DEVELOPMENT CHARGES BACKGROUND STUDY:

TOWN-WIDE SOFT SERVICES

Town of Markham

 $\boldsymbol{HEMSON} \,\, \, \textbf{Consulting Ltd.}$

TABLE OF CONTENTS

EXE	CUT	IVE SUMMARY	. 1
I	INT	RODUCTION	. 8
II		E METHODOLOGY USES A TOWN-WIDE APPROACH ALIGN GROWTH-RELATED COSTS AND BENEFITS	11
	A. B.	Town-wide Development Charges Are Proposed	
Ш	GR	OWTH FORECAST	
IV	HIS	STORIC CAPITAL SERVICE LEVELS	17
V	GR	OWTH-RELATED CAPITAL FORECAST	19
	A. B.	Growth-related Capital Forecast Is Provided for Council's Approval The Growth-related Capital Forecast for General Services	
VI		OPOSED DEVELOPMENT CHARGES ARE LCULATED IN ACCORDANCE WITH THE <i>DCA</i>	23
	A. B.	Development Charges Calculation	
	C.	with Charges Currently in Force in Markham	
VII	LO	NG-TERM CAPITAL AND OPERATING COSTS	34
	A.	Net Operating Costs for the Town Services to Increase over the Forecast Period	24
	В.	Long-term Capital Financing from Non-development Charges Sources Totals \$17.6 Million	
VIII	ОТІ	HER ISSUES AND CONSIDERATIONS	
	A. B.	Development Charges Policies and Practices	
APF	PENE	DICES	

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EXECUTIVE SUMMARY

Hemson Consulting Ltd. was retained by the Town of Markham to complete a Development Charges Background Study. The following summarizes the findings of the study.

(i) THE TOWN HAS A COMPLEX DEVELOPMENT CHARGES REGIME

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

- 1. Town-Wide Soft (TWS) Service Development Charges for the recovery of growth-related cost for the provision of general government, library, fire, indoor recreation, parks development and facilities, and public works (building, equipment and fleet) services.
- Town-Wide Hard (TWH) Service Development Charges for the recovery of growth-related cost 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), and related studies.
- 3. Area-Specific Development Charges (ASDC) for the recovery of growth-related cost for the provision of some roads, intersection improvements, sidewalks, streetlighting, watermains, sanitary sewers and storm water management facilities (storm water ponds).

The first two types of development charges, the TWS and TWH, are levied on a uniform basis against all development in the Town. The ASDCs are levied on a planning area-specific basis. In 2008, the Town enacted new TWH and ASDC by-laws. However, the TWS by-law from 2004 was left unchanged and requires replacement prior to September 2009. This process will result in a new TWS by-law and charges while leaving the TWH and ASDC by-laws unchanged.

(ii) BACKGROUND

• The *Development Charges Act*, 1997 (the DCA) and its associated regulation (O. Reg. 82/98) allow municipalities in Ontario to recover for growth-related capital costs from new development.



- This study calculates new TWS development charges for the Town of Markham in compliance with the provisions of the DCA.
- In 2008, the Town enacted new TWH and ASDC development charges by-laws for the recovery of engineering infrastructure (roads, water, sewer and storm water management) which are not considered as part of this background study.
- The Town of Markham's existing development charges by-law, By-law Number 2004-223, expires on August 31, 2009; however, Council may choose to pass a new development charges by-law before the legislated five-year expiry date.
- The Town needs to continue implementing development charges to fund capital projects related to growth throughout Markham so that development continues to be serviced in a fiscally responsible manner. The calculated changes to the development charges rates are required in order to reflect the revised costs associated with the infrastructure requirements.
- This report identifies the growth-related net capital costs which are attributable to development that is forecast to occur in the Town. These costs are apportioned to types of development (residential, non-residential) in a manner that reflects the increase in the need for each service attributable to each type of development. This report therefore presents development charges for each type of development.

(iii) INTRODUCTION

- 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 Town;
 - The average capital service levels provided in the Town over the ten-year period immediately preceding the preparation of the background study;
 - A review of future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred or to be incurred by the Town 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 Town. These costs are apportioned to
types of development (residential; non-residential) in a manner that reflects the
increase in the need for each service attributable to each type of development. This
report, therefore, presents development charges for each type of development.

(iv) GROWTH FORECAST

- The growth forecast contained in this study is consistent with the 2008 Town-wide Hard Services and Area-Specific Charges Development Charges Background Study. The forecasts were prepared by Hemson Consulting in conjunction with the Town's Planning and Urban Design Department.
- As this Background Study deals with only the Town's general services, the forecast is limited to the ten-year planning period of 2009 to 2018.
- The Town is forecast to add approximately 20,550 new households in the ten-year planning period from 2009 to 2018. This translates into a population of roughly 61,000 in the newly constructed units.
- The employment forecast for the Town is forecast to add approximately 38,380 employees in the ten-year planning period. This results in the addition of 1,512,480 square metres of new non-residential building space from 2009 to 2018.
- The following is a summary of the projected growth for the Town:

	2008	2009 - 2018			
	Estimate	Growth	Total		
Households Population Census With Undercount In New Households	82,203 275,287 286,300	20,550 51,711 53,800 61,022	102,753 326,998 340,100		

	2008	2009 - 2018			
	Estimate	Growth	Total		
Employment	172,859	38,376	211,235		
Non-Residential Building Space (sq.m.)		1,512,480			

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(v) ALL ELIGIBLE GENERAL (SOFT) SERVICES ARE INCLUDED IN THE ANALYSIS

- The following Town services have been included in the development charges analysis:
 - General Government (Growth Studies)
 - Library Board
 - Fire Services
 - Indoor Recreation
 - Park Development and Facilities
 - Public Works
- The Town has existing infrastructure for the provision of these services. The historic service levels for each of the services are shown in Section IV.

(vi) THE TOWN HAS AN EXTENSIVE GROWTH-RELATED CAPITAL PROGRAM FOR THE PROVISION OF ELIGIBLE SERVICES

- The study uses a Town-wide approach for calculating development charges for all the general services which the Town provides.
- Town staff in collaboration with Hemson Consulting has developed a growth-related capital program setting out projects that are required to service the anticipated growth. The growth-related capital programs are based on a ten-year planning period from 2009 to 2018.
- The gross cost of the Town's growth-related capital program for general services amounts to \$365.87 million and provides for a wide range of infrastructure expansions. Of this amount, approximately \$169.57 million has been identified as eligible for recovery through development charges over the 2009–2018 planning period after discounts.
- The DCA requires that growth-related net capital costs for "general" services be reduced by 10 per cent in calculating the applicable development charges for these services. The 10 per cent share of growth-related net capital costs not included in the development charges calculations must be funded from non-development charges sources.
- In total, about \$17.60 million is identified as the required 10 per cent reduction.
- A prior growth share, in the amount of \$84.66 million, represents the funds available in the development charges reserve funds. These reserves are applied to the first projects in each capital program to fund growth-related infrastructure.

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- A share of the capital forecast is for portions of projects that relate to growth in the
 post-2018 period (for which future development charges could be collected) and
 to general service level increases. In total, about \$88.01 million falls within this
 definition, a portion of which may represent a general service level increase which
 would require tax rate funding.
- The following is a summary of the growth-related capital program for general services:

	Gross	DC Recoverable
	Cost	2009-2018
Service	(\$000)	(\$000)
1.0 GENERAL GOVERNMENT	\$12,439.0	\$8,520.4
2.0 LIBRARY BOARD	\$24,025.3	\$10,666.6
3.0 FIRE SERVICES	\$18,643.0	\$11,142.4
4.0 INDOOR RECREATION	\$112,380.0	\$68,963.4
5.0 PARK DEVELOPMENT AND FACILITIES	\$172,887.8	\$59,674.2
6.0 PUBLIC WORKS	\$25,497.9	\$10,605.2
TOTAL - 10 YEAR GENERAL SERVICES	\$365,872.8	\$169,572.2

- It is estimated that net annual property tax-supported operating costs will increase by approximately \$14.77 million by 2018 as facilities and infrastructure listed in the capital forecast are operated and maintained. These costs should be funded from the increase in property assessment by new development.
- Details on the capital programs for each of the general services are provided in Appendix B.

(vii) DEVELOPMENT CHARGES RATES CALCULATED WITH REFERENCE TO THE DCA

- Development charges rates have been established under the parameters and limitations of the DCA. This study provides the rationale and basis for the calculated rates.
- The calculated charges are the maximum charges the Town may adopt. Lower charges can be approved; however, this will require a reduction in the capital plan and reduced service levels or financing from other sources, most likely property tax increases.



- The fully calculated residential charges are recommended to vary by unit type, reflecting the difference in occupancy patterns expected in various unit types and the associated differences in demand that would be placed on Town services.
- Based on the Town of Markham's growth forecast and growth-related capital programs, new residential development charges rates have been calculated. The following is a summary of the calculated residential development charges by unit type:

	Adjusted Charge		Charge By I	Unit Type (1)		Percentage
Service	After Cashflow Per Capita	Single & Semi- Detached	Townhouse & Other Multiples	Large Apartment > 750 sq.ft.	Small Apartment <750 sq.ft.	of Total
General Government	\$90.95	\$343	\$269	\$212	\$127	3.4%
Library Board	\$192.50	\$726	\$570	\$449	\$270	7.1%
Fire Services	\$120.98	\$456	\$358	\$282	\$169	4.5%
Indoor Recreation	\$1,174.13	\$4,426	\$3,475	\$2,736	\$1,644	43.3%
Park Development And Facilities	\$1,025.40	\$3,866	\$3,035	\$2,389	\$1,436	37.8%
Public Works	\$110.15	\$415	\$326	\$257	\$154	4.1%
Total Development Charge Per Unit for General Services	\$2,714.11	\$10,232	\$8,033	\$6,325	\$3,800	100.0%

(1) Based on Persons Per Unit Of:

3.77

2.96

2.33

1.40

 Based on the Town of Markham's growth forecast and growth-related capital programs, new non-residential development charges rates have been calculated. If Council should decide to levy the non-residential charge on a uniform basis, the resulting calculated charges would be:

Service	Adjusted Charge After Cashflow (\$/sq.m)	Percentage of Total
General Government	\$2.37	28.3%
Library Board	\$0.00	0.0%
Fire Services	\$3.16	37.7%
Indoor Recreation	\$0.00	0.0%
Park Development And Facilities	\$0.00	0.0%
Public Works	\$2.85	34.0%
Total Development Charge Per Square Metre for General Services	\$8.38	100.0%



- These charges are levied in addition to the Town's TWS and ASDC development charges.
- Overall, the proposed development charges are higher than the Town's current (2009) charges which is a reflection of increased service levels, a more highly refined general services capital program and increases in construction costs.

(viii) NEWLY CALCULATED RATES ARE HIGHER THAN CURRENT RATES

- The fully calculated residential charge for a single or semi-detached unit in Markham is \$10,232, which represents an increase of 56 per cent over the Town's current charge for general services of \$6,566.
- The charge of \$8.38 per square metre of gross floor area represents a 100 per cent increase over the Town's current non-residential charge of \$4.20 per square metre.
- The scale of these increases is consistent with the experience of many municipalities in Greater Toronto Area as the development charges inflation index has outpaced inflation and resulted in rapid increases in construction costs.

(ix) CONSIDERATION BEING GIVEN TO A DIFFERENTIATED NON-RESIDENTIAL CHARGE

- Council is giving consideration to levying differential non-residential charges on varying non-residential land uses.
- The main reason for this consideration is to reflect an anticipation that the nonresidential use as part of a mixed-use development places a lower demand on the municipal services of fire services and public works (building, fleet and equipment).
- Three options are set out in part C of Section VI of the report.

I INTRODUCTION

The Development Charges Act, 1997 (DCA) and its associated Ontario Regulation 82/98 (O. Reg. 82/98) allow municipalities in Ontario to recover growth-related capital costs from new development. The Town of Markham currently levies three types of development charges for the recovery of growth-related capital costs:

- 1. Town-Wide Soft (TWS) Service Development Charges for the recovery of growth-related cost for the provision of general government, library, fire, indoor recreation, parks development and facilities, and public works (building, equipment and fleet) services.
- 2. Town-Wide Hard (TWH) Service Development Charges for the recovery of growth-related cost 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), and related studies.
- 3. Area-Specific Development Charges (ASDC) for the recovery of growth-related cost for the provision of some roads, intersection improvements, sidewalks, streetlighting, watermains, sanitary sewers and storm water management facilities (storm water ponds).

The first two types of development charges, the TWS and TWH, are levied on a uniform basis against all development in the Town. The ASDCs are levied on a planning area-specific basis. In 2008, the Town enacted new TWH and ASDC by-laws. However, the TWS by-law from 2004 was left unchanged and requires replacement prior to September 2009. This process will result in a new TWS by-law and charges while leaving the TWH and ASDC by-laws unchanged.

The Town of Markham Development Charges Background Study is presented as part of a process to establish a development charges by-law that complies with this legislation.

The Town of Markham is experiencing residential growth pressure; it is also an attractive location for a variety of non-residential development. The anticipated growth in Markham will increase the demand on all Town services. The Town wishes to

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continue implementing development charges to fund capital projects related to growth so that development continues to be serviced in a fiscally responsible manner.

When a development charges by-law is proposed, the DCA and O. Reg. 82/98 require that a development charges background study be prepared in support of the proposed changes with reference to:

- A forecast of the amount, type and location of development anticipated in the Town;
- The average capital service levels provided in the Town over the ten-year period immediately preceding the preparation of the background study;
- A review of future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred, or to be incurred, by the Town 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 identifies the growth-related net capital costs attributable to development that is forecast to occur in the Town. The 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. The study therefore calculates development charges for each type of development.

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

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



Section II designates the services for which the development charges are calculated and the areas within the Town to which the development charges will apply. It also briefly reviews the methodologies that have 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 Town over the ten-year planning period from 2009 to 2018.

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

In Section V, the growth-related capital forecast that has been developed by various Town departments is reviewed.

Section VI summarizes the calculation of applicable development charges and the resulting calculated development charges by class and type of development. This section also provides a comparison of calculated total development charges rates for the Town with rates currently being levied.

Section VII provides a discussion of other issues and considerations including by-law rules and policies.



II THE METHODOLOGY USES A TOWN-WIDE APPROACH TO ALIGN GROWTH-RELATED COSTS AND BENEFITS

Several key steps are required when 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 Town of Markham's unique circumstances. The approach to the calculated development charges is focused on providing a reasonable alignment of growth-related costs with the development that necessitates them. This study uses a Town-wide approach for all general services being considered in this study. The approach used herein is consistent with Markham's 2004 Development Charges Background Study. The Background Study provides an update to the historic service levels and the cost of providing future growth-related capital infrastructure.

A. TOWN-WIDE DEVELOPMENT CHARGES ARE PROPOSED

The DCA provides municipalities with flexibility to define services that will be included in the development charges by-laws, provided that its other provisions, as well as those of O. Reg. 82/98, are met. The DCA also requires that the by-laws designate the areas within which they shall be imposed. The development charges may apply to all lands in a municipality or to other designated development areas as specified in the by-laws.

1. All Services Based on a Town-Wide Approach

All Town residents and employees have access to the infrastructure for the majority of the services the Town provides. As new development occurs, new infrastructure will need to be added so that overall service levels in the Town do not decline. A widely accepted method for sharing the growth-related capital costs for such Town services is to apportion them over all new growth anticipated in the Town.

The following services are included in the Town-wide development charges calculation:

- General Government
- Library Board
- Fire Services
- Indoor Recreation
- Park Development and Facilities
- Public Works



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 their individual capital facilities and equipment. The resulting development charges for these services would be imposed against all development anywhere in the Town.

B. KEY STEPS WHEN DETERMINING DEVELOPMENT CHARGES FOR FUTURE GROWTH-RELATED PROJECTS

Several key steps are required when calculating development charges for future growth-related projects. They are summarized below.

1. Growth Forecast

The first step in the methodology requires that a development forecast be prepared for the ten-year study period from 2009 to 2018. The forecast of the future residential and non-residential development used in this study is consistent with the 2004 Development Charges Background Study and also the 2008 Town-wide Hard Services & Area-Specific Development Charges Background Study.

For the residential portion of the forecast, the total additional population that will result from the addition of new housing units is estimated. This "population in new units" determines the need for additional facilities and provides the foundation for the growth-related capital forecast.

The non-residential portion of the forecast estimates the amount of building space to be developed in the Town over the planning periods. The forecast is based on the projected increase in employment levels and the anticipated amount of new building space required to accommodate it.

2. Service Categories and Historic Service Levels

The DCA states 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 Town over the 10-year period immediately preceding the preparation of the background study...(s. 5. (1) 4.)

Historic ten-year average service levels thus form the basis for the development charges calculation. A review of the Town's capital service levels for buildings, land, vehicles, equipment and others has therefore been prepared as a reference for the calculation so that the portion of future capital projects that may be included in the development



charges can be determined. The historic service levels used in this study have been calculated based on the period from 1999 to 2008.

3. Growth-Related Capital Forecast and Analysis of Net Capital Costs to Be Included in the Development Charges

A growth-related capital forecast has been prepared by Town staff as part of the study. The forecast identifies growth-related projects and their gross and net costs after allowing for capital grants, subsidies or other contributions as required by s.5.(2) of the DCA. 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 Town has indicated that it intends to ensure that such an increase in need will be met. (s.5.(1)3.)

S.5.(1)4. and s.5.(2). require that the development charges be calculated on the lesser of the historic ten-year average service levels or the service levels embodied in the future plans of the Town. The growth-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 Town 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 growth-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 Town from non-development charges sources. The amount of financing for such non-growth shares of projects is also identified as part of the preparation of the growth-related capital forecast.

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

Finally, when calculating development charges, the growth-related net capital costs must be reduced by ten per cent for all services except protection services (DCA,



s.5.(1)8). The ten per cent discount is applied to the other services, e.g. Library Board and Parks and Recreation, and the resulting financing responsibility from non-development charges sources is identified.

4. Attribution to Types of Development

The next step in the determination of development charges is the allocation of the growth-related net capital costs between the residential and the non-residential sectors. In the Town of Markham, the allocation is based on the projected changes in population (in new households) and employment over the planning periods, the anticipated demand for services and other relevant factors.

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

5. Final Adjustment

The final determination of the development charges results from adjustments made to growth-related net capital costs for each service and sector resulting from a cash flow analysis that takes account of 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.



III GROWTH FORECAST

This section summarizes the growth forecasts used to calculate the development charges for the Town of Markham. Appendix A contains additional material related to the growth forecast and the Town's demographics.

The growth forecast used in this Development Charges Background Study is consistent with the 2004 Development Charges Background Study and also the 2008 Town-wide Hard Services & Area-Specific Development Charges Background Study. The Town-Wide Soft (TWS) calculations are based on full build-out of lands currently designated for development under the Town's Official Plan. The lands available for development has not changed since the 2004 Background Study.

The Town of Markham and the Region of York are in the process of reviewing their Official Plans and growth forecast in the context of the Provincial Places to Grow Act and associated policies and guidelines. The Town and the Region anticipate completing this study process in 2009. The review may result in the identification of additional lands for development in Markham and for different levels and types of development within the Town. When the new growth forecast are complete the Town may need to review its' Development Charge Background Studies to determine if adjustments and updates to the policies, practices and rates are required.

This Development Charge Background Study is based on the growth forecasts completed as part of the 2004 Background Study. The 2004 forecast has been adjusted to reflect growth that has occurred since the 2004 and incorporates information and data from the 2006 Census.

The forecast is based on census years and is translated into the time periods required for Development Charge purposes generally by pro-rating the census periods to the DC time period. The planning time period for the TWS calculations is 2009 to 2018. The annualisation of the DC forecast also accounts for the Town's anticipated timing of development for new areas in the Town.

Table 1 provides a summary of the residential and non-residential growth forecast used in this analysis.



TABLE 1

TOWN OF MARKHAM 2009 DEVELOPMENT CHARGES STUDY RESIDENTIAL AND NON-RESIDENTIAL GROWTH FORECAST

	2008	2009 -	2018	2009	- 2031
	Estimate	Growth	Total	Growth	Total
Households Population Census With Undercount In New Households	82,203 275,287 286,300	20,550 51,711 53,800 61,022	102,753 326,998 340,100	31,244 70,852 73,700 88,149	113,447 346,139 360,000

	2008	2009	- 2018	2009 - 2031		
	Estimate	Growth	Total	Growth	Total	
Employment	172,859	38,376	211,235	41,747	214,606	
Non-Residential Building Space (sq.m.)		1,512,480		1,645,360		

IV HISTORIC CAPITAL SERVICE LEVELS

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

For non-engineered services (Library Board, Fire Services, etc.) the legislative requirement is met by documenting service levels for the preceding ten years — in this case, for the period from 1999 to 2008. Typically, service levels for non-engineered services are measured as a ratio of inputs per capita or inputs per population and employment.

O. Reg. 82/98 requires that when defining and determining historic 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 per unit. The qualitative aspect is introduced by consideration of the monetary value of a 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 cost) of services provided by the Town in the past. Both the quantitative and qualitative aspects of service levels used in the current analysis are based on information provided by Town staff. This information is generally based on historical records and the Town's and surrounding municipalities' experience with costs to acquire or construct similar facilities, equipment and infrastructure.

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



TABLE 2

TOWN OF MARKHAM SUMMARY OF AVERAGE HISTORIC SERVICE LEVELS (1999 - 2008) BY SERVICE COMPONENT

Service	Average Service Level					
1 LIBRARY BOARD - Buildings - Land - Materials - Furniture and Equipment 2 FIRE SERVICES - Buildings	0.23 \$67.31 \$24.55 \$112.10 0.16	sq. ft./ capita ha./10,000 pop /capita /capita /pop & emp sq.ft./pop & emp				
LandFurniture and EquipmentVehicles	\$21.62	ha./10,000 pop & emp /pop & emp /pop & emp				
3 INDOOR RECREATION - Major Facilities - Land for Major Facilities - Equipment for Major Facilities	1.56	/capita sq. ft./ capita ha./10,000 pop /capita				
4 PARK DEVELOPMENT AND FACILITIES - Facilities - Park Development - Outdoor Buildings - Special Facilities		/capita ha./1,000 pop /capita				
5 PUBLIC WORKS - Buildings - Land - Furniture and Equipment - Town Fleet	0.16 0.11 \$1.95	/pop & emp sq.ft./pop & emp ha./10,000 pop & emp /pop & emp /pop & emp				

V GROWTH-RELATED CAPITAL FORECAST

The DCA requires that the Council of a Town 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 Town has indicated that it intends to ensure that an increase in the need for service will be met if the increase in service forms part of an official plan, capital forecast or similar expression of the intention of the council and the plan, forecast or similar expression of the intention of the council has been approved by the council.

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

Based on the growth forecasts summarized in Section III and detailed in Appendix A, Town staff, in collaboration with the consultant, have developed a growth-related capital forecast which sets out those projects that are required to service anticipated growth. For all general services, the capital plan covers the ten-year period from 2009 to 2018.

One of the recommendations contained in this background study is for Council to adopt the growth-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 capital projects presented here as they will be needed to service the anticipated growth in the Town. It is, however, acknowledged that changes to the forecast presented here may occur through the Town's normal capital budget process.

B. THE GROWTH-RELATED CAPITAL FORECAST FOR GENERAL SERVICES

A summary of the growth-related capital forecast for general services is presented in Table 3. The table shows that the gross cost of the Town's capital forecast is estimated to be \$365.87 million. Grants totalling \$6.03 million have been identified and netted off the total project cost. As such, \$359.84 million is brought forth for the development charges consideration.



20

TABLE 3

TOWN OF MARKHAM SUMMARY OF GROWTH-RELATED CAPITAL FORECAST 2009-2018

	Gross	Grants/	Capital				-	Total Net Cap	ital Forecas	st			
	Cost	Subsidies	Cost					(\$0	00)				
Service	(\$000)	(\$000)	(\$000)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1.0 GENERAL GOVERNMENT	\$12,439.0	\$0.0	\$12,439.0	\$3,918.6	\$946.7	\$946.7	\$946.7	\$946.7	\$946.7	\$946.7	\$946.7	\$946.7	\$946.7
1.1 Growth-Related Studies	\$12,439.0	\$0.0	\$12,439.0	\$3,918.6	\$946.7	\$946.7	\$946.7	\$946.7	\$946.7	\$946.7	\$946.7	\$946.7	\$946.7
2.0 LIBRARY BOARD	\$24,025.3	\$6,033.9	\$17,991.4	\$1,212.8	\$12,820.2	\$3,958.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2.1 Library Buildings	\$15,960.1	\$5,080.0	\$10,880.0	\$0.0	\$9,981.0	\$899.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2.2 Land for Library Buildings	\$1,212.8	\$0.0	\$1,212.8	\$1,212.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2.3 Furniture & Equipment	\$1,877.7	\$0.0	\$1,877.7	\$0.0	\$666.0	\$1,211.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2.4 Collection Materials	\$4,974.8	\$953.9	\$4,020.9	\$0.0	\$2,173.1	\$1,847.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3.0 FIRE SERVICES	\$18,643.0	\$0.0	\$18,643.0	\$6,113.2	\$5,052.1	\$650.0	\$0.0	\$0.0	\$1,324.3	\$0.0	\$840.0	\$4,663.2	\$0.0
3.1 Fire Buildings	\$10,850.0	\$0.0	\$10,850.0	\$3,500.0	\$3,850.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3,500.0	\$0.0
3.2 Land for Fire Buildings	\$2,940.0	\$0.0	\$2,940.0	\$2,100.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$840.0	\$0.0	\$0.0
3.3 Expansion Main Library	\$1,205.6	\$0.0	\$1,205.6	\$388.9	\$427.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$388.9	\$0.0
3.4 Firefighter Equipment	\$497.4	\$0.0	\$497.4	\$124.3	\$124.3	\$0.0	\$0.0	\$0.0	\$124.3	\$0.0	\$0.0	\$124.3	\$0.0
3.5 Fire Vehicles	\$3,150.0	\$0.0	\$3,150.0	\$0.0	\$650.0	\$650.0	\$0.0	\$0.0	\$1,200.0	\$0.0	\$0.0	\$650.0	\$0.0
4.0 INDOOR RECREATION	\$112,380.0	\$0.0	\$112,380.0	\$10,928.9	\$48,451.1	\$0.0	\$0.0	\$53,000.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
4.1 Major Facilities	\$104,626.8	\$0.0	\$104,626.8	\$5,841.7	\$45,785.1	\$0.0	\$0.0	\$53,000.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
4.2 Land for Major Facilities	\$5,087.2	\$0.0	\$5,087.2	\$5,087.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
4.3 Equipment	\$2,666.0	\$0.0	\$2,666.0	\$0.0	\$2,666.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
5.0 PARK DEVELOPMENT AND FACILITIES	\$172,887.8	\$0.0	\$172,887.8	\$28,109.3	\$13,278.2	\$11,115.9	\$48,547.5	\$14,104.4	\$9,358.2	\$20,254.0	\$12,667.2	\$10,580.6	\$4,872.4
6.0 PUBLIC WORKS	\$25,497.9	\$0.0	\$25,497.9	\$276.9	\$10,748.3	\$1,855.4	\$388.4	\$10,489.8	\$793.8	\$164.7	\$338.4	\$103.6	\$338.6
6.1 Public Works Buildings	\$12,526.3	\$0.0	\$12,526.3	\$0.0	\$920.0	\$1,600.0	\$0.0	\$10,006.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
6.2 Land for Public Works Buildings	\$9,375.0	\$0.0	\$9,375.0	\$0.0	\$9,375.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
6.3 Furniture and Equipment	\$259.6	\$0.0	\$259.6	\$0.0	\$0.0	\$0.0	\$0.0	\$259.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
6.4 Town Fleet	\$3,337.0	\$0.0	\$3,337.0	\$276.9	\$453.3	\$255.4	\$388.4	\$224.0	\$793.8	\$164.7	\$338.4	\$103.6	\$338.6
TOTAL - 10 YEAR GENERAL SERVICES	\$365,872.8	\$6,033.9	\$359,838.9	\$50,559.8	\$91,296.6	\$18,526.4	\$49,882.6	\$78,540.9	\$12,423.1	\$21,365.3	\$14,792.4	\$16,294.2	\$6,157.7



Of this \$359.84 million net capital cost, nearly 50 per cent, or \$172.89 million, is related to capital works for Park Development and Facilities. A portion of this amount, roughly 30 percent, is related to the community and Town-wide park development. Other large components to the Park Development and Facilities capital program include, concrete plazas, major gazebos and shelters and major lighted soccer fields. The full detailed list of projects for Park Development and Facilities can be found on Table 2, Appendix B.5.

The next largest capital program belongs to Indoor Recreation at \$112.38 million. This capital program is providing for the construction of two major community centres; East Markham Community Centre which is planned to be 105,000 square feet and constructed in 2010 for \$45.79 million and an addition provision for an indoor recreation space of 132,500 square feet in the year 2013 for \$53.0 million. Other components to this capital program include the expansion to the existing Centennial Community Centre, the purchase of land and equipment for East Markham Community Centre.

The capital program associated with Fire Services amounts to \$18.64 million for the construction, land, furniture and equipment, and pumper purchase for three new fire stations. The first fire station is planned for 2009 and is anticipated to be 10,000 square feet, the second station is Cornell Station which construction is planned to start in 2010 for a 11,000 square foot hall and the last station which is planned for Markham Centre will be of a similar size to Cathedral station, and planned for year 2017.

The construction of the East Markham library branch and the expansion to the existing Milliken branch are major components to the Library Board capital program. The purchase of land, furniture and equipment, collection materials and the parking lot are all included as projects related to the East Markham library branch. The expansion to Milliken branch, the purchase of furniture, equipment and collection materials are planned for 2011.

The capital program for Public Works is extensive at \$25.50 million. The large projects for this service include a four bay fleet garage addition to the Miller Street depot, the construction and land purchase of the East Yard Garage/Office and salt/sand brine dome. Fleet additions are also included in Public Works program.



The portion of the Town's program which relates to the provision of growth-related studies is referred to as General Government which amounts to \$12.44 million, in which a portion of this, 24 percent, relates the recovery of the reserve fund shortfall.

The capital forecast incorporates those projects identified to be related to growth 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). Portions of the capital forecast may be related to replacement of existing facilities, shares of projects that benefit the existing population, or growth anticipated to occur beyond the 2009–2018 planning period. In addition to these reductions, the amounts shown in Table 3 have not been reduced by ten per cent for various general services as required by s.5(1) of the DCA.

After these reductions, the remaining growth-related capital costs are brought forward to the development charges calculation. Further details on the capital plans for each individual service category are available in Appendix B.



VI 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 all services, the calculation of the "unadjusted" per capita (residential) and per square metre (non-residential) charges is reviewed. Adjustments to these amounts resulting from a cash flow analysis that accounts for interest earnings and borrowing costs are also discussed.

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

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

A. DEVELOPMENT CHARGES CALCULATION

A summary of the "unadjusted" residential and non-residential development charges for the Town-wide services is presented in Table 4. Further details of the calculation for each of the individual general services are available in Appendix B.

