	1	\$311,932
WESTPHALEN PARK	-	-	-	-	-	1	1	1	1	1	\$311,932
WILLIAM CANTLEY	-	-	-	-	1	1	1	1	1	1	\$311,932

APPENDIX B.5

TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
PARKS BUILDINGS

Shelters Park Name	# of Shelters										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Park Pavillion											
BERCZY PARK NORTH	-	-	1	1	1	1	1	1	1	1	\$311,932
HIGHGATE PARK	-	1	1	1	1	1	1	1	1	1	\$311,932
MILNE DAM CONSERVATION PARK	1	1	1	1	1	1	1	1	1	1	\$311,932
SADDLECREEK PARK(ADA MACKENZIE PARK)	-	-	1	1	1	1	1	1	1	1	\$311,932
SIMONSTON PARK	1	1	1	1	1	1	1	1	1	1	\$311,932
Total (#)	80	94	109	110	121	131	138	141	145	150	
Total (\$000)	\$15,586.4	\$17,373.9	\$21,271.2	\$21,520.7	\$23,737.3	\$25,836.8	\$27,098.6	\$27,573.5	\$28,528.4	\$30,088.0	

APPENDIX B.5

TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
PARKS BUILDINGS

Urban Park Features Park Name	Square or Linear Meters										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2019	2021	
HARD SURFACES - PLAZA (SQ.M.)											
Concrete											
ARTHUR LISMER PARK	-	-	172	172	172	172	172	172	172	172	\$149
BENJAMIN THRONE PARK	-	-	365	365	365	365	365	365	365	365	\$149
GEORGE COUTHUP PARK	-	1,007	1,007	1,007	1,007	1,007	1,007	1,007	1,007	1,007	\$149
MONARCH CATHEDRALTOWN NORTH PARK	-	-	-	-	103	103	103	103	103	103	\$149
SIR ROBERT WATSON PARK	-	-	150	150	150	150	150	150	150	150	\$149
THOMAS MCQUAY PARK	-	-	1,209	1,209	1,209	1,209	1,209	1,209	1,209	1,209	\$149
WISMER PARK	887	887	887	887	887	887	887	887	887	887	\$149
Unit Paving											
ARTHUR LISMER PARK	-	-	205	205	205	205	205	205	205	205	\$340
BENJAMIN THRONE PARK	-	-	432	432	432	432	432	432	432	432	\$340
GORDON STOLLERY PARK	-	-	-	-	20	20	20	20	20	20	\$340
SIR ROBERT WATSON PARK	-	-	188	188	188	188	188	188	188	188	\$340
WISMER PARK	357	357	357	357	357	357	357	357	357	357	\$340
Brick											
ARTHUR LISMER PARK	-	-	212	212	212	212	212	212	212	212	\$444
Seat Walls and Feature Walls (l.m)											
GEORGE COUTHUP PARK	-	46	46	46	46	46	46	46	46	46	\$1,220
WISMER PARK	-	-	5	5	5	5	5	5	5	5	\$1,220
RETAINING WALLS											
Concrete (sq.m.)											
ARTHUR LISMER PARK	-	-	28	28	28	28	28	28	28	28	\$1,628
GORDON STOLLERY PARK	-	-	-	-	91	91	91	91	91	91	\$1,628
THOMAS MCQUAY PARK	-	-	88	88	88	88	88	88	88	88	\$1,628
VINEGAR HILL PARKETTE	-	-	-	-	58	58	58	58	58	58	\$1,628
Armourstone (l.m.)											
GORDON STOLLERY PARK	-	-	-	-	35	35	35	35	35	35	\$667
SADDLECREEK PARK	-	-	12	12	12	12	12	12	12	12	\$667
VICTORIA SQUARE PARK	-	7	7	7	7	7	7	7	7	7	\$667
Limestone (l.m.)											
GEORGE COUTHUP PARK	-	9	9	9	9	9	9	9	9	9	\$517
Concrete Stairs and Ramps (l.m.)											
ARTHUR LISMER PARK	-	-	32	32	32	32	32	32	32	32	\$1,252
BENJAMIN THRONE PARK	-	-	-	73	73	73	73	73	73	73	\$1,252
BERCZY SQUARE	-	-	-	-	5	5	5	5	5	5	\$1,252
GORDON STOLLERY PARK	-	-	-	-	25	25	25	25	25	25	\$1,252
THOMAS MCQUAY PARK	-	-	27	27	27	27	27	27	27	27	\$1,252
Total (#)	1,244	2,313	5,438	5,512	5,849	5,849	5,849	5,849	5,849	5,849	
Total (\$000)	\$253.5	\$468.9	\$1,403.0	\$1,494.6	\$1,820.4	\$1,820.4	\$1,820.4	\$1,820.4	\$1,820.4	\$1,820.4	

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Major Soccer - Artificial Turf Park Name	# of Lighted Major Soccer Fields										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
BILL CROTHERS S.S. (SHARED AGREEMENT W SCHOOL BOARD)	2	2	2	2	2	2	2	2	2	2	\$1,122,954
MOUNT JOY C.C. AND PARK	1	1	1	1	1	1	1	1	1	1	\$1,122,954
ST ROBERT CHS (SHARED AGREEMENT W SCHOOL BOARD)	1	1	1	1	1	1	1	1	1	1	\$1,122,954
Total (#)	4	4	4	4	4	4	4	4	4	4	
Total (\$000)	\$4,491.8	\$4,491.8	\$4,491.8	\$4,491.8	\$4,491.8	\$4,491.8	\$4,491.8	\$4,491.8	\$4,491.8	\$4,491.8	

Major Soccer - Lighted Park Name	# of Lighted Major Soccer Fields										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
BERCZY PARK NORTH	1	1	1	1	1	1	1	1	1	1	\$748,636
BILL CROTHERS S.S.(SHARED AGREEMENT W SCHOOL BOARD)	1	1	1	1	1	1	1	1	1	1	\$748,636
BISHOP'S CROSS PARK	1	1	1	1	1	1	1	1	1	1	\$748,636
BROTHER ANDRE CHS (SHARED AGREEMENT W SCHOOL BOARD)	1	1	1	1	1	1	1	1	1	1	\$748,636
CENTENNIAL PARK	1	1	1	1	1	1	1	1	1	1	\$748,636
GORDON STOLLERY PARK	1	1	1	1	1	1	1	1	1	1	\$748,636
HUNTINGTON PARK	1	1	1	1	1	1	1	1	1	1	\$748,636
MILLIKEN MILLS COMMUNITY PARK	1	1	1	1	1	1	1	1	1	1	\$748,636
MILLIKEN MILLS HIGH SCHOOL (SHARED MAINTENANCE AGREEMENT)	1	1	1	1	1	1	1	1	1	1	\$748,636
Total (#)	9	9	9	9	9	9	9	9	9	9	
Total (\$000)	\$6,737.7	\$6,737.7	\$6,737.7	\$6,737.7	\$6,737.7	\$6,737.7	\$6,737.7	\$6,737.7	\$6,737.7	\$6,737.7	

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Major Soccer - Unlighted Park Name	# of Unlighted Major Soccer Fields										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
ADA MACKENZIE PARK	-	-	1	1	1	1	1	1	1	1	\$394,689
ALDERGROVE PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
ARMSTRONG PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
ASHTON MEADOWS PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
BAYVIEW RESERVOIR	2	2	2	2	2	2	2	2	2	2	\$394,689
BENJAMIN MARR PARK - NORTH	1	1	1	1	1	1	1	1	1	1	\$394,689
BENJAMIN MARR PARK - SOUTH	1	1	1	1	1	1	1	1	1	1	\$394,689
BERCZY PARK NORTH	2	2	2	2	2	2	2	2	2	2	\$394,689
BERCZY PARK SOUTH	1	1	1	1	1	1	1	1	1	1	\$394,689
BROTHER ANDRE CHS	1	1	1	1	1	1	1	1	1	1	\$394,689
BUR OAK SS (SHARED MAINTENANCE AGREEMENT)	1	1	1	1	1	1	1	1	1	1	\$394,689
CALVERT PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
CARLTON PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
CENTRAL PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
COLTY CORNERS	1	1	1	1	1	1	1	1	1	1	\$394,689
COPPARD PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
CROSBY PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
ELSON PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
FRANKLIN CARMICHAEL PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
GREEN LANE PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
HENRY WHITE PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
HIGHGATE PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
INNIS MACDONALD PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
JAMES EDWARD PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
JOHN BUTTON PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
MARKHAM DISTRICT HS (SHARED MAINTENANCE AGREEMENT)	2	2	2	2	2	2	2	2	2	2	\$394,689

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Major Soccer - Unlighted Park Name	# of Unlighted Major Soccer Fields										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
MARKVILLE SS (SHARED MAINTENANCE AGREEMENT)	1	1	1	1	1	1	1	1	1	1	\$394,689
MIDDLEFIELD CI (SHARED MAINTENANCE AGREEMENT)	1	1	1	1	1	1	1	1	1	1	\$394,689
MINTLEAF PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
PADDOCK PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
PIERRE ELLIOT TRUDEAU HS (SHARED MAINTENANCE AGREEMENT)	1	1	1	1	1	1	1	1	1	1	\$394,689
RANDALL PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
RAYBECK PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
RIVERWALK PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
SENECA COLLEGE	1	1	1	1	1	-	-	-	-	-	\$394,689
SIMONSTON PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
SOUTH UNIONVILLE PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
SPEIGHT PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
SPRINGDALE PARK	1	1	1	1	1	1	1	1	1	1	\$394,689
ST AUGUSTINE CHS (SHARED MAINTENANCE AGREEMENT)	1	1	1	1	1	1	1	1	1	1	\$394,689
ST ROBERT CHS (NATURAL FIELD - SHARED MAINTENANCE AGREEMENT)	1	1	1	1	1	1	1	1	1	1	\$394,689
THORNHILL PSS (SHARED MAINTENANCE AGREEMENT)	2	2	2	2	2	2	2	2	2	2	\$394,689
THORNLEA PSS (SHARED MAINTENANCE AGREEMENT)	1	1	1	1	1	1	1	1	1	1	\$394,689
UNIONVILLE HS (SHARED MAINTENANCE AGREEMENT)	2	2	2	2	2	2	2	2	2	2	\$394,689
Total (#)	2,060	2,061	2,063	2,064	2,065	2,065	2,066	2,067	2,068	2,069	
Total (\$000)	\$18,945.1	\$18,945.1	\$19,339.8	\$19,339.8	\$19,339.8	\$18,945.1	\$18,945.1	\$18,945.1	\$18,945.1	\$18,945.1	

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Minor Soccer - Unlighted Park Name	# of Unlighted Minor Soccer Fields										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
ALDERGROVE PARK	2	2	2	2	2	2	2	2	2	2	\$203,710
ALMA WALKER PARK	2	2	2	2	2	2	2	2	2	2	\$203,710
ARMADALE PARK	2	2	2	2	2	2	2	2	2	2	\$203,710
LEITCHCROFT PARK	1	1	1	1	1	1	1	1	1	1	\$203,710
MILLIKEN MILLS COMMUNITY PARK	3	4	4	4	4	4	4	4	4	4	\$203,710
MONARCH PARK	1	1	1	1	1	1	1	1	1	1	\$203,710
MOUNT JOY PARK	3	3	3	3	3	3	3	3	3	3	\$203,710
QUANTZTOWN PARK	1	1	1	1	1	1	1	1	1	1	\$203,710
REESOR PARK	2	2	2	2	2	2	2	2	2	2	\$203,710
SIMONSTON PARK	1	1	1	1	1	1	1	1	1	1	\$203,710
SIR RICARHD SCOTT	1	1	1	-	-	-	-	-	-	-	\$203,710
THORNLEA PSS (SHARED MAINTENANCE AGREEMENT)	1	1	1	1	1	1	1	1	1	1	\$203,710
TOMLINSON PARK	1	1	1	1	1	1	1	1	1	1	\$203,710
WISMER PARK	4	4	4	4	4	4	4	4	4	4	\$203,710
Total (#)	25	26	26	25	25	25	25	25	25	25	
Total (\$000)	\$5,092.8	\$5,296.5	\$5,296.5	\$5,092.8	\$5,092.8	\$5,092.8	\$5,092.8	\$5,092.8	\$5,092.8	\$5,092.8	

Mini Soccer - Unlighted Park Name	# of Unlighted Mini Soccer Fields										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
ARMSTRONG PARK	1	1	1	1	1	1	1	1	1	1	\$124,773
ASHTON MEADOWS PARK	2	2	2	2	2	2	2	2	2	2	\$124,773
BAYVIEW RESERVOIR	3	3	3	3	2	2	2	2	2	2	\$124,773
BOX GROVE PARK	-	-	-	-	-	-	-	-	-	1	\$124,773
DENISON PARK	1	1	1	1	1	1	1	1	1	1	\$124,773
FINCHAM PARK	8	8	8	8	8	8	8	1	1	1	\$124,773
HAROLD HUMPHREYS PARK	2	2	2	2	2	2	2	2	2	2	\$124,773
HUNTINGTON PARK	2	2	2	2	2	2	2	2	2	2	\$124,773
JOHN CANNING PARK	1	1	1	1	1	1	1	1	1	1	\$124,773
MIDDLEFIELD CI (SHARED MAINTENANCE AGREEMENT)	1	1	1	1	1	1	1	1	1	1	\$124,773
MINTLEAF PARK	13	13	13	13	13	13	13	13	13	13	\$124,773
POMONA MILLS PARK	2	2	2	2	2	2	2	2	2	2	\$124,773
ROXBURY PARK	1	1	1	1	1	1	1	1	1	1	\$124,773
THORNHILL PSS (SHARED MAINTENANCE AGREEMENT)	1	1	1	1	1	1	1	1	1	1	\$124,773
UPPER CORNELL PARK	1	1	1	1	1	1	1	1	1	1	\$124,773
VILLAGE PARK	2	2	2	2	2	2	2	2	2	2	\$124,773
Total (#)	41	41	41	41	40	40	40	33	33	34	
Total (\$000)	\$5,115.7	\$5,115.7	\$5,115.7	\$5,115.7	\$4,990.9	\$4,990.9	\$4,990.9	\$4,117.5	\$4,117.5	\$4,242.3	

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Major Diamond - Lighted Park Name	# of Lighted Major Diamonds										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
ASHTON MEADOWS PARK	1	1	1	1	1	1	1	1	1	1	\$623,863
BAYVIEW RESERVOIR	1	1	1	1	1	1	1	1	1	1	\$623,863
BERCZY PARK SOUTH	1	1	1	1	1	1	1	1	1	1	\$623,863
BISHOP'S CROSS PARK	2	2	2	2	2	2	2	2	2	2	\$623,863
CARLTON PARK	1	1	1	1	1	1	1	1	1	1	\$623,863
CEDAR GROVE PARK	1	1	1	1	1	1	1	1	1	1	\$623,863
CENTENNIAL PARK	2	2	2	2	2	2	2	2	2	2	\$623,863
CROSBY PARK	1	1	1	1	1	1	1	1	1	1	\$623,863
GRANDVIEW PARK	1	1	1	1	1	1	1	1	1	1	\$623,863
HIGHGATE PARK	1	1	1	1	1	1	1	1	1	1	\$623,863
HUNTINGTON PARK	1	1	1	1	1	1	1	1	1	1	\$623,863
MILLIKEN MILLS COMMUNITY PARK	5	5	5	5	5	5	5	5	5	5	\$623,863
MINTLEAF PARK	1	1	1	1	1	1	1	1	1	1	\$623,863
MONARCH PARK	1	1	1	1	1	1	1	1	1	1	\$623,863
MORGAN PARK	1	1	1	1	1	1	1	1	1	1	\$623,863
VICTORIA SQUARE PARK	1	1	1	1	1	1	1	1	1	1	\$623,863
Total (#)	22	22	22	22	22	22	22	22	22	22	
Total (\$000)	\$13,725.0	\$13,725.0	\$13,725.0	\$13,725.0	\$13,725.0	\$13,725.0	\$13,725.0	\$13,725.0	\$13,725.0	\$13,725.0	

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Major Diamond - Unlighted Park Name	# of Unlighted Major Diamonds										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
ALDERGROVE PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
ARMADALE PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
BAYVIEW GLEN PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
BAYVIEW LANE PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
CALVERT PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
COLEDALE PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
COLTY CORNERS	1	1	1	1	1	1	1	1	1	1	\$374,318
DENISON PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
DUNCAN PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
ELSON PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
FEATHERSTONE PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
JAMES EDWARD PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
JOHN BUTTON PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
LEGACY PARK	2	2	2	2	2	2	2	2	2	2	\$374,318
RANDALL PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
RAYBECK PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
REESOR PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
RISEBROUGH PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
ROXBURY PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
STARGELL PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
TOMLINSON PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
VICTORIA SQUARE PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
WILCLAY PARK	1	1	1	1	1	1	1	1	1	1	\$374,318
Total (#)	24	24	24	24	24	24	24	24	24	24	
Total (\$000)	\$8,983.6	\$8,983.6	\$8,983.6	\$8,983.6	\$8,983.6	\$8,983.6	\$8,983.6	\$8,983.6	\$8,983.6	\$8,983.6	

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Minor Diamonds Park Name	# of Minor Diamonds										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
JOHN XXIII CES (SHARED MAINTENANCE AGREEMENT)	1	1	1	1	1	1	1	1	1	1	\$187,159
ASHTON MEADOWS PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
BAYTHORN PES	2	2	2	2	2	2	2	2	2	2	\$187,159
CROSBY PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
DOREEN QUIRK PARK (EJ SANDS PES)	1	1	1	1	1	1	1	1	1	1	\$187,159
GRANDVIEW PARK	1	1	1	1	1	-	-	-	-	-	\$187,159
GREEN LANE PARK	1	-	-	-	-	-	-	-	-	-	\$187,159
LINCOLN PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
MOTHER TERESA CES	-	1	1	1	1	1	1	1	1	1	\$187,159
PADDOCK PARK (UNDER FLOWERVEALE PS)	1	1	1	1	-	-	-	-	-	-	\$187,159
PARKVIEW PES		1	1	1	1	1	1	1	1	1	\$187,159
RISEBROUGH PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
ROBINSON PARK	2	2	2	2	2	2	2	2	2	2	\$187,159
UNIONVILLE PES	1	1	1	1	1	1	1	1	1	1	\$187,159
WILLIAM BERCZY PES	1	1	1	1	1	1	1	1	1	1	\$187,159
Total (#)	15	16	16	16	15	14	14	14	14	14	
Total (\$000)	\$2,807.4	\$2,994.5	\$2,994.5	\$2,994.5	\$2,807.4	\$2,620.2	\$2,620.2	\$2,620.2	\$2,620.2	\$2,620.2	

Tennis Courts - Lighted Park Name	# of Lighted Tennis Courts										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
ARMADALE PARK	4	4	4	4	4	4	4	4	4	4	\$109,176
CARLTON PARK	9	9	9	9	9	9	9	9	9	9	\$109,176
DUNCAN PARK	3	3	3	3	3	3	3	3	3	3	\$109,176
HENDERSON PUBLIC SCHOOL(GRANDVIEW PARK /SCHOOL PROPERTY)	2	2	2	2	2	2	2	2	2	2	\$109,176
HIGHGATE PARK	3	3	3	3	3	3	3	3	3	3	\$109,176
JOHNSVIEW PARK	2	2	2	2	2	2	2	2	2	2	\$109,176
MORGAN PARK	2	2	2	2	2	2	2	2	2	2	\$109,176
POMONA MILLS PARK	6	6	6	6	6	6	6	6	6	6	\$109,176
REESOR PARK	6	6	6	6	6	6	6	6	6	6	\$109,176
SCHOOLHOUSE PARK	2	2	2	2	2	2	2	2	2	2	\$109,176
SIMONSTON PARK (GERMAN MILLS)	4	4	4	4	4	4	4	4	4	4	\$109,176
SOUTH UNIONVILLE PARK WEST	-	-	-	-	2	2	2	2	2	2	\$109,176
TOOGOOD PARK	2	2	2	2	2	2	2	2	2	2	\$109,176
Total (#)	45	45	45	45	47	47	47	47	47	47	
Total (\$000)	\$4,912.9	\$4,912.9	\$4,912.9	\$4,912.9	\$5,131.3	\$5,131.3	\$5,131.3	\$5,131.3	\$5,131.3	\$5,131.3	

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Tennis Courts - Unlighted Park Name	# of Unlighted Tennis Courts										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2019	2019	
ADA MACKENZIE PARK	-	-	2	2	2	2	2	2	2	2	\$93,580
BAYVIEW GLEN PARK	2	2	2	2	2	2	2	2	2	2	\$93,580
BERCZY PARK NORTH	2	2	2	2	2	2	2	2	2	2	\$93,580
BERCZY PARK SOUTH	2	2	2	2	2	2	2	2	2	2	\$93,580
BOX GROVE PARK	-	-	-	-	-	-	-	-	-	2	\$93,580
FRISBY PARK	-	-	-	-	2	2	2	2	2	2	\$93,580
HENRY WHITE PARK	2	2	2	2	2	2	2	2	2	2	\$93,580
LAURA AND ALF WEAVER PARK	-	-	-	-	-	-	-	-	2	2	\$93,580
ROBINSON PARK	2	2	2	2	2	2	2	2	2	2	\$93,580
ROY RAMER PARK	-	-	-	-	-	-	-	-	-	2	\$93,580
THORNLEA PSS	4	4	4	4	4	4	4	4	4	4	\$93,580
WISMER PARK	2	2	2	2	2	2	2	2	2	2	\$93,580
Total (#)	16	16	18	18	20	20	20	20	22	26	
Total (\$000)	\$1,497.3	\$1,497.3	\$1,684.4	\$1,684.4	\$1,871.6	\$1,871.6	\$1,871.6	\$1,871.6	\$2,058.8	\$2,433.1	

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Basketball Courts Park Name	# of Basketball Courts										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Half Court											
ARMADALE C.C.	1	1	1	1	1	1	1	1	1	1	\$43,670
ASHTON MEADOWS PARK	1	1	1	1	1	1	1	1	1	1	\$43,670
CENTENNIAL PARK	1	1	1	1	1	1	1	1	1	1	\$43,670
CORNELL CC & LIBRARY	-	-	-	-	-	1	1	1	1	1	\$43,670
ELSON PARK	1	1	1	1	1	1	1	1	1	1	\$43,670
ERNEST WIDEMAN PARK	-	-	-	-	-	1	1	1	1	1	\$43,670
HARMONY PARK	-	-	-	-	-	1	1	1	1	1	\$43,670
HENRY WHITE PARK	1	1	1	1	1	1	1	1	1	1	\$43,670
HIGHGATE PARK	1	-	-	-	-	-	-	-	-	-	\$43,670
JOHN CANNING PARK	1	1	1	1	1	1	1	1	1	1	\$43,670
MILLIKEN MILLS COMMUNITY PARK	1	1	1	1	1	1	1	1	1	1	\$43,670
RAY STREET PARK	-	-	1	1	1	1	1	1	1	1	\$43,670
SABLEWOOD PARK	1	1	1	1	1	1	1	1	1	1	\$43,670
SCHOOLHOUSE PARK	1	1	1	1	1	1	1	1	1	1	\$43,670
WILLIAM CANTLEY PARK	-	-	-	-	1	1	1	1	1	1	\$43,670
Full Court											
AANIIN PARK	-	-	-	-	-	1	1	1	1	1	\$81,102
ADA MACKENZIE PARK	-	-	1	1	1	1	1	1	1	1	\$81,102
BAYVIEW LANE PARK	1	1	1	1	1	1	1	1	1	1	\$81,102
BERCZY PARK SOUTH	1	1	1	1	1	1	1	1	1	1	\$81,102
BOX GROVE PARK	-	-	-	-	-	-	-	-	-	1	\$81,102
DENISON PARK	1	1	1	1	1	1	1	1	1	1	\$81,102
GORDON STOLLERY PARK	-	-	-	-	2	2	2	2	2	2	\$81,102
HIGHGATE PARK	-	1	1	1	1	1	1	1	1	1	\$81,102
JOHNSVIEW PARK	-	1	1	1	1	1	1	1	1	1	\$81,102
LEGACY PARK	1	1	1	1	1	1	1	1	1	1	\$81,102
LEIGHLAND PARK	1	1	1	1	1	1	1	1	1	1	\$81,102
MILLIKEN MILLS C.C. AND LIBRARY	1	1	1	1	1	1	1	1	1	1	\$81,102
WISMER PARK	1	1	1	1	1	1	1	1	1	1	\$81,102
Total (#)	17	18	20	20	23	27	27	27	27	28	
Total (\$000)	\$1,004.4	\$1,122.9	\$1,247.7	\$1,247.7	\$1,453.6	\$1,665.7	\$1,665.7	\$1,665.7	\$1,665.7	\$1,746.8	

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Cricket Pitch Park Name	# of Cricket Pitches										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
MCCOWAN RESERVOIR	2	2	2	2	2	2	2	2	2	2	\$827,574
YARL CEDARWOOD PARK	1	1	1	1	1	1	1	1	1	1	\$827,574
Total (#)	3	3	3	3	3	3	3	3	3	3	
Total (\$000)	\$2,482.7	\$2,482.7	\$2,482.7	\$2,482.7	\$2,482.7	\$2,482.7	\$2,482.7	\$2,482.7	\$2,482.7	\$2,482.7	

Rugby Pitch Park Name	# of Rugby Pitches										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
AUSTIN DRIVE	2	2	2	2	2	2	2	2	2	2	\$394,689
Total (#)	2	2	2	2	2	2	2	2	2	2	
Total (\$000)	\$789.4	\$789.4	\$789.4	\$789.4	\$789.4	\$789.4	\$789.4	\$789.4	\$789.4	\$789.4	

Outdoor Pools Park Name	# of Outdoor Pools										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
MORGAN PARK	1	1	1	1	1	1	1	1	1	1	\$2,801,019
ROUGE RIVER C.C. AND POOL	1	1	1	1	1	1	1	1	1	1	\$1,247,727
Total (#)	2	2	2	2	2	2	2	2	2	2	
Total (\$000)	\$4,048.7	\$4,048.7	\$4,048.7	\$4,048.7	\$4,048.7	\$4,048.7	\$4,048.7	\$4,048.7	\$4,048.7	\$4,048.7	

Skate Parks Park Name	# of Skate Parks										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Major											
BERCZY PARK SOUTH	-	-	-	-	1	1	1	1	1	1	\$1,122,954
CENTENNIAL	1	1	1	1	1	1	1	1	1	1	\$1,122,954
Minor											
ADA MACKENZIE PARK	-	-	1	1	1	1	1	1	1	1	\$249,545
BOX GROVE PARK	-	-	-	-	-	-	-	-	-	1	\$249,545
GORDON STOLLERY PARK	-	-	-	-	1	1	1	1	1	1	\$249,545
GRANDVIEW PARK	-	-	-	-	-	-	-	-	1	1	\$249,545
LAURA AND ALF WEAVER PARK							1	1	1	1	\$249,545
RAY STREET PARK	-	-	1	1	1	1	1	1	1	1	\$249,545
Total (#)	1	1	3	3	5	5	6	6	7	8	
Total (\$000)	\$1,123.0	\$1,123.0	\$1,372.5	\$1,372.5	\$2,745.0	\$2,745.0	\$2,745.0	\$2,745.0	\$2,994.5	\$3,244.1	

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Playgrounds - Senior Park Name	# of Senior Playgrounds										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2017	2017	2017	2017	
AANIIN PARK	-	-	-	-	-	-	1	1	1	1	\$249,545
ABRAHAM STRICKLER PARK	-	-	-	-	-	1	1	1	1	1	\$249,545
ADA MACKENZIE PARK	-	-	-	-	-	-	1	1	1	1	\$249,545
ALICE CLARK PARK	-	-	-	-	-	1	1	1	1	1	\$249,545
ALMA WALKER PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
AMBER GLEN PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
ARMSTRONG PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
AUSTIN DRIVE RUGBY	1	1	1	1	1	1	1	1	1	1	\$249,545
AVOCA PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
BAYVIEW LANE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
BAYVIEW RESERVOIR	1	1	1	1	1	1	1	1	1	1	\$249,545
BEAUPRE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
BECKETT FARM PARK	-	-	-	-	-	-	-	1	1	1	\$249,545
BERCZY PARK SOUTH	1	1	1	1	1	1	1	1	1	1	\$249,545
BIANCA PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
BISHOP'S CROSS PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
CABOTO TRAIL PARKETTE	1	1	1	1	1	1	1	1	1	1	\$249,545
CAKEBREAD PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
CAROLYN CLEMENTS PARK	-	-	-	-	1	1	1	1	1	1	\$249,545
CEDAR GROVE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
CENTENNIAL PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
CENTRAL PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
CLARENCE CHANT PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
COLEDALE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
COLTY CORNERS	1	1	1	1	1	1	1	1	1	1	\$249,545
COPPARD PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
CORNELL C.C AND LIBRARY	-	-	-	-	-	-	-	-	1	1	\$249,545
DRAKE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
DUNCAN PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
ELEANOR CASELY PARK	-	-	-	-	-	-	1	1	1	1	\$249,545
ELSON PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
ERNEST WIDEMAN PARK	-	-	-	-	-	1	1	1	1	1	\$249,545
FEATHERSTONE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
FINCHAM PARK	2	2	2	2	2	2	2	2	2	2	\$249,545
FRANK H JOHNSON PARK	-	-	-	-	-	-	-	1	1	1	\$249,545
FREDERICK PETERSON PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
GEORGE COUPERWAITE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
GEORGE COUPERWAITE PARK WEST	-	-	-	-	1	1	1	1	1	1	\$249,545
GERTRUDE HELSY PARK	1	1	1	1	1	1	1	1	1	1	\$249,545

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Playgrounds - Senior Park Name	# of Senior Playgrounds										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2017	2017	2017	2017	
GLENCREST PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
GORDON STOLLERY PARK	-	-	-	-	1	1	1	1	1	1	\$249,545
GRAND CORNELL PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
GRANDVIEW PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
GREEN LANE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
HARMONY PARK	-	-	-	-	-	1	1	1	1	1	\$249,545
HIGHGATE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
HUNTINGTON PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
INNIS MACDONALD PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
JAMES COCHRANE PARK	-	-	-	-	-	1	1	1	1	1	\$249,545
JAMES EDWARD PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
JAMES THOMAS PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
JOHN BAIRD WOODS	-	-	-	-	1	1	1	1	1	1	\$249,545
JOHN CANNING PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
JOHN PAYNE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
JOHNSVIEW PARK	2	2	2	2	2	2	2	2	2	2	\$249,545
JOSEPH ELLERBY PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
KAMIL SADIQ PARK	-	-	1	1	1	1	1	1	1	1	\$249,545
LEGACY PARK	2	2	2	2	2	2	2	2	2	2	\$249,545
LEITCHCROFT PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
LINCOLN PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
MATTHEW RAE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
MCCOWAN FREEMAN PARKETTE	-	-	1	1	1	1	1	1	1	1	\$249,545
MCCREIGHT PARKETTE	1	1	1	1	1	1	1	1	1	1	\$249,545
MIDDLETON PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
MILLENNIUM PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
MILLIKEN MILLS COMMUNITY PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
MILTON FIERHELLER PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
MINTLEAF PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
MONARCH PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
PADDOCK PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
PAT WHEELER PARK	-	-	-	-	-	-	1	1	1	1	\$249,545
PEACE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
PERSONNA PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
PIONEER PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
POMONA MILLS PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
POTTERY PARK	-	-	-	-	-	-	-	-	1	1	\$249,545
QUANTZTOWN PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
RANDALL PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
RAY STREET PARK	-	-	1	1	1	1	1	1	1	1	\$249,545
RAYBECK PARK	1	1	1	1	1	1	1	1	1	1	\$249,545

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Playgrounds - Senior Park Name	# of Senior Playgrounds										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2017	2017	2017	2017	
READ'S CORNER PARK	-	-	-	-	1	1	1	1	1	1	\$249,545
REESOR PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
REEVE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
ROBERT GRUNDY PARKETTE	1	1	1	1	1	1	1	1	1	1	\$249,545
ROMFIELD PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
ROSS BROWN PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
ROXBURY PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
ROY WALKER PARKETTE	1	1	1	1	1	1	1	1	1	1	\$249,545
RUSSELL CARTER TEFFT PARK	-	-	-	-	-	-	-	1	1	1	\$249,545
SABLEWOOD PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
SCHOOLHOUSE PARK	-	-	-	-	-	-	2	2	2	2	\$249,545
SINCLAIR HOLDEN PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
SOUTH UNIONVILLE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
SPARTA WOODS PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
SPRINGDALE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
STARGELL PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
STONEFARM PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
SUMMERDALE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
VANHORN PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
VICTORIA SQUARE PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
WESTPHALEN PARK	-	-	-	-	-	1	1	1	1	1	\$249,545
WINDFIELDS PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
WINDY HILL PARK	1	1	1	1	1	1	1	1	1	1	\$249,545
Total (#)	4,106	4,108	4,113	4,115	4,122	4,130	4,136	4,139	4,141	4,141	
Total (\$000)	\$20,462.7	\$20,462.7	\$21,211.3	\$21,211.3	\$22,459.1	\$23,956.3	\$25,453.6	\$26,202.2	\$26,701.3	\$26,701.3	

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Playgrounds - Junior Park Name	# of Junior Playgrounds										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2018	2018	2021	
AANIIN PARK	-	-	-	-	-	-	1	1	1	1	\$187,159
ABRAHAM STRICKLER PARK	-	-	-	-	-	1	1	1	1	1	\$187,159
ADA MACKENZIE PARK	-	-	-	-	-	-	1	1	1	1	\$187,159
ALMA WALKER PARK	1	1	1	1	1	1	1	1	-	-	\$187,159
APPLE CREEK PARK	1	-	-	-	-	-	-	-	-	-	\$187,159
AVOCA PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
BAYVIEW LANE PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
BEAUPRE PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
BERCZY PARK NORTH	1	1	1	1	1	1	1	1	1	1	\$187,159
BERCZY PARK SOUTH	2	1	1	1	1	1	1	1	1	1	\$187,159
BIANCA PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
BRIAN CHATLAND PARK	-	-	-	1	1	1	1	1	1	1	\$187,159
BRUCE BOYD PARKETTE	1	1	1	1	1	1	1	1	1	1	\$187,159
CENTENNIAL PARK	1	-	-	-	-	-	-	-	-	-	\$187,159
CENTRAL PARK	1	-	-	-	-	-	-	-	-	-	\$187,159
CHELSEA PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
CORNELL ROUGE WOODS	2	2	2	2	2	2	2	2	2	2	\$187,159
COUNTRY GLEN PARKETTE	1	1	1	1	1	1	1	1	1	1	\$187,159
DONALD CLARK PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
EDITH M MAIRS PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
ELEANOR CASELY PARK	-	-	-	-	-	-	1	1	1	1	\$187,159
ELSON PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
ERNEST WIDEMAN PARK	-	-	-	-	-	1	1	1	1	1	\$187,159
FLORENCE & DONALD DEACON PARK	-	-	-	-	-	-	1	1	1	1	\$187,159
GEORGE COUPERWAITE PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
GEORGE COUPERWAITE PARK EAST	-	-	-	-	1	1	1	1	1	1	\$187,159
GORDON LEITCH PARK	-	-	-	-	-	-	-	-	-	1	\$187,159
GRAND CORNELL PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
GREEN LANE PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
HARMONY PARK	-	-	-	-	-	1	1	1	1	1	\$187,159
JAMES COCHRANE PARK	-	-	-	-	-	1	1	1	1	1	\$187,159
JAMES EDWARD PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
JEANNE CHARLOTTE ALLA PARK	-	-	-	-	-	1	1	1	1	1	\$187,159
JOHN BAIRD WOODS	-	-	-	-	1	1	1	1	1	1	\$187,159
JOHN DANIELS PARK	2	2	2	2	2	2	2	2	2	2	\$187,159
JOHN FERRARA PARK	-	-	-	-	-	2	2	2	2	2	\$187,159
JOHN MAPES PARKETTE	1	1	1	1	1	1	1	1	1	1	\$187,159
JOHNSVIEW	1	-	-	-	-	-	-	-	-	-	\$187,159

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Playgrounds - Junior Park Name	# of Junior Playgrounds										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2018	2018	2021	
JOSEPH ELLERBY PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
LEGACY PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
LINDSAY BOLGER PARK	-	-	-	-	-	1	1	1	1	1	\$187,159
LUNDY PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
MARKHAM CIVIC CENTRE	2	2	2	2	-	-	-	-	-	-	\$187,159
MCCOWAN FREEMAN PARKETTE	-	-	1	1	1	1	1	1	1	1	\$187,159
MORGAN PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
NAPIER SIMPSON PARK (Kamil Sadik Park)	-	-	1	1	1	1	1	1	1	1	\$187,159
NORDINGLEN PARK	-	1	1	1	1	1	1	1	1	1	\$187,159
PAT WHEELER PARK	-	-	-	-	-	-	1	1	1	1	\$187,159
POMONA MILLS PARK	1	-	-	-	-	-	-	-	-	-	\$187,159
QUANTZTOWN PARK	2	1	1	1	1	1	1	1	1	1	\$187,159
RANDALL PARK	1	-	-	-	-	-	-	-	-	-	\$187,159
RAYNESWOOD PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
READ'S CORNER PARK	-	-	-	-	1	1	1	1	1	1	\$187,159
ROBERT GRUNDY PARKETTE	1	-	-	-	-	-	-	-	-	-	\$187,159
ROMFIELD PARK	1	-	-	-	-	-	-	-	-	-	\$187,159
ROXBURY PARK	1	2	2	2	2	2	2	2	2	2	\$187,159
RUSSELL CARTER TEFFT PARK	-	-	-	-	-	-	-	1	1	1	\$187,159
SHANIA JOHNSTON PARKETTE	1	1	1	1	1	1	1	1	1	1	\$187,159
SIR ROBERT WATSON	-	-	1	1	1	1	1	1	1	1	\$187,159
SPRINGDALE PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
SPRUCEWOOD PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
TOOGOOD PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
UNITY PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
WESTPHALEN PARK	-	-	-	-	-	-	1	1	1	1	\$187,159
WILCLAY PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
WILLIAM ROBB PARK	1	1	1	1	1	1	1	1	1	1	\$187,159
Total (#)	2,060	2,053	2,057	2,059	2,061	2,070	2,077	2,078	2,077	2,081	
Total (\$000)	\$8,983.6	\$7,486.4	\$8,047.8	\$8,235.0	\$8,422.2	\$9,919.4	\$11,042.4	\$11,229.5	\$11,042.4	\$11,229.5	

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Playgrounds - Senior & Junior Park Name	# of Senior & Junior Playgrounds										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2018	2018	2021	
ABRAHAM IREDELL PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
ALDERGROVE PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
ANGUS GLEN VILLAGE GREEN	1	1	1	1	1	1	1	1	1	1	\$338,669
APPLE CREEK PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
ARMADALE PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
ART LATCHAM PARK	-	-	-	-	1	1	1	1	1	1	\$338,669
ASHTON MEADOWS PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
BAYVIEW GLEN PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
BENJAMIN MARR PARK - NORTH	1	1	1	1	1	1	1	1	1	1	\$338,669
BENJAMIN MARR PARK - SOUTH	1	1	1	1	1	1	1	1	1	1	\$338,669
BERNBRIDGE PARK	-	-	-	-	1	1	1	1	1	1	\$338,669
BOX GROVE PARK	-	-	-	-	-	-	-	-	-	1	\$338,669
BRIARWOOD PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
CALVERT PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
CARLTON PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
CENTENNIAL PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
COLEDALE PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
CORNELL ROUGE WOODS	1	1	1	1	1	1	1	1	1	1	\$338,669
CORNELL WOODLOT PARK	-	-	-	-	-	-	-	-	-	1	\$338,669
DENISON PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
E.B.F. ROBINSON PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
FRANKLIN CARMICHAEL PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
FREDERICK BAGG PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
FRISBY PARK	-	-	-	-	1	1	1	1	1	1	\$338,669
GORDON STOLLERY PARK	-	-	-	-	1	1	1	1	1	1	\$338,669
HAROLD HUMPHREYS PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
HARVEST GATE PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
HENRY WHITE PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
HUGHSON PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
IVAN REESOR PARK	-	-	-	-	1	1	1	1	1	1	\$338,669
JOHN BAIRD WOODS	-	-	-	-	1	1	1	1	1	1	\$338,669
JOHN BUTTON PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
JOHN CANNING PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
JOHN STEGMAN WOODS	1	1	1	1	1	1	1	1	1	1	\$338,669

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Playgrounds - Senior & Junior - cont'd Park Name	# of Senior & Junior Playgrounds										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
LEIGHLAND PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
LEITCHCROFT PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
LLOYD ROBERTSON PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
MARION MAYNARD ROBIN PARK	-	-	-	-	-	1	1	1	1	1	\$338,669
MILLIKEN MILLS COMMUNITY PARK	2	2	2	2	2	2	2	2	2	2	\$338,669
MORGAN PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
MOUNT JOY PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
NICHOLAS MILLER PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
PETER BAWDEN PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
POTTERY PARK	-	-	-	-	-	-	-	-	1	1	\$338,669
PROCTOR PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
RAILSIDE PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
RANDALL PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
RAY STREET PARK	-	-	1	1	1	1	1	1	1	1	\$338,669
RISEBROUGH PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
RIVERWALK PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
ROBERT GRUNDY PARKETTE	1	1	1	1	1	1	1	1	1	1	\$338,669
ROBERT SPINDLOE PARK	-	-	-	-	-	-	-	-	-	1	\$338,669
ROBINSON PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
ROUGEHAVEN PARKETTE	1	1	1	1	1	1	1	1	1	1	\$338,669
ROY RAMER PARK	-	-	-	-	-	-	-	-	-	1	\$338,669
SIMONSTON PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
SOUTH UNIONVILLE PARK WEST	-	-	-	-	1	1	1	1	1	1	\$338,669
SPEIGHT PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
SWAN LAKE PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
THE MEWS PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
THOMAS FRISBY WOODLOT	1	1	1	1	1	1	1	1	1	1	\$338,669
TOMLINSON PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
UPPER CORNELL PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
VICTORIA SQUARE PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
WILCLAY PARK	1	1	1	1	1	1	1	1	1	1	\$338,669
WILLIAM CANTLEY PARK	-	-	-	-	1	1	1	1	1	1	\$338,669
WISMER PARK	2	2	2	2	2	2	2	2	2	2	\$338,669
YARL CEDARWOOD PARK	2	2	2	2	2	2	2	2	2	2	\$338,669
Total (#)	56	56	57	57	65	66	66	66	68	71	
Total (\$000)	\$18,965.5	\$18,965.5	\$19,304.1	\$19,304.1	\$22,013.5	\$22,352.2	\$22,352.2	\$22,352.2	\$23,029.5	\$24,045.5	

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Waterplay - Minor Park Name	# of Minor Waterplay Parks										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
BAYVIEW LANE PARK	1	1	1	1	1	1	1	1	1	1	\$185,912
BENJAMIN MARR PARK - NORTH	1	1	1	1	1	1	1	1	1	1	\$185,912
BOX GROVE PARK	-	-	-	-	-	-	-	-	-	-	\$185,912
JOHN PAYNE PARK	1	1	1	1	1	1	1	1	1	1	\$185,912
SOUTH UNIONVILLE PARK	1	1	1	1	1	1	1	1	1	1	\$185,912
THOMAS MCQUAY PARK	1	1	1	1	1	1	1	1	1	1	\$185,912
Total (#)	5	5	5	5	5	5	5	5	5	6	
Total (\$000)	\$929.6	\$929.6	\$929.6	\$929.6	\$929.6	\$929.6	\$929.6	\$929.6	\$929.6	\$1,115.5	

Waterplay - Major Park Name	# of Major Waterplay Parks										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
ADA MACKENZIE PARK	-	-	1	1	1	1	1	1	1	1	\$499,091
ASHTON MEADOWS PARK	1	1	1	1	1	1	1	1	1	1	\$499,091
BEAUPRE PARK	1	1	1	1	1	1	1	1	1	1	\$499,091
BERCZY PARK NORTH	-	-	1	1	1	1	1	1	1	1	\$499,091
GEORGE COUPERWAITE EAST	-	-	-	-	1	1	1	1	1	1	\$499,091
GORDON STOLLERY PARK	-	-	-	-	1	1	1	1	1	1	\$499,091
HENRY WHITE PARK	1	1	1	1	1	1	1	1	1	1	\$499,091
JAMES EDWARD PARK	1	1	1	1	1	1	1	1	1	1	\$499,091
MILLENNIUM PARK	1	1	1	1	1	1	1	1	1	1	\$499,091
MILLIKEN MILLS COMMUNITY PARK	1	1	1	1	1	1	1	1	1	1	\$499,091
MORGAN PARK	-	-	-	-	-	-	-	1	1	1	\$499,091
POTTERY PARK	-	-	-	-	-	-	-	1	1	1	\$499,091
RAY STREET PARK	-	-	1	1	1	1	1	1	1	1	\$499,091
ROSEBERRY PARK	-	-	1	1	1	1	1	1	1	1	\$499,091
RUSSELL CARTER TEFFT PARK	-	-	-	-	-	-	-	1	1	1	\$499,091
SIMONSTON PARK	1	1	1	1	1	1	1	1	1	1	\$499,091
SWAN LAKE PARK	1	1	1	1	1	1	1	1	1	1	\$499,091
TOMLINSON PARK	1	1	1	1	1	1	1	1	1	1	\$499,091
UPPER CORNELL PARK	1	1	1	1	1	1	1	1	1	1	\$499,091
VICTORIA SQUARE PARK	-	1	1	1	1	1	1	1	1	1	\$499,091
WILLIAM CANTLEY PARK	-	-	-	-	1	1	1	1	1	1	\$499,091
WISMER PARK	1	1	1	1	1	1	1	1	1	1	\$499,091
YARL CEDARWOOD PARK	1	1	1	1	1	1	1	1	1	1	\$499,091
Total (#)	12	13	17	17	20	20	20	23	23	23	
Total (\$000)	\$5,989.1	\$6,488.2	\$8,484.5	\$8,484.5	\$9,981.8	\$9,981.8	\$9,981.8	\$11,479.1	\$11,479.1	\$11,479.1	

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Rock Climbing Wall Park Name	# of Walls										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
FRANK H. JOHNSON PARK	-	-	-	-	-	-	-	-	1	1	\$39,927
RAY STREET PARK	-	-	1	1	1	1	1	1	1	1	\$39,927
SOUTH UNIONVILLE	-	-	-	-	-	1	1	1	1	1	\$39,927
Total (#)	-	-	1	1	1	2	2	2	3	3	
Total (\$000)	\$0.0	\$0.0	\$39.9	\$39.9	\$39.9	\$79.9	\$79.9	\$79.9	\$119.8	\$119.8	

Exercise Station Park Name	# of Stations										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
AANIIN PARK	-	-	-	-	-	-	-	-	1	1	\$93,580
ADA MACKENZIE PARK	-	-	1	1	1	1	1	1	1	1	\$93,580
ALMA WALKER	-	-	-	-	-	-	3	3	3	3	\$93,580
ARMADALE PARK	-	-	-	1	1	1	1	1	1	1	\$93,580
ARMSTRONG PARK	-	-	-	-	-	-	-	-	1	1	\$93,580
ART LATCHAM PARK	-	-	-	-	2	2	2	2	2	2	\$93,580
BERCZY PARK SOUTH	1	1	1	1	1	1	1	1	1	1	\$93,580
BISHOPS CROSS PARK	-	-	-	6	6	6	6	6	6	6	\$93,580
E.B.F. ROBINSON PARK	-	-	-	-	-	-	3	3	3	3	\$93,580
ERNEST WIDEMAN PARK	-	-	-	-	-	2	2	2	2	2	\$93,580
FEATHERSTONE	-	-	-	-	-	-	-	-	3	3	\$93,580
FRANK H JOHNSON PARK	-	-	-	-	-	-	-	1	1	1	\$93,580
FRISBY PARK	-	-	-	-	1	1	1	1	1	1	\$93,580
HENRY WHITE PARK	-	-	-	1	1	1	1	1	1	1	\$93,580
HIGHGATE PARK	-	-	-	-	-	-	3	3	3	3	\$93,580
JOHN BUTTON	-	-	-	-	-	-	-	-	3	3	\$93,580
LAURA AND ALF WEAVER PARK	-	-	-	-	-	-	1	1	1	1	\$93,580
MONARCH PARK	-	-	-	-	-	-	3	3	3	3	\$93,580
RAY STREET PARK	-	-	2	2	2	2	2	2	2	2	\$93,580
ROSEBERRY PARK	-	-	2	2	2	2	2	2	2	2	\$93,580
SIMONSTON PARK	-	-	-	-	-	-	3	3	3	3	\$93,580
SOUTH UNIONVILLE PARK WEST	-	-	-	-	1	1	1	1	1	1	\$93,580
WESTPHALEN PARK	-	-	-	-	-	-	1	1	1	1	\$93,580
WILLIAM CANTLEY PARK	-	-	-	-	2	2	2	2	2	2	\$93,580
WISMER PARK	-	-	-	-	-	-	3	3	3	3	\$93,580
Total (#)	1	1	6	14	20	22	42	43	51	51	
Total (\$000)	\$93.6	\$93.6	\$561.5	\$1,310.1	\$1,871.6	\$2,058.8	\$3,930.4	\$4,023.9	\$4,772.6	\$4,772.6	

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
SPORTS FIELDS

Skating Rinks	# of Facilities										UNIT COST (\$/unit)
Park Name	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
MARKHAM CIVIC CENTRE	1	1	1	1	1	1	1	1	1	1	\$6,111,315
Total (#)	1	1	1	1	1	1	1	1	1	1	
Total (\$000)	\$6,111.3	\$6,111.3	\$6,111.3	\$6,111.3	\$6,111.3	\$6,111.3	\$6,111.3	\$6,111.3	\$6,111.3	\$6,111.3	

Golf Course	# of Facilities										UNIT COST (\$/unit)
Park Name	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
MARKHAM GREEN GOLF CLUB	1	1	1	1	1	1	1	1	1	1	\$7,511,825
Total (#)	1	1	1	1	1	1	1	1	1	1	
Total (\$000)	\$7,511.8	\$7,511.8	\$7,511.8	\$7,511.8	\$7,511.8	\$7,511.8	\$7,511.8	\$7,511.8	\$7,511.8	\$7,511.8	

APPENDIX B.5
TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
DEVELOPED PARKLAND

Developed Parkland Park Name	# of Hectares of Developed Area										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Traditional Developed Parkland	653	664	677	681	689	692	699	713	721	734	\$430,512
Urban Developed Parkland	-	1	2	2	2	2	2	2	2	2	\$1,551,741
Parks Share East Yard - 10192 Ninth Line	-	-	-	-	-	-	-	-	2	2	\$950,000
Total (ha)	653.32	665.19	678.03	682.03	690.71	693.35	700.79	715.38	725.17	738.29	
Total (\$000)	\$281,261.5	\$287,491.6	\$293,609.1	\$295,329.9	\$299,065.3	\$300,201.9	\$303,965.5	\$310,246.7	\$315,710.6	\$321,359.0	

APPENDIX B.5

TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
BRIDGES

Wooden Bridges Park Name	# of Linear Feet										UNIT COST
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/ft)
Armadale Park 3 Structure(s)	60	60	60	60	60	60	60	60	60	60	\$749
Bruce's Creek 1 Structure(s)	-	-	-	385	385	385	385	385	385	385	\$749
Campbell Park 2 Structure(s)	-	-	-	163	163	163	163	163	163	163	\$749
Coppard Park 1 Structure(s)	8	8	8	8	8	8	8	8	8	8	\$749
Denison Park 1 Structure(s)	8	8	8	8	8	8	8	8	8	8	\$749
Edward T Crowle PES 1 Structure(s)	45	45	45	45	45	45	45	45	45	45	\$749
Featherstone Park 1 Structure(s)	8	8	8	8	8	8	8	8	8	8	\$749
Grand Cornell Park 1 Structure(s)	8	8	8	8	8	8	8	8	8	8	\$749
James Edward Park 1 Structure(s)	8	8	8	8	8	8	8	8	8	8	\$749
John Button Waterway South 2 Structure(s)	22	-	-	-	-	-	-	-	-	-	\$749
Middlefield Corners 1 Structure(s)	16	16	16	16	16	16	16	16	16	16	\$749
Milne Dam Conservation Park 1 Structure(s)	44	44	44	44	44	44	44	44	44	44	\$749
Pomona Mills Park 1 Structure(s)	18	18	18	18	18	18	18	18	18	18	\$749
Quantztown Park 1 Structure(s)	25	25	25	25	25	25	25	25	25	25	\$749
Randall Park 2 Structure(s)	16	16	16	16	16	16	16	16	16	16	\$749
Robinson Park 1 Structure(s)	22	22	22	22	22	22	22	22	22	22	\$749
Springdale Park 2 Structure(s)	91	91	91	91	91	91	91	91	91	91	\$749
Swan Lake Park 1 Structure(s)	26	26	26	26	26	26	26	26	26	26	\$749
Tannery Pond 1 Boardwalk	416	416	416	416	416	416	416	416	416	416	\$749
Toogood Pond (Millstone Crt) 1 Structure(s)	224	224	224	224	224	224	224	224	224	224	\$749
Toogood Pond (Normandale Rd) 2 Structure(s)	225	225	225	225	225	225	225	225	225	225	\$749
Toogood Pond 1 Fishing Platform	55	55	55	55	55	55	55	55	55	55	\$749
Toogood Pond (Pennock Cres) 4 Structure(s)	395	395	395	395	395	395	395	395	395	395	\$749
Total (sq.ft.)	1,740	1,718	1,718	2,266	2,266	2,266	2,266	2,266	2,266	2,266	
Total (\$000)	\$1,303.3	\$1,286.8	\$1,286.8	\$1,697.2	\$1,697.2	\$1,697.2	\$1,697.2	\$1,697.2	\$1,697.2	\$1,697.2	

APPENDIX B.5

TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
BRIDGES

Steel Bridges Park Name	# of Linear Feet										UNIT COST
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/ft)
14th Ave MUP 1 Structure(s)	-	-	-	-	150	150	150	150	150	150	\$3,119
Apple Creek North 1 Structure(s)	42	42	42	42	42	42	42	42	42	42	\$3,119
Austin Drive Park 3 structure(s)	203	203	203	203	203	203	203	203	203	203	\$3,119
Berczy Pond 1 Structure(s)	120	120	120	120	120	120	120	120	120	120	\$3,119
Boswell Valley South 1 Structure(s)	55	55	55	55	55	55	55	55	55	55	\$3,119
Bruce's Creek 2 Structure(s)	166	166	166	166	166	166	166	166	166	166	\$3,119
Campbell Park 5 Structure(s)	137	137	137	337	337	337	337	337	337	337	\$3,119
Cedar Valley 1 structure(s)	151	151	151	151	151	151	151	151	151	151	\$3,119
Cochrane Pond	60	60	60	60	60	60	60	60	60	60	\$3,119
Denby Valley 2 structure(s)	163	163	163	163	163	163	163	163	163	163	\$3,119
Doreen Quirk Park 1 structure(s)	62	62	62	62	62	62	62	62	62	62	\$3,119
Fairtree Pond 1 structure(s)	138	138	138	138	138	138	138	138	138	138	\$3,119
George Couperwaite Park 1 structure(s)	60	60	60	60	60	60	60	60	60	60	\$3,119
German Mills Settler's Park 2 structure(s)	84	84	84	84	84	84	84	84	84	84	\$3,119
Heisey Trail 2 structure(s)	40	40	40	40	40	40	40	40	40	40	\$3,119
Huntington Park 1 structure(s)	32	32	32	32	32	32	32	32	32	32	\$3,119
John Button Waterway North 1 Structure(s)	44	44	44	44	44	44	44	44	44	44	\$3,119
John Button Waterway South 2 Structure(s)	-	104	104	104	104	104	104	104	104	104	\$3,119
John Canning Park 1 structure(s)	18	18	18	18	18	18	18	18	18	18	\$3,119
Mildred Temple Park 1 structure(s)	31	31	31	31	31	31	31	31	31	31	\$3,119
Milne Dam Conservation Park 2 Structure(s)	54	54	54	68	68	242	242	242	840	840	\$3,119
Milne Floating (Plastic) 1 structure(s)	56	56	56	56	56	56	56	56	56	56	\$3,119
Mount Joy C.C. and Park 1 structure(s)	81	81	81	81	81	81	81	81	81	81	\$3,119
Personna Park 1 structure(s)	30	30	30	30	30	30	30	30	30	30	\$3,119
Pomona Mills Park 3 structure(s)	203	203	203	203	203	217	217	217	217	217	\$3,119
Royal Orchard Park 1 structure(s)	54	54	54	54	54	54	54	54	54	54	\$3,119
Smoothwater Valley North 1 structure(s)	57	57	57	57	57	57	57	57	57	57	\$3,119
South Unionville Pond 1 structure(s)	57	57	57	57	57	57	57	57	57	57	\$3,119
Summerdale Park 1 structure(s)	25	25	25	25	25	25	25	25	25	25	\$3,119
Swan Lake Park 1 structure(s)	41	41	41	41	41	60	60	60	60	60	\$3,119
Tannery Pond 1 structure(s)	-	-	60	60	60	60	60	60	60	60	\$3,119
Toogood Pond (Aitken Crt) 3 structure(s)	150	150	150	150	150	150	150	150	150	150	\$3,119
Toogood Pond (Millstone Crt) 1 Structure(s)	55	55	55	55	55	112	112	112	112	112	\$3,119
Toogood Pond (Normandale Rd) 4 structure(s)	206	206	206	206	206	206	206	206	206	206	\$3,119
Toogood Pond Dam 1 structure(s)	356	356	356	356	356	356	356	356	356	356	\$3,119
Unionville H.S. 1 structure(s)	46	46	46	46	46	46	46	46	46	46	\$3,119
Unionville Library 2 structure(s)	56	56	67	67	67	67	67	67	67	67	\$3,119
Viva Woodlot 1 structure(s)	160	160	160	160	160	160	160	160	160	160	\$3,119
Walden 3 structure(s)	206	206	206	206	206	206	206	206	206	206	\$3,119
Wycliffe 1 structure(s)	60	60	60	60	60	60	60	60	60	60	\$3,119
Total (#)	3,559	3,663	3,734	3,948	4,098	4,362	4,362	4,362	4,960	4,960	
Total (\$000)	\$11,100.5	\$11,424.9	\$11,646.3	\$12,313.8	\$12,781.7	\$13,605.1	\$13,605.1	\$13,605.1	\$15,470.2	\$15,470.2	