1. Town-Wide Services

The capital forecast for general 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 4 shows that \$84.66 million of the capital forecast has been identified as prior growth and

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TABLE 4

TOWN OF MARKHAM SUMMARY OF UNADJUSTED RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES 10-YEAR GENERAL SERVICES

10 Year Growth in Population in New Units 10 Year Growth in Square Metres 61,022

e Metres 1,512,480

			Growth-Related	Capital Forecas	t								
	Total (Net of Grants/ Subsidies) (\$000)	Replacement Share (\$000)	Prior Growth (\$000)	Net Cost After Prior Growth & Replacement (\$000)	Pre-Built for Post 2018 Growth (\$000)	Growth-Related Net Capital Costs 2009-2018 (\$000)	Disc	rvice count uired \$000	Total Growth- Related Net Capital Costs After Discount (\$000)		idential hare \$000		esidential hare \$000
1.0 GENERAL GOVERNMENT	\$12,439.0	\$0.0	\$0.0	\$12,439.0	\$2,971.9	\$9,467.1	10%	\$946.7	\$8,520.39	61%	\$5,230.8	39%	\$3,289.58
Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq. m											\$85.72		\$2.17
2.0 LIBRARY BOARD	\$17,991.4	\$0.0	\$3,115.0	\$14,876.3	\$3,024.5	\$11,851.8	10%	\$1,185.2	\$10,666.61	100%	\$10,666.6	0%	\$0.00
Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq. m											\$174.80		\$0.00
3.0 FIRE SERVICES	\$18,643.0	\$0.0	\$2,628.8	\$16,014.2	\$4,871.8	\$11,142.4	0%	\$0.0	\$11,142.43	61%	\$6,840.5	39%	\$4,301.91
Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq. m											\$112.10		\$2.84
4.0 INDOOR RECREATION	\$112,380.0	\$0.0	\$32,961.7	\$79,418.3	\$2,792.3	\$76,626.0	10%	\$7,662.6	\$68,963.4	100%	\$68,963.4	0%	\$0.00
Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq. m											\$1,130.15		\$0.00
5.0 PARK DEVELOPMENT AND FACILITIES	\$172,887.8	\$0.0	\$36,703.1	\$136,184.6	\$69,879.9	\$66,304.7	10%	\$6,630.5	\$59,674.24	100%	\$59,674.2	0%	\$0.00
Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq. m											\$977.92		\$0.00
6.0 PUBLIC WORKS	\$25,497.9	\$0.0	\$9,249.8	\$16,248.1	\$4,464.6	\$11,783.5	10%	\$1,178.4	\$10,605.18	61%	\$6,510.7	39%	\$4,094.49
Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq. m											\$106.70		\$2.71
TOTAL 10 YEAR GENERAL SERVICES	\$359,838.9	\$0.0	\$84,658.4	\$275,180.6	\$88,005.0	\$187,175.5		\$17,603.3	\$169,572.2		\$157,886.2		\$11,686.0
Unadjusted Development Charge Per Capita Unadjusted Development Charge Per Sq. m											\$2,587.39		\$7.72



represents the revenues collected from previous development charges. This portion has been netted out of the chargeable capital costs. Another share of the forecast, \$88.01 million, is either attributable to growth beyond the 2018 period (and can therefore only be recovered under future development charges studies) or represents a service level increase in the Town.

The DCA, s.5(1)8, requires that growth-related net capital costs for "soft" services be reduced by 10 per cent in calculating the applicable development charges for these services. The 10 per cent share of growth-related net capital costs not included in the development charges calculations must be funded from non-development charges sources. In total, about \$17.60 million is identified as the required 10 per cent reduction.

The remaining \$169.57 million is carried forward to the development charges calculation as a growth-related cost. Of the growth-related cost, \$157.89 million has been allocated to new residential development, and \$11.69 million has been allocated to new non-residential development. This results in an unadjusted charge of \$2,587.39 per capita and \$7.72 per square metre for the provision of general services.

2. Adjusted Residential and Non-Residential Development Charge Rates

Final adjustments to the "unadjusted" development charges rates are made through a cash flow analysis. The details are included in Appendix B for general services and considers the borrowing cost and interest earnings associated with the timing of expenditures and development charges receipts for each service category. Table 5 summarizes the results of the cash flow adjustments for the residential development charges rates. The adjusted per capita rate increases by approximately \$126.72 from \$2,587.39 per capita to \$2,714.11 per capita after the cash flow analysis for the Townwide uniform charge. Table 5 also provides the calculated rates by residential unit with the total charge per unit ranging from a high of \$10,232 per unit for a single or semi-detached unit to a low of \$3,800 for a small apartment unit.

The non-residential Town-wide uniform charge also experiences an increase after cash flow considerations from \$7.73 to \$8.38 per square metre. This is displayed on Table 6.



TABLE 5

TOWN OF MARKHAM SUMMARY OF TOWN-WIDE DEVELOPMENT CHARGES FOR GENERAL SERVICES RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPES

	Unadjusted Adjusted Charge Charge By Unit Type (1)								
Service	Charge Per Capita	After Cashflow Per Capita	Single & Semi- Detached	Townhouse & Other Multiples	Large Apartment > 750 sq.ft.	Small Apartment < 750 sq.ft.	of Total		
	Per Capita	Per Capita	Detached	Other Multiples	> 750 Sq.it.	< 750 Sq.π.	Total		
General Government	\$85.72	\$90.95	\$343	\$269	\$212	\$127	3.4%		
Library Board	\$174.80	\$192.50	\$726	\$570	\$449	\$270	7.1%		
Fire Services	\$112.10	\$120.98	\$456	\$358	\$282	\$169	4.5%		
Indoor Recreation	\$1,130.15	\$1,174.13	\$4,426	\$3,475	\$2,736	\$1,644	43.3%		
Park Development And Facilities	\$977.92	\$1,025.40	\$3,866	\$3,035	\$2,389	\$1,436	37.8%		
Public Works	\$106.70	\$110.15	\$415	\$326	\$257	\$154	4.1%		
Total Development Charge Per Unit for General Services	\$2,587.39	\$2,714.11	\$10,232	\$8,033	\$6,325	\$3,800	100.0%		

(1) Based on Persons Per Unit Of: 3.77 2.96 2.33 1.40



27

TABLE 6

TOWN OF MARKHAM SUMMARY OF TOWN-WIDE DEVELOPMENT CHARGES FOR GENERAL SERVICES NON-RESIDENTIAL DEVELOPMENT CHARGES

Service	Adjusted Charge After Cashflow (\$/sq.m)	Percentage of Total
General Government	\$2.37	28.3%
Library Board	\$0.00	0.0%
Fire Services	\$3.16	37.7%
Indoor Recreation	\$0.00	0.0%
Park Development And Facilities	\$0.00	0.0%
Public Works	\$2.85	34.0%
Total Development Charge Per Square Metre for General Services	\$8.38	100.0%



B. COMPARISON OF 2009 NEWLY CALCULATED DEVELOPMENT CHARGES WITH CHARGES CURRENTLY IN FORCE IN MARKHAM

Tables 7 and 8 present a comparison of the newly calculated residential and non-residential development charges with currently imposed development charge rates. It demonstrates that the residential development charge rate for a single- or semi-detached unit increases by \$3,666 per unit, or 56 percent.

The current development charges rate for non-residential development increases by \$4.18 per square metre, or 100 percent.

Overall, the development charges rates are increasing in Markham. These increases are a result of the following:

- Higher construction costs;
- Proposed full recovery of growth-related capital costs for all services; and
- Increased service levels in recent years.

TABLE 7

TOWN OF MARKHAM COMPARISON OF CURRENT AND CALCULATED RESIDENTIAL DEVELOPMENT CHARGES PER SINGLE AND SEMI-DETACHED UNITS

Service	Current Residential Charge SDU	Calculated Residential Charge SDU	Difference in Charge	
			\$	%
General Government	\$196	\$343	\$147	75%
Library Board	\$628	\$726	\$98	16%
Fire Services	\$522	\$456	(\$66)	-13%
Indoor Recreation	\$2,423	\$4,426	\$2,003	83%
Park Development And Facilities	\$2,589	\$3,866	\$1,277	49%
Public Works	\$208	\$415	\$207	100%
Total Development Charge Per Unit for General Services	\$6,566	\$10,232	\$3,666	56%



TABLE 8

TOWN OF MARKHAM COMPARISON OF CURRENT AND CALCULATED NON-RESIDENTIAL DEVELOPMENT CHARGES

Service	Current Non-Residential Charge (\$/sq.m)	Calculated Non-Residential Charge (\$/sq.m)	Difference in Charge	
			\$	%
General Government	\$0.70	\$2.37	\$1.67	239%
Library Board	\$0.00	\$0.00	\$0.00	N/A
Fire Services	\$1.85	\$3.16	\$1.31	71%
Indoor Recreation	\$0.00	\$0.00	\$0.00	N/A
Park Development And Facilities	\$0.00	\$0.00	\$0.00	N/A
Public Works	\$1.65	\$2.85	\$1.20	73%
Total Development Charge Per Square Metre for General Services	\$4.20	\$8.38	\$4.18	100%



C. DIFFERENTIATED NON-RESIDENTIAL RATE BEING CONSIDERED

The Town currently levies a uniform Town-wide development charge for general services against all types of non-residential development. Town Council is giving consideration to levying the TWS development charge on a differential basis for different types of non-residential land uses and building types. The differentiation would reflect anticipated variations in the demand for certain Town services, namely: fire protection services and public works (buildings, fleet and equipment).

The main reason for this consideration is expectation that the non-residential portion of mixed-use development place a lower demand on fire and public works services. Town staff have developed the following draft definition for mixed-use development: "a building containing either retail or office space, internally integrated with dwelling unit(s) within the same structure, so long as residential is the predominant component of the structure." It is to be noted, this definition is being reviewed and will be refined prior to by-law adoption if Council decides to proceed with this alternative.

Town staff have developed three options on the structure of the non-residential charges for Council's consideration:

Option 1: Status Quo — One Town-wide uniform rate applied equally to all non-residential development.

Option 2: Two Rates — Mixed-use and Non-mixed-use: The non-residential portion of mixed-use development would be levied a lower charge based on 50% of fire services and public works component of the calculated rates based on anticipated efficiency in the delivery of these services to mixed-use developments. The non-mixed-use charge would be marginally higher, as compared to the uniform charge, providing revenue neutrality to the Town.

Option 3: Three Rates — Industrial/Office/Institutional, Mixed-use and Non-mixed-use Retail.

• The analysis assumes that 75% of the non-residential growth over the 2009–2018 planning period is for Industrial/Office/Institutional development, 12.5% for mixed-use buildings, and the remaining 12.5% for other non-mixed-use retail developments.

- Under Option 3, the charge for Industrial/Office/Institutional is set at the calculated Town-wide charge.
- The charge for Retail Non-mixed-use is then established.
- A charge for the non-residential portion of mixed-use development is then calculated based on 50% of the Retail Non-mixed-use fire service and public works calculated charges.

The rates for all three options are shown on Table 9. It is noted that these charges and calculations are preliminary and subject to review and change.

TABLE 9

TOWN OF MARKHAM DIFFERENTIATED NON-RESIDENTIAL CHARGES OPTIONS UNDER CONSIDERATION

OPTION 1: STATUS QUO - TOWN-WIDE UNIFORM

Service	All Non-Residential Uses (\$/sq.m)
General Government	\$2.37
Fire Services	\$3.16
Public Works	\$2.85
Total Development Charge	\$8.38

OPTION 2: TWO RATES - MIXED USE AND NON-MIXED USE

Service	Non-Residential In Mixed-Use Development (\$/sq.m)	All Other Non-Residential Land Uses (\$/sq.m)
General Government	\$2.37	\$2.37
Fire Services	\$1.69	\$3.37
Public Works	\$1.52	\$3.04
Total Development Charge	\$5.58	\$8.78
Change from Option 1: Status Quo	-33.4%	4.8%

OPTION 3: THREE RATES - MIXED USE, NON-MIXED RETAIL AND INDUSTRIAL/OFFICE/INSITUTIONAL

Service	Non-Residential In Mixed-Use Development (\$/sq.m)	All Other Retail Land Uses (\$/sq.m)	Industrial, Office, Institutional and all Other Non-Residential (\$/sq.m)
General Government	\$2.37	\$2.37	\$2.37
Fire Services	\$2.10	\$4.20	\$3.16
Public Works	\$1.90	\$3.80	\$2.85
Total Development Charge	\$6.37	\$10.37	\$8.38
Change from Option 1: Status Quo	-24.0%	23.7%	0.0%



VII 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 DCA.

A. NET OPERATING COSTS FOR THE TOWN SERVICES TO INCREASE OVER THE FORECAST PERIOD

Table 10 summarizes the estimated increase in net operating costs that the Town will experience for additions associated with the planned capital program. The estimated changes in net operating costs are based on the financial information from the Town (additional details are included in Appendix D).

As shown in Table 10, by 2018 the Town's net operating costs are estimated to increase by about \$14.77 million. The most significant portion of this increase relates to the construction of the three fire stations. Additional park developments, the construction of the two new recreation facilities, two new library branches and an additional public works depot and associated fleet are projected to impact on the annual operating budget.

B. LONG-TERM CAPITAL FINANCING FROM NON-DEVELOPMENT CHARGES SOURCES TOTALS \$17.6 MILLION

Table 10 also summarizes the components of the growth-related capital forecast that will require funding from non-development charges sources. Of the \$359.84 million net capital forecast (property tax-supported services), about \$17.60 million will need to be financed from non-development charges sources over the next 10 years. This includes about \$17.60 in respect of the 10 per cent discount required by the DCA for "soft" services. In addition, \$88.0 million in interim financing may be required for projects related to general service level increases and to growth in the post-2018 period. It is likely that most of these monies could be recovered from future development charges as the by-laws are revisited at least every five years.



TABLE 10

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

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	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 BOARD	\$0.0	\$0.0	\$1,254.0	\$1,995.0	\$1,995.0	\$1,995.0	\$1,995.0	\$1,995.0	\$1,995.0	\$1,995.0	
FIRE SERVICES	\$0.0	\$2,640.0	\$5,544.0	\$5,544.0	\$5,544.0	\$5,544.0	\$5,544.0	\$5,544.0	\$5,544.0	\$8,448.0	
INDOOR RECREATION	\$0.0	\$342.3	\$1,391.0	\$1,391.0	\$1,391.0	\$2,666.0	\$2,666.0	\$2,666.0	\$2,666.0	\$2,666.0	
PARK DEVELOPMENT AND FACILITIES	\$0.0	\$81.2	\$270.2	\$1,092.8	\$1,133.8	\$1,133.8	\$1,133.8	\$1,133.8	\$1,133.8	\$1,133.8	
PUBLIC WORKS	\$0.0	\$79.9	\$163.4	\$180.9	\$530.3	\$530.3	\$530.3	\$530.3	\$530.3	\$530.3	
NET OPERATING IMPACTS	\$0.0	\$3,143.4	\$8,622.5	\$10,203.6	\$10,594.0	\$11,869.0	\$11,869.0	\$11,869.0	\$11,869.0	\$14,773.0	n/a
LONG-TERM CAPITAL IMPACTS (1)											
Total Net Cost	\$50,559.8	\$91,296.6	\$18,526.4	\$49,882.6	\$78,540.9	\$12,423.1	\$21,365.3	\$14,792.4	\$16,294.2	\$6,157.7	\$359,838.9
Net Cost From Development Charges	\$8,102.7	\$44,288.5	\$13,957.3	\$44,496.3	\$55,186.0	\$2,176.4	\$733.4	\$631.5	\$0.0	\$0.0	\$169,572.2
Prior Growth Share from DC Reserve Balances (2)	\$41,943.9	\$42,648.5	\$66.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$84,658.4
Portion for Post 2018 Growth (3)	\$0.0	\$0.0	\$3,024.5	\$442.2	\$17,223.1	\$10,152.0	\$20,550.4	\$14,160.9	\$16,294.2	\$6,157.7	\$88,005.0
Funding From Non-DC Sources											
- Discount Portion	\$513.1	\$4,359.6	\$1,478.6	\$4,944.0	\$6,131.8	\$94.7	\$81.5	\$0.0	\$0.0	\$0.0	\$17,603.3
- 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	\$513.1	\$4,359.6	\$1,478.6	\$4,944.0	\$6,131.8	\$94.7	\$81.5	\$0.0	\$0.0	\$0.0	\$17,603.3
TOTAL NET OPERATING & CAPITAL IMPACTS	\$513.1	\$7,503.0	\$10,101.1	\$15,147.7	\$16,725.8	\$11,963.7	\$11,950.5	\$11,869.0	\$11,869.0	\$14,773.0	n/a

Notes:

- (1) See Appendix D
- (2) Existing development charge reserve fund balances collected from growth prior to 2009 are applied to fund initial projects in growth-related capital forecast
- (3) Post 2018 growth-related net capital costs may be eligible for development charge funding in future DC by-laws



VIII OTHER ISSUES AND CONSIDERATIONS

A. DEVELOPMENT CHARGES POLICIES AND PRACTICES

No significant changes are recommended to the Town's current policies and practices regarding development charges administration. Considering the requirements of the DCA, the following recommendations are made:

- 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 Town 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 Town continue to actively encourage the use of frontending agreements or developer agreements (and services-in-lieu arrangements), whichever are practical and desirable by the development industry and the Town;
- 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 growth-related capital forecast for Town-wide services included in this Background Study, subject to annual review through the Town's normal capital budget process.

B. DEVELOPMENT CHARGES BY-LAW PROVISIONS

The Town is proposing to modify a few provisions of the development charges by-laws. The proposed draft by-law is available, under separate cover, and all the by-law provisions are provided in the draft. The proposed by-law is consistent with the Town's 2008 Town-wide Hard Services By-law, By-law 2008-124.

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Some of the changes being proposed include:

- 1. Description of apartments:
 - One-bedroom apartment to small apartment dwelling with a gross floor area equal to or less than 750 square feet.
 - Two-bedroom or larger to large apartment dwelling with a gross floor area of more than 750 square feet.
- 2. The exemption/credit where a change of use exists is amended to provide a credit for an amount equal to the development charges originally paid.
- 3. Council is considering differentiated rates for non-residential land uses. The intent is to promote the development of mixed non-residential forms.

The proposed draft by-law should be reviewed for the exact wording of the changes and all rules related to the implementation and levying of development charges in the Town of Markham.



APPENDIX A

GROWTH FORECAST

APPENDIX A

GROWTH FORECAST:

HOUSING, POPULATION AND EMPLOYMENT

This appendix provides a review of the method, key assumptions and results of the growth forecasts for the Town of Markham prepared for the 2009 Town-Wide Soft Development Charges Background Study.

The forecast used for this Study is an update of the growth forecast contained in the Town of Markham 2004 Development Charges Background Study. The Town-Wide Soft (TWS) calculations are based on full build-out of lands currently designated for development under the Town's Official Plan. The lands available for development has not changed since the 2004 Background Study.

The Town of Markham and the Region of York are in the process of reviewing their Official Plans and growth forecast in the context of the Provincial Places to Grow Act and associated policies and guidelines. The Town and the Region anticipate completing this study process in 2009. The review may result in the identification of additional lands for development in Markham and for different levels and types of development within the Town. When the new growth forecast are complete the Town may need to review its' Development Charge Background Studies to determine if adjustments and updates to the policies, practices and rates are required.

This Development Charge Background Study is based on the growth forecasts completed as part of the 2004 Background Study. The 2004 forecast has been adjusted to reflect growth that has occurred since the 2004 and incorporates information and data from the 2006 Census. In addition, the growth forecast contained in this study is consistent with the 2008 Town-Wide Hard Development Charges Background Study in which by-laws were passed in June 2008.

The forecast is based on census years and is translated into the time periods required for Development Charge purposes generally by pro-rating the census periods to the DC time period. The planning time period for the TWS calculations is 2009 to 2018. The annualisation of the DC forecast also accounts for the Town's anticipated timing of development for new areas in the Town.



The following tables provide information on the update growth forecast.

This appendix provides the details of the growth forecasts used in this Study. The following tables can be found in this Appendix:

- Table A.1: Displays the historic population, households and employment from 1991 to 2008.
- Tables A.2 and A.3: Provide a break-down of the housing completions from 1998 to 2008 by unit type.
- Table A.4: Shows the historic population and households by period of construction based on a special Census data tabulation by Statistics Canada.
- Tables B.1 and B.2: Provides the overall population, household, and employment forecast results annually from 2009 to 2031 for the Town of Markham.

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- Tables B.3: Illustrates the growth in population in new households by unit type.
- Table B.4: Shows the growth in households by unit type.
- Table B.5: Shows the growth in non-residential floorspace over the period of 2009 to 2018.

TOWN OF MARKHAM 2009 DEVELOPMENT CHARGES STUDY

TABLE A.1 Historic Population, Households & Employment

Mid-Year	Population	Growth	Households	Growth	HH Size	Employment	Growth	Activity Rate
1991	153,800		43,600		3.53	91,945		59.8%
1992	157,531	3,731	44,705	1,105	3.52	93,342	1,397	59.3%
1993	161,353	3,822	45,838	1,133	3.52	94,760	1,418	58.7%
1994	165,267	3,914	46,999	1,161	3.52	96,200	1,440	58.2%
1995	169,276	4,009	48,190	1,191	3.51	97,661	1,462	57.7%
1996	173,383	4,107	49,411	1,221	3.51	99,145	1,484	57.2%
1997	179,918	6,535	51,480	2,069	3.49	104,121	4,976	57.9%
1998	186,699	6,781	53,636	2,156	3.48	109,346	5,226	58.6%
1999	193,736	7,037	55,882	2,246	3.47	114,834	5,488	59.3%
2000	201,038	7,302	58,222	2,340	3.45	120,598	5,763	60.0%
2001	208,615	7,577	60,660	2,438	3.44	126,650	6,052	60.7%
2002	218,270	9,655	63,657	2,997	3.43	133,070	6,420	61.0%
2003	228,373	10,102	66,802	3,145	3.42	139,816	6,746	61.2%
2004	238,943	10,570	70,102	3,300	3.41	146,904	7,088	61.5%
2005	250,002	11,059	73,566	3,463	3.40	154,351	7,447	61.7%
2006	261,573	11,571	77,200	3,634	3.39	162,175	7,824	62.0%
2007	268,342	6,769	79,198	1,998	3.39	167,432	5,257	62.4%
2008	275,287	6,944	81,247	2,050	3.39	172,859	5,427	62.8%

Source: Statistics Canada, Census of Canada

TABLE A.2 Historic Housing Activity - Units

Historic Housing Activity - Shares By Unit Type

		Hous	ing Completions	- Units					Housing Comp	oletions - Units
Mid-Year	Singles	Semis	Rows	Apts.	Total		Mid-Year	Singles	Semis	Rows
						•				
1998	1,449	236	894	198	2,777		1998	52%	8%	32%
1999	1,881	391	856	102	3,230		1999	58%	12%	27%
2000	2,019	241	716	227	3,203		2000	63%	8%	22%
2001	2,195	606	619	121	3,541		2001	62%	17%	17%
2002	2,671	281	454	534	3,940		2002	68%	7%	12%
2003	1,976	705	809	266	3,756		2003	53%	19%	22%
2004	1,328	592	622	602	3,144		2004	42%	19%	20%
2005	2,129	619	1,056	43	3,847		2005	55%	16%	27%
2006	1,053	287	748	1,184	3,272		2006	32%	9%	23%
2007	1,333	262	551	1,445	3,591		2007	37%	7%	15%
2008	1,219	314	384	438	2,355		2008	52%	13%	16%
Total	19,253	4,534	7,709	5,160	36,656	•	Total	53%	12%	21%
Average '99-'08	1,780	430	682	496	3,388	•	_		_	<u> </u>
Average '04-'08	1,412	415	672	742	3,242					

Source: Statistics Canada, Building Permits Data

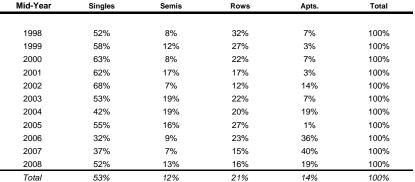




TABLE A.3
Historic Households by Period of Construction Showing Household Size

Period of Construction

	Teriod of Construction											
	Pre 1946	1946-1960	1961-1970	1971-1980	1981-1985	1986-1990	1991-1995	1996-2000	2001-2006	Pre 1996	1996-2006	Total
Singles												
Household Population	2,070	4,085	12,150	23,650	32,320	30,865	16,200	26,840	40,505	121,340	67,345	188,685
Households	770	1,495	4,090	7,180	8,945	8,095	4,005	6,760	10,585	34,580	17,345	51,925
Household Size	2.69	2.73	2.97	3.29	3.61	3.81	4.04	3.97	3.83	3.51	3.88	3.63
Semis												
Household Population	0	175	350	1,170	715	210	0	1,435	7,410	2,620	8,845	11,465
Households	10	55	115	395	215	75	20	445	2,220	885	2,665	3,550
Household Size	0.00	3.18	3.04	2.96	3.33	2.80	0.00	3.22	3.34	2.96	3.32	3.23
Rows												
Household Population	0	275	1,010	4,970	1,115	675	1,115	6,160	9,155	9,160	15,315	24,475
Households	15	100	415	1,785	400	220	365	2,175	3,090	3,300	5,265	8,565
Household Size	0.00	2.75	2.43	2.78	2.79	3.07	3.05	2.83	2.96	2.78	2.91	2.86
Apartments												
Household Population	520	1,370	2,420	4,375	4,820	9,135	4,770	3,650	4,620	27,410	8,270	35,680
Households	255	615	1,120	2,040	1,440	2,885	1,605	1,310	1,885	9,960	3,195	13,155
Household Size	2.04	2.23	2.16	2.14	3.35	3.17	2.97	2.79	2.45	2.75	2.59	2.71
All Units												
Household Population	2,590	5,905	15,930	34,165	38,970	40,885	22,085	38,085	61,690	160,530	99,775	260,305
Households	1,050	2,265	5,740	11,400	11,000	11,275	5,995	10,690	17,780	48,725	28,470	77,195
Household Size	2.47	2.61	2.78	3.00	3.54	3.63	3.68	3.56	3.47	3.29	3.50	3.37

Source: Statistics Canada, 2006 Census Special Run



TABLE B.1
Population, Household & Employment Forecast Summary

Mid-Year	Population	Households	Employment	PPH	Activity Rate
2006	261,573	77,200	162,175	3.39	62.0%
2007	268,342	79,198	167,432	3.39	62.4%
2008	275,287	81,247	172,859	3.39	62.8%
2009	282,411	83,350	178,462	3.39	63.2%
2010	289,719	85,507	184,247	3.39	63.6%
2011	297,217	90,441	190,219	3.29	64.0%
2012	302,030	91,905	193,899	3.29	64.2%
2013	306,920	93,394	197,651	3.29	64.4%
2014	311,890	94,906	201,475	3.29	64.6%
2015	316,940	96,443	205,373	3.29	64.8%
2016	322,072	100,372	209,347	3.21	65.0%
2017	324,526	101,576	210,289	3.19	64.8%
2018	326,998	102,795	211,235	3.18	64.6%
2019	329,489	104,029	212,185	3.17	64.4%
2020	331,999	105,277	213,139	3.15	64.2%
2021	334,528	106,540	214,098	3.14	64.0%
2022	335,890	107,335	214,293	3.13	63.8%
2023	337,257	108,135	214,489	3.12	63.6%
2024	338,630	108,942	214,685	3.11	63.4%
2025	340,008	109,754	214,881	3.10	63.2%
2026	341,392	110,573	215,077	3.09	63.0%
2027	342,336	111,142	214,983	3.08	62.8%
2028	343,283	111,714	214,888	3.07	62.6%
2029	344,232	112,289	214,794	3.07	62.4%
2030	345,184	112,866	214,700	3.06	62.2%
2031	346,139	113,447	214,606	3.05	62.0%

TABLE B.2
Forecast Population & Household Growth Summary

Mid-Year	Pop'n Growth	Total Pop'n	HH Growth	Total HHs	Emp Growth	Total Emp
2007	6,769	268,342	1,998	79,198	5,257	167,432
2008	6,944	275,287	2,050	81,247	5,427	172,859
2009	7,124	282,411	2,103	83,350	5,603	178,462
2010	7,309	289,719	2,157	85,507	5,785	184,247
2011	7,498	297,217	4,934	90,441	5,972	190,219
2012	4,813	302,030	1,464	91,905	3,680	193,899
2013	4,891	306,920	1,488	93,394	3,752	197,651
2014	4,970	311,890	1,512	94,906	3,824	201,475
2015	5,050	316,940	1,537	96,443	3,898	205,373
2016	5,132	322,072	3,929	100,372	3,974	209,347
2017	2,454	324,526	1,204	101,576	942	210,289
2018	2,472	326,998	1,219	102,795	946	211,235
2019	2,491	329,489	1,233	104,029	950	212,185
2020	2,510	331,999	1,248	105,277	954	213,139
2021	2,529	334,528	1,263	106,540	959	214,098
2022	1,362	335,890	795	107,335	195	214,293
2023	1,367	337,257	801	108,135	196	214,489
2024	1,373	338,630	807	108,942	196	214,685
2025	1,378	340,008	813	109,754	196	214,881
2026	1,384	341,392	819	110,573	196	215,077
2027	944	342,336	569	111,142	-94	214,983
2028	947	343,283	572	111,714	-94	214,888
2029	949	344,232	575	112,289	-94	214,794
2030	952	345,184	578	112,866	-94	214,700
2031	955	346,139	581	113,447	-94	214,606
2009-2018	51,711	326,998	21,548	102,795	38,376	211,235
2019-2031	19,141	346,139	10,652	113,447	3,371	214,606
2009-2031	70,852	346,139	32,200	113,447	41,747	214,606



44
APPENDIX A - TABLE B.3

TOWN OF MARKHAM FORECAST OF POPULATION AND HOUSEHOLDS

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2009-2018
Population											
Total Population	282,411	289,719	297,217	302,030	306,920	311,890	316,940	322,072	324,526	326,998	
Population Growth	7,124	7,309	7,498	4,813	4,891	4,970	5,050	5,132	2,454	2,472	51,711
Population Growth %	3%	3%	3%	2%	2%	2%	2%	2%	1%	1%	19%
Population in New Units Growth	8,182	8,471	8,714	5,577	5,717	5,861	6,010	6,084	3,168	3,238	61,022
Total Households											
Singles/Semis	59,495	60,896	62,331	63,147	63,973	64,810	65,658	66,517	66,739	66,962	
Rows/Other Multiples	9,787	10,235	10,702	11,012	11,332	11,661	11,999	12,347	12,722	13,108	
Apartments	15,565	16,461	17,408	18,160	18,945	19,763	20,617	21,508	22,088	22,684	
Total Households	84,847	87,592	90,441	92,319	94,250	96,234	98,274	100,372	101,549	102,753	
Shares of Total Households											
Singles/Semis	70%	70%	69%	68%	68%	67%	67%	66%	66%	65%	
Rows/Other Multiples	12%	12%	12%	12%	12%	12%	12%	12%	13%	13%	
Apartments	18%	19%	19%	20%	20%	21%	21%	21%	22%	22%	
Persons Per Unit (PPU)	3.33	3.31	3.29	3.27	3.26	3.24	3.23	3.21	3.20	3.18	

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2009-2031
Population														
Total Population	329,489	331,999	334,528	335,890	337,257	338,630	340,008	341,392	342,336	343,283	344,232	345,184	346,139	
Population Growth	2,491	2,510	2,529	1,362	1,367	1,373	1,378	1,384	944	947	949	952	955	70,852
Population Growth %	0.8%	0.8%	0.8%	0.4%	0.4%	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%	26%
Population in New Units Growth	3,310	3,384	3,411	1,965	1,996	2,028	2,060	2,065	1,351	1,367	1,384	1,401	1,406	88,149
Total Households														
Singles/Semis	67,185	67,409	67,634	67,717	67,801	67,884	67,968	68,052	68,086	68,119	68,153	68,186	68,220	
Rows/Other Multiples	13,505	13,915	14,337	14,531	14,729	14,928	15,131	15,336	15,454	15,572	15,691	15,812	15,933	
Apartments	23,296	23,924	24,569	25,071	25,584	26,107	26,640	27,185	27,594	28,010	28,431	28,860	29,294	
Total Households	103,986	105,248	106,540	107,320	108,113	108,920	109,739	110,573	111,133	111,701	112,276	112,858	113,447	
Shares of Total Households														
Singles/Semis	65%	64%	63%	63%	63%	62%	62%	62%	61%	61%	61%	60%	60%	
Rows/Other Multiples	13%	13%	13%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	
Apartments	22%	23%	23%	23%	24%	24%	24%	25%	25%	25%	25%	26%	26%	
Persons Per Unit (PPU)	3.17	3.15	3.14	3.13	3.12	3.11	3.10	3.09	3.08	3.07	3.07	3.06	3.05	

45

APPENDIX A - TABLE B.4

TOWN OF MARKHAM GROWTH IN HOUSEHOLD UNITS

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 2	2009-2018
Growth in Households											
Singles/Semis	1,369	1,402	1,435	816	826	837	848	859	222	223	8,836
Rows/Other Multiples	428	447	467	310	319	329	338	348	375	386	3,748
Apartments	847	896	947	752	785	819	854	891	580	596	7,966
Total Growth in Households	2,644	2,744	2,849	1,878	1,930	1,984	2,040	2,098	1,177	1,204	20,550
Growth in Households %											
Singles/Semis	2%	2%	2%	1%	1%	1%	1%	1%	0%	0%	15%
Rows/Other Multiples	5%	5%	5%	3%	3%	3%	3%	3%	3%	3%	40%
Apartments	6%	6%	6%	4%	4%	4%	4%	4%	3%	3%	54%
Total Growth in Households	3%	3%	3%	2%	2%	2%	2%	2%	1%	1%	25%
Shares of New Households											
Singles/Semis	52%	51%	50%	43%	43%	42%	42%	41%	19%	18%	43%
Rows/Other Multiples	16%	16%	16%	17%	17%	17%	17%	17%	32%	32%	18%
Apartments	32%	33%	33%	40%	41%	41%	42%	42%	49%	49%	39%

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2009-2031
Growth in Households														
Singles/Semis	223	224	225	83	83	84	84	84	34	34	34	34	34	10,095
Rows/Other Multiples	398	410	422	194	197	200	202	205	118	118	119	120	121	6,573
Apartments	612	628	645	502	513	523	534	545	409	415	422	428	434	14,576
Total Growth in Households	1,233	1,262	1,292	780	793	806	820	834	560	568	575	582	589	31,244
Growth in Households %														
Singles/Semis	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%
Rows/Other Multiples	3%	3%	3%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	70%
Apartments	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	99%
Total Growth in Households	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	38%
Shares of New Households														
Singles/Semis	18%	18%	17%	11%	11%	10%	10%	10%	6%	6%	6%	6%	6%	32%
Rows/Other Multiples	32%	32%	33%	25%	25%	25%	25%	25%	21%	21%	21%	21%	21%	21%
Apartments	50%	50%	50%	64%	65%	65%	65%	65%	73%	73%	73%	74%	74%	47%

TABLE B.5 Non-Residential Space Forecast

Employment Density

Average Sq.M. Per Employee

39.41 m² per employee

	<u>Total</u>							
Mid-Year	Empl Growth	Space (m²)						
2009	5,257	207,183						
2010	5,427	213,899						
2011	5,603	220,832						
2012	5,785	227,991						
2013	5,972	235,381						
2014	3,680	145,054						
2015	3,752	147,861						
2016	3,824	150,721						
2017	3,898	153,638						
2018	3,974	156,610						
2009 - 2018	47,172	1,859,170						



APPENDIX B

GENERAL SERVICES
TECHNICAL APPENDIX

APPENDIX B

GENERAL SERVICES TECHNICAL APPENDIX INTRODUCTION AND OVERVIEW

This appendix provides the detailed analysis undertaken to establish the development charges rates for each of the services in the Town of Markham. The appendix is divided into six sub-sections, with one section for each of the following services:

- **B.1** General Government
- **B.2** Library Board
- **B.3** Fire Services
- **B.4** Indoor Recreation
- B.5 Park Development and Facilities
- **B.6 Public Works**

Every sub-section contains a set of three tables. The tables provide the background data and analysis undertaken to arrive at the calculated development charges rates for that particular service. An overview of the content and purpose of each of the tables is provided below.

TABLE 1 HISTORIC SERVICE LEVELS

Table 1 presents the data used to determine the ten-year historic service level. The *Development Charges Act (DCA)* and *Ontario Regulation 82/98 (O. Reg. 82/98)* require that development charges be set at a level no higher than the average service level provided in the Town 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 historic inventory period has been defined as 1999 to 2008.

O. Reg. 82/98 requires that when defining and determining historic 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 per unit. 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 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 cost) of service provided



by the Town in the past. Both the quantitative and qualitative aspects of service levels used in the current analysis are based on information provided by Town staff. This information is generally based on historic records and experience with costs to acquire or construct similar facilities, equipment and infrastructure.

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

There is also a requirement in the *DCA* to consider "excess capacity" within the Town's existing infrastructure that may be available to partially meet the future servicing requirements. If Council has expressed its intent, before or at the time the capacity was created, to recoup the cost of providing the capacity from new development, it is considered "committed excess capacity" under the *DCA* and the associated capital is eligible for recovery. Should uncommitted excess capacity exist, it will be determined whether or not this capacity will be available to service new development and, if so, appropriate adjustments will be made to the calculations.

TABLE 2 2009–2018 PROVISIONAL GROWTH-RELATED CAPITAL BUDGET

The DCA requires the council of a Town to express its intent to provide future capital facilities at the level incorporated in the development charges calculation. Based on the growth forecasts presented in Appendix A, Town staff in collaboration with the consultant have developed a growth-related capital forecast which sets out those projects that are required to service anticipated growth for the ten-year period from 2009 to 2018. The growth-related capital forecasts for each service are shown in Table 2 of each sub-section.

To determine the growth-related share of the program, the project costs are reduced by any "prior growth" and "replacement" or "benefit to existing" shares. A prior growth share relates to a portion of a facility that is being constructed to alleviate an existing deficiency and to service growth that has already occurred. Reserve funds available to fund the prior growth share are shown in Appendix C.



A replacement share occurs when a new facility will in part service a facility that is demolished, redeployed or will otherwise not be available to serve its former function. A benefit to existing share represents that portion of a capital project that will benefit existing development. The replacement and benefit to existing shares of the capital program are not deemed to be growth-related and are therefore removed from the development charges calculation.

The capital program less any prior growth and replacement or benefit to existing shares yields the net growth-related program. Although deemed growth-related, not all of the net growth-related capital program may be recoverable from development charges in the period from 2009 to 2018. For some of the services, a portion of the capital program will service growth that will not occur until after 2018. This portion of the capital program is either deemed "pre-built" service capacity to be considered as committed excess capacity to be recovered under future development charges or represents a future service level increase.

The capital costs associated with pre-built service capacity and future service level increases are removed from the capital program to produce the growth-related capital program for the period from 2009 to 2018. In all cases, as required, this amount is equal to or is less than the maximum allowable as calculated on the final page of Table 1. Finally, when calculating development charges, the growth-related net capital costs must be reduced by ten per cent for all services except for fire services (*DCA*, s.5.(1)8.). The result is the discounted growth-related net capital costs that are eligible for recovery against growth over the period from 2009 to 2018.

Calculation of the Unadjusted Development Charges Rates

The section below the capital program displays the calculation of the unadjusted development charges rates. The term "unadjusted" development charges is used to distinguish the charge that is calculated prior to cash flow financing consideration. The cash flow analysis is shown in Table 3.

The first step when determining the unadjusted development charges rates is to allocate the growth-related net capital costs between the residential and the non-residential sectors. For all services, except Library Board, Indoor Recreation and Park Development and Facilities, the growth-related costs have been determined to be 61 per cent residential and 39 per cent non-residential. This ratio is based on projected changes in



population and employment over the planning period, anticipated demand for services, and other considerations.

The growth-related costs associated with the Library Board, Indoor Recreation and Park Development and Facilities have been allocated 100 per cent to residential growth because the need for these services is driven entirely by residential development.

The residential growth-related costs are then divided by the forecast population growth in new housing units. This gives the unadjusted residential development charge per capita. The non-residential growth-related 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.

TABLE 3 CASH FLOW ANALYSIS

A cash flow analysis is also undertaken to account for the timing of projects and receipt of development charges. Interest earnings or borrowing costs are, 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 growth-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 growth-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.

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



B.1 GENERAL GOVERNMENT

TABLE 1 HISTORIC SERVICE LEVELS

Table 1 provides a summary of the historical service level for the provision of general government services (growth-related studies). The service level is based on actual expenditures for growth-related studies over the last ten years (1999-2008).

Table 1 identifies a ten-year average service level for the provision of growth-related studies of \$946,710 per year. Based on this average service level, an additional \$9.47 million is the maximum allowable that can be included in the development charges calculation.

TABLE 2 2009–2018 PROVISIONAL GROWTH-RELATED CAPITAL BUDGET AND THE CALCULATION OF THE DEVELOPMENT CHARGE

When calculating development charges, the DCA allows for the inclusion of the costs of undertaking studies related to the provision of growth-related infrastructure, including development charges background studies. Table 2 provides a list of the average expenditures for growth-related studies the Town anticipates undertaking for the planning period of 2009 to 2018.

The first line in the capital program for General Government represents the negative balance of \$2.97 million, that was present in the reserve fund balance as at December 31, 2008. The remainder of the capital program are anticipated expenditures for growth-related studies for an amount of \$9.47 million.

Altogether, the ten-year capital forecast for the General Government amounts to \$12.44 million. A portion of the capital program, \$2.97 million, has been deemed as a post-period benefit. These shares have been removed from the development charges calculation.

The 2009–2018 growth-related capital cost amounts to \$9.47 million which is then reduced by legislated 10 per cent discount, yielding a discounted growth-related net capital cost of \$8.52 million.

The discounted growth-related net capital cost has been allocated 61 per cent (\$5.23 million) to the residential sector and 39 per cent (\$3.29 million) to the non-residential

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sector. The residential share is then allocated to the forecast population in new housing units (61,022), yielding a per capita charge of \$85.72. The non-residential share is allocated to the forecast increase in GFA of 1,512,480 square metres, yielding a charge of \$2.17 per metre squared.

TABLE 3 CASH FLOW ANALYSIS

The cash-flow analysis is displayed in Table 3. It considers timing of the development charges revenues to determine the adjusted calculated rates. The residential cash flow (page 1) calculates a \$90.95 charge per capita which is higher than the unadjusted charge previously calculated. The non-residential cash flow (page 2) results in a higher charge of \$2.37 per square metre. The following table summarizes the calculation of the General Government development charge.

		GENERAL GOV	ERNMENT SUM	MARY		
10-year Hist.	2	009-2018	Unad	justed	Adju	ısted
Service Level	Growth-Rela	ated Capital Program	Developm	ent Charge	Developm	ent Charge
\$000s/year	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$946.71	\$12,439,003	\$8,520,390	\$85.72	\$2.17	\$90.95	\$2.37



APPENDIX B.1 TABLE 1

TOWN OF MARKHAM
INVENTORY OF CAPITAL ASSETS
GENERAL GOVERNMENT

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Total
GROWTH-RELATED STUDIES (\$)											
Various Studies	\$300,213.0	\$554,213.0	\$902,335.0	\$304,577.0	\$125,775.0	\$1,480,906.6	\$1,570,052.1	\$714,288.0	\$1,495,023.0	\$1,666,854.0	\$9,114,236.7
Development Charges Studies	\$100,000.0	\$0.0	\$0.0	\$0.0	\$0.0	\$117,900.0	\$0.0	\$135,000.0	\$0.0	\$0.0	\$352,900.0
Total (\$000)	\$400.2	\$554.2	\$902.3	\$304.6	\$125.8	\$1,598.8	\$1,570.1	\$849.3	\$1,495.0	\$1,666.9	\$9,467.1

TOWN OF MARKHAM
CALCULATION OF SERVICE LEVELS
GENERAL GOVERNMENT

SERVICE LEVEL (\$/year)

Average Service Level

Growth Studies	\$400.21	\$554.21	\$902.34	\$304.58	\$125.78	\$1,598.81	\$1,570.05	\$849.29	\$1,495.02	\$1,666.85	\$946.71
Total (\$000)	\$400.21	\$554.21	\$902.34	\$304.58	\$125.78	\$1,598.81	\$1,570.05	\$849.29	\$1,495.02	\$1,666.85	\$946.71

TOWN OF MARKHAM
CALCULATION OF MAXIMUM ALLOWABLE
GENERAL GOVERNMENT

10 Year Average Service Level (1999-2008) \$946.71 \$000s/per year

 Study Period 2009-2018
 10 years

 Build-Out 2009-2031
 23 years



APPENDIX B.1 TABLE 2

TOWN OF MARKHAM GROWTH-RELATED CAPITAL PROGRAM

			Total		Less	Total	R	Replacement		Growth-Re	late	d Costs		2009-	2018	Discounted
Service	Project Description	Timing	Project Cost	/:	Grants Subsidies	Municipal Cost		and Benefit To Existing	Prior Growth	2009- 2018		Post 2018	Total	_		n-Related oital Costs
1.0 GENERAL G	OVERNMENT															
1.1 Grow	th-Related Studies															
1.1.1	Recovery of Reserve Fund Shortfall	2009	\$ 2,971,903	\$	-	\$ 2,971,903	\$	-	\$ -	\$ 2,971,903	\$	-	\$ 2,971,903	90	% \$	2,674,713
1.1.2	Various Studies	2009	\$ 946,710	\$	-	\$ 946,710	\$	-	\$ -	\$ 946,710	\$	-	\$ 946,710	90	% \$	852,039
1.1.3	Various Studies	2010	\$ 946,710	\$	-	\$ 946,710	\$	-	\$ -	\$ 946,710	\$	-	\$ 946,710	90	% \$	852,039
1.1.4	Various Studies	2011	\$ 946,710	\$	-	\$ 946,710	\$	-	\$ -	\$ 946,710	\$	-	\$ 946,710	90	% \$	852,039
1.1.5	Various Studies	2012	\$ 946,710	\$	-	\$ 946,710	\$	-	\$ -	\$ 946,710	\$	-	\$ 946,710	90	% \$	852,039
1.1.6	Various Studies	2013	\$ 946,710	\$	-	\$ 946,710	\$	-	\$ -	\$ 946,710	\$	-	\$ 946,710	90	% \$	852,039
1.1.7	Various Studies	2014	\$ 946,710	\$	-	\$ 946,710	\$	-	\$ -	\$ 946,710	\$	-	\$ 946,710		% \$	
1.1.8	Various Studies	2015	\$ 946,710	\$	-	\$ 946,710	\$	-	\$ -	\$ 814,937	\$	131,773	\$ 946,710		% \$	
1.1.9	Various Studies	2016	\$ 946,710	\$	-	\$ 946,710	\$	-	\$ -	\$ -	\$	946,710	\$ 946,710	90	% \$	-
1.1.10	Various Studies	2017	\$ 946,710	\$	-	\$ 946,710	\$	-	\$ -	\$ -	\$	946,710	\$ 946,710		% \$	
1.1.11	Various Studies	2018	\$ 946,710	\$		\$ 946,710	\$	<u> </u>	\$ -	\$ -	\$	946,710	\$ 946,710	90	% \$	-
	Subtotal Growth-Related Studies		\$ 12,439,003	\$	-	\$ 12,439,003	\$	-	\$ -	\$ 9,467,100	\$	2,971,903	\$ 12,439,003		\$	8,520,390
TOTAL GEN	ERAL GOVERNMENT		\$ 12,439,003	\$	-	\$ 12,439,003	\$	-	\$ -	\$ 9,467,100	\$	2,971,903	\$ 12,439,003		\$	8,520,39

Non-Chargeable Growth-Related Net Capital Cost: \$ 946,710

		_	
Residential Development Charge Calculation			
Residential Share of 2009-2018 Discounted Growth-Related Capital Program	61%		\$5,230,805
10 Year Growth in Population in New Units			61,022
Unadjusted Development Charge Per Capita (\$)			\$85.72
Non-Residential Development Charge Calculation			
Non-Residential Share of 2009-2018 Discounted Growth-Related Capital Program	39%	\$	3,289,585
10 Year Growth in Square Metres			1,512,480
Unadjusted Development Charge Per sq. m (\$)			\$2.17



APPENDIX B.1 TABLE 3 - PAGE 1

TOWN OF MARKHAM CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE GENERAL GOVERNMENT RESIDENTIAL DEVELOPMENT CHARGE

1.00 GENERAL GOVERNMENT

OPENING CASH BALANCE FROM APPLICABLE RESERVE	5			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING CASH BALANCE (\$000)	Ch-			\$0.00	(\$1,460.01)	(\$1,283.63)	(\$1,068.94)	(\$1,144.99)	(\$1,211.46)	(\$1,266.92)	(\$1,226.18)	(\$646.90)	(\$338.97)	
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS 1.00 GENERAL GOVERNMENT - constant (\$000) 1.00 GENERAL GOVERNMENT - current (\$000)	Res 61%	res Non-Res 39%		\$2,165.1 \$2,165.1	\$523.1 \$533.5	\$523.1 \$544.2	\$523.1 \$555.1	\$523.1 \$566.2	\$523.1 \$577.5	\$450.3 \$507.1	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$5,230.8 \$5,448.8
NEW UNIT GROWTH - Population in New Units				8,182	8,471	8,714	5,577	5,717	5,861	6,010	6,084	3,168	3,238	61,022
REVENUE - current (\$000) - Dev. Charge Receipts	Rate for 200 \$90.95 Balance:	9 Inflation: Postive	2.0% Negative	\$744.2	\$785.8	\$824.6	\$538.3	\$562.8	\$588.5	\$615.6	\$635.6	\$337.6	\$351.9	\$5,984.9
Interest on Opening Balance Interest on In-year Transactions (excl.int.)	Rate:	3.5% 3.5%	5.5%	\$0.0 (\$39.1)	(\$80.3) \$4.4	(\$70.6) \$4.9	(\$58.8) (\$0.5)	(\$63.0) (\$0.1)	(\$66.6) \$0.2	(\$69.7) \$1.9	(\$67.4) \$11.1	(\$35.6) \$5.9	(\$18.6) \$6.2	(\$530.6) (\$5.0)
TOTAL REVENUE				\$705.1	\$709.9	\$758.9	\$479.0	\$499.7	\$522.1	\$547.8	\$579.3	\$307.9	\$339.4	\$5,449.2
CLOSING CASH BALANCE				(\$1,460.0)	(\$1,283.6)	(\$1,068.9)	(\$1,145.0)	(\$1,211.5)	(\$1,266.9)	(\$1,226.2)	(\$646.9)	(\$339.0)	\$0.4	
GENERAL GOVERNMENT CHARGE PER CAPITA		\$90.95												



APPENDIX B.1 TABLE 3 - PAGE 2

TOWN OF MARKHAM CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE GENERAL GOVERNMENT NON-RESIDENTIAL DEVELOPMENT CHARGE

1.00 GENERAL GOVERNMENT

OPENING CASH BALANCE FROM APPLICABLE RESER	VES			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING CASH BALANCE (\$000)	01			\$0.00	(\$1,030.71)	(\$1,056.81)	(\$1,083.74)	(\$1,111.50)	(\$1,140.14)	(\$1,169.68)	(\$1,147.72)	(\$791.84)	(\$408.04)	
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS 1.00 GENERAL GOVERNMENT - constant (\$000) 1.00 GENERAL GOVERNMENT - current (\$000)	Sha Res 61%	Non-Res 39%		\$1,361.6 \$1,361.6	\$329.0 \$335.5	\$329.0 \$342.2	\$329.0 \$349.1	\$329.0 \$356.1	\$329.0 \$363.2	\$283.2 \$318.9	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$3,289.6 \$3,426.7
NON-RESIDENTIAL SPACE GROWTH - Growth in Sq. m				151,248	151,248	151,248	151,248	151,248	151,248	151,248	151,248	151,248	151,248	1,512,480
REVENUE - current (\$000)	Rate for 200	9												
- Dev. Charge Receipts	\$2.37 Balance:	Inflation: Postive	2.0% Negative	\$358.5	\$365.6	\$372.9	\$380.4	\$388.0	\$395.8	\$403.7	\$411.8	\$420.0	\$428.4	\$3,925.1
- Interest on Opening Balance	Rate:	3.5%	5.5%	\$0.0	(\$56.7)	(\$58.1)	(\$59.6)	(\$61.1)	(\$62.7)	(\$64.3)	(\$63.1)	(\$43.6)	(\$22.4)	(\$491.7)
- Interest on In-year Transactions (excl.int.)	Rate:	3.5%	5.5%	(\$27.6)	\$0.5	\$0.5	\$0.5	\$0.6	\$0.6	\$1.5	\$7.2	\$7.4	\$7.5	(\$1.3)
TOTAL REVENUE				\$330.9	\$309.4	\$315.3	\$321.3	\$327.4	\$333.7	\$340.9	\$355.9	\$383.8	\$413.5	\$3,432.1
CLOSING CASH BALANCE				(\$1,030.7)	(\$1,056.8)	(\$1,083.7)	(\$1,111.5)	(\$1,140.1)	(\$1,169.7)	(\$1,147.7)	(\$791.8)	(\$408.0)	\$5.4	
GENERAL GOVERNMENT CHARGE PER SQ. M		\$2.37												



B.2 LIBRARY BOARD

The Markham Public Library provides library services from six branch locations at which offer a wide array of adult and children services, library programs and room rentals. Each branch offers a variety of books, periodicals, multimedia and other electronic resource materials for the community's use.

TABLE 1 HISTORIC SERVICE LEVELS

Table 1 displays the Library Board ten-year historic inventory for buildings, land, materials, and furniture and equipment (excluding computer equipment). The building space amounts to 122,051 square feet, valued at over \$41.62 million. The library buildings occupy approximately 5.92 hectares of land worth approximately \$12.43 million. The materials found at all library branches are valued at \$19.70 million and the furniture and equipment associated with the branches are valued at \$6.50 million.

The 2008 full replacement value of the inventory of capital assets for the Library Board amounts to \$80.24 million and the ten-year historic average service level is \$273.84 per capita. The historic service level, multiplied by the ten-year forecast growth in population in new units, results in a ten-year maximum allowable funding envelope of \$16.71 million. Excess capacity of \$4.86 million has been identified and thus the new calculated maximum allowable is reduced to \$11.85 million.

TABLE 2 2009–2018 PROVISIONAL GROWTH-RELATED CAPITAL BUDGET AND THE CALCULATION OF THE DEVELOPMENT CHARGE

The Library Board capital program comprises of the construction of the East Markham branch and the expansion of the Milliken branch. The purchase of land is required for the construction of the East Markham branch - this purchase is anticipated in 2009 at a cost of \$1.21 million. The construction of this branch, including the cost of the parking lot totals to \$10.91 million. Fixtures, furniture and equipment for this branch and collection materials add another \$666,000 and \$3.13 million to the capital program, respectively. The expansion of the Milliken branch , planned to be 13,000 square feet, will occur in 2011 at a total construction cost of approximately \$5.05 million. Fixtures, furniture and equipment and additional collection materials for this expansion add \$1.21 million and \$1.85 million to the capital program.



Altogether, the ten-year capital forecast for the Library Board amounts to \$24.03 million. Two grants have been identified to help fund the East Markham and Milliken projects. The grants total to \$6.03 million and have been removed from the development charges calculation. A prior growth share of \$3.12 million has been identified as development charges previously collected for this service and has been netted off of the development charges calculation. A portion of the capital program, \$3.03 million, has been deemed as a post-period benefit. These shares will not be recovered under these development charges, but in the next Development Charges Background Study.

The 2009–2018 growth-related capital cost amounts to \$11.85 million which is then reduced by legislated 10 per cent discount, yielding a discounted growth-related net capital cost of \$10.67 million.

The entire growth-related net capital cost of \$10.67 million for the Library Board is allocated against residential development in the Town of Markham. This results in an unadjusted development charge of \$174.80 per capita.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the residential calculated charge increases to \$192.50 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 Library Board development charge:

		LIBRARY E	BOARD SUMMAI	RY		
10-year Hist.	2	009-2018	Unad	justed	Adju	ısted
Service Level	Growth-Rela	ated Capital Program	Developm	ent Charge	Developm	ent Charge
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$273.84	\$24,025,262	\$10,666,613	\$174.80	\$0.00	\$192.50	\$0.00



APPENDIX B.2 TABLE 1 - PAGE 1

TOWN OF MARKHAM INVENTORY OF CAPITAL ASSETS LIBRARY BOARD

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
BUILDINGS (sq.ft.)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2006	(\$/sq. ft.)
Angus Glen Library - 3990 Major Mackenzie Drive East, Markham	-	-	-		_	29.700	29.700	29.700	29.700	29.700	\$390.00
Markham Village Library - 6031 Hwy #7, Markham	19,561	19,561	19.561	19,561	19,561	19,561	19,561	19,561	32,510	32.510	\$390.00
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	\$290.00
Thornhill CC Library - 7755 Bayview Ave., Thornhill	25.053	25,053	25.053	25.053	25.053	25.053	25.053	25.053	25.053	25.053	\$290.00
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	\$290.00
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	\$290.00
Officitylie Library - 13 Library Lane, Officityline	13,040	10,040	13,040	13,040	13,040	13,040	13,040	13,040	15,040	13,040	Ψ230.00
Total (sq.ft.)	79,402	79,402	79,402	79,402	79,402	109,102	109,102	109,102	122,051	122,051	
Total (\$000)	\$24,982.7	\$24,982.7	\$24,982.7	\$24,982.7	\$24,982.7	\$36,565.7	\$36,565.7	\$36,565.7	\$41,615.8	\$41,615.8	
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LAND (hectares)											UNIT COST (\$/ha)
Angus Glen Library - 3990 Major Mackenzie Drive East, Markham	-	-	-	-	-	1.20	1.20	1.20	1.20	1.20	\$2,100,000
Markham Village Library - 6031 Hwy #7, Markham	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	\$2,100,000
Milliken Mills Library - Unit 1, 7600 Kennedy Rd., Unionville	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	\$2,100,000
Thornhill CC Library - 7755 Bayview Ave., Thornhill	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	\$2,100,000
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	\$2,100,000
Unionville Library - 15 Library Lane, Unionville	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	\$2,100,000
											, , , , , , , , , , , , , , , , , , , ,
Total (ha)	4.72	4.72	4.72	4.72	4.72	5.92	5.92	5.92	5.92	5.92	
Total (\$000)	\$9,912.0	\$9,912.0	\$9,912.0	\$9,912.0	\$9,912.0	\$12,432.0	\$12,432.0	\$12,432.0	\$12,432.0	\$12,432.0	
											UNIT COST
MATERIALS (#)											(\$/material)
- 16 mm Films	49	49	49	49	49	49	49	27	27	27	\$67.75
- Audiocassettes	4,806	4,616	2,588	2,588	2,382	1,403	424	347	293	179	\$12.10
- Talking Books	5,088	5,541	7,212	8.096	8.096	12,052	12,162	13,663	14,128	14,497	\$54.62
- Talking Books (kits)	1,855	2,185	2,467	1,909	1,909	2,877	2,828	3,665	3,663	4,130	\$72.93
- Books	348,710	357,842	367,142	387,954	398,788	478.847	458,619	493,540	512,885	561,583	\$27.18
- Browsing PB	92,589	93,484	95,105	100,282	98,801	110,447	95,589	105,910	85,574	68,654	\$8.84
- CD-ROM Software	896	1,978	2,542	3,420	3,869	5,395	6,293	6,792	6,128	5,761	\$41.09
- Compact Discs	5.273	7,312	8,773	10.392	11.517	15,529	18.581	22,459	22.883	23,206	\$18.19
- DVDs	0,2.0	7,012	881	1,627	3,241	11,144	19,878	28,210	33,882	42.411	\$27.88
- Maps	1,875	1,875	1,875	1,875	1,875	1,877	1,919	861	898	400	\$2.95
- Microfiche	11,935	12,086	12,173	12,349	12,349	12,920	13,168	9,062	9,062	500	\$67.75
- Microfilms	2,685	2,791	2,980	3,154	3,154	3,408	3,445	3,487	3,513	2,727	\$67.75
- Newspapers	54	60	59	63	63	73	79	60	60	60	\$276.00
- Periodicals	751	779	849	891	891	1,153	1,242	1,051	942	942	\$81.43
- Videocassettes	13.642	16.089	17,272	19.335	19.682	19.725	15.985	12,596	9.677	6.702	\$22.84
- Videocasseries	13,042	10,009	11,212	19,555	19,002	19,723	13,963	25	328	815	\$53.07
- Electronic Resources	\$45,000	\$61,000	\$80,123	\$106,956	\$140,213	\$173,858	\$145,492	\$287,569	\$253,058	\$380,244	φυσ.07
- Electronic Resources	Ψ-3,000	ψ01,000	ψ00,123	ψ100,930	ψ140,213	ψ173,030	ψ140,432	Ψ201,303	Ψ200,000	ψ500,244	
Total (#)	490,208	506,687	521,967	553,984	566,666	676,899	650,261	701,755	703.943	732,594	
Total (\$000)	\$12,332.5	\$12,809.9	\$13,308.9	\$14,116.4	\$14,520.4	\$17,544.8	\$17,104.7	\$18,375.8	\$18,792.9	\$19,698.7	
Total (\$000)	φ12,332.3	\$12,003.3	φ13,300.9	\$14,110.4	\$14,320.4	\$17,344.0	\$17,104.7	\$10,373.0	φ10,792.9	\$19,090.7	
FURNITURE AND EQUIPMENT (excluding computers) (\$)											
Automated Library Collection System	\$869,054	\$1,073,534	\$1,469,054	\$1,318,729	\$1,552,748	\$1,791,626	\$1,833,902	\$1,833,902	\$1,833,902	\$1,870,580	
Angus Glen Library - 3990 Major Mackenzie Drive East, Markham	\$0	\$0	\$0	\$0	\$0	\$607,345	\$680,454	\$824,586	\$824,586	\$841,078	
Markham Village Library - 6031 Hwy #7. Markham	\$925.576	\$925.576	\$925.576	\$925.576	\$925.576	\$854,445	\$202,913	\$216,866	\$707,000	\$721,140	
Milliken Mills Library - Unit 1, 7600 Kennedy Rd., Unionville	\$921,472	\$921,472	\$921,472	\$921,472	\$921,472	\$961.849	\$981,657	\$974.734	\$974,734	\$994,229	
Thornhill CC Library - 7755 Bayview Ave., Thornhill	\$1.077.841	\$1.077.841	\$1.077.841	\$1.077.841	\$1,077,841	\$1,019,289	\$938,751	\$948.874	\$948.874	\$967,851	
Thornhill Village Library - 10 Colbourne St., Thornhill	\$167.693	\$167.693	\$167.693	\$167.693	\$167.693	\$127.843	\$131.229	\$142.684	\$142.684	\$145,538	
Unionville Library - 15 Library Lane, Unionville	\$961.034	\$961.034	\$961,034	\$961.034	\$961,034	\$930.943	\$941,314	\$936,574	\$936,574	\$955,305	
Officially - 10 Library Lane, Officialis	ψου 1,034	ψου 1,004	ψου1,034	ψ301,034	ψ301,034	ψ330,343	ψυ-1,υ14	ψοσο,σ74	ψουσ,574	ψουσ,ουσ	
Total (\$000)	\$4,922.7	\$5,127.2	\$5,522.7	\$5,372.3	\$5,606.4	\$6,293.3	\$5,710.2	\$5,878.2	\$6,368.4	\$6,495.7	
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APPENDIX B.2 TABLE 1 - PAGE 2