APPENDIX B.5

TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
BRIDGES

Pathways Type	# of Linear Metres										UNIT COST
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/unit)
Paved Surface	40,265	40,265	40,265	40,265	92,869	93,816	93,816	93,816	93,816	93,816	\$87
Stone Surface	37,419	37,419	37,419	37,419	35,246	48,035	48,035	48,035	48,035	48,035	\$62
Woodchip Surface	2,515	2,515	2,515	2,515	2,515	3,327	3,327	3,327	3,327	3,327	\$62
Concrete Surface	8,720	8,720	8,720	8,720	31,192	50,114	50,114	50,114	50,114	50,114	\$125
Interlock Surface	651	651	651	651	651	2,452	2,452	2,452	2,452	2,452	\$281
Boardwalk	242	242	242	242	1,035	1,380	1,380	1,380	1,380	1,380	\$707
Total (#)	89,812	89,812	89,812	89,812	163,508	199,124	199,124	199,124	199,124	199,124	
Total (\$000)	\$7,423.0	\$7,423.0	\$7,423.0	\$7,423.0	\$15,234.5	\$19,275.4	\$19,275.4	\$19,275.4	\$19,275.4	\$19,275.4	

Illumination Location	# of Poles										UNIT COST
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/unit)
Pathways	618	667	698	698	716	811	836	836	836	836	\$8,110
Parking Lots	45	45	47	47	47	313	315	315	315	315	\$11,230
Gazebo	41	42	43	44	45	55	62	63	69	69	\$8,002
In Wall	29	29	29	29	29	58	58	58	58	58	\$8,110
In Ground	7	28	28	28	28	35	45	45	45	45	\$8,110
Total (#)	740	811	845	846	865	1,272	1,316	1,317	1,323	1,323	
Total (\$000)	\$6,137.4	\$6,713.1	\$6,994.9	\$7,002.9	\$7,156.9	\$11,286.5	\$11,648.9	\$11,656.9	\$11,704.9	\$11,704.9	

APPENDIX B.5

TABLE B.5-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARK DEVELOPMENT & FACILITIES
BRIDGES

Landscaping Type	Square Metres										UNIT COST (\$/sq.m.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Landscape (<5000 square metres)	66,333	66,333	66,333	66,333	66,333	66,333	66,333	66,333	66,333	66,333	\$10
Landscape (>5000 square metres)	16,786	16,786	16,786	16,786	16,786	16,786	16,786	16,786	16,786	16,786	\$5
Total (#)	83,119	83,119	83,119	83,119	83,119	83,119	83,119	83,119	83,119	83,119	
Total (\$000)	\$747.3	\$747.3	\$747.3	\$747.3	\$747.3	\$747.3	\$747.3	\$747.3	\$747.3	\$747.3	

Parking Lots Type	Square Metres										UNIT COST (\$/sq.m.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Paved	55,239	55,239	55,239	60,073	60,073	185,308	186,616	186,616	188,420	188,420	\$125
Unpaved	39,896	39,896	39,896	39,896	39,896	18,779	18,779	18,779	18,779	18,779	\$60
Total (#)	95,135	95,135	95,135	99,969	99,969	204,087	205,395	205,395	207,199	207,199	
Total (\$000)	\$9,298.6	\$9,298.6	\$9,298.6	\$9,902.9	\$9,902.9	\$24,290.2	\$24,453.7	\$24,453.7	\$24,679.2	\$24,679.2	

APPENDIX B.5

TABLE B.5-1

CITY OF MARKHAM

CALCULATION OF SERVICE LEVELS

PARK DEVELOPMENT & FACILITIES

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historical Population	301,709	306,973	312,329	317,779	323,324	328,966	333,938	338,985	344,109	349,310	354,589

INVENTORY SUMMARY (\$000)

Outdoor Rec	\$95,649.1	\$95,843.1	\$99,113.5	\$98,686.4	\$99,290.1	\$102,267.8	\$104,367.3	\$105,629.0	\$106,686.7	\$107,800.8	\$110,143.9
Sports Fields	\$150,249.2	\$150,804.6	\$150,315.9	\$155,425.0	\$156,157.1	\$164,032.0	\$167,222.6	\$171,714.4	\$173,367.6	\$175,582.2	\$177,801.0
Parks	\$280,541.1	\$281,261.5	\$287,491.6	\$293,609.1	\$295,329.9	\$299,065.3	\$300,201.9	\$303,965.5	\$310,246.7	\$315,710.6	\$321,359.0
Bridges	\$35,590.1	\$36,010.0	\$36,893.6	\$37,396.9	\$39,087.1	\$47,520.4	\$70,901.7	\$71,427.5	\$71,435.5	\$73,574.2	\$73,574.2
Total (\$000)	\$562,029.6	\$563,919.3	\$573,814.6	\$585,117.4	\$589,864.3	\$612,885.5	\$642,693.4	\$652,736.4	\$661,736.5	\$672,667.9	\$682,878.0

SERVICE LEVEL (\$/capita)

Average
Service
Level

Outdoor Rec	\$317.0	\$312.2	\$317.3	\$310.6	\$307.1	\$310.9	\$312.5	\$311.6	\$310.0	\$308.6	\$310.6	\$311.15
Sports Fields	\$498.0	\$491.3	\$481.3	\$489.1	\$483.0	\$498.6	\$500.8	\$506.6	\$503.8	\$502.7	\$501.4	\$495.85
Parks	\$929.8	\$916.2	\$920.5	\$923.9	\$913.4	\$909.1	\$899.0	\$896.7	\$901.6	\$903.8	\$906.3	\$909.05
Bridges	\$118.0	\$117.3	\$118.1	\$117.7	\$120.9	\$144.5	\$212.3	\$210.7	\$207.6	\$210.6	\$207.5	\$166.72
Total (\$/capita)	\$1,862.8	\$1,837.0	\$1,837.2	\$1,841.3	\$1,824.4	\$1,863.1	\$1,924.6	\$1,925.6	\$1,923.0	\$1,925.7	\$1,925.8	\$1,882.77

CITY OF MARKHAM

CALCULATION OF MAXIMUM ALLOWABLE

PARK DEVELOPMENT & FACILITIES

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2012 - 2021	\$1,882.77
Net Population Growth 2022 - 2031	90,071
Maximum Allowable Funding Envelope	\$169,582,317

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
5.0 PARK DEVELOPMENT & FACILITIES											
5.1 Basketball - Full Court											
5.1.1 Markham Centre-Rougeside Promenade Parks	2022	\$ 81,102	\$ -	\$ 81,102	0%	\$ -	\$ 81,102	\$ -	\$ 81,102	\$ -	\$ -
5.1.2 Berczy Glen Community Park	2024	\$ 81,102	\$ -	\$ 81,102	0%	\$ -	\$ 81,102	\$ -	\$ 81,102	\$ -	\$ -
5.1.3 Langstaff - Pomona Creek Park	2024	\$ 81,102	\$ -	\$ 81,102	0%	\$ -	\$ 81,102	\$ -	\$ 81,102	\$ -	\$ -
5.1.4 Leitchcroft Community Park Block 49	2024	\$ 81,102	\$ -	\$ 81,102	0%	\$ -	\$ 81,102	\$ -	\$ 81,102	\$ -	\$ -
5.1.5 Robinson Glen Community Park	2024	\$ 162,204	\$ -	\$ 162,204	0%	\$ -	\$ 162,204	\$ -	\$ 162,204	\$ -	\$ -
5.1.6 York Downs East Parkette - Block 6	2024	\$ 81,102	\$ -	\$ 81,102	0%	\$ -	\$ 81,102	\$ -	\$ 81,102	\$ -	\$ -
5.1.7 Andre De Grasse Street East Park	2026	\$ 81,102	\$ -	\$ 81,102	0%	\$ -	\$ 81,102	\$ -	\$ -	\$ -	\$ 81,102
5.1.8 Markham Sports Park	2026	\$ 162,204	\$ -	\$ 162,204	0%	\$ -	\$ 162,204	\$ -	\$ -	\$ -	\$ 162,204
5.1.9 YMCA Park West	2026	\$ 81,102	\$ -	\$ 81,102	0%	\$ -	\$ 81,102	\$ -	\$ -	\$ -	\$ 81,102
5.1.10 Angus Glen Community Park South	2027	\$ 81,102	\$ -	\$ 81,102	0%	\$ -	\$ 81,102	\$ -	\$ -	\$ -	\$ 81,102
5.1.11 Enterprise Drive Central Park South	2027	\$ 162,204	\$ -	\$ 162,204	0%	\$ -	\$ 162,204	\$ -	\$ -	\$ -	\$ 162,204
5.1.12 Markham Woodside Square	2029	\$ 162,204	\$ -	\$ 162,204	0%	\$ -	\$ 162,204	\$ -	\$ -	\$ -	\$ 162,204
Subtotal Basketball - Full Court		\$ 1,297,632	\$ -	\$ 1,297,632		\$ -	\$ 1,297,632	\$ -	\$ 567,714	\$ -	\$ 729,918
5.2 Basketball - Half Court											
5.2.1 Green Lane Park	2022	\$ 43,670	\$ -	\$ 43,670	0%	\$ -	\$ 43,670	\$ -	\$ 43,670	\$ -	\$ -
5.2.2 Robinson Glen East Neighbourhood Park	2024	\$ 43,670	\$ -	\$ 43,670	0%	\$ -	\$ 43,670	\$ -	\$ 43,670	\$ -	\$ -
5.2.3 Rougeside Promenade North West Park	2024	\$ 43,670	\$ -	\$ 43,670	0%	\$ -	\$ 43,670	\$ -	\$ 43,670	\$ -	\$ -
5.2.4 South Cornell Parkette - Block 156	2024	\$ 43,670	\$ -	\$ 43,670	0%	\$ -	\$ 43,670	\$ -	\$ 43,670	\$ -	\$ -
5.2.5 Angus Glen East Neighbourhood Park	2025	\$ 43,670	\$ -	\$ 43,670	0%	\$ -	\$ 43,670	\$ -	\$ -	\$ 43,670	\$ -
5.2.6 McCowan Road Neighbourhood Park	2025	\$ 43,670	\$ -	\$ 43,670	0%	\$ -	\$ 43,670	\$ -	\$ -	\$ 43,670	\$ -
5.2.7 York Downs School - Block 4	2025	\$ 43,670	\$ -	\$ 43,670	0%	\$ -	\$ 43,670	\$ -	\$ -	\$ 43,670	\$ -
5.2.8 York Downs West Gateway Park - Block 20	2026	\$ 43,670	\$ -	\$ 43,670	0%	\$ -	\$ 43,670	\$ -	\$ -	\$ -	\$ 43,670
5.2.9 Angus Glen Central Neighbourhood Park	2027	\$ 43,670	\$ -	\$ 43,670	0%	\$ -	\$ 43,670	\$ -	\$ -	\$ -	\$ 43,670
5.2.10 Langstaff Gateway - Cedar Park	2027	\$ 43,670	\$ -	\$ 43,670	0%	\$ -	\$ 43,670	\$ -	\$ -	\$ -	\$ 43,670
5.2.11 Unionville Home Society Parkette	2027	\$ 43,670	\$ -	\$ 43,670	0%	\$ -	\$ 43,670	\$ -	\$ -	\$ -	\$ 43,670
5.2.12 Clegg Road South West Park	2029	\$ 43,670	\$ -	\$ 43,670	0%	\$ -	\$ 43,670	\$ -	\$ -	\$ -	\$ 43,670
Subtotal Basketball - Half Court		\$ 524,040	\$ -	\$ 524,040		\$ -	\$ 524,040	\$ -	\$ 174,680	\$ 131,010	\$ 218,350
5.3 Baseball Diamond - Major											
5.3.1 Berczy Glen Community Park	2024	\$ 748,636	\$ -	\$ 748,636	0%	\$ -	\$ 748,636	\$ -	\$ 748,636	\$ -	\$ -
Subtotal Baseball Diamond - Major		\$ 748,636	\$ -	\$ 748,636		\$ -	\$ 748,636	\$ -	\$ 748,636	\$ -	\$ -
5.4 Baseball Diamond - Major Lit											
5.4.1 Markham Centre Baseball Complex	2028	\$ 2,495,452	\$ -	\$ 2,495,452	0%	\$ -	\$ 2,495,452	\$ -	\$ -	\$ -	\$ 2,495,452
Subtotal Baseball Diamond - Major Lit		\$ 2,495,452	\$ -	\$ 2,495,452		\$ -	\$ 2,495,452	\$ -	\$ -	\$ -	\$ 2,495,452
5.5 Cricket Pitch											
5.5.1 Celebration Park	2022	\$ 827,574	\$ -	\$ 827,574	0%	\$ -	\$ 827,574	\$ -	\$ 827,574	\$ -	\$ -
Subtotal Cricket Pitch		\$ 827,574	\$ -	\$ 827,574		\$ -	\$ 827,574	\$ -	\$ 827,574	\$ -	\$ -

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description			Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			Other Dev. Related Costs
							Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022-2031	
5.6 Exercise Station													
5.6.1	Markham Centre-Rougeside Promenade Parks		2022	\$ 187,160	\$ -	\$ 187,160	0%	\$ -	\$ 187,160	\$ -	\$ 187,160	\$ -	\$ -
5.6.2	Berczy Glen North Park - Block 207		2023	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ 93,580	\$ -	\$ -
5.6.3	Markham Centre - Chimenti Court Park		2023	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ 93,580	\$ -	\$ -
5.6.4	Villages Of Fairtree East Neighbourhood Park		2023	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ 93,580	\$ -	\$ -
5.6.5	Berczy Glen Community Park		2024	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ 93,580	\$ -	\$ -
5.6.6	Leitchcroft Community Park Block 49		2024	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ 93,580	\$ -	\$ -
5.6.7	Robinson Glen Community Park		2024	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ 93,580	\$ -	\$ -
5.6.8	Robinson Glen East Neighbourhood Park		2024	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ 93,580	\$ -	\$ -
5.6.9	Robinson Glen Northeast Neighbourhood Park		2024	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ 93,580	\$ -	\$ -
5.6.10	Robinson Glen Southeast Neighbourhood Park		2024	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ 93,580	\$ -	\$ -
5.6.11	Berczy Glen Southwest Neighbourhood Park		2025	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ 93,580	\$ -
5.6.12	McCowan Road Neighbourhood Park		2025	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ 93,580	\$ -
5.6.13	Rougeside Promenade West Parks		2025	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ 93,580	\$ -
5.6.14	Victoria Glen Neighbourhood Park		2025	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ 93,580	\$ -
5.6.15	York Downs School - Block 4		2025	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ 93,580	\$ -
5.6.16	Markham Centre - Aryeh Strata Park		2026	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ -	\$ 93,580
5.6.17	Markham Sports Park		2026	\$ 187,160	\$ -	\$ 187,160	0%	\$ -	\$ 187,160	\$ -	\$ -	\$ -	\$ 187,160
5.6.18	Warden West Valley Edge Park		2026	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ -	\$ 93,580
5.6.19	York Downs West Large Lot Park - Block 21		2026	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ -	\$ 93,580
5.6.20	York Downs West Parkette - Block 24		2026	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ -	\$ 93,580
5.6.21	Angus Glen Central Neighbourhood Park		2027	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ -	\$ 93,580
5.6.22	Angus Glen Community Park South		2027	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ -	\$ 93,580
5.6.23	Angus Glen Urban Park East		2027	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ -	\$ 93,580
5.6.24	Bayview South Parkette		2027	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ -	\$ 93,580
5.6.25	Milliken Neighbourhood Park		2028	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ -	\$ 93,580
5.6.26	Markham Centre - Active Park		2029	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ -	\$ 93,580
5.6.27	Cathedral South Square		2031	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ -	\$ 93,580
5.6.28	Cornell Centre South Neighbourhood Park		2031	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ -	\$ 93,580
Subtotal Exercise Station				\$ 2,807,400	\$ -	\$ 2,807,400		\$ -	\$ 2,807,400	\$ -	\$ 1,029,380	\$ 467,900	\$ 1,310,120

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement	& BTE Shares		Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
5.7 Gazebo & Shelters - Major											
5.7.1 Celebration Park	2022	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.4 Markham Centre-Rougeside Promenade Parks	2022	\$ 623,864	\$ -	\$ 623,864	0%	\$ -	\$ 623,864	\$ -	\$ -	\$ 623,864	\$ -
5.7.2 York Downs Kennedy Road Parkette - Block 5	2022	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.3 Berczy Glen North Park - Block 207	2023	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.5 Berczy Glen Community Park	2024	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.7 Langstaff - Pomona Creek Park	2024	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.8 Langstaff - Woodlot Park	2024	\$ 623,864	\$ -	\$ 623,864	0%	\$ -	\$ 623,864	\$ -	\$ -	\$ 623,864	\$ -
5.7.9 Leitchcroft Community Park Block 49	2024	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.10 Leitchcroft Neighbourhood Park Block 46	2024	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.11 Robinson Glen Community Park	2024	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.12 Rougeside Promenade North West Park	2024	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.6 Royal Orchard South East Parkette	2024	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.13 South Cornell Neighbourhood Park	2024	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.14 South Cornell Parkette - Block 156	2024	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.15 York Downs East Parkette - Block 6	2024	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.16 Angus Glen East Neighbourhood Park	2025	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.17 Carlton Park	2025	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.18 Rougeside Promenade West Parks	2025	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.19 Thornhill Centre Timber Creek Parkette	2025	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.20 York Downs School - Block 4	2025	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ 311,932	\$ -
5.7.21 Andre De Grasse Street East Park	2026	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.22 King's Square	2026	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.23 Markham Sports Park	2026	\$ 623,864	\$ -	\$ 623,864	0%	\$ -	\$ 623,864	\$ -	\$ -	\$ -	\$ 623,864
5.7.24 Markham Square East Parkette	2026	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.25 York Downs West Gateway Park - Block 20	2026	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.26 York Downs West Large Lot Park - Block 21	2026	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.27 Angus Glen Community Park South	2027	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.28 Berczy Glen Northwest Neighbourhood Park	2027	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.29 Enterprise Drive Central Park South	2027	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.30 Glenbar Gardens West Park	2027	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.31 Langstaff Gateway - Cedar Park	2027	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.32 Langstaff Gateway - Hub Green	2027	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.33 Langstaff Gateway - Promenade Park	2027	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.34 Cornell Centre Neighbourhood Park	2028	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.35 Enterprise Blvd North West Park	2028	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.36 Markham Centre Baseball Complex	2028	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.37 Markham Centre Soccer Complex	2028	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.38 Markham New World Centre	2028	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.39 Yonge Dudley Park	2028	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.40 Markham Woodside Square	2029	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
5.7.41 First Markham Place	2030	\$ 311,932	\$ -	\$ 311,932	0%	\$ -	\$ 311,932	\$ -	\$ -	\$ -	\$ 311,932
Subtotal Gazebo & Shelters - Major		\$ 13,725,008	\$ -	\$ 13,725,008		\$ -	\$ 13,725,008	\$ -	\$ -	\$ 6,862,504	\$ 6,862,504

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description			Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs				
							Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs	
5.8 Gazebos & Shelters - Minor														
5.8.1	Berczy Beckett Park (Cherna Ave.)	2022	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ -
5.8.2	Berczy Glen Central Parkette - Block 291	2022	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ -
5.8.3	Berczy Glen North Parkette - Block 172	2022	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ -
5.8.4	Berczy Glen Northwest Parkette - Block 170	2022	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ -
5.8.5	Berczy Glen West Parkette - Block 171	2022	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ -
5.8.6	Blodwen Davies Park	2022	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ -
5.8.7	Green Lane Park	2022	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ -
5.8.8	Markham Centre-Rougeside Promenade Parks	2022	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ -
5.8.9	Victoria Square West Village	2022	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ -
5.8.10	Woodbine By-Pass North Park	2022	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ -
5.8.11	Yonge Grandview	2022	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ -
5.8.12	Berczy Glen Southeast Parkette - Block 307	2023	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ -
5.8.13	Berczy Glen Southwest Parkette Block 327	2023	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ -
5.8.14	Birchmount Drive West Park	2023	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ -
5.8.15	Markham Centre - Chimenti Court Park	2023	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ -
5.8.16	Villages Of Fairtree East Neighbourhood Park	2023	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ -
5.8.17	16th Avenue Parkette	2024	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.18	Bayview North Parkette	2024	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.19	Berczy Glen Community Park	2024	\$ 162,968	\$ -	\$ 162,968	0%	\$ -	\$ 162,968	\$ -	\$ -	\$ 162,968	\$ -	\$ -	\$ -
5.8.20	Cornell Centre West Parkette	2024	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.21	East Neighbourhood Park	2024	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.22	Highway 7 North East Neighbourhood Park	2024	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.23	Innovation Park	2024	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.24	Langstaff - Pomona Creek Park	2024	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.25	Leitchcroft Community Park Block 49	2024	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.26	Markham Road North East Park	2024	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.27	Robinson Glen Central Parkette	2024	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.28	Robinson Glen Community Park	2024	\$ 244,452	\$ -	\$ 244,452	0%	\$ -	\$ 244,452	\$ -	\$ -	\$ 244,452	\$ -	\$ -	\$ -
5.8.29	Robinson Glen Northeast Neighbourhood Park	2024	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.30	Robinson Glen Northwest Parkette - Block 928	2024	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.31	Robinson Glen Southeast Neighbourhood Park	2024	\$ 325,936	\$ -	\$ 325,936	0%	\$ -	\$ 325,936	\$ -	\$ -	\$ 325,936	\$ -	\$ -	\$ -
5.8.32	Robinson Glen Southwest Parkette - Block 929	2024	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.33	West Neighbourhood Park	2024	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.34	Berczy Glen Southwest Neighbourhood Park	2025	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.35	Birchmount Drive East Park	2025	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.36	Circa Drive East Park	2025	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.37	Circa Drive West Park	2025	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.38	North Neighbourhood Park	2025	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -
5.8.39	Rougeside Promenade West Parks	2025	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	\$ -	\$ -

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description			Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
							Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
5.8.40	Sheridan Nurseries Neighbourhood Park	2025	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	
5.8.41	South Neighbourhood Park	2025	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	
5.8.42	Victoria Glen Neighbourhood Park	2025	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ 81,484	\$ -	
5.8.43	Highway 7 North West Neighbourhood Park	2026	\$ 162,968	\$ -	\$ 162,968	0%	\$ -	\$ 162,968	\$ -	\$ -	\$ -	\$ 162,968	
5.8.44	Kennedy Road South East Park	2026	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.45	Markham Centre - Aryeh Strata Park	2026	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.46	Markham Centre Neighbourhood Park	2026	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.47	Markham Sports Park	2026	\$ 325,936	\$ -	\$ 325,936	0%	\$ -	\$ 325,936	\$ -	\$ -	\$ -	\$ 325,936	
5.8.48	Markham Square West Parkette	2026	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.49	Rougeside Promenade South West Park	2026	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.50	South Town Centre Blvd North West Park	2026	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.51	Unionville Market Square	2026	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.52	Warden West Valley Edge Park	2026	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.53	YMCA Park East	2026	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.54	YMCA Park West	2026	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.55	York Downs West Park - Block 22	2026	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.56	York Downs West Parkette - Block 23	2026	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.57	York Downs West Parkette - Block 24	2026	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.58	Buttonville - Open Space Block North	2027	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.59	Buttonville - Open Space Block South	2027	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.60	Enterprise Drive Central Park South	2027	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.61	Langstaff - Transit Green Park	2027	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.62	Langstaff Gateway - Hub Green	2027	\$ 162,968	\$ -	\$ 162,968	0%	\$ -	\$ 162,968	\$ -	\$ -	\$ -	\$ 162,968	
5.8.63	Langstaff Gateway - Linear Park East	2027	\$ 244,452	\$ -	\$ 244,452	0%	\$ -	\$ 244,452	\$ -	\$ -	\$ -	\$ 244,452	
5.8.64	Langstaff Gateway - Linear Park West	2027	\$ 244,452	\$ -	\$ 244,452	0%	\$ -	\$ 244,452	\$ -	\$ -	\$ -	\$ 244,452	
5.8.65	Markham Centre - East Central Parkette	2027	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.66	Unionville Home Society Parkette	2027	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.67	Aviva Way South Park	2028	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.68	Hilton Markham Suites	2028	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.69	Main Street Milliken NW Parkette	2028	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.70	Markham Centre Baseball Complex	2028	\$ 325,936	\$ -	\$ 325,936	0%	\$ -	\$ 325,936	\$ -	\$ -	\$ -	\$ 325,936	
5.8.71	Markham Centre Soccer Complex	2028	\$ 325,936	\$ -	\$ 325,936	0%	\$ -	\$ 325,936	\$ -	\$ -	\$ -	\$ 325,936	
5.8.72	Markham Village Town Square	2028	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.73	Milliken Main Street South East Park	2028	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.74	Milliken Neighbourhood Park	2028	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.75	Clegg Road South West Park	2029	\$ 162,968	\$ -	\$ 162,968	0%	\$ -	\$ 162,968	\$ -	\$ -	\$ -	\$ 162,968	
5.8.76	Kennedy Commons	2029	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.77	Henderson Clark Parkette	2030	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.78	Markham Town Square	2030	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
5.8.79	Cornell Centre South Neighbourhood Park	2031	\$ 81,484	\$ -	\$ 81,484	0%	\$ -	\$ 81,484	\$ -	\$ -	\$ -	\$ 81,484	
Subtotal Gazebos & Shelters - Minor			\$ 8,229,884	\$ -	\$ 8,229,884	\$ -	\$ -	\$ 8,229,884	\$ -	\$ 1,303,744	\$ 2,607,488	\$ 4,318,652	

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement	& BTE Shares		Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
5.9 Hard Surface - Plaza											
5.9.1 Celebration Park	2022	\$ 89,400	\$ -	\$ 89,400	0%	\$ -	\$ 89,400	\$ -	\$ 89,400	\$ -	\$ -
5.9.2 Markham Centre-Rougeside Promenade Parks	2022	\$ 74,500	\$ -	\$ 74,500	0%	\$ -	\$ 74,500	\$ -	\$ 74,500	\$ -	\$ -
5.9.3 Victoria Square West Village	2022	\$ 14,900	\$ -	\$ 14,900	0%	\$ -	\$ 14,900	\$ -	\$ 14,900	\$ -	\$ -
5.9.4 Woodbine By-Pass North Park	2022	\$ 34,300	\$ -	\$ 34,300	0%	\$ -	\$ 34,300	\$ -	\$ 34,300	\$ -	\$ -
5.9.5 York Downs Kennedy Road Parkette - Block 5	2022	\$ 22,350	\$ -	\$ 22,350	0%	\$ -	\$ 22,350	\$ -	\$ 22,350	\$ -	\$ -
5.9.6 Markham Centre - Chimenti Court Park	2023	\$ 22,350	\$ -	\$ 22,350	0%	\$ -	\$ 22,350	\$ -	\$ 22,350	\$ -	\$ -
5.9.7 Cathedral Town Parkette	2024	\$ 17,880	\$ -	\$ 17,880	0%	\$ -	\$ 17,880	\$ -	\$ -	\$ 17,880	\$ -
5.9.8 Innovation Park	2024	\$ 23,840	\$ -	\$ 23,840	0%	\$ -	\$ 23,840	\$ -	\$ -	\$ 23,840	\$ -
5.9.9 Leitchcroft Community Park Block 49	2024	\$ 11,340	\$ -	\$ 11,340	0%	\$ -	\$ 11,340	\$ -	\$ -	\$ 11,340	\$ -
5.9.10 South Cornell Neighbourhood Park	2024	\$ 22,350	\$ -	\$ 22,350	0%	\$ -	\$ 22,350	\$ -	\$ -	\$ 22,350	\$ -
5.9.11 Unionville Central Square	2024	\$ 4,470	\$ -	\$ 4,470	0%	\$ -	\$ 4,470	\$ -	\$ -	\$ 4,470	\$ -
5.9.12 Thornhill Centre Timber Creek Parkette	2025	\$ 14,900	\$ -	\$ 14,900	0%	\$ -	\$ 14,900	\$ -	\$ -	\$ 14,900	\$ -
5.9.13 Markham Centre - Aryeh Strata Park	2026	\$ 47,680	\$ -	\$ 47,680	0%	\$ -	\$ 47,680	\$ -	\$ -	\$ -	\$ 47,680
5.9.14 Markham Sports Park	2026	\$ 333,611	\$ -	\$ 333,611	0%	\$ -	\$ 333,611	\$ -	\$ -	\$ -	\$ 333,611
5.9.15 Shops On Steeles	2026	\$ 37,250	\$ -	\$ 37,250	0%	\$ -	\$ 37,250	\$ -	\$ -	\$ -	\$ 37,250
5.9.16 South Town Centre Blvd North West Park	2026	\$ 59,600	\$ -	\$ 59,600	0%	\$ -	\$ 59,600	\$ -	\$ -	\$ -	\$ 59,600
5.9.17 Unionville Market Square	2026	\$ 14,900	\$ -	\$ 14,900	0%	\$ -	\$ 14,900	\$ -	\$ -	\$ -	\$ 14,900
5.9.18 York Downs West Gateway Park - Block 20	2026	\$ 22,350	\$ -	\$ 22,350	0%	\$ -	\$ 22,350	\$ -	\$ -	\$ -	\$ 22,350
5.9.19 Angus Glen Urban Park East	2027	\$ 17,000	\$ -	\$ 17,000	0%	\$ -	\$ 17,000	\$ -	\$ -	\$ -	\$ 17,000
5.9.20 Bayview South Parkette	2027	\$ 11,175	\$ -	\$ 11,175	0%	\$ -	\$ 11,175	\$ -	\$ -	\$ -	\$ 11,175
5.9.21 Buttonville - Open Space Block South	2027	\$ 14,900	\$ -	\$ 14,900	0%	\$ -	\$ 14,900	\$ -	\$ -	\$ -	\$ 14,900
5.9.22 Langstaff - Transit Green Park	2027	\$ 34,000	\$ -	\$ 34,000	0%	\$ -	\$ 34,000	\$ -	\$ -	\$ -	\$ 34,000
5.9.23 Markham New World Centre	2028	\$ 59,600	\$ -	\$ 59,600	0%	\$ -	\$ 59,600	\$ -	\$ -	\$ -	\$ 59,600
5.9.24 Markham Village Town Square	2028	\$ 34,000	\$ -	\$ 34,000	0%	\$ -	\$ 34,000	\$ -	\$ -	\$ -	\$ 34,000
5.9.25 Unionville Gardens - Cenotaph Square	2028	\$ 8,500	\$ -	\$ 8,500	0%	\$ -	\$ 8,500	\$ -	\$ -	\$ -	\$ 8,500
5.9.26 Yonge Dudley Park	2028	\$ 54,400	\$ -	\$ 54,400	0%	\$ -	\$ 54,400	\$ -	\$ -	\$ -	\$ 54,400
5.9.27 Cathedral North Parkette	2029	\$ 14,900	\$ -	\$ 14,900	0%	\$ -	\$ 14,900	\$ -	\$ -	\$ -	\$ 14,900
5.9.28 Henderson Clark Parkette	2030	\$ 5,960	\$ -	\$ 5,960	0%	\$ -	\$ 5,960	\$ -	\$ -	\$ -	\$ 5,960
5.9.29 Markham Centre/Unionville Parkette	2030	\$ 25,500	\$ -	\$ 25,500	0%	\$ -	\$ 25,500	\$ -	\$ -	\$ -	\$ 25,500
5.9.30 Milliken - Market Village	2030	\$ 14,900	\$ -	\$ 14,900	0%	\$ -	\$ 14,900	\$ -	\$ -	\$ -	\$ 14,900
5.9.31 Cathedral Centre Square	2031	\$ 11,175	\$ -	\$ 11,175	0%	\$ -	\$ 11,175	\$ -	\$ -	\$ -	\$ 11,175
5.9.32 Cornell Centre South Neighbourhood Park	2031	\$ 11,175	\$ -	\$ 11,175	0%	\$ -	\$ 11,175	\$ -	\$ -	\$ -	\$ 11,175
Subtotal Hard Surface - Plaza		\$ 1,185,156	\$ -	\$ 1,185,156		\$ -	\$ 1,185,156	\$ -	\$ 257,800	\$ 94,780	\$ 832,576
5.10 Multipurpose Court											
5.10.1 Franklin Carmichael Park - Multi-Purpose Court	2022	\$ 87,239	\$ -	\$ 87,239	0%	\$ -	\$ 87,239	\$ -	\$ 87,239	\$ -	\$ -
5.10.2 Villages Of Fairtree East Neighbourhood Park	2023	\$ 87,239	\$ -	\$ 87,239	0%	\$ -	\$ 87,239	\$ -	\$ 87,239	\$ -	\$ -
5.10.3 Berczy Glen Community Park	2024	\$ 87,239	\$ -	\$ 87,239	0%	\$ -	\$ 87,239	\$ -	\$ -	\$ 87,239	\$ -
5.10.4 Robinson Glen Central Neighbourhood Park	2024	\$ 87,239	\$ -	\$ 87,239	0%	\$ -	\$ 87,239	\$ -	\$ -	\$ 87,239	\$ -
5.10.5 Robinson Glen Community Park	2024	\$ 87,239	\$ -	\$ 87,239	0%	\$ -	\$ 87,239	\$ -	\$ -	\$ 87,239	\$ -
5.10.6 York Downs West Gateway Park - Block 20	2026	\$ 87,239	\$ -	\$ 87,239	0%	\$ -	\$ 87,239	\$ -	\$ -	\$ -	\$ 87,239
5.10.7 Angus Glen Community Park South	2027	\$ 87,239	\$ -	\$ 87,239	0%	\$ -	\$ 87,239	\$ -	\$ -	\$ -	\$ 87,239
Subtotal Multipurpose Court		\$ 610,673	\$ -	\$ 610,673		\$ -	\$ 610,673	\$ -	\$ 174,478	\$ 261,717	\$ 174,478

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description		Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
						Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022-2031
5.11 Parking Lot - Lighting											
5.11.1	Celebration Park	2022	\$ 89,840	\$ -	\$ 89,840	0%	\$ -	\$ 89,840	\$ -	\$ 89,840	\$ -
5.11.2	Robinson Glen Community Park	2024	\$ 67,380	\$ -	\$ 67,380	0%	\$ -	\$ 67,380	\$ -	\$ -	\$ 67,380
5.11.3	Carlton Park	2025	\$ 67,380	\$ -	\$ 67,380	0%	\$ -	\$ 67,380	\$ -	\$ -	\$ 67,380
5.11.4	Markham Sports Park	2026	\$ 269,520	\$ -	\$ 269,520	0%	\$ -	\$ 269,520	\$ -	\$ -	\$ 269,520
Subtotal Parking Lot - Lighting			\$ 494,120	\$ -	\$ 494,120		\$ -	\$ 494,120	\$ -	\$ 89,840	\$ 134,760
5.12 Parking Lot - Major											
5.12.1	Celebration Park	2022	\$ 625,000	\$ -	\$ 625,000	0%	\$ -	\$ 625,000	\$ -	\$ 625,000	\$ -
5.12.2	Berczy Glen Community Park	2024	\$ 625,000	\$ -	\$ 625,000	0%	\$ -	\$ 625,000	\$ -	\$ -	\$ 625,000
5.12.3	Robinson Glen Community Park	2024	\$ 625,000	\$ -	\$ 625,000	0%	\$ -	\$ 625,000	\$ -	\$ -	\$ 625,000
5.12.4	Carlton Park	2025	\$ 625,000	\$ -	\$ 625,000	0%	\$ -	\$ 625,000	\$ -	\$ -	\$ 625,000
5.12.5	Markham Sports Park	2026	\$ 2,500,000	\$ -	\$ 2,500,000	0%	\$ -	\$ 2,500,000	\$ -	\$ -	\$ 2,500,000
5.12.6	Markham Centre Baseball Complex	2028	\$ 625,000	\$ -	\$ 625,000	0%	\$ -	\$ 625,000	\$ -	\$ -	\$ 625,000
5.12.7	Markham Centre Soccer Complex	2028	\$ 625,000	\$ -	\$ 625,000	0%	\$ -	\$ 625,000	\$ -	\$ -	\$ 625,000
Subtotal Parking Lot - Major			\$ 6,250,000	\$ -	\$ 6,250,000		\$ -	\$ 6,250,000	\$ -	\$ 625,000	\$ 4,375,000
5.13 Parking Lot - Minor											
5.13.1	Celebration Park	2022	\$ 187,500	\$ -	\$ 187,500	0%	\$ -	\$ 187,500	\$ -	\$ 187,500	\$ -
5.13.2	Off Leash Dog Area - Paddock Park	2022	\$ 75,000	\$ -	\$ 75,000	0%	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -
5.13.3	Ward 2 Off Leash Dog Park	2023	\$ 75,000	\$ -	\$ 75,000	0%	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -
5.13.4	Ward 3 Off Leash Dog Park	2023	\$ 75,000	\$ -	\$ 75,000	0%	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -
5.13.5	Ward 4 Off Leash Dog Park	2023	\$ 75,000	\$ -	\$ 75,000	0%	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -
5.13.6	Ward 5 Off Leash Dog Park	2023	\$ 75,000	\$ -	\$ 75,000	0%	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -
5.13.7	Ward 6 Off Leash Dog Park	2023	\$ 75,000	\$ -	\$ 75,000	0%	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -
5.13.8	Ward 7 Off Leash Dog Park	2023	\$ 75,000	\$ -	\$ 75,000	0%	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -
5.13.9	Ward 8 Off Leash Dog Park	2023	\$ 75,000	\$ -	\$ 75,000	0%	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -
5.13.10	Langstaff - Pomona Creek Park	2024	\$ 187,500	\$ -	\$ 187,500	0%	\$ -	\$ 187,500	\$ -	\$ -	\$ 187,500
5.13.11	York Downs School - Block 4	2025	\$ 187,500	\$ -	\$ 187,500	0%	\$ -	\$ 187,500	\$ -	\$ -	\$ 187,500
Subtotal Parking Lot - Minor			\$ 1,162,500	\$ -	\$ 1,162,500		\$ -	\$ 1,162,500	\$ -	\$ 787,500	\$ 375,000
5.14 Pedestrian Lighting											
5.14.1	Berczy Glen Community Park	2024	\$ 243,300	\$ -	\$ 243,300	0%	\$ -	\$ 243,300	\$ -	\$ -	\$ 243,300
5.14.2	Robinson Glen Community Park	2024	\$ 81,100	\$ -	\$ 81,100	0%	\$ -	\$ 81,100	\$ -	\$ -	\$ 81,100
5.14.3	Unionville Central Square	2024	\$ 24,330	\$ -	\$ 24,330	0%	\$ -	\$ 24,330	\$ -	\$ -	\$ 24,330
5.14.4	Carlton Park	2025	\$ 81,100	\$ -	\$ 81,100	0%	\$ -	\$ 81,100	\$ -	\$ -	\$ 81,100
5.14.5	Angus Glen Community Park South	2027	\$ 121,650	\$ -	\$ 121,650	0%	\$ -	\$ 121,650	\$ -	\$ -	\$ 121,650
Subtotal Pedestrian Lighting			\$ 551,480	\$ -	\$ 551,480		\$ -	\$ 551,480	\$ -	\$ -	\$ 429,830

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs				
					Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs	
5.15 Playground - Junior												
5.15.1 Berczy Beckett Park (Cherna Ave.)	2022	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ 187,159	\$ -	\$ -	\$ -
5.15.2 York Downs Kennedy Road Parkette - Block 5	2022	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ 187,159	\$ -	\$ -	\$ -
5.15.3 Markham Centre - Chimenti Court Park	2023	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ 187,159	\$ -	\$ -	\$ -
5.15.4 Bayview North Parkette	2024	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ -	\$ 187,159	\$ -	\$ -
5.15.5 Cornell Centre East Parkette	2024	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ -	\$ 187,159	\$ -	\$ -
5.15.6 Robinson Glen Northeast Neighbourhood Park	2024	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ -	\$ 187,159	\$ -	\$ -
5.15.7 Angus Glen East Neighbourhood Park	2025	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ -	\$ 187,159	\$ -	\$ -
5.15.8 King's Square	2026	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ -	\$ -	\$ 187,159	\$ 187,159
5.15.9 Markham Centre - Aryeh Strata Park	2026	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ -	\$ -	\$ 187,159	\$ 187,159
5.15.10 York Downs West Gateway Park - Block 20	2026	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ -	\$ -	\$ 187,159	\$ 187,159
5.15.11 Berczy Glen Northwest Neighbourhood Park	2027	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ -	\$ -	\$ 187,159	\$ 187,159
5.15.12 Buttonville - Open Space Block South	2027	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ -	\$ -	\$ 187,159	\$ 187,159
5.15.13 Markham Centre - East Central Parkette	2027	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ -	\$ -	\$ 187,159	\$ 187,159
5.15.14 Milliken Main Street South East Park	2028	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ -	\$ -	\$ 187,159	\$ 187,159
5.15.15 Milliken Neighbourhood Park	2028	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ -	\$ -	\$ 187,159	\$ 187,159
5.15.16 Yonge Dudley Park	2028	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ -	\$ -	\$ 187,159	\$ 187,159
5.15.17 Cathedral Centre Square	2031	\$ 187,159	\$ -	\$ 187,159	0%	\$ -	\$ 187,159	\$ -	\$ -	\$ -	\$ 187,159	\$ 187,159
Subtotal Playground - Junior		\$ 3,181,703	\$ -	\$ 3,181,703		\$ -	\$ 3,181,703	\$ -	\$ 561,477	\$ 748,636	\$ 1,871,590	
5.16 Playground - Senior												
5.16.1 Green Lane Park	2022	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ 249,545	\$ -	\$ -	\$ -
5.16.2 York Downs Kennedy Road Parkette - Block 5	2022	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ 249,545	\$ -	\$ -	\$ -
5.16.3 Markham Centre - Chimenti Court Park	2023	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ 249,545	\$ -	\$ -	\$ -
5.16.4 Cornell Centre East Parkette	2024	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ 249,545	\$ -	\$ -
5.16.5 Robinson Glen Northeast Neighbourhood Park	2024	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ 249,545	\$ -	\$ -
5.16.6 Angus Glen East Neighbourhood Park	2025	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ 249,545	\$ -	\$ -
5.16.7 King's Square	2026	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ -	\$ 249,545	\$ 249,545
5.16.8 Markham Centre - Aryeh Strata Park	2026	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ -	\$ 249,545	\$ 249,545
5.16.9 York Downs West Gateway Park - Block 20	2026	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ -	\$ 249,545	\$ 249,545
5.16.10 Berczy Glen Northwest Neighbourhood Park	2027	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ -	\$ 249,545	\$ 249,545
5.16.11 Buttonville - Open Space Block South	2027	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ -	\$ 249,545	\$ 249,545
5.16.12 Markham Centre - East Central Parkette	2027	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ -	\$ 249,545	\$ 249,545
5.16.13 Milliken Main Street South East Park	2028	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ -	\$ 249,545	\$ 249,545
5.16.14 Milliken Neighbourhood Park	2028	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ -	\$ 249,545	\$ 249,545
5.16.15 Yonge Dudley Park	2028	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ -	\$ 249,545	\$ 249,545
Subtotal Playground - Senior		\$ 3,743,175	\$ -	\$ 3,743,175		\$ -	\$ 3,743,175	\$ -	\$ 748,635	\$ 748,635	\$ 2,245,905	

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs				
					Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs	
5.17 Playground - Junior & Senior												
5.17.1 Berczy Glen North Parkette - Block 172	2022	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.2 Berczy Glen West Parkette - Block 171	2022	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.3 Blodwen Davies Park	2022	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.4 Celebration Park	2022	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.5 Markham Centre-Rougeside Promenade Parks	2022	\$ 677,338	\$ -	\$ 677,338	0%	\$ -	\$ 677,338	\$ -	\$ -	\$ 677,338	\$ -	
5.17.6 Victoria Square West Village	2022	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.7 Woodbine By-Pass North Park	2022	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.8 Yonge Grandview	2022	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.9 Berczy Glen North Park - Block 207	2023	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.10 Berczy Glen Southeast Parkette - Block 307	2023	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.11 Berczy Glen Southwest Parkette Block 327	2023	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.12 Villages Of Fairtree East Neighbourhood Park	2023	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.13 Berczy Glen Community Park	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.14 Cathedral Town Parkette	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.15 Cornell Centre West Parkette	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.16 East Neighbourhood Park	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.17 Innovation Park	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.18 Langstaff - Pomona Creek Park	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.19 Langstaff - Woodlot Park	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.20 Leitchcroft Community Park Block 49	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.21 Leitchcroft Neighbourhood Park Block 46	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.22 Markham Road North East Park	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.23 Robinson Glen Central Neighbourhood Park	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.24 Robinson Glen Community Park	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.25 Robinson Glen East Neighbourhood Park	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.26 Robinson Glen Northwest Parkette - Block 928	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.27 Robinson Glen Southeast Neighbourhood Park	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.28 Rougeside Promenade North West Park	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.29 Royal Orchard South East Parkette	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.30 South Cornell Neighbourhood Park	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.31 South Cornell Parkette - Block 156	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.32 West Neighbourhood Park	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.33 York Downs East Parkette - Block 6	2024	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.34 Berczy Glen Southwest Neighbourhood Park	2025	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.35 Carlton Park	2025	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.36 Circa Drive West Park	2025	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.37 McCowan Road Neighbourhood Park	2025	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.38 North Neighbourhood Park	2025	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	
5.17.39 Rougeside Promenade West Parks	2025	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -	

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022- 2031	Other Dev. Related Costs
5.17.40 Sheridan Nurseries Neighbourhood Park	2025	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -
5.17.41 South Neighbourhood Park	2025	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -
5.17.42 Thornhill Centre Timber Creek Parkette	2025	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -
5.17.43 Victoria Glen Neighbourhood Park	2025	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -
5.17.44 York Downs School - Block 4	2025	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ 338,669	\$ -
5.17.45 Andre De Grasse Street East Park	2026	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.46 Highway 7 North West Neighbourhood Park	2026	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.47 Kennedy Road South East Park	2026	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.48 Markham Centre Neighbourhood Park	2026	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.49 Markham Sports Park	2026	\$ 677,338	\$ -	\$ 677,338	0%	\$ -	\$ 677,338	\$ -	\$ -	\$ -	\$ 677,338
5.17.50 Markham Square West Parkette	2026	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.51 Rougeside Promenade South West Park	2026	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.52 Warden West Valley Edge Park	2026	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.53 YMCA Park East	2026	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.54 YMCA Park West	2026	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.55 York Downs West Large Lot Park - Block 21	2026	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.56 York Downs West Park - Block 22	2026	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.57 York Downs West Parkette - Block 24	2026	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.58 Angus Glen Central Neighbourhood Park	2027	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.59 Angus Glen Community Park South	2027	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.60 Angus Glen Urban Park East	2027	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.61 Bayview South Parkette	2027	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.62 Enterprise Drive Central Park South	2027	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.63 Glenbar Gardens West Park	2027	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.64 Langstaff Gateway - Cedar Park	2027	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.65 Langstaff Gateway - Hub Green	2027	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.66 Langstaff Gateway - Linear Park East	2027	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.67 Unionville Home Society Parkette	2027	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.68 Aviva Way South Park	2028	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.69 Cornell Centre Neighbourhood Park	2028	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.70 Enterprise Blvd North West Park	2028	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.71 Main Street Milliken NW Parkette	2028	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.72 Markham Centre Baseball Complex	2028	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.73 Markham Centre Soccer Complex	2028	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.74 Markham New World Centre	2028	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.75 Clegg Road South West Park	2029	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.76 Kennedy Commons	2029	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.77 Markham Centre - Active Park	2029	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.78 Markham Woodside Square	2029	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.79 First Markham Place	2030	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.80 Markham Town Square	2030	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.81 Milliken - Market Village	2030	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.82 Cathedral South Square	2031	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
5.17.83 Cornell Centre South Neighbourhood Park	2031	\$ 338,669	\$ -	\$ 338,669	0%	\$ -	\$ 338,669	\$ -	\$ -	\$ -	\$ 338,669
Subtotal Playground - Junior & Senior		\$ 28,786,865	\$ -	\$ 28,786,865		\$ -	\$ 28,786,865	\$ -	\$ -	\$ 15,240,105	\$ 13,546,760

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
5.18 Seatwall & Feature Wall											
5.18.1 Berczy Beckett Park (Cherna Ave.)	2022	\$ 48,800	\$ -	\$ 48,800	0%	\$ -	\$ 48,800	\$ -	\$ 48,800	\$ -	\$ -
5.18.2 Victoria Square West Village	2022	\$ 24,400	\$ -	\$ 24,400	0%	\$ -	\$ 24,400	\$ -	\$ 24,400	\$ -	\$ -
5.18.3 Woodbine By-Pass North Park	2022	\$ 24,400	\$ -	\$ 24,400	0%	\$ -	\$ 24,400	\$ -	\$ 24,400	\$ -	\$ -
5.18.4 Berczy Glen North Park - Block 207	2023	\$ 18,300	\$ -	\$ 18,300	0%	\$ -	\$ 18,300	\$ -	\$ 18,300	\$ -	\$ -
5.18.5 Berczy Glen Community Park	2024	\$ 24,400	\$ -	\$ 24,400	0%	\$ -	\$ 24,400	\$ -	\$ -	\$ 24,400	\$ -
5.18.6 Innovation Park	2024	\$ 24,400	\$ -	\$ 24,400	0%	\$ -	\$ 24,400	\$ -	\$ -	\$ 24,400	\$ -
5.18.7 Rougeside Promenade North West Park	2024	\$ 24,400	\$ -	\$ 24,400	0%	\$ -	\$ 24,400	\$ -	\$ -	\$ 24,400	\$ -
5.18.8 Royal Orchard South East Parkette	2024	\$ 18,300	\$ -	\$ 18,300	0%	\$ -	\$ 18,300	\$ -	\$ -	\$ 18,300	\$ -
5.18.9 Unionville Central Square	2024	\$ 6,100	\$ -	\$ 6,100	0%	\$ -	\$ 6,100	\$ -	\$ -	\$ 6,100	\$ -
5.18.10 Thornhill Centre Timber Creek Parkette	2025	\$ 24,400	\$ -	\$ 24,400	0%	\$ -	\$ 24,400	\$ -	\$ -	\$ 24,400	\$ -
5.18.11 Andre De Grasse Street East Park	2026	\$ 24,400	\$ -	\$ 24,400	0%	\$ -	\$ 24,400	\$ -	\$ -	\$ -	\$ 24,400
5.18.12 Kennedy Road South East Park	2026	\$ 12,200	\$ -	\$ 12,200	0%	\$ -	\$ 12,200	\$ -	\$ -	\$ -	\$ 12,200
5.18.13 Markham Centre - Aryeh Strata Park	2026	\$ 12,200	\$ -	\$ 12,200	0%	\$ -	\$ 12,200	\$ -	\$ -	\$ -	\$ 12,200
5.18.14 Markham Square East Parkette	2026	\$ 12,200	\$ -	\$ 12,200	0%	\$ -	\$ 12,200	\$ -	\$ -	\$ -	\$ 12,200
5.18.15 Rougeside Promenade South West Park	2026	\$ 24,400	\$ -	\$ 24,400	0%	\$ -	\$ 24,400	\$ -	\$ -	\$ -	\$ 24,400
5.18.16 South Town Centre Blvd North West Park	2026	\$ 24,400	\$ -	\$ 24,400	0%	\$ -	\$ 24,400	\$ -	\$ -	\$ -	\$ 24,400
5.18.17 Unionville Market Square	2026	\$ 12,200	\$ -	\$ 12,200	0%	\$ -	\$ 12,200	\$ -	\$ -	\$ -	\$ 12,200
5.18.18 Angus Glen Urban Park East	2027	\$ 6,100	\$ -	\$ 6,100	0%	\$ -	\$ 6,100	\$ -	\$ -	\$ -	\$ 6,100
5.18.19 Langstaff - Transit Green Park	2027	\$ 61,000	\$ -	\$ 61,000	0%	\$ -	\$ 61,000	\$ -	\$ -	\$ -	\$ 61,000
5.18.20 Aviva Way South Park	2028	\$ 12,200	\$ -	\$ 12,200	0%	\$ -	\$ 12,200	\$ -	\$ -	\$ -	\$ 12,200
5.18.21 Enterprise Blvd North West Park	2028	\$ 48,800	\$ -	\$ 48,800	0%	\$ -	\$ 48,800	\$ -	\$ -	\$ -	\$ 48,800
5.18.22 Hilton Markham Suites	2028	\$ 12,200	\$ -	\$ 12,200	0%	\$ -	\$ 12,200	\$ -	\$ -	\$ -	\$ 12,200
5.18.23 Markham New World Centre	2028	\$ 12,200	\$ -	\$ 12,200	0%	\$ -	\$ 12,200	\$ -	\$ -	\$ -	\$ 12,200
5.18.24 Markham Village Town Square	2028	\$ 12,200	\$ -	\$ 12,200	0%	\$ -	\$ 12,200	\$ -	\$ -	\$ -	\$ 12,200
5.18.25 Unionville Gardens - Cenotaph Square	2028	\$ 36,600	\$ -	\$ 36,600	0%	\$ -	\$ 36,600	\$ -	\$ -	\$ -	\$ 36,600
5.18.26 Kennedy Commons	2029	\$ 12,200	\$ -	\$ 12,200	0%	\$ -	\$ 12,200	\$ -	\$ -	\$ -	\$ 12,200
5.18.27 Henderson Clark Parkette	2030	\$ 6,100	\$ -	\$ 6,100	0%	\$ -	\$ 6,100	\$ -	\$ -	\$ -	\$ 6,100
Subtotal Seatwall & Feature Wall		\$ 579,500	\$ -	\$ 579,500		\$ -	\$ 579,500	\$ -	\$ 115,900	\$ 122,000	\$ 341,600
5.19 Skateboard Park - Major											
5.19.1 Enterprise Blvd North West Park	2028	\$ 1,122,954	\$ -	\$ 1,122,954	0%	\$ -	\$ 1,122,954	\$ -	\$ -	\$ -	\$ 1,122,954
Subtotal Skateboard Park - Major		\$ 1,122,954	\$ -	\$ 1,122,954		\$ -	\$ 1,122,954	\$ -	\$ -	\$ -	\$ 1,122,954
5.20 Skateboard Park - Minor											
5.20.1 Berczy Glen Community Park	2024	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ 249,545	\$ -
5.20.2 Langstaff - Pomona Creek Park	2024	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ 249,545	\$ -
5.20.3 Robinson Glen Community Park	2024	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ 249,545	\$ -
5.20.4 Berczy Glen Southwest Neighbourhood Park	2025	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ 249,545	\$ -
5.20.5 Angus Glen Community Park South	2027	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ -	\$ 249,545
5.20.6 Markham Centre Baseball Complex	2028	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ -	\$ 249,545
5.20.7 Markham Woodside Square	2029	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ -	\$ 249,545
5.20.8 Milliken - Market Village	2030	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ -	\$ 249,545
Subtotal Skateboard Park - Minor		\$ 1,996,360	\$ -	\$ 1,996,360		\$ -	\$ 1,996,360	\$ -	\$ -	\$ 998,180	\$ 998,180

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description		Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
						Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022- 2031	Other Dev. Related Costs
5.21 Soccer Field - Major												
5.21.1	Robinson Glen Community Park	2024	\$ 1,184,067	\$ -	\$ 1,184,067	0%	\$ -	\$ 1,184,067	\$ -	\$ -	\$ 1,184,067	\$ -
5.22.2	York Downs School - Block 4	2025	\$ 394,689	\$ -	\$ 394,689	0%	\$ -	\$ 394,689	\$ -	\$ -	\$ 394,689	\$ -
5.22.3	Angus Glen Community Park South	2027	\$ 789,378	\$ -	\$ 789,378	0%	\$ -	\$ 789,378	\$ -	\$ -	\$ -	\$ 789,378
Subtotal Soccer Field - Major			\$ 2,368,134	\$ -	\$ 2,368,134		\$ -	\$ 2,368,134	\$ -	\$ -	\$ 1,578,756	\$ 789,378
5.22 Soccer Field - Major Lit												
5.22.1	Robinson Glen Southeast Neighbourhood Park	2024	\$ 1,497,272	\$ -	\$ 1,497,272	0%	\$ -	\$ 1,497,272	\$ -	\$ -	\$ 1,497,272	\$ -
5.23.2	Markham Sports Park	2026	\$ 5,989,088	\$ -	\$ 5,989,088	0%	\$ -	\$ 5,989,088	\$ -	\$ -	\$ -	\$ 5,989,088
5.23.3	Markham Centre Soccer Complex	2028	\$ 2,994,544	\$ -	\$ 2,994,544	0%	\$ -	\$ 2,994,544	\$ -	\$ -	\$ -	\$ 2,994,544
Subtotal Soccer Field - Major Lit			\$ 10,480,904	\$ -	\$ 10,480,904		\$ -	\$ 10,480,904	\$ -	\$ -	\$ 1,497,272	\$ 8,983,632
5.23 Soccer Field - Mini Pitch												
5.23.1	Leitchcroft Community Park Block 49	2024	\$ 249,546	\$ -	\$ 249,546	0%	\$ -	\$ 249,546	\$ -	\$ -	\$ 249,546	\$ -
Subtotal Soccer Field - Mini Pitch			\$ 249,546	\$ -	\$ 249,546		\$ -	\$ 249,546	\$ -	\$ -	\$ 249,546	\$ -
5.24 Soccer Field - Minor												
5.24.1	Berczy Glen Northwest Neighbourhood Park	2027	\$ 203,710	\$ -	\$ 203,710	0%	\$ -	\$ 203,710	\$ -	\$ -	\$ -	\$ 203,710
Subtotal Soccer Field - Minor			\$ 203,710	\$ -	\$ 203,710		\$ -	\$ 203,710	\$ -	\$ -	\$ -	\$ 203,710
5.25 Splash Pad - Major												
5.25.1	Celebration Park	2022	\$ 499,091	\$ -	\$ 499,091	0%	\$ -	\$ 499,091	\$ -	\$ -	\$ 499,091	\$ -
5.25.2	Markham Centre-Rougeside Promenade Parks	2022	\$ 499,091	\$ -	\$ 499,091	0%	\$ -	\$ 499,091	\$ -	\$ -	\$ 499,091	\$ -
5.25.3	Berczy Glen Community Park	2024	\$ 499,091	\$ -	\$ 499,091	0%	\$ -	\$ 499,091	\$ -	\$ -	\$ 499,091	\$ -
5.25.4	Cathedral Town Parkette	2024	\$ 499,091	\$ -	\$ 499,091	0%	\$ -	\$ 499,091	\$ -	\$ -	\$ 499,091	\$ -
5.25.5	Robinson Glen Community Park	2024	\$ 499,091	\$ -	\$ 499,091	0%	\$ -	\$ 499,091	\$ -	\$ -	\$ 499,091	\$ -
5.25.6	Rougeside Promenade West Parks	2025	\$ 499,091	\$ -	\$ 499,091	0%	\$ -	\$ 499,091	\$ -	\$ -	\$ 499,091	\$ -
5.25.7	Markham Sports Park	2026	\$ 499,091	\$ -	\$ 499,091	0%	\$ -	\$ 499,091	\$ -	\$ -	\$ 499,091	\$ -
5.25.8	Angus Glen Community Park South	2027	\$ 499,091	\$ -	\$ 499,091	0%	\$ -	\$ 499,091	\$ -	\$ -	\$ -	\$ 499,091
5.25.9	Markham Centre Soccer Complex	2028	\$ 499,091	\$ -	\$ 499,091	0%	\$ -	\$ 499,091	\$ -	\$ -	\$ -	\$ 499,091
Subtotal Splash Pad - Major			\$ 4,491,819	\$ -	\$ 4,491,819		\$ -	\$ 4,491,819	\$ -	\$ -	\$ 3,493,637	\$ 998,182
5.26 Splash Pad - Minor												
5.26.1	Robinson Glen Southeast Neighbourhood Park	2024	\$ 185,912	\$ -	\$ 185,912	0%	\$ -	\$ 185,912	\$ -	\$ -	\$ 185,912	\$ -
5.26.2	Angus Glen East Neighbourhood Park	2025	\$ 185,912	\$ -	\$ 185,912	0%	\$ -	\$ 185,912	\$ -	\$ -	\$ 185,912	\$ -
5.26.3	Carlton Park	2025	\$ 185,912	\$ -	\$ 185,912	0%	\$ -	\$ 185,912	\$ -	\$ -	\$ 185,912	\$ -
5.26.4	York Downs School - Block 4	2025	\$ 185,912	\$ -	\$ 185,912	0%	\$ -	\$ 185,912	\$ -	\$ -	\$ 185,912	\$ -
5.26.5	Andre De Grasse Street East Park	2026	\$ 185,912	\$ -	\$ 185,912	0%	\$ -	\$ 185,912	\$ -	\$ -	\$ 185,912	\$ -
5.26.6	Berczy Glen Northwest Neighbourhood Park	2027	\$ 185,912	\$ -	\$ 185,912	0%	\$ -	\$ 185,912	\$ -	\$ -	\$ -	\$ 185,912
5.26.7	Enterprise Drive Central Park South	2027	\$ 185,912	\$ -	\$ 185,912	0%	\$ -	\$ 185,912	\$ -	\$ -	\$ -	\$ 185,912
5.26.8	First Markham Place	2030	\$ 185,912	\$ -	\$ 185,912	0%	\$ -	\$ 185,912	\$ -	\$ -	\$ -	\$ 185,912
Subtotal Splash Pad - Minor			\$ 1,487,296	\$ -	\$ 1,487,296		\$ -	\$ 1,487,296	\$ -	\$ -	\$ 929,560	\$ 557,736