TOWN OF MARKHAM
CALCULATION OF SERVICE LEVELS
LIBRARY BOARD

Historic Population	1999 193,736	2000 201,038	2001 208,615	2002 218,270	2003 228,373	2004 238,943	2005 250,002	2006 261,573	2007 268,342	2008 275,287	
INVENTORY SUMMARY (\$000)											
Buildings	\$24,982.7	\$24,982.7	\$24,982.7	\$24,982.7	\$24,982.7	\$36,565.7	\$36,565.7	\$36,565.7	\$41,615.8	\$41,615.8	
Land	\$9,912.0	\$9,912.0	\$9,912.0	\$9,912.0	\$9,912.0	\$12,432.0	\$12,432.0	\$12,432.0	\$12,432.0	\$12,432.0	
Materials	\$12,332.5	\$12,809.9	\$13,308.9	\$14,116.4	\$14,520.4	\$17,544.8	\$17,104.7	\$18,375.8	\$18,792.9	\$19,698.7	
Furniture and Equipment	\$4,922.7	\$5,127.2	\$5,522.7	\$5,372.3	\$5,606.4	\$6,293.3	\$5,710.2	\$5,878.2	\$6,368.4	\$6,495.7	
Total (\$000)	\$52,149.8	\$52,831.7	\$53,726.2	\$54,383.5	\$55,021.5	\$72,835.8	\$71,812.6	\$73,251.7	\$79,209.1	\$80,242.2	
SERVICE LEVEL (\$/capita)											Average Service Level
Buildings	\$128.95	\$124.27	\$119.75	\$114.46	\$109.39	\$153.03	\$146.26	\$139.79	\$155.08	\$151.17	\$134.22

\$45.41

\$64.67

\$24.61

\$249.16

\$43.40

\$63.58

\$24.55

\$240.93

\$52.03

\$73.43

\$26.34

\$304.83

\$49.73

\$68.42

\$22.84

\$287.25

\$47.53

\$70.25

\$22.47

\$280.04

\$46.33

\$70.03

\$23.73

\$295.18

\$45.16

\$71.56

\$23.60

\$291.49

\$47.76

\$67.31

\$24.55

\$273.84

\$47.51

\$63.80

\$26.47

\$257.54

\$49.30

\$63.72

\$25.50

\$262.80

\$51.16

\$63.66

\$25.41

\$269.18

TOWN OF MARKHAM
CALCULATION OF MAXIMUM ALLOWABLE
LIBRARY BOARD

Land

Materials

Total (\$/capita)

Furniture and Equipment

10 Year Average Service Level (1999-2008) \$273.84 per capita

 2008 Population
 275,287

 Population Growth in New Units 2009-2018
 61,022

 Population Growth in New Units 2009-2031
 88,149

Excess Calculation (\$000) Average Maximum Allowable Using **New Maximum** Service 10 Years 2031 2008 Average **Excess** Allowable (\$000) Level Inventory Service Level Capacity 10 Years 2031 Total Library Board \$273.84 per capita \$16,710.0 \$24,138.6 \$80,242.2 \$75,383.9 \$4,858.2 \$11,851.8 \$19,280.4



APPENDIX B.2 TABLE 2

TOWN OF MARKHAM GROWTH-RELATED CAPITAL PROGRAM

				Total		Less	Total	F	Replacement							2009-	2018	3 Discounted		
Service	Project Description	Timing		Project		Grants	Municipal		and Benefit		Prior		2009-		Post			-		h-Related
			-	Cost	/8	Subsidies	Cost	Ľ	To Existing		Growth		2018		2018		Total	Net	Ca	oital Costs
2.0 LIBRARY BOA	RD																			
2.1 Library	Buildings																			
2.1.2	East Markham - Construction & Parking	2010	\$	10,914,929	\$	933,900	\$ 9,981,029	\$	_	\$	3,115,048	\$	6,865,981	\$	_	\$	9,981,029	909	% \$	6,179,383
2.1.1	Milliken Expansion (13,000 sf)	2011	\$	5,045,123	\$	4,146,142	\$ 898,981	\$	-	\$	-	\$	898,981	\$	-	\$	898,981		% \$	
	Subtotal Library Buildings		\$	15,960,052	\$		\$ 10,880,010	\$	-			\$	7,764,962	\$	-	\$	898,981		\$	-
2.2 Land fo	r Library Buildings																			
2.2.1	East Markham	2009	\$	1,212,770	\$	-	\$ 1,212,770	\$	-	\$	-	\$	1,212,770	\$		\$	1,212,770	909	% \$	1,091,493
	Subtotal Land for Library Buildings		\$	1,212,770	\$	-	\$ 1,212,770	\$	-	\$	-	\$	1,212,770	\$	-	\$	1,212,770		\$	1,091,493
2.3 Furnitu	re & Equipment																			
2.3.1	East Markham	2010	\$	666,000	\$	-	\$ 666,000	\$	-	\$	-	\$	666,000	\$	-	\$	666,000	909	% \$	599,400
2.3.2	Milliken Expansion	2011	\$	1,211,668	\$	-	\$ 1,211,668	\$		\$	-	\$	34,919	\$	1,176,749	\$	1,211,668	909	% <u>\$</u>	31,427
	Subtotal Furniture & Equipment		\$	1,877,668	\$	-	\$ 1,877,668	\$	-	\$	-	\$	700,919	\$	1,176,749	\$	1,877,668		\$	630,827
2.4 Collecti	on Materials																			
2.4.1	East Markham	2010	\$	3,127,000	\$	953,858	\$ 2,173,142	\$	-	\$	-	\$	2,173,142	\$	-	\$	2,173,142	909	% \$	1,955,828
2.4.2	Milliken Expansion	2011	\$	1,847,773	\$	-	\$ 1,847,773	\$	-	\$		\$	-	\$	1,847,773	\$	1,847,773	909	% <u>\$</u>	-
	Subtotal Collection Materials		\$	4,974,773	\$	953,858	\$ 4,020,915	\$	-	\$	-	\$	2,173,142	\$	1,847,773	\$	4,020,915		\$	1,955,828
TOTAL LIBRAI	RY BOARD		\$	24,025,262	\$	6,033,900	\$ 17,991,362	\$	-	\$	3,115,048	\$	11,851,793	\$	3,024,521	\$	17,991,362		\$	10,666,613

Non-Chargeable Growth-Related Net Capital Cost: \$ 1,185,179

Residential Development Charge Calculation			
Residential Share of 2009-2018 Discounted Growth-Related Capital Program	100%	5	10,666,613
10 Year Growth in Population in New Units			61,022
Unadjusted Development Charge Per Capita (\$)			\$174.80
Non-Residential Development Charge Calculation			
Non-Residential Share of 2009-2018 Discounted Growth-Related Capital Program	0%	\$	-
10 Year Growth in Square Metres			1,512,480
Unadjusted Development Charge Per sq. m (\$)			\$0.00



APPENDIX B.2 TABLE 3

TOWN OF MARKHAM CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE LIBRARY BOARD RESIDENTIAL DEVELOPMENT CHARGE

2.00 LIBRARY BOARD

OPENING CASH BALANCE FROM APPLICABLE RESER	VES			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING CASH BALANCE (\$000)	Cha			\$0.00	\$492.07	(\$6,936.08)	(\$6,431.49)	(\$5,625.98)	(\$4,723.37)	(\$3,715.65)	(\$2,594.31)	(\$1,368.26)	(\$716.51)	
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS 2.00 LIBRARY BOARD - constant (\$000) 2.00 LIBRARY BOARD - current (\$000)	Sha Res 100%	Non-Res 0%		\$1,091.5 \$1,091.5	\$8,734.6 \$8,909.3	\$840.5 \$874.5	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$10,666.6 \$10,875.3
NEW UNIT GROWTH - Population in New Units				8,182	8,471	8,714	5,577	5,717	5,861	6,010	6,084	3,168	3,238	61,022
REVENUE - current (\$000) - Dev. Charge Receipts	Rate for 200 \$192.50 Balance:	9 Inflation: Postive	2.0% Negative	\$1,575.1	\$1,663.2	\$1,745.3	\$1,139.3	\$1,191.2	\$1,245.7	\$1,302.9	\$1,345.2	\$714.5	\$744.9	\$12,667.3
- Interest on Opening Balance - Interest on In-year Transactions (excl.int.)	Rate:	3.5% 3.5%	5.5% 5.5%	\$0.0 \$8.5	\$17.2 (\$199.3)	(\$381.5) \$15.2	(\$353.7) \$19.9	(\$309.4) \$20.8	(\$259.8) \$21.8	(\$204.4) \$22.8	(\$142.7) \$23.5	(\$75.3) \$12.5	(\$39.4) \$13.0	(\$1,748.9) (\$41.1)
TOTAL REVENUE				\$1,583.6	\$1,481.2	\$1,379.1	\$805.5	\$902.6	\$1,007.7	\$1,121.3	\$1,226.1	\$651.7	\$718.5	\$10,877.3
CLOSING CASH BALANCE				\$492.1	(\$6,936.1)	(\$6,431.5)	(\$5,626.0)	(\$4,723.4)	(\$3,715.7)	(\$2,594.3)	(\$1,368.3)	(\$716.5)	\$2.0	
LIBRARY BOARD CHARGE PER CAPITA		\$192.50												



B.3 FIRE SERVICES

The Markham Fire Department is responsible for the provision of fire protection, suppression and public education programs for the Town. The Fire Department serves the Town from seven stations and one training centre.

TABLE 1 HISTORIC SERVICE LEVELS

The Fire Services inventory of capital assets includes seven fire stations and one training centre with a combined area of over 70,259 square feet, valued at \$19.32 million. The buildings occupy 3.64 hectares of land which is valued at \$7,65 million. The 44 vehicles associated with the fire stations in the Town of Markham have a replacement value of \$10.96 million. Personal firefighting equipment and other station furniture and equipment add another \$8.82 million to the inventory.

The current value of the total Fire Services capital infrastructure including building, land, vehicles, furniture and equipment is valued at approximately \$46.75 million and has provided Markham with a 10-year average historical service level of \$112.10 per population and employment. The calculated maximum allowable recoverable through development charges is \$11.14 million. No excess capacity has been identified for this service and as such, the full amount of \$11.14 million is brought forward to the development charges calculation.

TABLE 2 2009–2018 PROVISIONAL GROWTH-RELATED CAPITAL BUDGET AND THE CALCULATION OF THE DEVELOPMENT CHARGE

The 2009 to 2018 growth-related capital program provides for the construction of three new fire stations; Cathedral (10,000 square feet), Cornell (11,000 square feet) and Markham Centre (10,000 square feet). The construction of each station will require the purchase of land, fixtures, furniture and equipment, the addition of 20 new firefighters and one pumper truck. The construction cost of each station is estimated to be \$350 per square foot and the subtotal for the construction of the stations equals \$10.85 million. The purchase of land is valued at \$2,100,000 per hectare. Cathedral and Markham Centre station will require 0.4 hectares of land whereas Cornell Station will require 0.6 hectares. The total cost for land is \$2.94 million. Fixtures, furniture and equipment for the three stations total to \$1.21 million. It is anticipated that 60 new firefighters will be recruited in the ten-year program; 20 at each new station, and a second crew at an existing station. The total cost for outfitting the 60 new firefighters is \$497,360. Finally,



1 pumper truck at each station will be required, at a cost of \$650,000 each. In addition, one aerial is required for the second crew at an existing station at a cost of \$1.2 million.

Altogether, the ten-year capital forecast for Fire Services amounts to \$18.64 million. Approximately \$2.63 million is to be funded from the current Fire Services development charges reserve funds and is therefore considered to be the prior growth share. A portion of the Fire Services capital program, \$4.87 million, is deemed as a post-period benefit, and will not be recovered under these development charges. The remaining \$11.14 million is related to growth between 2009 and 2018. Fire Services are not required to be discounted, and the full 2009 to 2018 growth-related share of the capital program, \$11.14 million, is included in the present calculation.

The growth-related cost is allocated 61 per cent, or \$6.84 million, against new residential development, and 39 per cent, or \$4.30 million, against non-residential development. This yields an unadjusted development charge of \$112.10 per capita and \$2.84 per square metre.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the calculated residential charge is increased to \$120.98 per capita and the non-residential charge is also increased to \$3.16 per square metre.

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

	FIRE SERVICES SUMMARY													
10-year Hist.	20	009-2018	Unadj	justed	Adju	sted								
Service Level	Growth-Rela	ated Capital Program	Developme	ent Charge	Development Charge									
per pop+empl	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m								
\$112.10	\$18,642,950	\$11,142,426	\$112.10	\$2.84	\$120.98	\$3.16								



APPENDIX B.3 TABLE 1 - PAGE 1

TOWN OF MARKHAM
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
BUILDINGS (sq.ft.)											(\$/sq. ft.)
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	\$275.00
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	\$275.00
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	\$275.00
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	\$275.00
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	\$275.00
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	\$275.00
Firehall 92 - 10 Riviera Drive, Markham						10,800	10,800	10,800	10,800	10,800	\$275.00
Firehall 98 - 650 Bur Oak Avenue, Markham							9,990	9,990	9,990	9,990	\$275.00
	49,469	49,469	49,469	49,469	49,469	60,269	70,259	70,259	70,259	70,259	
Total (sq.ft.)	43,403										
Total (sq.ft.) Total (\$000)	\$13,604.0	\$13,604.0	\$13,604.0	\$13,604.0	\$13,604.0	\$16,574.0	\$19,321.2	\$19,321.2	\$19,321.2	\$19,321.2	
			\$13,604.0	\$13,604.0	\$13,604.0	\$16,574.0	\$19,321.2	\$19,321.2	\$19,321.2	\$19,321.2	LINUT COOT
Total (\$000)			\$13,604.0	\$13,604.0	\$13,604.0	\$16,574.0	\$19,321.2	\$19,321.2	\$19,321.2	\$19,321.2	UNIT COST
Total (\$000) LAND (hectares)	\$13,604.0	\$13,604.0		. ,				. ,		,	(\$/ha)
Total (\$000) LAND (hectares) Firehall 91 - 7801 Bayview Ave., Thornhill	\$13,604.0 0.41	\$13,604.0 0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	(\$/ha) \$2,100,000
LAND (hectares) Firehall 91 - 7801 Bayview Ave., Thornhill Fire Training Centre - 436 John Street, Thornhill	\$13,604.0 0.41 0.44	\$13,604.0 0.41 0.44	0.41	0.41	0.41	0.41	0.41	0.41 0.44	0.41	0.41	(\$/ha) \$2,100,000 \$2,100,000
LAND (hectares) Firehall 91 - 7801 Bayview Ave., Thornhill Fire Training Centre - 436 John Street, Thornhill Firehall 94 - 7300 Birchmount, Milliken Mills	\$13,604.0 0.41 0.44 0.33	\$13,604.0 0.41 0.44 0.33	0.41 0.44 0.33	0.41 0.44 0.33	0.41 0.44 0.33	0.41 0.44 0.33	0.41 0.44 0.33	0.41 0.44 0.33	0.41 0.44 0.33	0.41 0.44 0.33	(\$/ha) \$2,100,000 \$2,100,000 \$2,100,000
LAND (hectares) Firehall 91 - 7801 Bayview Ave., Thornhill Fire Training Centre - 436 John Street, Thornhill Firehall 94 - 7300 Birchmount, Milliken Mills Firehall 95 - 316 Main Street, Markham	\$13,604.0 0.41 0.44 0.33 0.42	0.41 0.44 0.33 0.42	0.41 0.44 0.33 0.42	0.41 0.44 0.33 0.42	0.41 0.44 0.33 0.42	0.41 0.44 0.33 0.42	0.41 0.44 0.33 0.42	0.41 0.44 0.33 0.42	0.41 0.44 0.33 0.42	0.41 0.44 0.33 0.42	(\$/ha) \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000
LAND (hectares) Firehall 91 - 7801 Bayview Ave., Thornhill Fire Training Centre - 436 John Street, Thornhill Firehall 94 - 7300 Birchmount, Milliken Mills Firehall 95 - 316 Main Street, Markham Firehall 96 - 5567 14th Avenue, Milliken	\$13,604.0 0.41 0.44 0.33 0.42 0.37	\$13,604.0 0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37	(\$/ha) \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000
LAND (hectares) Firehall 91 - 7801 Bayview Ave., Thornhill Fire Training Centre - 436 John Street, Thornhill Firehall 94 - 7300 Birchmount, Milliken Mills Firehall 95 - 316 Main Street, Markham Firehall 96 - 5567 14th Avenue, Milliken Firehall 97 - 209 Main Street, Markham	\$13,604.0 0.41 0.44 0.33 0.42	0.41 0.44 0.33 0.42	0.41 0.44 0.33 0.42	0.41 0.44 0.33 0.42	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	(\$/ha) \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000
Total (\$000) LAND (hectares) Firehall 91 - 7801 Bayview Ave., Thornhill Fire Training Centre - 436 John Street, Thornhill Firehall 94 - 7300 Birchmount, Milliken Mills Firehall 95 - 316 Main Street, Markham Firehall 96 - 5567 14th Avenue, Milliken Firehall 97 - 209 Main Street, Markham Firehall 92 - 10 Riviera Drive, Markham	\$13,604.0 0.41 0.44 0.33 0.42 0.37	\$13,604.0 0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32 0.68	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	(\$/ha) \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000
LAND (hectares) Firehall 91 - 7801 Bayview Ave., Thornhill Fire Training Centre - 436 John Street, Thornhill Firehall 94 - 7300 Birchmount, Milliken Mills Firehall 95 - 316 Main Street, Markham Firehall 96 - 5567 14th Avenue, Milliken Firehall 97 - 209 Main Street, Markham	\$13,604.0 0.41 0.44 0.33 0.42 0.37	\$13,604.0 0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	(\$/ha) \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000
Total (\$000) LAND (hectares) Firehall 91 - 7801 Bayview Ave., Thornhill Fire Training Centre - 436 John Street, Thornhill Firehall 94 - 7300 Birchmount, Milliken Mills Firehall 95 - 316 Main Street, Markham Firehall 96 - 5567 14th Avenue, Milliken Firehall 97 - 209 Main Street, Markham Firehall 92 - 10 Riviera Drive, Markham	\$13,604.0 0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32 0.68 0.67	0.41 0.44 0.33 0.42 0.37 0.32 0.68 0.67	0.41 0.44 0.33 0.42 0.37 0.32 0.68	0.41 0.44 0.33 0.42 0.37 0.32 0.68 0.67	0.41 0.44 0.33 0.42 0.37 0.32	(\$/ha) \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000
Total (\$000) LAND (hectares) Firehall 91 - 7801 Bayview Ave., Thornhill Fire Training Centre - 436 John Street, Thornhill Firehall 94 - 7300 Birchmount, Milliken Mills Firehall 95 - 316 Main Street, Markham Firehall 96 - 5567 14th Avenue, Milliken Firehall 97 - 209 Main Street, Markham Firehall 92 - 10 Riviera Drive, Markham	\$13,604.0 0.41 0.44 0.33 0.42 0.37	\$13,604.0 0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32 0.68	0.41 0.44 0.33 0.42 0.37 0.32	0.41 0.44 0.33 0.42 0.37 0.32	(\$/ha) \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000 \$2,100,000



APPENDIX B.3 TABLE 1 - PAGE 2

TOWN OF MARKHAM
INVENTORY OF CAPITAL ASSETS
FIRE SERVICES

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
VEHICLES (#)											(\$/vehicle)
- Aerial Truck	2	2	2	2	2	2	2	2	2	2	\$1,200,000
- Aircraft Crash Truck	1	1	1	1	-	-	-	-	-	-	\$270,608
- Command Trailer	1	1	1	1	1	1	1	1	1	1	\$129,892
- Flashover Simulator	1	1	1	1	1	1	1	1	1	1	\$64,946
- Incident Command Simulator (Smokehouse)	1	1	1	1	1	1	1	1	1	1	\$45,000
- Mechanical Vehicles				2	2	2	2	2	2	2	\$22,950
- Personnel/ Rehabilitation	1	1	1	1	1	1	1	1	1	1	\$113,655
- Platoon Chief Vehicle	1	1	1	1	1	1	1	1	1	1	\$94,860
- Propane Simulator Props	1	1	1	1	1	1	1	1	1	2	\$34,638
- Pumpers	9	9	9	7	7	7	9	9	9	9	\$676,000
- Rescue Truck	1	1	1	1	-	-	-	-	-	-	\$750,000
- Tankers	2	2	2	1	1	1	1	1	1	1	\$422,149
- Telesquirts	3	3	3	2	2	1	1	1	1	1	\$876,771
- Training Vehicles				2	2	2	2	2	2	4	\$25,500
- Fire Prevention Cars	9	9	9	9	9	9	11	11	11	13	\$18,870
- Deputy Fire Chief Vehicle								2	2	2	\$50,960
- District Chief Vehicle								1	1	1	\$94,536
- Supply Van										1	\$35,700
- Fire Chief	1	1	1	1	1	1	1	1	1	1	\$34,680
Total (#)	24	24	24	24	22	24	25	20	20	44	
Total (#)	34	34 \$43.666.7	34	34 \$44.442.7	32 \$40,003.4	31 \$0.245.2	35	38 \$40.804.5	38 \$40.804.5	44 \$40,000,6	
Total (\$000)	\$13,666.7	\$13,666.7	\$13,666.7	\$11,112.7	\$10,092.1	\$9,215.3	\$10,605.1	\$10,801.5	\$10,801.5	\$10,960.6	

											UNIT COST
FURNITURE AND EQUIPMENT (\$)											(per firefighte
- Dispatch Centre	\$1,623,649	\$1,623,649	\$1,623,649	\$1,623,649	\$1,623,649	\$1,623,649	\$1,623,649	\$1,623,649	\$1,623,649	\$1,623,649	
- Equipment for vehicles	\$2,250,000	\$2,350,000	\$2,350,000	\$2,625,000	\$2,714,800	\$2,938,589	\$2,938,589	\$2,938,589	\$2,938,589	\$2,938,589	
- Other Vehicle Equipment	\$306,004	\$306,004	\$306,004	\$306,004	\$306,004	\$306,004	\$306,004	\$306,004	\$306,004	\$306,004	
- Fire Training Centre						\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	
- Station 91	\$313,906	\$313,906	\$313,906	\$313,906	\$313,906	\$313,906	\$313,906	\$313,906	\$313,906	\$313,906	
- Station 92	\$393,128	\$393,128	\$393,128	\$393,128	\$393,128	\$393,128	\$393,128	\$393,128	\$393,128	\$393,128	
- Station 94	\$245,712	\$245,712	\$245,712	\$245,712	\$245,712	\$245,712	\$245,712	\$245,712	\$245,712	\$245,712	
- Station 95	\$263,031	\$263,031	\$263,031	\$263,031	\$263,031	\$263,031	\$263,031	\$263,031	\$263,031	\$263,031	
- Station 96	\$489,260	\$489,260	\$489,260	\$489,260	\$489,260	\$489,260	\$489,260	\$489,260	\$489,260	\$489,260	
- Station 97	\$388,593	\$388,593	\$388,593	\$388,593	\$388,593	\$388,593	\$388,593	\$388,593	\$388,593	\$388,593	
- Station 98							\$393,026	\$393,026	\$393,026	\$393,026	
Number of Firefighters	166	168	176	176	176	204	230	234	230	231	\$6,217
Total (\$000)	\$7,305.3	\$7,417.7	\$7,467.5	\$7,742.5	\$7,832.3	\$8,255.1	\$8,809.8	\$8,834.7	\$8,809.8	\$8,816.0	



APPENDIX B.3 TABLE 1 - PAGE 3

TOWN OF MARKHAM
CALCULATION OF SERVICE LEVELS
FIRE SERVICES

Historic Population Historic Employment Population+Employment INVENTORY SUMMARY (\$000)	1999 193,736 <u>114,834</u> 308,570	2000 201,038 120,598 321,635	2001 208,615 126,650 335,265	2002 218,270 133,070 351,341	2003 228,373 139,816 368,189	2004 238,943 <u>146,904</u> 385,846	2005 250,002 154,351 404,353	2006 261,573 162,175 423,748	2007 268,342 167,432 435,774	2008 275,287 <u>172,859</u> 448,146	
Buildings	\$13,604.0	\$13,604.0	\$13,604.0	\$13,604.0	\$13,604.0	\$16,574.0	\$19,321.2	\$19,321.2	\$19,321.2	\$19,321.2	
Land	\$4,809.0	\$4,809.0	\$4,809.0	\$4,809.0	\$6,237.0	\$7,644.0	\$7,648.2	\$7,648.2	\$7,648.2	\$7,648.2	
Vehicles	\$13,666.7	\$13,666.7	\$13,666.7	\$11,112.7	\$10,092.1	\$9,215.3	\$10,605.1	\$10,801.5	\$10,801.5	\$10,960.6	
Furniture and Equipment	\$7,305.3	\$7,417.7	\$7,467.5	\$7,742.5	\$7,832.3	\$8,255.1	\$8,809.8	\$8,834.7	\$8,809.8	\$8,816.0	
Total (\$000)	\$39,385.0	\$39,497.4	\$39,547.2	\$37,268.1	\$37,765.3	\$41,688.4	\$46,384.3	\$46,605.6	\$46,580.7	\$46,746.0	
SERVICE LEVEL (\$/pop+empl)						•			•		Average Service Level
Buildings	\$44.09	\$42.30	\$40.58	\$38.72	\$36.95	\$42.95	\$47.78	\$45.60	\$44.34	\$43.11	\$42.64
Land	\$15.58	\$14.95	\$14.34	\$13.69	\$16.94	\$19.81	\$18.91	\$18.05	\$17.55	\$17.07	\$16.69
Vehicles	\$44.29	\$42.49	\$40.76	\$31.63	\$27.41	\$23.88	\$26.23	\$25.49	\$24.79	\$24.46	\$31.14
Furniture and Equipment	\$23.67	\$23.06	\$22.27	\$22.04	\$21.27	\$21.39	\$21.79	\$20.85	\$20.22	\$19.67	\$21.62

\$106.07

\$102.57

\$108.04

\$114.71

\$109.98

\$106.89

\$104.31

\$112.10

TOWN OF MARKHAM CALCULATION OF MAXIMUM ALLOWABLE FIRE SERVICES

Total (\$/pop+empl)

10 Year Average Service Level (1999-2008) \$112.10 per pop+empl

\$127.64

\$122.80

\$117.96

 2008 Population+Employment
 448,146

 Population in New Units + Employment 2009-2018
 99,397

 Population in New Units + Employment 2009-2031
 129,896

					Excess	s Calculation (\$0		
	Average	Maximum Allo	wable		Using		New Maxi	mum
	Service	10 Years	2031	2008	Average	Excess	Allowab	ole
	Level	(\$000)		Inventory	Service Level	Capacity	10 Years	2031
Total Fire Services	\$112.10 per pop+empl	\$11,142.4	\$14,561.4	\$46,746.0	\$50,237.1	\$0.0	\$11,142.4	\$14,561.4



APPENDIX B.3 TABLE 2

TOWN OF MARKHAM GROWTH-RELATED CAPITAL PROGRAM

				Total		Less		Total	Re	placement				Growth-Re	lated	d Costs			2009-	2018	Discounted
Service	Project Description	Timing		Project		Grants	N	/lunicipal	aı	nd Benefit		Prior		2009-		Post					h-Related
				Cost	/Sı	ubsidies		Cost	T	o Existing		Growth		2018		2018		Total	Net	Cap	ital Costs
3.0 FIRE SERVICE	ES																				
3.1 Fire Bu	uildings																				
3.1.1	New Fire Station - Cathedral (10,000 sf)	2009	\$	3,500,000	\$	-	\$	3,500,000	\$	-	\$	2,628,764	\$	871,236	\$	-	\$	3,500,000	1009	% \$	871,236
3.1.2	New Fire Station - Cornell (11,000 sf)	2010	\$		\$	-	\$	3,850,000	\$	-	\$	-	\$	3,850,000	\$	-	\$	3,850,000	1009		
3.1.3	New Fire Station - Markham Centre (10,000 sf)	2017	\$	3,500,000	\$		\$	3,500,000	\$		\$		\$		\$	3,500,000	\$	3,500,000	1009	% <u>\$</u>	
	Subtotal Fire Buildings		\$	10,850,000	\$	-	\$	10,850,000	\$	-	\$	2,628,764	\$	4,721,236	\$	3,500,000	\$	10,850,000		\$	4,721,236
3.2 Land f	or Fire Buildings																				
3.2.1	New Fire Station - Cathedral (0.4 ha)	2009	\$	840,000	\$	-	\$	840,000	\$	-	\$	-	\$	840,000	\$	-	\$	840,000	1009	% \$	840,000
3.2.2	New Fire Station - Cornell (0.6ha)	2009	\$	1,260,000	\$	_	\$	1,260,000	\$	-	\$	-	\$	1,260,000	\$	-	\$	1,260,000	1009	% \$	
3.2.3	New Fire Station - Markham Centre (0.4 ha)	2016	\$	840,000	\$	-	\$	840,000	\$	-	\$	-	\$	631,480	\$	208,520	\$	840,000	1009		
	Subtotal Land for Fire Buildings		\$	2,940,000	\$	-	\$	2,940,000	\$	-	\$	-	\$	2,731,480	\$	208,520	\$	2,940,000		\$	2,731,480
3.3 Furnitu	ure and Equipment														\$	_					
3.3.1	New Fire Station - Cathedral	2009	\$	388,900	\$	-	\$	388,900	\$	_	\$	_	\$	388,900	\$		\$	388,900	1009	% S	388,900
3.3.2	New Fire Station - Cornell	2010	\$	427,790	\$	_	\$	427,790	\$	-	\$	-	\$	427,790	\$	-	\$	427,790	1009	% \$	
3.3.3	New Fire Station - Markham Centre	2017	\$	388,900	\$		\$	388,900	\$		\$	-	\$		\$	388,900	\$	388,900	1009		
	Subtotal Expansion Main Library		\$	1,205,590	\$	-	\$	1,205,590	\$	-	\$	-	\$	816,690	\$	388,900	\$	1,205,590		\$	816,690
3.4 Firefia	hter Equipment																				
3.4.1	New Fire Station - Cathedral (20 firefighters)	2009	\$	124,340	\$	-	\$	124,340	\$	-	\$	-	\$	124,340	\$	-	\$	124,340	1009	% \$	124,340
3.4.2	New Fire Station - Cornell (20 firefighters)	2010	\$	124,340	\$	-	\$	124,340	\$	-	\$	-	\$	124,340	\$	-	\$	124,340	1009	% \$	124,340
3.4.3	2nd. Crew in existing station (20 firefighters)	2014	\$	124,340	\$	-	\$	124,340	\$	-	\$	-	\$	124,340	\$	-	\$	124,340	1009	% \$	124,340
3.4.4	New Fire Station - Markham Centre (20 firefighters)	2017	\$	124,340	\$		\$	124,340	\$		\$		\$	<u> </u>	\$	124,340	\$	124,340	1009	% \$	· -
	Subtotal Firefighter Equipment		\$	497,360	\$	-	\$	497,360	\$	-	\$	-	\$	373,020	\$	124,340	\$	497,360		\$	373,020
3.5 Fire Ve	ehicles																				
3.5.1	1 Pumper Truck - Cathedral	2010	\$	650,000	\$	-	\$	650,000	\$	-	\$	-	\$	650,000	\$	-	\$	650,000	1009	% \$	650,000
3.5.2	1 Pumper Truck - Cornell	2011	\$		\$	-	\$	650,000	\$	_	\$	_	\$	650,000	\$		\$	650,000	1009		,
3.5.3	1 Aerial for 2nd. Crew in existing station	2014	\$	1,200,000	\$	-	\$	1,200,000	\$	_	\$	_	\$	1,200,000	\$		\$	1,200,000	1009		,
3.5.4	1 Pumper Truck - Markham Centre	2017	\$	650,000	\$		\$	650,000	\$		\$	-	\$	-	\$	650,000	\$	650,000	1009		
	Subtotal Fire Vehicles		\$	3,150,000	\$	-	\$	3,150,000	\$	-	\$	-	\$	2,500,000	\$	650,000	\$	3,150,000		\$	2,500,000
TOTAL FIRE	SERVICES		\$	18,642,950	\$	_	\$	18,642,950	\$	_	\$	2.628.764	\$	11,142,426	\$	4,871,760	\$	18,642,950		\$	11,142,426
TOTAL PIKE	SERVICEO		Ψ.	10,042,330	Ψ	-	φ	10,042,330	۳	-	٠	2,020,704	Ψ	11,142,420	φ	-,011,100	Ψ	10,042,930		1	11,142,420

Non-Chargeable Growth-Related Net Capital Cost:

\$

Residential Development Charge Calculation		
Residential Share of 2009-2018 Discounted Growth-Related Capital Program	61%	\$6,840,516
10 Year Growth in Population in New Units		61,022
Unadjusted Development Charge Per Capita (\$)		\$112.10
Non-Residential Development Charge Calculation		
Non-Residential Share of 2009-2018 Discounted Growth-Related Capital Program	39%	\$ 4,301,911
10 Year Growth in Square Metres		1,512,480
Unadjusted Development Charge Per sq. m (\$)		\$2.84



APPENDIX B.3 TABLE 3 - PAGE 1

TOWN OF MARKHAM CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE FIRE SERVICES RESIDENTIAL DEVELOPMENT CHARGE

3.00 FIRE SERVICES

OPENING CASH BALANCE FROM APPLICABLE RESE	RVES			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING CASH BALANCE (\$000)	Ohaa			\$0.00	(\$1,180.88)	(\$3,422.40)	(\$2,916.97)	(\$2,348.87)	(\$1,716.36)	(\$1,928.67)	(\$1,201.62)	(\$860.62)	(\$451.10)	
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS 3.00 FIRE SERVICES - constant (\$000) 3.00 FIRE SERVICES - current (\$000)	Shar Res 61%	Non-Res 39%		\$2,139.2 \$2,139.2	\$3,101.6 \$3,163.6	\$399.0 \$415.2	\$0.0 \$0.0	\$0.0 \$0.0	\$813.0 \$897.7	\$0.0 \$0.0	\$387.7 \$445.3	\$0.0 \$0.0	\$0.0 \$0.0	\$6,840.5 \$7,060.9
NEW UNIT GROWTH - Population in New Units				8,182	8,471	8,714	5,577	5,717	5,861	6,010	6,084	3,168	3,238	61,022
REVENUE - current (\$000) - Dev. Charge Receipts	Rate for 2009 \$120.98 Balance:	Inflation: Postive	2.0% Negative	\$989.9	\$1,045.3	\$1,096.9	\$716.0	\$748.6	\$782.9	\$818.8	\$845.4	\$449.0	\$468.1	\$7,960.9
- Interest on Opening Balance - Interest on In-year Transactions (excl.int.)	Rate:	3.5% 3.5%		\$0.0 (\$31.6)	(\$64.9) (\$58.3)	(\$188.2) \$11.9	(\$160.4) \$12.5	(\$129.2) \$13.1	(\$94.4) (\$3.2)	(\$106.1) \$14.3	(\$66.1) \$7.0	(\$47.3) \$7.9	(\$24.8) \$8.2	(\$881.5) (\$18.1)
TOTAL REVENUE				\$958.3	\$922.1	\$920.6	\$568.1	\$632.5	\$685.3	\$727.1	\$786.3	\$409.5	\$451.5	\$7,061.3
CLOSING CASH BALANCE				(\$1,180.9)	(\$3,422.4)	(\$2,917.0)	(\$2,348.9)	(\$1,716.4)	(\$1,928.7)	(\$1,201.6)	(\$860.6)	(\$451.1)	\$0.4	
FIRE SERVICES CHARGE PER CAPITA		\$120.98												



TOWN OF MARKHAM CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE FIRE SERVICES NON-RESIDENTIAL DEVELOPMENT CHARGE

3.00 FIRE SERVICES

OPENING CASH BALANCE FROM APPLICABLE RESE	RVES			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING CASH BALANCE (\$000)	Oh -			\$0.00	(\$891.25)	(\$2,483.64)	(\$2,379.89)	(\$1,994.71)	(\$1,578.07)	(\$1,702.70)	(\$1,248.73)	(\$1,043.76)	(\$531.36)	
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS 3.00 FIRE SERVICES - constant (\$000) 3.00 FIRE SERVICES - current (\$000)	Sha Res 61%	Non-Res 39%		\$1,345.3 \$1,345.3	\$1,950.5 \$1,989.6	\$251.0 \$261.1	\$0.0 \$0.0	\$0.0 \$0.0	\$511.3 \$564.5	\$0.0 \$0.0	\$243.8 \$280.1	\$0.0 \$0.0	\$0.0 \$0.0	\$4,301.9 \$4,440.5
NON-RESIDENTIAL SPACE GROWTH - Growth in Sq. m				151,248	151,248	151,248	151,248	151,248	151,248	151,248	151,248	151,248	151,248	1,512,480
REVENUE - current (\$000) - Dev. Charge Receipts	Rate for 200 \$3.16 Balance:	9 Inflation: Postive	2.0% Negative	\$477.9	\$487.5	\$497.3	\$507.2	\$517.3	\$527.7	\$538.2	\$549.0	\$560.0	\$571.2	\$5,233.3
- Interest on Opening Balance - Interest on In-year Transactions (excl.int.)	Rate: Rate:	3.5% 3.5%	5.5% 5.5%	\$0.0 (\$23.9)	(\$49.0) (\$41.3)	(\$136.6) \$4.1	(\$130.9) \$8.9	(\$109.7) \$9.1	(\$86.8) (\$1.0)	(\$93.6) \$9.4	(\$68.7) \$4.7	(\$57.4) \$9.8	(\$29.2) \$10.0	(\$762.0) (\$10.2)
TOTAL REVENUE				\$454.0	\$397.2	\$364.8	\$385.2	\$416.6	\$439.9	\$454.0	\$485.0	\$512.4	\$552.0	\$4,461.1
CLOSING CASH BALANCE				(\$891.3)	(\$2,483.6)	(\$2,379.9)	(\$1,994.7)	(\$1,578.1)	(\$1,702.7)	(\$1,248.7)	(\$1,043.8)	(\$531.4)	\$20.6	
FIRE SERVICES CHARGE PER SQ. M		\$3.16												



B.4 INDOOR RECREATION

The Town of Markham Recreation Department is responsible for providing indoor leisure space to its residents. The Town offers a wide array of indoor recreational opportunities by way of halls and meeting rooms, ice pads, indoor soccer facilities, indoor pools, fitness centres, gymnasiums, senior centres and other common spaces in community centres.

TABLE 1 HISTORIC SERVICE LEVELS

The ten-year historic inventory of capital assets for Indoor Recreation includes over 827,000 square feet of indoor recreation building space valued at \$252.18 million. These buildings occupy over 37 hectares of land valued at \$78.79 million. The fixtures, furniture and equipment to the indoor facilities add another \$4.86 million to the inventory.

The combined value of capital assets for Indoor Recreation is \$335.84 million. The tenyear historic average service level is \$1,255.72 per capita, and this, multiplied by the ten-year forecast growth in population in new units, results in a maximum allowable of \$76.63 million. No excess capacity has been identified for this service and as such, the full maximum allowable of \$76.63 million is brought forward to the development charges calculation.

TABLE 2 2009–2018 PROVISIONAL GROWTH-RELATED CAPITAL BUDGET AND THE CALCULATION OF THE DEVELOPMENT CHARGE

The 2009–2018 growth-related capital program for Indoor Recreation amounts to \$112.38 million. It provides for a 34,000 square foot expansion of the Centennial Community Centre at a cost of \$4.84 million, the construction of the 105,000 square foot East Markham Community Centre at \$45.79 million and the provision for an additional indoor recreation space of 132,000 square feet, slated for 2013 for \$53.0 million. A 2.8 hectare parcel of land is required for the construction of the East Markham Community Centre at a cost of \$5.09 million. Finally, equipment for the East Markham Community Centre adds another \$2.67 million to the capital program.

Of the \$112.38 million capital program, approximately \$32.96 million is to be funded from the current Indoor Recreation development charges reserve fund and is therefore considered to be the prior growth share. A share of \$2.79 million is related to growth

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beyond 2018 and will be recovered through future development charges. The remaining \$76.63 million is related to growth between 2009 and 2018 and is subject to the ten per cent reduction required by the legislation. \$68.96 million, is then brought forward to the development charges calculation.

The entire discounted growth-related net capital cost of \$68.96 million for Indoor Recreation is allocated against residential development in the Town of Markham. This results in a charge of \$1,130.15 per capita.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the residential calculated charge increases to \$1,174.13 per capita.

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

		INDOOR REC	CREATION SUMM	1ARY		
10-year Hist.	20	009-2018	Unadji	usted	Adju	sted
Service Level	Growth-Rel∂	ated Capital Program	Developme	ent Charge	Developme	ent Charge
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$1,255.72	\$112,379,982	\$68,963,382	\$1,130.15	\$0.00	\$1,174.13	\$0.00



TOWN OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION DEPARTMENT
INDOOR RECREATION

Halls / Meeting Rooms (sq. ft.)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST (\$/sq. ft.)
Angus Glen Community Centre						12,498	12,498	12,498	12,498	12,498	\$390
Armadale Community Centre	5,460	5,460	5,460	5,460	5,460	5,460	5,460	5,460	5,460	5,460	\$180
Box Grove Community Centre	5,920	5,920	5,920	5,920	5,920	5,920	5,920	5,920	5,920	5,920	\$160
Buttonville Women's Institute	5,360	5,360	5,360	5,360	5,360	5,360	5,360	5,360	5,360	5,360	\$160
Cedar Grove Community Centre	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	3,562	\$160
Centennial Community Centre	6,188	6,188	6,188	6,188	6,188	6,188	6,188	6,188	6,188	6,188	\$390
Crosby Memorial Community Centre	5,521	5,521	5,521	5,521	5,521	5,521	5,521	5,521	5,521	5,521	\$180
German Mills Community Centre	1,983	1,983	1,983	1,983	1,983	1,983	1,983	1,983	1,983	1,983	\$220
Heintzman House	14,266	14,266	14,266	14,266	14,266	14,266	14,266	14,266	14,266	14,266	\$350
Rouge River Community Centre	12,160	12,160	12,160	12,160	12,160	12,160	12,160	12,160	12,160	12,160	\$230
Markham Community Centre	6,568	6,568	6,568	6,568	6,568	6,568	6,568	6,568	6,568	6,568	\$180
Markham Train Station			2,262	2,262	2,262	2,262	2,262	2,262	2,262	2,262	\$300
Museum Education Building	1,167	1,167	1,167	1,167	1,167	1,167	1,167	1,167	1,167	1,167	\$241
McKay House	3,116	3,116	3,116	3,116	3,116	3,116	3,116	3,116	3,116	3,116	\$168
Milliken Mills Community Centre	9,956	9,956	9,956	9,956	9,956	9,956	9,956	9,956	9,956	9,956	\$390
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	\$160
Thornhill Community Centre	16,158	16,158	16,158	16,158	16,158	16,158	16,158	16,158	16,158	16,158	\$390
Unionville Train Station	1,514	1,514	1,514	1,514	1,514	1,514	1,514	1,514	1,514	1,514	\$300
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	\$300
Victoria Square Community Centre	8,774	8,774	8,774	8,774	8,774	8,774	8,774	8,774	8,774	8,774	\$160
Warden House	5,296	5,296	5,296	5,296	5,296	5,296	5,296	5,296	5,296	5,296	\$300
YMCA								20,000	20,000	20,000	\$346
Total (sq.ft.)	118,033	118,033	120,295	120,295	120,295	132,793	132,793	152,793	152,793	152,793	
Total (\$000)	\$31,656.0	\$31,656.0	\$32,334.6	\$32,334.6	\$32,334.6	\$37,208.8	\$37,208.8	\$44,128.8	\$44,128.8	\$44,128.8	
Ice Pads (sq. ft.)											LINUT COST
											UNIT COST (\$/sq. ft.)
Angus Glen Community Centre					65,259	69,126	69,126	69,126	69,126	69,126	(\$/sq. ft.)
Angus Glen Community Centre Centennial Community Centre	45,187	45,187	45,187	45,187	65,259 45,187	69,126 45,187	69,126 45,187	69,126 45,187	69,126 45,187	45,187	(\$/sq. ft.) \$390 \$390
- i	45,187 26,166	45,187 26,166	45,187 26,166	45,187 26,166						45,187 26,166	(\$/sq. ft.) \$390 \$390 \$180
Centennial Community Centre		26,166 28,889			45,187	45,187 26,166 28,889	45,187 26,166 28,889	45,187	45,187	45,187 26,166 28,889	(\$/sq. ft.) \$390 \$390 \$180 \$180
Centennial Community Centre Crosby Memorial Community Centre	26,166	26,166	26,166	26,166	45,187 26,166	45,187 26,166	45,187 26,166	45,187 26,166	45,187 26,166	45,187 26,166	(\$/sq. ft.) \$390 \$390 \$180 \$180 \$390
Centennial Community Centre Crosby Memorial Community Centre Markham Community Centre	26,166 28,889	26,166 28,889	26,166 28,889	26,166 28,889	45,187 26,166 28,889	45,187 26,166 28,889	45,187 26,166 28,889	45,187 26,166 28,889	45,187 26,166 28,889	45,187 26,166 28,889 33,054 29,309	(\$/sq. ft.) \$390 \$390 \$180 \$180 \$390 \$180
Centennial Community Centre Crosby Memorial Community Centre Markham Community Centre Milliken Mills Community Centre	26,166 28,889 33,054	26,166 28,889 33,054	26,166 28,889 33,054	26,166 28,889 33,054	45,187 26,166 28,889 33,054	45,187 26,166 28,889 33,054	45,187 26,166 28,889 33,054	45,187 26,166 28,889 33,054	45,187 26,166 28,889 33,054	45,187 26,166 28,889 33,054	(\$/sq. ft.) \$390 \$390 \$180 \$180 \$180 \$180 \$180
Centennial Community Centre Crosby Memorial Community Centre Markham Community Centre Milliken Mills Community Centre Mt. Joy Community Centre	26,166 28,889 33,054 29,309	26,166 28,889 33,054 29,309	26,166 28,889 33,054 29,309	26,166 28,889 33,054 29,309	45,187 26,166 28,889 33,054 29,309	45,187 26,166 28,889 33,054 29,309	45,187 26,166 28,889 33,054 29,309	45,187 26,166 28,889 33,054 29,309	45,187 26,166 28,889 33,054 29,309	45,187 26,166 28,889 33,054 29,309	(\$/sq. ft.) \$390 \$390 \$180 \$180 \$180 \$180 \$180
Centennial Community Centre Crosby Memorial Community Centre Markham Community Centre Milliken Mills Community Centre Mt. Joy Community Centre R.J. Clatworthy Arena Thornhill Community Centre	26,166 28,889 33,054 29,309 32,329 68,520	26,166 28,889 33,054 29,309 32,329 68,520	26,166 28,889 33,054 29,309 32,329 68,520	26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	(\$/sq. ft.) \$390 \$390 \$180 \$180 \$180 \$180 \$180
Centennial Community Centre Crosby Memorial Community Centre Markham Community Centre Milliken Mills Community Centre Mt. Joy Community Centre R.J. Clatworthy Arena Thornhill Community Centre Total (sq.ft.)	26,166 28,889 33,054 29,309 32,329 68,520 263,454	26,166 28,889 33,054 29,309 32,329 68,520 263,454	26,166 28,889 33,054 29,309 32,329 68,520 263,454	26,166 28,889 33,054 29,309 32,329 68,520 263,454	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520 332,580	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	
Centennial Community Centre Crosby Memorial Community Centre Markham Community Centre Milliken Mills Community Centre Mt. Joy Community Centre R.J. Clatworthy Arena Thornhill Community Centre	26,166 28,889 33,054 29,309 32,329 68,520	26,166 28,889 33,054 29,309 32,329 68,520	26,166 28,889 33,054 29,309 32,329 68,520	26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	(\$/sq. ft.) \$390 \$390 \$180 \$180 \$180 \$180 \$180
Centennial Community Centre Crosby Memorial Community Centre Markham Community Centre Milliken Mills Community Centre Mt. Joy Community Centre R.J. Clatworthy Arena Thornhill Community Centre Total (sq.ft.)	26,166 28,889 33,054 29,309 32,329 68,520 263,454	26,166 28,889 33,054 29,309 32,329 68,520 263,454	26,166 28,889 33,054 29,309 32,329 68,520 263,454	26,166 28,889 33,054 29,309 32,329 68,520 263,454	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520 332,580	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	(\$/sq. ft.) \$390 \$390 \$180 \$180 \$180 \$180 \$180
Centennial Community Centre Crosby Memorial Community Centre Markham Community Centre Milliken Mills Community Centre Mt. Joy Community Centre R.J. Clatworthy Arena Thornhill Community Centre Total (sq.ft.) Total (\$000)	26,166 28,889 33,054 29,309 32,329 68,520 263,454	26,166 28,889 33,054 29,309 32,329 68,520 263,454	26,166 28,889 33,054 29,309 32,329 68,520 263,454	26,166 28,889 33,054 29,309 32,329 68,520 263,454	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520 332,580	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	45,187 26,166 28,889 33,054 29,309 32,329 68,520	(\$/sq. ft.) \$390 \$390 \$180 \$180 \$180 \$390 \$180 \$180 \$180 \$180 \$180
Centennial Community Centre Crosby Memorial Community Centre Markham Community Centre Milliken Mills Community Centre Mt. Joy Community Centre R.J. Clatworthy Arena Thornhill Community Centre Total (sq.ft.) Total (\$000)	26,166 28,889 33,054 29,309 32,329 68,520 263,454 \$78,241.5	26,166 28,889 33,054 29,309 32,329 68,520 263,454 \$78,241.5	26,166 28,889 33,054 29,309 32,329 68,520 263,454 \$78,241.5	26,166 28,889 33,054 29,309 32,329 68,520 263,454 \$78,241.5	45,187 26,166 28,889 33,054 29,309 32,329 68,520 328,713 \$103,692.5	45,187 26,166 28,889 33,054 29,309 32,329 68,520 332,580 \$105,200.7	45,187 26,166 28,889 33,054 29,309 32,329 68,520 332,580 \$105,200.7	45,187 26,166 28,889 33,054 29,309 32,329 68,520 332,580 \$105,200.7	45,187 26,166 28,889 33,054 29,309 32,329 68,520 332,580 \$105,200.7	45,187 26,166 28,889 33,054 29,309 32,329 68,520 332,580 \$105,200.7	(\$/sq. ft.) \$390 \$390 \$180 \$180 \$390 \$180 \$390 \$180 \$180 \$180 \$390
Centennial Community Centre Crosby Memorial Community Centre Markham Community Centre Milliken Mills Community Centre Mt. Joy Community Centre R.J. Clatworthy Arena Thornhill Community Centre Total (sq.ft.) Total (\$000)	26,166 28,889 33,054 29,309 32,329 68,520 263,454 \$78,241.5	26,166 28,889 33,054 29,309 32,329 68,520 263,454 \$78,241.5	26,166 28,889 33,054 29,309 32,329 68,520 263,454 \$78,241.5	26,166 28,889 33,054 29,309 32,329 68,520 263,454 \$78,241.5	45,187 26,166 28,889 33,054 29,309 32,329 68,520 328,713 \$103,692.5	45,187 26,166 28,889 33,054 29,309 32,329 68,520 332,580 \$105,200.7	45,187 26,166 28,889 33,054 29,309 32,329 68,520 332,580 \$105,200.7	45,187 26,166 28,889 33,054 29,309 32,329 68,520 332,580 \$105,200.7	45,187 26,166 28,889 33,054 29,309 32,329 68,520 332,580 \$105,200.7	45,187 26,166 28,889 33,054 29,309 32,329 68,520 332,580 \$105,200.7	(\$/sq. ft.) \$390 \$390 \$180 \$180 \$180 \$390 \$180 \$180 \$UNIT COST



TOWN OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION DEPARTMENT
INDOOR RECREATION

Indoor Pools (sq. ft.)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST (\$/sq. ft.)
Angus Glen Community Centre						24,364	24,364	24,364	24,364	24,364	\$438
Centennial Community Centre	19,062	19,062	19,062	19,062	19,062	19,062	19,062	19,062	19,062	19,062	\$316
Milliken Mills Community Centre	23,950	23,950	23,950	23,950	23,950	23,950	23,950	23,950	23,950	23,950	\$438
Thornlea Pool	15,082	15,082	15,082	15,082	15,082	15,082	15,082	16,352	16,352	16,352	\$316
Total (sq.ft.)	58,094	58,094	58,094	58,094	58,094	82,458	82,458	83,728	83,728	83,728	
Total (\$000)	\$21,279.6	\$21,279.6	\$21,279.6	\$21,279.6	\$21,279.6	\$31,951.0	\$31,951.0	\$32,352.4	\$32,352.4	\$32,352.4	
Fitness Centres (sq. ft.)											UNIT COST (\$/sq. ft.)
Centennial Community Centre	8,229	8,229	8,229	8,229	8,229	8.229	8,229	8,229	8.229	8,229	\$390
Thornhill Community Centre	12,961	12,961	12,961	12,961	12,961	12,961	12,961	16.932	16.932	16,932	\$390
Thomas Community Contro	12,001	12,001	12,001	12,001	12,001	12,001	12,001	10,002	10,002	10,002	φοσο
Total (sq.ft.)	21,190	21,190	21,190	21,190	21,190	21,190	21,190	25,161	25,161	25,161	
Total (\$000)	\$8,264.1	\$8,264.1	\$8,264.1	\$8,264.1	\$8,264.1	\$8,264.1	\$8,264.1	\$9,812.8	\$9,812.8	\$9,812.8	
Gymnasiums (sq. ft.)											UNIT COST (\$/sq. ft.)
Angus Glen Community Centre						9,598	9,598	9,598	9,598	9,598	\$241
Armadale Community Centre	10,858	10,858	10,858	10,858	10,858	10,858	10,858	10,858	10,858	10,858	\$241
Flowervale Public School	4,060	4,060	4,060	4,060	4,060	4,060	4,060	4,060	4,060	4,060	\$241
Thornhill Community Centre								3,809	3,809	3,809	\$241
Reesor Park Public School	3,320	3,320	3,320	3,320	3,320	3,320	3,320	3,320	3,320	3,320	\$241
Total (sq.ft.)	18,238	18,238	18,238	18,238	18,238	27,836	27,836	31,645	31,645	31,645	
Total (\$000)	\$4,395.4	\$4,395.4	\$4,395.4	\$4,395.4	\$4,395.4	\$6,708.5	\$6,708.5	\$7,626.4	\$7,626.4	\$7,626.4	
Senior Centres (sq. ft.)	44400	44400	44.400	44400	44400	44.400	44400	44.400	44400	44400	UNIT COST (\$/sq. ft.)
Markham Seniors Activity Centre	14,139	14,139	14,139	14,139	14,139	14,139	14,139	14,139	14,139	14,139	\$160
Thornhill Seniors Centre						5,600	5,600	6,720	6,720	6,720	\$160
Total (sq.ft.)	14,139	14,139	14,139	14,139	14,139	19,739	19,739	20,859	20,859	20,859	
Total (\$000)	\$2,262.2	\$2,262.2	\$2,262.2	\$2,262.2	\$2,262.2	\$3,158.2	\$3,158.2	\$3,337.4	\$3,337.4	\$3,337.4	
Common Space - Major Community Ce	ntres (sq. ft.)						_				UNIT COST (\$/sq. ft.)
Angus Glen Community Centre					199	33,905	33,905	33,905	33,905	33,905	\$390
Armadale Community Centre	7,239	7,239	7,239	7,239	7,239	7,239	7,239	7,239	7,239	7,239	\$180
Centennial Community Centre	11,096	11,096	11,096	11,096	11,096	11,096	11,096	11,096	11,096	11,096	\$390
Crosby Community Centre	2,606	2,606	2,606	2,606	2,606	2,606	2,606	2,606	2,606	2,606	\$180
Heintzman House	1,660	1,660	1,660	1,660	1,660	1,660	1,660	1,660	1,660	1,660	\$350
Markham Community Centre	11,096	11,096	11,096	11,096	11,096	11,096	11,096	11,096	11,096	11,096	\$180
Milliken Mills Community Centre	19,613	19,613	19,613	19,613	19,613	19,613	19,613	19,613	19,613	19,613	\$390
Mount Joy Community Centre	4,295	4,295	4,295	4,295	4,295	4,295	4,295	4,295	4,295	4,295	\$180
		6,180	6,180	6,180	6,180	6,180	6,180	6,180	6,180	6,180	\$230
Rouge River Community Centre	6,180										
	11,357	11,357	11,357	11,357	11,357	11,357	11,357	28,770	28,770	28,770	\$390
Rouge River Community Centre						11,357 109,047	11,357 109,047	28,770 126,460	28,770 126,460	28,770 126,460	\$390



76

TOWN OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION DEPARTMENT
INDOOR RECREATION - LAND

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
LAND (ha)											(\$/ha)
Angus Glen Community Centre			5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	\$2,100,000
Armadale Community Centre	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	\$2,100,000
Box Grove Community Centre	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	\$2,100,000
Buttonville Women's Institute	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	\$2,100,000
Cedar Grove Community Centre	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	\$2,100,000
Centennial Community Centre	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	\$2,100,000
Crosby Memorial Community Centre	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	\$2,100,000
German Mills Community Centre	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$2,100,000
Heintzman House	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	\$2,100,000
Rouge River Community Centre	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	\$2,100,000
Markham Community Centre	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	\$2,100,000
Markham Seniors Activity Centre	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$2,100,000
Markham Train Station	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	\$2,100,000
McKay House	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	\$2,100,000
Milliken Mills Community Centre	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.79	3.79	\$2,100,000
Milliken Soccer Dome	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	\$2,100,000
Mt. Joy Community Centre	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	\$2,100,000
Museum Education Building	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	\$2,100,000
Old Unionville Library Community Centre	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53	\$2,100,000
R.J. Clatworthy Arena	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	\$2,100,000
Thornhill Community Centre	3.09	3.09	3.09	3.09	3.09	3.09	3.09	3.09	3.09	3.09	\$2,100,000
Unionville Train Station	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	\$2,100,000
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	\$2,100,000
Victoria Square Community Centre	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	\$2,100,000
Warden House	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	\$2,100,000
Total (ha)	31.72	31.72	37.52	37.52	37.52	37.52	37.52	37.52	37.52	37.52	
Total (\$000)	\$66,612.0	\$66,612.0	\$78,792.0	\$78,792.0	\$78,792.0	\$78,792.0	\$78,792.0	\$78,792.0	\$78,792.0	\$78,792.0	1



TOWN OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION DEPARTMENT
INDOOR RECREATION - EQUIPMENT

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Halls / Meeting Rooms (\$) Centennial Community Centre	\$35,466	\$35,466	\$35.466	\$35,466	\$35,466	\$35.466	\$35,466	\$35,466	\$35.466	\$35,466
Crosby Memorial Community Centre	\$32,402	\$32,402	\$32,402	\$32,402	\$32,402	\$32,402	\$32,402	\$32,402	\$32,402	\$32,402
Markham Community Centre	\$27,880	\$27,880	\$27,880	\$27,880	\$27,880	\$27,880	\$27,880	\$27,880	\$27,880	\$27,880
Milliken Mills Community Centre	\$45,938	\$45,938	\$45,938	\$45,938	\$45,938	\$45,938	\$45,938	\$45,938	\$45.938	\$45,938
Thornhill Community Centre	\$123,820	\$123,820	\$123,820	\$123,820	\$123,820	\$123,820	\$123,820	\$123,820	\$123,820	\$123,820
Angus Glen Community Centre	\$41,590	\$41,590	\$41,590	\$41,590	\$41,590	\$41,590	\$41,590	\$41,590	\$41,590	\$41,590
Armadale Community Centre	\$26,080	\$26,080	\$26,080	\$26,080	\$26,080	\$26,080	\$26,080	\$26,080	\$26.080	\$26,080
Rouge River Community Centre	\$35,110	\$35,110	\$35,110	\$35,110	\$35,110	\$35,110	\$35,110	\$35,110	\$35,110	\$35,110
Warden House	\$11,290	\$11,290	\$11,290	\$11,290	\$11,290	\$11,290	\$11,290	\$11,290	\$11,290	\$11,290
Box Grove Community Centre	\$2,300	\$2,300	\$2,300	\$2,300	\$2,300	\$2,300	\$2,300	\$2,300	\$2,300	\$2,300
Cedar Grove Community Centre	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700
German Mills Community Centre	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800
Mount Joy Community Centre	\$1,070	\$1,070	\$1,070	\$1,070	\$1,070	\$1,070	\$1,070	\$1,070	\$1,070	\$1,070
mount boy command, contro	\$1,010	ψ.,σ.σ	ψ.,σ.σ	ψ1,070	ψ.,σ.σ	ψ.,σ.σ	\$1,070	ψ.,σ.σ	ψ.,σ.σ	ψ.,σ.σ
Total (\$000)	\$387.4	\$387.4	\$387.4	\$387.4	\$387.4	\$387.4	\$387.4	\$387.4	\$387.4	\$387.4
Angus Glen Community Centre Centennial Community Centre	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000 \$160,000	\$160,000 \$160,000	\$160,000 \$160,000	\$160,000 \$160,000	\$160,000 \$160,000	\$160,000 \$160,000
ce Pads (\$)										
Angus Glen Community Centre					\$160,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000
	+,	*,	+/	*,	,		/			
Crosby Memorial Community Centre	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000
Markham Community Centre	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000
Milliken Mills Community Centre	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000
Mt. Joy Community Centre	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000
R.J. Clatworthy Arena	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000
Thornhill Community Centre	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000
Total (\$000)	\$720.0	\$720.0	\$720.0	\$720.0	\$880.0	\$880.0	\$880.0	\$880.0	\$880.0	\$880.0
ndoor Pools (\$)							007.000	<u></u> የሰማ በርር	007.000	
Angus Glen Community Centre					\$97,866	\$97,866	\$97,866	\$97,866	\$97,866	\$97,866
	\$51,062	\$51,062	\$51,062	\$51,062	\$97,866 \$51,062	\$97,866 \$51,062	\$97,866	\$51,062	\$97,866 \$51,062	\$97,866 \$51,062
Angus Glen Community Centre	\$51,062 \$65,311	\$51,062 \$65,311	\$51,062 \$65,311	\$51,062 \$65,311						
Angus Glen Community Centre Centennial Community Centre					\$51,062	\$51,062	\$51,062	\$51,062	\$51,062	\$51,062



TOWN OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION DEPARTMENT
INDOOR RECREATION - EQUIPMENT

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Program Supplies (\$)										
Armadale Community Centre	\$35,896	\$35,896	\$35,896	\$35,896	\$35,896	\$35,896	\$35,896	\$35,896	\$35,896	\$35,896
Mount Joy C.C.	\$5,622	\$5,622	\$5,622	\$5,622	\$5,622	\$5,622	\$5,622	\$5,622	\$5,622	\$5,622
Markham Village C.C.	\$15,272	\$15,272	\$15,272	\$15,272	\$15,272	\$15,272	\$15,272	\$15,272	\$15,272	\$15,272
Centennial C.C.	\$24,581	\$24,581	\$24,581	\$24,581	\$24,581	\$24,581	\$24,581	\$24,581	\$24,581	\$24,581
Crosby Arena	\$13,015	\$13,015	\$13,015	\$13,015	\$13,015	\$13,015	\$13,015	\$13,015	\$13,015	\$13,015
Angus Glen C.C.	\$88,437	\$88,437	\$88,437	\$88,437	\$88,437	\$88,437	\$88,437	\$88,437	\$88,437	\$88,437
Milliken Mills C.C.	\$68,160	\$68,160	\$68,160	\$68,160	\$68,160	\$68,160	\$68,160	\$68,160	\$68,160	\$68,160
Milliken Mills Dome	\$8,457	\$8,457	\$8,457	\$8,457	\$8,457	\$8,457	\$8,457	\$8,457	\$8,457	\$8,457
Rouge River C.C.	\$21,302	\$21,302	\$21,302	\$21,302	\$21,302	\$21,302	\$21,302	\$21,302	\$21,302	\$21,302
Thornhill C.C.	\$95,221	\$95,221	\$95,221	\$95,221	\$95,221	\$95,221	\$95,221	\$95,221	\$95,221	\$95,221
Warden House	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000
Old Library	\$13,000	\$13,000	\$13,000	\$13,000	\$13,000	\$13,000	\$13,000	\$13,000	\$13,000	\$13,000
Train Station										\$2,000
Total (\$000)	\$397.0	\$397.0	\$397.0	\$397.0	\$397.0	\$397.0	\$397.0	\$397.0	\$397.0	\$399.0
Soccer Dome (\$)										
Milliken Soccer Dome	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$11,000
Total (\$000)	\$11.0	\$11.0	\$11.0	\$11.0	\$11.0	\$11.0	\$11.0	\$11.0	\$11.0	\$11.0
Senior Centres (\$)			<u> </u>							
Markham Seniors Activity (TSC,Angus)	\$56,937	\$56,937	\$56,937	\$56,937	\$56,937	\$28,757	\$28,757	\$28,757	\$28,757	\$28,757
Total (\$000)	\$56.9	\$56.9	\$56.9	\$56.9	\$56.9	\$28.8	\$28.8	\$28.8	\$28.8	\$28.8