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement	& BTE Shares		Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
5.27 Tennis Court - Double (Unlit)											
5.27.1 Blodwen Davies Park	2022	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ 93,580	\$ -	\$ -
5.27.2 Berczy Glen Community Park	2024	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ 93,580	\$ -
5.27.3 Langstaff - Pomona Creek Park	2024	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ 93,580	\$ -
5.27.4 Leitchcroft Community Park Block 49	2024	\$ 187,160	\$ -	\$ 187,160	0%	\$ -	\$ 187,160	\$ -	\$ -	\$ 187,160	\$ -
5.27.5 Robinson Glen Community Park	2024	\$ 467,900	\$ -	\$ 467,900	0%	\$ -	\$ 467,900	\$ -	\$ -	\$ 467,900	\$ -
5.27.6 South Cornell Neighbourhood Park	2024	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ 93,580	\$ -
5.27.7 Angus Glen East Neighbourhood Park	2025	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ 93,580	\$ -
5.27.8 McCowan Road Neighbourhood Park	2025	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ 93,580	\$ -
5.27.9 Rougeside Promenade West Parks	2025	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ 93,580	\$ -
5.27.10 Andre De Grasse Street East Park	2026	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ 93,580	\$ -
5.27.11 YMCA Park East	2026	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ 93,580	\$ -
5.27.12 York Downs West Large Lot Park - Block 21	2026	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ 93,580	\$ -
5.27.13 Angus Glen Community Park South	2027	\$ 187,160	\$ -	\$ 187,160	0%	\$ -	\$ 187,160	\$ -	\$ -	\$ -	\$ 187,160
5.27.14 Enterprise Drive Central Park South	2027	\$ 187,160	\$ -	\$ 187,160	0%	\$ -	\$ 187,160	\$ -	\$ -	\$ -	\$ 187,160
5.27.15 Langstaff Gateway - Cedar Park	2027	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ -	\$ 93,580
5.27.16 Yonge Dudley Park	2028	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ -	\$ 93,580
5.27.17 Clegg Road South West Park	2029	\$ 93,580	\$ -	\$ 93,580	0%	\$ -	\$ 93,580	\$ -	\$ -	\$ -	\$ 93,580
5.27.18 First Markham Place	2030	\$ 187,160	\$ -	\$ 187,160	0%	\$ -	\$ 187,160	\$ -	\$ -	\$ -	\$ 187,160
Subtotal Tennis Court - Double (Unlit)		\$ 2,433,080	\$ -	\$ 2,433,080		\$ -	\$ 2,433,080	\$ -	\$ 93,580	\$ 1,497,280	\$ 842,220
5.28 Trellis - Major											
5.28.1 Robinson Glen Community Park	2024	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ 249,545	\$ -
5.28.2 Shops On Steeles	2026	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ 249,545	\$ -
5.28.3 Angus Glen Community Park South	2027	\$ 249,545	\$ -	\$ 249,545	0%	\$ -	\$ 249,545	\$ -	\$ -	\$ -	\$ 249,545
Subtotal Trellis - Major		\$ 748,635	\$ -	\$ 748,635		\$ -	\$ 748,635	\$ -	\$ -	\$ 499,090	\$ 249,545
5.29 Trellis - Minor											
5.29.1 Cathedral Town Parkette	2024	\$ 108,221	\$ -	\$ 108,221	0%	\$ -	\$ 108,221	\$ -	\$ -	\$ 108,221	\$ -
5.29.2 Cornell Centre East Parkette	2024	\$ 108,221	\$ -	\$ 108,221	0%	\$ -	\$ 108,221	\$ -	\$ -	\$ 108,221	\$ -
5.29.3 Robinson Glen Central Neighbourhood Park	2024	\$ 108,221	\$ -	\$ 108,221	0%	\$ -	\$ 108,221	\$ -	\$ -	\$ 108,221	\$ -
5.29.4 Robinson Glen Community Park	2024	\$ 108,221	\$ -	\$ 108,221	0%	\$ -	\$ 108,221	\$ -	\$ -	\$ 108,221	\$ -
5.29.5 Robinson Glen East Neighbourhood Park	2024	\$ 108,221	\$ -	\$ 108,221	0%	\$ -	\$ 108,221	\$ -	\$ -	\$ 108,221	\$ -
5.29.6 Angus Glen Central Neighbourhood Park	2027	\$ 108,221	\$ -	\$ 108,221	0%	\$ -	\$ 108,221	\$ -	\$ -	\$ -	\$ 108,221
5.29.7 Angus Glen Community Park South	2027	\$ 108,221	\$ -	\$ 108,221	0%	\$ -	\$ 108,221	\$ -	\$ -	\$ -	\$ 108,221
5.29.8 Bayview South Parkette	2027	\$ 108,221	\$ -	\$ 108,221	0%	\$ -	\$ 108,221	\$ -	\$ -	\$ -	\$ 108,221
5.29.9 Markham Centre - Active Park	2029	\$ 108,221	\$ -	\$ 108,221	0%	\$ -	\$ 108,221	\$ -	\$ -	\$ -	\$ 108,221
5.29.10 Milliken - Market Village	2030	\$ 108,221	\$ -	\$ 108,221	0%	\$ -	\$ 108,221	\$ -	\$ -	\$ -	\$ 108,221
5.29.11 Cathedral South Square	2031	\$ 108,221	\$ -	\$ 108,221	0%	\$ -	\$ 108,221	\$ -	\$ -	\$ -	\$ 108,221
Subtotal Trellis - Minor		\$ 1,190,431	\$ -	\$ 1,190,431		\$ -	\$ 1,190,431	\$ -	\$ -	\$ 541,105	\$ 649,326

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description		Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
						Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
5.30 Walkway & Paths - Asphalt												
5.30.1	Off Leash Dog Area - Paddock Park	2022	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ 8,700	\$ -	\$ -
5.30.2	Ward 2 Off Leash Dog Park	2023	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ 8,700	\$ -	\$ -
5.30.3	Ward 3 Off Leash Dog Park	2023	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ 8,700	\$ -	\$ -
5.30.4	Ward 4 Off Leash Dog Park	2023	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ 8,700	\$ -	\$ -
5.30.5	Ward 5 Off Leash Dog Park	2023	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ 8,700	\$ -	\$ -
5.30.6	Ward 6 Off Leash Dog Park	2023	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ 8,700	\$ -	\$ -
5.30.7	Ward 7 Off Leash Dog Park	2023	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ 8,700	\$ -	\$ -
5.30.8	Ward 8 Off Leash Dog Park	2023	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ 8,700	\$ -	\$ -
5.30.9	Langstaff - Pomona Creek Park	2024	\$ 17,400	\$ -	\$ 17,400	0%	\$ -	\$ 17,400	\$ -	\$ -	\$ 17,400	\$ -
5.30.10	Langstaff - Woodlot Park	2024	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ -	\$ 8,700	\$ -
5.30.11	Leitchcroft Neighbourhood Park Block 46	2024	\$ 48,459	\$ -	\$ 48,459	0%	\$ -	\$ 48,459	\$ -	\$ -	\$ 48,459	\$ -
5.30.12	Robinson Glen Central Neighbourhood Park	2024	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ -	\$ 8,700	\$ -
5.30.13	Robinson Glen Community Park	2024	\$ 43,500	\$ -	\$ 43,500	0%	\$ -	\$ 43,500	\$ -	\$ -	\$ 43,500	\$ -
5.30.14	Robinson Glen Southeast Neighbourhood Park	2024	\$ 17,400	\$ -	\$ 17,400	0%	\$ -	\$ 17,400	\$ -	\$ -	\$ 17,400	\$ -
5.30.15	Angus Glen East Neighbourhood Park	2025	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ -	\$ 8,700	\$ -
5.30.16	Berczy Glen Southwest Neighbourhood Park	2025	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ -	\$ 8,700	\$ -
5.30.17	Carlton Park	2025	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ -	\$ 8,700	\$ -
5.30.18	Rougeside Promenade West Parks	2025	\$ 26,100	\$ -	\$ 26,100	0%	\$ -	\$ 26,100	\$ -	\$ -	\$ 26,100	\$ -
5.30.19	York Downs School - Block 4	2025	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ -	\$ 8,700	\$ -
5.30.20	Markham Sports Park	2026	\$ 217,500	\$ -	\$ 217,500	0%	\$ -	\$ 217,500	\$ -	\$ -	\$ 217,500	\$ -
5.30.21	Warden West Valley Edge Park	2026	\$ 34,800	\$ -	\$ 34,800	0%	\$ -	\$ 34,800	\$ -	\$ -	\$ 34,800	\$ -
5.30.22	York Downs West Gateway Park - Block 20	2026	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ -	\$ 8,700	\$ -
5.30.23	York Downs West Large Lot Park - Block 21	2026	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ -	\$ 8,700	\$ -
5.30.24	Berczy Glen Northwest Neighbourhood Park	2027	\$ 8,700	\$ -	\$ 8,700	0%	\$ -	\$ 8,700	\$ -	\$ -	\$ -	\$ 8,700
5.30.25	Buttonville - Open Space Block North	2027	\$ 6,525	\$ -	\$ 6,525	0%	\$ -	\$ 6,525	\$ -	\$ -	\$ -	\$ 6,525
5.30.26	Markham Centre - East Central Parkette	2027	\$ 6,525	\$ -	\$ 6,525	0%	\$ -	\$ 6,525	\$ -	\$ -	\$ -	\$ 6,525
Subtotal Walkway & Paths - Asphalt			\$ 566,109	\$ -	\$ 566,109	\$ -	\$ -	\$ 566,109	\$ -	\$ 69,600	\$ 474,759	\$ 21,750

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement	& BTE Shares		Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
5.31 Walkway & Paths - Concrete											
5.31.1 Berczy Beckett Park (Cherna Ave.)	2022	\$ 25,000	\$ -	\$ 25,000	0%	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ -
5.31.2 Berczy Glen Central Parkette - Block 291	2022	\$ 8,750	\$ -	\$ 8,750	0%	\$ -	\$ 8,750	\$ -	\$ 8,750	\$ -	\$ -
5.31.3 Berczy Glen North Parkette - Block 172	2022	\$ 25,000	\$ -	\$ 25,000	0%	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ -
5.31.4 Berczy Glen Northwest Parkette - Block 170	2022	\$ 8,750	\$ -	\$ 8,750	0%	\$ -	\$ 8,750	\$ -	\$ 8,750	\$ -	\$ -
5.31.5 Berczy Glen West Parkette - Block 171	2022	\$ 25,000	\$ -	\$ 25,000	0%	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ -
5.31.6 Blodwen Davies Park	2022	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ -
5.31.7 Celebration Park	2022	\$ 137,500	\$ -	\$ 137,500	0%	\$ -	\$ 137,500	\$ -	\$ 137,500	\$ -	\$ -
5.31.8 Green Lane Park	2022	\$ 37,500	\$ -	\$ 37,500	0%	\$ -	\$ 37,500	\$ -	\$ 37,500	\$ -	\$ -
5.31.9 Markham Centre-Rougeside Promenade Parks	2022	\$ 150,000	\$ -	\$ 150,000	0%	\$ -	\$ 150,000	\$ -	\$ 150,000	\$ -	\$ -
5.31.10 Victoria Square West Village	2022	\$ 75,000	\$ -	\$ 75,000	0%	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ -	\$ -
5.31.11 Woodbine By-Pass North Park	2022	\$ 62,500	\$ -	\$ 62,500	0%	\$ -	\$ 62,500	\$ -	\$ 62,500	\$ -	\$ -
5.31.12 Yonge Grandview	2022	\$ 62,500	\$ -	\$ 62,500	0%	\$ -	\$ 62,500	\$ -	\$ 62,500	\$ -	\$ -
5.31.13 York Downs Kennedy Road Parkette - Block 5	2022	\$ 18,750	\$ -	\$ 18,750	0%	\$ -	\$ 18,750	\$ -	\$ 18,750	\$ -	\$ -
5.31.14 Berczy Glen North Park - Block 207	2023	\$ 37,500	\$ -	\$ 37,500	0%	\$ -	\$ 37,500	\$ -	\$ 37,500	\$ -	\$ -
5.31.15 Berczy Glen Southeast Parkette - Block 307	2023	\$ 54,375	\$ -	\$ 54,375	0%	\$ -	\$ 54,375	\$ -	\$ 54,375	\$ -	\$ -
5.31.16 Berczy Glen Southwest Parkette Block 327	2023	\$ 49,625	\$ -	\$ 49,625	0%	\$ -	\$ 49,625	\$ -	\$ 49,625	\$ -	\$ -
5.31.17 Birchmount Drive West Park	2023	\$ 31,250	\$ -	\$ 31,250	0%	\$ -	\$ 31,250	\$ -	\$ 31,250	\$ -	\$ -
5.31.18 Markham Centre - Chimenti Court Park	2023	\$ 25,000	\$ -	\$ 25,000	0%	\$ -	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ -
5.31.19 Villages Of Fairtree East Neighbourhood Park	2023	\$ 112,500	\$ -	\$ 112,500	0%	\$ -	\$ 112,500	\$ -	\$ 112,500	\$ -	\$ -
5.31.20 16th Avenue Parkette	2024	\$ 6,250	\$ -	\$ 6,250	0%	\$ -	\$ 6,250	\$ -	\$ -	\$ 6,250	\$ -
5.31.21 Bayview North Parkette	2024	\$ 34,000	\$ -	\$ 34,000	0%	\$ -	\$ 34,000	\$ -	\$ -	\$ 34,000	\$ -
5.31.22 Berczy Glen Community Park	2024	\$ 272,500	\$ -	\$ 272,500	0%	\$ -	\$ 272,500	\$ -	\$ -	\$ 272,500	\$ -
5.31.23 Cathedral Town Parkette	2024	\$ 18,750	\$ -	\$ 18,750	0%	\$ -	\$ 18,750	\$ -	\$ -	\$ 18,750	\$ -
5.31.24 Cornell Centre East Parkette	2024	\$ 40,000	\$ -	\$ 40,000	0%	\$ -	\$ 40,000	\$ -	\$ -	\$ 40,000	\$ -
5.31.25 Cornell Centre West Parkette	2024	\$ 25,000	\$ -	\$ 25,000	0%	\$ -	\$ 25,000	\$ -	\$ -	\$ 25,000	\$ -
5.31.26 East Neighbourhood Park	2024	\$ 62,500	\$ -	\$ 62,500	0%	\$ -	\$ 62,500	\$ -	\$ -	\$ 62,500	\$ -
5.31.27 Highway 7 North East Neighbourhood Park	2024	\$ 43,750	\$ -	\$ 43,750	0%	\$ -	\$ 43,750	\$ -	\$ -	\$ 43,750	\$ -
5.31.28 Innovation Park	2024	\$ 75,000	\$ -	\$ 75,000	0%	\$ -	\$ 75,000	\$ -	\$ -	\$ 75,000	\$ -
5.31.29 Langstaff - Pomona Creek Park	2024	\$ 75,000	\$ -	\$ 75,000	0%	\$ -	\$ 75,000	\$ -	\$ -	\$ 75,000	\$ -
5.31.30 Langstaff - Woodlot Park	2024	\$ 31,250	\$ -	\$ 31,250	0%	\$ -	\$ 31,250	\$ -	\$ -	\$ 31,250	\$ -
5.31.31 Leitchcroft Neighbourhood Park Block 46	2024	\$ 139,250	\$ -	\$ 139,250	0%	\$ -	\$ 139,250	\$ -	\$ -	\$ 139,250	\$ -
5.31.32 Markham Road North East Park	2024	\$ 37,500	\$ -	\$ 37,500	0%	\$ -	\$ 37,500	\$ -	\$ -	\$ 37,500	\$ -
5.31.33 Robinson Glen Central Neighbourhood Park	2024	\$ 40,000	\$ -	\$ 40,000	0%	\$ -	\$ 40,000	\$ -	\$ -	\$ 40,000	\$ -
5.31.34 Robinson Glen Central Parkette	2024	\$ 12,500	\$ -	\$ 12,500	0%	\$ -	\$ 12,500	\$ -	\$ -	\$ 12,500	\$ -
5.31.35 Robinson Glen Community Park	2024	\$ 272,750	\$ -	\$ 272,750	0%	\$ -	\$ 272,750	\$ -	\$ -	\$ 272,750	\$ -
5.31.36 Robinson Glen East Neighbourhood Park	2024	\$ 40,000	\$ -	\$ 40,000	0%	\$ -	\$ 40,000	\$ -	\$ -	\$ 40,000	\$ -
5.31.37 Robinson Glen Northeast Neighbourhood Park	2024	\$ 40,000	\$ -	\$ 40,000	0%	\$ -	\$ 40,000	\$ -	\$ -	\$ 40,000	\$ -
5.31.38 Robinson Glen Northwest Parkette - Block 928	2024	\$ 33,375	\$ -	\$ 33,375	0%	\$ -	\$ 33,375	\$ -	\$ -	\$ 33,375	\$ -
5.31.39 Robinson Glen Southeast Neighbourhood Park	2024	\$ 40,000	\$ -	\$ 40,000	0%	\$ -	\$ 40,000	\$ -	\$ -	\$ 40,000	\$ -
5.31.40 Robinson Glen Southwest Parkette - Block 929	2024	\$ 38,875	\$ -	\$ 38,875	0%	\$ -	\$ 38,875	\$ -	\$ -	\$ 38,875	\$ -
5.31.41 Rougeside Promenade North West Park	2024	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ -
5.31.42 Royal Orchard South East Parkette	2024	\$ 18,750	\$ -	\$ 18,750	0%	\$ -	\$ 18,750	\$ -	\$ -	\$ 18,750	\$ -
5.31.43 South Cornell Neighbourhood Park	2024	\$ 80,875	\$ -	\$ 80,875	0%	\$ -	\$ 80,875	\$ -	\$ -	\$ 80,875	\$ -
5.31.44 South Cornell Parkette - Block 156	2024	\$ 53,500	\$ -	\$ 53,500	0%	\$ -	\$ 53,500	\$ -	\$ -	\$ 53,500	\$ -
5.31.45 South Cornell Parkette - Block 159	2024	\$ 14,000	\$ -	\$ 14,000	0%	\$ -	\$ 14,000	\$ -	\$ -	\$ 14,000	\$ -
5.31.46 South Cornell Subdivision - Block 150	2024	\$ 21,875	\$ -	\$ 21,875	0%	\$ -	\$ 21,875	\$ -	\$ -	\$ 21,875	\$ -
5.31.47 West Neighbourhood Park	2024	\$ 62,500	\$ -	\$ 62,500	0%	\$ -	\$ 62,500	\$ -	\$ -	\$ 62,500	\$ -
5.31.48 York Downs East Parkette - Block 6	2024	\$ 35,000	\$ -	\$ 35,000	0%	\$ -	\$ 35,000	\$ -	\$ -	\$ 35,000	\$ -
5.31.49 Angus Glen East Neighbourhood Park	2025	\$ 40,000	\$ -	\$ 40,000	0%	\$ -	\$ 40,000	\$ -	\$ -	\$ 40,000	\$ -
5.31.50 Berczy Glen Southwest Neighbourhood Park	2025	\$ 40,000	\$ -	\$ 40,000	0%	\$ -	\$ 40,000	\$ -	\$ -	\$ 40,000	\$ -
5.31.51 Birchmount Drive East Park	2025	\$ 31,250	\$ -	\$ 31,250	0%	\$ -	\$ 31,250	\$ -	\$ -	\$ 31,250	\$ -
5.31.52 Carlton Park	2025	\$ 25,000	\$ -	\$ 25,000	0%	\$ -	\$ 25,000	\$ -	\$ -	\$ 25,000	\$ -
5.31.53 Circa Drive East Park	2025	\$ 31,250	\$ -	\$ 31,250	0%	\$ -	\$ 31,250	\$ -	\$ -	\$ 31,250	\$ -
5.31.54 Circa Drive West Park	2025	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ -
5.31.55 McCowan Road Neighbourhood Park	2025	\$ 21,250	\$ -	\$ 21,250	0%	\$ -	\$ 21,250	\$ -	\$ -	\$ 21,250	\$ -
5.31.56 North Neighbourhood Park	2025	\$ 62,500	\$ -	\$ 62,500	0%	\$ -	\$ 62,500	\$ -	\$ -	\$ 62,500	\$ -
5.31.57 Rougeside Promenade West Parks	2025	\$ 150,000	\$ -	\$ 150,000	0%	\$ -	\$ 150,000	\$ -	\$ -	\$ 150,000	\$ -
5.31.58 Sheridan Nurseries Neighbourhood Park	2025	\$ 46,375	\$ -	\$ 46,375	0%	\$ -	\$ 46,375	\$ -	\$ -	\$ 46,375	\$ -
5.31.59 South Neighbourhood Park	2025	\$ 62,500	\$ -	\$ 62,500	0%	\$ -	\$ 62,500	\$ -	\$ -	\$ 62,500	\$ -

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement	& BTE Shares		Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
5.31.60 Thornhill Centre Timber Creek Parkette	2025	\$ 25,000	\$ -	\$ 25,000	0%	\$ -	\$ 25,000	\$ -	\$ -	\$ 25,000	\$ -
5.31.61 Victoria Glen Neighbourhood Park	2025	\$ 40,000	\$ -	\$ 40,000	0%	\$ -	\$ 40,000	\$ -	\$ -	\$ 40,000	\$ -
5.31.62 York Downs School - Block 4	2025	\$ 40,000	\$ -	\$ 40,000	0%	\$ -	\$ 40,000	\$ -	\$ -	\$ 40,000	\$ -
5.31.63 Andre De Grasse Street East Park	2026	\$ 75,000	\$ -	\$ 75,000	0%	\$ -	\$ 75,000	\$ -	\$ -	\$ 75,000	\$ -
5.31.64 Highway 7 North West Neighbourhood Park	2026	\$ 18,750	\$ -	\$ 18,750	0%	\$ -	\$ 18,750	\$ -	\$ -	\$ 18,750	\$ -
5.31.65 Kennedy Road South East Park	2026	\$ 31,250	\$ -	\$ 31,250	0%	\$ -	\$ 31,250	\$ -	\$ -	\$ 31,250	\$ -
5.31.66 King's Square	2026	\$ 18,750	\$ -	\$ 18,750	0%	\$ -	\$ 18,750	\$ -	\$ -	\$ 18,750	\$ -
5.31.67 Markham Centre Neighbourhood Park	2026	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ -
5.31.68 Markham Sports Park	2026	\$ 113,750	\$ -	\$ 113,750	0%	\$ -	\$ 113,750	\$ -	\$ -	\$ 113,750	\$ -
5.31.69 Markham Square East Parkette	2026	\$ 43,750	\$ -	\$ 43,750	0%	\$ -	\$ 43,750	\$ -	\$ -	\$ 43,750	\$ -
5.31.70 Markham Square West Parkette	2026	\$ 18,750	\$ -	\$ 18,750	0%	\$ -	\$ 18,750	\$ -	\$ -	\$ 18,750	\$ -
5.31.71 Rougeside Promenade South West Park	2026	\$ 62,500	\$ -	\$ 62,500	0%	\$ -	\$ 62,500	\$ -	\$ -	\$ 62,500	\$ -
5.31.72 Shops On Steeles	2026	\$ 12,500	\$ -	\$ 12,500	0%	\$ -	\$ 12,500	\$ -	\$ -	\$ 12,500	\$ -
5.31.73 Unionville Market Square	2026	\$ 18,750	\$ -	\$ 18,750	0%	\$ -	\$ 18,750	\$ -	\$ -	\$ 18,750	\$ -
5.31.74 Warden West Valley Edge Park	2026	\$ 25,000	\$ -	\$ 25,000	0%	\$ -	\$ 25,000	\$ -	\$ -	\$ 25,000	\$ -
5.31.75 YMCA Park East	2026	\$ 75,000	\$ -	\$ 75,000	0%	\$ -	\$ 75,000	\$ -	\$ -	\$ 75,000	\$ -
5.31.76 YMCA Park West	2026	\$ 75,000	\$ -	\$ 75,000	0%	\$ -	\$ 75,000	\$ -	\$ -	\$ 75,000	\$ -
5.31.77 York Downs West Gateway Park - Block 20	2026	\$ 31,250	\$ -	\$ 31,250	0%	\$ -	\$ 31,250	\$ -	\$ -	\$ 31,250	\$ -
5.31.78 York Downs West Large Lot Park - Block 21	2026	\$ 40,000	\$ -	\$ 40,000	0%	\$ -	\$ 40,000	\$ -	\$ -	\$ 40,000	\$ -
5.31.79 York Downs West Park - Block 22	2026	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ -	\$ -	\$ 50,000	\$ -
5.31.80 York Downs West Parkette - Block 23	2026	\$ 18,750	\$ -	\$ 18,750	0%	\$ -	\$ 18,750	\$ -	\$ -	\$ 18,750	\$ -
5.31.81 York Downs West Parkette - Block 24	2026	\$ 12,500	\$ -	\$ 12,500	0%	\$ -	\$ 12,500	\$ -	\$ -	\$ 12,500	\$ -
5.31.82 Angus Glen Central Neighbourhood Park	2027	\$ 40,000	\$ -	\$ 40,000	0%	\$ -	\$ 40,000	\$ -	\$ -	\$ -	\$ 40,000
5.31.83 Angus Glen Community Park South	2027	\$ 272,750	\$ -	\$ 272,750	0%	\$ -	\$ 272,750	\$ -	\$ -	\$ -	\$ 272,750
5.31.84 Angus Glen Urban Park East	2027	\$ 12,500	\$ -	\$ 12,500	0%	\$ -	\$ 12,500	\$ -	\$ -	\$ -	\$ 12,500
5.31.85 Bayview South Parkette	2027	\$ 31,250	\$ -	\$ 31,250	0%	\$ -	\$ 31,250	\$ -	\$ -	\$ -	\$ 31,250
5.31.86 Berczy Glen Northwest Neighbourhood Park	2027	\$ 40,000	\$ -	\$ 40,000	0%	\$ -	\$ 40,000	\$ -	\$ -	\$ -	\$ 40,000
5.31.87 Buttonville - Open Space Block North	2027	\$ 12,500	\$ -	\$ 12,500	0%	\$ -	\$ 12,500	\$ -	\$ -	\$ -	\$ 12,500
5.31.88 Buttonville - Open Space Block South	2027	\$ 12,500	\$ -	\$ 12,500	0%	\$ -	\$ 12,500	\$ -	\$ -	\$ -	\$ 12,500
5.31.89 Enterprise Drive Central Park South	2027	\$ 81,250	\$ -	\$ 81,250	0%	\$ -	\$ 81,250	\$ -	\$ -	\$ -	\$ 81,250
5.31.90 Glenbar Gardens West Park	2027	\$ 48,750	\$ -	\$ 48,750	0%	\$ -	\$ 48,750	\$ -	\$ -	\$ -	\$ 48,750
5.31.91 Langstaff - Transit Green Park	2027	\$ 25,000	\$ -	\$ 25,000	0%	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ 25,000
5.31.92 Langstaff Gateway - Cedar Park	2027	\$ 125,000	\$ -	\$ 125,000	0%	\$ -	\$ 125,000	\$ -	\$ -	\$ -	\$ 125,000

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description		Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
						Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
5.31.93	Langstaff Gateway - Hub Green	2027	\$ 62,500	\$ -	\$ 62,500	0%	\$ -	\$ 62,500	\$ -	\$ -	\$ -	\$ 62,500
5.31.94	Langstaff Gateway - Linear Park East	2027	\$ 112,500	\$ -	\$ 112,500	0%	\$ -	\$ 112,500	\$ -	\$ -	\$ -	\$ 112,500
5.31.95	Langstaff Gateway - Linear Park West	2027	\$ 62,500	\$ -	\$ 62,500	0%	\$ -	\$ 62,500	\$ -	\$ -	\$ -	\$ 62,500
5.31.96	Langstaff Gateway - Promenade Park	2027	\$ 62,500	\$ -	\$ 62,500	0%	\$ -	\$ 62,500	\$ -	\$ -	\$ -	\$ 62,500
5.31.97	Markham Centre - East Central Parkette	2027	\$ 15,000	\$ -	\$ 15,000	0%	\$ -	\$ 15,000	\$ -	\$ -	\$ -	\$ 15,000
5.31.98	Unionville Home Society Parkette	2027	\$ 56,250	\$ -	\$ 56,250	0%	\$ -	\$ 56,250	\$ -	\$ -	\$ -	\$ 56,250
5.31.99	Aviva Way South Park	2028	\$ 31,250	\$ -	\$ 31,250	0%	\$ -	\$ 31,250	\$ -	\$ -	\$ -	\$ 31,250
5.31.100	Cornell Centre Neighbourhood Park	2028	\$ 26,875	\$ -	\$ 26,875	0%	\$ -	\$ 26,875	\$ -	\$ -	\$ -	\$ 26,875
5.31.101	Enterprise Blvd North West Park	2028	\$ 250,000	\$ -	\$ 250,000	0%	\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ 250,000
5.31.102	Hilton Markham Suites	2028	\$ 62,500	\$ -	\$ 62,500	0%	\$ -	\$ 62,500	\$ -	\$ -	\$ -	\$ 62,500
5.31.103	Main Street Milliken NW Parkette	2028	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000
5.31.104	Markham Centre Baseball Complex	2028	\$ 375,000	\$ -	\$ 375,000	0%	\$ -	\$ 375,000	\$ -	\$ -	\$ -	\$ 375,000
5.31.105	Markham Centre Soccer Complex	2028	\$ 375,000	\$ -	\$ 375,000	0%	\$ -	\$ 375,000	\$ -	\$ -	\$ -	\$ 375,000
5.31.106	Markham Village Town Square	2028	\$ 37,500	\$ -	\$ 37,500	0%	\$ -	\$ 37,500	\$ -	\$ -	\$ -	\$ 37,500
5.31.107	Milliken Main Street South East Park	2028	\$ 37,500	\$ -	\$ 37,500	0%	\$ -	\$ 37,500	\$ -	\$ -	\$ -	\$ 37,500
5.31.108	Milliken Neighbourhood Park	2028	\$ 18,750	\$ -	\$ 18,750	0%	\$ -	\$ 18,750	\$ -	\$ -	\$ -	\$ 18,750
5.31.109	Unionville Gardens - Cenotaph Square	2028	\$ 5,000	\$ -	\$ 5,000	0%	\$ -	\$ 5,000	\$ -	\$ -	\$ -	\$ 5,000
5.31.110	Yonge Dudley Park	2028	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000
5.31.111	Cathedral North Parkette	2029	\$ 31,250	\$ -	\$ 31,250	0%	\$ -	\$ 31,250	\$ -	\$ -	\$ -	\$ 31,250
5.31.112	Clegg Road South West Park	2029	\$ 87,500	\$ -	\$ 87,500	0%	\$ -	\$ 87,500	\$ -	\$ -	\$ -	\$ 87,500
5.31.113	Kennedy Commons	2029	\$ 31,250	\$ -	\$ 31,250	0%	\$ -	\$ 31,250	\$ -	\$ -	\$ -	\$ 31,250
5.31.114	Markham Centre - Active Park	2029	\$ 12,500	\$ -	\$ 12,500	0%	\$ -	\$ 12,500	\$ -	\$ -	\$ -	\$ 12,500
5.31.115	Markham Woodside Square	2029	\$ 81,250	\$ -	\$ 81,250	0%	\$ -	\$ 81,250	\$ -	\$ -	\$ -	\$ 81,250
5.31.116	First Markham Place	2030	\$ 81,250	\$ -	\$ 81,250	0%	\$ -	\$ 81,250	\$ -	\$ -	\$ -	\$ 81,250
5.31.117	Henderson Clark Parkette	2030	\$ 7,500	\$ -	\$ 7,500	0%	\$ -	\$ 7,500	\$ -	\$ -	\$ -	\$ 7,500
5.31.118	Markham Centre/Unionville Parkette	2030	\$ 9,375	\$ -	\$ 9,375	0%	\$ -	\$ 9,375	\$ -	\$ -	\$ -	\$ 9,375
5.31.119	Markham Town Square	2030	\$ 56,250	\$ -	\$ 56,250	0%	\$ -	\$ 56,250	\$ -	\$ -	\$ -	\$ 56,250
5.31.120	Milliken - Market Village	2030	\$ 40,000	\$ -	\$ 40,000	0%	\$ -	\$ 40,000	\$ -	\$ -	\$ -	\$ 40,000
5.31.121	Cathedral Centre Square	2031	\$ 12,500	\$ -	\$ 12,500	0%	\$ -	\$ 12,500	\$ -	\$ -	\$ -	\$ 12,500
5.31.122	Cathedral South Square	2031	\$ 30,000	\$ -	\$ 30,000	0%	\$ -	\$ 30,000	\$ -	\$ -	\$ -	\$ 30,000
5.31.123	Cornell Centre South Neighbourhood Park	2031	\$ 37,500	\$ -	\$ 37,500	0%	\$ -	\$ 37,500	\$ -	\$ -	\$ -	\$ 37,500
Subtotal Walkway & Paths - Concrete			\$ 7,077,875	\$ -	\$ 7,077,875	\$ -		\$ 7,077,875	\$ -	\$ 996,500	\$ 3,171,125	\$ 2,910,250

APPENDIX B.5
TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement	& BTE Shares		Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
5.32 Walkway & Paths - Limestone											
5.32.1 Langstaff - Woodlot Park	2024	\$ 6,200	\$ -	\$ 6,200	0%	\$ -	\$ 6,200	\$ -	\$ -	\$ 6,200	\$ -
Subtotal Walkway & Paths - Limestone		\$ 6,200	\$ -	\$ 6,200		\$ -	\$ 6,200	\$ -	\$ -	\$ 6,200	\$ -
5.33 Washroom Facilities											
5.33.1 Celebration Park	2022	\$ 731,946	\$ -	\$ 731,946	0%	\$ -	\$ 731,946	\$ -	\$ 731,946	\$ -	\$ -
5.33.2 Berczy Glen Community Park	2024	\$ 731,946	\$ -	\$ 731,946	0%	\$ -	\$ 731,946	\$ -	\$ -	\$ 731,946	\$ -
5.33.3 Langstaff - Pomona Creek Park	2024	\$ 731,946	\$ -	\$ 731,946	0%	\$ -	\$ 731,946	\$ -	\$ -	\$ 731,946	\$ -
5.33.4 Leitchcroft Community Park Block 49	2024	\$ 731,946	\$ -	\$ 731,946	0%	\$ -	\$ 731,946	\$ -	\$ -	\$ 731,946	\$ -
5.33.5 Robinson Glen Community Park	2024	\$ 731,946	\$ -	\$ 731,946	0%	\$ -	\$ 731,946	\$ -	\$ -	\$ 731,946	\$ -
5.33.6 Unionville Central Square	2024	\$ 365,973	\$ -	\$ 365,973	0%	\$ -	\$ 365,973	\$ -	\$ -	\$ 365,973	\$ -
5.33.7 Carlton Park	2025	\$ 731,946	\$ -	\$ 731,946	0%	\$ -	\$ 731,946	\$ -	\$ -	\$ 731,946	\$ -
5.33.8 Markham Sports Park	2026	\$ 731,946	\$ -	\$ 731,946	0%	\$ -	\$ 731,946	\$ -	\$ -	\$ 731,946	\$ -
5.33.9 Markham Centre Baseball Complex	2028	\$ 731,946	\$ -	\$ 731,946	0%	\$ -	\$ 731,946	\$ -	\$ -	\$ -	\$ 731,946
5.33.10 Markham Centre Soccer Complex	2028	\$ 731,946	\$ -	\$ 731,946	0%	\$ -	\$ 731,946	\$ -	\$ -	\$ -	\$ 731,946
Subtotal Washroom Facilities		\$ 6,953,487	\$ -	\$ 6,953,487		\$ -	\$ 6,953,487	\$ -	\$ 731,946	\$ 4,757,649	\$ 1,463,892
5.34 Park Development - Community/City-Wide											
5.34.1 Berczy Beckett Park (Cherna Ave.)	2022	\$ 172,072	\$ -	\$ 172,072	0%	\$ -	\$ 172,072	\$ -	\$ 172,072	\$ -	\$ -
5.34.2 Berczy Glen Central Parkette - Block 291	2022	\$ 196,175	\$ -	\$ 196,175	0%	\$ -	\$ 196,175	\$ -	\$ 196,175	\$ -	\$ -
5.34.3 Berczy Glen North Parkette - Block 172	2022	\$ 453,161	\$ -	\$ 453,161	0%	\$ -	\$ 453,161	\$ -	\$ 453,161	\$ -	\$ -
5.34.4 Berczy Glen Northwest Parkette - Block 170	2022	\$ 129,746	\$ -	\$ 129,746	0%	\$ -	\$ 129,746	\$ -	\$ 129,746	\$ -	\$ -
5.34.5 Berczy Glen West Parkette - Block 171	2022	\$ 381,623	\$ -	\$ 381,623	0%	\$ -	\$ 381,623	\$ -	\$ 381,623	\$ -	\$ -
5.34.6 Blodwen Davies Park	2022	\$ 1,468,792	\$ -	\$ 1,468,792	0%	\$ -	\$ 1,468,792	\$ -	\$ 1,468,792	\$ -	\$ -
5.34.7 Celebration Park	2022	\$ 5,571,501	\$ -	\$ 5,571,501	0%	\$ -	\$ 5,571,501	\$ -	\$ 5,571,501	\$ -	\$ -
5.34.8 City-wide Growth Related Capital Program & Delivery	2022	\$ 2,510,170	\$ -	\$ 2,510,170	0%	\$ -	\$ 2,510,170	\$ -	\$ 2,510,170	\$ -	\$ -
5.34.9 Franklin Carmichael Park - Multi-Purpose Court	2022	\$ 177,514	\$ -	\$ 177,514	0%	\$ -	\$ 177,514	\$ -	\$ 177,514	\$ -	\$ -
5.34.10 Green Lane Park	2022	\$ 266,042	\$ -	\$ 266,042	0%	\$ -	\$ 266,042	\$ -	\$ 266,042	\$ -	\$ -
5.34.11 Markham Centre Trails	2022	\$ 518,325	\$ -	\$ 518,325	0%	\$ -	\$ 518,325	\$ -	\$ 518,325	\$ -	\$ -
5.34.12 Markham Centre-Rougeside Promenade Parks	2022	\$ 1,955,281	\$ -	\$ 1,955,281	0%	\$ -	\$ 1,955,281	\$ -	\$ 1,955,281	\$ -	\$ -
5.34.13 Off Leash Dog Area - Paddock Park	2022	\$ 516,202	\$ -	\$ 516,202	0%	\$ -	\$ 516,202	\$ -	\$ 516,202	\$ -	\$ -
5.34.14 Off Road Trails	2022	\$ 1,399,455	\$ -	\$ 1,399,455	0%	\$ -	\$ 1,399,455	\$ -	\$ 1,399,455	\$ -	\$ -
5.34.15 Victoria Square West Village	2022	\$ 367,867	\$ -	\$ 367,867	0%	\$ -	\$ 367,867	\$ -	\$ 367,867	\$ -	\$ -
5.34.16 Woodbine By-Pass North Park	2022	\$ 390,222	\$ -	\$ 390,222	0%	\$ -	\$ 390,222	\$ -	\$ 390,222	\$ -	\$ -
5.34.17 Yonge Grandview	2022	\$ 273,256	\$ -	\$ 273,256	0%	\$ -	\$ 273,256	\$ -	\$ 273,256	\$ -	\$ -
5.34.18 York Downs Kennedy Road Parkette - Block 5	2022	\$ 717,905	\$ -	\$ 717,905	0%	\$ -	\$ 717,905	\$ -	\$ 717,905	\$ -	\$ -
5.34.19 Berczy Glen North Park - Block 207	2023	\$ 710,135	\$ -	\$ 710,135	0%	\$ -	\$ 710,135	\$ -	\$ 710,135	\$ -	\$ -
5.34.20 Berczy Glen Southeast Parkette - Block 307	2023	\$ 332,590	\$ -	\$ 332,590	0%	\$ -	\$ 332,590	\$ -	\$ 332,590	\$ -	\$ -
5.34.21 Berczy Glen Southwest Parkette Block 327	2023	\$ 310,990	\$ -	\$ 310,990	0%	\$ -	\$ 310,990	\$ -	\$ 121,831	\$ 189,159	\$ -
5.34.22 Birchmount Drive West Park	2023	\$ 242,550	\$ -	\$ 242,550	0%	\$ -	\$ 242,550	\$ -	\$ -	\$ 242,550	\$ -
5.34.23 City-wide Growth Related Capital Program & Delivery	2023	\$ 2,510,170	\$ -	\$ 2,510,170	0%	\$ -	\$ 2,510,170	\$ -	\$ -	\$ 2,510,170	\$ -
5.34.24 Markham Centre - Chimenti Court Park	2023	\$ 756,873	\$ -	\$ 756,873	0%	\$ -	\$ 756,873	\$ -	\$ -	\$ 756,873	\$ -
5.34.25 Villages Of Fairtree East Neighbourhood Park	2023	\$ 946,193	\$ -	\$ 946,193	0%	\$ -	\$ 946,193	\$ -	\$ -	\$ 946,193	\$ -
5.34.26 Ward 2 Off Leash Dog Park	2023	\$ 516,202	\$ -	\$ 516,202	0%	\$ -	\$ 516,202	\$ -	\$ -	\$ 516,202	\$ -
5.34.27 Ward 3 Off Leash Dog Park	2023	\$ 516,202	\$ -	\$ 516,202	0%	\$ -	\$ 516,202	\$ -	\$ -	\$ 516,202	\$ -
5.34.28 Ward 4 Off Leash Dog Park	2023	\$ 516,202	\$ -	\$ 516,202	0%	\$ -	\$ 516,202	\$ -	\$ -	\$ 516,202	\$ -
5.34.29 Ward 5 Off Leash Dog Park	2023	\$ 516,202	\$ -	\$ 516,202	0%	\$ -	\$ 516,202	\$ -	\$ -	\$ 516,202	\$ -
5.34.30 Ward 6 Off Leash Dog Park	2023	\$ 516,202	\$ -	\$ 516,202	0%	\$ -	\$ 516,202	\$ -	\$ -	\$ 516,202	\$ -
5.34.31 Ward 7 Off Leash Dog Park	2023	\$ 516,202	\$ -	\$ 516,202	0%	\$ -	\$ 516,202	\$ -	\$ -	\$ 516,202	\$ -
5.34.32 Ward 8 Off Leash Dog Park	2023	\$ 516,202	\$ -	\$ 516,202	0%	\$ -	\$ 516,202	\$ -	\$ -	\$ 516,202	\$ -

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TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement	& BTE Shares		Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
5.34.33 Markham Centre Trails	2023	\$ 518,325	\$ -	\$ 518,325	0%	\$ -	\$ 518,325	\$ -	\$ -	\$ 518,325	\$ -
5.34.34 Off Road Trails	2023	\$ 1,399,455	\$ -	\$ 1,399,455	0%	\$ -	\$ 1,399,455	\$ -	\$ -	\$ 1,399,455	\$ -
5.34.35 16th Avenue Parkette	2024	\$ 42,267	\$ -	\$ 42,267	0%	\$ -	\$ 42,267	\$ -	\$ -	\$ 42,267	\$ -
5.34.36 Bayview North Parkette	2024	\$ 167,221	\$ -	\$ 167,221	0%	\$ -	\$ 167,221	\$ -	\$ -	\$ 167,221	\$ -
5.34.37 Berczy Glen Community Park	2024	\$ 4,221,914	\$ -	\$ 4,221,914	0%	\$ -	\$ 4,221,914	\$ -	\$ -	\$ 4,221,914	\$ -
5.34.38 Cathedral Town Parkette	2024	\$ 469,570	\$ -	\$ 469,570	0%	\$ -	\$ 469,570	\$ -	\$ -	\$ 469,570	\$ -
5.34.39 City-wide Growth Related Capital Program & Delivery	2024	\$ 2,510,170	\$ -	\$ 2,510,170	0%	\$ -	\$ 2,510,170	\$ -	\$ -	\$ 2,510,170	\$ -
5.34.40 Cornell Centre East Parkette	2024	\$ 733,191	\$ -	\$ 733,191	0%	\$ -	\$ 733,191	\$ -	\$ -	\$ 733,191	\$ -
5.34.41 Cornell Centre West Parkette	2024	\$ 202,776	\$ -	\$ 202,776	0%	\$ -	\$ 202,776	\$ -	\$ -	\$ 202,776	\$ -
5.34.42 East Neighbourhood Park	2024	\$ 1,244,135	\$ -	\$ 1,244,135	0%	\$ -	\$ 1,244,135	\$ -	\$ -	\$ 1,244,135	\$ -
5.34.43 Highway 7 North East Neighbourhood Park	2024	\$ 153,626	\$ -	\$ 153,626	0%	\$ -	\$ 153,626	\$ -	\$ -	\$ 153,626	\$ -
5.34.44 Innovation Park	2024	\$ 1,829,513	\$ -	\$ 1,829,513	0%	\$ -	\$ 1,829,513	\$ -	\$ -	\$ 1,829,513	\$ -
5.34.45 Langstaff - Pomona Creek Park	2024	\$ 2,898,974	\$ -	\$ 2,898,974	0%	\$ -	\$ 2,898,974	\$ -	\$ -	\$ 2,898,974	\$ -
5.34.46 Langstaff - Woodlot Park	2024	\$ 1,522,196	\$ -	\$ 1,522,196	0%	\$ -	\$ 1,522,196	\$ -	\$ -	\$ 1,522,196	\$ -
5.34.47 Leitchcroft Community Park Block 49	2024	\$ 1,481,305	\$ -	\$ 1,481,305	0%	\$ -	\$ 1,481,305	\$ -	\$ -	\$ 1,481,305	\$ -
5.34.48 Leitchcroft Neighbourhood Park Block 46	2024	\$ 637,725	\$ -	\$ 637,725	0%	\$ -	\$ 637,725	\$ -	\$ -	\$ 637,725	\$ -
5.34.49 Markham Centre Trails	2024	\$ 518,325	\$ -	\$ 518,325	0%	\$ -	\$ 518,325	\$ -	\$ -	\$ 518,325	\$ -
5.34.50 Markham Road North East Park	2024	\$ 323,358	\$ -	\$ 323,358	0%	\$ -	\$ 323,358	\$ -	\$ -	\$ 323,358	\$ -
5.34.51 Off Road Trails	2024	\$ 1,399,455	\$ -	\$ 1,399,455	0%	\$ -	\$ 1,399,455	\$ -	\$ -	\$ 1,399,455	\$ -
5.34.52 Robinson Glen Central Neighbourhood Park	2024	\$ 1,149,102	\$ -	\$ 1,149,102	0%	\$ -	\$ 1,149,102	\$ -	\$ -	\$ 1,149,102	\$ -
5.34.53 Robinson Glen Central Parkette	2024	\$ 125,552	\$ -	\$ 125,552	0%	\$ -	\$ 125,552	\$ -	\$ -	\$ 125,552	\$ -
5.34.54 Robinson Glen Community Park	2024	\$ 4,539,821	\$ -	\$ 4,539,821	0%	\$ -	\$ 4,539,821	\$ -	\$ -	\$ 4,539,821	\$ -
5.34.55 Robinson Glen East Neighbourhood Park	2024	\$ 1,146,644	\$ -	\$ 1,146,644	0%	\$ -	\$ 1,146,644	\$ -	\$ -	\$ 1,146,644	\$ -
5.34.56 Robinson Glen Northeast Neighbourhood Park	2024	\$ 1,439,682	\$ -	\$ 1,439,682	0%	\$ -	\$ 1,439,682	\$ -	\$ -	\$ 1,439,682	\$ -
5.34.57 Robinson Glen Northwest Parkette - Block 928	2024	\$ 281,471	\$ -	\$ 281,471	0%	\$ -	\$ 281,471	\$ -	\$ -	\$ 281,471	\$ -
5.34.58 Robinson Glen Southeast Neighbourhood Park	2024	\$ 1,869,298	\$ -	\$ 1,869,298	0%	\$ -	\$ 1,869,298	\$ -	\$ -	\$ 1,869,298	\$ -
5.34.59 Robinson Glen Southwest Parkette - Block 929	2024	\$ 172,874	\$ -	\$ 172,874	0%	\$ -	\$ 172,874	\$ -	\$ -	\$ 172,874	\$ -
5.34.60 Rougeside Promenade North West Park	2024	\$ 964,845	\$ -	\$ 964,845	0%	\$ -	\$ 964,845	\$ -	\$ -	\$ 964,845	\$ -
5.34.61 Royal Orchard South East Parkette	2024	\$ 429,101	\$ -	\$ 429,101	0%	\$ -	\$ 429,101	\$ -	\$ -	\$ 429,101	\$ -
5.34.62 South Cornell Neighbourhood Park	2024	\$ 706,419	\$ -	\$ 706,419	0%	\$ -	\$ 706,419	\$ -	\$ -	\$ 706,419	\$ -
5.34.63 South Cornell Parkette - Block 156	2024	\$ 390,454	\$ -	\$ 390,454	0%	\$ -	\$ 390,454	\$ -	\$ -	\$ 390,454	\$ -
5.34.64 South Cornell Parkette - Block 159	2024	\$ 54,519	\$ -	\$ 54,519	0%	\$ -	\$ 54,519	\$ -	\$ -	\$ 54,519	\$ -
5.34.65 South Cornell Subdivision - Block 150	2024	\$ 81,992	\$ -	\$ 81,992	0%	\$ -	\$ 81,992	\$ -	\$ -	\$ 81,992	\$ -
5.34.66 Unionville Central Square	2024	\$ 125,622	\$ -	\$ 125,622	0%	\$ -	\$ 125,622	\$ -	\$ -	\$ 125,622	\$ -
5.34.67 West Neighbourhood Park	2024	\$ 1,244,135	\$ -	\$ 1,244,135	0%	\$ -	\$ 1,244,135	\$ -	\$ -	\$ 1,244,135	\$ -
5.34.68 York Downs East Parkette - Block 6	2024	\$ 599,658	\$ -	\$ 599,658	0%	\$ -	\$ 599,658	\$ -	\$ -	\$ 599,658	\$ -
5.34.69 Angus Glen East Neighbourhood Park	2025	\$ 1,352,123	\$ -	\$ 1,352,123	0%	\$ -	\$ 1,352,123	\$ -	\$ -	\$ 1,352,123	\$ -
5.34.70 Berczy Glen Southwest Neighbourhood Park	2025	\$ 1,224,162	\$ -	\$ 1,224,162	0%	\$ -	\$ 1,224,162	\$ -	\$ -	\$ 1,224,162	\$ -
5.34.71 Birchmount Drive East Park	2025	\$ 262,990	\$ -	\$ 262,990	0%	\$ -	\$ 262,990	\$ -	\$ -	\$ 262,990	\$ -
5.34.72 Carlton Park	2025	\$ 2,484,952	\$ -	\$ 2,484,952	0%	\$ -	\$ 2,484,952	\$ -	\$ -	\$ 2,484,952	\$ -
5.34.73 Circa Drive East Park	2025	\$ 341,043	\$ -	\$ 341,043	0%	\$ -	\$ 341,043	\$ -	\$ -	\$ 341,043	\$ -
5.34.74 Circa Drive West Park	2025	\$ 1,019,394	\$ -	\$ 1,019,394	0%	\$ -	\$ 1,019,394	\$ -	\$ -	\$ 1,019,394	\$ -
5.34.75 City-wide Growth Related Capital Program & Delivery	2025	\$ 2,510,170	\$ -	\$ 2,510,170	0%	\$ -	\$ 2,510,170	\$ -	\$ -	\$ 2,510,170	\$ -
5.34.76 McCowan Road Neighbourhood Park	2025	\$ 407,702	\$ -	\$ 407,702	0%	\$ -	\$ 407,702	\$ -	\$ -	\$ 407,702	\$ -
5.34.77 North Neighbourhood Park	2025	\$ 1,244,135	\$ -	\$ 1,244,135	0%	\$ -	\$ 1,244,135	\$ -	\$ -	\$ 1,244,135	\$ -
5.34.78 Rougeside Promenade West Parks	2025	\$ 5,019,637	\$ -	\$ 5,019,637	0%	\$ -	\$ 5,019,637	\$ -	\$ -	\$ 5,019,637	\$ -
5.34.79 Sheridan Nurseries Neighbourhood Park	2025	\$ 852,746	\$ -	\$ 852,746	0%	\$ -	\$ 852,746	\$ -	\$ -	\$ 852,746	\$ -
5.34.80 South Neighbourhood Park	2025	\$ 1,244,135	\$ -	\$ 1,244,135	0%	\$ -	\$ 1,244,135	\$ -	\$ -	\$ 1,244,135	\$ -

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TABLE B.5-2

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PARK DEVELOPMENT & FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement	& BTE Shares		Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
5.34.81 Markham Centre Trails	2025	\$ 518,325	\$ -	\$ 518,325	0%	\$ -	\$ 518,325	\$ -	\$ -	\$ 518,325	\$ -
5.34.82 Off Road Trails	2025	\$ 1,399,455	\$ -	\$ 1,399,455	0%	\$ -	\$ 1,399,455	\$ -	\$ -	\$ 1,399,455	\$ -
5.34.83 Thornhill Centre Timber Creek Parkette	2025	\$ 351,750	\$ -	\$ 351,750	0%	\$ -	\$ 351,750	\$ -	\$ -	\$ 351,750	\$ -
5.34.84 Victoria Glen Neighbourhood Park	2025	\$ 1,139,319	\$ -	\$ 1,139,319	0%	\$ -	\$ 1,139,319	\$ -	\$ -	\$ 1,139,319	\$ -
5.34.85 York Downs School - Block 4	2025	\$ 1,497,376	\$ -	\$ 1,497,376	0%	\$ -	\$ 1,497,376	\$ -	\$ -	\$ 1,497,376	\$ -
5.34.86 Andre De Grasse Street East Park	2026	\$ 2,615,457	\$ -	\$ 2,615,457	0%	\$ -	\$ 2,615,457	\$ -	\$ -	\$ 2,615,457	\$ -
5.34.87 City-wide Growth Related Capital Program & Delivery	2026	\$ 2,510,170	\$ -	\$ 2,510,170	0%	\$ -	\$ 2,510,170	\$ -	\$ -	\$ 2,510,170	\$ -
5.34.88 Highway 7 North West Neighbourhood Park	2026	\$ 640,561	\$ -	\$ 640,561	0%	\$ -	\$ 640,561	\$ -	\$ -	\$ 640,561	\$ -
5.34.89 Kennedy Road South East Park	2026	\$ 273,772	\$ -	\$ 273,772	0%	\$ -	\$ 273,772	\$ -	\$ -	\$ 273,772	\$ -
5.34.90 King'S Square	2026	\$ 257,545	\$ -	\$ 257,545	0%	\$ -	\$ 257,545	\$ -	\$ -	\$ 257,545	\$ -
5.34.91 Markham Centre - Aryeh Strata Park	2026	\$ 1,769,760	\$ -	\$ 1,769,760	0%	\$ -	\$ 1,769,760	\$ -	\$ -	\$ 1,769,760	\$ -
5.34.92 Markham Centre Neighbourhood Park	2026	\$ 1,958,719	\$ -	\$ 1,958,719	0%	\$ -	\$ 1,958,719	\$ -	\$ -	\$ 1,958,719	\$ -
5.34.93 Markham Centre Trails	2026	\$ 518,325	\$ -	\$ 518,325	0%	\$ -	\$ 518,325	\$ -	\$ -	\$ 518,325	\$ -
5.34.94 Markham Sports Park	2026	\$ 24,102,061	\$ -	\$ 24,102,061	0%	\$ -	\$ 24,102,061	\$ -	\$ -	\$ 24,102,061	\$ -
5.34.95 Markham Square East Parkette	2026	\$ 717,661	\$ -	\$ 717,661	0%	\$ -	\$ 717,661	\$ -	\$ -	\$ 717,661	\$ -
5.34.96 Markham Square South West Parkette	2026	\$ 35,769	\$ -	\$ 35,769	0%	\$ -	\$ 35,769	\$ -	\$ -	\$ 35,769	\$ -
5.34.97 Markham Square West Parkette	2026	\$ 753,906	\$ -	\$ 753,906	0%	\$ -	\$ 753,906	\$ -	\$ -	\$ 753,906	\$ -
5.34.98 Off Road Trails	2026	\$ 1,399,455	\$ -	\$ 1,399,455	0%	\$ -	\$ 1,399,455	\$ -	\$ -	\$ 1,399,455	\$ -
5.34.99 Rougeside Promenade South West Park	2026	\$ 844,346	\$ -	\$ 844,346	0%	\$ -	\$ 844,346	\$ -	\$ -	\$ 844,346	\$ -
5.34.100 Shops On Steeles	2026	\$ 432,219	\$ -	\$ 432,219	0%	\$ -	\$ 432,219	\$ -	\$ -	\$ 432,219	\$ -
5.34.101 South Town Centre Blvd North West Park	2026	\$ 354,368	\$ -	\$ 354,368	0%	\$ -	\$ 354,368	\$ -	\$ -	\$ 354,368	\$ -
5.34.102 Unionville Market Square	2026	\$ 52,080	\$ -	\$ 52,080	0%	\$ -	\$ 52,080	\$ -	\$ -	\$ 52,080	\$ -
5.34.103 Warden West Valley Edge Park	2026	\$ 643,769	\$ -	\$ 643,769	0%	\$ -	\$ 643,769	\$ -	\$ -	\$ 643,769	\$ -
5.34.104 Ymca Park East	2026	\$ 993,563	\$ -	\$ 993,563	0%	\$ -	\$ 993,563	\$ -	\$ -	\$ 993,563	\$ -
5.34.105 Ymca Park West	2026	\$ 1,064,129	\$ -	\$ 1,064,129	0%	\$ -	\$ 1,064,129	\$ -	\$ -	\$ 1,064,129	\$ -
5.34.106 York Downs West Gateway Park - Block 20	2026	\$ 1,049,542	\$ -	\$ 1,049,542	0%	\$ -	\$ 1,049,542	\$ -	\$ -	\$ 1,049,542	\$ -
5.34.107 York Downs West Large Lot Park - Block 21	2026	\$ 859,470	\$ -	\$ 859,470	0%	\$ -	\$ 859,470	\$ -	\$ -	\$ 859,470	\$ -
5.34.108 York Downs West Park - Block 22	2026	\$ 372,400	\$ -	\$ 372,400	0%	\$ -	\$ 372,400	\$ -	\$ -	\$ 372,400	\$ -
5.34.109 York Downs West Parkette - Block 23	2026	\$ 96,420	\$ -	\$ 96,420	0%	\$ -	\$ 96,420	\$ -	\$ -	\$ 96,420	\$ -
5.34.110 York Downs West Parkette - Block 24	2026	\$ 386,558	\$ -	\$ 386,558	0%	\$ -	\$ 386,558	\$ -	\$ -	\$ 386,558	\$ -