TOWN OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PARKS & RECREATION DEPARTMENT
INDOOR RECREATION - EQUIPMENT

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Common Space - Major Community Centre	es (\$)									
Angus Glen Community Centre	\$82,900	\$82,900	\$82,900	\$82,900	\$82,900	\$82,900	\$82,900	\$82,900	\$82,900	\$82,900
Centennial Community Centre	\$118,600	\$118,600	\$118,600	\$118,600	\$118,600	\$118,600	\$118,600	\$118,600	\$118,600	\$118,600
Crosby Memorial Community Centre	\$485,200	\$485,200	\$485,200	\$485,200	\$485,200	\$485,200	\$485,200	\$485,200	\$485,200	\$485,200
Markham Community Centre	\$162,100	\$162,100	\$162,100	\$162,100	\$162,100	\$162,100	\$162,100	\$162,100	\$162,100	\$162,100
Milliken Mills Community Centre	\$105,500	\$105,500	\$105,500	\$105,500	\$105,500	\$105,500	\$105,500	\$105,500	\$105,500	\$105,500
Mt. Joy Community Centre	\$575,275	\$575,275	\$575,275	\$575,275	\$575,275	\$575,275	\$575,275	\$575,275	\$575,275	\$575,275
R.J. Clatworthy Arena	\$155,000	\$155,000	\$155,000	\$155,000	\$155,000	\$155,000	\$155,000	\$155,000	\$155,000	\$155,000
Thornhill Community Centre	\$134,300	\$134,300	\$134,300	\$134,300	\$134,300	\$134,300	\$134,300	\$134,300	\$134,300	\$134,300
Milliken Mills Dome	\$77,750	\$77,750	\$77,750	\$77,750	\$77,750	\$77,750	\$77,750	\$77,750	\$77,750	\$77,750
Armadale Community Centre	\$11,400	\$11,400	\$11,400	\$11,400	\$11,400	\$11,400	\$11,400	\$11,400	\$11,400	\$11,400
Rouge River Community Centre	\$14,700	\$14,700	\$14,700	\$14,700	\$14,700	\$14,700	\$14,700	\$14,700	\$14,700	\$14,700
Warden House	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300	\$5,300
Old Library	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Buttonville Inst.	\$9,300	\$9,300	\$9,300	\$9,300	\$9,300	\$9,300	\$9,300	\$9,300	\$9,300	\$9,300
Train Station	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700
Box Grove	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800	\$1,800
Cedar Grove	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
German Mills	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000
Heinzman House	\$32,300	\$32,300	\$32,300	\$32,300	\$32,300	\$32,300	\$32,300	\$32,300	\$32,300	\$32,300
Victoria Square	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000
Automatic External Defibrilation Program	\$121,000	\$121,000	\$121,000	\$121,000	\$121,000	\$121,000	\$121,000	\$121,000	\$121,000	\$121,000
										•
Total (\$000)	\$2,144.1	\$2,144.1	\$2,144.1	\$2,144.1	\$2,144.1	\$2,144.1	\$2,144.1	\$2,144.1	\$2,144.1	\$2,144.1



TOWN OF MARKHAM
CALCULATION OF SERVICE LEVELS
PARKS & RECREATION DEPARTMENT
INDOOR RECREATION

Historic Population	1999 193,736	2000 201,038	2001 208,615	2002 218,270	2003 228,373	2004 238,943	2005 250,002	2006 261,573	2007 268,342	2008 275,287	
INVENTORY SUMMARY (\$000)											
Indoor Recreation - Major Facilities	\$175,808.5	\$175,808.5	\$176,487.1	\$176,487.1	\$202,015.7	\$235,424.0	\$235,424.0	\$252,182.2	\$252,182.2	\$252,182.2	
Indoor Recreation - Land	\$66,612.0	\$66,612.0	\$78,792.0	\$78,792.0	\$78,792.0	\$78,792.0	\$78,792.0	\$78,792.0	\$78,792.0	\$78,792.0	
Indoor Recreation - Equipment	\$4,567.7	\$4,567.7	\$4,567.7	\$4,567.7	\$4,825.6	\$4,859.5	\$4,859.5	\$4,859.5	\$4,859.5	\$4,861.5	
Total (\$000)	\$246,988.2	\$246,988.2	\$259,846.8	\$259,846.8	\$285,633.3	\$319,075.5	\$319,075.5	\$335,833.8	\$335,833.8	\$335,835.8	
											Average
SERVICE LEVEL (\$/capita)											Service Level
Indoor Recreation - Major Facilities	\$907.47	\$874.50	\$845.99	\$808.57	\$884.59	\$985.27	\$941.69	\$964.10	\$939.78	\$916.07	\$906.80

\$345.01

\$21.13

\$1,250.73

\$329.75

\$1,335.36

\$20.34

\$315.17

\$19.44

\$1,276.29

\$301.22

\$18.58

\$1,283.90

\$293.63

\$1,251.51

\$18.11

\$286.22

\$17.66

\$1,219.95

\$328.48

\$20.44

\$1,255.72

\$360.98

\$20.93

\$1,190.48

TOWN OF MARKHAM
CALCULATION OF MAXIMUM ALLOWABLE
PARKS & RECREATION DEPARTMENT

Indoor Recreation - Land

INDOOR RECREATION

Total (\$/capita)

Indoor Recreation - Equipment

10 Year Average Service Level (1999-2008) \$1,255.72 per capita

\$343.83

\$23.58

\$1,274.87

 2008 Population
 275,287

 Population Growth in New Units 2009-2018
 61,022

 Population Growth in New Units 2009-2031
 88,149

				_		Exces	s Calculation (\$0	000)	
	Average	Maximum All	owable	_		Using		New Max	imum
	Service	10 Years	2031		2008	Average	Excess	Allowa	ble
	Level	(\$000)			Inventory	Service Level	Capacity	10 Years	2031
				_					
Total Indoor Recreation	\$1,255.72 per capita	\$76,626.0	\$110,690.9		\$335,835.8	\$345,683.0	\$0.0	\$76,626.0	\$110,690.9

\$377.69

\$21.90

\$1,245.58

\$331.34

\$22.72

\$1,228.57



APPENDIX B.4 TABLE 2

TOWN OF MARKHAM GROWTH-RELATED CAPITAL PROGRAM

			Total	Less	Total	Replacement		Growth-Re	lated Costs		2009-2018	Discounted
Service	Project Description	Timing	Project Cost	Grants /Subsidies	Municipal Cost	and Benefit To Existing	Prior Growth	2009- 2018	Post 2018	Total		-Related tal Costs
4.0 INDOOR RECREA			000.	7042014100	000.	. o zaomig	0.000	20.0	20.0		iner eap.	
4.1.1 4.1.2 4.1.3	Centennial CC Expansion (34,230 sf) East Markham Community Centre (104,868 sf) Provision for additional indoor recreation space (132,500 sf) Subtotal Major Facilities	2009 2010 2013	5,841,681 \$ 45,785,071 \$ 53,000,000 \$ 104,626,752	\$ - \$ -	\$ 5,841,681 \$ 45,785,071 \$ 53,000,000 \$ 104,626,752	\$ - \$ -	\$ -	\$ - \$ 23,752,308 \$ 50,207,672 \$ 73,959,980	\$ 2,792,328	\$ 5,841,681 \$ 45,785,071 \$ 53,000,000 \$ 104,626,752	90% \$	21,377,077 45,186,905 66,563,982
4.2 Land for M 4.2.1	lajor Facilities East Markham Community Centre (2.8 ha) Subtotal Land for Major Facilities	2009	\$ 5,087,230 \$ 5,087,230		\$ 5,087,230 \$ 5,087,230		\$ 5,087,230 \$ 5,087,230		<u>\$ -</u> \$ -	\$ 5,087,230 \$ 5,087,230	90% <u>\$</u>	-
4.3 Equipment 4.3.1 TOTAL INDOOR F	East Markham Community Centre Subtotal Equipment	2010	\$ 2,666,000 \$ 2,666,000 \$ 112,379,982	\$ -	\$ 2,666,000 \$ 2,666,000 \$ 112,379,982	\$ -	\$ - \$ - \$ 32,961,674	\$ 2,666,000 \$ 2,666,000 \$ 76,625,980	\$ -	\$ 2,666,000 \$ 2,666,000 \$ 112,379,982	90% <u>\$</u> \$	2,399,400 2,399,400 68,963,382

Non-Chargeable Growth-Related Net Capital Cost: \$ 7,662,598

Residential Development Charge Calculation		
Residential Share of 2009-2018 Discounted Growth-Related Capital Program	100%	\$ 68,963,382
10 Year Growth in Population in New Units		61,022
Unadjusted Development Charge Per Capita (\$)		\$1,130.15
Non-Residential Development Charge Calculation		
Non-Residential Share of 2009-2018 Discounted Growth-Related Capital Program	0%	\$ -
10 Year Growth in Square Metres		1,512,480
Unadjusted Development Charge Per sq. m (\$)		\$0.00



APPENDIX B.4 TABLE 3

TOWN OF MARKHAM CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE INDOOR RECREATION RESIDENTIAL DEVELOPMENT CHARGE

4.00 INDOOR RECREATION

OPENING CASH BALANCE FROM APPLICABLE RESE	RVES			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING CASH BALANCE (\$000)				\$0.00	\$9,775.12	(\$4,378.21)	\$6,212.58	\$13,500.83	(\$28,817.97)	(\$22,672.09)	(\$15,833.29)	(\$8,355.63)	(\$4,381.23)	
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS 4.00 INDOOR RECREATION - constant (\$000)	Sha Res 100%	res Non-Res 0%		\$0.0	\$23,776.5	\$0.0	\$0.0	\$45,186.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$68,963.4
4.00 INDOOR RECREATION - current (\$000)				\$0.0	\$24,252.0	\$0.0	\$0.0	\$48,911.8	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$73,163.8
NEW UNIT GROWTH - Population in New Units				8,182	8,471	8,714	5,577	5,717	5,861	6,010	6,084	3,168	3,238	61,022
REVENUE - current (\$000)	Rate for 2009	9												
- Dev. Charge Receipts	\$1,174.13 Balance:	Inflation: Postive	2.0% Negative	\$9,607.0	\$10,144.5	\$10,645.3	\$6,949.2	\$7,265.7	\$7,597.9	\$7,946.7	\$8,204.9	\$4,357.7	\$4,543.4	\$77,262.3
- Interest on Opening Balance - Interest on In-year Transactions (excl.int.)	Rate: Rate:	3.5% 3.5%	5.5% 5.5%	\$0.0 \$168.1	\$342.1 (\$388.0)	(\$240.8) \$186.3	\$217.4 \$121.6	\$472.5 (\$1,145.3)	(\$1,585.0) \$133.0	(\$1,247.0) \$139.1	(\$870.8) \$143.6	(\$459.6) \$76.3	(\$241.0) \$79.5	(\$3,612.0) (\$485.8)
TOTAL REVENUE				\$9,775.1	\$10,098.7	\$10,590.8	\$7,288.3	\$6,593.0	\$6,145.9	\$6,838.8	\$7,477.7	\$3,974.4	\$4,381.9	\$73,164.5
CLOSING CASH BALANCE				\$9,775.1	(\$4,378.2)	\$6,212.6	\$13,500.8	(\$28,818.0)	(\$22,672.1)	(\$15,833.3)	(\$8,355.6)	(\$4,381.2)	\$0.7	
INDOOR RECREATION CHARGE PER CAPITA		\$1,174.13												



B.5 PARK DEVELOPMENT AND FACILITIES

The Town of Markham offers a plethora of outdoor facilities including soccer pitches, baseball diamonds, tennis courts, basketball courts, cricket and rugby pitches, playgrounds, outdoor water facilities and much more. In addition, the Town has over 640 hectares of developed parkland to offer public leisure space to its residents. The Town prides itself in offering a high level of service for recreation facilities.

TABLE 1 HISTORIC SERVICE LEVELS

The ten-year historic inventory of capital assets for Park Development and Facilities includes approximately \$69.57 million in park facilities. Outdoor buildings, necessary to maintain the park facilities and their associated land add another \$5.82 and \$7.71, respectively, to the inventory. The developed parkland is a major component to the Parks service level; the developed parkland is estimated at over 640 hectares which is valued at \$170.98 million. Special facilities, such as bridges, pathways, illumination, washrooms, gazebos and parking lots, add a further \$27.70 million to the inventory.

The total value of the Park Development and Facilities capital infrastructure is estimated to be \$281.79 million. The ten-year historic average service level is \$1,086.58 per capita, and this, multiplied by the ten-year growth forecast growth, results in a ten-year maximum allowable of \$66.30 million. No excess capacity is identified and thus the full maximum allowable is eligible through recovery of development charges.

TABLE 2 2009–2018 PROVISIONAL GROWTH-RELATED CAPITAL BUDGET AND THE CALCULATION OF THE DEVELOPMENT CHARGE

The ten-year growth-related capital plan for Park Development and Facilities is extensive at a total gross cost of \$172.89 million. The components that make up this capital program are; lighter major soccer fields, unlighted major soccer fields, lighted major diamonds, unlighted major diamonds, lighted tennis courts, unlighted minor soccer fields, unlighted tennis courts, full and half basketball courts, minor and major waterplay facilities, senior and junior playgrounds, gazebos and shelters, washrooms and pavilions, concrete plaza spaces, concrete, asphalt, granular and woodchip pathways, wooden and steel bridges, paved parking lots, parking lot lighting, pathway lighting, irrigation for sports pitches,landscape irrigation for parks, park development, parks buildings and land for parks buildings. A detailed list of projects can be found on Table 2 of this Appendix.



Altogether, the ten-year capital forecast for Park Development and Facilities amounts to \$172.89 million. A share of the growth-related costs,\$36.70 million, is to be funded from the current Park Development and Facilities development charges reserve fund balance and is therefore removed from the development charges calculation. Another \$69.88 million, the portion of the growth-related cost which exceeds the maximum allowable, is either a post-2018 benefit share or represents a service level increase. The remaining \$66.30 million is related to growth between 2009 and 2018. This figure is subject to the ten per cent reduction required by the legislation and, having been reduced to \$59.67 million, is then brought forward to the development charges calculation.

The growth-related cost of \$59.67 million is allocated entirely to the residential sector. This yields an unadjusted development charge of \$977.92 per capita.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the residential calculated charge increases to \$1,025.40 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 Park Development and Facilities development charge.

		PARK DEVELOPMENT	T AND FACILITIE	S SUMMARY			
10-year Hist.	20	009-2018	Unad	justed	Adju	sted	
Service Level	Growth-Rela	nted Capital Program	Developm	ent Charge	Development Charge		
per capita	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m	
\$1,086.58	\$172,887,759	\$59,674,238	\$977.92	\$0.00	\$1,025.40	\$0.00	



Major Soccer - Lighted					# of F	ields					UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Berczy Commons					1	1	1	1	1	1	\$517,365
Bishops Cross	1	1	1	1	1	1	1	1	1	1	\$517,365
Brother Andre									1	1	\$517,365
Centennial	1	1	1	1	1	1	1	1	1	1	\$517,365
Huntington	1	1	1	1	1	1	1	1	1	1	\$517,365
Milliken Mills Community Park	1	1	1	1	1	1	1	1	1	1	\$517,365
Mount Joy	1	1	2	2	2	2	2	2	2	2	\$517,365
Milliken High School	1	1	1	1	1	1	1	1	1	1	\$517,365
Subtotal (#)	6	6	7	7	8	8	8	8	9	9	
Subtotal (\$)	\$3,104,190	\$3,104,190	\$3,621,555	\$3,621,555	\$4,138,920	\$4,138,920	\$4,138,920	\$4,138,920	\$4,656,285	\$4,656,285	

Major Diamond - Lighted					# of F	ields					UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Ashton Meadows	1	1	1	1	1	1	1	1	1	1	\$458,223
Bayview Reservoir	1	1	1	1	1	1	1	1	1	1	\$458,223
Bishop's Cross	2	2	2	2	2	2	2	2	2	2	\$458,223
Carlton	1	1	1	1	1	1	1	1	1	1	\$458,223
Cedargrove				1	1	1	1	1	1	1	\$458,223
Centennial	2	2	2	2	2	2	2	2	2	2	\$458,223
Crosby	1	1	1	1	1	1	1	1	1	1	\$458,223
Grandview	1	1	1	1	1	1	1	1	1	1	\$458,223
Highgate	1	1	1	1	1	1	1	1	1	1	\$458,223
Huntington	1	1	1	1	1	1	1	1	1	1	\$458,223
Milliken Mills Community Park	5	5	5	5	5	5	5	5	5	5	\$458,223
Mint Leaf	1	1	1	1	1	1	1	1	1	1	\$458,223
Monarch	1	1	1	1	1	1	1	1	1	1	\$458,223
Morgan	1	1	1	1	1	1	1	1	1	1	\$458,223
Subtotal (#)	19	19	19	20	20	20	20	20	20	20	
Subtotal (\$)	\$8,706,237	\$8,706,237	\$8,706,237	\$9,164,460	\$9,164,460	\$9,164,460	\$9,164,460	\$9,164,460	\$9,164,460	\$9,164,460	



Major Soccer - Unlighted					# of F	ields					UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Aldergrove	1	1	1	1	1	1	1	1	1	1	\$153,070
Armstrong	1	1	1	1	1	1	1	1	1	1	\$153,070
Ashton Meadows	1	1	1	1	1	1	1	1	1	1	\$153,070
Bayview Reservoir	2	2	2	2	2	2	2	2	2	2	\$153,070
Benjamin Marr Park		2	2	2	2	2	2	2	2	2	\$153,070
Berczy Commons					2	2	2	2	2	2	\$153,070
Brother Andre									1	1	\$153,070
Calvert	1	1	1	1	1	1	1	1	1	1	\$153,070
Carlton	1	1	1	1	1	1	1	1	1	1	\$153,070
Central	1	1	1	1	1	1	1	1	1	1	\$153,070
Colty Corners	1	1	1	1	1	1	1	1	1	1	\$153,070
Coppard	1	1	1	1	1	1	1	1	1	1	\$153,070
Crosby	1	1	1	1	1	1	1	1	1	1	\$153,070
Elson	1	1	1	1	1	1	1	1	1	1	\$153,070
Greenlane	1	1	1	1	1	1	1	1	1	1	\$153,070
Highgate	1	1	1	1	1	1	1	1	1	1	\$153,070
James Edward	1	1	1	1	1	1	1	1	1	1	\$153,070
John Button	1	1	1	1	1	1	1	1	1	1	\$153,070
Metrus										1	\$153,070
Markham District HS	3	3	3	3	3	3	3	3	3	3	\$153,070
McLaren Park	1	1	1	1	1	1	1	1	1	1	\$153,070
Milliken Mills Community Park	3	3	3	3	3	3	3	3	3	3	\$153,070
Mintleaf	1	1	1	1	1	1	1	1	1	1	\$153,070
Randall	1	1	1	1	1	1	1	1	1	1	\$153,070
Raybeck	1	1	1	1	1	1	1	1	1	1	\$153,070
Springdale Park/Valley	1	1	1	1	1	1	1	1	1	1	\$153,070
Thornlea East	1	1	1	1	1	1	1	1	1	1	\$153,070
UHS Sportsfield	2	2	2	2	2	2	2	2	2	2	\$153,070
Wismer					-	-		_	_	3	\$153,070
					•	•				•	
Subtotal (#)	30	32	32	32	34	34	34	34	35	39	
Subtotal (\$)	\$4,592,100	\$4,898,240	\$4,898,240	\$4,898,240	\$5,204,380	\$5,204,380	\$5,204,380	\$5,204,380	\$5,357,450	\$5,969,730	

Minor Soccer - Unlighted					# of F	ields					UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Armstrong	1	1	1	1	1	1	1	1	1	1	\$130,753
Ashton Meadows	1	1	1	1	1	1	1	1	1	1	\$130,753
Featherstone Park	1	1	1	1	1	1	1	1	1	1	\$130,753
Huntington	1	1	1	1	1	1	1	1	1	1	\$130,753
John Canning					1	1	1	1	1	1	\$130,753
Leitchcroft Neighbourhood Park					1	1	1	1	1	1	\$130,753
Monarch	1	1	1	1	1	1	1	1	1	1	\$130,753
Paddock	1	1	1	1	1	1		-	-	-	\$130,753
Quantztown	1	1	1	1	1	1	1	1	1	1	\$130,753
Roxbury	1	1	1	1	1	1	1	1	1	1	\$130,753
Tomlinson	1	1	1	1	1	1	1	1	1	1	\$130,753
Wilcay	1	1	1	1	1	1	1	1	1	1	\$130,753
Subtotal (#)	10	10	10	10	12	12	11	11	11	11	
Subtotal (\$)	\$1,307,530	\$1,307,530	\$1,307,530	\$1,307,530	\$1,569,036	\$1,569,036	\$1,438,283	\$1,438,283	\$1,438,283	\$1,438,283	1



Mini Soccer - Unlighted					# of F	ields					UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Aldergrove	2	2	2	2	2	2	2	2	2	2	\$49,989
Armadale	2	2	2	2	2	2	2	2	2	2	\$49,989
Bayview Reservoir	3	3	3	3	3	3	3	3	3	3	\$49,989
Denison	1	1	1	1	1	1	1	1	1	1	\$49,989
Fincham	4	4	4	4	4	4	4	10	10	10	\$49,989
Grandview	1	1	1	1	1	1	1	1	1	1	\$49,989
Huntington	1	1	1	1	1	1	1	1	1	1	\$49,989
MDJV								4	4	4	\$49,989
McLaren	1	1	1	1	1	1	1	1	1	1	\$49,989
Milliken Mills Community Centre	1	1	1	1	1	1	1	1	1	1	\$49,989
Mintleaf	5	5	5	5	5	5	5	8	8	8	\$49,989
Pomona Valley	2	2	2	2	2	2	2	2	2	2	\$49,989
Reesor	3	3	3	3	3	3	3	3	3	3	\$49,989
Roxbury	4	4	4	4	4	4	4	4	4	4	\$49,989
South Unionville									2	2	\$49,989
Village Park	1	1	1	1	1	1	1	2	2	2	\$49,989
Walker	2	2	2	2	2	2	2	2	2	2	\$49,989
		-								-	
Subtotal (#)	33	33	33	33	33	33	33	47	49	49	
Subtotal (\$)	\$1,649,637	\$1,649,637	\$1,649,637	\$1,649,637	\$1,649,637	\$1,649,637	\$1,649,637	\$2,349,483	\$2,449,461	\$2,449,461	

Major Diamond - Unlighted					# of F	ields					UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Aldergrove	1	1	1	1	1	1	1	1	1	1	\$148,582
Angus Glen	1	1	1	1	1	1	1	1	1	1	\$148,582
Armadale	1	1	1	1	1	1	1	1	1	1	\$148,582
Bayview Glen	1	1	1	1	1	1	1	1	1	1	\$148,582
Berczy	1	1	1	1	1	1	1	1	1	1	\$148,582
Calvert	1	1	1	1	1	1	1	1	1	1	\$148,582
Coledale	1	1	1	1	1	1	1	1	1	1	\$148,582
Colty Corners	1	1	1	1	1	1	1	1	1	1	\$148,582
Denison	1	1	1	1	1	1	1	1	1	1	\$148,582
Duncan	1	1	1	1	1	1	1	1	1	1	\$148,582
Elson	1	1	1	1	1	1	1	1	1	1	\$148,582
Featherstone	1	1	1	1	1	1	1	1	1	1	\$148,582
James Edward	1	1	1	1	1	1	1	1	1	1	\$148,582
Legacy	2	2	2	2	2	2	2	2	2	2	\$148,582
Lincoln	1	1	1	1	1	1	1	1	1	1	\$148,582
Randall	1	1	1	1	1	1	1	1	1	1	\$148,582
Raybeck	1	1	1	1	1	1	1	1	1	1	\$148,582
Reesor	1	1	1	1	1	1	1	1	1	1	\$148,582
Risebrough	2	2	2	2	2	2	2	2	2	2	\$148,582
Tomlinson	1	1	1	1	1	1	1	1	1	1	\$148,582
Victoria Square	1	1	1	1	1	1	1	1	1	1	\$148,582
Woodland	1	1	1	1	1	-	-	-	-	-	\$148,582
Subtotal (#)	26	26	26	26	27	26	26	26	26	26	
Subtotal (\$)	\$3,863,132	\$3,863,132	\$3,863,132	\$3,863,132	\$3,971,113	\$3,822,531	\$3,822,531	\$3,822,531	\$3,822,531	\$3,822,531	



Minor Diamond					# of F	ields					UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Armstrong	1	1	1	1	1	1	1	1	1	1	\$114,438
Ashton Meadows	1	1	1	1	1	1	1	1	1	1	\$114,438
Bayview Reservoir	1	1	1	1	1	1	1	1	1	1	\$114,438
Carlton	2	2	2	2	2	2	2	2	2	2	\$114,438
Crosby	2	2	2	2	2	2	2	2	2	2	\$114,438
Glencrest	1	1	1	1	1	1	1	1	1	1	\$114,438
Grandview	1	1	1	1	1	1	1	1	1	1	\$114,438
Greenlane	1	1	1	1	1	1	1	1	1	1	\$114,438
Johnsview	1	1	1	1	1	1	1	1	1	1	\$114,438
Linclon	1	1	1	1	1	1	1	1	1	1	\$114,438
Paddock	1	1	1	1	1	1	1	1	1	1	\$114,438
Reesor	2	2	2	2	2	2	2	2	2	2	\$114,438
Riseborough	1	1	1	1	1	1	1	1	1	1	\$114,438
Robinson	2	2	2	2	2	2	2	2	2	2	\$114,438
Royal Orchard	2	2	2	2	2	2	2	2	2	2	\$114,438
Roxbury	1	1	1	1	1	1	1	1	1	1	\$114,438
Stargell	1	1	1	1	1	1	1	1	1	1	\$114,438
Wilclay	1	1	1	1	1	1	1	1	1	1	\$114,438
Victoria Centre	1	1	1	1	1	1	1	1	1	1	\$114,438
Woodlands	1	1	1	1	1	1	1	1	1	1	\$114,438
Subtotal (#)	25	25	25	25	25	25	25	25	25	25	
Subtotal (\$)	\$2,860,950	\$2,860,950	\$2,860,950	\$2,860,950	\$2,860,950	\$2,860,950	\$2,860,950	\$2,860,950	\$2,860,950	\$2,860,950	

Lighted Tennis					# of C	ourts					UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Armadale	4	4	4	4	4	4	4	4	4	4	\$146,603
Box Grove	2	2	2	2	2	2	2	2	2	2	\$146,603
Carlton	9	9	9	9	9	9	9	9	9	9	\$146,603
Duncan Park	3	3	3	3	3	3	3	3	3	3	\$146,603
German Mills	4	4	4	4	4	4	4	4	4	4	\$146,603
Grandview	3	3	3	3	3	3	3	3	3	3	\$146,603
Henderson Public School	2	2	2	2	2	2	2	2	2	2	\$146,603
Highgate	6	6	6	6	6	6	6	6	6	6	\$146,603
Johnsview Village (Public)	2	2	2	2	2	2	2	2	2	2	\$146,603
Morgan	2	2	2	2	2	2	2	2	2	2	\$146,603
Pomona Valley	6	6	6	6	6	6	6	6	6	6	\$146,603
Reesor	6	6	6	6	6	6	6	6	6	6	\$146,603
Toogood	2	2	2	2	2	2	2	2	2	2	\$146,603
-											
Subtotal (#)	51	51	51	51	51	51	51	51	51	51	
Subtotal (\$)	\$7,476,753	\$7,476,753	\$7,476,753	\$7,476,753	\$7,476,753	\$7,476,753	\$7,476,753	\$7,476,753	\$7,476,753	\$7,476,753	



Unlighted Tennis					# of C	Courts					UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Bay View Glen	2	2	2	2	2	2	2	2	2	2	\$105,307
Metrus										1	\$105,307
Robinson	2	2	2	2	2	2	2	2	2	2	\$105,307
Wismer										1	\$105,307
Subtotal (#)	4	4	4	4	4	4	4	4	4	6	
Subtotal (\$)	\$421,228	\$421,228	\$421,228	\$421,228	\$421,228	\$421,228	\$421,228	\$421,228	\$421,228	\$631,842	

Bocce Courts		# of Courts									UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Denison	1	1	1	1	1	1	1	1	1	1	\$18,170
Milliken Mills Community Park	3	3	3	3	3	3	3	3	3	3	\$18,170
Springdale Park/Valley	4	4	4	4	4	4	4	-	-	-	\$18,170
Subtotal (#)	8	8	8	8	8	8	8	4	4	4	
Subtotal (\$)	\$145,360	\$145,360	\$145,360	\$145,360	\$145,360	\$145,360	\$145,360	\$72,680	\$72,680	\$72,680	

Basketball Courts					# of Courts						UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Half Court											
Armadale	1	1	1	1	1	1	1	1	1	1	\$13,999
Ashton Meadows	1	1	1	1	1	1	1	1	1	1	\$13,999
Box Grove	1	1	1	1	1	1	1	1	1	1	\$13,999
Centennial	1	1	1	1	1	1	1	1	1	1	\$13,999
Elson	1	1	1	1	1	1	1	1	1	1	\$13,999
Milliken Mills Community Park	1	1	1	1	1	1	1	1	1	1	\$13,999
Sablewood	1	1	1	1	1	1	1	1	1	1	\$13,999
Victoria Square	1	1	1	1	1	1	•	•	•	-	\$13,999
Full Court											
Bayview Lane	1	1	1	1	1	1	1	1	1	1	\$27,997
Denison	1	1	1	1	1	1	1	1	1	1	\$27,997
Legacy	1	1	1	1	1	1	1	1	1	1	\$27,997
Leighland	1	1	1	1	1	1	1	1	1	1	\$27,997
Milliken Mills Community Centre	1	1	1	1	1	1	1	1	1	1	\$27,997
Wismer										1	\$27,997
Subtotal (#)	13	13	13	13	13	13	12	12	12	13	
Subtotal (\$)	\$251,977	\$251,977	\$251,977	\$251,977	\$251,977	\$251,977	\$237,978	\$237,978	\$237,978	\$265,975	



Cricket					# of Pitches						UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
McCowan Reservoir	2	2	2	2	2	2	2	2	2	2	\$277,099
Subtotal (#)	2	2	2	2	2	2	2	2	2	2	
Subtotal (\$)	\$554,198	\$554,198	\$554,198	\$554,198	\$554,198	\$554,198	\$554,198	\$554,198	\$554,198	\$554,198	