APPENDIX B.5
TABLE B.5-2
CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement	& BTE Shares		Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
5.34.111 Angus Glen Central Neighbourhood Park	2027	\$ 1,197,743	\$ -	\$ 1,197,743	0%	\$ -	\$ 1,197,743	\$ -	\$ -	\$ 1,197,743	\$ -
5.34.112 Angus Glen Community Park South	2027	\$ 4,923,427	\$ -	\$ 4,923,427	0%	\$ -	\$ 4,923,427	\$ -	\$ -	\$ 2,666,562	\$ 2,256,865
5.34.113 Angus Glen Urban Park East	2027	\$ 372,010	\$ -	\$ 372,010	0%	\$ -	\$ 372,010	\$ -	\$ -	\$ -	\$ 372,010
5.34.114 Bayview South Parkette	2027	\$ 656,085	\$ -	\$ 656,085	0%	\$ -	\$ 656,085	\$ -	\$ -	\$ -	\$ 656,085
5.34.115 Berczy Glen Northwest Neighbourhood Park	2027	\$ 1,307,352	\$ -	\$ 1,307,352	0%	\$ -	\$ 1,307,352	\$ -	\$ -	\$ -	\$ 1,307,352
5.34.116 Buttonville - Open Space Block North	2027	\$ 208,976	\$ -	\$ 208,976	0%	\$ -	\$ 208,976	\$ -	\$ -	\$ -	\$ 208,976
5.34.117 Buttonville - Open Space Block South	2027	\$ 335,179	\$ -	\$ 335,179	0%	\$ -	\$ 335,179	\$ -	\$ -	\$ -	\$ 335,179
5.34.118 City-wide Growth Related Capital Program & Delivery	2027	\$ 2,510,170	\$ -	\$ 2,510,170	0%	\$ -	\$ 2,510,170	\$ -	\$ -	\$ -	\$ 2,510,170
5.34.119 Enterprise Drive Central Park South	2027	\$ 3,043,093	\$ -	\$ 3,043,093	0%	\$ -	\$ 3,043,093	\$ -	\$ -	\$ -	\$ 3,043,093
5.34.120 Glenbar Gardens West Park	2027	\$ 291,544	\$ -	\$ 291,544	0%	\$ -	\$ 291,544	\$ -	\$ -	\$ -	\$ 291,544
5.34.121 Langstaff - Transit Green Park	2027	\$ 160,582	\$ -	\$ 160,582	0%	\$ -	\$ 160,582	\$ -	\$ -	\$ -	\$ 160,582
5.34.122 Langstaff Gateway - Cedar Park	2027	\$ 1,534,529	\$ -	\$ 1,534,529	0%	\$ -	\$ 1,534,529	\$ -	\$ -	\$ -	\$ 1,534,529
5.34.123 Langstaff Gateway - Hub Green	2027	\$ 1,102,048	\$ -	\$ 1,102,048	0%	\$ -	\$ 1,102,048	\$ -	\$ -	\$ -	\$ 1,102,048
5.34.124 Langstaff Gateway - Linear Park East	2027	\$ 1,756,735	\$ -	\$ 1,756,735	0%	\$ -	\$ 1,756,735	\$ -	\$ -	\$ -	\$ 1,756,735
5.34.125 Langstaff Gateway - Linear Park West	2027	\$ 1,070,750	\$ -	\$ 1,070,750	0%	\$ -	\$ 1,070,750	\$ -	\$ -	\$ -	\$ 1,070,750
5.34.126 Langstaff Gateway - Promenade Park	2027	\$ 332,421	\$ -	\$ 332,421	0%	\$ -	\$ 332,421	\$ -	\$ -	\$ -	\$ 332,421
5.34.127 Markham Centre - East Central Parkette	2027	\$ 779,085	\$ -	\$ 779,085	0%	\$ -	\$ 779,085	\$ -	\$ -	\$ -	\$ 779,085
5.34.128 Markham Centre Trails	2027	\$ 518,325	\$ -	\$ 518,325	0%	\$ -	\$ 518,325	\$ -	\$ -	\$ -	\$ 518,325
5.34.129 Off Road Trails	2027	\$ 1,399,455	\$ -	\$ 1,399,455	0%	\$ -	\$ 1,399,455	\$ -	\$ -	\$ -	\$ 1,399,455
5.34.130 Unionville Home Society Parkette	2027	\$ 251,952	\$ -	\$ 251,952	0%	\$ -	\$ 251,952	\$ -	\$ -	\$ -	\$ 251,952
5.34.131 Aviva Way South Park	2028	\$ 391,637	\$ -	\$ 391,637	0%	\$ -	\$ 391,637	\$ -	\$ -	\$ -	\$ 391,637
5.34.132 City-wide Growth Related Capital Program & Delivery	2028	\$ 2,510,170	\$ -	\$ 2,510,170	0%	\$ -	\$ 2,510,170	\$ -	\$ -	\$ -	\$ 2,510,170
5.34.133 Cornell Centre Neighbourhood Park	2028	\$ 388,398	\$ -	\$ 388,398	0%	\$ -	\$ 388,398	\$ -	\$ -	\$ -	\$ 388,398
5.34.134 Enterprise Blvd North West Park	2028	\$ 2,522,708	\$ -	\$ 2,522,708	0%	\$ -	\$ 2,522,708	\$ -	\$ -	\$ -	\$ 2,522,708
5.34.135 Hilton Markham Suites	2028	\$ 425,389	\$ -	\$ 425,389	0%	\$ -	\$ 425,389	\$ -	\$ -	\$ -	\$ 425,389
5.34.136 Main Street Milliken NW Parkette	2028	\$ 341,741	\$ -	\$ 341,741	0%	\$ -	\$ 341,741	\$ -	\$ -	\$ -	\$ 341,741
5.34.137 Markham Centre Baseball Complex	2028	\$ 6,995,560	\$ -	\$ 6,995,560	0%	\$ -	\$ 6,995,560	\$ -	\$ -	\$ -	\$ 6,995,560
5.34.138 Markham Centre Soccer Complex	2028	\$ 5,138,124	\$ -	\$ 5,138,124	0%	\$ -	\$ 5,138,124	\$ -	\$ -	\$ -	\$ 5,138,124
5.34.139 Markham New World Centre	2028	\$ 1,137,770	\$ -	\$ 1,137,770	0%	\$ -	\$ 1,137,770	\$ -	\$ -	\$ -	\$ 1,137,770
5.34.140 Markham Village Town Square	2028	\$ 454,869	\$ -	\$ 454,869	0%	\$ -	\$ 454,869	\$ -	\$ -	\$ -	\$ 454,869
5.34.141 Milliken Main Street South East Park	2028	\$ 363,116	\$ -	\$ 363,116	0%	\$ -	\$ 363,116	\$ -	\$ -	\$ -	\$ 363,116
5.34.142 Milliken Neighbourhood Park	2028	\$ 668,008	\$ -	\$ 668,008	0%	\$ -	\$ 668,008	\$ -	\$ -	\$ -	\$ 668,008

APPENDIX B.5

TABLE B.5-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
PARK DEVELOPMENT & FACILITIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
					Replacement	& BTE Shares		Prior Growth	Available DC Reserves	2022- 2031	Other Dev. Related Costs
5.34.143 Markham Centre Trails	2028	\$ 518,325	\$ -	\$ 518,325	0%	\$ -	\$ 518,325	\$ -	\$ -	\$ -	\$ 518,325
5.34.144 Off Road Trails	2028	\$ 1,399,455	\$ -	\$ 1,399,455	0%	\$ -	\$ 1,399,455	\$ -	\$ -	\$ -	\$ 1,399,455
5.34.145 Unionville Gardens - Cenotaph Square	2028	\$ 68,666	\$ -	\$ 68,666	0%	\$ -	\$ 68,666	\$ -	\$ -	\$ -	\$ 68,666
5.34.146 Yonge Dudley Park	2028	\$ 767,041	\$ -	\$ 767,041	0%	\$ -	\$ 767,041	\$ -	\$ -	\$ -	\$ 767,041
5.34.147 Cathedral North Parkette	2029	\$ 215,749	\$ -	\$ 215,749	0%	\$ -	\$ 215,749	\$ -	\$ -	\$ -	\$ 215,749
5.34.148 City-wide Growth Related Capital Program & Delivery	2029	\$ 2,510,170	\$ -	\$ 2,510,170	0%	\$ -	\$ 2,510,170	\$ -	\$ -	\$ -	\$ 2,510,170
5.34.149 Clegg Road South West Park	2029	\$ 2,759,104	\$ -	\$ 2,759,104	0%	\$ -	\$ 2,759,104	\$ -	\$ -	\$ -	\$ 2,759,104
5.34.150 Kennedy Commons	2029	\$ 238,002	\$ -	\$ 238,002	0%	\$ -	\$ 238,002	\$ -	\$ -	\$ -	\$ 238,002
5.34.151 Markham Centre - Active Park	2029	\$ 1,077,051	\$ -	\$ 1,077,051	0%	\$ -	\$ 1,077,051	\$ -	\$ -	\$ -	\$ 1,077,051
5.34.152 Markham Centre Trails	2029	\$ 518,325	\$ -	\$ 518,325	0%	\$ -	\$ 518,325	\$ -	\$ -	\$ -	\$ 518,325
5.34.153 Markham Woodside Square	2029	\$ 2,955,187	\$ -	\$ 2,955,187	0%	\$ -	\$ 2,955,187	\$ -	\$ -	\$ -	\$ 2,955,187
5.34.154 Off Road Trails	2029	\$ 1,399,455	\$ -	\$ 1,399,455	0%	\$ -	\$ 1,399,455	\$ -	\$ -	\$ -	\$ 1,399,455
5.34.155 City-wide Growth Related Capital Program & Delivery	2030	\$ 2,510,170	\$ -	\$ 2,510,170	0%	\$ -	\$ 2,510,170	\$ -	\$ -	\$ -	\$ 2,510,170
5.34.156 First Markham Place	2030	\$ 2,577,174	\$ -	\$ 2,577,174	0%	\$ -	\$ 2,577,174	\$ -	\$ -	\$ -	\$ 2,577,174
5.34.157 Henderson Clark Parkette	2030	\$ 127,339	\$ -	\$ 127,339	0%	\$ -	\$ 127,339	\$ -	\$ -	\$ -	\$ 127,339
5.34.158 Markham Centre Trails	2030	\$ 518,325	\$ -	\$ 518,325	0%	\$ -	\$ 518,325	\$ -	\$ -	\$ -	\$ 518,325
5.34.159 Markham Centre/Unionville Parkette	2030	\$ 561,184	\$ -	\$ 561,184	0%	\$ -	\$ 561,184	\$ -	\$ -	\$ -	\$ 561,184
5.34.160 Markham Town Square	2030	\$ 348,377	\$ -	\$ 348,377	0%	\$ -	\$ 348,377	\$ -	\$ -	\$ -	\$ 348,377
5.34.161 Milliken - Market Village	2030	\$ 1,413,401	\$ -	\$ 1,413,401	0%	\$ -	\$ 1,413,401	\$ -	\$ -	\$ -	\$ 1,413,401
5.34.162 Off Road Trails	2030	\$ 1,399,455	\$ -	\$ 1,399,455	0%	\$ -	\$ 1,399,455	\$ -	\$ -	\$ -	\$ 1,399,455
5.34.163 Cathedral Centre Square	2031	\$ 563,469	\$ -	\$ 563,469	0%	\$ -	\$ 563,469	\$ -	\$ -	\$ -	\$ 563,469
5.34.164 Cathedral South Square	2031	\$ 959,583	\$ -	\$ 959,583	0%	\$ -	\$ 959,583	\$ -	\$ -	\$ -	\$ 959,583
5.34.165 City-wide Growth Related Capital Program & Delivery	2031	\$ 2,510,170	\$ -	\$ 2,510,170	0%	\$ -	\$ 2,510,170	\$ -	\$ -	\$ -	\$ 2,510,170
5.34.166 Cornell Centre South Neighbourhood Park	2031	\$ 436,334	\$ -	\$ 436,334	0%	\$ -	\$ 436,334	\$ -	\$ -	\$ -	\$ 436,334
5.34.167 Markham Centre Trails	2031	\$ 518,325	\$ -	\$ 518,325	0%	\$ -	\$ 518,325	\$ -	\$ -	\$ -	\$ 518,325
5.34.168 Off Road Trails	2031	\$ 1,399,455	\$ -	\$ 1,399,455	0%	\$ -	\$ 1,399,455	\$ -	\$ -	\$ -	\$ 1,399,455
Subtotal Park Development - Community/City-Wide		\$ 207,412,595	\$ -	\$ 207,412,595		\$ -	\$ 207,412,595	\$ -	\$ 18,629,865	\$ 117,288,793	\$ 71,493,937
TOTAL PARK DEVELOPMENT & FACILITIES		\$ 325,989,933	\$ -	\$ 325,989,933		\$ -	\$ 325,989,933	\$ -	\$ 28,533,849	\$ 169,582,317	\$ 127,873,766.6

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	100%	\$169,582,317
10-Year Growth in Population in New Units		90,381
Unadjusted Development Charge Per Capita		\$1,876.30
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		2,550,244
Unadjusted Development Charge Per Square Metre		\$0.00

2022 - 2031 Net Funding Envelope	\$169,582,317
Reserve Fund Balance	\$28,533,849

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

**CITY OF MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PARK DEVELOPMENT & FACILITIES
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PARK DEVELOPMENT & FACILITIES	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$28,533.85	\$16,865.19	\$19,030.79	(\$32,506.68)	(\$52,636.71)	(\$91,369.52)	(\$80,235.19)	(\$63,207.90)	(\$44,265.93)	(\$23,251.88)	
2022 - 2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$23,292.7	\$3,313.5	\$1,927.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$28,533.8
- Parks And Recreation (New Projects): Non Inflated	\$5,293.9	\$11,842.7	\$64,007.7	\$34,363.5	\$50,210.2	\$3,864.3	\$0.0	\$0.0	\$0.0	\$0.0	\$169,582.3
- Park Development & Facilities: Inflated	\$28,586.6	\$15,459.3	\$68,599.2	\$36,466.8	\$54,349.1	\$4,266.5	\$0.0	\$0.0	\$0.0	\$0.0	\$207,727.5
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	8,094	8,301	8,514	8,733	8,955	9,085	9,315	9,549	9,792	10,043	90,381
REVENUE											
- DC Receipts: Inflated	\$16,258.3	\$17,007.5	\$17,792.8	\$18,615.5	\$19,470.5	\$20,148.2	\$21,071.5	\$22,032.8	\$23,045.4	\$24,108.8	\$199,551.4
INTEREST											
- Interest on Opening Balance	\$998.7	\$590.3	\$666.1	(\$1,787.9)	(\$2,895.0)	(\$5,025.3)	(\$4,412.9)	(\$3,476.4)	(\$2,434.6)	(\$1,278.9)	(\$19,056.0)
- Interest on In-year Transactions	(\$339.0)	\$27.1	(\$1,397.2)	(\$490.9)	(\$959.2)	\$277.9	\$368.8	\$385.6	\$403.3	\$421.9	(\$1,301.7)
TOTAL REVENUE	\$16,917.9	\$17,624.9	\$17,061.7	\$16,336.7	\$15,616.3	\$15,400.8	\$17,027.3	\$18,942.0	\$21,014.0	\$23,251.9	\$179,193.7
CLOSING CASH BALANCE	\$16,865.2	\$19,030.8	(\$32,506.7)	(\$52,636.7)	(\$91,369.5)	(\$80,235.2)	(\$63,207.9)	(\$44,265.9)	(\$23,251.9)	\$0.0	

2022 Adjusted Charge Per Capita **\$2,008.68**

Allocation of Capital Program

Residential Sector	100.0%
Non-Residential Sector	0.0%

Rates for 2022

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

Appendix B.6

Public Works

Appendix B.6: Public Works

The City of Markham Public Works Department operates out of 555 Miller Avenue, East Yard, and 8100 Warden where its main office, storage sheds, salt and sand domes, sign shop and domes are located.

Table B.6-1 2012 - 2021 Historical Service Levels

The ten-year historical inventory of capital assets for Public Works includes 149,200 square feet of building space with a replacement value of \$30.76 million. The 14.67 hectares of land associated with the Public Works buildings are valued at \$58.62 million. Furniture & equipment and fleet add an additional \$2.64 million and \$71.06 million to the value of the Public Works capital assets.

The total value of the Public Works capital infrastructure in 2021 is estimated to be \$163.09 million. The ten-year historical average service level is \$282.86 per net population and employment; when multiplied by the ten-year forecast net population and employment growth (145,660), a ten-year maximum allowable funding envelope of \$41.20 million is the result.

Table B.6-2 2022 – 2031 Development-Related Capital Program and Calculation of the Unadjusted Development Charges

The total 2022 – 2031 development-related capital program for the Public Works department amounts to \$107.79 million.

The Public Works capital program lists several projects including the recovery of the negative Public Works DC reserve fund balance (\$2.35 million), three additional facilities (\$34.10 million) as well as land acquisition (\$63.66 million), furniture, and equipment (\$0.29 million).

Three new facilities include a new garage/office with a construction cost of \$28.43 million, a decanting dome amounting to \$4.78 million, and a weather protected storage unit with a gross cost of \$0.89 million are expected to be constructed in 2025.

Additionally, acquisition of land to accommodate a works yard expansion in 2023 and land development/pavement in 2024 account for \$63.66 million of the total Public Works capital program.

Finally, furniture and equipment for these projects add another \$0.29 in capital costs. The City will acquire a number of vehicles for these projects, including trucks, forklifts, mowers, and tractors, for a total fleet cost of \$7.41 million to the Public Works capital program.

No grants or replacement shares have been identified for this service; as such, the full amount of the Public Works capital program (\$107.79) is deemed eligible for recovery through DCs.

A significant share of the development-related capital program, \$128.31 million, is above the 10-year historic service level net funding envelope and as such, has been removed from the 2022 – 2031 development charges calculation and will be examined for recovery under subsequent DC by-law updates(subject to service level restrictions), other growth-funding tools or other funding sources. These costs are allocated 62 per cent, or \$25.51 million, against new residential development, and 38 per cent, or \$15.69 million, against non-residential development. When divided by the ten-year forecasted population growth in new units (90,380), this yields an unadjusted residential development charge of \$282.26 per capita.

The unadjusted retail development charge is \$7.24 per square metre, while the unadjusted industrial/office/institutional (I.O.I.) charge is \$5.84 per square metre. The unadjusted mixed use charge is \$3.53 per square metre.

Table B.6-3 Cash Flow Analysis

After cash flow analysis, the residential calculated charge increases to \$320.59 per capita. The non-residential charge for retail increases to \$8.28 per square metre and the industrial/office/institutional charge increases to \$6.64 per square metre. The mixed use charge increases to \$4.04 per square metre. This is a reflection of the timing of the capital program and development charges revenues.

The following table summarizes the calculation of the Public Works development charge.

PUBLIC WORKS SUMMARY										
10-year Hist. Service Level per pop & emp	2022 - 2031		Unadjusted Development Charge				Adjusted Development Charge			
	Development-Related Total	Capital Program Net DC Recoverable	Residential \$/capita	Retail \$/sq.m	I.O.I. \$/sq.m	Mixed-Use \$/sq.m	Residential \$/capita	Retail \$/sq.m	I.O.I. \$/sq.m	Mixed-Use \$/sq.m
\$282.86	\$107,794,294	\$41,201,500	\$282.26	\$7.24	\$5.84	\$3.53	\$320.59	\$8.28	\$6.64	\$4.04

APPENDIX B.6

TABLE B.6-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq.ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
555 Miller Ave:											
Garage / Office	33,002	33,002	33,002	33,002	33,002	33,002	33,002	33,002	33,002	33,002	\$379
Metal Storage Shed	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	\$123
Salt Dome Structure	6,450	6,450	6,450	6,450	6,450	6,450	6,450	6,450	-	-	\$123
Salt Barn 1	-	-	-	-	-	-	-	8,678	8,678	8,678	\$123
Salt Barn 2	-	-	-	-	-	-	-	8,678	8,678	8,678	\$123
Sand Dome Structure	6,450	6,450	6,450	6,450	6,450	6,450	6,450	6,450	6,450	6,450	\$123
Sign Shop	3,988	3,988	3,988	3,988	3,988	3,988	3,988	3,988	3,988	3,988	\$379
Wood Dome Structure	7,900	7,900	7,900	7,900	7,900	7,900	7,900	7,900	7,900	7,900	\$123
Wood Storage Shed	560	560	560	560	560	560	560	560	560	560	\$123
Quonset Hut	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	3,200	\$123
East Yard:											
Office Trailer	-	-	-	-	-	-	-	-	-	2,160	\$379
Salt Dome Structure	-	-	-	-	-	-	-	-	-	64,066	\$123
8100 Warden:											
Garage for Fleet Storage	8,050	8,050	8,050	8,050	8,050	8,050	8,050	8,050	8,050	8,050	\$379
Office Space	665	665	665	665	665	665	665	665	665	665	\$615
Total (#)	72,065	72,065	72,065	72,065	72,065	72,065	72,065	89,421	82,971	149,197	
Total (\$000)	\$20,721.4	\$20,721.4	\$20,721.4	\$20,721.4	\$20,721.4	\$20,721.4	\$20,721.4	\$22,856.2	\$22,062.9	\$30,761.6	

APPENDIX B.6

TABLE B.6-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
555 Miller Ave	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11	\$6,384,000
3290 14th Ave	-	-	-	-	-	-	-	-	1.39	1.39	\$6,384,000
East Yard - 10192 Ninth Line	-	-	-	-	-	-	-	-	8.01	8.01	\$950,000
8100 Warden	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	\$13,714,000
Total (ha)	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	14.67	14.67	
Total (\$000)	\$42,146.5	\$42,146.5	\$42,146.5	\$42,146.5	\$42,146.5	\$42,146.5	\$42,146.5	\$42,146.5	\$58,624.2	\$58,624.2	

FURNITURE & EQUIPMENT Facility Name	Total Value of Furniture & Equipment (\$)									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Shop Equipment	\$478,229	\$478,229	\$478,229	\$478,229	\$478,229	\$478,229	\$478,229	\$478,229	\$478,229	\$478,229
Other Equipment	\$682,066	\$682,066	\$682,066	\$682,066	\$682,066	\$682,066	\$682,066	\$682,066	\$682,066	\$682,066
Fuel Station (Gas & Diesel)	-	-	-	-	-	\$283,250	\$283,250	\$283,250	\$283,250	\$283,250
Brine Tanks	\$51,500	\$51,500	\$51,500	\$51,500	\$51,500	\$51,500	\$51,500	\$51,500	\$51,500	\$51,500
Fence Gate and Lighting	-	-	-	-	-	-	-	\$108,150	\$108,150	\$108,150
Fuel Station (Gas & Diesel) - 14th Avenue	-	-	-	-	-	\$113,300	\$113,300	\$113,300	\$113,300	\$113,300
East Yard:										
Brine System	-	-	-	-	-	-	-	-	-	150,000
Scale	-	-	-	-	-	-	-	-	-	215,000
Fuel Station (Gas & Diesel)	-	-	-	-	-	-	-	-	-	220,000
Diesel Generator w/Fuel line	-	-	-	-	-	-	-	-	-	340,000
Total (\$000)	\$1,211.8	\$1,211.8	\$1,211.8	\$1,211.8	\$1,211.8	\$1,608.3	\$1,608.3	\$1,716.5	\$1,716.5	\$2,641.5

APPENDIX B.6

TABLE B.6-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

FLEET & EQUIPMENT Description	# of Fleet										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Utility Truckster	10	10	10	10	8	11	11	11	11	11	\$24,800
Rotary Walkbehind	20	18	16	14	11	5	5	5	5	5	\$9,300
Rotary Mower	8	9	13	15	15	6	6	8	8	8	\$72,800
Zero Turn Mower	43	32	33	33	39	39	39	39	39	39	\$19,270
Articulating Flail Mower	-	-	-	-	-	-	-	1	1	1	\$28,610
Car Compact	2	3	3	8	10	10	10	10	10	10	\$23,710
Compact Pick-Up	13	11	11	11	11	11	11	11	11	11	\$37,465
Compact Van	17	17	17	15	15	15	15	15	15	15	\$43,140
Full Size 2WD Pick-Up	18	15	10	11	11	11	11	11	11	11	\$34,190
Full Size Van	24	26	26	28	29	29	29	29	29	32	\$38,690
1 Ton Full-Sized Pick-Up	3	3	4	4	4	-	-	-	-	-	\$36,000
Car Mid Size	4	3	3	3	2	-	-	-	-	-	\$27,800
Full Size 4WD Pick-Up	61	22	22	22	22	21	21	21	21	22	\$45,260
Sport Utility Vehicle											
<i>Regular</i>	8	8	8	8	8	8	8	8	8	8	\$28,840
<i>Hybrid</i>	10	12	14	14	16	10	10	10	9	9	\$42,420
<i>PHEV</i>	-	-	-	-	-	6	6	6	7	7	\$54,570
1 Ton Flat Bed	19	19	19	19	19	20	20	20	20	20	\$49,500
3 ton Trucks	1	-	-	-	-	-	-	-	-	-	\$95,500
Agricultural Tractors	21	21	21	21	21	21	21	21	21	21	\$55,450
Articulating Loader	1	1	1	1	1	1	1	1	2	2	\$267,210
Backhoe	1	1	1	1	1	1	1	1	1	1	\$152,410
Bucket Truck	2	2	2	2	2	3	3	3	3	3	\$244,090
Camera Truck	1	1	1	1	1	1	1	1	1	1	\$378,150
Crane Truck	1	1	1	1	1	1	1	1	1	1	\$310,100
Cube Van	1	1	1	1	1	1	1	1	1	1	\$52,460
Landscape Loader	5	5	5	5	5	5	5	5	5	5	\$131,400
Mott Mowers	4	4	4	4	4	6	6	6	6	6	\$10,860
Rotary Mowers 16' pull behind	1	1	1	1	1	1	1	1	1	1	\$16,240
Rotary Mowers 16' cut	6	6	6	6	6	6	6	6	6	6	\$114,440

APPENDIX B.6

TABLE B.6-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

FLEET & EQUIPMENT- Cont'd Description	# of Fleet										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Rotary mowers 72" and under	6	6	6	6	6	6	6	6	6	6	\$37,240
Sewer Flusher	1	1	1	1	1	1	1	1	1	1	\$550,465
Sidewalk Tractors Articulated	3	3	3	3	3	2	3	3	3	3	\$157,020
Sidewalk Grinder	1	1	1	1	1	3	3	3	3	3	\$27,600
Single Axle Dump Trucks	5	5	5	5	5	4	4	4	4	4	\$268,970
Sweeper	2	2	2	2	2	2	2	2	2	2	\$411,720
Tandem Dump Truck	2	2	2	2	2	3	3	3	3	3	\$310,100
Trailers	48	46	46	46	44	40	40	40	40	40	\$10,640
Air Compressor	1	1	1	1	1	1	1	1	1	1	\$33,600
Brush Chipper	3	3	3	3	3	3	3	3	3	3	\$55,150
Compact Sidewalk Tractor	6	6	6	6	6	3	3	3	3	3	\$53,320
Excavator Vacuum	1	1	1	1	1	1	1	1	1	1	\$95,000
Forklift	3	3	3	3	3	4	4	4	4	4	\$34,205
Parks Compactor Truck	2	2	2	2	2	2	2	2	2	2	\$153,450
Flatbed (>8,000 KG RGWW)	15	15	15	15	13	12	12	12	12	12	\$94,650
Stump Cutter	2	2	2	2	2	2	2	2	2	2	\$51,285
Top Dressers	4	4	4	4	4	4	4	4	4	4	\$28,220
Sidewalk Ploughs	24	26	28	30	30	32	33	33	33	33	\$57,910
Sidewalk Flatbeds	8	8	8	8	8	8	10	10	10	10	\$77,000
Sander / Plough Trucks	19	20	21	22	22	22	24	24	24	24	\$301,100
Grader	40	40	41	42	42	44	44	46	46	46	\$535,000
Loaders	28	35	36	41	41	42	44	44	46	46	\$291,430
Windrow Trucks	8	8	10	12	13	15	15	19	22	22	\$90,230
Loaders with Plow Wing Combination	2	2	2	2	2	2	2	2	2	2	\$300,000
Aerator	3	3	3	3	3	3	3	3	3	3	\$27,210
Cold Planer	1	1	1	1	1	1	1	1	1	1	\$26,210
Drive Broom	1	1	1	1	1	1	1	1	1	1	\$11,060
Flusher Washer	1	1	1	1	1	1	1	1	1	1	\$5,670
Generator	1	1	1	1	1	1	1	1	1	1	\$61,000
Hitch Disc	1	1	1	1	1	1	1	1	1	1	\$15,040
Lawn Roller	2	2	2	2	2	2	2	2	2	2	\$8,180
Leaf Vacuum	2	2	2	2	2	2	2	2	2	2	\$34,700
Loader	1	1	1	1	1	1	1	1	1	1	\$60,360
Over Seeder	5	5	5	5	5	5	5	5	5	5	\$20,646
Sander	1	1	1	1	1	1	1	1	1	1	\$4,900
Snowblower Rear Mount	2	2	2	2	2	2	2	2	2	2	\$8,740
Stacker	1	1	1	1	1	1	1	1	1	1	\$90,140
Turf Tiller	2	2	2	2	2	2	2	2	2	2	\$33,080
Valve Operator	7	7	7	7	7	7	7	7	7	7	\$23,600
Weed Sprayer	1	1	1	1	1	1	1	1	1	1	\$9,860
Misc < \$5,000	513	513	513	513	513	513	513	513	513	513	\$1,160
Total (#)	1,084	1,039	1,047	1,064	1,066	1,052	1,060	1,069	1,075	1,079	
Total (\$000)	\$60,782.0	\$61,179.8	\$62,845.4	\$65,705.8	\$65,766.7	\$66,607.5	\$68,161.5	\$69,766.6	\$70,899.5	\$71,060.9	

APPENDIX B.6

TABLE B.6-1

CITY OF MARKHAM
CALCULATION OF SERVICE LEVELS
PUBLIC WORKS

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historical Population	306,973	312,329	317,779	323,324	328,966	333,938	338,985	344,109	349,310	354,589
Historical Employment	<u>135,104</u>	<u>137,357</u>	<u>139,685</u>	<u>142,092</u>	<u>144,582</u>	<u>147,517</u>	<u>150,539</u>	<u>153,654</u>	<u>156,862</u>	<u>160,210</u>
Total Historical Population & Employment	442,077	449,686	457,464	465,416	473,548	481,455	489,524	497,763	506,172	514,800

INVENTORY SUMMARY (\$000)

Buildings	\$20,721.4	\$20,721.4	\$20,721.4	\$20,721.4	\$20,721.4	\$20,721.4	\$20,721.4	\$22,856.2	\$22,062.9	\$30,761.6
Land	\$42,146.5	\$42,146.5	\$42,146.5	\$42,146.5	\$42,146.5	\$42,146.5	\$42,146.5	\$42,146.5	\$58,624.2	\$58,624.2
Furniture & Equipment	\$1,211.8	\$1,211.8	\$1,211.8	\$1,211.8	\$1,211.8	\$1,608.3	\$1,608.3	\$1,716.5	\$1,716.5	\$2,641.5
Fleet & Equipment	\$60,782.0	\$61,179.8	\$62,845.4	\$65,705.8	\$65,766.7	\$66,607.5	\$68,161.5	\$69,766.6	\$70,899.5	\$71,060.9
Total (\$000)	\$124,861.6	\$125,259.5	\$126,925.1	\$129,785.5	\$129,846.4	\$131,083.7	\$132,637.7	\$136,485.8	\$153,303.1	\$163,088.2

SERVICE LEVEL (\$/pop & emp)

Average
Service
Level

Buildings	\$46.87	\$46.08	\$45.30	\$44.52	\$43.76	\$43.04	\$42.33	\$45.92	\$43.59	\$59.75	\$46.12
Land	\$95.34	\$93.72	\$92.13	\$90.56	\$89.00	\$87.54	\$86.10	\$84.67	\$115.82	\$113.88	\$94.88
Furniture & Equipment	\$2.74	\$2.69	\$2.65	\$2.60	\$2.56	\$3.34	\$3.29	\$3.45	\$3.39	\$5.13	\$3.18
Fleet & Equipment	\$137.49	\$136.05	\$137.38	\$141.18	\$138.88	\$138.35	\$139.24	\$140.16	\$140.07	\$138.04	\$138.68
Total (\$/pop & emp)	\$282.44	\$278.55	\$277.45	\$278.86	\$274.20	\$272.27	\$270.95	\$274.20	\$302.87	\$316.80	\$282.86

CITY OF MARKHAM
CALCULATION OF MAXIMUM ALLOWABLE
PUBLIC WORKS

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2012 - 2021	\$282.86
Net Population & Employment Growth 2022 - 2031	145,660
Maximum Allowable Funding Envelope	\$41,201,500

APPENDIX B.6
TABLE B.6-2

CITY OF MARKHAM
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			
					Replacement	BTE Shares		Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
6.0 PUBLIC WORKS											
6.1 Recovery of Past Commitments											
6.1.1 Recovery of negative reserve fund balance	2022	\$ 2,347,898	\$ -	\$ 2,347,898	0%	\$ -	\$ 2,347,898	\$ -	\$ -	\$ 2,347,898	\$ -
Subtotal Recovery of Past Commitments		\$ 2,347,898	\$ -	\$ 2,347,898		\$ -	\$ 2,347,898	\$ -	\$ -	\$ 2,347,898	\$ -
6.2 Public Works Buildings											
6.2.1 Garage / Office	2025	\$ 28,430,878	\$ -	\$ 28,430,878	0%	\$ -	\$ 28,430,878	\$ -	\$ -	\$ -	\$ 28,430,878
6.2.2 Decanting Dome	2025	\$ 4,779,172	\$ -	\$ 4,779,172	0%	\$ -	\$ 4,779,172	\$ -	\$ -	\$ -	\$ 4,779,172
6.2.3 Weather Protected Storage	2025	\$ 885,292	\$ -	\$ 885,292	0%	\$ -	\$ 885,292	\$ -	\$ -	\$ -	\$ 885,292
Subtotal		\$ 34,095,342	\$ -	\$ 34,095,342		\$ -	\$ 34,095,342	\$ -	\$ -	\$ -	\$ 34,095,342
6.3 Land for Public Works											
6.3.1 Works Yard - Expansion	2023	\$ 60,904,619	\$ -	\$ 60,904,619.0	0%	\$ -	\$ 60,904,619	\$ -	\$ -	\$ 33,097,289	\$ 27,807,330
6.3.2 Land Development / Pavement	2024	\$ 2,755,746	\$ -	\$ 2,755,746	0%	\$ -	\$ 2,755,746	\$ -	\$ -	\$ 2,755,746	\$ -
Subtotal Land for Public Works		\$ 63,660,365	\$ -	\$ 63,660,365.0		\$ -	\$ 63,660,365.0	\$ -	\$ -	\$ 35,853,035	\$ 27,807,329.8
6.4 Furniture & Equipment											
6.4.1 Works Yard - Expansion	2025	\$ 285,560	\$ -	\$ 285,560	0%	\$ -	\$ 285,560	\$ -	\$ -	\$ 285,560	\$ -
Subtotal Furniture & Equipment		\$ 285,560	\$ -	\$ 285,560.0		\$ -	\$ 285,560.0	\$ -	\$ -	\$ 285,560	\$ -
6.5 Fleet											
6.5.1 1 Ton Flat Bed	2022	\$ 49,500	\$ -	\$ 49,500	0%	\$ -	\$ 49,500	\$ -	\$ -	\$ 49,500	\$ -
6.5.2 Brush Chipper	2022	\$ 55,154	\$ -	\$ 55,154	0%	\$ -	\$ 55,154	\$ -	\$ -	\$ 55,154	\$ -
6.5.3 Mott Mowers	2022	\$ 10,857	\$ -	\$ 10,857	0%	\$ -	\$ 10,857	\$ -	\$ -	\$ 10,857	\$ -
6.5.4 Rotary Mower	2022	\$ 72,776	\$ -	\$ 72,776	0%	\$ -	\$ 72,776	\$ -	\$ -	\$ 72,776	\$ -
6.5.5 Sidewalk Flatbed	2022	\$ 77,000	\$ -	\$ 77,000	0%	\$ -	\$ 77,000	\$ -	\$ -	\$ 77,000	\$ -
6.5.6 Utility Truckster	2022	\$ 24,788	\$ -	\$ 24,788	0%	\$ -	\$ 24,788	\$ -	\$ -	\$ 24,788	\$ -
6.5.7 Windrow Truck	2022	\$ 90,230	\$ -	\$ 90,230	0%	\$ -	\$ 90,230	\$ -	\$ -	\$ 90,230	\$ -
6.5.8 Articulating Flail Mower	2023	\$ 28,611	\$ -	\$ 28,611	0%	\$ -	\$ 28,611	\$ -	\$ -	\$ 28,611	\$ -
6.5.9 Forklift	2023	\$ 34,205	\$ -	\$ 34,205	0%	\$ -	\$ 34,205	\$ -	\$ -	\$ 34,205	\$ -
6.5.10 Loader	2023	\$ 291,427	\$ -	\$ 291,427	0%	\$ -	\$ 291,427	\$ -	\$ -	\$ 291,427	\$ -
6.5.11 Sidewalk Flatbed	2023	\$ 77,000	\$ -	\$ 77,000	0%	\$ -	\$ 77,000	\$ -	\$ -	\$ 77,000	\$ -
6.5.12 Trailers	2023	\$ 10,638	\$ -	\$ 10,638	0%	\$ -	\$ 10,638	\$ -	\$ -	\$ 10,638	\$ -
6.5.13 Windrow Truck	2023	\$ 90,230	\$ -	\$ 90,230	0%	\$ -	\$ 90,230	\$ -	\$ -	\$ 90,230	\$ -
6.5.14 Zero Turn Mower	2023	\$ 19,269	\$ -	\$ 19,269	0%	\$ -	\$ 19,269	\$ -	\$ -	\$ 19,269	\$ -
6.5.15 Zero Turn Mower	2023	\$ 19,269	\$ -	\$ 19,269	0%	\$ -	\$ 19,269	\$ -	\$ -	\$ 19,269	\$ -
6.5.16 Grader	2024	\$ 535,000	\$ -	\$ 535,000	0%	\$ -	\$ 535,000	\$ -	\$ -	\$ 535,000	\$ -
6.5.17 Loader	2024	\$ 291,427	\$ -	\$ 291,427	0%	\$ -	\$ 291,427	\$ -	\$ -	\$ 291,427	\$ -
6.5.18 Sidewalk Flatbed	2024	\$ 77,000	\$ -	\$ 77,000	0%	\$ -	\$ 77,000	\$ -	\$ -	\$ 77,000	\$ -
6.5.19 Trailers	2024	\$ 10,638	\$ -	\$ 10,638	0%	\$ -	\$ 10,638	\$ -	\$ -	\$ 10,638	\$ -
6.5.20 Windrow Truck	2024	\$ 90,230	\$ -	\$ 90,230	0%	\$ -	\$ 90,230	\$ -	\$ -	\$ 90,230	\$ -
6.5.21 Loader	2025	\$ 291,427	\$ -	\$ 291,427	0%	\$ -	\$ 291,427	\$ -	\$ -	\$ 291,427	\$ -
6.5.22 Sander / Plough Trucks	2025	\$ 301,100	\$ -	\$ 301,100	0%	\$ -	\$ 301,100	\$ -	\$ -	\$ 301,100	\$ -
6.5.23 Sidewalk Flatbed	2025	\$ 77,000	\$ -	\$ 77,000	0%	\$ -	\$ 77,000	\$ -	\$ -	\$ 77,000	\$ -

APPENDIX B.6
TABLE B.6-2

CITY OF MARKHAM
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			
					Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
6.5.24 Windrow Truck	2025	\$ 90,230	\$ -	\$ 90,230	0%	\$ -	\$ 90,230	\$ -	\$ -	\$ 90,230	\$ -
6.5.25 Full Size 4WD Pick-Up	2026	\$ 45,262	\$ -	\$ 45,262	0%	\$ -	\$ 45,262	\$ -	\$ -	\$ -	\$ 45,262
6.5.26 Full Size Van	2026	\$ 38,691	\$ -	\$ 38,691	0%	\$ -	\$ 38,691	\$ -	\$ -	\$ -	\$ 38,691
6.5.27 Grader	2026	\$ 535,000	\$ -	\$ 535,000	0%	\$ -	\$ 535,000	\$ -	\$ -	\$ -	\$ 535,000
6.5.28 Sidewalk Flatbed	2026	\$ 77,000	\$ -	\$ 77,000	0%	\$ -	\$ 77,000	\$ -	\$ -	\$ -	\$ 77,000
6.5.29 Windrow Truck	2026	\$ 90,230	\$ -	\$ 90,230	0%	\$ -	\$ 90,230	\$ -	\$ -	\$ -	\$ 90,230
6.5.30 Loader	2027	\$ 291,427	\$ -	\$ 291,427	0%	\$ -	\$ 291,427	\$ -	\$ -	\$ -	\$ 291,427
6.5.31 Sidewalk Flatbed	2027	\$ 77,000	\$ -	\$ 77,000	0%	\$ -	\$ 77,000	\$ -	\$ -	\$ -	\$ 77,000
6.5.32 Tandem Dump Truck	2027	\$ 310,101	\$ -	\$ 310,101	0%	\$ -	\$ 310,101	\$ -	\$ -	\$ -	\$ 310,101
6.5.33 Trailers	2027	\$ 10,638	\$ -	\$ 10,638	0%	\$ -	\$ 10,638	\$ -	\$ -	\$ -	\$ 10,638
6.5.34 Windrow Truck	2027	\$ 90,230	\$ -	\$ 90,230	0%	\$ -	\$ 90,230	\$ -	\$ -	\$ -	\$ 90,230
6.5.35 Zero Turn Mower	2027	\$ 19,269	\$ -	\$ 19,269	0%	\$ -	\$ 19,269	\$ -	\$ -	\$ -	\$ 19,269
6.5.36 Zero Turn Mower	2027	\$ 19,269	\$ -	\$ 19,269	0%	\$ -	\$ 19,269	\$ -	\$ -	\$ -	\$ 19,269
6.5.37 Grader	2028	\$ 535,000	\$ -	\$ 535,000	0%	\$ -	\$ 535,000	\$ -	\$ -	\$ -	\$ 535,000
6.5.38 Loader	2028	\$ 291,427	\$ -	\$ 291,427	0%	\$ -	\$ 291,427	\$ -	\$ -	\$ -	\$ 291,427
6.5.39 Sander / Plough Trucks	2028	\$ 301,100	\$ -	\$ 301,100	0%	\$ -	\$ 301,100	\$ -	\$ -	\$ -	\$ 301,100
6.5.40 Sidewalk Flatbed	2028	\$ 77,000	\$ -	\$ 77,000	0%	\$ -	\$ 77,000	\$ -	\$ -	\$ -	\$ 77,000
6.5.41 Windrow Truck	2028	\$ 90,230	\$ -	\$ 90,230	0%	\$ -	\$ 90,230	\$ -	\$ -	\$ -	\$ 90,230
6.5.42 Articulating Loader	2029	\$ 267,215	\$ -	\$ 267,215	0%	\$ -	\$ 267,215	\$ -	\$ -	\$ -	\$ 267,215
6.5.43 Loader	2029	\$ 291,427	\$ -	\$ 291,427	0%	\$ -	\$ 291,427	\$ -	\$ -	\$ -	\$ 291,427
6.5.44 Rotary Mower	2029	\$ 72,776	\$ -	\$ 72,776	0%	\$ -	\$ 72,776	\$ -	\$ -	\$ -	\$ 72,776
6.5.45 Sidewalk Flatbed	2029	\$ 77,000	\$ -	\$ 77,000	0%	\$ -	\$ 77,000	\$ -	\$ -	\$ -	\$ 77,000
6.5.46 Trailers	2029	\$ 10,638	\$ -	\$ 10,638	0%	\$ -	\$ 10,638	\$ -	\$ -	\$ -	\$ 10,638
6.5.47 Windrow Truck	2029	\$ 90,230	\$ -	\$ 90,230	0%	\$ -	\$ 90,230	\$ -	\$ -	\$ -	\$ 90,230
6.5.48 Bucket Truck	2030	\$ 244,088	\$ -	\$ 244,088	0%	\$ -	\$ 244,088	\$ -	\$ -	\$ -	\$ 244,088
6.5.49 Grader	2030	\$ 535,000	\$ -	\$ 535,000	0%	\$ -	\$ 535,000	\$ -	\$ -	\$ -	\$ 535,000
6.5.50 Mott Mowers	2030	\$ 10,857	\$ -	\$ 10,857	0%	\$ -	\$ 10,857	\$ -	\$ -	\$ -	\$ 10,857
6.5.51 Sidewalk Flatbed	2030	\$ 77,000	\$ -	\$ 77,000	0%	\$ -	\$ 77,000	\$ -	\$ -	\$ -	\$ 77,000
6.5.52 Utility Truckster	2030	\$ 24,788	\$ -	\$ 24,788	0%	\$ -	\$ 24,788	\$ -	\$ -	\$ -	\$ 24,788
6.5.53 Windrow Truck	2030	\$ 90,230	\$ -	\$ 90,230	0%	\$ -	\$ 90,230	\$ -	\$ -	\$ -	\$ 90,230
Subtotal Fleet		\$ 7,405,129	\$ -	\$ 7,405,129	\$ -	\$ -	\$ 7,405,129	\$ -	\$ -	\$ 2,715,006	\$ 4,690,123
TOTAL PUBLIC WORKS		\$ 107,794,294	\$ -	\$ 107,794,294	\$ -	\$ -	\$ 107,794,294	\$ -	\$ -	\$ 41,201,500	\$ 66,592,795

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	61.9%	\$25,510,815
10-Year Growth in Population in New Units		90,381
Unadjusted Development Charge Per Capita		\$282.26
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	38.1%	\$15,690,684
10-Year Growth in Square Metres		2,550,244
Unadjusted Development Charge Per Square Metre		\$6.15

Non-Residential Development Charge Calculation		
Retail Commercial		
Non-Residential Share of 2017 - 2026 DC Eligible Costs	11.0%	\$ 4,542,107
10-Year Growth in Square Metres		627,176
Unadjusted Development Charge Per Square Metre		\$7.24
Industrial/Office/Institutional		
Non-Residential Share of 2017 - 2026 DC Eligible Costs	26.8%	\$ 11,032,113
10-Year Growth in Square Metres		1,890,059
Unadjusted Development Charge Per Square Metre		\$5.84
Mixed-Use		
Non-Residential Share of 2017 - 2026 DC Eligible Costs	0.3%	\$ 116,464
10-Year Growth in Square Metres		33,009
Unadjusted Development Charge Per Square Metre		\$3.53

2022 - 2031 Net Funding Envelope	\$41,201,500
Reserve Fund Balance	(\$2,347,898)

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

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

PUBLIC WORKS	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	(\$1,453.75)	\$866.93	(\$18,161.59)	(\$18,735.60)	(\$17,441.89)	(\$15,239.32)	(\$12,805.54)	(\$10,087.99)	(\$7,064.85)	(\$3,711.00)	
2022 - 2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Public Works: Non Inflated	\$235.5	\$20,846.2	\$2,328.1	\$647.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$24,057.1
- Public Works: Inflated	\$235.5	\$21,263.2	\$2,422.2	\$686.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$24,607.7
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	8,094	8,301	8,514	8,733	8,955	9,085	9,315	9,549	9,792	10,043	90,381
REVENUE											
- DC Receipts: Inflated	\$2,594.8	\$2,714.4	\$2,839.7	\$2,971.0	\$3,107.5	\$3,215.7	\$3,363.0	\$3,516.4	\$3,678.0	\$3,847.8	\$31,848.4
INTEREST											
- Interest on Opening Balance	(\$80.0)	\$30.3	(\$998.9)	(\$1,030.5)	(\$959.3)	(\$838.2)	(\$704.3)	(\$554.8)	(\$388.6)	(\$204.1)	(\$5,728.2)
- Interest on In-year Transactions	\$41.3	(\$510.1)	\$7.3	\$40.0	\$54.4	\$56.3	\$58.9	\$61.5	\$64.4	\$67.3	(\$58.8)
TOTAL REVENUE	\$2,556.2	\$2,234.7	\$1,848.2	\$1,980.6	\$2,202.6	\$2,433.8	\$2,717.6	\$3,023.1	\$3,353.8	\$3,711.0	\$26,061.4
CLOSING CASH BALANCE	\$866.9	(\$18,161.6)	(\$18,735.6)	(\$17,441.9)	(\$15,239.3)	(\$12,805.5)	(\$10,088.0)	(\$7,064.8)	(\$3,711.0)	\$0.0	

2022 Adjusted Charge Per Capita

\$320.59

Allocation of Capital Program

Residential Sector	61.9%
Non-Residential Sector	38.1%

Rates for 2022

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 MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC WORKS
RETAIL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PUBLIC WORKS	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	(\$258.84)	\$102.77	(\$3,330.57)	(\$3,471.66)	(\$3,271.70)	(\$2,898.97)	(\$2,466.04)	(\$1,966.78)	(\$1,394.26)	(\$741.35)	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Public Works: Non Inflated	\$41.9	\$3,711.6	\$414.5	\$115.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,283.3
- Public Works: Inflated	\$41.9	\$3,785.8	\$431.3	\$122.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4,381.3
NON-RESIDENTIAL SPACE GROWTH - RETAIL											
- Growth in Square Metres	49,648	52,174	54,834	57,608	60,572	63,650	66,880	70,300	73,872	77,638	627,176.00
REVENUE											
- DC Receipts: Inflated	\$411.3	\$440.9	\$472.6	\$506.5	\$543.2	\$582.2	\$624.0	\$669.0	\$717.0	\$768.7	\$5,735.3
INTEREST											
- Interest on Opening Balance	(\$14.2)	\$3.6	(\$183.2)	(\$190.9)	(\$179.9)	(\$159.4)	(\$135.6)	(\$108.2)	(\$76.7)	(\$40.8)	(\$1,085.4)
- Interest on In-year Transactions	\$6.5	(\$92.0)	\$0.7	\$6.7	\$9.5	\$10.2	\$10.9	\$11.7	\$12.5	\$13.5	(\$9.8)
TOTAL REVENUE	\$403.5	\$352.5	\$290.2	\$322.2	\$372.7	\$432.9	\$499.3	\$572.5	\$652.9	\$741.3	\$4,640.1
CLOSING CASH BALANCE	\$102.8	(\$3,330.6)	(\$3,471.7)	(\$3,271.7)	(\$2,899.0)	(\$2,466.0)	(\$1,966.8)	(\$1,394.3)	(\$741.3)	\$0.0	

2022 Adjusted Charge Per Square Metre

\$8.28

Allocation of Capital Program

Retail Sector	11.0%
Industrial/Office/Institutional Sector	26.8%
Mixed-Use	0.3%

Rates for 2022

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 MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC WORKS
INDUSTRIAL/OFFICE/INSTITUTIONAL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

PUBLIC WORKS	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	(\$628.67)	\$342.58	(\$7,916.14)	(\$8,191.38)	(\$7,655.58)	(\$6,721.64)	(\$5,665.78)	(\$4,477.71)	(\$3,145.92)	(\$1,657.47)	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Public Works: Non Inflated	\$101.8	\$9,014.9	\$1,006.8	\$279.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$10,403.4
- Public Works: Inflated	\$101.8	\$9,195.2	\$1,047.5	\$297.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$10,641.5
NON-RESIDENTIAL SPACE GROWTH - I.O.I.											
- Growth in Square Metres	164,145	169,120	174,338	179,648	185,208	191,032	197,025	203,257	209,805	216,481	1,890,059
REVENUE											
- DC Receipts: Inflated	\$1,090.4	\$1,145.9	\$1,204.9	\$1,266.4	\$1,331.7	\$1,401.0	\$1,473.9	\$1,550.9	\$1,632.9	\$1,718.6	\$13,816.5
INTEREST											
- Interest on Opening Balance	(\$34.6)	\$12.0	(\$435.4)	(\$450.5)	(\$421.1)	(\$369.7)	(\$311.6)	(\$246.3)	(\$173.0)	(\$91.2)	(\$2,521.3)
- Interest on In-year Transactions	\$17.3	(\$221.4)	\$2.8	\$17.0	\$23.3	\$24.5	\$25.8	\$27.1	\$28.6	\$30.1	(\$24.9)
TOTAL REVENUE	\$1,073.1	\$936.5	\$772.2	\$832.8	\$933.9	\$1,055.9	\$1,188.1	\$1,331.8	\$1,488.5	\$1,657.5	\$11,270.2
CLOSING CASH BALANCE	\$342.6	(\$7,916.1)	(\$8,191.4)	(\$7,655.6)	(\$6,721.6)	(\$5,665.8)	(\$4,477.7)	(\$3,145.9)	(\$1,657.5)	(\$0.0)	

2022 Adjusted Charge Per Square Metre

\$6.64

Allocation of Capital Program

Retail Sector 11.0%

Industrial/Office/Institutional Sector 26.8%

Mixed-Use 0.3%

Rates for 2022

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 MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
PUBLIC WORKS
MIXED-USE NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

PUBLIC WORKS	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	(\$6.64)	\$2.64	(\$85.40)	(\$89.02)	(\$83.89)	(\$74.33)	(\$63.23)	(\$50.43)	(\$35.75)	(\$19.01)	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
- Public Works: Non Inflated	\$1.1	\$95.2	\$10.6	\$3.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$109.8
- Public Works: Inflated	\$1.1	\$97.1	\$11.1	\$3.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$112.3
NON-RESIDENTIAL SPACE GROWTH - MIXED-USE											
- Growth in Square Metres	2,613	2,746	2,886	3,032	3,188	3,350	3,520	3,700	3,888	4,086	33,009
REVENUE											
- DC Receipts: Inflated	\$10.5	\$11.3	\$12.1	\$13.0	\$13.9	\$14.9	\$16.0	\$17.2	\$18.4	\$19.7	\$147.1
INTEREST											
- Interest on Opening Balance	(\$0.4)	\$0.1	(\$4.7)	(\$4.9)	(\$4.6)	(\$4.1)	(\$3.5)	(\$2.8)	(\$2.0)	(\$1.0)	(\$27.8)
- Interest on In-year Transactions	\$0.2	(\$2.4)	\$0.0	\$0.2	\$0.2	\$0.3	\$0.3	\$0.3	\$0.3	\$0.3	(\$0.3)
TOTAL REVENUE	\$10.3	\$9.0	\$7.4	\$8.3	\$9.6	\$11.1	\$12.8	\$14.7	\$16.7	\$19.0	\$119.0
CLOSING CASH BALANCE	\$2.6	(\$85.4)	(\$89.0)	(\$83.9)	(\$74.3)	(\$63.2)	(\$50.4)	(\$35.7)	(\$19.0)	\$0.0	

2022 Adjusted Charge Per Square Metre

\$4.04

Allocation of Capital Program

Retail Sector	11.0%
Industrial/Office/Institutional Sector	26.8%
Mixed-Use	0.3%

Rates for 2022

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

Appendix B.7

Waste Diversion

Appendix B.7: Waste Diversion

The City of Markham provides Waste Diversion Services for its residents; this includes both ground-related dwelling and multi-residential buildings. The City does not provide collection services to non-residential users.

As of January 1, 2016, the *Development Charges Act* permits the inclusion of capital costs associated with waste diversion operations, and specifically excludes waste incineration and landfill activities. These shares of facilities, land, vehicles and equipment have been included from the development charges calculation are those related to waste diversion operations.

Table B.7-1 2012 - 2021 Historical Service Levels

In 2021, the total square footage the City’s existing Waste Diversion depots and sheds that relate to eligible operations of waste diversion activities was 12,560 square feet with a replacement value of \$4.93 million. The land related to these buildings totals 0.62 hectares and is valued at \$8.48 million. In total, 40 vehicles are used to provide DC eligible waste diversion services in the City of Markham, these vehicles add a value of \$10.00 million to the inventory. Finally, the waste diversion-related furniture and equipment totals \$1.03 million.

The total value of the inventory of capital assets for Waste Diversion Services in 2021 was \$24.44 million resulting in a ten-year historical average service level of \$73.98 per capita. When multiplied by the ten-year net population growth (90,070), the historical service level (\$73.98) yields a ten-year maximum allowable funding envelope of \$6.66 million.

Table B.7-2 2022 – 2031 Development-Related Capital Program and Calculation of the Unadjusted Development Charges

The ten-year development-related capital plan for Waste Diversion Services includes a provision for two new 2,100 square foot depots: one in the FUA by 2023 and the other in Cornell by 2026. Building costs for the depots amount to \$1.59 million; the 0.30 hectares of land which the new depots will occupy is valued at \$4.11 million and the furniture and equipment associated with the new facilities amounts to \$0.45 million. The City of Markham also plans to utilize 10 additional waste-related fleet between 2025 and 2030.

No grants, subsidies or replacement shares have been identified, as such, the total Waste Diversion development-related capital program (\$9.25 million) is carried forward to the net municipal costs.

The existing Waste Diversion DC reserve fund balance of \$0.52 million and the other development-related shares (share of cost above the 10-year historic maximum funding envelope), totaling \$2.07 million, reduces the 2021 – 2031 DC eligible costs to \$6.66 million. This amount is allocated entirely to the residential sector and, when divided by the forecasted 10-year population growth in new units (90,380), yields an unadjusted development charge of \$73.73 per capita.

Table B.7-3 Cash Flow Analysis

After cash flow and reserve fund analysis, the residential charge increases to \$80.47 per capita.

The following table summarizes the calculation of the waste diversion development charge.

WASTE DIVERSION SUMMARY										
10-year Hist. Service Level per pop & emp	2022 - 2031			Unadjusted Development Charge			Adjusted Development Charge			
	Development-Related Capital Program	Residential		Retail	I.O.I.	Mixed-Use	Residential	Retail	I.O.I.	Mixed-Use
	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/sq.m	\$/sq.m	\$/capita	\$/sq.m	\$/sq.m	\$/sq.m
\$73.98	\$9,254,012	\$6,663,427	\$73.73	\$0.00	\$0.00	\$0.00	\$80.47	\$0.00	\$0.00	\$0.00

APPENDIX B.7

TABLE B.7-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
WASTE DIVERSION

BUILDINGS Facility Name	# of Square Feet										UNIT COST (\$/sq.ft.)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Markham Depot - 6041 Hwy 7 East, Markham	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	\$379
Unionville Depot - 139A Unionville Main Street, Markham	1,575	1,575	1,575	1,575	1,575	1,575	1,575	1,575	1,575	1,575	\$379
Thornhill Depot - 5 Green Lane, Thornhill	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	2,100	\$379
Milliken Depot - 7660 Kennedy Road, Markham	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	\$379
8100 Warden Sheds	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	\$379
8100 Warden - Office Space	735	735	735	735	735	735	735	735	735	735	\$615
Total (#)	12,560	12,560	12,560	12,560	12,560	12,560	12,560	12,560	12,560	12,560	
Total (\$000)	\$4,933.7	\$4,933.7	\$4,933.7	\$4,933.7	\$4,933.7	\$4,933.7	\$4,933.7	\$4,933.7	\$4,933.7	\$4,933.7	

LAND Facility Name	# of Hectares										UNIT COST (\$/ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Markham Depot	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	\$13,714,000
Unionville Depot	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	\$13,714,000
Thornhill Depot	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	\$13,714,000
Milliken Depot	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	\$13,714,000
8100 Warden	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	\$13,714,000
Total (ha)	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	
Total (\$000)	8,479.84	8,479.84	8,479.84	8,479.84	8,479.84	8,479.84	8,479.84	8,479.84	8,479.84	8,479.84	

APPENDIX B.7

TABLE B.7-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
WASTE DIVERSION

VEHICLES Description	# of Vehicles										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Single Stream Rear Loaders	10	10	10	10	10	10	10	10	10	10	\$270,000
Dual Stream Rear Loaders	12	12	12	12	12	12	12	12	12	12	\$320,000
Top Loaders	7	7	7	7	7	7	7	7	7	7	\$325,000
Front End Loader	1	1	1	1	1	1	1	1	1	1	\$360,000
Single stream Side Load	1	1	1	1	1	1	1	1	1	1	\$269,000
Large Truck	1	1	1	1	1	1	1	1	1	1	\$27,060
Small Truck	1	1	1	1	1	1	1	1	1	1	\$16,240
Fork lift	2	2	2	2	2	2	2	2	2	2	\$30,000
Pick-up Truck	4	4	4	4	4	4	4	4	4	4	\$50,000
Roll-Off Truck	1	1	1	1	1	1	1	1	1	1	\$265,000
Total (#)	40	40	40	40	40	40	40	40	40	40	
Total (\$000)	\$9,997.3	\$9,997.3	\$9,997.3	\$9,997.3	\$9,997.3	\$9,997.3	\$9,997.3	\$9,997.3	\$9,997.3	\$9,997.3	

FURNITURE & EQUIPMENT	Total Value of Furniture & Equipment (\$)									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Containers	\$572,783	\$572,783	\$572,783	\$572,783	\$572,783	\$572,783	\$572,783	\$572,783	\$572,783	\$572,783
Other Equipment	\$455,157	\$455,157	\$455,157	\$455,157	\$455,157	\$455,157	\$455,157	\$455,157	\$455,157	\$455,157
Total (\$000)	\$1,027.9	\$1,027.9	\$1,027.9	\$1,027.9	\$1,027.9	\$1,027.9	\$1,027.9	\$1,027.9	\$1,027.9	\$1,027.9

APPENDIX B.7

TABLE B.7-1

CITY OF MARKHAM

CALCULATION OF SERVICE LEVELS

WASTE DIVERSION

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historical Population	306,973	312,329	317,779	323,324	328,966	333,938	338,985	344,109	349,310	354,589

INVENTORY SUMMARY (\$000)

Buildings	\$4,933.7	\$4,933.7	\$4,933.7	\$4,933.7	\$4,933.7	\$4,933.7	\$4,933.7	\$4,933.7	\$4,933.7	\$4,933.7
Land	\$8,479.8	\$8,479.8	\$8,479.8	\$8,479.8	\$8,479.8	\$8,479.8	\$8,479.8	\$8,479.8	\$8,479.8	\$8,479.8
Vehicles	\$9,997.3	\$9,997.3	\$9,997.3	\$9,997.3	\$9,997.3	\$9,997.3	\$9,997.3	\$9,997.3	\$9,997.3	\$9,997.3
Furniture & Equipment	\$1,027.9	\$1,027.9	\$1,027.9	\$1,027.9	\$1,027.9	\$1,027.9	\$1,027.9	\$1,027.9	\$1,027.9	\$1,027.9
Total (\$000)	\$24,438.8	\$24,438.8	\$24,438.8	\$24,438.8	\$24,438.8	\$24,438.8	\$24,438.8	\$24,438.8	\$24,438.8	\$24,438.8

SERVICE LEVEL (\$/pop)

Average
Service
Level

Buildings	\$16.1	\$15.8	\$15.5	\$15.3	\$15.0	\$14.8	\$14.6	\$14.3	\$14.1	\$13.9	\$14.94
Land	\$27.6	\$27.2	\$26.7	\$26.2	\$25.8	\$25.4	\$25.0	\$24.6	\$24.3	\$23.9	\$25.67
Vehicles	\$32.6	\$32.0	\$31.5	\$30.9	\$30.4	\$29.9	\$29.5	\$29.1	\$28.6	\$28.2	\$30.26
Furniture & Equipment	\$3.3	\$3.3	\$3.2	\$3.2	\$3.1	\$3.1	\$3.0	\$3.0	\$2.9	\$2.9	\$3.11
Total (\$/pop)	\$79.6	\$78.2	\$76.9	\$75.6	\$74.3	\$73.2	\$72.1	\$71.0	\$70.0	\$68.9	\$73.98

CITY OF MARKHAM

CALCULATION OF MAXIMUM ALLOWABLE

WASTE DIVERSION

10-Year Funding Envelope Calculation

10 Year Average Service Level 2012 - 2021	\$73.98
Net Population 2022 - 2031	90,071
Maximum Allowable Funding Envelope	\$6,663,427

APPENDIX B.7
TABLE B.7-2

CITY OF MARKHAM
DEVELOPMENT-RELATED CAPITAL PROGRAM
WASTE DIVERSION

Project Description		Timing	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs			
						Replacement & BTE Shares			Prior Growth	Available DC Reserves	2022-2031	Other Dev. Related Costs
7.0 WASTE DIVERSION												
7.1 Waste Buildings												
7.1.1	New Depot - Future Urban Area (2,100 sq ft)	2023	\$ 795,900	\$ -	\$ 795,900	0%	\$ -	\$ 795,900	\$ -	\$ -	\$ 795,900	\$ -
7.1.3	New Depot - Cornell (2,100 sq ft)	2026	\$ 795,900	\$ -	\$ 795,900	0%	\$ -	\$ 795,900	\$ -	\$ -	\$ 795,900	\$ -
Subtotal Waste Buildings			\$ 1,591,800	\$ -	\$ 1,591,800		\$ -	\$ 1,591,800	\$ -	\$ -	\$ 1,591,800	\$ -
7.2 Land for Waste Buildings												
7.2.1	New Depot - Future Urban Area (0.15 Ha)	2022	\$ 2,057,100	\$ -	\$ 2,057,100	0%	\$ -	\$ 2,057,100	\$ -	\$ 523,823	\$ 1,533,277	\$ -
7.2.2	New Depot - Cornell (0.15 Ha)	2025	\$ 2,057,100	\$ -	\$ 2,057,100	0%	\$ -	\$ 2,057,100	\$ -	\$ -	\$ 2,057,100	\$ -
Subtotal Land for Waste Buildings			\$ 4,114,200	\$ -	\$ 4,114,200		\$ -	\$ 4,114,200	\$ -	\$ 523,823	\$ 3,590,377	\$ -
7.3 Furniture & Equipment												
7.3.1	New Depot - Future Urban Area	2023	\$ 205,485	\$ -	\$ 205,485	0%	\$ -	\$ 205,485	\$ -	\$ -	\$ 205,485	\$ -
7.3.2	SMART Bins	2023	\$ 39,042	\$ -	\$ 39,042	0%	\$ -	\$ 39,042	\$ -	\$ -	\$ 39,042	\$ -
7.3.3	New Depot - Cornell	2026	\$ 205,485	\$ -	\$ 205,485	0%	\$ -	\$ 205,485	\$ -	\$ -	\$ 205,485	\$ -
Subtotal Furniture & Equipment			\$ 450,012	\$ -	\$ 450,012		\$ -	\$ 450,012	\$ -	\$ -	\$ 450,012	\$ -
7.4 Fleet												
7.4.1	Single Stream Top Loader (Curbside)	2025	\$ 325,000	\$ -	\$ 325,000	0%	\$ -	\$ 325,000	\$ -	\$ -	\$ 325,000	\$ -
7.4.2	Dual Stream Top Loader (Multi-residential)	2025	\$ 325,000	\$ -	\$ 325,000	0%	\$ -	\$ 325,000	\$ -	\$ -	\$ 325,000	\$ -
7.4.3	Dual Stream Rear Loader (Curbside)	2025	\$ 270,000	\$ -	\$ 270,000	0%	\$ -	\$ 270,000	\$ -	\$ -	\$ 270,000	\$ -
7.4.4	Single Stream Side Loader (Curbside)	2025	\$ 269,000	\$ -	\$ 269,000	0%	\$ -	\$ 269,000	\$ -	\$ -	\$ 111,237	\$ 157,763
7.4.5	Front End Loader (Multi-residential)	2025	\$ 360,000	\$ -	\$ 360,000	0%	\$ -	\$ 360,000	\$ -	\$ -	\$ 360,000	\$ 360,000
7.4.6	Single Stream Top Loader (Curbside)	2030	\$ 325,000	\$ -	\$ 325,000	0%	\$ -	\$ 325,000	\$ -	\$ -	\$ -	\$ 325,000
7.4.7	Dual Stream Top Loader (Multi-residential)	2030	\$ 325,000	\$ -	\$ 325,000	0%	\$ -	\$ 325,000	\$ -	\$ -	\$ -	\$ 325,000
7.4.8	Dual Stream Rear Loader (Curbside)	2030	\$ 270,000	\$ -	\$ 270,000	0%	\$ -	\$ 270,000	\$ -	\$ -	\$ -	\$ 270,000
7.4.9	Single Stream Side Loader (Curbside)	2030	\$ 269,000	\$ -	\$ 269,000	0%	\$ -	\$ 269,000	\$ -	\$ -	\$ -	\$ 269,000
7.4.10	Front End Loader (Multi-residential)	2030	\$ 360,000	\$ -	\$ 360,000	0%	\$ -	\$ 360,000	\$ -	\$ -	\$ -	\$ 360,000
Subtotal Fleet			\$ 3,098,000	\$ -	\$ 3,098,000		\$ -	\$ 3,098,000	\$ -	\$ -	\$ 1,031,237	\$ 2,066,763
TOTAL WASTE DIVERSION			\$ 9,254,012	\$ -	\$ 9,254,012		\$ -	\$ 9,254,012	\$ -	\$ 523,823	\$ 6,663,427	\$ 2,066,763

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	100%	\$6,663,427
10-Year Growth in Population in New Units		90,381
Unadjusted Development Charge Per Capita		\$73.73
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		2,550,244
Unadjusted Development Charge Per Square Metre		\$0.00

2022 - 2031 Net Funding Envelope	\$6,663,427
Reserve Fund Balance	\$523,823

**APPENDIX B.7
TABLE B.7-3**

**CITY OF MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
WASTE DIVERSION
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)**

WASTE DIVERSION	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$523.82	(\$902.26)	(\$1,342.20)	(\$690.73)	(\$3,329.92)	(\$3,825.32)	(\$3,214.41)	(\$2,532.25)	(\$1,773.40)	(\$931.52)	
2022 - 2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$523.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$523.8
- Waste Diversion : Non Inflated	\$1,533.3	\$1,040.4	\$0.0	\$3,088.3	\$1,001.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6,663.4
- Waste Diversion : Inflated	\$2,057.1	\$1,061.2	\$0.0	\$3,277.4	\$1,083.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$7,479.6
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	8,094	8,301	8,514	8,733	8,955	9,085	9,315	9,549	9,792	10,043	90,381
REVENUE											
- DC Receipts: Inflated	\$651.3	\$681.4	\$712.8	\$745.8	\$780.0	\$807.2	\$844.2	\$882.7	\$923.3	\$965.9	\$7,994.5
INTEREST											
- Interest on Opening Balance	\$18.3	(\$49.6)	(\$73.8)	(\$38.0)	(\$183.1)	(\$210.4)	(\$176.8)	(\$139.3)	(\$97.5)	(\$51.2)	(\$1,001.5)
- Interest on In-year Transactions	(\$38.7)	(\$10.4)	\$12.5	(\$69.6)	(\$8.4)	\$14.1	\$14.8	\$15.4	\$16.2	\$16.9	(\$37.2)
TOTAL REVENUE	\$631.0	\$621.3	\$651.5	\$638.2	\$588.5	\$610.9	\$682.2	\$758.9	\$841.9	\$931.5	\$6,955.8
CLOSING CASH BALANCE	(\$902.3)	(\$1,342.2)	(\$690.7)	(\$3,329.9)	(\$3,825.3)	(\$3,214.4)	(\$2,532.3)	(\$1,773.4)	(\$931.5)	\$0.0	

2022 Adjusted Charge Per Capita

\$80.47

Allocation of Capital Program

Residential Sector	100.0%
Non-Residential Sector	0.0%

Rates for 2022

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

Appendix C

City-Wide Hard Services

Technical Appendix

Appendix B: City-Wide Hard Services

Technical Appendix

The Engineering Department is responsible for the design and construction of the City’s network of public roads, its water distribution system, the sanitary sewage collection system and the storm water management infrastructure. This appendix provides an overview of the City-wide hard services included in the development charges calculation.

Other elements of required development-related infrastructure for the City are analysed and calculated on an area-specific basis for development charges purposes; these components are included in Appendix D. In addition, the City has reviewed and updated the applicable local service definitions, as discussed in the main body of the report.

As permitted under the *Development Charges Act, 1997 (DCA)*, the City-wide hard services are planned for the period from 2022 – 2031 so that the development-related capital costs are apportioned over the longer-term development anticipated within the City’s designated urban boundary, including the Future Urban Area (FUA).

The cost, quantum and timing of the projects identified in the forecast have been provided by the Engineering Department based on estimates prepared by City staff and various engineer consultants. The estimates include provision for engineering and contingencies.

Table C-1 Historical Service Levels

City-wide hard services include a range of engineering related infrastructure such as roads, storm water management, watermain infrastructure etc. In accordance with the *DCA*, the increase in need for service cannot exceed the ten-year historical average level of service unless a standard level of

service is required under another Act (O.Reg. 82/98 4(3)). For services such as stormwater management, water and wastewater related infrastructure, the projects identified in the City-wide hard capital program are required to achieve health and safety standards set out in relevant legislation including, but not limited to, the *Planning Act*, the *Ontario Water Resources Act* and the *Municipal Act*. As such, in accordance with section 4(3) of O.Reg. 82/98, the ten-year historical service level does not apply.

However, an analysis of the ten-year historical inventory for all City roads related infrastructure has been provided in Table C-1. In 2021, the City's inventory included 776 hectares of property related to roads; the property was valued at \$8.02 billion. 341 kilometers of roads occupy a portion of this property and are valued at \$1.68 billion. There are roughly 340 bridges and culverts in the City that provide for a combined value of \$278.77 million. Approximately 29,460 streetlights add another \$219.40 million to the total value of capital assets and approximately 110 traffic signals add an additional \$73.84 million. Finally, roughly 950 kilometers of sidewalks add an additional \$409.38 million to the total value of capital assets related to roads.

The total value of all roads and related infrastructure in 2021 amounts to \$10.68 billion. This results in a ten-year historical average service level of \$22,688.49 per population and employment. The historical service level, multiplied by the long-term net population and employment growth over the 2022 – 2031 planning period (145,660), results in a ten-year maximum allowable funding envelope of \$3.30 billion.

Tables C-2 & C-3 City-Wide Hard Capital Program

Table C-2 provides a summary of the development-related capital program for City-wide hard services (the projects included in the capital program are identified in Table C-3).

As shown in Table C-2, the gross cost of the capital program totals \$1.83 billion. A local service or “internal” component is identified for some of the projects, reflecting the cost that a development would have to pay for required local servicing for a particular subdivision. In keeping with historical practice, the City will continue to require these contributions through the normal subdivision process, but excluding them from the development charges calculation ensures that only the oversized portion of costs is shared by other developments. The total recoveries anticipated from local costs are estimated at \$379.41 million.

A further \$33.18 million has been identified as a non-growth or benefit to existing share and will be recovered from other municipal funding sources. Another share of the City-wide program, \$18.50 million, will either be recovered through area-specific by-laws, or are subsidies received from the Region of York or other local area municipalities. Additionally, \$57.03 million has been identified as prior growth and represent the revenue collected from previous development charges. A further \$129.41 million has been deemed to benefit growth occurring beyond the 2031 planning horizon and will be considered for recovery in subsequent development charge by-law updates. The remaining capital cost of \$1.21 billion is deemed development-related and is eligible for recovery over the 2022 – 2031 planning period.

Of the 2022 -2031 development-related costs, approximately 31.7 per cent relates to the provision of structures, or \$382.76 million; the provision for roads totals \$274.96 million and represents 22.8 per cent of the 2022 – 2031 DC recoverable costs; properties acquisition amount to \$245.04 million or 20.3 per cent. The balance of the 2022 - 2031 DC eligible costs is comprised of watermains (\$71.52 million), sidewalks (\$60.08 million), special projects – which are largely streetscaping (\$53.02 million), illumination (\$38.92 million), intersections (\$38.43 million), storm water management (\$23.32 million), studies (\$18.00 million), and sanitary sewers (\$2.50 million).

The total costs eligible for development charge recovery amounts to \$1.21 billion and is allocated 61.9 per cent, or \$748.31 million to the residential sector, 11.0 per cent, or \$133.23 million to the retail sector, 26.8 per cent, or \$323.61 million, to the other industrial/office/institutional sector and 0.3 per cent, or \$3.42 million to the mixed-use sector; theses shares are based on the 2021 – 2031 shares of growth in population in new units and employment.

The resulting unadjusted per capita residential charge is \$8,261.38 before cash flow adjustments. The non-residential retail unadjusted charge is \$211.97 per square meter, the industrial/office/institutional is \$170.84 per square meter and the mixed used charge is \$103.27 per square meter.

Table C-3 provides detail on the capital projects included in the City-wide hard development charge calculation and allocations of benefit and costs.

Table C-4 Cash Flow Analysis

The long term cash flow analysis, shown in Table C-4 takes into consideration expenditure timing and revenue projections. After cash flow analysis, the residential charge increases marginally, \$122.53 (1.5%), to \$8,383.90 per capita. Likewise the non-residential charges increase slightly after cash flow: the retail charge increases to \$216.47 per square metre, the industrial/office/institutional increases to \$173.68 per square metre and the mixed use charge increases to \$105.46 per square metre.

CITY-WIDE HARD SUMMARY										
10-year Hist. Service Level per pop & emp	2022 - 2031			Unadjusted Development Charge			Adjusted Development Charge			
	Development-Related Capital Program		Residential	Retail	I.O.I.	Mixed-Use	Residential	Retail	I.O.I.	Mixed-Use
	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/sq.m	\$/sq.m	\$/capita	\$/sq.m	\$/sq.m	\$/sq.m
\$22,688.49	\$1,826,095	\$1,208,572	\$8,261.38	\$211.97	\$170.84	\$103.27	\$8,383.90	\$216.47	\$173.68	\$105.46

APPENDIX C
TABLE C-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
ROADS & RELATED - CITY-WIDE INFRASTRUCTURE

ROADS - PROPERTY Type of Road	# of Hectares										UNIT COST (\$/Ha)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Major Arterial	17.72	17.72	17.72	17.72	17.72	13.99	13.99	13.99	13.99	13.99	\$10,335,527
Major Collector	290.46	293.55	293.55	295.43	295.43	281.56	284.58	287.29	287.29	287.29	\$10,335,527
Minor Collector	489.46	495.90	496.41	497.98	502.92	462.75	466.12	471.79	474.66	474.66	\$10,335,527
Total (Ha)	798	807	808	811	816	758	765	773	776	776	
Total (\$000)	8,244,029.76	8,342,527.33	8,347,798.45	8,383,456.02	8,434,513.52	7,837,430.12	7,903,474.14	7,990,085.86	8,019,748.82	8,019,748.82	

ROADS Type of Road	# of Kilometres										UNIT COST (\$/km)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Major Arterial	5.54	5.54	5.54	5.54	5.54	5.54	5.54	5.54	5.54	5.54	\$5,793,017
Major Collector	111.72	112.90	112.90	113.63	113.63	113.88	114.92	115.94	115.94	115.94	\$5,461,988
Minor Collector	212.81	215.61	215.83	216.52	218.66	213.37	214.95	217.96	219.29	219.29	\$4,634,414
Total (km)	330	334	334	336	338	333	335	339	341	341	
Total (\$000)	1,628,556.26	1,647,977.76	1,648,997.33	1,656,182.33	1,666,099.98	1,642,949.42	1,655,952.26	1,675,473.08	1,681,636.85	1,681,636.85	

BRIDGES & CULVERTS Description	# of Bridges & Culverts										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
VEHICULAR BRIDGES	25	25	25	25	25	25	25	25	25	25	\$7,129,867
PEDESTRIAN BRIDGES	63	63	65	66	66	66	78	78	78	78	\$318,298
CULVERTS	229	230	231	232	232	232	234	237	237	237	\$319,386
Total (#)	317	318	321	323	323	323	337	340	340	340	
Total (\$000)	\$271,438.8	\$271,758.2	\$272,714.2	\$273,351.9	\$273,351.9	\$273,351.9	\$277,810.2	\$278,768.4	\$278,768.4	\$278,768.4	

APPENDIX C
TABLE C-1

CITY OF MARKHAM
INVENTORY OF CAPITAL ASSETS
ROADS & RELATED - CITY-WIDE INFRASTRUCTURE

STREETLIGHTS Description	# of Lights										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
HPS	13,107	13,668	14,229	15,400	15,351	15,107	15,062	15,016	15,023	15,023	\$7,448
LED	14,502	15,063	15,624	12,503	12,587	13,485	13,559	14,111	14,434	14,434	\$7,448
Total (#)	27,609	28,731	29,853	27,903	27,938	28,592	28,621	29,127	29,457	29,457	
Total (\$000)	\$205,631.8	\$213,988.5	\$222,345.1	\$207,821.5	\$208,082.2	\$212,953.2	\$213,169.2	\$216,937.9	\$219,395.7	\$219,395.7	

TRAFFIC SIGNALS Description	# of Traffic Signals										UNIT COST (\$/unit)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Signalized Intersections	93	94	94	94	95	93	98	99	99	99	\$744,817
Warning Flashers	8	8	8	8	8	12	12	13	13	13	\$7,639
Total (#)	101	102	102	102	103	105	110	112	112	112	
Total (\$000)	\$69,329.1	\$70,073.9	\$70,073.9	\$70,073.9	\$70,818.7	\$69,359.6	\$73,083.7	\$73,836.2	\$73,836.2	\$73,836.2	

SIDEWALKS Description	# of Kilometres										UNIT COST (\$/km)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Sidewalks	1,052	1,064	1,065	1,070	1,076	885	898	915	924	924	\$430,338
Multiple Use Pathways	27	27	27	28	28	25	26	27	27	27	\$430,338
Total (#)	1,079	1,091	1,092	1,098	1,104	910	924	942	951	951	
Total (\$000)	\$464,334.7	\$469,498.8	\$469,929.1	\$472,511.1	\$475,093.2	\$391,779.7	\$397,546.2	\$405,378.4	\$409,380.5	\$409,380.5	

**APPENDIX C
TABLE C-1**

**CITY OF MARKHAM
CALCULATION OF SERVICE LEVELS
INVENTORY OF CAPITAL ASSETS
ROADS & RELATED - CITY-WIDE INFRASTRUCTURE**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historical Population	306,973	312,329	317,779	323,324	328,966	333,938	338,985	344,109	349,310	354,589
Historical Employment	<u>135,104</u>	<u>137,357</u>	<u>139,685</u>	<u>142,092</u>	<u>144,582</u>	<u>147,517</u>	<u>150,539</u>	<u>153,654</u>	<u>156,862</u>	<u>160,210</u>
Total Historical Population & Employment	442,077	449,686	457,464	465,416	473,548	481,455	489,524	497,763	506,172	514,800

INVENTORY SUMMARY (\$000)

Property ROW	\$8,244,029.8	\$8,342,527.3	\$8,347,798.4	\$8,383,456.0	\$8,434,513.5	\$7,837,430.1	\$7,903,474.1	\$7,990,085.9	\$8,019,748.8	\$8,019,748.8
Roads	\$1,628,556.3	\$1,647,977.8	\$1,648,997.3	\$1,656,182.3	\$1,666,100.0	\$1,642,949.4	\$1,655,952.3	\$1,675,473.1	\$1,681,636.8	\$1,681,636.8
Streetlights	\$205,631.8	\$213,988.5	\$222,345.1	\$207,821.5	\$208,082.2	\$212,953.2	\$213,169.2	\$216,937.9	\$219,395.7	\$219,395.7
Bridges & Culverts	\$271,438.8	\$271,758.2	\$272,714.2	\$273,351.9	\$273,351.9	\$273,351.9	\$277,810.2	\$278,768.4	\$278,768.4	\$278,768.4
Traffic Signals	\$69,329.1	\$70,073.9	\$70,073.9	\$70,073.9	\$70,818.7	\$69,359.6	\$73,083.7	\$73,836.2	\$73,836.2	\$73,836.2
Sidewalks	\$464,334.7	\$469,498.8	\$469,929.1	\$472,511.1	\$475,093.2	\$391,779.7	\$397,546.2	\$405,378.4	\$409,380.5	\$409,380.5
Total (\$000)	\$10,883,320.5	\$11,015,824.5	\$11,031,858.1	\$11,063,396.8	\$11,127,959.5	\$10,427,824.0	\$10,521,035.8	\$10,640,479.8	\$10,682,766.5	\$10,682,766.5

SERVICE LEVEL (\$/pop+empl)

**Average
Service
Level**

Property ROW	\$18,648.40	\$18,551.89	\$18,247.99	\$18,012.82	\$17,811.31	\$16,278.64	\$16,145.21	\$16,051.99	\$15,843.91	\$15,578.39	\$17,117.06
Roads	\$3,683.87	\$3,664.73	\$3,604.65	\$3,558.50	\$3,518.33	\$3,412.47	\$3,382.78	\$3,366.01	\$3,322.26	\$3,266.59	\$3,478.02
Streetlights	\$465.15	\$475.86	\$486.04	\$446.53	\$439.41	\$442.31	\$435.46	\$435.83	\$433.44	\$426.18	\$448.62
Bridges & Culverts	\$614.01	\$604.33	\$596.14	\$587.33	\$577.24	\$567.76	\$567.51	\$560.04	\$550.74	\$541.51	\$576.66
Traffic Signals	\$156.83	\$155.83	\$153.18	\$150.56	\$149.55	\$144.06	\$149.30	\$148.34	\$145.87	\$143.43	\$149.69
Sidewalks	\$1,050.35	\$1,044.06	\$1,027.25	\$1,015.24	\$1,003.26	\$813.74	\$812.11	\$814.40	\$808.78	\$795.22	\$918.44
Total (\$/pop+empl)	\$24,618.61	\$24,496.70	\$24,115.25	\$23,770.99	\$23,499.11	\$21,658.99	\$21,492.37	\$21,376.61	\$21,105.00	\$20,751.31	\$22,688.49

**CITY OF MARKHAM
CALCULATION OF SERVICE LEVELS
INVENTORY OF CAPITAL ASSETS
ROADS & RELATED - CITY-WIDE INFRASTRUCTURE**

10-Year Funding Envelope Calculation	
10 Year Average Service Level 2012 - 2021	\$22,688.49
Net Population & Employment Growth 2022 - 2031	145,660
Maximum Allowable Funding Envelope	\$3,304,814,431

APPENDIX C
TABLE C-2

CITY OF MARKHAM
CITY-WIDE HARD SERVICES DEVELOPMENT-RELATED PROJECTS SUMMARY
2022 - 2031

Service	Total Gross Cost	Non-Development Charge Recoverable Costs		Area Specific & Other Development Charges Recovery	Prior Growth	Other Development-Related	City-Wide Development Charge Recoverable	Residential Share of CWH Development Charge Recoverable		Non-Residential Retail	Non-Residential I.O.I.		Non-Residential Mixed-Use		
		Local Costs	Non-Growth (Benefit to Existing)							Share of CWH Development Charge Recoverable	Share of CWH Development Charge Recoverable	Share of CWH Development Charge Recoverable			
ILLUMINATION	\$ 44,640,000	\$ 217,114	\$ 3,721,999	\$ -	\$ -	\$ 1,776,168	\$ 38,924,718	61.9%	\$ 24,101,096	11.0%	\$ 4,291,112	26.8%	\$ 10,422,482	0.3%	\$ 110,029
INTERSECTION	\$ 43,111,194	\$ 403,999	\$ 4,272,330	\$ -	\$ -	\$ -	\$ 38,434,865	61.9%	\$ 23,797,792	11.0%	\$ 4,237,110	26.8%	\$ 10,291,319	0.3%	\$ 108,644
ROADS	\$ 604,538,439	\$ 243,553,583	\$ -	\$ -	\$ 11,125,155	\$ 74,895,469	\$ 274,964,232	61.9%	\$ 170,250,156	11.0%	\$ 30,312,418	26.8%	\$ 73,624,417	0.3%	\$ 777,241
PROPERTIES ACQUISITION	\$ 266,083,580	\$ 8,347,025	\$ -	\$ -	\$ 12,279,353	\$ 420,857	\$ 245,036,345	61.9%	\$ 151,719,646	11.0%	\$ 27,013,128	26.8%	\$ 65,610,926	0.3%	\$ 692,644
SIDEWALKS	\$ 72,400,047	\$ 244,164	\$ 6,036,536	\$ -	\$ -	\$ 6,036,536	\$ 60,082,811	61.9%	\$ 37,201,595	11.0%	\$ 6,623,608	26.8%	\$ 16,087,772	0.3%	\$ 169,836
STORM WATER MANAGEMENT	\$ 50,474,837	\$ -	\$ 7,311,950	\$ 16,039,216	\$ 3,801,032	\$ -	\$ 23,322,638	61.9%	\$ 14,440,725	11.0%	\$ 2,571,118	26.8%	\$ 6,244,869	0.3%	\$ 65,926
WATERMAIN	\$ 83,090,298	\$ 687,748	\$ 651,348	\$ 364,813	\$ 9,861,531	\$ -	\$ 71,524,858	61.9%	\$ 44,286,190	11.0%	\$ 7,884,994	26.8%	\$ 19,151,494	0.3%	\$ 202,179
STUDIES	\$ 18,003,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,003,000	61.9%	\$ 11,146,954	11.0%	\$ 1,984,674	26.8%	\$ 4,820,483	0.3%	\$ 50,889
SPECIAL PROJECTS	\$ 90,505,053	\$ 19,218,118	\$ 11,186,286	\$ -	\$ -	\$ 7,080,786	\$ 53,019,863	61.9%	\$ 32,828,415	11.0%	\$ 5,844,979	26.8%	\$ 14,196,597	0.3%	\$ 149,871
STRUCTURES	\$ 542,259,752	\$ 106,739,947	\$ -	\$ -	\$ 16,062,886	\$ 36,697,757	\$ 382,759,161	61.9%	\$ 236,993,759	11.0%	\$ 42,195,872	26.8%	\$ 102,487,585	0.3%	\$ 1,081,945
SANITARY SEWER	\$ 5,000,000	\$ -	\$ -	\$ -	\$ -	\$ 2,500,000	\$ 2,500,000	61.9%	\$ 1,547,930	11.0%	\$ 275,603	26.8%	\$ 669,400	0.3%	\$ 7,067
CREDIT AGREEMENT PROJECTS	\$ 5,989,298	\$ -	\$ -	\$ 2,093,566	\$ 3,895,732	\$ -	\$ -	61.9%	\$ -	11.0%	\$ -	26.8%	\$ -	0.3%	\$ -
TOTAL	\$1,826,095,497	\$ 379,411,698	\$ 33,180,448	\$ 18,497,595	\$ 57,025,690	\$ 129,407,574	\$1,208,572,492	\$ 748,314,258	\$ 133,234,618	\$ 323,607,344	\$ 3,416,272				

Adjustments															
Less Existing Unallocated Reserve Fund Balances								61.9%	\$0	11.0%	\$0	26.8%	\$0	0.3%	\$0
Less Credit Agreements Paid								61.9%	(\$2,652,776)	11.0%	(\$292,446)	26.8%	(\$710,307)	0.3%	(\$7,499)
Projects Funded From Reserves								61.9%	\$0	11.0%	\$0	26.8%	\$0	0.3%	\$0
TOTAL CITY-WIDE HARD DEVELOPMENT CHARGE RECOVERABLE								\$1,205,919,716	\$ 746,671,734	\$ 132,942,172	\$ 322,897,037	\$ 3,408,774			

RESIDENTIAL DEVELOPMENT CHARGE	
Population in New Units 2022 - 2031	90,381
Unadjusted Development Charge Per Capita - Before Cash Flow	\$ 8,261.38
Charge per Single and Semi	3.73
City-Wide Hard Preliminary Draft Rate Calculation	\$30,811

NON-RESIDENTIAL DEVELOPMENT CHARGE							
Non-residential Growth in Square Metres (GFA) 2022-2031							
Unadjusted Development Charge Per Square Metre of GFA - Before Cash Flow				Retail	\$ 627,176	I.O.I	\$ 1,890,059
					\$ 211.97		\$ 170.84
						Mixed-use	\$ 33,009
							\$ 103.27

APPENDIX C
TABLE C-3

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
CITY-WIDE GROWTH-RELATED PROJECTS

Location	From / To	Timing of Project	Total	Local - by others		Others Sharing and/or Non-Growth Cost				City-Share		DC Eligible		
			Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	Share (%)	Cost (\$)	Prior Growth	DC Eligible Costs 2022 - 2031	Other Dev. Related (\$)
1.0 ILLUMINATION														
City-wide Illumination requests		2022 - 2031	\$ 4,447,556	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 4,447,556	\$ -	\$ 4,447,556	\$ -
Alden Road	N&W Esna Park to Warden Ave.	2022 - 2031	\$ 417,414	0%	\$ -	65%	\$ 271,319	\$ -	\$ 271,319	35%	\$ 146,095	\$ -	\$ 146,095	\$ -
Church Street	S.S. Country Glen to Bur Oak	2022 - 2031	\$ 113,471	0%	\$ -	65%	\$ 73,756	\$ -	\$ 73,756	35%	\$ 39,715	\$ -	\$ 39,715	\$ -
Denison St.	S.S. East limit to 9th Line	2022 - 2031	\$ 306,904	0%	\$ -	65%	\$ 199,487	\$ -	\$ 199,487	35%	\$ 107,416	\$ -	\$ 107,416	\$ -
Highway 7	B.S. 9th Line to 300m East of Reesor Rd	2022 - 2031	\$ 1,308,604	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,308,604	\$ -	\$ 1,308,604	\$ -
Highway 7	S.S. Cornell Centre Blvd to Donald Cousens Pkwy	2022 - 2031	\$ 168,766	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 168,766	\$ -	\$ 168,766	\$ -
Highway 7	S.S. Donald Cousens Pkwy to Reesor Road	2022 - 2031	\$ 196,393	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 196,393	\$ -	\$ 196,393	\$ -
Kirkham Dr.	S.S. Karachi Drive to S limit Lot 4, Con. 8	2022 - 2031	\$ 120,976	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 120,976	\$ -	\$ 120,976	\$ -
Main St. North	B.S. Major Mackenzie to Donald Cousens Pkwy	2022 - 2031	\$ 878,402	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 878,402	\$ -	\$ 878,402	\$ -
Major Mackenzie	B.S. Markham Rd. to Donald Cousens Pkwy	2022 - 2031	\$ 527,924	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 527,924	\$ -	\$ 527,924	\$ -
Major Mackenzie	S.S. Donald Cousens Parkway to Ninth Line	2022 - 2031	\$ 334,531	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 334,531	\$ -	\$ 334,531	\$ -
Donald Cousens Parkway	B.S. Main St. North to OHEPC	2022 - 2031	\$ 2,868,083	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,868,083	\$ -	\$ 2,868,083	\$ -
Donald Cousens Parkway	E.S. 9th Line to between 9th line and 16th Ave	2022 - 2031	\$ 279,276	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 279,276	\$ -	\$ 279,276	\$ -
Donald Cousens Parkway	W.S. Highway 407 N. to Hwy 7	2022 - 2031	\$ 251,648	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 251,648	\$ -	\$ 251,648	\$ -
Donald Cousens Parkway	B.S. Nineteenth Avenue to Warden Ave	2022 - 2031	\$ 878,402	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 878,402	\$ -	\$ 878,402	\$ -
Miller Extension	B.S. Warden Avenue to Birchmount Rd.	2022 - 2031	\$ 445,042	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 445,042	\$ -	\$ 445,042	\$ -
Miller Extension	B.S. Birchmount Rd. to Kennedy Rd.	2022 - 2031	\$ 932,178	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 932,178	\$ -	\$ 932,178	\$ -
Rodick Road	B.S. 14th Avenue to Miller Avenue	2022 - 2031	\$ 417,414	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 417,414	\$ -	\$ 417,414	\$ -
Sixteenth Avenue	B.S. Highway 404 to Cachet Woods	2022 - 2031	\$ 279,276	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 279,276	\$ -	\$ 279,276	\$ -
Sixteenth Avenue	S.S. Cachet Woods to Woodbine	2022 - 2031	\$ 182,579	0%	\$ -	65%	\$ 118,677	\$ -	\$ 118,677	35%	\$ 63,903	\$ -	\$ 63,903	\$ -
Sixteenth Avenue	N.S. Warden Ave. to Kennedy Rd.	2022 - 2031	\$ 582,639	0%	\$ -	65%	\$ 378,715	\$ -	\$ 378,715	35%	\$ 203,924	\$ -	\$ 203,924	\$ -
Sixteenth Avenue	S.S. Markham Rd to 300m westerly	2022 - 2031	\$ 85,103	0%	\$ -	65%	\$ 55,317	\$ -	\$ 55,317	35%	\$ 29,786	\$ -	\$ 29,786	\$ -
Steeles Avenue	N.S. Markham Rd to OHEPC	2022 - 2031	\$ 1,066,615	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,066,615	\$ -	\$ 1,066,615	\$ -
Reesor Rd.	E.S. Highway 7 to 1000m North of Highway 7	2022 - 2031	\$ 279,276	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 279,276	\$ -	\$ 279,276	\$ -
Reesor Rd.	B.S. Highway 7 to Highway 407	2022 - 2031	\$ 500,297	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 500,297	\$ -	\$ 500,297	\$ -
Reesor Rd.	W.S. Highway 407 to 14th Avenue	2022 - 2031	\$ 320,717	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 320,717	\$ -	\$ 320,717	\$ -
Victoria Park	E.S. Denison to Steeles	2022 - 2031	\$ 320,717	0%	\$ -	65%	\$ 208,466	\$ -	\$ 208,466	35%	\$ 112,251	\$ -	\$ 112,251	\$ -
Woodbine Avenue	E.S. N. limit of Cathedral to 19th Avenue	2022 - 2031	\$ 472,669	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 472,669	\$ -	\$ 472,669	\$ -
Yorktech Drive	B.S. Rodick Rd. to Warden	2022 - 2031	\$ 824,627	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 824,627	\$ -	\$ 824,627	\$ -
White Belt	B.S. Warden, Kennedy	2022 - 2031	\$ 3,244,509	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,244,509	\$ -	\$ 3,244,509	\$ -
John Street	N.S. 200m West of Aileen Rd to Woodbine	2022 - 2031	\$ 891,846	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 891,846	\$ -	\$ 891,846	\$ -
Main St. North	E.S. Parkway Avenue to 16th Avenue	2022 - 2031	\$ 348,345	0%	\$ -	65%	\$ 226,424	\$ -	\$ 226,424	35%	\$ 121,921	\$ -	\$ 121,921	\$ -
Middlefield Rd	E.S. Steeles Ave to 14 Ave	2022 - 2031	\$ 636,414	0%	\$ -	65%	\$ 413,669	\$ -	\$ 413,669	35%	\$ 222,745	\$ -	\$ 222,745	\$ -
Rodick Road	E.S. 16th Avenue to Woodbine Avenue	2022 - 2031	\$ 417,414	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 417,414	\$ -	\$ 417,414	\$ -
Allstate Pkwy	E.S. Centurian Drive to South Limit of Buttonville	2022 - 2031	\$ 210,207	50%	\$ 105,104	0%	\$ -	\$ -	\$ -	50%	\$ 105,104	\$ -	\$ 105,104	\$ -
Valleywood Dr	B.S. Frontenac Drive to North of Applecreek Blvd.	2022 - 2031	\$ 224,021	50%	\$ 112,010	0%	\$ -	\$ -	\$ -	50%	\$ 112,010	\$ -	\$ 112,010	\$ -
Cachet Woods Crescent	E.S. 16th Avenue to Markland Extension	2022 - 2031	\$ 417,414	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 417,414	\$ -	\$ 417,414	\$ -
Old Kennedy Rd	W.S. Steeles Ave. to Denison St	2022 - 2031	\$ 279,276	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 279,276	\$ -	\$ 279,276	\$ -
19th Ave	B.S. Hwy 404 to 1100m E of Woodbine Ave	2022 - 2031	\$ 1,201,053	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,201,053	\$ -	\$ 1,201,053	\$ -
Elgin Mills Rd	B.S. Victoria Square Blvd to Warden Ave	2022 - 2031	\$ 1,201,053	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,201,053	\$ -	\$ 1,201,053	\$ -
Elgin Mills Rd	B.S. Warden Ave to Kennedy Rd	2022 - 2031	\$ 1,201,053	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,201,053	\$ -	\$ 1,201,053	\$ -
Elgin Mills Rd	B.S. Kennedy Rd to 1000m E of Kennedy Rd	2022 - 2031	\$ 555,552	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 555,552	\$ -	\$ 555,552	\$ -
Langstaff Road	B.S. Bayview Avenue to South Limit of Langstaff Development	2022 - 2031	\$ 251,648	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 251,648	\$ -	\$ 251,648	\$ -
Warden Ave	B.S. Major Mackenzie Dr to Elgin Mills Rd	2022 - 2031	\$ 1,201,053	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,201,053	\$ -	\$ 1,201,053	\$ -
Warden Ave	B.S. Elgin Mills Rd to 19th Ave	2022 - 2031	\$ 1,201,053	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,201,053	\$ -	\$ 1,201,053	\$ -
Kennedy Rd	B.S. Major Mackenzie Dr to Elgin Mills Rd	2022 - 2031	\$ 1,201,053	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,201,053	\$ -	\$ 1,201,053	\$ -
Streetslights for Sidewalk Gapping Program		2022 - 2031	\$ 5,189,473	0%	\$ -	18%	\$ 908,158	\$ -	\$ 908,158	65%	\$ 3,373,157	\$ -	\$ 3,373,157	\$ 908,158
Streetslights for Active Transportation Program		2022 - 2031	\$ 4,960,060	0%	\$ -	18%	\$ 868,011	\$ -	\$ 868,011	65%	\$ 3,224,039	\$ -	\$ 3,224,039	\$ 868,011
TOTAL ILLUMINATION			\$ 44,640,000		\$ 217,114		\$ 3,721,999	\$ -	\$ 3,721,999		\$ 38,924,718	\$ -	\$ 38,924,718	\$ 1,776,168.3

APPENDIX C
TABLE C-3

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
CIY-WIDE GROWTH-RELATED PROJECTS

Location	From / To	Timing of Project	Total	Local - by others		Others Sharing and/or Non-Growth Cost				City-Share		DC Eligible		
			Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	Share (%)	Cost (\$)	Prior Growth	DC Eligible Costs 2022 - 2031	Other Dev. Related (\$)
2.0 INTERSECTION														
City-wide Intersection Improvements		2022 - 2031	\$ 1,685,774	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,685,774	\$ -	\$ 1,685,774	\$ -
City-wide Intersection Pedestrian Signal (Lump Sum) - 10		2022 - 2031	\$ 2,300,217	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,300,217	\$ -	\$ 2,300,217	\$ -
404 North employment Land N-S Road Internal Traffic Signals (3)		2022 - 2031	\$ 1,018,665	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,018,665	\$ -	\$ 1,018,665	\$ -
Birchmount Extension	at Miller Avenue	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Apple Creek Boulevard	at McIntosh Drive	2022 - 2031	\$ 345,735	0%	\$ -	65%	\$ 224,728	\$ -	\$ 224,728	35%	\$ 121,007	\$ -	\$ 121,007	\$ -
Brimley Road	at Cardiff / Worthing	2022 - 2031	\$ 345,735	0%	\$ -	65%	\$ 224,728	\$ -	\$ 224,728	35%	\$ 121,007	\$ -	\$ 121,007	\$ -
Brimley Road	at Randall Avenue	2022 - 2031	\$ 345,735	0%	\$ -	65%	\$ 224,728	\$ -	\$ 224,728	35%	\$ 121,007	\$ -	\$ 121,007	\$ -
Future Signalized Intersections (2)	at Wismer	2022 - 2031	\$ 685,110	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 685,110	\$ -	\$ 685,110	\$ -
Future Signalized Intersections (5)	at Berzcy	2022 - 2031	\$ 1,685,774	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,685,774	\$ -	\$ 1,685,774	\$ -
Future Signalized Intersections (4)	at Greensborough	2022 - 2031	\$ 1,352,219	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,352,219	\$ -	\$ 1,352,219	\$ -
Future Signalized Intersections (2)	at Cathedraltown	2022 - 2031	\$ 685,110	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 685,110	\$ -	\$ 685,110	\$ -
Future Signalized Intersections (5)	at FUA	2022 - 2031	\$ 1,685,774	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,685,774	\$ -	\$ 1,685,774	\$ -
Carlton Road	at Village Parkway	2022 - 2031	\$ 345,735	0%	\$ -	65%	\$ 224,728	\$ -	\$ 224,728	35%	\$ 121,007	\$ -	\$ 121,007	\$ -
Carlton Road	at Manhattan Drive	2022 - 2031	\$ 345,735	0%	\$ -	65%	\$ 224,728	\$ -	\$ 224,728	35%	\$ 121,007	\$ -	\$ 121,007	\$ -
Church Street	at Wooten Way	2022 - 2031	\$ 807,998	0%	\$ -	65%	\$ 525,199	\$ -	\$ 525,199	35%	\$ 282,799	\$ -	\$ 282,799	\$ -
Denison Street	at Marydale Drive	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Doncaster Avenue	at Henderson Avenue	2022 - 2031	\$ 807,998	0%	\$ -	65%	\$ 525,199	\$ -	\$ 525,199	35%	\$ 282,799	\$ -	\$ 282,799	\$ -
Enterprise Drive	at Sciberras Road	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Fairburn Drive	at Rodick Road	2022 - 2031	\$ 345,735	0%	\$ -	65%	\$ 224,728	\$ -	\$ 224,728	35%	\$ 121,007	\$ -	\$ 121,007	\$ -
Fourteenth Avenue	at Riviera Drive (east of Rodick)	2022 - 2031	\$ 345,735	0%	\$ -	65%	\$ 224,728	\$ -	\$ 224,728	35%	\$ 121,007	\$ -	\$ 121,007	\$ -
Fourteenth Avenue	at Mid Block (east of Woodbine)	2022 - 2031	\$ 345,735	0%	\$ -	65%	\$ 224,728	\$ -	\$ 224,728	35%	\$ 121,007	\$ -	\$ 121,007	\$ -
Green Lane	at Aileen / Willowbrook	2022 - 2031	\$ 807,998	0%	\$ -	65%	\$ 525,199	\$ -	\$ 525,199	35%	\$ 282,799	\$ -	\$ 282,799	\$ -
Henderson Street	at John Street	2022 - 2031	\$ 345,735	0%	\$ -	65%	\$ 224,728	\$ -	\$ 224,728	35%	\$ 121,007	\$ -	\$ 121,007	\$ -
Honda Blvd.	at 19th Avenue	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Hood Road	at McPherson Road	2022 - 2031	\$ 345,735	0%	\$ -	65%	\$ 224,728	\$ -	\$ 224,728	35%	\$ 121,007	\$ -	\$ 121,007	\$ -
Markham Centre Turning Lane & Unionville Traffic Calming		2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Main St. North	at Battista Perri Dr	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Markland Street	at Hillmount Road	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Midland Avenue	at Old Kennedy Road	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Ramona Blvd.	at Wooten Way	2022 - 2031	\$ 345,735	0%	\$ -	65%	\$ 224,728	\$ -	\$ 224,728	35%	\$ 121,007	\$ -	\$ 121,007	\$ -
Rizal Avenue	at Copper Creek Drive	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Rodick Road	at Clegg Road	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Rodick Road	at Cox Blvd.	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Rougeside Promenade	at Verclair Gate	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Rougeside Promenade	at Sciberras Road	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Rodick Road	at Macrill / Rachel	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Village Gate	at Calvert Road	2022 - 2031	\$ 345,735	0%	\$ -	65%	\$ 224,728	\$ -	\$ 224,728	35%	\$ 121,007	\$ -	\$ 121,007	\$ -
White's Hill Avenue	at Cornell Centre Boulevard	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
407 Westbound exit ramp to East Precint		2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Reesor Road	at Elgin Mills	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Reesor Road	at 19th Avenue	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Allstate Parkway	at Valleywood Dr	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Allstate Parkway	at Applecreek Blvd.	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Renfrew Dr	at Valleywood Dr	2022 - 2031	\$ 807,998	50%	\$ 403,999	0%	\$ -	\$ -	\$ -	50%	\$ 403,999	\$ -	\$ 403,999	\$ -
Applecreek Blvd.	at Valleywood Dr	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Markland St	at Hwy 404 Mid-block Crossing	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Cachet Wood Crt	at Hwy 404 Mid-block Crossing	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Centurian Drive	at Frontenac Drive	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Rustlewood Ave	at Bur Oak Ave	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Rustlewood Ave	at Cornell Centre Blvd.	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Riverlands Ave	at Reesor Rd	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
19th Ave	at Collector Rd 'A'	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Elgin Mills Rd	at Collector Rd 'D'	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Elgin Mills Rd	at Collector Rd 'E'	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Elgin Mills Rd	at Collector Rd 'F'	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Elgin Mills Rd	at Collector Rd 'I'	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Elgin Mills Rd	at Collector Rd 'J'	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Elgin Mills Rd	at Collector Rd 'K'	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Midland Ave.	at Old Kennedy Rd	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Old Kennedy Rd.	at Aldergrove Dr	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Old Kennedy Rd.	at Denison St	2022 - 2031	\$ 345,735	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,735	\$ -	\$ 345,735	\$ -
Rodick Rd	at Yorktech Dr	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Birchmount Rd	at Verdale Rd	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Birchmount Rd	at Rougeside Promenade	2022 - 2031	\$ 807,998	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 807,998	\$ -	\$ 807,998	\$ -
Future Signalized Intersections (6)	at Langstaff	2022 - 2031	\$ 2,019,329	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,019,329	\$ -	\$ 2,019,329	\$ -
TOTAL INTERSECTION			\$ 43,111,194		\$ 403,999	\$ 4,272,330	\$ -	\$ 4,272,330		\$ 38,434,865	\$ -	\$ 38,434,865	\$ -	

APPENDIX C
TABLE C-3

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
CIY-WIDE GROWTH-RELATED PROJECTS