Rugby Pitch - Unlighted					# of Pitches						
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
Austin Drive	1	1	1	1	1	1	1	1	1	1	\$212,902
Subtotal (#)	1	1	1	1	1	1	1	1	1	1	
Subtotal (\$)	\$212,902	\$212,902	\$212,902	\$212,902	\$212,902	\$212,902	\$212,902	\$212,902	\$212,902	\$212,902	

Outdoor Pools					# of Pools						UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Morgan	1	1	1	1	1	1	1	1	1	1	\$688,000
Rouge			1	1	1	1	1	1	1	1	\$688,000
Subtotal (#)	1	1	2	2	2	2	2	2	2	2	
Subtotal (\$)	\$688,000	\$688,000	\$1,376,000	\$1,376,000	\$1,376,000	\$1,376,000	\$1,376,000	\$1,376,000	\$1,376,000	\$1,376,000	

Skate Parks					UNIT COST						
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Centennial Skate Park						1	1	1	1	1	\$790,759
Subtotal (#)	-	-	-	-	-	1	1	1	1	1	
Subtotal (\$)	\$0	\$0	\$0	\$0	\$0	\$790,759	\$790,759	\$790,759	\$790,759	\$790,759	



Playgrounds - Senior					f of Playgrounds	S					UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Aldergrove	1	1	1	1	1	1		1	1	1	\$158,652
Apple Creek South	1	1	1	1	1	1		1	1	1	\$158,652
Armadale	1	1	1	1	1	1		1	1	1	\$158,652
Avoca	1	1	1	1	1	1		1	1	1	\$158,652
Bayview Glen	1	1	1	1	1	1		1	1	1	\$158,652
Bayview Cleri Bayview Lane	1	1	1	1	1	1		1	1	1	\$158,652
Bayview Reservoir	1	1	1	1	1	1		1	1	1	\$158,652
Beaupre	<u>'</u>		1	1	1	1		1	1	1	\$158,652
Berczy				- '	<u>'</u>		- '		1	1	\$158,652
	1	1	1	1	1	1	1	1	1	1	\$158,652
Cakebread				1		1			1		
Carlton	1	1	1		1			1		1	\$158,652
Cedargrove				1	1	1		1	1	1	\$158,652
Centennial	1	1	1	1	1	1		1	1	1	\$158,652
Central	1	1	1	1	1	1		1	1	1	\$158,652
Coledale	1	1	1	1	1	1		1	1	1	\$158,652
Colty Corners	1	1	1	1	1	1		1	1	1	\$158,652
Coppard	1	1	1	1	1	1		1	1	1	\$158,652
Drake	1	1	1	1	1	1	1	1	1	1	\$158,652
Duncan	1	1	1	1	1	1	1	1	1	1	\$158,652
Elson	1	1	1	1	1	1		1	1	1	\$158,652
Evervale		1	1	1	1	1		1	1	1	\$158,652
Glencrest	1	1	1	1	1	1	1	1	1	1	\$158,652
Grandview	1	1	1	1	1	1	1	1	1	1	\$158,652
Greenlane	1	1	1	1	1	1	1	1	1	1	\$158,652
Harvest Gate	1	1	1	1	1	1	1	1	1	1	\$158,652
Highgate	1	1	1	1	1	1	1	1	1	1	\$158,652
James Edward	1	1	1	1	1	1	1	1	1	1	\$158,652
John Button	1	1	1	1	1	1	1	1	1	1	\$158,652
John Canning				,	1	1		1	1	1	\$158.652
Johnsview	1	1	1	1	1	1	1	1	1	1	\$158,652
Legacy	1	1	1	1	1	1		1	1	1	\$158,652
Lincoln	1	1	1	1	1	1		1	1	1	\$158,652
Middleton	1	1	1	1	1	1		1	1	1	\$158,652
Milliken Mills	2	2	2	2	2	2		2	2	2	\$158,652
Mintleaf		1	1	1	1	1		1	1	1	\$158.652
Milton Fierheller		1	1	1	1	1	1	1	1	1	\$158,652
Nordinglen	1	1	1	1	1	1		1	1	1	\$158,652
Pioneer	1	1	1	1	1	1		1	1	1	\$158,652
	1	1	1	1	1	1		1	1	1	\$158,652
Pomona Valley	1	1	1	1	1	1		1	1	1	
Randall											\$158,652
Reesor	1	1	1	1_	1	1		1	1	1	\$158,652
Reeve Park	1	1	1	1	1	1		1	1	1	\$158,652
Risebrough	1	1	1	1	1	1		1	1	1	\$158,652
Roxbury	1	1	1	1	1	1		1	1	1	\$158,652
Sablewood	1	1	1	1	1	1	1	1	1	1	\$158,652
South Unionville									1	1	\$158,652
Springdale	1	1	1	1	1	1	1	1	1	1	\$158,652
Stargell	1	1	1	1	1	1		1	1	1	\$158,652
Thornlea East	1	1	1	1	1	1		1	1	1	\$158,652
Vanhorn Park (Leitchcroft)		1	1	1	1	1		1	1	1	\$158,652
Wilclay	1	1	1	1	1	1	1	1	1	1	\$158,652
Windfields	1	1	1	1	1	1	1	1	1	1	\$158,652
Windy Hill	1	1	1	1	1	1	1	1	1	1	\$158,652
Subtotal (#)	45	49	50	51	52	52	52	52	54	54	
Subtotal (\$)	\$7,139,340	\$7,773,948	\$7,932,600	\$8,091,252	\$8,249,904	\$8,249,904	\$8,249,904	\$8,249,904	\$8,567,208	\$8,567,208	



Playgrounds - Junior			UNIT COST								
Park Name	1999	2000	2001	2002	of Playgrounds 2003	2004	2005	2006	2007	2008	(\$/facility)
Amber Glen	1333	1	1	1	1	1	1	1	1	1	\$113,767
Armadale	1	1	1	1	1	1	1	1	1	1	\$113,767
Austin	1	1	1	1	1	1		1	1	1	\$113,767
Avoca	1	1	1	1	1	1	1	1	1	1	\$113,767
Bayview Glen	1	1	1	1	1	1	1	1	1	1	\$113,767
Bayview Gieri Bavview Lane	1	1	1	1	1	1	1	1	1	1	\$113,767
Bayview Reservoir	1	1	1	1	1	1	1				\$113,767
Berzey Village	1	1	1	1	1	2	2	2	2	2	\$113,767
	1	1	1	1	1	1	1		2	1	
Briarwood	1	1	1	- '	1	ı		1	1		\$113,767
Brookhaven							1		1	1	\$113,767
Centennial	1	1	1	1	1	1	1	1	1	1	\$113,767
Central	1	1	1	1	1	1	1	1	1	1	\$113,767
Chelsea Park		1	1	1	1	1	1	1	1	1	\$113,767
Country Ridge						1	1	1	1	1	\$113,767
Denison	1	1	1	1	1	1	1	1	1	1	\$113,767
Drake	1	1	1	1	1	1	1	1	-	-	\$113,767
Featherstone	1	1	1	1	1	1	1	-	-	-	\$113,767
Fred McLaren						1	1	1	1	1	\$113,767
German Mills Community Centre	1	1	1	1	1	1	1	1	1	1	\$113,767
Green Lane	1	1	1	1	1	1	1	1	1	1	\$113,767
James Edward	1	1	1	1	1	1	1	1	1	1	\$113,767
John Button	1	1	1	1	1	1	1	1	1	1	\$113,767
John Canning	1	1	1	1	1	1	1	1	1	1	\$113,767
Johnsview							1	1	1	1	\$113,767
Legacy	1	1	1	1	1	1	1	1	1	1	\$113,767
Lincoln	1	1	1	1	1	1	1	1	1	1	\$113,767
Lundy Park	1	1	1	1	1	1	1	1	1	1	\$113,767
Milliken Mills Community Park	1	1	1	1	1	1	1	1	1	1	\$113,767
Markham Civic Centre	2	2	2	2	2	2	2	2	2	2	\$113,767
Monarch	1	1	1	1	1	1	1	1	-		\$113,767
Nordlingen (Berczy Parkette)	1	1	1	1	1	1	1	1	1	1	\$113,767
Pomona Vallev	- '			'		-	1	1	1	1	\$113,767
Quantztown	1	1	1	1	1	1	1	1	1	1	\$113,767
Randall	1	1	1	1	1	1	1	1	1	1	\$113,767
Rayneswood	1	1	1	1	1	1		1	1	1	\$113,767
Romfield	1	1	1	1	1	1	1	1	1	1	\$113,767
	1	1	1	1	1		1	1	1	1	
Roxbury	1		1	- 1		1			-		\$113,767
South Unionville							1	1	1	1	\$113,767
Springdale Park/Valley	1	1	1	1	1	1	1	1	1	1	\$113,767
Sprucewood	1	1	1	1	1	1	1	1	1	1	\$113,767
Stone Farm	1	1	1	1	1	1	1	1	1	1	\$113,767
Storybook								1	1	1	\$113,767
The Mews Park	1	1	1	1	1	1	1	1	1	1	\$113,767
Thornlea East	1	1	1	1	1	1	1	1	1	1	\$113,767
Toogood Park	1	1	1	1	1	1	1	1	1	1	\$113,767
Victoria Square	1	1	1	1	1	1	1	1	1	1	\$113,767
Wilclay	1	1	1	1	1	1	1	1	1	1	\$113,767
Windy Hill	1	1	1	1	1	1	1	1	1	1	\$113,767
Wismer CP		_	_		_					2	\$113,767
Wismer Parkette					1	1	1	1	1	1	\$113,767
Woodbine									1	1	\$113,767
									1	·	, .,
Subtotal (#)	41	42	42	42	43	46	50	49	48	50	J
Subtotal (\$)	\$4.664.447	\$4,778,214	\$4,778,214	\$4,778,214	\$4.891.981	\$5,233,282	\$5,688,350	\$5,574,583	\$5,460,816	\$5,688,350	



Playgrounds - Senior & Junior				#	of Playgrounds	3					UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Amber Glen	1	1	1	1	1	1	-	-	-	-	\$232,790
Angus Glen (Village Green)	1	1	1	1	1	1	1	1	1	1	\$232,790
Apple Creek	1	1	1	1	1	1	1	1	1	1	\$232,790
Armstrong	1	1	1	1	1	1	1	1	1	1	\$232,790
Ashton Meadows	1	1	1	1	1	1	1	1	1	1	\$232,790
Beaupre	'	1	1	1	1	1	1	1	1	1	\$232,790
Benjamin Marr		1	1	1	1	1	1	1	1	1	\$232,790
Benjamin Marr - South		'	'	'	'	1	1	1	1	1	\$232,790
Bishop's Cross	1	1	1	1	1	1	1	1	1	1	\$232,790
Box Grove	1	1	1	1	1	1	1	1	1	1	\$232,790
		1	1	1	1	1	1	1	1	1	\$232,790
Calvert	1										
Carlton	1	1	1	1	1	1	1	1	1	1	\$232,790
Centennial	1	1	1	1	1	1	1	1	1	1	\$232,790
Elson	1	1	1	1	1	1	1	1	1	1	\$232,790
Featherstone	1	1	1	1	1	1	1	1	1	1	\$232,790
Fincham	2	2	2	2	2	2	2	2	2	2	\$232,790
Frederick Bagg Park					1	1	1	1	1	1	\$232,790
Hazelton									1	1	\$232,790
Hughson	1	1	1	1	1	1	1	1	1	1	\$232,790
Huntington	1	1	1	1	1	1	1	1	1	1	\$232,790
John Daniels				1	1	1	1	1	1	1	\$232,790
Leighland	1	1	1	1	1	1	1	1	1	1	\$232,790
Lietchcroft Neighbourhood Park					1	1	1	1	1	1	\$232,790
MDJV								1	1	1	\$232,790
Mattamy										1	\$232,790
Mattamy Town Square										1	\$232,790
McLaren					1	1	1	1	1	1	\$232,790
Metrus										1	\$232,790
Millenium			1	1	1	1	1	1	1	1	\$232,790
Monarch	1	1	1	1	1	1	1	1	1	1	\$232,790
Morgan	1	1	1	1	1	1	1	1	1	1	\$232,790
Paddock	1	1	1	1	1	1	1	1	1	1	\$232,790
Personna Park	1	1	1	1	1	1	1	1	1	1	\$232,790
Proctor	1	1	1	1	1	1	1	1	1	1	\$232,790
Quantztown	1	1	1	1	1	1	1	1	1	1	\$232,790
Railside	1	1	1	1	1	1	1	1	1	1	\$232,790
Raybeck	1	1	1	1	1	1	1	1	1	1	\$232,790
Robinson	1	1	1	1	1	1	1	1	1	1	\$232,790
Rougehaven	1	1	1	1	1	1	1	1	1	1	\$232,790
Roxbury	1	1	1	1	1	1	1	1	1	1	\$232,790
South Unionville East Central Parkette	+ '+	'	1	1	1	1	1	1	1	1	\$232,790
Summerdale	1	1	1	1	1	1	1	1	1	1	\$232,790 \$232,790
	+ 1	1	1	1	1	1	1	1	1		
Swan Lake	1									1	\$232,790
Thomas Frisby	 	1	1	1	1	1	1	1	1	1	\$232,790
Tomlinson	1	1	1	1	1	1_	1	1	1	1	\$232,790
Walker	1	1	1	1	1	1	1	1	1	1	\$232,790
Windy Hill	1	1	1	1	1	1	1	1	1	1	\$232,790
	ļ .										
Subtotal (#)	32	35	37	38	41	42	41	42	44	47	
Subtotal (\$)	\$7,449,283	\$8,147,653	\$8,613,233	\$8,846,023	\$9,544,393	\$9,777,183	\$9,544,393	\$9,777,183	\$10,242,764	\$10,941,134	



TOWN OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PLANNING & URBAN DESIGN DEPARTMENT
PARK DEVELOPMENT & FACILITIES - FACILITIES

Waterplay Minor					UNIT COST						
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Bayview Lane Park								1	1	1	\$127,789
Benjamin Marr	1	1	1	1	1	1	1	1	1	1	\$127,789
South Unionville									1	1	\$127,789
Subtotal (#)	1	1	1	1	1	1	1	2	3	3	
Subtotal (\$)	\$127,789	\$127,789	\$127,789	\$127,789	\$127,789	\$127,789	\$127,789	\$255,578	\$383,367	\$383,367	

Waterplay Major					of Playgrounds	3					UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Ashton Meadows	1	1	1	1	1	1	1	1	1	1	\$281,165
Beaupre		1	1	1	1	1	1	1	1	1	\$281,165
James Edward	1	1	1	1	1	1	1	1	1	1	\$281,165
McLaren					1	1	1	1	1	1	\$281,165
Milliken Mills Community Park	1	1	1	1	1	1	1	1	1	1	\$281,165
Millennium			1	1	1	1	1	1	1	1	\$281,165
Swan Lake									1	1	\$281,165
Tomlison		1	1	1	1	1	1	1	1	1	\$281,165
Subtotal (#)	3	5	6	6	7	7	7	7	8	8	
Subtotal (\$)	\$843,495	\$1,405,825	\$1,686,990	\$1,686,990	\$1,968,155	\$1,968,155	\$1,968,155	\$1,968,155	\$2,249,320	\$2,249,320	

PARK DEVELOPMENT & FACILITIES - OUTDOOR BUILDINGS

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
OUTDOOR BUILDINGS (sq.ft.)											(\$/sq. ft.)
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	\$150
Bishop Cross	600	600	600	600	600	600	600	600	600	600	\$120
Berczy Commons					200	200	200	200	200	200	\$120
Centennial	600	600	600	600	600	600	600	600	600	600	\$120
Civic Center Park	600	600	600	600	600	600	600	600	600	600	\$120
Greenhouses 4415 14th Avenue	9,450	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600	12,600	\$120
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	\$150
Milliken Mills Park	600	600	600	600	600	600	600	600	600	600	\$120
Milne Dam	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	\$120
Paint Shop, 440 John Street	580	580	580	580	580	580	580	580	580	580	\$150
Princess Street	960	960	960	960	960	960	960	960	960	960	\$150
Storage Building 14th Avenue	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	\$120
Storage Shed, 440 John Street	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	1,440	\$120
Tower Storage, 440 John Street	13,270	13,270	13,270	13,270	13,270	13,270	13,270	13,270	13,270	13,270	\$120
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	\$150
Subtotal (sq.ft.)	41,986	45,136	45,136	45,136	45,336	45,336	45,336	45,336	45,336	45,336	
Subtotal (\$)	\$5,419,860.0	\$5,797,860.0	\$5,797,860.0	\$5,797,860.0	\$5,821,860.0	\$5,821,860.0	\$5,821,860.0	\$5,821,860.0	\$5,821,860.0	\$5,821,860.0	



TOWN OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PLANNING & URBAN DESIGN DEPARTMENT
PARK DEVELOPMENT & FACILITIES - FACILITIES

UNIT COST LAND FOR OUTDOOR BUILDINGS (ha) (\$/ha) 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 \$2,100,000 428 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 \$2,100,000 440 John Street 0.44 0.44 0.44 0.44 0.44 0.44 0.44 0.44 0.44 0.44 \$2,100,000 Bishops Cross 0.01 0.01 0.01 0.01 0.01 \$2,100,000 0.01 0.01 0.01 0.01 0.01 Centennial 0.01 0.01 0.01 0.01 0.01 0.01 0.01 \$2,100,000 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 \$2,100,000 Civic Center Park 0.01 0.01 \$2,100,000 Milliken Mills Park 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 Milne Dam 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 \$2,100,000 Princess Street 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.25 \$2,100,000 0.01 0.01 0.01 \$2,100,000 Toogood Pavilion 0.01 0.01 0.01 0.01 0.01 0.01 0.01 3.67 3.67 3.67 3.67 3.67 3.67 3.67 3.67 3.67 3.67 Subtotal (ha) \$7,709,100.0 Subtotal (\$) \$7,709,100.0 \$7,709,100.0 \$7,709,100.0 \$7,709,100.0 \$7,709,100.0 \$7,709,100.0 \$7,709,100.0 \$7,709,100.0 \$7,709,100.0

PARK DEVELOPMENT & FACILITIES - PARKLAND

Development **DEVELOPED PARKLAND (ha)** Cost per Ha Developed Parkland 504.77 510.40 526.51 530.75 560.23 577.08 587.38 602.38 619.18 640.39 \$267,000 504.77 510.40 526.51 530.75 560.23 577.08 587.38 602.38 619.18 640.39 Subtotal (ha) Subtotal (\$) \$134,773,590.0 \$136,276,800.0 \$140,578,170.0 \$141,710,250.0 \$149,581,410.0 \$154,080,360.0 \$156,830,460.0 \$160,835,460.0 \$165,321,060.0 \$170,984,130.0

PARK DEVELOPMENT & FACILITIES - SPECIAL FACILITIES

Wooden Bridges (linear feet)					Linear Feet						UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/foot)
Armadale 3 Structure(s)	60	60	60	60	60	60	60	60	60	60	\$505
Calvert 1 Structure(s)	43	43	43	43	43	43	43	43	43	43	\$505
Coppard 1 Structure(s)	8	8	8	8	8	8	8	8	8	8	\$505
Dennison 1 Structure(s)	8	8	8	8	8	8	8	8	8	8	\$505
Featherstone 1 Structure(s)	8	8	8	8	8	8	8	8	8	8	\$505
James Edward 1 Structure(s)	8	8	8	8	8	8	8	8	8	8	\$505
John Button Waterway 1 Structure(s)	17	17	17	17	17	17	17	17	17	17	\$505
Middlefield Corners 1 Structure(s)	16	16	16	16	16	16	16	16	16	16	\$505
Millstone 1 Structure(s)	224	224	224	224	224	224	224	224	224	224	\$505
Normandale 2 Structure(s)	225	225	225	225	225	225	225	225	225	225	\$505
Quantz Town 1 Structure(s)	25	25	25	25	25	25	25	25	25	25	\$505
Randall 2 Structure(s)	16	16	16	16	16	16	16	16	16	16	\$505
Robinson 1 Structure(s)	22	22	22	22	22	22	22	22	22	22	\$505
Springdale Park 2 Structure(s)	91	91	91	91	91	91	91	91	91	91	\$505
Tannery Pond				416	416	416	416	416	416	416	\$505
Toogood Pond 1 Structure(s)	397	397	397	397	397	397	397	397	397	397	\$505
								•		•	
Subtotal (feet)	1,168	1,168	1,168	1,584	1,584	1,584	1,584	1,584	1,584	1,584	
Subtotal (\$)	\$589,840	\$589,840	\$589,840	\$799,920	\$799,920	\$799,920	\$799,920	\$799,920	\$799,920	\$799,920	



Steel Bridges (linear feet)					Linear Feet						UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/foot)
Aitken 3 structure(s)	144	144	144	144	144	144	144	144	144	144	\$2,130
Austin 4 structure(s)	313	313	313	313	313	313	313	313	313	313	\$2,130
Banfield Structure									55	55	\$2,130
Berczy Commons					120	120	120	120	120	120	\$2,130
Cedar Valley 1 structure(s)	151	151	151	151	151	151	151	151	151	151	\$2,130
Civic Center 1 structure(s)	46	46	46	46	46	46	46	46	46	46	\$2,130
Cochrane Pond					75	75	75	75	75	75	\$2,130
Milne Floating (Plastic) 1 structure(s)	56	56	56	56	56	56	56	56	56	56	\$2,130
Normandale 4 structure(s)	206	206	206	206	206	206	206	206	206	206	\$2,130
Personna 1 structure(s)	30	30	30	30	30	30	30	30	30	30	\$2,130
Rodick Road Pedestrian Bridge					160	160	160	160	160	160	\$2,130
Six Penny 1 structure(s)	26	26	26	26	26	26	26	26	26	26	\$2,130
Summerdale 1 structure(s)	30	30	30	30	30	30	30	30	30	30	\$2,130
Toogood Pond 1 Structure(s)	50	50	50	50	50	50	50	50	50	50	\$2,130
Toogood Pond Dam 1 structure(s)	356	356	356	356	356	356	356	356	356	356	\$2,130
Unionville Library 1 structure(s)	56	56	56	56	56	56	56	56	56	56	\$2,130
Unioville Gate 1 structure(s)	31	31	31	31	31	31	31	31	31	31	\$2,130
Walden 3 structure(s)	206	206	206	206	206	206	206	206	206	206	\$2,130
Wycliffe 1 structure(s)	60	60	60	60	60	60	60	60	60	60	\$2,130
						-					
Subtotal (feet)	1,761	1,761	1,761	1,761	2,116	2,116	2,116	2,116	2,171	2,171	
Subtotal (\$)	\$3,750,930	\$3,750,930	\$3,750,930	\$3,750,930	\$4,507,080	\$4,507,080	\$4,507,080	\$4,507,080	\$4,624,230	\$4,624,230	

Pathways (linear metres)					Linear Metres						UNIT COST
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/metre)
Paved Surface (linear metres)	28,437	30,444	32,341	33,983	35,863	35,863	35,863	36,041	36,224	36,825	\$57
Stone Surface (linear metres)	28,334	30,495	32,488	32,488	33,505	34,288	35,071	35,854	36,637	37,419	\$40
Woodchip Surface (linear metres)	1,890	2,097	2,515	2,515	2,515	2,515	2,515	2,515	2,515	2,515	\$59
Concrete Surface (linear metres)	1,259	2,262	4,104	4,625	5,966	5,966	5,966	5,966	5,966	5,966	\$94
Boardwalk (linear metres)	191	191	191	191	191	191	191	191	191	191	\$484
Subtotal (metres)	60,111	65,489	71,639	73,801	78,039	78,822	79,605	80,566	81,532	82,915	
Subtotal (\$)	\$3,065,849	\$3,372,431	\$3,757,443	\$3,899,956	\$4,173,469	\$4,204,476	\$4,235,483	\$4,276,635	\$4,318,073	\$4,383,297	

Illumination (# of poles)					# of Poles						UNIT COST
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/poles)
Pathways	217	227	248	248	287	287	287	287	287	287	\$5,500
Playgrounds	26	26	26	26	26	26	26	26	32	32	\$5,500
Parking Lots	61	61	61	61	69	69	69	69	69	69	\$7,570
Subtotal (#)	304	314	335	335	382	382	382	382	388	388	
Subtotal (\$)	\$1,798,270	\$1,853,270	\$1,968,770	\$1,968,770	\$2,243,830	\$2,243,830	\$2,243,830	\$2,243,830	\$2,276,830	\$2,276,830	



Irrigation (# of fields)					\$ of Fields						UNIT COST
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/fields)
Sportsfield	30	30	30	30	35	35	35	35	35	35	\$17,500
Subtotal (#)	30	30	30	30	35	35	35	35	35	35	
Subtotal (\$)	\$525,000	\$525,000	\$525,000	\$525,000	\$612,500	\$612,500	\$612,500	\$612,500	\$612,500	\$612,500	

Landscape (sq.m.)					Square Metres						UNIT COST
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/metre)
Landscape (<5000 square metres)	28,508	28,508	40,508	40,508	66,333	66,333	66,333	66,333	66,333	66,333	\$6.90
Landscape (>5000 square metres)	3,782	3,782	7,382	7,382	14,926	14,926	14,926	14,926	16,786	16,786	\$3.45
Subtotal (metres)	32,290	32,290	47,890	47,890	81,259	81,259	81,259	81,259	83,119	83,119	
Subtotal (\$)	\$209,753	\$209,753	\$304,973	\$304,973	\$509,192	\$509,192	\$509,192	\$509,192	\$515,609	\$515,609	

Buildings and Washrooms (#)				# of Bu	uildings & Wash	rooms					UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Milliken Mills Community Park	1	1	1	1	1	1	1	1	1	1	\$71,000
Millenium			1	1	1	1	1	1	1	1	\$71,000
Milne	1	1	1	1	1	1	1	1	1	1	\$71,000
Pomona Mills	1	1	1	1	1	1	1	1	1	1	\$71,000
Toogood Pond	1	1	1	1	1	1	1	1	1	1	\$71,000
Victoria Sq.	1	1	1	1	1	1	1	1	1	1	\$71,000
Mintleaf	1	1	1	1	1	1	1	1	1	1	\$71,000
Riseborough	1	1	1	1	1	1	1	1	1	1	\$71,000
Springdale	1	1	1	1	1	1					\$71,000
Subtotal (#)	8	8	9	9	9	9	8	8	8	8	
Subtotal (\$)	\$568,000	\$568,000	\$639,000	\$639,000	\$639,000	\$639,000	\$568,000	\$568,000	\$568,000	\$568,000	



Gazebos/Shelters (#)				# of	Gazebos & Shel	Iters					UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
MINOR											
Alfred Patterson									1	1	\$56,000
Beaupre			1	1	1	1	1	1	1	1	\$56,000
Benjamin Marr		1	1	1	1	1	1	1	1	1	\$56,000
Benjamin Marr - South						1	1	1	1	1	\$56,000
Denison	1	1	1	1	1	1	1	1	1	1	\$56,000
Frederick Bagg					1	1	1	1	1	1	\$56,000
Hazelton									1	1	\$56,000
James Edwards		1	1	1	1	1	1	1	1	1	\$56,000
Joseph St. Parkette			1	1	1	1	1	1	1	1	\$56,000
Leitchcroft Neighbourhood Park					1	1	1	1	1	1	\$56,000
Mattamy Town Square										1	\$56,000
Church Parkette			1	1	1	1	1	1	1	1	\$56,000
Rougehaven	2	2	2	2	2	2	2	2	2	2	\$56,000
Roxbury Park	1	1	1	1	1	1	1	1	1	1	\$56,000
South Unionville									1	1	\$56,000
Victoria Square	1	1	1	1	1	1	1	1	1	1	\$56,000
Williamstown		1	1	1	1	1	1	1	1	1	\$56,000
MAJOR											
Berczy Commons (3)					1	1	1	1	1	1	\$179,200
Greensborough Town Centre Park (3)					1	1	1	1	1	1	\$179,200
Huntington Park	1	1	1	1	1	1	1	1	1	1	\$179,200
John Daniels Park				1	1	1	1	1	1	1	\$179,200
Legacy	1	1	1	1	1	1	1	1	1	1	\$179,200
MDJV								1	1	1	+ · · · · · · · · · · · · · · · · · · ·
McLaren Park (2)					1	1	1	1	1	1	\$179,200
Metrus										1	\$179,200
Millenium Square			1	1	1	1	1	1	1	1	\$179,200
Millenium Park			1	1	1	1	1	1	1	1	\$179,200
Milne	1	1	1	1	1	1	1	1	1	1	\$179,200
Swan Lake									1	1	\$179,200
Subtotal (#)	8	11	16	17	22	23	23	24	28	30	
Subtotal (\$)	\$817,600	\$985,600	\$1,512,000	\$1,691,200	\$2,340,800	\$2,396,800	\$2,396,800	\$2,576,000	\$2,923,200	\$3,158,400	

Parking Lots (sq.m.)					Square Metres						UNIT COST
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/metre)
Paved	51,969	51,969	51,969	51,969	55,239	55,239	55,239	55,239	55,239	55,239	\$74
Unpaved	39,896	39,896	39,896	39,896	39,896	39,896	39,896	39,896	39,896	39,896	\$41
Subtotal (metres)	91,865	91,865	91,865	91,865	95,135	95,135	95,135	95,135	95,135	95,135	
Subtotal (\$)	\$5,481,442	\$5,481,442	\$5,481,442	\$5,481,442	\$5,723,422	\$5,723,422	\$5,723,422	\$5,723,422	\$5,723,422	\$5,723,422	

Gold Courses (#)				#	of Golf Courses	S					UNIT COST
Park Name	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	(\$/facility)
Legacy Golf Course	1	1	1	1	1	1	1	1	1	1	\$5,036,000
Subtotal (#)	1	1	1	1	1	1	1	1	1	1	
Subtotal (\$)	\$5,036,000	\$5,036,000	\$5,036,000	\$5,036,000	\$5,036,000	\$5,036,000	\$5,036,000	\$5,036,000	\$5,036,000	\$5,036,000	



TOWN OF MARKHAM **CALCULATION OF SERVICE LEVELS** PLANNING & URBAN DESIGN DEPARTMENT **PARK DEVELOPMENT & FACILITIES - FACILITIES**

Historic Population	1999 193,736	2000 201,038	2001 208,615	2002 218,270	2003 228,373	2004 238,943	2005 250,002	2006 261,573	2007 268,342	2008 275,287
INVENTORY SUMMARY (\$000)										
Park Facilities	\$56,058.5	\$58,373.8	\$60,484.5	\$61,334.2	\$63,779.1	\$64,995.4	\$65,072.9	\$65,946.9	\$67,795.4	\$69,572.2
Outdoor Buildings	\$5,419.9	\$5,797.9	\$5,797.9	\$5,797.9	\$5,821.9	\$5,821.9	\$5,821.9	\$5,821.9	\$5,821.9	\$5,821.9
Land for Outdoor Buildings	\$7,709.1	\$7,709.1	\$7,709.1	\$7,709.1	\$7,709.1	\$7,709.1	\$7,709.1	\$7,709.1	\$7,709.1	\$7,709.1
Parkland	\$134,773.6	\$136,276.8	\$140,578.2	\$141,710.3	\$149,581.4	\$154,080.4	\$156,830.5	\$160,835.5	\$165,321.1	\$170,984.1
Special Facilities	\$21,842.7	\$22,372.3	\$23,565.4	\$24,097.2	\$26,585.2	\$26,672.2	\$26,632.2	\$26,852.6	\$27,397.8	\$27,698.2
Total (\$000)	\$225,803.8	\$230,529.8	\$238,135.1	\$240,648.6	\$253,476.7	\$259,278.9	\$262,066.6	\$267,165.9	\$274,045.2	\$281,785.5