Location	From / To	Timing of Project	Total	Local - by others		Others Sharing and/or Non-Growth Cost				City-Share		DC Eligible		
			Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	Share (%)	Cost (\$)	Prior Growth	DC Eligible Costs 2022 - 2031	Other Dev. Related (\$)
3.0 ROADS														
14th Ave Reconstruction	Alden Rd to Hwy 404	2030 - 2031	\$ 15,667,386	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 15,667,386	\$ -	\$ 15,667,386	\$ -
Birchmount Road, 4th lane	Enterprise to Rouge River	2022 - 2022	\$ 4,075,248	82%	\$ 3,347,525	0%	\$ -	\$ -	\$ -	18%	\$ 727,723	\$ 727,723	\$ -	\$ -
Cachet Woods Crescent	16th Avenue to Markland Extension	2022 - 2023	\$ 1,467,017	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,467,017	\$ -	\$ 1,467,017	\$ -
Church Street	9th Line to Bur Oak	2025 - 2026	\$ 5,536,016	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 5,536,016	\$ -	\$ 5,536,016	\$ -
City-wide Miscellaneous		2022 - 2031	\$ 4,432,413	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 4,432,413	\$ -	\$ 4,432,413	\$ -
Commerce Valley East and West Widening		2026 - 2027	\$ 10,450,924	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 10,450,924	\$ -	\$ 10,450,924	\$ -
Denison St.	Bethany St to east limit of Village of Fairtree	2022 - 2022	\$ 2,277,856	82%	\$ 1,871,096	0%	\$ -	\$ -	\$ -	18%	\$ 406,760	\$ 406,760	\$ -	\$ -
Denison St.	East Limit of Village of Fairtree to Golf Course	2022 - 2022	\$ 2,891,884	82%	\$ 2,375,476	0%	\$ -	\$ -	\$ -	18%	\$ 516,408	\$ 516,408	\$ -	\$ -
Denison St.	Golf Course to 9th Line	2027 - 2028	\$ 3,737,144	0%	\$ -	0%	\$ -	\$ -	\$ -	85%	\$ 3,176,573	\$ -	\$ 3,176,573	\$ 560,572
Enterprise Drive (Ph. II)	Rivas Road to Main Street S	2022 - 2022	\$ 2,172,736	82%	\$ 1,784,748	0%	\$ -	\$ -	\$ -	18%	\$ 387,989	\$ 387,989	\$ -	\$ -
Enterprise Drive, local (Ph. I)	Rivas Road to GO Line	2022 - 2022	\$ 1,067,976	82%	\$ 877,266	0%	\$ -	\$ -	\$ -	18%	\$ 190,710	\$ 190,710	\$ -	\$ -
Govette Dr	Kennedy Rd to Old Kennedy Ave	2027 - 2028	\$ 1,756,821	82%	\$ 1,443,103	0%	\$ -	\$ -	\$ -	18%	\$ 313,718	\$ -	\$ 313,718	\$ -
Honda Blvd	Woodbine Bypass to Gas Pipeline	2022 - 2022	\$ 255,927	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 255,927	\$ 255,927	\$ -	\$ -
Honda Blvd	Gas Pipeline to 19th Avenue	2024 - 2025	\$ 2,973,995	82%	\$ 2,442,925	0%	\$ -	\$ -	\$ -	18%	\$ 531,071	\$ -	\$ 531,071	\$ -
Kirkham Dr	Karachi Dr. To North Limit of Development	2022 - 2022	\$ 2,592,138	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,592,138	\$ 2,592,138	\$ -	\$ -
Markham Rd.	Major Mackenzie to Donald Cousens Parkway	2027 - 2028	\$ 5,234,462	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 5,234,462	\$ -	\$ 5,234,462	\$ -
Markland Extension	Cachet Woods Court to Woodbine Avenue	2022 - 2023	\$ 7,536,297	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 7,536,297	\$ -	\$ 7,536,297	\$ -
Midland Ave	Steeles Ave to Old Kennedy Rd	2028 - 2029	\$ 2,626,231	82%	\$ 2,157,261	0%	\$ -	\$ -	\$ -	18%	\$ 468,970	\$ -	\$ 468,970	\$ -
Miller Ave	Woodbine Ave to Rodick Rd	2024 - 2025	\$ 9,523,553	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 9,523,553	\$ -	\$ 9,523,553	\$ -
Miller Ave	Warden Ave to Birchmount Rd	2026 - 2027	\$ 4,365,052	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 4,365,052	\$ -	\$ 4,365,052	\$ -
Miller Ave	Birchmount Rd to Duffield Dr	2028 - 2031	\$ 9,871,317	0%	\$ -	0%	\$ -	\$ -	\$ -	85%	\$ 8,390,619	\$ -	\$ 8,390,619	\$ 1,480,698
Reesor Rd Reconstruction	14th Avenue to 1000m N of Highway 7	2030 - 2031	\$ 17,406,206	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 17,406,206	\$ -	\$ 17,406,206	\$ -
Rivas Drive (N-S Connection Road), local		2022 - 2022	\$ 721,636	100%	\$ 721,636	0%	\$ -	\$ -	\$ -	0%	\$ -	\$ -	\$ -	\$ -
Rivis Road	YMCA Boulevard to Markham Live	2026 - 2027	\$ 1,611,919	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,611,919	\$ -	\$ 1,611,919	\$ -
Rodick Rd	14th Ave to Miller	2023 - 2024	\$ 4,365,052	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 4,365,052	\$ -	\$ 4,365,052	\$ -
Rougeside Promenade	Warden Ave to 100m East	2026 - 2027	\$ 1,000,000	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -
Rougeside Promenade	100m east of Warden Ave to Verdale	2026 - 2027	\$ 1,177,214	82%	\$ 966,997	0%	\$ -	\$ -	\$ -	18%	\$ 210,217	\$ -	\$ 210,217	\$ -
Sciberras Dr	Highway 7 to Rouge River	2029 - 2030	\$ 3,263,799	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,263,799	\$ -	\$ 3,263,799	\$ -
Verclaire	Highway 7 to Rouge River	2022 - 2022	\$ 2,046,624	82%	\$ 1,681,156	0%	\$ -	\$ -	\$ -	18%	\$ 365,469	\$ 365,469	\$ -	\$ -
Victoria Square Boulevard	WBP South to Stony Hill Avenue	2023 - 2024	\$ 14,040,319	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 14,040,319	\$ -	\$ 14,040,319	\$ -
Victoria Square Boulevard	Princess of Wales to WBP North	2024 - 2025	\$ 8,400,688	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 8,400,688	\$ -	\$ 8,400,688	\$ -
Victoria Square Boulevard	Stony Hill Avenue to Princess of Wales	2025 - 2026	\$ 14,502,793	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 14,502,793	\$ -	\$ 14,502,793	\$ -
East Precint Road Requirements		2028 - 2031	\$ 87,855,138	0%	\$ -	0%	\$ -	\$ -	\$ -	18%	\$ 16,017,950	\$ -	\$ 16,017,950	\$ 71,837,188
YMCA BLVD		2025 - 2026	\$ 2,887,054	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,887,054	\$ -	\$ 2,887,054	\$ -
Yorktech Extension	Rodick Rd to Warden Ave	2023 - 2024	\$ 8,712,103	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 8,712,103	\$ -	\$ 8,712,103	\$ -
Miller Ave	Rodick Rd to Warden Ave	2030 - 2031	\$ 7,842,693	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 7,842,693	\$ -	\$ 7,842,693	\$ -
Allstate Pkwy	Hwy 7 to Valleywood	2026 - 2027	\$ 4,108,588	50%	\$ 2,054,294	0%	\$ -	\$ -	\$ -	50%	\$ 2,054,294	\$ -	\$ 2,054,294	\$ -
19th Ave (Urbanize)	Hwy 404 to 1000m E of Woodbine Ave	2028 - 2029	\$ 13,542,161	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 13,542,161	\$ -	\$ 13,542,161	\$ -
Allstate Pkwy	Current terminus to 16th Avenue	2027 - 2028	\$ 6,393,676	82%	\$ 5,251,948	0%	\$ -	\$ -	\$ -	18%	\$ 1,141,728	\$ -	\$ 1,141,728	\$ -
Allstate Pkwy	Valleywood Dr to Current Terminus	2028 - 2029	\$ 2,626,231	50%	\$ 1,313,115	0%	\$ -	\$ -	\$ -	50%	\$ 1,313,115	\$ -	\$ 1,313,115	\$ -
Applecreek Blvd.	Allstate Pkwy to Woodbine Ave	2028 - 2029	\$ 3,147,877	82%	\$ 2,585,756	0%	\$ -	\$ -	\$ -	18%	\$ 562,121	\$ -	\$ 562,121	\$ -
Bur Oak Avenue	9th Line to Whites Hill	2022 - 2022	\$ 310,290	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 310,290	\$ 310,290	\$ -	\$ -
Bur Oak Avenue	Riverlands to Hwy 7	2022 - 2022	\$ 403,070	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 403,070	\$ 403,070	\$ -	\$ -
Bur Oak Avenue	Hwy 7 to Romeo DeGasperi	2024 - 2025	\$ 1,528,256	82%	\$ 1,255,353	0%	\$ -	\$ -	\$ -	18%	\$ 272,903	\$ -	\$ 272,903	\$ -
William Forester Rd	Hwy 7 to 200m South	2023 - 2024	\$ 1,182,134	82%	\$ 971,038	0%	\$ -	\$ -	\$ -	18%	\$ 211,095	\$ -	\$ 211,095	\$ -
Cedar Avenue Extension	South Boulevard to North Boulevard	2022 - 2023	\$ 1,195,679	82%	\$ 982,165	0%	\$ -	\$ -	\$ -	18%	\$ 213,514	\$ -	\$ 213,514	\$ -
Cedar Avenue Extension	North Boulevard to High Tech Road	2022 - 2023	\$ 8,851,360	67%	\$ 5,900,907	0%	\$ -	\$ -	\$ -	33%	\$ 2,950,453	\$ -	\$ 2,950,453	\$ -
Collector Road 'C'	Langstaff Development (East)	2025 - 2026	\$ 1,048,469	82%	\$ 861,243	0%	\$ -	\$ -	\$ -	18%	\$ 187,227	\$ -	\$ 187,227	\$ -
Elgin Mills Rd	Warden Ave to Kennedy Rd	2024 - 2025	\$ 14,894,577	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 14,894,577	\$ -	\$ 14,894,577	\$ -
Elgin Mills Rd	Kennedy Rd to 1000m E	2026 - 2027	\$ 6,780,080	0%	\$ -	0%	\$ -	\$ -	\$ -	85%	\$ 5,763,068	\$ -	\$ 5,763,068	\$ 1,017,012
Elgin Mills Rd	Victoria Square to Warden Ave	2024 - 2025	\$ 14,894,577	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 14,894,577	\$ -	\$ 14,894,577	\$ -
FUA - Collector Rd 'A'	Warden Ave to 19th Ave	2022 - 2026	\$ 13,401,650	93%	\$ 12,444,389	0%	\$ -	\$ -	\$ -	7%	\$ 957,261	\$ -	\$ 957,261	\$ -
FUA - Collector Rd 'B'	Woodbine Ave to Collector Rd 'A'	2022 - 2023	\$ 1,440,671	93%	\$ 1,337,766	0%	\$ -	\$ -	\$ -	7%	\$ 102,905	\$ -	\$ 102,905	\$ -
FUA - Collector Rd 'C'	Collector Rd 'D' to Warden Ave	2024 - 2025	\$ 2,125,661	93%	\$ 1,973,828	0%	\$ -	\$ -	\$ -	7%	\$ 151,833	\$ -	\$ 151,833	\$ -
BG - Street '1' (Collector Rd 'D')	Elgin Mills Rd to Street 'AA'	2022 - 2022	\$ 1,806,438	82%	\$ 1,483,860	0%	\$ -	\$ -	\$ -	18%	\$ 322,578	\$ 322,578	\$ -	\$ -
FUA - Collector Rd 'D'	Street 'AA' to Street '1'	2023 - 2023	\$ 2,125,661	93%	\$ 1,973,828	0%	\$ -	\$ -	\$ -	7%	\$ 151,833	\$ -	\$ 151,833	\$ -
BG - Street '3' (Collector Rd 'D')	Street '1' to Street '2'	2022 - 2022	\$ 2,201,533	82%	\$ 1,808,402	0%	\$ -	\$ -	\$ -	18%	\$ 393,131	\$ 393,131	\$ -	\$ -
FUA - Collector Rd 'D'	Street '2' to Warden Ave	2024 - 2025	\$ 3,190,030	93%	\$ 2,962,171	0%	\$ -	\$ -	\$ -	7%	\$ 227,859	\$ -	\$ 227,859	\$ -
FUA - Collector Rd 'D'	Warden Ave to Kennedy Rd	2026 - 2028	\$ 11,662,829	93%	\$ 10,829,770	0%	\$ -	\$ -	\$ -	7%	\$ 833,059	\$ -	\$ 833,059	\$ -
FUA - Collector Rd 'D'	Kennedy Rd to Collector Rd 'N'	2026 - 2027	\$ 8,501,337	93%	\$ 7,894,099	0%	\$ -	\$ -	\$ -	7%	\$ 607,238	\$ -	\$ 607,238	\$ -
FUA - Collector Rd 'D'	19th Ave to Elgin Mills Rd	2028 - 2029	\$ 11,662,829	93%	\$ 10,829,770	0%	\$ -	\$ -	\$ -	7%	\$ 833,059	\$ -	\$ 833,059	\$ -
BG - Street 'A' (Collector Rd 'E')	Street 'C' to Elgin Mills Road	2022 - 2022	\$ 423,989	82%	\$ 348,277	0%	\$ -	\$ -	\$ -	18%	\$ 75,712	\$ 75,712	\$ -	\$ -
FUA - Collector Rd 'E'	Elgin Mills Rd to North end Hydro Corridor	2026 - 2027	\$ 3,179,492	93%	\$ 2,952,385	0%	\$ -	\$ -	\$ -	7%	\$ 227,107	\$ -	\$ 227,107	\$ -
BG - Street 'L'/'Z' (Collector Road 'F')	Elgin Mills to Street 'K'/'S'	2022 - 2022	\$ 1,828,886	82%	\$ 1,502,299	0%	\$ -	\$ -	\$ -	18%	\$ 326,587	\$ 326,587	\$ -	\$ -
BG - Street 'L' (Collector Road 'F')	Street 'K'/'S' to Street 'V'	2022 - 2022	\$ 1,918,681	82%	\$ 1,576,059	0%	\$ -	\$ -	\$ -	18%	\$ 342,622	\$ 342,622	\$ -	\$ -

APPENDIX C
TABLE C-3

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
CIY-WIDE GROWTH-RELATED PROJECTS

Location	From / To	Timing of Project	Total	Local - by others		Others Sharing and/or Non-Growth Cost				City-Share		DC Eligible		
			Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	Share (%)	Cost (\$)	Prior Growth	DC Eligible Costs 2022 - 2031	Other Dev. Related (\$)
BG - Street 'Z' (Collector Road 'F')	Street 'V' to Warden Ave	2022 - 2022	\$ 4,621,490	82%	\$ 3,796,224	0%	\$ -	\$ -	\$ -	18%	\$ 825,266	\$ 825,266	\$ -	\$ -
BG - Street 'AA' (Collector Rd 'G')	West Hydro Corridor to Block 335	2022 - 2022	\$ 4,522,716	82%	\$ 3,715,088	0%	\$ -	\$ -	\$ -	18%	\$ 807,628	\$ 807,628	\$ -	\$ -
FUA - Collector Rd 'G'	Block 335 to Warden Ave	2024 - 2025	\$ 5,968,631	63%	\$ 3,730,394	0%	\$ -	\$ -	\$ -	38%	\$ 2,238,237	\$ -	\$ 2,238,237	\$ -
FUA - Collector Rd 'G'	Warden Ave to Kennedy Rd	2025 - 2026	\$ 14,556,473	63%	\$ 9,097,796	0%	\$ -	\$ -	\$ -	38%	\$ 5,458,677	\$ -	\$ 5,458,677	\$ -
FUA - Collector Rd 'G'	Kennedy Rd to East Dead End	2026 - 2027	\$ 4,548,594	63%	\$ 2,842,871	0%	\$ -	\$ -	\$ -	38%	\$ 1,705,723	\$ -	\$ 1,705,723	\$ -
FUA - Collector Rd 'H'	West Hydro Corridor to Street '8'	2027 - 2028	\$ 4,628,509	93%	\$ 4,297,901	0%	\$ -	\$ -	\$ -	7%	\$ 330,608	\$ -	\$ 330,608	\$ -
BG - Street 'I' (Collector Rd 'H')	Street '8' to Warden Ave	2022 - 2022	\$ 4,545,165	82%	\$ 3,733,528	0%	\$ -	\$ -	\$ -	18%	\$ 811,637	\$ 811,637	\$ -	\$ -
FUA - Collector Rd 'H'	Warden Ave to Major Mackenzie Dr	2024 - 2028	\$ 11,662,829	93%	\$ 10,829,770	0%	\$ -	\$ -	\$ -	7%	\$ 833,059	\$ -	\$ 833,059	\$ -
FUA - Collector Rd 'I'	Major Mackenzie Dr. to Elgin Mills Rd	2024 - 2028	\$ 10,977,839	93%	\$ 10,193,708	0%	\$ -	\$ -	\$ -	7%	\$ 784,131	\$ -	\$ 784,131	\$ -
FUA - Collector Rd 'J'	Major Mackenzie Dr. to Elgin Mills Rd	2024 - 2028	\$ 11,662,829	93%	\$ 10,829,770	0%	\$ -	\$ -	\$ -	7%	\$ 833,059	\$ -	\$ 833,059	\$ -
FUA - Collector Rd 'K'	Major Mackenzie Dr. to Elgin Mills Rd	2024 - 2028	\$ 12,347,819	93%	\$ 11,465,832	0%	\$ -	\$ -	\$ -	7%	\$ 881,987	\$ -	\$ 881,987	\$ -
FUA - Collector Rd 'L'	Major Mackenzie Dr. to Collector Rd 'D'	2024 - 2028	\$ 2,494,502	93%	\$ 2,316,323	0%	\$ -	\$ -	\$ -	7%	\$ 178,179	\$ -	\$ 178,179	\$ -
FUA - Collector Rd 'M'	Major Mackenzie Dr. to Collector Rd 'D'	2024 - 2028	\$ 2,494,502	93%	\$ 2,316,323	0%	\$ -	\$ -	\$ -	7%	\$ 178,179	\$ -	\$ 178,179	\$ -
FUA - Collector Rd 'N'	Major Mackenzie Dr to Collector Rd 'D'	2024 - 2028	\$ 2,494,502	93%	\$ 2,316,323	0%	\$ -	\$ -	\$ -	7%	\$ 178,179	\$ -	\$ 178,179	\$ -
FUA - Collector Rd 'P'	Collector Rd 'J' to Kennedy Rd	2025 - 2026	\$ 729,336	93%	\$ 677,241	0%	\$ -	\$ -	\$ -	7%	\$ 52,095	\$ -	\$ 52,095	\$ -
FUA - Collector Rd 'P'	Kennedy Rd to Collector Rd 'K'	2026 - 2027	\$ 1,440,671	93%	\$ 1,337,766	0%	\$ -	\$ -	\$ -	7%	\$ 102,905	\$ -	\$ 102,905	\$ -
Future Donald Cousen Pkwy	19th Ave to Warden Ave	2027 - 2030	\$ 8,132,496	82%	\$ 6,680,265	0%	\$ -	\$ -	\$ -	18%	\$ 1,452,231	\$ -	\$ 1,452,231	\$ -
Langstaff Road	Bayview Avenue to South Limit (External)	2024 - 2025	\$ 3,330,223	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,330,223	\$ -	\$ 3,330,223	\$ -
Langstaff North Boulevard	South Blvd W to South Blvd E	2025 - 2026	\$ 12,310,026	82%	\$ 10,111,807	0%	\$ -	\$ -	\$ -	18%	\$ 2,198,219	\$ -	\$ 2,198,219	\$ -
Langstaff South Boulevard	Yonge Street to Langstaff North Boulevard	2026 - 2027	\$ 11,058,742	82%	\$ 9,083,966	0%	\$ -	\$ -	\$ -	18%	\$ 1,974,775	\$ -	\$ 1,974,775	\$ -
Gorvette Rd Extension	Denison Avenue to Kennedy Rd	2028 - 2029	\$ 2,916,034	82%	\$ 2,395,314	0%	\$ -	\$ -	\$ -	18%	\$ 520,720	\$ -	\$ 520,720	\$ -
Valleywood Dr	Allstate Pkwy to Applecreek Blvd.	2025 - 2026	\$ 4,365,052	50%	\$ 2,182,526	0%	\$ -	\$ -	\$ -	50%	\$ 2,182,526	\$ -	\$ 2,182,526	\$ -
Verdale Gate	Birchmount Rd to Post Rd	2022 - 2022	\$ 1,177,214	82%	\$ 966,997	0%	\$ -	\$ -	\$ -	18%	\$ 210,217	\$ 210,217	\$ -	\$ -
Verdale Gate	Post Rd to Enterprise Dr	2022 - 2022	\$ 3,205,838	82%	\$ 2,633,367	0%	\$ -	\$ -	\$ -	18%	\$ 572,471	\$ 572,471	\$ -	\$ -
Yorkdowns - Collector Rd	East Development	2023 - 2024	\$ 9,001,907	82%	\$ 7,394,423	0%	\$ -	\$ -	\$ -	18%	\$ 1,607,483	\$ -	\$ 1,607,483	\$ -
Yorkdowns - Collector Rd	West Development	2024 - 2025	\$ 3,785,445	82%	\$ 3,109,472	0%	\$ -	\$ -	\$ -	18%	\$ 675,972	\$ -	\$ 675,972	\$ -
William Forester Rd	Hwy 7 to Arthur Bonner	2023 - 2024	\$ 280,825	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 280,825	\$ 280,825	\$ -	\$ -
Reesor Rd	Riverlands to Hwy 7	2029 - 2030	\$ 2,481,329	82%	\$ 2,038,235	0%	\$ -	\$ -	\$ -	18%	\$ 443,095	\$ -	\$ 443,095	\$ -
404 North Collector Road A	Woodbine Avenue to 19th Avenue	2030 - 2031	\$ 3,535,735	82%	\$ 2,904,354	0%	\$ -	\$ -	\$ -	18%	\$ 631,381	\$ -	\$ 631,381	\$ -
404 North Collector Road B	19th Avenue to 60m North	2029 - 2030	\$ 357,368	82%	\$ 293,552	0%	\$ -	\$ -	\$ -	18%	\$ 63,816	\$ -	\$ 63,816	\$ -
404 North Collector Road D	Cul-de-sac to Honda Boulevard	2029 - 2030	\$ 2,304,035	82%	\$ 1,892,600	0%	\$ -	\$ -	\$ -	18%	\$ 411,435	\$ -	\$ 411,435	\$ -
404 North Collector Road D	Honda Boulevard to Road E1	2024 - 2025	\$ 2,382,864	82%	\$ 1,957,353	0%	\$ -	\$ -	\$ -	18%	\$ 425,511	\$ -	\$ 425,511	\$ -
404 North Collector Road D	Road E1 to Woodbine Avenue	2025 - 2026	\$ 1,318,675	82%	\$ 1,083,197	0%	\$ -	\$ -	\$ -	18%	\$ 235,478	\$ -	\$ 235,478	\$ -
404 North Collector Road D	Within Hydro Corridor	2025 - 2025	\$ 407,992	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 407,992	\$ -	\$ 407,992	\$ -
404 North Collector Road E1	Road D to south limit of Enbridge Property	2027 - 2028	\$ 875,188	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 875,188	\$ -	\$ 875,188	\$ -
404 North Collector Road E1	South limit of Enbridge Property to Woodbine Avenue	2028 - 2029	\$ 4,264,977	82%	\$ 3,503,374	0%	\$ -	\$ -	\$ -	18%	\$ 761,603	\$ -	\$ 761,603	\$ -
404 North Collector Road (Full ROW)		2024 - 2024	\$ 1,576,524	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,576,524	\$ -	\$ 1,576,524	\$ -
Royal Orchard Extension	External to Subdivision	2023 - 2024	\$ 1,178,397	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,178,397	\$ -	\$ 1,178,397	\$ -
Royal Orchard Extension	Within the plan of subdivision	2024 - 2025	\$ 1,295,317	82%	\$ 1,064,011	0%	\$ -	\$ -	\$ -	18%	\$ 231,307	\$ -	\$ 231,307	\$ -
Collector Road 'G' (Stony Hill)	Hydro Crossing	2022 - 2022	\$ 192,496	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 192,496	\$ -	\$ 192,496	\$ -
Collector Road 'H' (Vine Cliff)	Hydro Crossing	2022 - 2022	\$ 192,496	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 192,496	\$ -	\$ 192,496	\$ -
Rinas Avenue	Hydro Crossing	2022 - 2022	\$ 192,496	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 192,496	\$ -	\$ 192,496	\$ -
TOTAL ROADS			\$ 604,538,439	\$ 243,553,583		\$ -	\$ -	\$ -	\$ -	\$ 286,089,387	\$ 11,125,155	\$ 274,964,232	\$ 74,895,469	

APPENDIX C
TABLE C-3

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
CIY-WIDE GROWTH-RELATED PROJECTS

Location	From / To	Timing of Project	Total	Local - by others		Others Sharing and/or Non-Growth Cost				City-Share		DC Eligible		
			Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	Share (%)	Cost (\$)	Prior Growth	DC Eligible Costs 2022 - 2031	Other Dev. Related (\$)
4.0 PROPERTIES ACQUISITION - ROADS & STRUCTURES														
Miller Ave	Warden to Kennedy	2026 - 2031	\$ 24,178,197	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 24,178,197	\$ -	\$ 24,178,197	\$ -
City-wide Land Acquisition (Roads)		2022 - 2031	\$ 9,419,250	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 9,419,250	\$ -	\$ 9,419,250	\$ -
Denison Street	Bethany St to east limit of Village of Fairtree	2022 - 2022	\$ 1,087,307	82%	\$ 893,145	0%	\$ -	\$ -	\$ -	18%	\$ 194,162	\$ 194,162	\$ -	\$ -
Denison Street	East Limit of Vilalge of Fairtree to Golf Course	2022 - 2022	\$ 2,782,484	82%	\$ 2,285,612	0%	\$ -	\$ -	\$ -	18%	\$ 496,872	\$ 496,872	\$ -	\$ -
Denison Street	Golf Course to 9th Line	2027 - 2028	\$ 8,876,739	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 8,876,739	\$ -	\$ 8,876,739	\$ -
York Tech Extension	Rodick to Warden	2023 - 2024	\$ 22,632,688	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 22,632,688	\$ -	\$ 22,632,688	\$ -
Commerce Valley East and West Widening		2026 - 2027	\$ 8,690,891	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 8,690,891	\$ -	\$ 8,690,891	\$ -
Land Acquisition for Active Transporation Infrastructure		2022 - 2031	\$ 4,405,250	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 4,405,250	\$ -	\$ 4,405,250	\$ -
Mid-block Crossing Hwy 404 property	Major Mackenzie to Elgin Mills	2029 - 2030	\$ 2,624,190	67%	\$ 1,749,547	0%	\$ -	\$ -	\$ -	33%	\$ 874,643	\$ -	\$ 874,643	\$ -
Ramps to Hwy 404 Property	Major Mackenzie	2025 - 2026	\$ 3,502,644	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,502,644	\$ -	\$ 3,502,644	\$ -
Allstate Pkwy	Hwy 7 to Valleywood	2026 - 2027	\$ 2,712,791	50%	\$ 1,356,396	0%	\$ -	\$ -	\$ -	50%	\$ 1,356,396	\$ -	\$ 1,356,396	\$ -
19th Ave (Urbanize)	Hwy 404 to 1000m E of Woodbine Ave	2028 - 2029	\$ 3,697,784	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,697,784	\$ -	\$ 3,697,784	\$ -
Aldergrove Dr Extension	Street 'C' to Old Kennedy Rd	2025 - 2026	\$ 2,703,499	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,703,499	\$ -	\$ 2,703,499	\$ -
Allstate Pkwy	Hooper Rd. to 16th Avenue	2026 - 2027	\$ 4,106,649	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 4,106,649	\$ -	\$ 4,106,649	\$ -
Allstate Pkwy	Valleywood Dr to Hooper Road	2026 - 2027	\$ 1,318,934	50%	\$ 659,467	0%	\$ -	\$ -	\$ -	50%	\$ 659,467	\$ -	\$ 659,467	\$ -
Applecreek Blvd.	Allstate Pkwy to Woodbine Ave	2024 - 2025	\$ 2,025,155	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,025,155	\$ -	\$ 2,025,155	\$ -
Birchmount Road	Verclaire Gate to Rouge River	2022 - 2022	\$ 1,098,925	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,098,925	\$ 1,098,925	\$ -	\$ -
Bur Oak Avenue	9th Line to Whites Hill	2022 - 2022	\$ 434,623	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 434,623	\$ 434,623	\$ -	\$ -
Bur Oak Avenue	Riverlands to Hwy 7	2022 - 2022	\$ 356,848	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 356,848	\$ 356,848	\$ -	\$ -
Bur Oak Avenue	Hwy 7 to Romeo DeGasperis	2022 - 2022	\$ 635,954	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 635,954	\$ 635,954	\$ -	\$ -
Cedar Avenue Extension	Langstaff South to Langstaff North	2022 - 2023	\$ 761,391	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 761,391	\$ -	\$ 761,391	\$ -
Collector Road 'C'	Langstaff Development (East)	2025 - 2026	\$ 668,467	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 668,467	\$ -	\$ 668,467	\$ -
Elgin Mills Rd	Warden Ave to Kennedy Rd	2024 - 2025	\$ 6,150,973	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 6,150,973	\$ -	\$ 6,150,973	\$ -
Elgin Mills Rd	Kennedy Rd to 1000m E	2026 - 2027	\$ 2,805,715	0%	\$ -	0%	\$ -	\$ -	\$ -	85%	\$ 2,384,858	\$ -	\$ 2,384,858	\$ 420.857
Elgin Mills Rd	Victoria Square to Warden Ave	2024 - 2025	\$ 6,150,973	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 6,150,973	\$ -	\$ 6,150,973	\$ -
Enterprise Drive	Warden Avenue to Sciberras Drive	2022 - 2022	\$ 507,250	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 507,250	\$ 507,250	\$ -	\$ -
Frontenac Dr. Extension	Valleywood Dr to Hooper Road	2027 - 2028	\$ 1,690,629	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,690,629	\$ -	\$ 1,690,629	\$ -
Frontenac Dr. Extension	Hooper Road to Allstate Pkwy	2026 - 2027	\$ 612,713	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 612,713	\$ -	\$ 612,713	\$ -
FUA - Collector Rd 'A'	Warden Ave to 19th Ave	2022 - 2026	\$ 3,558,398	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,558,398	\$ -	\$ 3,558,398	\$ -
FUA - Collector Rd 'B'	Woodbine Ave to Collector Rd 'A'	2022 - 2023	\$ 389,700	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 389,700	\$ -	\$ 389,700	\$ -
FUA - Collector Rd 'C'	Collector Rd 'D' to Warden Ave	2024 - 2025	\$ 575,543	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 575,543	\$ -	\$ 575,543	\$ -
BG - Street '1' (Collector Rd 'D')	Elgin Mills Rd to Street 'AA'	2022 - 2022	\$ 455,573	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 455,573	\$ 455,573	\$ -	\$ -
FUA - Collector Rd 'D'	Street 'AA' to Street '1'	2023 - 2023	\$ 575,543	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 575,543	\$ -	\$ 575,543	\$ -
BG - Street '3' (Collector Rd 'D')	Street '1' to Street '2'	2022 - 2022	\$ 455,573	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 455,573	\$ 455,573	\$ -	\$ -
FUA - Collector Rd 'D'	Street '2' to Warden Ave	2024 - 2025	\$ 972,792	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 972,792	\$ -	\$ 972,792	\$ -
FUA - Collector Rd 'D'	Warden Ave to Kennedy Rd	2026 - 2028	\$ 3,098,425	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,098,425	\$ -	\$ 3,098,425	\$ -
FUA - Collector Rd 'D'	Kennedy Rd to Collector Rd 'N'	2026 - 2027	\$ 2,262,111	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,262,111	\$ -	\$ 2,262,111	\$ -
FUA - Collector Rd 'D'	19th Ave to Elgin Mills Rd	2028 - 2029	\$ 3,098,425	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,098,425	\$ -	\$ 3,098,425	\$ -
BG - Street 'A' (Collector Rd 'E')	Street 'C' to Elgin Mills Road	2022 - 2022	\$ 105,880	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 105,880	\$ 105,880	\$ -	\$ -
FUA - Collector Rd 'E'	Elgin Mills Rd to North end Hydro Corridor	2026 - 2027	\$ 854,315	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 854,315	\$ -	\$ 854,315	\$ -
BG - Street 'L'/'Z' (Collector Road 'F')	Elgin Mills to Street 'K'/'S'	2022 - 2022	\$ 461,301	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 461,301	\$ 461,301	\$ -	\$ -
BG - Street 'L' (Collector Road 'F')	Street 'K'/'S' to Street 'V'	2022 - 2022	\$ 487,654	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 487,654	\$ 487,654	\$ -	\$ -
BG - Street 'Z' (Collector Road 'F')	Street 'V' to Warden Ave	2022 - 2022	\$ 1,156,912	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,156,912	\$ 1,156,912	\$ -	\$ -

APPENDIX C
TABLE C-3

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
CIY-WIDE GROWTH-RELATED PROJECTS

Location	From / To	Timing of Project	Total	Local - by others		Others Sharing and/or Non-Growth Cost				City-Share		DC Eligible		
			Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	Share (%)	Cost (\$)	Prior Growth	DC Eligible Costs 2022 - 2031	Other Dev. Related (\$)
BG - Street 'AA' (Collector Rd 'G')	West Hydro Corridor to Block 427	2022 - 2022	\$ 1,132,719	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,132,719	\$ 1,132,719	\$ -	\$ -
FUA - Collector Rd 'G'	Block 427 to Warden Ave	2024 - 2025	\$ 6,150,973	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 6,150,973	\$ -	\$ 6,150,973	\$ -
FUA - Collector Rd 'G'	Warden Ave to Kennedy Rd	2025 - 2026	\$ 15,001,968	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 15,001,968	\$ -	\$ 15,001,968	\$ -
FUA - Collector Rd 'G'	Kennedy Rd to East Dead End	2026 - 2027	\$ 4,687,423	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 4,687,423	\$ -	\$ 4,687,423	\$ -
FUA - Collector Rd 'H'	West Hydro Corridor to Warden Ave	2027 - 2028	\$ 2,638,452	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,638,452	\$ -	\$ 2,638,452	\$ -
FUA - Collector Rd 'H'	Warden Ave to Major Mackenzie Dr	2022 - 2022	\$ 3,098,425	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,098,425	\$ 3,098,425	\$ -	\$ -
FUA - Collector Rd 'I'	Major Mackenzie Dr. to Elgin Mills Rd	2024 - 2028	\$ 2,917,224	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,917,224	\$ -	\$ 2,917,224	\$ -
FUA - Collector Rd 'J'	Major Mackenzie Dr. to Elgin Mills Rd	2024 - 2028	\$ 3,098,425	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,098,425	\$ -	\$ 3,098,425	\$ -
FUA - Collector Rd 'K'	Major Mackenzie Dr. to Elgin Mills Rd	2024 - 2028	\$ 3,279,627	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,279,627	\$ -	\$ 3,279,627	\$ -
FUA - Collector Rd 'L'	Major Mackenzie Dr. to Collector Rd 'D'	2024 - 2028	\$ 673,113	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 673,113	\$ -	\$ 673,113	\$ -
FUA - Collector Rd 'M'	Major Mackenzie Dr. to Collector Rd 'D'	2024 - 2028	\$ 673,113	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 673,113	\$ -	\$ 673,113	\$ -
FUA - Collector Rd 'N'	Major Mackenzie Dr to Collector Rd 'D'	2024 - 2028	\$ 673,113	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 673,113	\$ -	\$ 673,113	\$ -
FUA - Collector Rd 'P'	Collector Rd 'J' to Kennedy Rd	2024 - 2028	\$ 196,350	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 196,350	\$ -	\$ 196,350	\$ -
FUA - Collector Rd 'P'	Kennedy Rd to Collector Rd 'K'	2025 - 2026	\$ 389,700	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 389,700	\$ -	\$ 389,700	\$ -
Future Donald Cousen Pkwy	19th Ave to Warden Ave	2026 - 2027	\$ 3,363,258	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,363,258	\$ -	\$ 3,363,258	\$ -
Gorvette Rd Extension	Kennedy Rd to Old Kennedy Rd	2029 - 2030	\$ 1,360,749	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,360,749	\$ -	\$ 1,360,749	\$ -
Honda Blvd	Woodbine Bypass to Gas Pipeline	2022 - 2022	\$ 421,159	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 421,159	\$ 421,159	\$ -	\$ -
Honda Blvd	Gas Pipeline to 19th Avenue	2024 - 2025	\$ 2,292,775	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,292,775	\$ -	\$ 2,292,775	\$ -
Langstaff Road	Bayview Avenue to South Limit (External)	2024 - 2024	\$ 6,987,288	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 6,987,288	\$ -	\$ 6,987,288	\$ -
Langstaff Road North	Langstaff Road South to Bayview Avenue	2025 - 2025	\$ 7,312,521	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 7,312,521	\$ -	\$ 7,312,521	\$ -
Langstaff Road South	Yonge Street to Langstaff Road North	2026 - 2026	\$ 6,662,054	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 6,662,054	\$ -	\$ 6,662,054	\$ -
Midland Ave Extension	Steeles Ave. to Old Kennedy Road	2028 - 2028	\$ 3,177,410	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,177,410	\$ -	\$ 3,177,410	\$ -
Renfrew Drive	Frontenac Dr to Hooper Rd.	2027 - 2028	\$ 4,218,157	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 4,218,157	\$ -	\$ 4,218,157	\$ -
Renfrew Drive	Hooper Road to Allstate Pkwy	2026 - 2027	\$ 3,214,580	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,214,580	\$ -	\$ 3,214,580	\$ -
Valleywood Dr	Allstate Pkwy to Applecreek Blvd.	2025 - 2026	\$ 2,805,715	50%	\$ 1,402,858	0%	\$ -	\$ -	\$ -	50%	\$ 1,402,858	\$ -	\$ 1,402,858	\$ -
Verdale Gate	Birchmount Rd to Post Rd	2023 - 2023	\$ 2,619,867	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,619,867	\$ -	\$ 2,619,867	\$ -
Verdale Gate	Post Rd to Enterprise Dr	2024 - 2024	\$ 7,173,135	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 7,173,135	\$ -	\$ 7,173,135	\$ -
Yorkdowns - Collector Rd	East Development	2023 - 2024	\$ 7,219,597	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 7,219,597	\$ -	\$ 7,219,597	\$ -
Yorkdowns - Collector Rd	West Development	2024 - 2025	\$ 3,038,025	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,038,025	\$ -	\$ 3,038,025	\$ -
William Forester Rd	Hwy 7 to 200m South	2022 - 2022	\$ 490,078	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 490,078	\$ 490,078	\$ -	\$ -
William Forester Rd	Hwy 7 to Arthur Bonner	2023 - 2024	\$ 289,444	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 289,444	\$ 289,444	\$ -	\$ -
Reesor Rd	Riverlands to Hwy 7	2028 - 2029	\$ 1,597,705	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,597,705	\$ -	\$ 1,597,705	\$ -
404 North Collector Road A	Woodbine Avenue to 19th Avenue	2030 - 2031	\$ 373,468	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 373,468	\$ -	\$ 373,468	\$ -
404 North Collector Road B	19th Avenue to 60m North	2029 - 2030	\$ 47,059	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 47,059	\$ -	\$ 47,059	\$ -
404 North Collector Road D	Cul-de-sac to Honda Boulevard	2029 - 2030	\$ 736,611	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 736,611	\$ -	\$ 736,611	\$ -
404 North Collector Road D	Honda Boulevard to Road E1	2024 - 2025	\$ 761,391	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 761,391	\$ -	\$ 761,391	\$ -
404 North Collector Road D	Road E1 to Woodbine Avenue	2025 - 2026	\$ 423,118	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 423,118	\$ -	\$ 423,118	\$ -
404 North Collector Road D	Within Hydro Corridor	2025 - 2025	\$ 711,831	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 711,831	\$ -	\$ 711,831	\$ -
404 North Collector Road E1	Road D to south limit of Enbridge Property	2027 - 2028	\$ 1,353,625	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,353,625	\$ -	\$ 1,353,625	\$ -
404 North Collector Road E1	South limit of Enbridge Property to Woodbine Avenue	2028 - 2029	\$ 419,299	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 419,299	\$ -	\$ 419,299	\$ -
404 North Collector Road (Full ROW)		2024 - 2024	\$ 2,446,410	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,446,410	\$ -	\$ 2,446,410	\$ -
Royal Orchard Extension	Within the plan of subdivision	2024 - 2025	\$ 2,511,456	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,511,456	\$ -	\$ 2,511,456	\$ -
Collector Road 'G' (Stony Hill)	Hydro Crossing	2022 - 2022	\$ 766,037	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 766,037	\$ -	\$ 766,037	\$ -
Collector Road 'H' (Vine Cliff)	Hydro Crossing	2022 - 2022	\$ 766,037	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 766,037	\$ -	\$ 766,037	\$ -
Rinas Avenue	Hydro Crossing	2022 - 2022	\$ 766,037	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 766,037	\$ -	\$ 766,037	\$ -
TOTAL PROPERTIES ACQUISITION			\$ 266,083,580	\$ 8,347,025	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 257,315,698	\$ 12,279,353	\$ 245,036,345	\$ 420,857	

APPENDIX C
TABLE C-3

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
CIY-WIDE GROWTH-RELATED PROJECTS

Location	From / To	Timing of Project	Total	Local - by others		Others Sharing and/or Non-Growth Cost				City-Share		DC Eligible		
			Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	Share (%)	Cost (\$)	Prior Growth	DC Eligible Costs 2022 - 2031	Other Dev. Related (\$)
5.0 SIDEWALKS														
Miscellaneous new sidewalks		2022 - 2031	\$ 2,086,275	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,086,275	\$ -	\$ 2,086,275	\$ -
Donald Cousens Parkway	B.S. Ninth Line to Highway 407	2022 - 2031	\$ 709,562	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 709,562	\$ -	\$ 709,562	\$ -
Donald Cousens Parkway	S.S. Highway 7 to 500m North of Highway 7	2022 - 2031	\$ 65,960	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 65,960	\$ -	\$ 65,960	\$ -
Highway 7 E	B.S. 9th to Donald Cousens Parkway	2022 - 2031	\$ 1,146,216	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,146,216	\$ -	\$ 1,146,216	\$ -
Main St. north, Markham	B.S. Major Mackenzie to Donald Cousens Parkway	2022 - 2031	\$ 547,051	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 547,051	\$ -	\$ 547,051	\$ -
Major Mackenzie	B.S. Markland St to Highway 404	2022 - 2031	\$ 613,663	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 613,663	\$ -	\$ 613,663	\$ -
Major Mackenzie	S.S. Donald Cousens Parkway to Ninth Line	2022 - 2031	\$ 411,038	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 411,038	\$ -	\$ 411,038	\$ -
Miller Avenue	B.S. Woodbine Ave. to Rodick Rd.	2022 - 2031	\$ 1,103,431	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,103,431	\$ -	\$ 1,103,431	\$ -
Miller Ave. Extension	B.S. Warden Ave. to Birchmount Rd.	2022 - 2031	\$ 1,076,957	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,076,957	\$ -	\$ 1,076,957	\$ -
Miller Ave. Extension	B.S. Birchmount Rd. to Duffield Drive	2022 - 2031	\$ 2,268,283	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,268,283	\$ -	\$ 2,268,283	\$ -
Ninth Line	W.S. Donald Cousens Parkway to Major Mackenzie	2022 - 2031	\$ 411,038	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 411,038	\$ -	\$ 411,038	\$ -
Ninth Line	B.S. Steeles to Ridgevale Dr.	2022 - 2031	\$ 580,571	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 580,571	\$ -	\$ 580,571	\$ -
Reesor Rd.	E.S. Highway 7 to 1000m North of Highway 7	2022 - 2031	\$ 343,032	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 343,032	\$ -	\$ 343,032	\$ -
Reesor Rd.	B.S. Highway 7 to Highway 407	2022 - 2031	\$ 613,663	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 613,663	\$ -	\$ 613,663	\$ -
Reesor Rd.	W.S. Highway 407 to 14th Avenue	2022 - 2031	\$ 394,037	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 394,037	\$ -	\$ 394,037	\$ -
Rodick Road	B.S. 14th Avenue to Miller Avenue	2022 - 2031	\$ 1,010,772	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,010,772	\$ -	\$ 1,010,772	\$ -
Sixteenth Avenue	N.S. Warden Ave. to Yorkton Blvd.	2022 - 2031	\$ 630,209	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 630,209	\$ -	\$ 630,209	\$ -
Kirkham Dr.	S.S. Karachi Drive to S limit Lot 4, Con. 8	2022 - 2031	\$ 120,976	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 120,976	\$ -	\$ 120,976	\$ -
Warden Avenue	W.S. Elgin Mills Rd. to 19th Avenue	2022 - 2031	\$ 746,033	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 746,033	\$ -	\$ 746,033	\$ -
Woodbine Avenue	B.S. N. Of Woodbine By Pass to 19th Avenue	2022 - 2031	\$ 1,474,066	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,474,066	\$ -	\$ 1,474,066	\$ -
Yorktech Drive	B.S. Rodick Rd. to Warden Avenue	2022 - 2031	\$ 1,143,142	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,143,142	\$ -	\$ 1,143,142	\$ -
Fourteenth Avenue	S.S. West Dead End to Alden Road	2022 - 2031	\$ 852,204	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 852,204	\$ -	\$ 852,204	\$ -
John St	S.S. Yonge St to Henderson Ave.	2022 - 2031	\$ 345,866	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,866	\$ -	\$ 345,866	\$ -
Sixteenth Avenue	N.S. Highway 404 to Cachet Wood Crt.	2022 - 2031	\$ 151,056	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 151,056	\$ -	\$ 151,056	\$ -
Sixteenth Avenue	N.S. 300m W of Mingay Ave to Mingay Ave	2022 - 2031	\$ 96,014	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 96,014	\$ -	\$ 96,014	\$ -
Sixteenth Avenue	N.S. Bur Oak to Donald Cousens Pkwy	2022 - 2031	\$ 377,035	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 377,035	\$ -	\$ 377,035	\$ -
Victoria Square Blvd.	B.S. Woodbine By Pass South to Woodbine By Pass North	2022 - 2031	\$ 1,871,174	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,871,174	\$ -	\$ 1,871,174	\$ -
Duffield Drive	B.S. Miller Ave. to Kennedy Road	2022 - 2031	\$ 2,202,098	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,202,098	\$ -	\$ 2,202,098	\$ -
Old Kennedy Road	W.S. Aldergrove Dr to Denison St	2022 - 2031	\$ 158,848	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 158,848	\$ -	\$ 158,848	\$ -
Allstate Pkwy	B.S. Highway 7 to Valleywood Dr	2022 - 2031	\$ 145,297	50%	\$ 72,648	0%	\$ -	\$ -	\$ -	50%	\$ 72,648	\$ -	\$ 72,648	\$ -
Allstate Pkwy	B.S. Valleywood to North Dead End	2022 - 2031	\$ 343,032	50%	\$ 171,516	0%	\$ -	\$ -	\$ -	50%	\$ 171,516	\$ -	\$ 171,516	\$ -
Birchmount Rd	B.S. Verclare Gate to Rouge River Bridge	2022 - 2031	\$ 360,034	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 360,034	\$ -	\$ 360,034	\$ -
Commerce Valley Dr E	N.S. Leslie St to Highway 7	2022 - 2031	\$ 345,866	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 345,866	\$ -	\$ 345,866	\$ -
Commerce Valley Dr W	N.S. Highway 7 to Leslie St	2022 - 2031	\$ 252,357	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 252,357	\$ -	\$ 252,357	\$ -
19th Ave	S.S. Hwy 404 to 1100m E of Woodbine Ave	2022 - 2031	\$ 746,033	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 746,033	\$ -	\$ 746,033	\$ -
Donald Cousens Pkwy Ext.	B.S. 19th Ave to Warden Ave	2022 - 2031	\$ 812,218	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 812,218	\$ -	\$ 812,218	\$ -
Elgin Mills Road	B.S. Victoria Square Blvd. to Warden Ave	2022 - 2031	\$ 2,930,131	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,930,131	\$ -	\$ 2,930,131	\$ -
Elgin Mills Road	S.S. Warden Ave to 1000m E of Warden Ave	2022 - 2031	\$ 1,076,957	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,076,957	\$ -	\$ 1,076,957	\$ -
Langstaff Road	B.S. Bayview Avenue to South Limit of Langstaff Development	2022 - 2031	\$ 343,032	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 343,032	\$ -	\$ 343,032	\$ -
Warden Ave	B.S. Major Mackenzie Dr to Elgin Mills Rd	2022 - 2031	\$ 2,930,131	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,930,131	\$ -	\$ 2,930,131	\$ -
Kennedy Rd	B.S. Major Mackenzie Dr to Elgin Mills Rd	2022 - 2031	\$ 2,930,131	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,930,131	\$ -	\$ 2,930,131	\$ -
Major Mackenzie Dr E	N.S. Kennedy Rd to McCowan Rd	2022 - 2031	\$ 746,033	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 746,033	\$ -	\$ 746,033	\$ -
Church St	B.S. 9th Line to Bur Oak	2022 - 2031	\$ 394,037	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 394,037	\$ -	\$ 394,037	\$ -
Sidewalk Gapping Program		2022 - 2031	\$ 34,494,490	0%	\$ -	18%	\$ 6,036,536	\$ -	\$ 6,036,536	65%	\$ 22,421,419	\$ -	\$ 22,421,419	\$ 6,036,536
Total - Sidewalk			\$ 72,400,047		\$ 244,164		\$ 6,036,536	\$ -	\$ 6,036,536		\$ 60,082,811	\$ -	\$ 60,082,811	\$ 6,036,536

APPENDIX C
TABLE C-3

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
CIY-WIDE GROWTH-RELATED PROJECTS

Location	From / To	Timing of Project	Total	Local - by others		Others Sharing and/or Non-Growth Cost				City-Share		DC Eligible		
			Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	Share (%)	Cost (\$)	Prior Growth	DC Eligible Costs 2022 - 2031	Other Dev. Related (\$)
6.0 <u>STORM WATER MANAGEMENT</u>														
City's Watercourses - Erosion Control		2022 - 2031	\$ 20,700,750	0%	\$ -	35%	\$ 7,311,950	\$ -	\$ 7,311,950	65%	\$ 13,388,800	\$ -	\$ 13,388,800	\$ -
East Precinct - Tributary 5 Relocation		2025 - 2026	\$ 5,468,000	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 5,468,000	\$ -	\$ 5,468,000	\$ -
Miller Avenue Storm	Woodbine to Rodick	2024 - 2024	\$ 1,581,741	0%	\$ -	32%	\$ 498,341	\$ 498,341	\$ -	68%	\$ 1,083,400	\$ -	\$ 1,083,400	\$ -
Rodick Road Storm	Miller to 14th Avenue	2023 - 2023	\$ 1,068,834	0%	\$ -	32%	\$ 336,745	\$ 336,745	\$ -	68%	\$ 732,089	\$ -	\$ 732,089	\$ -
Birchmount Pond Modification	Crossing Miller	2026 - 2027	\$ 2,650,350	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,650,350	\$ -	\$ 2,650,350	\$ -
Miller / Rodick SWM pond and Channel improvements		2022 - 2022	\$ 19,005,161	0%	\$ -	80%	\$ 15,204,129	\$ 15,204,129	\$ -	20%	\$ 3,801,032	\$ 3,801,032	\$ -	\$ -
Total - SWM			\$ 50,474,837	\$ -	\$ -	\$ 23,351,166	\$ 16,039,216	\$ 7,311,950		\$ 27,123,671	\$ 3,801,032	\$ 23,322,638	\$ -	
7.0 <u>WATERMAIN</u>														
Church Street Watermain	Country Glen Road to Bur Oak	2025 - 2026	\$ 745,802	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 745,802	\$ -	\$ 745,802	\$ -
Woodbine Avenue (400mm)	Woodbine By-pass to 19th Avenue	2023 - 2026	\$ 1,665,853	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,665,853	\$ -	\$ 1,665,853	\$ -
Woodbine Avenue	Burr Cres / Millbrook Gate	2024 - 2025	\$ 317,420	0%	\$ -	90%	\$ 285,678	\$ -	\$ 285,678	10%	\$ 31,742	\$ -	\$ 31,742	\$ -
Enterprise, Phase II	Rivas Rd. to Main Street S	2022 - 2022	\$ 429,192	0%	\$ -	85%	\$ 364,813	\$ 364,813	\$ -	15%	\$ 64,379	\$ 64,379	\$ -	\$ -
Kirkham Drive (400mm)	Karachi Drive to S limit Lot 4, Con.8	2022 - 2022	\$ 572,945	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 572,945	\$ 572,945	\$ -	\$ -
Rodick Road (400mm)	Miller Avenue to 14th Avenue	2023 - 2023	\$ 1,047,908	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,047,908	\$ -	\$ 1,047,908	\$ -
Miller Road (200mm to 400mm)	Woodbine to Rodick Road	2024 - 2024	\$ 1,185,229	0%	\$ -	26%	\$ 308,160	\$ -	\$ 308,160	74%	\$ 877,069	\$ -	\$ 877,069	\$ -
Ninth Line (300mm)	Cornell South to Church Street	2023 - 2024	\$ 809,115	85%	687,748	0%	\$ -	\$ -	\$ -	15%	\$ 121,367	\$ -	\$ 121,367	\$ -
Highland Park	Dudley to east of Dudley	2026 - 2027	\$ 112,525	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 112,525	\$ -	\$ 112,525	\$ -
Miller Road	Warden Avenue to Birchmount Road	2026 - 2027	\$ 578,648	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 578,648	\$ -	\$ 578,648	\$ -
Rustle Woods (PD6M)	9th Line to Bur Oak	2024 - 2024	\$ 820,000	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 820,000	\$ -	\$ 820,000	\$ -
Hwy 7 (PD6M)	Cornell Rouge to Reesor Road	2024 - 2028	\$ 603,000	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 603,000	\$ -	\$ 603,000	\$ -
Elgin Mills Road (600mm)	Victoria Square Boulevard to Street 'A'	2024 - 2025	\$ 3,051,470	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,051,470	\$ -	\$ 3,051,470	\$ -
Elgin Mills Road (600mm)	Street 'A' to Warden Avenue	2024 - 2025	\$ 815,215	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 815,215	\$ -	\$ 815,215	\$ -
Enterprise Drive (400mm)	Warden Avenue to Sciberras Drive	2022 - 2022	\$ 115,513	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 115,513	\$ 115,513	\$ -	\$ -
Honda Boulevard	Woodbine By-pass to TCPL	2022 - 2022	\$ 82,805	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 82,805	\$ 82,805	\$ -	\$ -
Honda Boulevard	TCPL to 19th Avenue	2024 - 2025	\$ 373,336	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 373,336	\$ -	\$ 373,336	\$ -
Warden Ave (400mm)	Elgin Mills Rd to 19th Ave	2027 - 2028	\$ 3,039,063	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,039,063	\$ -	\$ 3,039,063	\$ -
Woodbine Ave (400mm)	19th Ave to Victoria Square Blvd	2023 - 2026	\$ 4,206,006	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 4,206,006	\$ -	\$ 4,206,006	\$ -
Woodbine By-pass	Lord Melbourne to Woodbine	2022 - 2022	\$ 383,400	0%	\$ -	15%	\$ 57,510	\$ -	\$ 57,510	85%	\$ 325,890	\$ 325,890	\$ -	\$ -
19th Ave (400mm)	Victoria Sq Blvd to Warden Ave	2026 - 2027	\$ 3,039,063	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,039,063	\$ -	\$ 3,039,063	\$ -
Elgin Mills Rd	Warden Ave to Kennedy Rd	2024 - 2025	\$ 3,039,063	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,039,063	\$ -	\$ 3,039,063	\$ -
Elgin Mills Rd	Kennedy Rd to McCowan Rd	2026 - 2027	\$ 3,039,063	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,039,063	\$ -	\$ 3,039,063	\$ -
Kennedy Rd(PD 6)	Major Mackenzie Dr to Elgin Mills Rd	2025 - 2026	\$ 3,039,063	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,039,063	\$ -	\$ 3,039,063	\$ -
Kennedy Rd (PD 7)	Major Mackenzie Dr to Elgin Mills Rd	2025 - 2026	\$ 3,039,063	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,039,063	\$ -	\$ 3,039,063	\$ -
Langstaff Road (400mm)	Yonge Street to Bayview Avenue	2024 - 2025	\$ 398,082	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 398,082	\$ -	\$ 398,082	\$ -
Warden Ave - PD 6 (750mm)	Major Mackenzie Dr to Street 'E'	2022 - 2022	\$ 8,700,000	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 8,700,000	\$ 8,700,000	\$ -	\$ -
Warden Ave - PD 6 (600mm)	Street 'E' to Street 'D'	2022 - 2023	\$ 1,642,000	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,642,000	\$ -	\$ 1,642,000	\$ -
Warden Ave - PD 6 (600mm)	Street 'D' to Elgin Mills Road	2023 - 2024	\$ 2,176,000	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,176,000	\$ -	\$ 2,176,000	\$ -
Warden Ave (PD 7)	Major Mackenzie Dr to Elgin Mills Rd	2025 - 2026	\$ 3,039,063	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,039,063	\$ -	\$ 3,039,063	\$ -
Victoria Square Blvd	Elgin Mills Rd to North	2025 - 2026	\$ 208,742	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 208,742	\$ -	\$ 208,742	\$ -
Victoria Square Blvd	Elgin Mills Rd to South	2025 - 2026	\$ 373,336	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 373,336	\$ -	\$ 373,336	\$ -
Warden Avenue (400mm to 750mm)	Enterprise Drive to Clegg Road	2027 - 2028	\$ 7,125,972	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 7,125,972	\$ -	\$ 7,125,972	\$ -
Warden Avenue (300mm to 400mm)	Hwy 7 to Clegg Road	2025 - 2026	\$ 894,949	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 894,949	\$ -	\$ 894,949	\$ -
Hwy 7 (300mm to 400mm)	Railway to Kennedy Road	2029 - 2030	\$ 2,424,093	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,424,093	\$ -	\$ 2,424,093	\$ -
PD6RA to PD5B (PRV Connection)	Markham Centre	2029 - 2030	\$ 969,407	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 969,407	\$ -	\$ 969,407	\$ -
Birchmount Road (300mm)	Hwy 407 to 14th Avenue	2028 - 2029	\$ 1,701,576	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,701,576	\$ -	\$ 1,701,576	\$ -
Markham Centre Zone Realignment and Development Tracking		2026 - 2030	\$ 950,792	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 950,792	\$ -	\$ 950,792	\$ -
Citywide Watermain		2022 - 2031	\$ 2,086,275	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,086,275	\$ -	\$ 2,086,275	\$ -
FUA Water Booster Station		2027 - 2027	\$ 6,912,250	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 6,912,250	\$ -	\$ 6,912,250	\$ -
Total - Watermain			\$ 83,090,298	\$ 687,748	\$ -	\$ 1,016,161	\$ 364,813	\$ 651,348		\$ 81,386,390	\$ 9,861,531	\$ 71,524,858	\$ -	

APPENDIX C
TABLE C-3

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
CIY-WIDE GROWTH-RELATED PROJECTS

Location	From / To	Timing of Project	Total	Local - by others		Others Sharing and/or Non-Growth Cost				City-Share		DC Eligible		
			Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Gross Cost (\$)	Others Cost (\$)	Non-growth (\$)	Share (%)	Cost (\$)	Prior Growth	DC Eligible Costs 2022 - 2031	Other Dev. Related (\$)
8.0 STUDIES*														
Trans., Servicing, Enviro., Cycling, Traffic Calming, Noise, Subwatershed, Erosion Study Update etc.		2022 - 2031	\$ 18,003,000	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 18,003,000	\$ -	\$ 18,003,000	\$ -
Subtotal - Studies			\$ 18,003,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,003,000	\$ -	\$ 18,003,000	\$ -	\$ -
<i>* Includes growth-related city-wide studies and program administration</i>														
9.0 SPECIAL PROJECTS														
Bike Lanes on Collector / Arterial Roads		2022 - 2031	\$ 5,677,280	0%	\$ -	18%	\$ 993,524	\$ -	\$ 993,524	65%	\$ 3,690,232	\$ -	\$ 3,690,232	\$ 993,524
MUP on Collector / Arterial Roads		2022 - 2031	\$ 22,549,608	0%	\$ -	18%	\$ 3,946,181	\$ -	\$ 3,946,181	65%	\$ 14,657,245	\$ -	\$ 14,657,245	\$ 3,946,181
Cycle Track on Collector / Arterial Roads		2022 - 2031	\$ 6,136,017	0%	\$ -	18%	\$ 1,073,803	\$ -	\$ 1,073,803	65%	\$ 3,988,411	\$ -	\$ 3,988,411	\$ 1,073,803
City-wide Street Safety and Traffic Calming, various locations		2022 - 2031	\$ 6,098,729	0%	\$ -	18%	\$ 1,067,277	\$ -	\$ 1,067,277	65%	\$ 3,964,174	\$ -	\$ 3,964,174	\$ 1,067,277
Travel Demand Management		2022 - 2031	\$ 3,396,183	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,396,183	\$ -	\$ 3,396,183	\$ -
Subtotal - Special Projects			\$ 43,857,816	\$ -	\$ -	\$ 7,080,786	\$ -	\$ 7,080,786	\$ -	\$ 29,696,245	\$ -	\$ 29,696,245	\$ 7,080,786	\$ -
9.1 Streetscape														
9.1.1 Regional Roads														
Miscellaneous Regional Roads		2022 - 2031	\$ 4,786,750	0%	\$ -	50%	\$ 2,393,375	\$ -	\$ 2,393,375	50%	\$ 2,393,375	\$ -	\$ 2,393,375	\$ -
Subtotal Regional Streetscape			\$ 4,786,750	\$ -	\$ -	\$ 2,393,375	\$ -	\$ 2,393,375	\$ -	\$ 2,393,375	\$ -	\$ 2,393,375	\$ -	\$ -
9.1.2 City Roads														
Miscellaneous City Roads		2022 - 2031	\$ 3,424,250	0%	\$ -	50%	\$ 1,712,125	\$ -	\$ 1,712,125	50%	\$ 1,712,125	\$ -	\$ 1,712,125	\$ -
Major Mackenzie Drive	Warden Avenue to East Limit	2022 - 2031	\$ 3,126,645	50%	\$ 1,563,323	0%	\$ -	\$ -	\$ -	50%	\$ 1,563,323	\$ -	\$ 1,563,323	\$ -
FUA - Collector Rd 'D'	Warden Avenue to East Limit	2022 - 2031	\$ 6,235,290	50%	\$ 3,117,645	0%	\$ -	\$ -	\$ -	50%	\$ 3,117,645	\$ -	\$ 3,117,645	\$ -
FUA - Collector Rd 'D'	Street 'B' to Warden Avenue	2022 - 2031	\$ 2,349,484	50%	\$ 1,174,742	0%	\$ -	\$ -	\$ -	50%	\$ 1,174,742	\$ -	\$ 1,174,742	\$ -
FUA - Collector Rd 'I'	Major Mackenzie Dr. to Elgin Mills Rd	2022 - 2031	\$ 989,452	50%	\$ 494,726	0%	\$ -	\$ -	\$ -	50%	\$ 494,726	\$ -	\$ 494,726	\$ -
FUA - Collector Rd 'J'	Major Mackenzie Dr. to Elgin Mills Rd	2022 - 2031	\$ 989,452	50%	\$ 494,726	0%	\$ -	\$ -	\$ -	50%	\$ 494,726	\$ -	\$ 494,726	\$ -
Enterprise	Warden Avenue to Tributary 4	2022 - 2031	\$ 2,252,339	50%	\$ 1,126,169	0%	\$ -	\$ -	\$ -	50%	\$ 1,126,169	\$ -	\$ 1,126,169	\$ -
Enterprise	Tributary 4 to Sciberras Drive	2022 - 2031	\$ 352,366	50%	\$ 176,183	0%	\$ -	\$ -	\$ -	50%	\$ 176,183	\$ -	\$ 176,183	\$ -
New East West Collector	Langstaff West	2022 - 2031	\$ 2,738,064	50%	\$ 1,369,032	0%	\$ -	\$ -	\$ -	50%	\$ 1,369,032	\$ -	\$ 1,369,032	\$ -
Langstaff Road	Ruggles Rd	2022 - 2031	\$ 2,466,058	50%	\$ 1,233,029	0%	\$ -	\$ -	\$ -	50%	\$ 1,233,029	\$ -	\$ 1,233,029	\$ -
Langstaff Road	New Collector East	2022 - 2031	\$ 502,094	50%	\$ 251,047	0%	\$ -	\$ -	\$ -	50%	\$ 251,047	\$ -	\$ 251,047	\$ -
Yonge Street	Steeles	2022 - 2031	\$ 1,475,177	50%	\$ 737,589	0%	\$ -	\$ -	\$ -	50%	\$ 737,589	\$ -	\$ 737,589	\$ -
Steeles Ave	Yonge	2022 - 2031	\$ 472,149	50%	\$ 236,074	0%	\$ -	\$ -	\$ -	50%	\$ 236,074	\$ -	\$ 236,074	\$ -
Yonge Street	Cricketwood Park north limit	2022 - 2031	\$ 1,086,597	50%	\$ 543,298	0%	\$ -	\$ -	\$ -	50%	\$ 543,298	\$ -	\$ 543,298	\$ -
Bayview Avenue	John St	2022 - 2031	\$ 377,321	50%	\$ 188,660	0%	\$ -	\$ -	\$ -	50%	\$ 188,660	\$ -	\$ 188,660	\$ -
Woodbine Ave	Steeles	2022 - 2031	\$ 1,242,029	50%	\$ 621,015	0%	\$ -	\$ -	\$ -	50%	\$ 621,015	\$ -	\$ 621,015	\$ -
Leslie Street	St Robert Highschool	2022 - 2031	\$ 1,057,453	50%	\$ 528,727	0%	\$ -	\$ -	\$ -	50%	\$ 528,727	\$ -	\$ 528,727	\$ -
Centurian	Hwy 404	2022 - 2031	\$ 332,402	50%	\$ 166,201	0%	\$ -	\$ -	\$ -	50%	\$ 166,201	\$ -	\$ 166,201	\$ -
16th Ave	Hwy 404	2022 - 2031	\$ 989,452	50%	\$ 494,726	0%	\$ -	\$ -	\$ -	50%	\$ 494,726	\$ -	\$ 494,726	\$ -
Cachet Woods Ct	16th Ave	2022 - 2031	\$ 746,589	50%	\$ 373,294	0%	\$ -	\$ -	\$ -	50%	\$ 373,294	\$ -	\$ 373,294	\$ -
Markland St	Woodbine	2022 - 2031	\$ 1,062,310	50%	\$ 531,155	0%	\$ -	\$ -	\$ -	50%	\$ 531,155	\$ -	\$ 531,155	\$ -
Woodbine Ave	16th Ave	2022 - 2031	\$ 581,442	50%	\$ 290,721	0%	\$ -	\$ -	\$ -	50%	\$ 290,721	\$ -	\$ 290,721	\$ -
Victoria Sq Blvd	Donald Buttress Blvd	2022 - 2031	\$ 387,303	50%	\$ 193,651	0%	\$ -	\$ -	\$ -	50%	\$ 193,651	\$ -	\$ 193,651	\$ -
Kennedy Rd	Steeles	2022 - 2031	\$ 1,232,315	50%	\$ 616,157	0%	\$ -	\$ -	\$ -	50%	\$ 616,157	\$ -	\$ 616,157	\$ -
Denison St	Railway	2022 - 2031	\$ 162,710	50%	\$ 81,355	0%	\$ -	\$ -	\$ -	50%	\$ 81,355	\$ -	\$ 81,355	\$ -
Old Kennedy Rd	Denison	2022 - 2031	\$ 955,451	50%	\$ 477,725	0%	\$ -	\$ -	\$ -	50%	\$ 477,725	\$ -	\$ 477,725	\$ -
Gorvette Dr	Denison	2022 - 2031	\$ 502,094	50%	\$ 251,047	0%	\$ -	\$ -	\$ -	50%	\$ 251,047	\$ -	\$ 251,047	\$ -
Midland	Steeles Ave	2022 - 2031	\$ 482,131	50%	\$ 241,065	0%	\$ -	\$ -	\$ -	50%	\$ 241,065	\$ -	\$ 241,065	\$ -
Hwy 7	Ninth Line	2022 - 2031	\$ 2,738,064	50%	\$ 1,369,032	0%	\$ -	\$ -	\$ -	50%	\$ 1,369,032	\$ -	\$ 1,369,032	\$ -
Bur Oak	Hwy 7	2022 - 2031	\$ 552,004	50%	\$ 276,002	0%	\$ -	\$ -	\$ -	50%	\$ 276,002	\$ -	\$ 276,002	\$ -
Subtotal City Streetscape			\$ 41,860,487	\$ 19,218,118	\$ -	\$ 1,712,125	\$ -	\$ 1,712,125	\$ -	\$ 20,930,243	\$ -	\$ 20,930,243	\$ -	\$ -
Total Special Projects			\$ 90,505,053	\$ 19,218,118	\$ -	\$ 11,186,286	\$ -	\$ 11,186,286	\$ -	\$ 53,019,863	\$ -	\$ 53,019,863	\$ 7,080,786	\$ -

APPENDIX C
TABLE C-3

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
CIY-WIDE GROWTH-RELATED PROJECTS

Location	From / To	Timing of Project	Total	Local - by others		Others Sharing and/or Non-Growth Cost				City-Share		DC Eligible		
			Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	Share (%)	Cost (\$)	Prior Growth	DC Eligible Costs 2022 - 2031	Other Dev. Related (\$)
10.0 STRUCTURES														
407 Ramp alignment at Warden		2026 - 2027	\$ 10,000,000	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 10,000,000	\$ -	\$ 10,000,000	\$ -
407 Ramp alignment at Kennedy		2027 - 2028	\$ 1,000,000	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -
Denison Street Extension Structure over / under CN		2027 - 2028	\$ 22,715,070	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 22,715,070	\$ -	\$ 22,715,070	\$ -
Denison Street Extension Structure over Rouge River		2027 - 2028	\$ 2,278,117	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,278,117	\$ -	\$ 2,278,117	\$ -
Hwy 404 Mid-block Crossing North of 16th Avenue		2022 - 2024	\$ 21,300,494	67%	\$ 14,200,329	0%	\$ -	\$ -	\$ -	33%	\$ 7,100,165	\$ -	\$ 7,100,165	\$ -
Hwy 404 Mid-Block Crossing North of Major Mackenzie		2029 - 2030	\$ 41,194,000	67%	\$ 27,599,980	0%	\$ -	\$ -	\$ -	17%	\$ 6,797,010	\$ -	\$ 6,797,010	\$ 6,797,010
Hwy 404 Mid-Block Crossing North of Elgin Mills		2030 - 2031	\$ 62,077,293	67%	\$ 41,384,862	0%	\$ -	\$ -	\$ -	0%	\$ -	\$ -	\$ -	\$ 20,692,431
Hwy 404 Ramp Improvements - Buttonville		2028 - 2029	\$ 6,937,164	67%	\$ 4,624,776	0%	\$ -	\$ -	\$ -	33%	\$ 2,312,388	\$ -	\$ 2,312,388	\$ -
Major Mackenzie 404 Ramp Realignment		2025 - 2026	\$ 18,368,150	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 18,368,150	\$ -	\$ 18,368,150	\$ -
John Street Partial Ramp Improvements		2029 - 2030	\$ 7,060,053	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 7,060,053	\$ -	\$ 7,060,053	\$ -
Langstaff North Crossing		2025 - 2026	\$ 18,753,138	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 18,753,138	\$ -	\$ 18,753,138	\$ -
Langstaff South Crossing		2026 - 2027	\$ 18,753,138	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 18,753,138	\$ -	\$ 18,753,138	\$ -
Langstaff-Two Crossings		2024 - 2025	\$ 3,200,000	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 3,200,000	\$ -	\$ 3,200,000	\$ -
Markland St. Extension - Structure over Rouge River		2022 - 2023	\$ 13,244,435	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 13,244,435	\$ 4,042,886	\$ 9,201,549	\$ -
MC - Markham Live Street over GO Station		2026 - 2027	\$ 7,092,734	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 7,092,734	\$ -	\$ 7,092,734	\$ -
MC - YMCA Boulevard over GO Station		2028 - 2029	\$ 7,656,243	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 7,656,243	\$ -	\$ 7,656,243	\$ -
Miller Avenue Extension Structure over CN		2030 - 2031	\$ 26,814,243	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 26,814,243	\$ -	\$ 26,814,243	\$ -
Miller Avenue Extension Structure over Go Rail		2028 - 2029	\$ 18,582,718	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 18,582,718	\$ -	\$ 18,582,718	\$ -
Pedestrian Bridges		2022 - 2031	\$ 8,774,942	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 8,774,942	\$ -	\$ 8,774,942	\$ -
Sciberras Road Structure over Rouge River		2029 - 2030	\$ 14,904,802	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 14,904,802	\$ -	\$ 14,904,802	\$ -
City Wide bridge/crossing projects (minor collectors)		2022 - 2031	\$ 25,240,000	75%	\$ 18,930,000	0%	\$ -	\$ -	\$ -	25%	\$ 6,310,000	\$ -	\$ 6,310,000	\$ -
Town Centre Blvd. Extension to Yorktech Drive		2024 - 2025	\$ 5,272,165	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 5,272,165	\$ -	\$ 5,272,165	\$ -
Yorktech Drive Structure over Rouge River		2023 - 2024	\$ 8,774,942	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 8,774,942	\$ -	\$ 8,774,942	\$ -
FUA - Employment Area (2 Major Collector Crossings)		2028 - 2031	\$ 28,040,215	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 28,040,215	\$ -	\$ 28,040,215	\$ -
Markham Centre - Frontage Road		2027 - 2030	\$ 4,396,471	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 4,396,471	\$ -	\$ 4,396,471	\$ -
Markham Centre - YMCA Blvd		2027 - 2030	\$ 4,396,471	0%	\$ -	0%	\$ -	\$ -	\$ -	0%	\$ -	\$ -	\$ -	\$ 4,396,471
Markham Centre - Markham Live		2027 - 2031	\$ 4,396,471	0%	\$ -	0%	\$ -	\$ -	\$ -	0%	\$ -	\$ -	\$ -	\$ 4,396,471
FUA - Berczy Glen North Collector Road Structure		2022 - 2022	\$ 12,020,000	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 12,020,000	\$ 12,020,000	\$ -	\$ -
FUA - Berczy Glen South Collector Road Structure		2024 - 2024	\$ 12,900,000	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 12,900,000	\$ -	\$ 12,900,000	\$ -
FUA - Angus Glen (2 Major Collector Crossings)		2024 - 2025	\$ 8,023,876	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 8,023,876	\$ -	\$ 8,023,876	\$ -
FUA - Angus Glen (Bruce Creek Crossings)		2025 - 2026	\$ 47,943,207	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 47,943,207	\$ -	\$ 47,943,207	\$ -
Cachet Woods Ramp to Mid-block Crossing		2022 - 2023	\$ 8,773,800	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 8,773,800	\$ -	\$ 8,773,800	\$ -
York Downs Structure		2025 - 2026	\$ 11,710,430	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 11,710,430	\$ -	\$ 11,710,430	\$ -
404 North Collector Road E1 - Utility Structure Support		2027 - 2028	\$ 12,398,220	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 12,398,220	\$ -	\$ 12,398,220	\$ -
Elgin Mills (Berczy Creek)		2024 - 2025	\$ 4,832,530	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 4,832,530	\$ -	\$ 4,832,530	\$ -
Elgin Mills (Bruce Creek West)		2027 - 2028	\$ 2,769,160	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 2,769,160	\$ -	\$ 2,769,160	\$ -
Elgin Mills (Bruce Creek East)		2027 - 2028	\$ 6,895,900	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 6,895,900	\$ -	\$ 6,895,900	\$ -
Elgin Mills (Robinson Creek)		2029 - 2030	\$ 2,769,160	0%	\$ -	0%	\$ -	\$ -	\$ -	85%	\$ 2,353,786	\$ -	\$ 2,353,786	\$ 415,374
Total - Structures			\$ 542,259,752		\$ 106,739,947		\$ -	\$ -	\$ -		\$ 398,822,048	\$ 16,062,886	\$ 382,759,161	\$ 36,697,757
11.0 SANITARY SEWER														
Oversizing Watermains		2022 - 2031	\$ 5,000,000	0%	\$ -	0%	\$ -	\$ -	\$ -	50%	\$ 2,500,000	\$ -	\$ 2,500,000	\$ 2,500,000
Total - Sanitary Sewer			\$ 5,000,000		\$ -		\$ -	\$ -	\$ -		\$ 2,500,000	\$ -	\$ 2,500,000	\$ 2,500,000
TOTAL CITY WIDE HARD (Before Credit Agreements)			\$ 1,820,106,199	0	\$ 379,411,698	\$-	\$ 49,584,477	\$ 16,404,029	\$ 33,180,448	\$ -	\$ 1,261,702,451	\$ 53,129,958	\$ 1,208,572,492	\$ 129,407,574

APPENDIX C
TABLE C-3

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
CIY-WIDE GROWTH-RELATED PROJECTS

Location	From / To	Timing of Project	Total	Local - by others		Others Sharing and/or Non-Growth Cost				City-Share		DC Eligible		
			Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	Share (%)	Cost (\$)	Prior Growth	DC Eligible Costs 2022 - 2031	Other Dev. Related (\$)
12.0 PROJECTS UNDERTAKEN BY CREDIT AGREEMENT														
<u>ROADS</u>														
Burr Oak Avenue	At Grade crossing @ CNR	2022 - 2022	\$ 200,000	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 200,000	\$ 200,000	\$ -	\$ -
Burr Oak Avenue	CNR to Anderson Avenue	2022 - 2022	\$ 138,968	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 138,968	\$ 138,968	\$ -	\$ -
Anderson Avenue widening	east of Highway 48	2022 - 2022	\$ 102,706	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 102,706	\$ 102,706	\$ -	\$ -
			\$ 441,674	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 441,674	\$ 441,674	\$ -	\$ -	\$ -
12.1 PROJECTS undertaken by CREDIT AGREEMENT, 43														
PROJECTS undertaken by CREDIT AGREEMENT Phase I														
<u>ROADS</u>														
Burr Oak Avenue	At-Grade Crossing at CNR	2022 - 2022	\$ 400,000	0%	\$ -	50%	\$ 200,000	\$ 200,000	\$ -	50%	\$ 200,000	\$ 200,000	\$ -	\$ -
Burr Oak Avenue	Anderson Ave. / C.N.R.	2022 - 2022	\$ 277,936	0%	\$ -	50%	\$ 138,968	\$ 138,968	\$ -	50%	\$ 138,968	\$ 138,968	\$ -	\$ -
North Collector Road, Design Only	Anderson Ave. / C.N.R.	2022 - 2022	\$ 55,678	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 55,678	\$ 55,678	\$ -	\$ -
North Collector Road, Design Only	C.N.R. at Grade Crossing	2022 - 2022	\$ 30,000	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 30,000	\$ 30,000	\$ -	\$ -
Sub-Total - Roads			\$ 763,614	\$ -	\$ -	\$ 338,968	\$ 338,968	\$ -	\$ -	\$ 424,646	\$ 424,646	\$ -	\$ -	\$ -
<u>SIDEWALKS</u>														
16th Avenue	N.S. Ninth Line to 285m westerly	2022 - 2022	\$ 17,225	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 17,225	\$ 17,225	\$ -	\$ -
Sub-Total - Sidewalks			\$ 17,225	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,225	\$ 17,225	\$ -	\$ -	\$ -
<u>WATER</u>														
Realignment of PD 5 and PD 6		2022 - 2022	\$ 460,000	0%	\$ -	80%	\$ 369,132	\$ 369,132	\$ -	20%	\$ 90,868	\$ 90,868	\$ -	\$ -
Sixteenth Avenue East	Mintleaf Gate to 9th Line	2022 - 2022	\$ 1,000,000	0%	\$ -	61%	\$ 612,900	\$ 612,900	\$ -	39%	\$ 387,100	\$ 387,100	\$ -	\$ -
Sub-Total - Water			\$ 1,460,000	\$ -	\$ -	\$ 982,032	\$ 982,032	\$ -	\$ -	\$ 477,968	\$ 477,968	\$ -	\$ -	\$ -
SUBTOTAL by Credit Agreement			\$ 2,240,839	\$ -	\$ -	\$ 1,321,001	\$ 1,321,001	\$ -	\$ -	\$ 919,838	\$ 919,838	\$ -	\$ -	\$ -
PROJECTS undertaken by CREDIT AGREEMENT Phase II														
<u>ROADS</u>														
North Collector Road, construction	Anderson Ave. / C.N.R.	2022 - 2022	\$ 1,055,884	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 1,055,884	\$ 1,055,884	\$ -	\$ -
North Collector Road, construction	C.N.R. at Grade Crossing	2022 - 2022	\$ 573,549	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 573,549	\$ 573,549	\$ -	\$ -
North Collector Road (Property)	23m Right of Way	2022 - 2022	\$ 506,094	0%	\$ -	0%	\$ -	\$ -	\$ -	100%	\$ 506,094	\$ 506,094	\$ -	\$ -
Sub-Total - Roads			\$ 2,135,527	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,135,527	\$ 2,135,527	\$ -	\$ -	\$ -
SUBTOTAL by Credit Agreement - 43			\$ 4,376,366	\$ -	\$ -	\$ 1,321,001	\$ 1,321,001	\$ -	\$ -	\$ 3,055,365	\$ 3,055,365	\$ -	\$ -	\$ -
12.2 PROJECTS undertaken by CREDIT AGREEMENT, 45b														
<u>WATER</u>														
Realignment of PD 5 and PD 6		2022 - 2022	\$ 460,000	0%	\$ -	79%	\$ 364,101	\$ 364,101	\$ -	21%	\$ 95,899	\$ 95,899	\$ -	\$ -
Kennedy Road (400mm)	16th Ave. to Major Mackenzie Dr.	2022 - 2022	\$ 711,258	0%	\$ -	57%	\$ 408,464	\$ 408,464	\$ -	43%	\$ 302,794	\$ 302,794	\$ -	\$ -
Sub-Total - Water			\$ 1,171,258	\$ -	\$ -	\$ 772,565	\$ 772,565	\$ -	\$ -	\$ 398,692	\$ 398,692	\$ -	\$ -	\$ -
SUBTOTAL by Credit Agreement - 45B			\$ 1,171,258	\$ -	\$ -	\$ 772,565	\$ 772,565	\$ -	\$ -	\$ 398,692	\$ 398,692	\$ -	\$ -	\$ -
TOTAL CREDIT AGREEMENT			\$ 5,989,298	\$ -	\$ -	\$ 2,093,566	\$ 2,093,566	\$ -	\$ -	\$ 3,895,732	\$ 3,895,732	\$ -	\$ -	\$ -
TOTAL CITY WIDE HARD (After Credit Agreements)			\$ 1,826,095,497	\$ 379,411,698	\$ 51,678,043	\$ 18,497,595	\$ 33,180,448	\$ 1,265,598,182	\$ 57,025,690	\$ 1,208,572,492	\$ 129,407,574			

2022 - 2031 Net Funding Envelope	\$3,304,814,431
Reserve Fund Balance	\$57,025,690

APPENDIX C

TABLE C-4

CITY OF MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
CITY-WIDE ENGINEERING
RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

CITY-WIDE ENGINEERING	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$35,308.71	\$40,652.1	\$56,348.0	\$25,424.5	(\$19,992.2)	(\$63,585.1)	(\$79,630.9)	(\$83,227.6)	(\$62,377.3)	(\$41,749.1)	
2022 - 2031 RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$33,704.0	\$1,428.2	\$176.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$35,308.7
- City-Wide Engineering: Non Inflated	\$30,118.4	\$54,414.1	\$101,976.1	\$115,684.5	\$113,284.5	\$87,229.3	\$77,412.7	\$58,302.2	\$61,914.3	\$47,978.3	\$748,314.3
- City-Wide Engineering: Inflated	\$63,822.4	\$56,959.2	\$106,279.6	\$122,765.3	\$122,622.7	\$96,308.2	\$87,179.3	\$66,970.9	\$72,542.5	\$57,338.5	\$852,788.4
NEW RESIDENTIAL DEVELOPMENT											
- Population Growth in New Units	8,094	8,301	8,514	8,733	8,955	9,085	9,315	9,549	9,792	10,043	90,381
REVENUE											
- DC Receipts: Inflated	\$67,859.3	\$70,986.7	\$74,264.3	\$77,698.1	\$81,266.7	\$84,095.4	\$87,948.9	\$91,961.4	\$96,187.6	\$100,626.3	\$832,894.6
INTEREST											
- Interest on Opening Balance	\$1,235.8	\$1,422.8	\$1,972.2	\$889.9	(\$1,099.6)	(\$3,497.2)	(\$4,379.7)	(\$4,577.5)	(\$3,430.8)	(\$2,296.2)	(\$13,760.3)
- Interest on In-year Transactions	\$70.6	\$245.5	(\$880.4)	(\$1,239.3)	(\$1,137.3)	(\$335.9)	\$13.5	\$437.3	\$413.8	\$757.5	(\$1,654.7)
TOTAL REVENUE	\$69,165.8	\$72,655.0	\$75,356.1	\$77,348.6	\$79,029.8	\$80,262.3	\$83,582.6	\$87,821.2	\$93,170.6	\$99,087.6	\$817,479.7
CLOSING CASH BALANCE	\$40,652.1	\$56,348.0	\$25,424.5	(\$19,992.2)	(\$63,585.1)	(\$79,630.9)	(\$83,227.6)	(\$62,377.3)	(\$41,749.1)	\$0.0	

2022 Adjusted Charge Per Capita **\$8,383.90**

Allocation of Capital Program

Residential Sector	61.9%
Non-Residential Sector	38.1%

Rates for 2013

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

APPENDIX C

TABLE C-4

CITY OF MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
CITY-WIDE ENGINEERING
RETAIL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

CITY-WIDE ENGINEERING	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$6,286.59	\$5,873.9	\$7,482.5	\$990.6	(\$7,835.8)	(\$16,116.2)	(\$18,990.4)	(\$19,238.7)	(\$14,642.6)	(\$9,525.5)	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$6,000.9	\$254.3	\$31.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6,286.6
- City-Wide Engineering: Non Inflated	\$5,362.5	\$9,688.2	\$18,156.5	\$20,597.2	\$20,169.9	\$15,530.9	\$13,783.0	\$10,380.5	\$11,023.6	\$8,542.4	\$133,234.6
- City-Wide Engineering: Inflated	\$11,363.3	\$10,141.4	\$18,922.7	\$21,857.9	\$21,832.5	\$17,147.3	\$15,521.9	\$11,923.9	\$12,915.9	\$10,208.9	\$151,835.9
NEW RETAIL NON-RESIDENTIAL DEVELOPMENT											
- Growth in Square Metres	49,648	52,174	54,834	57,608	60,572	63,650	66,880	70,300	73,872	77,638	627,176
REVENUE											
- DC Receipts: Inflated	\$10,747.5	\$11,520.2	\$12,349.7	\$13,234.0	\$14,193.2	\$15,212.7	\$16,304.4	\$17,480.9	\$18,736.5	\$20,085.5	\$149,864.7
INTEREST											
- Interest on Opening Balance	\$220.0	\$205.6	\$261.9	\$34.7	(\$431.0)	(\$886.4)	(\$1,044.5)	(\$1,058.1)	(\$805.3)	(\$523.9)	(\$4,027.0)
- Interest on In-year Transactions	(\$16.9)	\$24.1	(\$180.8)	(\$237.2)	(\$210.1)	(\$53.2)	\$13.7	\$97.2	\$101.9	\$172.8	(\$288.4)
TOTAL REVENUE	\$10,950.6	\$11,750.0	\$12,430.9	\$13,031.5	\$13,552.1	\$14,273.1	\$15,273.6	\$16,520.0	\$18,033.0	\$19,734.5	\$145,549.3
CLOSING CASH BALANCE	\$5,873.9	\$7,482.5	\$990.6	(\$7,835.8)	(\$16,116.2)	(\$18,990.4)	(\$19,238.7)	(\$14,642.6)	(\$9,525.5)	\$0.0	

2022 Adjusted Charge Per Sq.M.

\$216.47

Allocation of Capital Program

Retail Sector	11.0%
Industrial/Office/Institutional	26.8%
Mixed-Use	0.3%

Rates

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

APPENDIX C

TABLE C-4

CITY OF MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
CITY-WIDE ENGINEERING
INDUSTRIAL/OFFICE/INSTITUTIONAL NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

CITY-WIDE ENGINEERING	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$15,269.20	\$16,728.0	\$22,734.7	\$8,674.4	(\$11,550.4)	(\$30,896.4)	(\$37,750.7)	(\$38,976.8)	(\$29,329.1)	(\$19,421.4)	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$14,575.2	\$617.6	\$76.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$15,269.2
- City-Wide Engineering: Non Inflated	\$13,024.6	\$23,531.3	\$44,099.4	\$50,027.6	\$48,989.7	\$37,722.2	\$33,477.0	\$25,212.7	\$26,774.7	\$20,748.1	\$323,607.3
- City-Wide Engineering: Inflated	\$27,599.9	\$24,631.9	\$45,960.4	\$53,089.7	\$53,028.0	\$41,648.3	\$37,700.5	\$28,961.5	\$31,370.9	\$24,795.9	\$368,787.0
NEW INDUSTRIAL/OFFICE/INSTITUTIONAL NON-RESIDENTIAL DEVELOPMENT											
- Growth in Square Metres	164,145	169,120	174,338	179,648	185,208	191,032	197,025	203,257	209,805	216,481	1,890,059
REVENUE											
- DC Receipts: Inflated	\$28,508.4	\$29,959.9	\$31,502.0	\$33,110.7	\$34,818.1	\$36,631.3	\$38,536.1	\$40,550.1	\$42,693.6	\$44,933.1	\$361,243.1
INTEREST											
- Interest on Opening Balance	\$534.4	\$585.5	\$795.7	\$303.6	(\$635.3)	(\$1,699.3)	(\$2,076.3)	(\$2,143.7)	(\$1,613.1)	(\$1,068.2)	(\$7,016.6)
- Interest on In-year Transactions	\$15.9	\$93.2	(\$397.6)	(\$549.4)	(\$500.8)	(\$138.0)	\$14.6	\$202.8	\$198.1	\$352.4	(\$708.7)
TOTAL REVENUE	\$29,058.7	\$30,638.6	\$31,900.1	\$32,864.9	\$33,682.1	\$34,794.0	\$36,474.4	\$38,609.2	\$41,278.6	\$44,217.3	\$353,517.8
CLOSING CASH BALANCE	\$16,728.0	\$22,734.7	\$8,674.4	(\$11,550.4)	(\$30,896.4)	(\$37,750.7)	(\$38,976.8)	(\$29,329.1)	(\$19,421.4)	\$0.0	

2022 Adjusted Charge Per Sq.M.

\$173.68

Allocation of Capital Program

Retail Sector	11.0%
Industrial/Office/Institutional	26.8%
Mixed-Use	0.3%

Rates

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

APPENDIX C

TABLE C-4

CITY OF MARKHAM
CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE
CITY-WIDE ENGINEERING
MIXED-USE NON-RESIDENTIAL DEVELOPMENT CHARGE
(in \$000)

CITY-WIDE ENGINEERING	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	TOTAL
OPENING CASH BALANCE	\$161.19	\$150.6	\$191.9	\$25.4	(\$200.9)	(\$413.2)	(\$486.9)	(\$493.3)	(\$375.4)	(\$244.2)	
2022 - 2031 NON-RESIDENTIAL FUNDING REQUIREMENTS											
- Prior Growth (Funding from DC Reserve Balance)	\$153.9	\$6.5	\$0.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$161.2
- City-Wide Engineering: Non Inflated	\$137.5	\$248.4	\$465.6	\$528.1	\$517.2	\$398.2	\$353.4	\$266.2	\$282.7	\$219.0	\$3,416.3
- City-Wide Engineering: Inflated	\$291.4	\$260.0	\$485.2	\$560.5	\$559.8	\$439.7	\$398.0	\$305.7	\$331.2	\$261.8	\$3,893.2
NEW MIXED-USE NON-RESIDENTIAL DEVELOPMENT											
- Growth in Square Metres	2,613	2,746	2,886	3,032	3,188	3,350	3,520	3,700	3,888	4,086	33,009
REVENUE											
- DC Receipts: Inflated	\$275.6	\$295.4	\$316.7	\$339.3	\$363.9	\$390.1	\$418.1	\$448.2	\$480.4	\$515.0	\$3,842.7
INTEREST											
- Interest on Opening Balance	\$5.6	\$5.3	\$6.7	\$0.9	(\$11.1)	(\$22.7)	(\$26.8)	(\$27.1)	(\$20.6)	(\$13.4)	(\$103.3)
- Interest on In-year Transactions	(\$0.4)	\$0.6	(\$4.6)	(\$6.1)	(\$5.4)	(\$1.4)	\$0.4	\$2.5	\$2.6	\$4.4	(\$7.4)
TOTAL REVENUE	\$280.8	\$301.3	\$318.7	\$334.1	\$347.5	\$366.0	\$391.6	\$423.6	\$462.4	\$506.0	\$3,732.0
CLOSING CASH BALANCE	\$150.6	\$191.9	\$25.4	(\$200.9)	(\$413.2)	(\$486.9)	(\$493.3)	(\$375.4)	(\$244.2)	\$0.0	

2022 Adjusted Charge Per Sq.M.

\$105.46

Allocation of Capital Program

Retail Sector	11.0%
Industrial/Office/Institutional	26.8%
Mixed-Use	0.3%

Rates

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

Appendix D

Area-Specific Technical Appendix

Appendix D: Area-Specific Technical Appendix

This appendix provides an overview of the area-specific development-related capital forecast and development charges calculation. The area-specific charges recover primarily for the following services:

- Roads;
- Sanitary Sewers;
- Storm water management;
- Special Projects (mainly streetscaping);
- Intersection Improvements;
- Structures;
- Property Acquisitions;
- Projects Undertaken by Credit Agreement;
- Sidewalks;
- Water; and
- Studies.

In some situations, the area-specific charges will continue to recover for some outstanding costs for projects undertaken through credit agreements with various landowners. Additionally, in a few specific areas, the charges will recover for other project costs not transferred to the City-wide hard calculations.

As permitted under the *Development Charges Act, 1997 (DCA)*, the area-specific services are planned for the period from 2022 to 2031 so that the development-related capital costs are apportioned over the development anticipated within the City's designated urban boundary and Future Urban Area (FUA).

Map 1 shows a schematic representation of the area-specific service areas that have been identified in the City. The areas recommended in this study are as follows:

- Area 1B – Yonge Steeles Corridor
- Area 5 – Armadale
- Area 7 – Armadale NE
- Area 9 – PD 1-7
- Area 17 – Rodick/Miller Road Planning District
- Area 23 – Mount Joy
- Area 42A.1 – Markham Centre – South Unionville – Helen Ave
- Area 42B – Markham Centre
- Area 42B.2 – Markham Centre – Clegg
- Area 42B.4 – Markham Centre – Hotel
- Area 42B.6 – Markham Centre – South Hwy 7
- Area 42B.8 – Markham Centre – Sciberras
- Area 42B.9 – Markham Centre – East Precinct
- Area 46 – Cathedral
- Area 47B – York Downs
- Area 49 – 404 North
- Area 50A-1 – Future Urban Area – Employment Block
- Area 50A-2 – Future Urban Area – Robinson Glen
- Area 50A-3 – Future Urban Area – Berczy Glen Block
- Area 50A-4 – Future Urban Area – Angus Glen Block
- Area 50A- 5 - Future Urban Area - Robinson Glen - South Block

These areas represent a reasonable basis on which to calculate the area-specific development charges so that the costs are fairly attributed to the areas that will benefit from them. In general, the areas represent development communities that can be serviced relatively independently of one another. The development-related net capital costs to provide services are allocated to the development area. In a number of cases, however, projects and related project costs are shared between development areas, and the costs are apportioned between these areas.

The cost, quantum and timing of the projects identified in the forecast have been provided by the Engineering Department based on estimates prepared by City staff and various consulting engineers. The estimates include

provisions for engineering and contingencies. It is noted that some of the costs in some of the ASDC are continuing to be reviewed with the landowners, and their consultants, and these ASDC rates may change prior to Council's consideration of the new ASDC by-laws. Any changes will be noted at the public meeting or prior to Council's consideration of the by-laws.

A. Area-Specific Capital Costs

Table D-1 provides a summary of the development-related capital program for area-specific services. Many of the area-specific projects provide benefits to multiple areas, including other area-specific areas and the broader City-wide benefitting area. In addition, an internal component is identified for some of the projects, reflecting the cost that a development would have to pay to provide for required local servicing for a particular subdivision. The City will continue to require these contributions through the normal subdivision process, but excluding them from the development charges calculation ensures that only the oversized portion of costs is shared by other developments. A further share of some projects is identified as a non-growth or benefit to existing share to be funded from other municipal revenue sources.

As shown in Table D-1, the servicing costs vary significantly by development area. This underscores the merit of utilizing an area-specific approach for these services.

Of the all the projects included in the area-specific calculations, \$121.75 million, is identified as area-specific development-related and forms the basis for the area-specific development charges calculations.

In total, there is an available reserve fund balance of \$4.76 million for all area-specific charges which is applied against the ASDC capital programs. Agreement credits in the sum of \$9.86 million have been removed from the

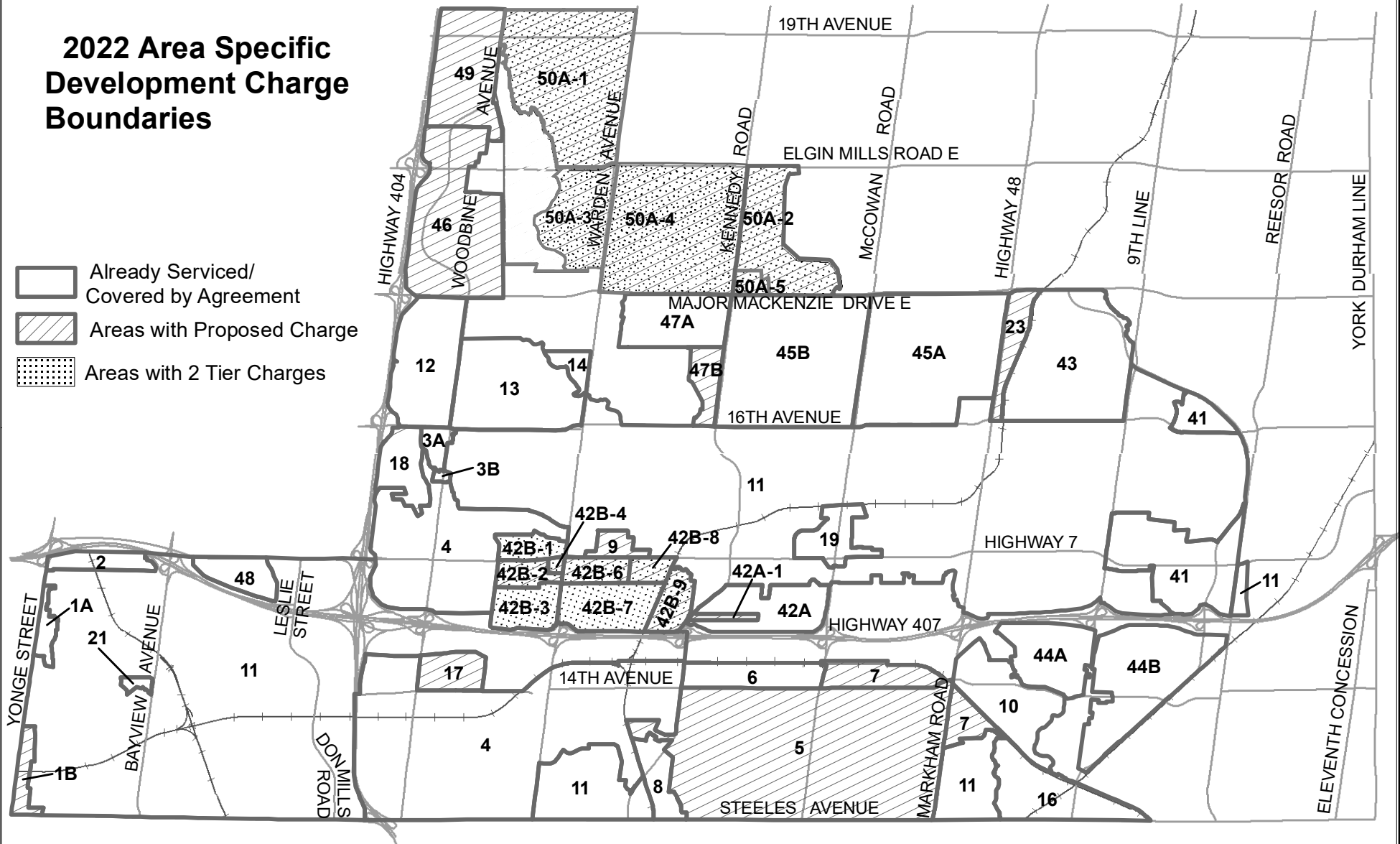
total eligible costs included for recovery in the ASDC calculation. In addition, a further \$0.69 million in projects already funded from reserves have also been removed.

The City's intention is to continue to calculate and collect the area-specific development charges on the basis of net developable land area. As shown in Table D-1, the calculated charges range from a low of about \$7,997 per net hectare to a high of about \$1.49 million per net hectare. This reflects the differing servicing costs associated with the various areas as well as the secured financing already approved by the City for some of the areas.

Table D-2 shows the details of the ASDC calculations, allocations and costs for each service area.

2022 Area Specific Development Charge Boundaries

- Already Served/
Covered by Agreement
- Areas with Proposed Charge
- Areas with 2 Tier Charges



APPENDIX D

TABLE D-1

**CITY OF MARKHAM
SUMMARY OF AREA-SPECIFIC DEVELOPMENT CHARGES
FOR AREA-SPECIFIC SERVICES 2022-2031**

Area Name	Area	Growth-Related Costs	Adjustments			Total ASDC Recoverable	Land Area (Ha)	ASDC Charge \$/ha
			Reserve Fund Balance	Credits in Agreement	Projects Funded From Reserve			
Yonge Steeles Corridor	1B	\$ 12,995,613	\$ 582,656	\$ -	\$ -	\$12,412,957.20	8.46	\$ 1,467,253
Armadales	5	\$ 1,213,831	\$ 675,358	\$ 293,988	\$ -	\$244,484.80	27.60	\$ 8,857
Armadales NE	7	\$ 521,486	\$ 121,641	\$ -	\$ -	\$399,844.81	25.81	\$ 15,489
PD 1-7	9	\$ 7,565,306	\$ 1,270,491	\$ 3,419,592	\$ -	\$2,875,222.11	3.90	\$ 736,670
Rodick/Miller Road Planning District	17	\$ 16,541,096	\$ (1,127,770)	\$ -	\$ -	\$17,668,865.79	26.66	\$ 662,823
Mount Joy	23	\$ 2,705,336	\$ 58,018	\$ -	\$ -	\$2,647,318.21	15.27	\$ 173,322
Markham Centre - South Unionville - Helen Ave	42A.1	\$ 3,137,837	\$ 1,347	\$ 2,063,068	\$ 691,311	\$382,111.42	2.16	\$ 176,576
Markham Centre	42B	\$ 881,933	\$ 74,313	\$ -	\$ -	\$807,620.00	100.99	\$ 7,997
Markham Centre - Clegg	42B.2	\$ 504,473	\$ (199,392)	\$ -	\$ -	\$703,865.17	4.16	\$ 169,076
Markham Centre - Hotel	42B.4	\$ 424,385	\$ (23,525)	\$ -	\$ -	\$447,909.93	0.50	\$ 895,820
Markham Centre - South Hwy 7	42B.6	\$ 10,582,519	\$ 814,222	\$ 3,795,207	\$ -	\$5,973,090.18	4.83	\$ 1,236,921
Markham Centre - Sciberras	42B.8	\$ 6,400,392	\$ (750,458)	\$ -	\$ -	\$7,150,850.27	4.80	\$ 1,490,071
Markham Centre - East Precinct	42B.9	\$ 3,125,352	\$ 1,663,489	\$ -	\$ -	\$1,461,862.97	6.18	\$ 236,433
Cathedral	46	\$ 1,041,155	\$ 198,589	\$ 290,350	\$ -	\$552,215.78	57.99	\$ 9,522
York Downs	47B	\$ 502,681	\$ 379,541	\$ -	\$ -	\$123,140.04	15.00	\$ 8,210
404 North	49	\$ 2,034,211	\$ 1,022,798	\$ -	\$ -	\$1,011,412.51	55.67	\$ 18,167
Future Urban Area	50A	\$ 7,587,159	\$ -	\$ -	\$ -	\$7,587,159.00	642.05	\$ 11,817
Future Urban Area - Employment Block	50A-1	\$ 25,533,491	\$ -	\$ -	\$ -	\$25,533,491.00	220.43	\$ 115,835
Future Urban Area - Robinson Glen	50A-2	\$ 2,683,382	\$ -	\$ -	\$ -	\$2,683,381.85	154.65	\$ 17,351
Future Urban Area - Berczy Glen Block	50A-3	\$ 19,150,465	\$ -	\$ -	\$ -	\$19,150,464.51	93.84	\$ 204,076
Future Urban Area - Angus Glen Block	50A-4	\$ 11,392,962	\$ -	\$ -	\$ -	\$11,392,962.16	162.04	\$ 70,310
Future Urban Area - Robinson Glen - South Block	50A-5	\$ 534,985	\$ -	\$ -	\$ -	\$534,985.00	11.09	\$ 48,240
Total		\$137,060,049	\$4,761,318	\$9,862,205	\$691,311	\$121,745,215		

APPENDIX D
TABLE D-2

CITY OF MARKHAM
2022 DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH RELATED PROJECTS
AREA 1B : YONGE STEELES CORRIDOR

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost		
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)
AREA 1B : YONGE STEELES CORRIDOR									
1.0	<u>ROADS</u>								
1.1	Dudley Avenue Ring Road	\$ 10,114,214	0%	\$ -	100%	\$ 10,114,214	\$ -	\$ -	\$ -
	Subtotal Roads	\$ 10,114,214		\$ -		\$ 10,114,214	\$ -	\$ -	\$ -
2.0	<u>Sanitary</u>								
2.1	Yonge / Steeles Corridor Dudley Ave	\$ 2,881,399	0%	\$ -	100%	\$ 2,881,399	\$ -	\$ -	\$ -
	Subtotal Sanitary	\$ 2,881,399		\$ -		\$ 2,881,399	\$ -	\$ -	\$ -
SUB-TOTAL AREA 1B		\$12,995,613		\$ -		\$12,995,613	\$ -	\$ -	\$ -
<u>PROJECTS undertaken by CREDIT AGREEMENT</u>									
No Projects									
TOTAL AREA 1B		\$12,995,613		\$ -		\$12,995,613	\$ -	\$ -	\$ -

Less: Balance in Reserve as at June 30, 2021

\$ (582,656)

Less: Credit as per Agreement

Less: Projects Funded from Reserve

Total Development-Related Recoverable Costs

\$12,412,957

Net Developable Area (Ha.) to Pay New Dev Charge

8.460

Development Charge per Net Hectare

\$ 1,467,253

APPENDIX D
TABLE D-2

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 5 : ARMADALE

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost		
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)
AREA 5 : ARMADALE									
1.0 <u>STORM WATER MANAGEMENT</u>									
1.1	Armadaale SWM S Pond SWM E of Hwy 48 pt lot 1 Con. 8	\$ 374,917	0%	\$ -	62%	\$ 233,831	\$ 141,086	\$ 141,086	\$ -
	Subtotal Storm Water Management	\$ 374,917		\$ -		\$ 233,831	\$ 141,086	\$ 141,086	\$ -
SUBTOTAL AREA 5		\$ 374,917		\$ -		\$ 233,831	\$ 141,086	\$ 141,086	\$ -
<u>PROJECTS undertaken by CREDIT AGREEMENT</u>									
2.0 <u>STORM WATER MANAGEMENT</u>									
2.1	Armadaale SWM N Pond SWM E of Hwy 48 Pt Lot 3 Con 8	\$ 5,676,382	0%	\$ -	17%	\$ 980,000	\$ 4,696,382	\$ 4,696,382	\$ -
	Subtotal Storm Water Management	\$ 5,676,382		\$ -		\$ 980,000	\$ 4,696,382	\$ 4,696,382	\$ -
SUBTOTAL CREDITS FROM AGREEMENT		\$ 5,676,382		\$ -		\$ 980,000	\$ 4,696,382	\$ 4,696,382	\$ -
TOTAL AREA 5		\$ 6,051,299				\$ 1,213,831	\$ 4,837,468	\$ 4,837,468	\$ -

Less: Balance in Reserve as at June 30, 2021

\$ (675,358)

Less: Credit as per Agreement

\$ (293,988)

Less: Projects Funded from Reserve

\$ -

Total Development-Related Recoverable Costs
Net Developable Area (Ha.) to Pay New Dev Charge
Development Charge per Net Hectare

\$ 244,485
27.604
\$ 8,857

**APPENDIX D
TABLE D-2**

**CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 7 : ARMADALE NE**

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost		
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)
AREA 7 : ARMADALE NE									
1.0 <u>STORM WATER MANAGEMENT</u>									
1.1	Armadales SWM N Pond SWM E of Hwy 48 Pt Lot 3 Con 8	\$ 5,676,382	8%	\$ 467,835	9%	\$ 521,486	\$ 4,687,061	\$ 4,687,061	\$ -
	Subtotal Storm Water Management	\$ 5,676,382		\$ -		\$ 521,486	\$ 4,687,061	\$ 4,687,061	\$ -
SUBTOTAL AREA 7		\$ 5,676,382		\$ -		\$ 521,486	\$ 4,687,061	\$ 4,687,061	\$ -
<u>PROJECTS undertaken by CREDIT AGREEMENT</u>									
No Projects									
TOTAL AREA 7		\$ 5,676,382		\$ -		\$ 521,486	\$ 4,687,061	\$ 4,687,061	\$ -

Less: Balance in Reserve as at June 30, 2021	\$ (121,641)
Less: Credit as per Agreement	\$ -
Less: Projects Funded from Reserve	\$ -
Total Development-Related Recoverable Costs	\$ 399,845
Net Developable Area (Ha.) to Pay New Dev Charge	25.814
Development Charge per Net Hectare	\$ 15,489

APPENDIX D
TABLE D-2

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 9 : PD 1-7 (Reference to Markham Centre Sub-Area 5)

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost		
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)
AREA 9 : PD 1-7 (Reference to Markham Centre Sub-Area 5)									
1.0	<u>INTERSECTION</u>								
1.1	Village Parkway Roundabout	\$ 400,250	0%	\$ -	100%	\$ 400,250	\$ -	\$ -	\$ -
	Subtotal Intersection	\$ 400,250				\$ 400,250	\$ -	\$ -	\$ -
2.0	<u>ROADS</u>								
2.1	Village Parkway Southbound dedicated left turn lane @ hwy 7	\$ 44,553	0%	\$ -	100%	\$ 44,553	\$ -	\$ -	\$ -
	Subtotal Roads	\$ 44,553		\$ -		\$ 44,553	\$ -	\$ -	\$ -
3.0	<u>STORM WATER MANAGEMENT</u>								
3.1	Sheridan Pond (Construction)	\$ 1,582,964	0%	\$ -	67%	\$ 1,068,324	\$ 514,640	\$ 514,640	\$ -
3.2	Highway 7 Storm Sewer Village Pkwy to East of Street G	\$ 1,607,823	0%	\$ -	90%	\$ 1,440,520	\$ 167,303	\$ 167,303	\$ -
3.3	Sheridan Storm Sewer Highway 7 to Sheridan Pond	\$ 1,810,704	0%	\$ -	93%	\$ 1,681,787	\$ 128,917	\$ 128,917	\$ -
	Subtotal Storm Water Management	\$ 5,001,491		\$ -		\$ 4,190,631	\$ 810,860	\$ 810,860	\$ -
4.0	<u>SANITARY SEWERS</u>								
4.1	Highway 7 Sanitary Se Village Parkway to Main Street Unionville	\$ 16,630,334	0%	\$ -	16%	\$ 2,604,128	\$ 14,026,206	\$ 14,026,206	\$ -
4.2	Highway 7 Sanitary Se Hwy 7 to YDSS	\$ 762,093	0%	\$ -	16%	\$ 119,335	\$ 642,758	\$ 642,758	\$ -
	Subtotal Sanitary Sewers	\$ 17,392,427		\$ -		\$ 2,723,463	\$ 14,668,964	\$ 14,668,964	\$ -
5.0	<u>SPECIAL PROJECTS</u> <u>STREETSCAPE</u>								
5.1	Village Parkway Dedicated Bike Lanes	\$ 206,409	0%	\$ -	100%	\$ 206,409	\$ -	\$ -	\$ -
	Subtotal Special Projects	\$ 206,409		\$ -		\$ 206,409	\$ -	\$ -	\$ -
	SUBTOTAL AREA 9	\$ 23,045,130				\$ 7,565,306	\$ 15,479,824	\$ 15,479,824	\$ -
6.0	<u>Projects Undertaken by Credit Agreement</u>								
6.1	Storm Water Management	\$ -		\$ -		\$ (1,342,913)	\$ -	\$ -	\$ -
6.2	Sanitary Sewers	\$ -		\$ -		\$ (2,076,679)	\$ -	\$ -	\$ -
	SUBTOTAL CREDITS FROM AGREEMENT	\$ -		\$ -		\$ (3,419,592)	\$ -	\$ -	\$ -
	TOTAL AREA 9	\$ 23,045,130	\$ -	\$ -		\$ 4,145,713	\$ 15,479,824	\$ 15,479,824	\$ -

Less: Balance in Reserve as at June 30, 2021
Less: Credit as per Agreement
Less: Projects Funded from Reserve

\$ (1,270,491)
\$ -
\$ -

Total Development-Related Recoverable Costs
Net Developable Area (Ha.) to Pay New Dev Charge
Development Charge per Net Hectare

\$ 2,875,222
3.9030
\$ 736,670

APPENDIX D
TABLE D-2

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 17 : RODICK ROAD / MILLER ROAD PLANNING DISTRICT

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost		
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)
AREA 17 : RODICK ROAD / MILLER ROAD PLANNING DISTRICT									
1.0 <u>STORM WATER MANAGEMENT</u>									
1.1	Miller Avenue Storm Woodbine to Rodick	\$ 1,581,741	0%	\$ -	32%	\$ 498,341	\$ 1,083,400	\$ 1,083,400	\$ -
1.2	Rodick Road Storm Miller Avenue to 14th Avenue	\$ 1,068,834	0%	\$ -	32%	\$ 336,745	\$ 732,089	\$ 732,089	\$ -
1.3	Miller / Rodick SWM pond and Channel improvements	\$ 19,005,161	0%	\$ -	80%	\$ 15,204,129	\$ 3,801,032	\$ 3,801,032	\$ -
	Subtotal Storm Water Management	\$ 21,655,737		\$ -		\$ 16,039,216	\$ 5,616,521	\$ 5,616,521	\$ -
2.0 <u>SANITARY SEWERS</u>									
2.1	Miller Avenue Sanitary Sewer Woodbine to Rodick	\$ 260,858	0%	\$ -	100%	\$ 260,858	\$ -	\$ -	\$ -
2.2	Rodick Road Sanitary Sewer Miller Avenue to 14th Avenue	\$ 241,022	0%	\$ -	100%	\$ 241,022	\$ -	\$ -	\$ -
	Subtotal Sanitary Sewers	\$ 501,880		\$ -		\$ 501,880	\$ -	\$ -	\$ -
SUBTOTAL AREA 17		\$ 22,157,617		\$ -		\$ 16,541,096	\$ 5,616,521	\$ 5,616,521	\$ -
<u>PROJECTS undertaken by CREDIT AGREEMENT</u>									
No Projects									
TOTAL AREA 17		\$ 22,157,617		\$ -		\$ 16,541,096	\$ 5,616,521	\$ 5,616,521	\$ -

Less: Balance in Reserve as at June 30, 2021

\$ 1,127,770

Less: Credit as per Agreement

\$ -

Less: Projects Funded from Reserve

\$ -

Total Development-Related Recoverable Costs
Net Developable Area (Ha.) to Pay New Dev Charge
Development Charge per Net Hectare

\$ 17,668,866
26.657
\$ 662,823

**APPENDIX D
TABLE D-2**

**CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 23 : MOUNT JOY**

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost		
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)
AREA 23 : MOUNT JOY									
1.0 <u>STORM WATER MANAGEMENT</u>									
1.1 East/West Storm Sewer to Mount Joy Pond		\$ 1,615,009	0%	\$ -	50%	\$ 811,542	\$ 803,467	\$ 803,467	\$ -
Sub-Total - Stormwater Management		\$ 1,615,009				\$ 811,542	\$ 803,467	\$ 803,467	\$ -
2.0 <u>SANITARY SEWERS</u>									
2.1 Markham Road Corridor - Mount Joy		\$ 1,179,867	0%	\$ -	100%	\$ 1,179,867	\$ -	\$ -	\$ -
2.1 Highway 48 Relief Sewer Outlet to Wismer		\$ 2,470,335	0%	\$ -	29%	\$ 713,927	\$ 1,756,408	\$ 1,756,408	\$ -
Sub-Total - Sanitary Sewers		\$ 3,650,202		\$ -		\$ 1,893,794	\$ 1,756,408	\$ 1,756,408	\$ -
SUBTOTAL AREA 23		\$ 5,265,211		\$ -		\$ 2,705,336	\$ 2,559,875	\$ 2,559,875	\$ -
<u>PROJECTS undertaken by CREDIT AGREEMENT</u>									
No Projects									
TOTAL AREA 23		\$ 5,265,211		\$ -		\$ 2,705,336	\$ 2,559,875	\$ 2,559,875	\$ -

Less: Balance in Reserve as at June 30, 2021	\$ (58,018)
Less: Credit as per Agreement	\$ -
Less: Projects Funded from Reserve	\$ -
Total Development-Related Recoverable Costs	\$ 2,647,318
Net Developable Area (Ha.) to Pay New Dev Charge	15.274
Development Charge per Net Hectare	\$ 173.322

**APPENDIX D
TABLE D-2**

**CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 42A-1 : HELEN AVENUE**

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost		
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)
AREA 42A-1 : HELEN AVENUE									
1.0 ROADS									
1.1	Helen Ave. urbanize including sidewalk on N.S. Stage IV & V	\$ 958,638	0%	\$ -	100%	\$ 958,638	\$ -	\$ -	\$ -
1.2	Urbanize existing Helen Avenue (east of Kennedy Road)	\$ 220,240	0%	\$ -	83%	\$ 183,240	\$ 37,000	\$ -	\$ 37,000
1.3	Helen Avenue Stage IV and V	\$ 47,558	0%	\$ -	100%	\$ 47,558	\$ -	\$ -	\$ -
	Subtotal Roads	\$ 1,226,436	0%	\$ -		\$ 1,189,436	\$ 37,000	\$ -	\$ 37,000
2.0 STORM WATER MANAGEMENT									
2.1	Helen Local Storm sewer Stage IV & V	\$ 484,693	0%	\$ -	66%	\$ 318,025	\$ 166,668	\$ 166,668	\$ -
	Sub-Total - Stormwater Management	\$ 484,693		\$ -		\$ 318,025	\$ 166,668	\$ 166,668	\$ -
3.0 SANITARY SEWERS									
3.1	Helen Avenue Stage IV and V sanitary sewer	\$ 222,400	0%	\$ -	62%	\$ 137,888	\$ 84,512	\$ 84,512	\$ -
3.2	Helen Avenue Sanitary Kennedy To 255m easterly	\$ 202,053	0%	\$ -	100%	\$ 202,053	\$ -	\$ -	\$ -
	Subtotal Sanitary Sewers	\$ 424,453		\$ -		\$ 339,941	\$ 84,512	\$ 84,512	\$ -
SUB-TOTAL AREA 42A-1		\$ 2,135,582		\$ -		\$ 1,847,401	\$ 288,180	\$ 251,180	\$ 37,000
4.0 PROJECTS undertaken by CREDIT AGREEMENT									
4.1	Helen Avenue N.S. Relocation of existing poles	\$ 83,441	0%	\$ -	100%	\$ 83,441			
4.2	Urbanize existing Helen Avenue including sidewalk on north side	\$ 652,724	0%	\$ -	83%	\$ 543,063	\$ 109,661	\$ -	\$ 109,661
4.3	Helen Local Storm sewer Stages I, II & III	\$ 756,544	34%	\$ 260,147	66%	\$ 496,397	\$ -	\$ -	
4.4	Helen Avenue Sanitary East end to 697m westerly	\$ 281,787	0%	\$ -	41%	\$ 115,835	\$ 165,952	\$ 165,952	
4.5	Existing Helen Avenue Watermain Looping	\$ 51,700	0%	\$ -	100%	\$ 51,700	\$ -	\$ -	
SUBTOTAL CREDITS FROM AGREEMENT		\$ 1,826,196		\$ 260,147		\$ 1,290,436	\$ 275,613	\$ 165,952	\$ 109,661
TOTAL AREA 42A.1		\$ 3,961,778		\$ 260,147		\$ 3,137,837	\$ 563,793	\$ 417,132	\$ 146,661

Less:	Balance in Reserve as at June 30, 2021	\$ (1,347)
Less:	Approved Credits	\$ (2,063,068)
Less:	Projects Funded from Reserve	\$ (691,311)
	Total Development-Related Recoverable Costs	\$ 382,111
	Net Developable Area (Ha.) to Pay New Dev Charge	2.164
	Development Charge per Net Hectare	\$ 176,576

APPENDIX D
TABLE D-2

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 42B : MARKHAM CENTRE

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost			Project
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	Shared With Area
AREA 42B : MARKHAM CENTRE										
1.0 <u>SANITARY SEWERS</u>										
1.1 Markham Centre		\$ 194,801	0%	\$ -	100%	\$ 194,801	\$ -	\$ -	\$ -	
Subtotal Sanitary Sewers		\$ 194,801		\$ -		\$ 194,801	\$ -	\$ -	\$ -	
2.0 <u>STUDIES</u>										
2.1 Secondary Plan Studies		\$ 935,000	0%	\$ -	73%	\$ 687,132	\$ 247,869	\$ 247,869	\$ -	42A
Subtotal Studies		\$ 935,000		\$ -		\$ 687,132	\$ 247,869	\$ 247,869	\$ -	
SUBTOTAL AREA 42B		\$ 1,129,801		\$ -		\$ 881,933	\$ 247,869	\$ 247,869	\$ -	
<u>PROJECTS undertaken by CREDIT AGREEMENT</u>										
No Projects										
TOTAL AREA 42B		\$ 1,129,801		\$ -		\$ 881,933	\$ 247,868.50	\$ 247,868.50	\$ -	

Less:	Balance in Reserve as at June 30, 2021	\$ (74,313)
Less:	Approved Credits	\$ -
Less:	Projects Funded from Reserve	\$ -

Total Development-Related Recoverable Costs	\$ 807,620
Net Developable Area (Ha.) to Pay New Dev Charge	100.993
Development Charge per Net Hectare	\$ 7,997

APPENDIX D
TABLE D-2

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 42B.2 : MARKHAM CENTRE - CLEGG

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost			Project
Location	From/To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	Shared With Area
AREA 42B.2 : MARKHAM CENTRE - CLEGG										
1.0 <u>ROADS</u>										
1.1 Clegg Road Extension	Town Centre to Warden Ave	\$ 2,422,510	64%	\$ -	21%	\$ 504,473	\$ 1,918,037	\$ 1,882,167	\$ 35,870	42B.4
Sub-Total - Roads		\$ 2,422,510		\$ -		\$ 504,473	\$ 1,918,037	\$ 1,882,167	\$ 35,870	
SUB-TOTAL AREA 42B.2		\$ 2,422,510				\$ 504,473	\$ 1,918,037	\$ 1,882,167	\$ 35,870	
<u>PROJECTS undertaken by CREDIT AGREEMENT</u>										
No Projects										
TOTAL AREA 42B.2		\$ 2,422,510		\$ -		\$ 504,473	\$ 1,918,037	\$ 1,882,167	\$ 35,870	

Less:	Balance in Reserve as at June 30, 2021	\$	199,392
Less:	Credit as per Agreement	\$	-
Less:	Projects Funded from Reserve	\$	-

Total Development-Related Recoverable Costs	\$	703,865
Net Developable Area (Ha.) to Pay New Dev Charge		4.163
Development Charge per Net Hectare	\$	169,076

APPENDIX D
TABLE D-2

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 42B.4 : MARKHAM CENTRE - HOTEL

Project Description			Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost			Project Shared With Area
Location	From / To		Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	
AREA 42B.4 : MARKHAM CENTRE - HOTEL											
1.0 ROADS											
1.1	Clegg Road Extension	Town Centre to Warden Ave	\$ 2,422,510	0%	\$ -	2%	\$ 46,103	\$ 2,376,407	\$ 2,340,537	\$ 35,870	42B.2
	Sub-Total - Roads		\$ 2,422,510		\$ -		\$ 46,103	\$ 2,376,407	\$ 2,340,537	\$ 35,870	
2.0 SIDEWALKS											
2.1	Clegg Road Extension		\$ 25,849	0%	\$ -	100%	\$ 25,849	\$ -	\$ -	\$ -	
	Sub-Total - Sidewalks		\$ 25,849		\$ -		\$ 25,849	\$ -	\$ -	\$ -	
3.0 STORM WATER MANAGEMENT											
3.1	Clegg Road Storm	Town Centre to Warden	\$ 519,986	0%	\$ -	48%	\$ 252,146	\$ 267,840	\$ 267,840	\$ -	42B.2
	Sub-Total - Stormwater Management		\$ 519,986		\$ -		\$ 252,146	\$ 267,840	\$ 267,840	\$ -	
4.0 SANITARY SEWERS											
4.1	Clegg Road Sanitary	Town Centre to Warden Avenue	\$ 217,006	0%	\$ -	37%	\$ 80,105	\$ 136,901	\$ 136,901	\$ -	42B.2
4.2	Courtyard Lane (NS Road) Sanitary Sewer		\$ 54,674	0%	\$ -	37%	\$ 20,182	\$ 34,492	\$ 34,492	\$ -	42B.2
	Sub-Total - Sanitary Sewers		\$ 271,680		\$ -		\$ 100,287	\$ 171,393	\$ 171,393	\$ -	
SUBTOTAL AREA 42B.4			\$ 3,240,025		\$ -		\$ 424,385	\$ 2,815,640	\$ 2,779,770	\$ 35,870	
PROJECTS undertaken by CREDIT AGREEMENT											
No Projects											
TOTAL AREA 42B.4			\$ 3,240,025		\$ -		\$ 424,385	\$ 2,815,640	\$ 2,779,770	\$ 35,870	

Less:	Balance in Reserve as at June 30, 2021	\$ 23,525	Check if works funded from this reserve
Less:	Credit as per Agreement	\$ -	
Less:	Projects Funded from Reserve	\$ -	
Total Development-Related Recoverable Costs		\$ 447,910	
Net Developable Area (Ha.) to Pay New Dev Charge		0.500	
Development Charge per Net Hectare		\$ 895,820	

APPENDIX D
TABLE D-2

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 42B.6 : MARKHAM CENTRE - SOUTH HIGHWAY 7

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost		
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)
AREA 42B.6 : MARKHAM CENTRE - SOUTH HIGHWAY 7									
1.0 <u>STORM WATER MANAGEMENT</u>									
1.1	Sheridan Pond (Construction)	\$ 1,582,964	0%	\$ -	1%	\$ 20,481	\$ 1,562,483	\$ 1,562,483	\$ -
1.2	Sheridan Storm Sewer Highway 7 to Sheridan Pond	\$ 1,810,704	0%	\$ -	2%	\$ 31,130	\$ 1,779,574	\$ 1,779,574	\$ -
	Sub-Total - Stormwater Management	\$ 3,393,668		\$ -		\$ 51,611	\$ 3,342,057	\$ 3,342,057	\$ -
2.0 <u>SANITARY SEWERS</u>									
2.1	Highway 7 Sanitary Sewer Village Parkway to Main Street Unionville	\$16,630,334	0%	\$ -	61%	\$10,069,470	\$ 6,560,864	\$ 6,560,864	\$ -
2.2	Highway 7 Sanitary Sewer Hwy 7 to YDSS	\$ 762,093	0%	\$ -	61%	\$ 461,438	\$ 300,655	\$ 300,655	\$ -
	Sub-Total - Sanitary Sewers	\$17,392,427		\$ -		\$10,530,908	\$ 6,861,519	\$ 6,861,519	\$ -
SUBTOTAL AREA 42B.6		\$20,786,095				\$10,582,519	\$ 10,203,576	\$ 10,203,576	\$ -
3.0 <u>CREDITS FOR PROJECTS UNDERTAKEN BY CREDIT AGREEMENT</u>									
3.1	Sanitary Sewers	\$ -	0%	\$ -	0%	\$ (3,795,207)	\$ -	\$ -	\$ -
SUBTOTAL CREDITS FROM AGREEMENT		\$ -		\$ -	0%	\$ (3,795,207)	\$ -	\$ -	\$ -
TOTAL AREA 42B.6		20,786,095		\$ -		\$ 6,787,312	\$ 10,203,576	\$ 10,203,576	\$ -

Less:	Balance in Reserve as at June 30, 2021	\$ (814,222)
Less:	Credit as per Agreement	\$ -
Less:	Projects Funded from Reserve	\$ -
Total Development-Related Recoverable Costs		\$ 5,973,090
Net Developable Area (Ha.) to Pay New Dev Charge		4.829
Development Charge per Net Hectare		\$ 1,405,532

APPENDIX D
TABLE D-2

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 42B.8 : MARKHAM CENTRE - SCIBERRAS

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost			Project
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	Shared With Area
AREA 42B.8 : MARKHAM CENTRE - SCIBERRAS										
1.0 <u>ROADS</u>										
1.1 Sciberras Dr (ROW)	Highway 7 to Rouge River	\$ 2,132,284	0%	\$ -	86%	\$ 1,827,672	\$ 304,612	\$ 304,612	\$ -	CWH
Sub-Total - Roads		\$ 2,132,284		\$ -		\$ 1,827,672	\$ 304,612	\$ 304,612	\$ -	
2.0 <u>STORM WATER MANAGEMENT</u>										
2.1 Sheridan Pond (Construction)		\$ 1,582,964	0%	\$ -	22%	\$ 353,590	\$ 1,229,374	\$ 1,229,374	\$ -	9, 42b.6, ROY
2.2 Sheridan Storm Sewer	Highway 7 to Sheridan Pond	\$ 1,810,704	0%	\$ -	2%	\$ 31,130	\$ 1,779,574	\$ 1,779,574	\$ -	9, 42b.6, ROY
2.3 Area 42B-8 Stub to Pond		\$ 49,945	0%	\$ -	100%	\$ 49,945	\$ -	\$ -	\$ -	
Sub-Total - Stormwater Management		\$ 3,443,613		\$ -		\$ 434,665	\$ 1,779,574	\$ 3,008,948	\$ -	
3.0 <u>SANITARY SEWERS</u>										
3.1 Highway 7 Sanitary Sewer	Village Parkway to Main Street Unionville	\$ 16,630,334	0%	\$ -	24%	\$ 3,956,736	\$ 12,673,598	\$ 12,673,598	\$ -	9, 42b.6
3.2 Highway 7 Sanitary Sewer	Hwy 7 to YDSS	\$ 762,093	0%	\$ -	24%	\$ 181,319	\$ 580,774	\$ 580,774	\$ -	9, 42b.6
Sub-Total - Sanitary Sewers		\$ 17,392,427		\$ -		\$ 4,138,055	\$ 13,254,372	\$ 13,254,372	\$ -	
SUBTOTAL AREA 42B.8		\$ 22,968,324		\$ -		\$ 6,400,392	\$ 15,338,558	\$ 16,567,932	\$ -	
<u>CREDITS FOR PROJECTS UNDERTAKEN BY CREDIT AGREEMENT</u>										
No Projects										
TOTAL AREA 42B.8		\$ 22,968,324		\$ -		\$ 6,400,392	\$ 15,338,558	\$ 16,567,932	\$ -	

Less:	Balance in Reserve as at June 30, 2021	\$ 750,458
Less:	Credit as per Agreement	\$ -
Less:	Projects Funded from Reserve	\$ -
Total Development-Related Recoverable Costs		\$ 7,150,850
Net Developable Area (Ha.) to Pay New Dev Charge		4.799
Development Charge per Net Hectare		\$ 1,490,071

**APPENDIX D
TABLE D-2**

**CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 42B.9 : MARKHAM CENTRE - EAST PRECINCT**

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost		
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)
AREA 42B.9 : MARKHAM CENTRE - EAST PRECINCT									
1.0 <u>STORM WATER MANAGEMENT</u>									
1.1	E.P., Enterprise Phase 1- Local Storm Sewers	\$ 956,874	0%	\$ -	100%	\$ 956,874	\$ -	\$ -	\$ -
1.2	E.P., South Pond, Kennedy/YMCA	\$ 113,743	0%	\$ -	100%	\$ 113,743	\$ -	\$ -	\$ -
	Sub-Total - Stormwater Management	\$ 1,070,617		\$ -		\$ 1,070,617	\$ -	\$ -	\$ -
2.0 <u>SANITARY SEWERS</u>									
2.1	E.P. Remaining Sanitary Sewers	\$ 332,240	0%	\$ -	100%	\$ 332,240	\$ -	\$ -	\$ -
2.2	E.P., Enterprise Phase I Sanitary Sewer	\$ 780,378	0%	\$ -	100%	\$ 780,378	\$ -	\$ -	\$ -
2.3	Enterprise Phase II Sanitary Sewer	\$ 59,754	0%	\$ -	100%	\$ 59,754	\$ -	\$ -	\$ -
	Sub-Total - Sanitary Sewers	\$ 1,172,371		\$ -		\$ 1,172,371	\$ -	\$ -	\$ -
3.0 <u>STUDIES</u>									
3.1	Studies	\$ 300,000	0%	\$ -	100%	\$ 300,000	\$ -	\$ -	\$ -
	Sub-Total - Studies	\$ 300,000		\$ -		\$ 300,000	\$ -	\$ -	\$ -
4.0 <u>WATER</u>									
4.1	E.P. Remaining Watermain Sewers	\$ 582,364	0%	\$ -	100%	\$ 582,364	\$ -	\$ -	\$ -
	Sub-Total - Water	\$ 582,364		\$ -		\$ 582,364	\$ -	\$ -	\$ -
SUBTOTAL AREA 42B.8		\$ 3,125,352		\$ -		\$ 3,125,352	\$ -	\$ -	\$ -
<u>PROJECTS undertaken by CREDIT AGREEMENT</u>									
No Projects									
TOTAL AREA 42B.9		\$ 3,125,352		\$ -		\$ 3,125,352	\$ -	\$ -	\$ -

Less:	Balance in Reserve as at June 30, 2021	\$ (1,663,489)
Less:	Credit as per Agreement	\$ -
Less:	Projects Funded From Reserve	\$ -
Total Development-Related Recoverable Costs		\$ 1,461,863
Net Developable Area (Ha.) to Pay New Dev Charge		6.183
Development Charge per Net Hectare		\$ 236,433

APPENDIX D
TABLE D-2

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 46: CATHEDRAL

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost		
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)
AREA 46: CATHEDRAL									
1.0 <u>SANITARY SEWERS</u>									
1.1	Existing Sanitary Oversizing and Deepening S of Major Mackenzie	\$ 205,800	0%	\$ -	100%	\$ 205,800	\$ -	\$ -	\$ -
1.2	Woodbine North Relief Sewer to 404 Region Trunk Sewer	\$ 621,899	0%	\$ -	70%	\$ 435,855	\$ 186,044	\$ 186,044	\$ -
	Sub-Total - Sanitary Sewers	\$ 827,699		\$ -		\$ 641,655	\$ 186,044	\$ 186,044	\$ -
2.0 <u>WATER</u>									
2.1	Woodbine by-pass (300mm) Elgin Mills to Lord Melbrone	\$ 247,940	85%	\$210,749.00	0%	\$ -	\$ -	\$ -	\$ -
	Sub-Total - Water	\$ 247,940		\$ 210,749		\$ -	\$ -	\$ -	\$ -
SUBTOTAL AREA 46		\$ 1,075,639		\$ 210,749		\$ 641,655	\$ 186,044	\$ 186,044	\$ -
3.0 <u>PROJECTS undertaken by CREDIT AGREEMENT</u>									
3.1	Exist. Sanitary Oversizing & Deepening S. of Major Mackenzie Dr. by Woodbine Cachet West Inc.	\$ 399,500	0%	\$ -	100%	\$ 399,500	\$ -	\$ -	\$ -
SUBTOTAL CREDITS FROM AGREEMENT		\$ 399,500		\$ -		\$ 399,500	\$ -	\$ -	\$ -
TOTAL AREA 46		\$ 1,475,139		\$ 210,749		\$ 1,041,155	\$ 186,044	\$ 186,044	\$ -

Less:	Balance in Reserve as at June 30, 2021	\$ (198,589)
Less:	Credit as per Agreement	\$ (290,350)
Less:	Projects Funded From Reserve	\$ -
Total Development-Related Recoverable Costs		\$ 552,216
Net Developable Area (Ha.) to Pay New Dev Charge		57.994
Development Charge per Net Hectare		\$ 9,522

**APPENDIX D
TABLE D-2**

**CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 47B: YORK DOWNS**

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost		
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)
AREA 47B: YORK DOWNS									
1.0 <u>SANITARY SEWERS</u>									
1.1 York Downs Sanitary		\$ 1,633,761	0%	\$ -	10%	\$ 158,977	\$ -	\$ -	\$ -
Sub-Total - Sanitary Sewers		\$ 1,633,761		\$ -		\$ 158,977	\$ -	\$ -	\$ -
2.0 <u>STRUCTURES</u>									
2.1 Angus Glen crossing at Beaver Creek		\$ 2,821,837	0%	\$ -	10%	\$ 282,184	\$ 2,539,654	\$ 2,539,654	\$ -
Sub-Total - Structures		\$ 2,821,837		\$ -		\$ 282,184	\$ 2,539,654	\$ 2,539,654	\$ -
3.0 <u>STUDIES</u>									
3.1 Class E.A. Study - Sewer and Water		\$ 17,636	0%	\$ -	35%	\$ 6,200	\$ -	\$ -	\$ -
3.2 External Traffic Study		\$ 127,812	0%	\$ -	35%	\$ 44,934	\$ -	\$ -	\$ -
3.3 North Markham Subwatershed Study		\$ 29,542	0%	\$ -	35%	\$ 10,386	\$ -	\$ -	\$ -
Sub-Total - Studies		\$ 174,990		\$ -		\$ 61,521	\$ -	\$ -	\$ -
SUBTOTAL AREA 47B		\$ 4,630,589		\$ -		\$ 502,681	\$ 2,539,654	\$ 2,539,654	\$ -
<u>PROJECTS undertaken by CREDIT AGREEMENT</u>									
No Projects									
TOTAL AREA 47B		\$ 4,630,589		\$ -		\$ 502,681	\$ 2,539,654	\$ 2,539,654	\$ -

Less:	Balance in Reserve as at June 30, 2021	\$ (379,541)
Less:	Credit as per Agreement	\$ -
Less:	Projects Funded From Reserve	\$ -
		\$ -
	Total Development-Related Recoverable Costs	\$ 123,140
	Net Developable Area (Ha.) to Pay New Dev Charge	14.999
	Development Charge per Net Hectare	\$ 8,210

APPENDIX D
TABLE D-2

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 49: 404 NORTH EMPLOYMENT LANDS

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost			Project
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	Shared With Area
AREA 49: 404 NORTH EMPLOYMENT LANDS										
1.0 <u>ROADS</u>		\$ -	0%	\$ -	0%	\$ -	\$ -	\$ -	\$ -	
Subtotal Roads		\$ -		\$ -		\$ -	\$ -	\$ -	\$ -	
2.0 <u>SANITARY SEWERS</u>										
2.1 Woodbine North Relief Sewer to 404 Region Trunk Sewer		\$ 621,899	0%	\$ -	30%	\$ 186,044	\$ 435,855	\$ 435,855	\$ -	46
2.2 Woodbine by-pass Sanitary sewer, Phase 1, to Lord Melborne		\$ 4,400,396	0%	\$ -	42%	\$ 1,848,166	\$ 2,552,230	\$ 2,552,230	\$ -	
Subtotal Sanitary Sewers		\$ 5,022,295		\$ -		\$ 2,034,211	\$ 2,988,084	\$ 2,988,084	\$ -	
SUBTOTAL AREA 49		\$ 5,022,295		\$ -		\$ 2,034,211	\$ 2,988,084	\$ 2,988,084	\$ -	
<u>PROJECTS undertaken by CREDIT AGREEMENT</u>										
No Projects										
TOTAL AREA 49		\$ 5,022,295		\$ -		\$ 2,034,211	\$ 2,988,084	\$ 2,988,084	\$ -	

Less:	Balance in Reserve as at June 30, 2021	\$ (1,022,798)
Less:	Credit as per Agreement	\$ -
Less:	Projects Funded From Reserve	\$ -
	Total Development-Related Recoverable Costs	\$ 1,011,413
	Net Developable Area (Ha.) to Pay New Dev Charge	55.674
	Development Charge per Net Hectare	\$ 18,166.69

APPENDIX D

TABLE D-2

TOWN OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 50A : FUTURE URBAN AREA

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost			Project Shared With Area
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	
AREA 50A : FUTURE URBAN AREA										
1.0 <u>STUDIES</u>										
1.1 Master Servicing, Transporation, Subwatershed Study		\$ 7,969,659	0%	\$ -	95%	\$ 7,587,159	\$ -	\$ 382,500	\$ -	CWH
Sub-Total - Studies		\$ 7,969,659		\$ -		\$ 7,587,159	\$ -	\$ 382,500	\$ -	
SUBTOTAL AREA 50		\$ 7,969,659		\$ -		\$ 7,587,159	\$ -	\$ 382,500	\$ -	
TOTAL AREA 50A		\$ 7,969,659		\$ -		\$ 7,587,159	\$ -	\$ 382,500	\$ -	

Less:	Balance in Reserve as at June 30, 2021	\$ -
Less:	Credit as per Agreement	\$ -
Less:	Projects Funded From Reserve	\$ -
	Total in Development Charge	\$ 7,587,159
	Net Developable Area (Ha.) to Pay New Dev Charge	642.05
	Development Charge per Net Hectare	\$ 11,817

**APPENDIX D
TABLE D-2**

**CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 50A-1 : FUTURE URBAN AREA - EMPLOYMENT BLOCK**

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost		
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)
AREA 50A-1 : FUTURE URBAN AREA - EMPLOYMENT BLOCK									
1.0 SANITARY SEWERS									
1.1	Employment Lands West Sewer	19th Avenue to Elgin Mills	\$ 8,224,000	63%	\$ 5,181,000	37%	\$ 3,043,000	\$ -	\$ -
1.2	Employment Lands East Sewer	19th Avenue to Elgin Mills	\$ 8,664,000	63%	\$ 5,484,000	37%	\$ 3,180,000	\$ -	\$ -
1.3	Berczy Glen Sewer	South Side of Elgin Mills to West Side of Warden	\$ 11,558,808	0%	\$ -	42%	\$ 4,858,808	\$ 6,700,000	\$ 6,700,000
1.4	Angus Glen Sewer	Sewer - West Side of Warden to Street A/Street E Intersection	\$ 17,070,527	0%	\$ -	43%	\$ 7,341,729	\$ 9,728,798	\$ 9,728,798
1.5	Angus Glen Sewer	West Side of Warden to Street A and Street E Intersection (easement land)	\$ 1,000,000	0%	\$ -	43%	\$ 430,082	\$ 569,918	\$ 569,918
1.6	Angus Glen Sewer	Street A/Street E Intersection to north end of Community Centre Entrance	\$ 2,218,842	0%	\$ -	29%	\$ 646,119	\$ 1,572,723	\$ 1,572,723
1.7	Angus Glen Sewer	North End of Community Centre Entrance to Major Mackenzie	\$ 1,696,038		\$ -	18%	\$ 311,050	\$ 1,384,988	\$ 1,384,988
1.8	Angus Glen Boulevard Sewer	Major Mackenzie to Stollery	\$ 8,063,000	0%	\$ -	29%	\$ 2,347,918	\$ 5,715,082	\$ 5,715,082
1.9	Angus Glen Boulevard Sewer	Stollery to Existing Golf Course	\$ 7,862,000	0%	\$ -	23%	\$ 1,804,171	\$ 6,057,829	\$ 6,057,829
2.0	York Downs West Sewer	Angus Glen Boulevard to Proposed Street C	\$ 4,016,000	0%	\$ -	9%	\$ 371,780	\$ 3,644,220	\$ 3,644,220
2.1	York Downs West Sewer	Angus Glen Boulevard to 16th Avenue (easement land)	\$ 445,000	0%	\$ -	19%	\$ 84,743	\$ 360,257	\$ 360,257
2.2	Creek Crossing and Connection to YDSS		\$ 6,439,000	0%	\$ -	17%	\$ 1,114,091	\$ 5,324,909	\$ 5,324,909
	Subtotal Sanitary Sewers		\$ 77,257,215		\$ 10,665,000		\$ 25,533,491	\$ -	\$ 41,058,724
SUB-TOTAL AREA 50A-1			\$ 77,257,215		\$ 10,665,000		\$ 25,533,491	\$ -	\$ 41,058,724
TOTAL AREA 50A-1			\$ 77,257,215		\$ 10,665,000		\$ 25,533,491	\$ -	\$ 41,058,724

Less:	Balance in Reserve as at June 30, 2021	\$ -
Less:	Credit as per Agreement	\$ -
Less:	Projects Funded From Reserve	\$ -
	Total in Development Charge	\$ 25,533,491
	Net Developable Area (Ha.) to Pay New Dev Charge	220.430
	Development Charge per Net Hectare	\$ 115.835

APPENDIX D
TABLE D-2

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 50A-2 : FUTURE URBAN AREA - ROBINSON GLEN BLOCK

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost		
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)
AREA 50A-2 : FUTURE URBAN AREA - ROBINSON GLEN BLOCK									
1.0 <u>SANITARY SEWERS</u>									
1.1	Sanitary Sewer Servicing Through Upper Unionville	\$ 100,000		\$ -	100%	\$ 100,000	\$ -	\$ -	\$ -
1.2	Sanitary Sewer Servicing Through Berczy Village	\$ 1,924,944	73%	\$ 1,404,146	27%	\$ 520,798	\$ -	\$ -	\$ -
1.2	Sanitary Sewer Upgrade on The Bridle Walk Major Mackenzie Drive to Bur Oak Avenue	\$ 2,062,584		\$ -	100%	\$ 2,062,584	\$ -	\$ -	\$ -
	Subtotal Sanitary Sewers	\$ 4,087,528		\$ 1,404,146		\$ 2,683,382	\$ -	\$ -	\$ -
SUB-TOTAL AREA 50A-2		\$ 4,087,528		\$ 1,404,146		\$ 2,683,382		\$ -	\$ -
TOTAL AREA 50A-2		\$ 4,087,528		\$ 1,404,146		\$ 2,683,382		\$ -	\$ -

Less:	Balance in Reserve as at June 30, 2021	\$ -
Less:	Credit as per Agreement	\$ -
Less:	Projects Funded From Reserve	\$ -
	Total Development-Related Recoverable Costs	\$ 2,683,382
	Net Developable Area (Ha.) to Pay New Dev Charge	154.650
	Development Charge per Net Hectare	\$ 17,351

APPENDIX D
TABLE D-2

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 50A-3 : FUTURE URBAN AREA - BERCZY GLEN BLOCK

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost			
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)	
AREA 50A-3 : FUTURE URBAN AREA - BERCZY GLEN BLOCK										
1.0 <u>SANITARY SEWERS</u>										
1.1	Berczy Glen Sewer	South Side of Elgin Mills to West Side of Warden	\$ 11,558,808	63%	\$7,252,670.31	0%	\$ -	\$ 4,858,808	\$ 4,858,808	\$ -
1.2	Angus Glen Sewer	West Side of Warden to Street A/Street E Intersection	\$ 17,070,527	0%	\$ -	57%	\$ 9,728,798	\$ 7,341,729	\$ 7,341,729	\$ -
1.3	Angus Glen Sewer	West Side of Warden to Street A and Street E Intersection (easement land)	\$ 1,000,000	0%	\$ -	57%	\$ 569,918	\$ 430,082	\$ 430,082	\$ -
1.4	Angus Glen Sewer	Street A/Street E intersection to north end of Community Centre Entrance	\$ 2,218,842	0%	\$ -	39%	\$ 856,197	\$ 1,362,645	\$ 1,362,645	\$ -
1.5	Angus Glen Sewer	North End of Community Centre Entrance to Major Mackenzie	\$ 1,696,038	0%	\$ -	24%	\$ 412,184	\$ 1,283,854	\$ 1,283,854	\$ -
1.6	Angus Glen Boulevard Sewer	Major Mackenzie to Stollery	\$ 8,063,000	0%	\$ -	39%	\$ 3,111,314	\$ 4,951,686	\$ 4,951,686	\$ -
1.7	Angus Glen Boulevard Sewer	Stollery to Existing Golf Course	\$ 7,862,000	0%	\$ -	30%	\$ 2,390,774	\$ 5,471,226	\$ 5,471,226	\$ -
1.8	York Downs West Sewer	Angus Glen Boulevard to Proposed Street C	\$ 4,016,000	0%	\$ -	12%	\$ 492,659	\$ 3,523,341	\$ 3,523,341	\$ -
1.9	York Downs West Sewer	Angus Glen Boulevard to 16th Avenue (easement land)	\$ 445,000	0%	\$ -	25%	\$ 112,296	\$ 332,703	\$ 332,703	\$ -
2	Creek Crossing and Connection to YDSS		\$ 6,439,000	0%	\$ -	23%	\$ 1,476,324	\$ 4,962,676	\$ 4,962,676	\$ -
Subtotal Sanitary Sewers			\$ 60,369,215		\$ 7,252,670		\$ 19,150,465	\$34,518,750	\$34,518,750	\$ -
SUB-TOTAL AREA 50A-3			\$ 60,369,215		\$ 7,252,670		\$ 19,150,465	\$34,518,750	\$34,518,750	\$ -
TOTAL AREA 50A-3			\$ 60,369,215		\$ 7,252,670		\$ 19,150,465	\$34,518,750	\$34,518,750	\$ -

Less:	Balance in Reserve as at June 30, 2021	\$ -
Less:	Credit as per Agreement	\$ -
Less:	Projects Funded From Reserve	\$ -
	Total Development-Related Recoverable Costs	\$ 19,150,465
	Net Developable Area (Ha.) to Pay New Dev Charge	93.840
	Development Charge per Net Hectare	\$ 204,076

APPENDIX D
TABLE D-2

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 50A-4 : FUTURE URBAN AREA - ANGUS GLEN BLOCK

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost		
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)
AREA 50A-4 : FUTURE URBAN AREA - ANGUS GLEN BLOCK									
1.0 <u>SANITARY SEWERS</u>									
1.1 Angus Glen Sewer	Street A/Street E intersection to north end of Community Centre Entrance	\$ 2,218,842	0%	\$ -	32%	\$ 716,526	\$ 1,502,316	\$ 1,502,316	\$ -
1.2 Angus Glen Sewer	North End of Community Centre Entrance to Major Mackenzie	\$ 1,696,038	0%	\$ -	20%	\$ 344,945	\$ 1,351,093	\$ 1,351,093	\$ -
1.3 Angus Glen Boulevard Sewer	Major Mackenzie to Stollery	\$ 8,063,000	0%	\$ -	32%	\$ 2,603,768	\$ 5,459,232	\$ 5,459,232	\$ -
1.4 Angus Glen Boulevard Sewer	Stollery to Existing Golf Course	\$ 7,862,000	0%	\$ -	47%	\$ 3,667,055	\$ 4,194,945	\$ 4,194,945	\$ -
1.5 York Downs West Sewer	Angus Glen Boulevard to Proposed Street C	\$ 4,016,000	0%	\$ -	24%	\$ 961,199	\$ 3,054,801	\$ 3,054,801	\$ -
1.6 York Downs West Sewer	Angus Glen Boulevard to 16th Avenue (easement land)	\$ 445,000	0%	\$ -	49%	\$ 219,095	\$ 225,905	\$ 225,905	\$ -
1.7 Creek Crossing and Connection to YDSS		\$ 6,439,000	0%	\$ -	45%	\$ 2,880,374	\$ 3,558,626	\$ 3,558,626	\$ -
Subtotal Sanitary Sewers		\$ 30,739,880		\$ -		\$11,392,962	\$19,346,918	\$19,346,918	\$ -
TOTAL AREA 50A-4		\$ 30,739,880		\$ -		\$11,392,962		\$19,346,918	\$ -
TOTAL AREA 50A-4		\$ 30,739,880		\$ -		\$11,392,962		\$19,346,918	\$ -

Less:	Balance in Reserve as at June 30, 2021	\$ -
Less:	Credit as per Agreement	\$ -
Less:	Projects Funded From Reserve	\$ -
	Total in Development Charge	\$11,392,962
	Net Developable Area (Ha.) to Pay New Dev Charge	162.040
	Development Charge per Net Hectare	\$ 70,310

APPENDIX D
TABLE D-2

CITY OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA-SPECIFIC GROWTH-RELATED PROJECTS
AREA 50A-5 : FUTURE URBAN AREA - ROBINSON GLEN - SOUTH BLOCK

Project Description		Total	Local Cost / by others		ASDC Growth - Related		Others Sharing and/or Non-Growth Cost		
Location	From / To	Gross Cost (\$)	Share (%)	Cost (\$)	Share (%)	Cost (\$)	Gross (\$)	Others Cost (\$)	Non-growth (\$)
AREA 50A-5 : FUTURE URBAN AREA - ROBINSON GLEN - SOUTH BLOCK									
1.0 <u>SANITARY SEWERS</u>									
1.1 York Downs West Sewer	Angus Glen Boulevard to Proposed Street C	\$ 4,016,000	0%	\$ -	3%	\$ 126,636	\$ 3,889,364	\$ 3,889,364	\$ -
1.2 York Downs West Sewer	Angus Glen Boulevard to 16th Avenue (easement land)	\$ 445,000	0%	\$ -	6%	\$ 28,865	\$ 416,135	\$ 416,135	\$ -
1.3 Creek Crossing and Connection to YDSS		\$ 6,439,000	0%	\$ -	6%	\$ 379,484	\$ 6,059,516	\$ 6,059,516	\$ -
Subtotal Sanitary Sewers		\$ 10,900,000		\$ -		\$ 534,985	\$10,365,015	\$10,365,015	\$ -
TOTAL AREA 50A-5		\$ 10,900,000		\$ -		\$ 534,985	\$10,365,015	\$10,365,015	\$ -
TOTAL AREA 50A-5		\$ 10,900,000		\$ -		\$ 534,985	\$10,365,015	\$10,365,015	\$ -

Less:	Balance in Reserve as at June 30, 2021	\$ -
Less:	Credit as per Agreement	\$ -
Less:	Projects Funded From Reserve	\$ -
	Total in Development Charge	\$ 534,985
	Net Developable Area (Ha.) to Pay New Dev Charge	11.090
	Development Charge per Net Hectare	\$ 48,240

Appendix E

Reserve Fund Balances

Appendix E: Reserve Fund Balances

Table E-1 presents the uncommitted reserve fund balances that are available to help fund the development-related net capital costs identified in this study. The closing balances of the development charges reserve funds as at June 30th, 2021 have been adjusted to account for current commitments to reserve fund projects. All of the adjusted reserve fund balances are accounted for in the study. The overall balance stood at \$80.22 million. There are \$45.56 million in commitments available to fund development-related projects to yield an uncommitted reserve fund balance of \$34.66 million which is brought forward to fund the DC capital programs.

The existing reserve fund balances for the Area-Specific reserves are shown in Table E-2. These funds are either assigned to projects in the initial years of the capital program for each service or to the opening balance of the cash flow calculations. The effect is to reduce and defer capital costs brought forward to the development charge calculation and the cash flow analysis.

**APPENDIX E
TABLE E-1**

**DEVELOPMENT CHARGE RESERVE FUND BALANCE BY ACCOUNT
FOR CITY-WIDE SERVICES
QUARTER ENDING JUNE 30TH 2021**

Service	Reserve Fund Balance as at June 30 2021	Commitments	Uncommitted Reserve Funds
General Government	(\$12,449,685)	\$0	(\$12,449,685)
Library	\$5,343,182	\$0	\$5,343,182
Fire Services	\$4,881,985	\$0	\$4,881,985
Indoor Recreation	(\$46,852,432)	\$0	(\$46,852,432)
Park Development & Facilities	41,581,398.49	\$13,047,550	\$28,533,849
Public Works	\$2,358,669	\$4,706,567	(\$2,347,898)
Waste Diversion	\$523,823	\$0	\$523,823
Subtotal Development Charge Reserves- General Services	(\$4,613,060)	\$17,754,117	(\$22,367,177)
City-wide Hard Services	84,828,615.90	\$27,802,926	\$57,025,690
Total CWS and CWH Services	\$80,215,556	\$45,557,043	\$34,658,513

APPENDIX E**TABLE E-2**

**CITY OF MARKHAM
DEVELOPMENT CHARGES RESERVE FUND BALANCES
FOR AREA-SPECIFIC**

Area	Balance as at June 30th, 2021
Area 1B	\$582,656
Area 5	\$675,358
Area 7	\$121,641
Area 9	\$1,270,491
Area 17	(\$1,127,770)
Area 23	\$58,018
Area 42A.1	\$1,347
Area 42B	\$74,313
Area 42B.2	(\$199,392)
Area 42B.4	(\$23,525)
Area 42B.6	\$814,222
Area 42B.8	(\$750,458)
Area 42B.9	\$1,663,489
Area 46	\$198,589
Area 47B	\$379,541
Area 49	\$1,022,798
Area 50A	\$0
Area 50A-1	\$0
Area 50A-2	\$0
Area 50A-3	\$0
Area 50A-4	\$0
Area 50A - 5	\$0

Appendix F

Long-Term Capital & Operating Impacts

APPENDIX F

TABLE F-1

CITY OF MARKHAM
ESTIMATED NET OPERATING COST OF THE PROPOSED
DEVELOPMENT-RELATED CAPITAL PROGRAM
(in constant 2022 dollars)

	Net Cost (in 2022\$)	Estimated Operating Costs (\$000)									
		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
LIBRARY											
- Buildings, Land and Furnishings	\$75.00 per sq.ft. of new library space	\$1,500.0	\$1,500.0	\$1,500.0	\$1,500.0	\$3,750.0	\$3,750.0	\$3,750.0	\$3,750.0	\$5,250.0	\$5,250.0
FIRE SERVICES											
- Buildings, Land and Furnishings	\$460.00 per sq.ft. of new fire station space	\$4,600.0	\$9,200.0	\$9,200.0	\$13,800.0	\$13,800.0	\$13,800.0	\$13,800.0	\$13,800.0	\$13,800.0	\$21,160.0
INDOOR RECREATION											
- Buildings, Land & Furnishings	\$20.00 per sq.ft. of new recreation space	\$0.0	\$0.0	\$200.0	\$400.0	\$1,200.0	\$1,400.0	\$1,400.0	\$2,180.0	\$5,580.0	\$5,580.0
PARK DEVELOPMENT & FACILITIES											
- Park Development and Facilities	\$20.00 per \$1,000 of total infrastructure value	\$571.7	\$874.86	\$2,193.6	\$2,880.8	\$4,239.0	\$4,981.4	\$5,834.6	\$6,126.7	\$6,365.2	\$6,519.8
PUBLIC WORKS											
- Buildings, Land and Fleet	\$20.00 per \$1,000 of total infrastructure value	\$54.6	\$1,284.07	\$1,359.3	\$2,062.1	\$2,077.8	\$2,094.2	\$2,120.1	\$2,136.2	\$2,155.9	\$2,155.9
WASTE DIVERSION											
	\$60.00 per household infrastructure value	\$175.6	\$355.63	\$540.3	\$729.7	\$924.0	\$1,121.0	\$1,323.0	\$1,530.1	\$1,742.5	\$1,960.4
City-Wide Hard											
- Development-Related Roads Infrastructure	\$320.00 per household	\$936.4	\$1,896.7	\$2,881.7	\$3,891.9	\$4,927.8	\$5,978.6	\$7,056.1	\$8,160.7	\$9,293.5	\$10,455.2
TOTAL ESTIMATED OPERATING COSTS		\$7,838.2	\$15,111.2	\$17,874.8	\$25,264.5	\$30,918.5	\$33,125.2	\$35,283.7	\$37,683.8	\$44,187.1	\$53,081.3

**APPENDIX F
TABLE F-2**

**CITY OF MARKHAM
SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS**

Net Capital Cost of Development-Related Projects	2022 (\$000)	2023 (\$000)	2024 (\$000)	2025 (\$000)	2026 (\$000)	2027 (\$000)	2028 (\$000)	2029 (\$000)	2030 (\$000)	2031 (\$000)	TOTAL (\$000)
GENERAL GOVERNMENT											
Total Net Cost (1)	14,614.7	2,165.0	2,165.0	2,165.0	2,165.0	2,165.0	2,165.0	2,165.0	2,165.0	2,165.0	34,099.7
Net Cost From Development Charges In-Period (2)	14,614.7	2,165.0	2,165.0	2,165.0	2,165.0	2,165.0	2,165.0	2,165.0	2,165.0	2,165.0	34,099.7
Net Cost From Other Sources	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Prior Growth (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Replacement & Benefit to Existing (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2031 Development (6)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LIBRARY											
Total Net Cost (1)	19,301.1	0.0	0.0	0.0	29,980.2	0.0	0.0	0.0	38,602.1	0.0	87,883.4
Net Cost From Development Charges In-Period (2)	13,957.9	0.0	0.0	0.0	20,883.3	0.0	0.0	0.0	22,572.6	0.0	57,413.7
Net Cost From Other Sources	5,343.2	0.0	0.0	0.0	9,096.9	0.0	0.0	0.0	16,029.6	0.0	30,469.6
- Prior Growth (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	5,343.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,343.2
- Replacement & Benefit to Existing (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2031 Development (6)	0.0	0.0	0.0	0.0	9,096.9	0.0	0.0	0.0	16,029.6	0.0	25,126.5
FIRE SERVICES											
Total Net Cost (1)	12,175.5	12,201.1	0.0	11,175.5	0.0	0.0	0.0	0.0	15,446.3	0.0	50,998.4
Net Cost From Development Charges In-Period (2)	7,293.5	12,201.1	0.0	11,175.5	0.0	0.0	0.0	0.0	15,319.2	0.0	45,989.4
Net Cost From Other Sources	4,882.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	127.0	0.0	5,009.0
- Prior Growth (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	4,882.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4,882.0
- Replacement & Benefit to Existing (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2031 Development (6)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	127.0	0.0	127.0
INDOOR RECREATION											
Total Net Cost (1)	46,852.4	0.0	6,765.0	6,765.0	54,460.0	6,765.0	0.0	57,524.5	169,805.0	0.0	348,936.9
Net Cost From Development Charges In-Period (2)	46,852.4	0.0	6,765.0	6,765.0	54,460.0	6,765.0	0.0	57,524.5	151,355.0	0.0	330,486.9
Net Cost From Other Sources	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18,450.0	0.0	18,450.0
- Prior Growth (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Replacement & Benefit to Existing (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2031 Development (6)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18,450.0	0.0	18,450.0
PARK DEVELOPMENT & FACILITIES											
Total Net Cost (1)	28,586.6	15,156.2	65,935.4	34,363.5	67,906.2	37,124.4	42,656.9	14,605.8	11,924.0	7,731.0	325,989.9
Net Cost From Development Charges In-Period (2)	5,293.9	11,842.7	64,007.7	34,363.5	50,210.2	3,425.7	0.0	0.0	0.0	0.0	169,143.7
Net Cost From Other Sources	23,292.7	3,313.5	1,927.7	0.0	17,696.0	33,698.8	42,656.9	14,605.8	11,924.0	7,731.0	156,846.3
- Prior Growth (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	23,292.7	3,313.5	1,927.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28,533.8
- Replacement & Benefit to Existing (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2031 Development (6)	0.0	0.0	0.0	0.0	17,696.0	33,698.8	42,656.9	14,605.8	11,924.0	7,731.0	128,312.4

Notes: (1) For total development-related capital program see Appendix B.

(2) Share of capital program to be funded from development charges if calculated rates are fully implemented

(3) Portion of development-related capital program that has committed development charge funds.

(4) Portion of development-related capital program identified as available DC reserves (to be funded from present Development Charge reserve fund balances).

(5) Portion of development-related capital program identified as benefitting to the existing population.

(6) Post 2032 development-related net capital costs may be eligible for development charges in future DC by-laws, but interim financing of this share may be required

**APPENDIX F
TABLE F-2**

**CITY OF MARKHAM
SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS**

Net Capital Cost of Development-Related Projects	2022 (\$000)	2023 (\$000)	2024 (\$000)	2025 (\$000)	2026 (\$000)	2027 (\$000)	2028 (\$000)	2029 (\$000)	2030 (\$000)	2031 (\$000)	TOTAL (\$000)
PUBLIC WORKS											
Total Net Cost (1)	2,728.2	61,475.3	3,760.0	35,140.7	786.2	817.9	1,294.8	809.3	982.0	0.0	107,794.3
Net Cost From Development Charges In-Period (2)	2,728.2	33,667.9	3,760.0	1,045.3	0.0	0.0	0.0	0.0	0.0	0.0	41,201.5
Net Cost From Other Sources	0.0	27,807.3	0.0	34,095.3	786.2	817.9	1,294.8	809.3	982.0	0.0	66,592.8
- Prior Growth (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Replacement & Benefit to Existing (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2031 Development (6)	0.0	27,807.3	0.0	34,095.3	786.2	817.9	1,294.8	809.3	982.0	0.0	66,592.8
WASTE DIVERSION											
Total Net Cost (1)	2,057.1	1,040.4	0.0	3,606.1	1,001.4	0.0	0.0	0.0	1,549.0	0.0	9,254.0
Net Cost From Development Charges In-Period (2)	1,533.3	1,040.4	0.0	3,088.3	1,001.4	0.0	0.0	0.0	0.0	0.0	6,663.4
Net Cost From Other Sources	523.8	0.0	0.0	517.8	0.0	0.0	0.0	0.0	1,549.0	0.0	2,590.6
- Prior Growth (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	523.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	523.8
- Replacement & Benefit to Existing (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2031 Development (6)	0.0	0.0	0.0	517.8	0.0	0.0	0.0	0.0	1,549.0	0.0	2,066.8
TOTAL MUNICIPAL SERVICES											
Total Net Cost (1)	126,315.6	92,038.0	78,625.4	93,215.7	156,298.9	46,872.4	46,116.6	75,104.5	240,473.4	9,896.0	964,956.6
Net Cost From Development Charges (2)	92,273.9	60,917.2	76,697.7	58,602.6	128,719.9	12,355.7	2,165.0	59,689.5	191,411.8	2,165.0	684,998.3
Net Cost From Non-DC Sources	34,041.6	31,120.8	1,927.7	34,613.1	27,579.1	34,516.7	43,951.6	15,415.0	49,061.6	7,731.0	279,958.3
- Prior Growth (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Available DC Reserves (4)	34,041.6	3,313.5	1,927.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39,282.8
- Replacement & Benefit to Existing (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2031 Development (6)	0.0	27,807.3	0.0	34,613.1	27,579.1	34,516.7	43,951.6	15,415.0	49,061.6	7,731.0	240,675.5

Notes: (1) For total development-related capital program see Appendix B.

(2) Share of capital program to be funded from development charges if calculated rates are fully implemented

(3) Portion of development-related capital program that has committed development charge funds.

(4) Portion of development-related capital program identified as available DC reserves (to be funded from present Development Charge reserve fund balances).

(5) Portion of development-related capital program identified as benefitting to the existing population.

(6) Post 2032 development-related net capital costs may be eligible for development charges in future DC by-laws, but interim financing of this share may be required

Appendix G

Cost of Growth Analysis

Appendix G: Asset Management Plan

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

A. Asset Types

A summary of the future municipal-owned assets and estimated useful life assumptions for eligible DC services considered as part of the study are outlined in Table G-1 and Table G-2. Although all capital assets considered in the study have been identified, not all assets necessitate future replacement or ongoing maintenance activities. The exception and the justification is as follows:

- Some of the works identified may represent one-time expenditures and may be temporary in nature. Therefore, the assets would not be required to be replaced and no ongoing operation and maintenance costs exist. Such assets are identified as “not a long-term asset” in the table.
- Some projects do not relate to the emplacement of a tangible capital asset – some examples include the acquisition of land or the undertaking of development-related studies. These projects/costs do not necessarily require future replacement or ongoing maintenance. Such projects are identified as “not infrastructure” in the table.

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

**APPENDIX G
TABLE G-1**

**CITY OF MARKHAM
SUMMARY OF MUNICIPAL ASSETS CONSIDERED CITY-WIDE SOFT SERVICES**

Capital Project Description	Estimated Useful Life
Recovery of Negative DC Reserve Fund Balances	Not a Long-Term Asset
Land Acquisition	Not Infrastructure
Studies	Not Infrastructure
Buildings & Structures	40 Years
Fire Services Equipment	11 Years
Fire Vehicles - Fire Apparatus	9 Years
Licensed Vehicles	7 Years
Non-Licensed Construction/Maintenance Equipment	7 Years
Library Furniture & Fixtures	10 Years
Library Media Collection	7 Years
Air-Supported Structures	20 Years
Artificial Turf	15 Years
Parks & Pathways - Lighting	30 Years
Parks & Pathways - Furnishings	10 Years
Parks & Pathways - Shelters	40 Years
Parks & Pathways - Skate Parks	25 Years
Parks & Pathways - Sport Field Structures	10 Years
Parks & Pathways - Pathways	15 Years
Parks & Pathways - Playground Structures	15 Years
Parks & Pathways - Waterplay Structures	20 Years

**APPENDIX G
TABLE G-2**

**CITY OF MARKHAM
SUMMARY OF MUNICIPAL ASSETS CONSIDERED CITY-WIDE HARD SERVICES**

Capital Project Description	Estimated Useful Life
Bridges - Structure	75 Years
Bridges - Superstructure	25 Years
Right of Ways (RoWs) - Road Surface	25 Years
Right of Ways (RoWs) - Sidewalk	45 Years
Right of Ways (RoWs) - Sub-base	45 Years
Streetlighting	35 Years
Stormwater Ponds	10 Years
Drinking Water Distribution System	60 Years

No annual provisions have been identified for General Government as the development-related studies included in the General Government development charge category are not infrastructure and therefore have no long-term financial requirements.

B. Annual Provision

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

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

Consistent with the requirements of the *Development Charge Act*, 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 ten per cent statutory discount, benefit-to-existing and post-period benefit have also been calculated.

Table G-3 provides an overview of the capital provisions required to replace the capital infrastructure proposed to be funded under the development charges by-law for both CWS and CWH services. As shown in Table G-3, by 2032, the City will need to fund an additional \$48.83 million per annum in order to properly fund the full life-cycle costs of the new assets related to the CWS and CWH services supported under the development charges by-law.

**APPENDIX G
TABLE G-3**

**CITY OF MARKHAM
ANNUAL ASSET MANAGEMENT PROVISION BY 2032**

Service	2022 - 2031 Capital Program		Calculated AMP Annual Provision by 2032	
	DC Related	Non-DC Related*	DC Related	Non-DC Related*
General Government	\$34,099,685	\$0	\$0	\$0
Library	\$58,120,079	\$29,763,300	\$2,655,609	\$1,130,342
Fire Services	\$50,871,342	\$665,686	\$1,178,482	\$19,680
Indoor Recreation	\$330,486,932	\$18,450,000	\$6,489,988	\$545,443
Park Development & Facilities	\$198,116,166	\$127,873,767	\$6,170,758	\$5,318,051
Public Works	\$41,201,500	\$66,592,795	\$431,808	\$1,667,971
Waste Diversion	\$7,187,249	\$2,066,763	\$245,717	\$337,308
City-Wide Hard	\$1,265,598,182	\$560,497,315	31,660,320	\$19,615,571
TOTAL	\$1,985,681,136	\$805,909,625	\$48,832,682	\$28,634,367

** Includes costs that will be recovered under future development charges studies (i.e. other development-related)*

C. Financial Sustainability of the Program

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 (to 2031) the City is projected to increase by approximately 32,670 households, which represents a 29 per cent increase over the existing base. In addition, the City will also add approximately 55,590 new employees that will result in roughly 2.55 million square metres of additional non-residential building space.

This growth will have the effect of increasing the overall assessment base and additional user fee and charges 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 the future replacement of these assets.

Annual Budgetary Reviews

In addition, as part of the annual budget update the City also undertakes analysis of the Life-cycle Reserve Fund. The analysis includes anticipated funding requirements and potential funding shortfalls resulting from inflation, past growth and new assets. Funding requirements are examined over a 25 year period and mitigation measures are proposed for Council's consideration. Examples of mitigating measures that have been used historically in the City include increased revenue sources (including projected dividends), allocation of Federal Gas Tax funding towards life-cycle costs and transferring additional funds into the Life-cycle Reserve Fund.

Through this annual exercise, staff identify the required funding and propose mitigating measures in order to ensure there are sufficient funds in the reserve over a 25 year horizon. Life-cycle funding methodologies are also reviewed in order to ensure that the City is continuing to implement financially sustainable practices for funding the eventual replacement of assets.

The Program is Deemed Financially Sustainable

The calculated annual provisions identified in Table G-3 is considered to be financially sustainable as it is expected that the increased capital asset management requirements can be absorbed by the tax and user base over the long-term. Importantly, the City's annual review of the Life-cycle Reserve Fund will allow staff to continue to monitor and implement mitigating measures should the program become less sustainable.

Appendix H

Local Service Definitions

Appendix H: Local Service Definitions

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

- The project will be required to be listed in the most current City of Markham Development Charges Study.
- If any infrastructure does not add any additional capacity over and above the capacity requirement for that development, these projects are assumed to be the sole responsibility of the developer.
- Infrastructure that provides servicing or capacity for more than one development is not necessarily fully or partially funded from development charges. If a project is considered fully or partially local in nature, the City will require the benefiting land owners to fund the works directly.

The following policy guidelines are general principles by which staff will be guided in considering development applications. Each application will be considered on its own merits having regard to, among other factors, the nature, type and location of the development in any existing or 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*, will also be assessed.

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-laws.

The detailed engineering requirements for all work and/or development are governed by the City of Markham Official Plan, or if not specified in the Official Plan, by the approved detailed engineering standards.

The provision of local services is considered to be a direct developer responsibility under s.59 of the *DCA* and will (or may) be recovered under other agreement(s) with the land owner or developer. The issue of “local services” is being specifically considered for the services outlined in the following sections.

A. General

A local service is the infrastructure or component thereof required to develop a subdivision within the boundaries of the secondary plan in accordance with the City of Markham Standards and current level of service (LOS) or LOS determined by Council. The infrastructure is assumed by the City when the conditions of subdivision are met/secondary plan is completed.

Example:

- Residential and non-residential development with 23.0 m right of way (ROW) and 11.0 m asphalt (Engineering Standard MR6);
- Turn lanes;
- Parking bays;
- Bike lanes (on road and off road);
- Streetlights;
- Utilities;
- Municipal services;
- Sidewalks and multi use paths; and
- Storm water management facilities.

B. Area Specific Development Charge (ASDC)/City Wide Hard (CWH) Project Assessment

i. Illumination

- All illumination on arterial and collector roads NOT in a secondary plan/draft plan of subdivision are to be funded through CWH development charges.
- Illumination on collector and local roads in a draft plan are the responsibility of the local developer (local service).

ii. Intersections

- All intersection improvements/signals after assumption of a subdivision not paid for by the developer are to be funded through CWH development charges.

iii. Roads

- Any portion of the road (land and construction) greater than the 23.0 m ROW and 11.0 m asphalt in a residential plan of subdivision are to be funded through CWH development charge.
- Any portion of the road (land and construction) equal to or less than the 23.0 m ROW and 11.0 m asphalt in a residential subdivision is to be funded by the local developer.
- Improvements to assumed collector roads (rural to urbanize or widening) are to be funded through CWH development charges.
- New roads outside the draft plan of subdivision area to be funded through CWH development charges.

iv. Structures/Crossings

- Structures and crossings that have a cross section greater than a 23.0 m ROW and 11.0 m asphalt are considered to be of City-wide benefit and are to be funded fully through CWH development charges.
- Structures and crossings on local roads are generally considered to be a local service and a direct developer responsibility.
- In some situations a local structure/crossing may be shown to provide a City-wide or Area-wide benefit. In these situations a share of the cost, to a maximum of 25 per cent, may be recovered by CWH development charges. The determination of whether or not a local structure provides a City-Wide benefit is at the sole discretion of the City as is determining the share to be funded from CWH development charges.

v. Sidewalks/Multi-Use Paths/ Bike Lanes

- Sidewalks/multi-use paths/on road and off road bike lanes on arterial roads and collector roads not in a draft plan of a subdivision are to be funded through CWH development charges.
- Sidewalks/multi-use paths/on road and off road bike lanes on City roads in a draft plan of subdivision are local services and is the responsibility of the developer.
- Trails and pathways on greenlands (valley land or open space outside of a draft plan of subdivision) are to be funded through CWH development charges (65 per cent) and the local developer/non-growth (35 per cent).

vi. Studies

- These are recovered through CWH and ASDC depending on the geographic and benefitting area of the study.

vii. Water

- All watermains on arterial and collector roads not in a draft plan of subdivision are funded through CWH development charges.
- 300 mm diameter watermains or smaller in a draft plan are the responsibility of the local developer.
- Oversizing of watermains (>300 mm) in a draft plan are to be recovered through CWH development charges if it is triggered by external uses.

viii. Sanitary/Storm Sewers and Stormwater Management Facilities

- To be recovered through ASDC/Local.

ix. Enhanced Streetscaping

- Enhanced streetscaping on internal roads within a plan of subdivision or abutting site plan are to be recovered 50 per cent through CWH development charges and 50 per cent through the local developer/non-growth.
- Enhanced streetscaping on external arterial and collector roads are to be recovered 50 per cent through CWH development charges and 50 per cent through the local developer/non-growth.

x. Oversizing of Sanitary Sewers for Future Growth

- A sanitary sewer, either internal or external to a development and, required to service a specific development is considered local and funded by the developer. Sanitary sewers that can service more than one development or development area can either be funded by the local developer(s) or, may be eligible for recovery through an Area Specific Development Charge.

- Where requested by the City, sanitary sewers can be sized to provide capacity above and beyond the planned growth of a benefitting area. The cost of this oversizing, will be recovered through the City Wide Hard Development charges.
- Where oversizing costs incurred can be directly attributed to a geographic location, and an Area Specific Development Charge by-law is created for this location, then the related costs and obligations will be reallocated from the CWH by-law to this new ASDC by-law.
- Oversizing costs represent the incremental or marginal differential in cost to construct the required pipe size for the benefitting population and, the larger pipe size for the projected future population.
- The oversizing cost will be recovered 50 per cent through the City Wide Hard development charges and 50 per cent will be allocated to post period benefit.

These policies are subject to ongoing review and update and to be approved by Council.

Appendix I
Draft DC By-Laws
(Available under Separate Cover)