Average SERVICE LEVEL (\$/capita) Service

											Levei
Park Facilities	\$289.36	\$290.36	\$289.93	\$281.00	\$279.28	\$272.01	\$260.29	\$252.12	\$252.65	\$252.73	\$271.97
Outdoor Buildings	\$27.98	\$28.84	\$27.79	\$26.56	\$25.49	\$24.37	\$23.29	\$22.26	\$21.70	\$21.15	\$24.94
Land for Outdoor Buildings	\$39.79	\$38.35	\$36.95	\$35.32	\$33.76	\$32.26	\$30.84	\$29.47	\$28.73	\$28.00	\$33.35
Parkland	\$695.66	\$677.87	\$673.86	\$649.24	\$654.99	\$644.84	\$627.32	\$614.88	\$616.08	\$621.11	\$647.58
Special Facilities	\$112.74	\$111.28	\$112.96	\$110.40	\$116.41	\$111.63	\$106.53	\$102.66	\$102.10	\$100.62	\$108.73
Total (\$/capita)	\$1,165.52	\$1,146.70	\$1,141.50	\$1,102.52	\$1,109.92	\$1,085.11	\$1,048.26	\$1,021.38	\$1,021.25	\$1,023.61	\$1,086.58

TOWN OF MARKHAM CALCULATION OF MAXIMUM ALLOWABLE PLANNING & URBAN DESIGN DEPARTMENT PARK DEVELOPMENT & FACILITIES

10 Year Average Service Level (1999-2008) \$1,086.58 per capita

2008 Population 275,287 Population Growth in New Units 2009-2018 61,022 Population Growth in New Units 2009-2031 88,149

			Excess Calcula	ation (\$000)	
Average	Maximum Allowable	·	Using	New Maximun	m
Service	10 Years 2031	2008	Average Exces	ss Allowable	
Level	(\$000)	Inventory	Service Level Capaci	ity 10 Years 2	2031
Total Park Development & Facilities \$1,086.58 per c	apita \$66,304.7 \$95,78	\$1.2 \$281,785.5	\$299,120.6	\$0.0 \$66,304.7 \$	\$95,781.2



			Total	Less	Total	Replacement		Growth-R	elated Costs		2009-20	18 Discounted
Service	Project Description	Timing	Project Cost	Grants /Subsidies	Municipal Cost	and Benefit To Existing	Prior Growth	2009- 2018	Post 2018	Total		wth-Related apital Costs
5.0 PARK DEVELOR	MENT AND FACILITIES			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
5.1 Major Soc	cor Lighted											
5.1.1	Angus Glen Community Centre Park	2009	\$ 992,619	\$ -	\$ 992,619	\$ -	\$ 992,619	¢ -	s -	\$ 992,619	90%	\$ -
5.1.2		2009	\$ 1,800,000	\$ -	\$ 1,800,000		\$ 1,800,000	\$ -	\$ -		90%	\$ -
	Bill Crothers Secondary (Artificial Turf)			\$ -				Ť	\$ - \$			\$ -
5.1.3	Villages of Fairtree Community Park	2009	+,	7	\$ 496,309	*	+,	\$ -	T	\$ 496,309	90%	*
5.1.4	Berczy Community Park S. Phase 2	2010	\$ 496,309	\$ -	\$ 496,309		\$ 496,309	\$ -	\$ -	\$ 496,309	90%	\$ -
5.1.5	Boxgrove Community Park	2012	\$ 992,619	\$ -	\$ 992,619		\$ -	\$ 992,619	\$ -	\$ 992,619	90%	\$ 893,357
5.1.6	Cornell Secondary School N.P.	2012	\$ 496,309	\$ -	\$ 496,309	\$ -	\$ -	\$ 496,309	\$ -	\$ 496,309	90%	\$ 446,678
5.1.7	Markham Sports Park	2012	\$ 5,459,404	\$ -	\$ 5,459,404	\$ -	\$ -	\$ 5,459,404	\$ -	\$ 5,459,404	90%	\$ 4,913,463
5.1.8	South East Markham Community Centre Park	2012	\$ 992,619	\$ -	\$ 992,619	\$ -	\$ -	\$ 992,619	\$ -	\$ 992,619	90%	\$ 893,357
5.1.9	Southwest Cathedral Monarch Memorial Neighbourhood Park	2012	\$ 496,309	\$ -	\$ 496,309	\$ -	\$ -	\$ 496,309	\$ -	\$ 496,309	90%	\$ 446,678
5.1.10	Greensborough Alfred Patterson Neighbourhood Park	2013	\$ 496,309	\$ -	\$ 496,309	\$ -	\$ -	\$ -	\$ 496,309	\$ 496,309	90%	\$ -
5.1.11	Cornell Community Park	2015	\$ 1,488,928	\$ -	\$ 1,488,928	\$ -	\$ -	\$ -	\$ 1,488,928	\$ 1,488,928	90%	\$ -
3.1.11	Subtotal Major Soccer Lighted		\$ 14,207,736	\$ -	\$ 14,207,736	\$ -	\$ 3,785,238	\$ 8,437,260	\$ 1,985,238	\$ 14,207,736		\$ 7,593,534
5.2 Major Soc	cer Unlighted											
5.2 Major 300 5.2.1	Boxgrove South Village N. P.	2009	\$ 146,841	\$ -	\$ 146,841	ls -	\$ 146,841	s -	s -	\$ 146,841	90%	s -
5.2.2	East Cathedral Community Park	2009	\$ 146,841	\$ -	\$ 146,841	\$ -	\$ 146,841	\$ -	\$ -	\$ 146,841	90%	\$ -
5.2.3	Greensborough Stalmaster N.P.	2009	\$ 146,841	\$ -	\$ 146,841	\$ -	\$ 146.841	\$ -	\$ -	\$ 146,841	90%	\$ -
5.2.3	H&R Grand Cornell Horseshoe Park	2009	\$ 146,841	\$ -	\$ 146,841	ا و	\$ 146,841	\$ -	\$ -	\$ 146,841	90%	\$ -
5.2.5	Leitchcroft (Times) Community Park	2009	\$ 146,841	\$ -	\$ 146,841	9 -	\$ 146,841	\$ -	\$ -	\$ 146,841	90%	\$ -
5.2.6	Wismer Roy Rainey Neighbourhood Park	2009	\$ 146,841	\$ -	\$ 146,841	9 -	\$ 146,841	\$ -	\$ -	\$ 146,841	90%	\$ -
		2010		\$ -		\$ -	* - / -	\$ -	\$ -			\$ -
5.2.7	South Unionville Ray Street Parkette E.	2010	\$ 146,841 \$ 146,841	\$ -	+,	5 -			\$ -		90%	
5.2.8 5.2.9	Remington Markham Centre Active Park East	2011		\$ -	\$ 146,841 \$ 146.841	÷ -	\$ - \$ -	\$ 146,841 \$ 146.841	\$ -		90%	\$ 132,157
	Northwest Cathedral Neighbourhood Park S.			7		5 -	*	+,	T	Ψ 110,011	90%	\$ 132,157
5.2.10	Main Street Milliken Armadale N.P.	2013	\$ 146,841	\$ -	\$ 146,841	5 -	\$ -	\$ -	\$ 146,841	\$ 146,841	90%	\$ -
5.2.11	Wismer Alexander Lowrey Neighbourhood Park West	2013	\$ 146,841	\$ -	\$ 146,841	\$ -	\$ -	\$ -	\$ 146,841	\$ 146,841	90%	\$ -
5.2.12	Greensborough Williamson NP	2014	\$ 146,841	\$ -	\$ 146,841	\$ -	\$ -	\$ -	\$ 146,841	\$ 146,841	90%	\$ -
5.2.13	Victoria Square Community Park N. Phase	2014	\$ 146,841	\$ -	\$ 146,841	\$ -	\$ -	\$ -	\$ 146,841	\$ 146,841	90%	\$ -
5.2.14	Berczy Beckett Neighbourhood Park	2015	\$ 146,841	\$ -	\$ 146,841	\$ -	\$ -	\$ -	\$ 146,841	\$ 146,841	90%	\$ -
5.2.15	Cornell Centre Mattamy Woodlot Park	2016	\$ 146,841	\$ -	\$ 146,841	\$ -	\$ -	\$ -	\$ 146,841	\$ 146,841	90%	\$ -
5.2.16	Wismer McCowan Woodlot Park	2016	\$ 146,841	\$ -	\$ 146,841	\$ -	\$ -	\$ -	\$ 146,841	\$ 146,841	90%	\$ -
5.2.17	South Unionville Community Park W.	2017	\$ 146,841	\$ -	\$ 146,841	\$ -	\$ -	\$ -	\$ 146,841	\$ 146,841	90%	\$ -
5.2.18	Greensborough North Parkway N.P. East	2018	\$ 146,841	\$ -	\$ 146,841	\$ -	\$ -	\$ -	\$ 146,841	\$ 146,841	90%	\$ -
	Subtotal Major Soccer Unlighted		\$ 2,643,134	\$ -	\$ 2,643,134	\$ -	\$ 1,027,885	\$ 293,682	\$ 1,321,567	\$ 2,643,134		\$ 264,313
5.3 Major Dia	mond - Lighted										90%	
5.3.1	Villages of Fairtree Community Park and Cricket Pitch	2009	\$ 439,575	\$ -	\$ 439,575	\$ -	\$ 439,575	\$ -	\$ -	\$ 439,575	90%	\$ -
5.3.2	Markham Sports Park	2012	\$ 1,758,298	\$ -	\$ 1,758,298	\$ -	\$ -	\$ 1,758,298	\$ -	\$ 1,758,298	90%	\$ 1,582,468
5.3.3	Cornell Community Park	2015	\$ 439,575	\$ -	\$ 439,575	\$ -	\$ -	\$ -	\$ 439,575	\$ 439,575	90%	\$ -
	Subtotal Major Diamond - Lighted		\$ 2,637,447	\$ -	\$ 2,637,447	\$ -	\$ 439,575	\$ 1,758,298	\$ 439,575	\$ 2,637,447		\$ 1,582,468
5.4 Major Dia	mond - Unlighted											
5.4.1	Villages of Fairtree Community Park and Cricket Pitch	2009	\$ 142,535	\$ -	\$ 142,535	\$ -	\$ 142,535	\$ -	\$ -	\$ 142,535	90%	\$ -
5.4.2	Boxgrove Community Park	2012	\$ 142.535	\$ -	\$ 142,535		\$ -	\$ 142,535	\$ -	\$ 142,535	90%	\$ 128,281
5.4.3	Greensborough Williamson NP	2012	\$ 142,535	\$ -	\$ 142,535		\$ -	\$ -	\$ 142,535	\$ 142,535	90%	\$ -
5.4.4	Cornell Centre Mattamy Woodlot Park	2016	\$ 142,535	\$ -	\$ 142,535		\$ -	\$ -	\$ 142,535	\$ 142,535	90%	\$ -
5.4.5	Wismer McCowan Woodlot Park	2016	\$ 142,535	\$ -	\$ 142,535		\$ -	\$ -	\$ 142,535	\$ 142,535	90%	\$ -
00	Subtotal Major Diamond - Unlighted		\$ 712,675	\$ -	\$ 712,675		\$ 142,535	\$ 142,535	\$ 427,605	\$ 712,675	0070	\$ 128,281
5.5 Tennis Co	urte - Lighted											
5.5 Tennis Co 5.5.1	Angus Glen Community Centre Park	2009	\$ 562,547	\$ -	\$ 562,547	•	\$ 562,547	s -	s -	\$ 562,547	90%	s -
				\$ -				*	\$ - \$ -			\$ - \$ -
5.5.2 5.5.3	Berczy Community Park Washroom Pavilion and Maintenance Station Markham Sports Park	2009 2012		\$ - \$ -	\$ 281,274	\$ - \$ -	\$ 281,274 \$ -	\$ -	\$ - \$ -	\$ 281,274	90% 90%	*
				\$ -	\$ 1,687,641	Ψ	\$ - \$ -	\$ 1,687,641 \$ -		\$ 1,687,641		
5.5.4 5.5.5	Cornell Community Park Reminetes Markham Contro Feet Valley Edge Linear Bark	2015		φ -	\$ 843,821 \$ 843,821	\$ -	φ -	9 -	\$ 843,821 \$ 843,821	\$ 843,821 \$ 843,821	90%	\$ -
5.5.5	Remington Markham Centre East Valley Edge Linear Park	2017	*	φ -		-	φ -	<u> </u>			90%	\$ -
	Subtotal Tennis Courts - Lighted	1	\$ 4,219,103	\$ -	\$ 4,219,103	\$ -	\$ 843,821	\$ 1,687,641	\$ 1,687,641	\$ 4,219,103		\$ 1,518,877
	Subtotal Tennis Courts - Lighted		\$ 4,219,103	\$ -	\$ 4,219,103	\$ -	\$ 843,821	\$ 1,687,641	\$ 1,687,641	\$ 4,219,103		



	<u> </u>		Total	Less	Total	Replacement			elated Costs			18 Discounted
Service	Project Description	Timing	Project	Grants	Municipal	and Benefit	Prior	2009-	Post			th-Related
			Cost	/Subsidies	Cost	To Existing	Growth	2018	2018	Total	Net C	apital Costs
5.0 PARK DEVELO	PMENT AND FACILITIES											
5.6 Minor So	ccer - Unlighted											
5.6.1	Cornell Madison Morning Dove Woodlot Park	2009	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ -	\$ 125,432	90%	\$ -
5.6.2	Fairtree South Village Billingsley Parkettte	2009	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ -	\$ 125,432	90%	\$ -
5.6.3	King David Cathedraltown Town Square	2009	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ -	\$ 125,432	90%	\$ -
5.6.4	Leitchcroft (Times) Community Park	2009	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ -	\$ 125,432	90%	\$ -
5.6.5	Berczy Community Park S. Phase 2	2010	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ -	\$ 125,432	90%	\$ -
5.6.6	South Unionville Ray Street Parkette E.	2010	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ -	\$ 125,432	90%	\$ -
5.6.7	Swan Lake Park Block 31	2010	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ -	\$ 125,432		\$ -
5.6.8	Angus Glen West Village Valley Edge Park	2011	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ -	\$ 125,432	\$ -	\$ 125,432	90%	\$ 112,889
5.6.9	Boxgrove Southeast Heritage House Parkette	2011	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ -	\$ 125,432	\$ -	\$ 125,432	90%	\$ 112,889
5.6.10	Cornell Madison East Woodlot Park	2011	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ -	\$ 125,432	\$ -	\$ 125,432		\$ 112,889
5.6.11	Greensborough Solace Rd. N.P.	2011	\$ 125,432	\$ -	\$ 125,432		\$ -	\$ 125,432	\$ -	\$ 125,432		\$ 112.889
5.6.12	Boxgrove Community Park	2012	\$ 250,863	\$ -	\$ 250,863		\$ -	\$ 250,863	\$ -	\$ 250,863		\$ 225,777
5.6.13	Cornell Gowland N.P.	2012	\$ 250,863	\$ -	\$ 250,863	\$ -	\$ -	\$ 250.863	\$ -	\$ 250,863		\$ 225,777
5.6.14	Elgin St. Honsburger Park	2012	\$ 125,432	š -	\$ 125,432	\$ -	\$ -	\$ 125,432	\$ -	\$ 125,432		\$ 112,889
5.6.15	Markham Sports Park	2012	\$ 1,128,885	\$ -	\$ 1,128,885	\$ -	\$ -	\$ 1,128,885	\$ -	\$ 1,128,885		\$ 1,015,997
5.6.16	South Unionville Ray Street Parkette W.	2012	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ -	\$ 125,432	\$ -	\$ 125,432		\$ 112,889
5.6.17	Southwest Cathedral Monarch Memorial Neighbourhood Park	2012	\$ 125,432	\$ -	\$ 125,432		\$ -	\$ 125,432	\$ -	\$ 125,432		\$ 112,889
5.6.18	Wismer Hwy. #48 Hamersley Woodlot Park	2012	\$ 125,432	\$ -	\$ 125,432		\$ -	\$ 125,432	\$ -	\$ 125,432		\$ 112,889
5.6.19	Berczy Northeast McCowan Parkette	2012	\$ 125,432	\$ -	\$ 125,432		\$ -	\$ -	\$ 125,432	\$ 125,432		\$ -
5.6.20	Main Street Milliken Armadale N.P.	2013	\$ 125,432	\$ -	\$ 125,432	· ·	\$ -	\$ -	\$ 125,432	\$ 125,432		\$ -
5.6.21	Southwest Cathedral Monarch Memorial Parkette	2013	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ -	\$ -	\$ 125,432	\$ 125,432		\$ -
5.6.22	Wismer Alexander Lowrey Neighbourhood Park East	2013	\$ 250,863	\$ -	\$ 250,863	\$ -	\$ -	\$ -	\$ 250,863	\$ 250,863		\$ -
5.6.23	Cornell Mattamy Cornell Park Ave. N.P.	2013	\$ 125,432	\$ -	\$ 125,432	Ÿ	\$ -	\$ -	\$ 125,432	\$ 125,432		\$ -
5.6.24	Greensborough Williamson NP	2014	\$ 125,432	\$ -	\$ 125,432		\$ -	\$ -	\$ 125,432	\$ 125,432		\$ -
		2014		\$ -			\$ -					\$ -
5.6.25	Berczy Beckett Neighbourhood Park		\$ 125,432 \$ 752,590	\$ -			\$ - \$ -			\$ 125,432 \$ 752,590		\$ - \$ -
5.6.26	Cornell Community Park	2015				ъ -	\$ - \$ -	T				\$ -
5.6.27	Cornell Madison Rouge Blvd. Park	2015 2015		\$ - \$ -	\$ 125,432 \$ 125,432	\$ -	\$ - \$ -	\$ - \$ -		\$ 125,432 \$ 125,432		
5.6.28	Remington Markham Centre East Central Parkette						\$ - \$ -	Ÿ	·			\$ -
5.6.29	Berczy Beckett Central Parkette	2016		Ψ	\$ 125,432		T	Ÿ		\$ 125,432		\$ -
5.6.30	Cornell Centre Mattamy N.P.	2016	\$ 125,432	\$ -	\$ 125,432		\$ -	\$ -	\$ 125,432	\$ 125,432		\$ -
5.6.31	Northwest Cathedral Neighbourhood Park N.	2016	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ -	\$ -	\$ 125,432	\$ 125,432		\$ -
5.6.32	Remington Markham Centre N.W. Valley Edge Parkette	2016	\$ 125,432	\$ -	\$ 125,432		\$ -	\$ -	\$ 125,432	\$ 125,432		\$ -
5.6.33	Cornell Madison East Channel Park	2017	\$ 250,863	\$ -	\$ 250,863		\$ -	\$ -	\$ 250,863	\$ 250,863		\$ -
5.6.34	Remington Markham Centre East Valley Edge Linear Park	2017	\$ 250,863	\$ -	\$ 250,863	\$ -	\$ -	\$ -	\$ 250,863	\$ 250,863	90%	\$ -
5.6.35	South Unionville Community Park W.	2017	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ -	\$ -	\$ 125,432	\$ 125,432	90%	\$ -
5.6.36	Cornell Madison South Woodlot Park	2018	\$ 250,863	\$ -	\$ 250,863	\$ -	\$ -	\$ -	\$ 250,863	\$ 250,863	90%	\$ -
5.6.37	Greensborough North Parkway N.P. East	2018	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ -	\$ -	\$ 125,432	\$ 125,432	90%	\$ -
5.6.38	Greensborough North Parkway N.P. West	2018	\$ 125,432	\$ -	\$ 125,432	\$ -	\$ -	\$ -	\$ 125,432	\$ 125,432	90%	\$ -
	Subtotal Minor Soccer - Unlighted		\$ 7,149,606	\$ -	\$ 7,149,606	\$ -	\$ 878,022	\$ 2,634,065	\$ 3,637,519	\$ 7,149,606		\$ 2,370,659
			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	*	• .,,	T		-,,	,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-,,
5.7 Tennis Co	ourts - Unlighted											
5.7.1	Leitchcroft (Times) Community Park	2009	\$ 202,042	\$ -	\$ 202,042	\$ -	\$ 202,042	\$ -	\$ -	\$ 202,042	90%	\$ -
5.7.2	Berczy Community Park S. Phase 2	2010	\$ 202,042	\$ -	\$ 202,042	\$ -	\$ 202,042	\$ -	\$ -	\$ 202,042	90%	\$ -
5.7.3	Swan Lake Park Block 31	2010	\$ 202,042	\$ -	\$ 202,042	\$ -	\$ 202,042	\$ -	\$ -	\$ 202,042	90%	\$ -
5.7.4	Remington Markham Centre Active Park East	2011	\$ 404,084	\$ -	\$ 404,084	\$ -	\$ -	\$ 404,084	\$ -	\$ 404,084		\$ 363,675
5.7.5	Boxgrove Community Park	2012	\$ 404,084	\$ -	\$ 404,084	\$ -	\$ -	\$ 404,084	\$ -	\$ 404,084		\$ 363,675
5.7.6	South East Markham Community Centre Park	2012	\$ 404,084	\$ -	\$ 404,084	\$ -	\$ -	\$ 404,084	\$ -	\$ 404,084		\$ 363,675
5.7.7	Southwest Cathedral Monarch Memorial Neighbourhood Park	2012	\$ 202,042	\$ -	\$ 202,042	\$ -	\$ -	\$ 202,042	\$ -	\$ 202,042		\$ 181,838
5.7.8	Wismer Alexander Lowrey Neighbourhood Park East	2013	\$ 202,042	\$ -	\$ 202,042		\$ -	\$ -	\$ 202,042	\$ 202,042		\$ -
5.7.9	Greensborough Williamson NP	2014	\$ 404,084	\$ -	\$ 404,084	\$ -	\$ -	\$ -	\$ 404,084	\$ 404,084		\$ -
5.7.10	Victoria Square Community Park N. Phase	2014	\$ 202,042	\$ -	\$ 202,042	\$ -	\$ -	\$ -	\$ 202,042	\$ 202,042		\$ -
5.7.11	Berczy Beckett Neighbourhood Park	2015	\$ 202,042	\$ -	\$ 202,042	\$ -	\$ -	\$ -	\$ 202,042	\$ 202,042		\$ -
5.7.12	Cornell Centre Mattamy Woodlot Park	2016	\$ 202,042	\$ -	\$ 202,042	\$ -	\$ -	\$ -	\$ 202,042	\$ 202,042		\$ -
5.7.13	Wismer McCowan Woodlot Park	2016	\$ 202,042	\$ -	\$ 202,042		\$ -	\$ -	\$ 202,042	\$ 202,042		\$ -
5.7.14	Cornell Madison East Channel Park	2017	\$ 202,042	\$ -	\$ 202,042		\$ -	\$ -	\$ 202,042	\$ 202,042		\$ -
5.7.15	South Unionville Community Park W.	2017	\$ 404.084	\$ -	\$ 404.084	š -	\$ -	\$ -	\$ 404,084	\$ 404,084		\$ -
5.7.16	Cornell Madison South Woodlot Park	2017	\$ 404,084	\$ -	\$ 404,084	\$ -	\$ -	\$ -	\$ 404,084	\$ 404,084		\$ -
			\$ 202,042	φ -			7	Ι _φ -	\$ 202,042			\$ -
5.7.17	Greensborough North Parkway N.P. East Subtotal Tennis Courts - Unlighted	2018	\$ 4,646,962	\$ -	\$ 202,042 \$ 4,646,962	<u>\$</u> -	\$ - \$ 606,126	\$ 1,414,293	\$ 2,626,544	\$ 202,042 \$ 4,646,962	90%	\$ 1,272,864



			Total	Less	Total	Replacement		Growth-R	elated Costs		2009-2018	3 Discounte
Service	Project Description	Timing	Project	Grants	Municipal	and Benefit	Prior	2009-	Post		Growth	h-Related
			Cost	/Subsidies	Cost	To Existing	Growth	2018	2018	Total	Net Cap	oital Costs
5.0 PARK DEVE	LOPMENT AND FACILITIES											
5.8 Basket	tball Courts - Half Courts										90%	
5.8.1	Angus Glen Community Centre Park	2009	\$ 13,430	\$ -	\$ 13,43	0 \$ -	\$ 13,430	\$ -	\$ -	\$ 13,430	90% \$	-
5.8.2	Berczy Community Park S. Phase 2	2010	\$ 13,430		\$ 13,43		\$ 13,430		\$ -	\$ 13,430		-
5.8.3	Southwest Cathedral Monarch Memorial Neighbourhood Park	2012	\$ 13,430		\$ 13,43		\$ -	\$ 13,430	\$ -	\$ 13,430		12,08
5.8.4	Wismer Alexander Lowrey Neighbourhood Park East	2013	\$ 13,430	\$ -	\$ 13,43	0 \$ -	\$ -	\$ -	\$ 13,430	\$ 13,430	90% \$	
5.8.5	Victoria Square Community Park N. Phase	2014	\$ 13,430	\$ -	\$ 13,43	0 \$ -	\$ -	\$ -	\$ 13,430	\$ 13,430	90% \$	-
5.8.6	Cornell Centre Mattamy Woodlot Park	2016	\$ 13,430	\$ -	\$ 13,43	0 \$ -	\$ -	\$ -	\$ 13,430	\$ 13,430	90% \$	-
5.8.7	Northwest Cathedral Neighbourhood Park N.	2016	\$ 13,430	\$ -	\$ 13,43	0 \$ -	\$ -	\$ -	\$ 13,430	\$ 13,430	90% \$	-
5.8.8	Wismer McCowan Woodlot Park	2016	\$ 13,430	\$ -	\$ 13,43	0 \$ -	\$ -	\$ -	\$ 13,430	\$ 13,430	90% \$	-
5.8.9	South Unionville Community Park W.	2017	\$ 13,430	\$ -	\$ 13,43	0 \$ -	\$ -	\$ -	\$ 13,430	\$ 13,430	90% \$	-
	Subtotal Basketball Courts - Half Courts		\$ 120,867	\$ -	\$ 120,86	7 \$ -	\$ 26,859	\$ 13,430	\$ 80,578	\$ 120,867	7 \$	12,08
5.9 Basket	tball Courts - Full Courts											
5.9.1	Boxgrove Community Park	2012	\$ 26,858	\$ -	\$ 26,85	8 \$ -	s -	\$ 26,858	s -	\$ 26,858	90% \$	24,1
5.9.2	Cornell Secondary School N.P.	2012	\$ 26,858		\$ 26,85		\$ -	\$ 26,858		\$ 26,858		
5.9.3	Markham Sports Park	2012	\$ 53.716		\$ 53.71		\$ -	\$ 53,716		\$ 53,716		
5.9.4	South East Markham Community Centre Park	2012	\$ 53,716	\$ -	\$ 53,71	6 \$ -	\$ -	\$ 53,716	\$ -	\$ 53,716	90% \$	48,3
5.9.5	Greensborough Alfred Patterson Neighbourhood Park	2013	\$ 26,858	\$ -	\$ 26,85	8 \$ -	\$ -	\$ -	\$ 26,858	\$ 26,858	8 90% \$	
5.9.6	Victoria Square Community Park N. Phase	2014	\$ 26,858		\$ 26,85		\$ -	\$ -	\$ 26,858			-
5.9.7	Cornell Community Park	2015	\$ 53,716	\$ -	\$ 53,71		\$ -	\$ -	\$ 53,716	\$ 53,716		-
	·		\$ 268,580	\$ -	\$ 268,58	0 \$ -	\$ -	\$ 161,148	\$ 107,432	\$ 268,580	\$	145,03
5.10 Minor	Waterplay											
5.10.1		2009	\$ 165,000	\$ -	\$ 165,00	0 \$ -	\$ 165,000	\$ -	\$ -	\$ 165,000	90% \$	-
5.10.2	Leitchcroft (Times) Community Park	2009	\$ 165,000	\$ -	\$ 165,00	0 \$ -	\$ 165,000	\$ -	\$ -	\$ 165,000	90% \$	-
5.10.3	Villages of Fairtree Community Park and Cricket Pitch	2009	\$ 165,000	\$ -	\$ 165,00	0 \$ -	\$ 165,000	\$ -	\$ -	\$ 165,000	90% \$	-
5.10.4	Remington Markham Centre Active Park East	2011	\$ 165,000	\$ -	\$ 165,00	0 \$ -	\$ -	\$ 165,000	\$ -	\$ 165,000	90% \$	148,5
5.10.5	Markham Sports Park	2012	\$ 165,000	\$ -	\$ 165,00	0 \$ -	\$ -	\$ 165,000	\$ -	\$ 165,000	90% \$	148,5
5.10.6	Southwest Cathedral Monarch Memorial Neighbourhood Park	2012	\$ 165,000	\$ -	\$ 165,00	0 \$ -	\$ -	\$ 165,000	\$ -	\$ 165,000	90% \$	148,5
5.10.7	Greensborough Alfred Patterson Neighbourhood Park	2013	\$ 165,000	\$ -	\$ 165,00	0 \$ -	\$ -	\$ -	\$ 165,000	\$ 165,000		
5.10.8	Greensborough Williamson NP	2014	\$ 165,000	\$ -	\$ 165,00	0 \$ -	\$ -	\$ -	\$ 165,000	\$ 165,000	90% \$	-
5.10.9	Cornell Community Park	2015	\$ 165,000	\$ -	\$ 165,00	0 \$ -	\$ -	\$ -	\$ 165,000	\$ 165,000		
5.10.1		2017	\$ 165,000		\$ 165,00		\$ -	\$ -	\$ 165,000			
5.10.1		2017	\$ 165,000	\$ -	\$ 165,00		\$ -	\$ -	\$ 165,000			
5.10.1	2 Cornell Madison South Woodlot Park	2018	\$ 165,000	\$ -	\$ 165,00	0 \$ -	\$ -	\$ -	\$ 165,000	\$ 165,000	90% \$	-
	Subtotal Minor Waterplay		\$ 1,980,000	\$ -	\$ 1,980,00	0 \$ -	\$ 495,000	\$ 495,000	\$ 990,000	\$ 1,980,000	\$	445,50



Service			Total	Less	Total	Replacement			elated Costs			018 Discounted
	Project Description	Timing	Project	Grants	Municipal	and Benefit	Prior	2009-	Post			wth-Related
			Cost	/Subsidies	Cost	To Existing	Growth	2018	2018	Total	Net C	Capital Costs
5.0 PARK DE	/ELOPMENT AND FACILITIES											I
5 11 Mai	or Waterplay											1
5.11 Waj		2009	\$ 363,000	\$ -	\$ 363,000	s -	\$ 363,000	s -	s -	\$ 363,000	90%	s -
5.1	,	2009	\$ 363,000	\$ -	\$ 363,000		\$ 363,000	š -	\$ -	\$ 363,000	90%	\$ -
5.1		2010	\$ 363,000	\$ -	\$ 363,000		\$ -	\$ 363,000	\$ -	\$ 363,000	90%	\$ 326,700
5.1		2012	\$ 363,000	\$ -	\$ 363,000	\$ -	\$ -	\$ 363,000	\$ -	\$ 363,000	90%	\$ 326,700
5.1	1.6 Markham Sports Park	2012	\$ 363,000	\$ -	\$ 363,000	\$ -	\$ -	\$ 363,000	\$ -	\$ 363,000	90%	\$ 326,700
5.1	1.7 South East Markham Community Centre Park	2012	\$ 363,000	\$ -	\$ 363,000		\$ -	\$ 363,000	\$ -	\$ 363,000	90%	\$ 326,700
	1.12 Yonge/Steeles Meadowvale Ave. Parkette	2012	\$ 363,000	\$ -	\$ 363,000		\$ -	\$ -	\$ 363,000	\$ 363,000	90%	\$ -
5.1		2013	\$ 363,000	\$ -	\$ 363,000		\$ -	\$ -	\$ 363,000	\$ 363,000	90%	\$ -
5.1		2015	\$ 363,000	\$ -	\$ 363,000		\$ -	\$ -	\$ 363,000	\$ 363,000	90%	\$ -
5.1	Cornell Centre Mattamy Woodlot Park Wismer McCowan Woodlot Park	2016 2016	\$ 363,000 \$ 363,000	\$ -	\$ 363,000 \$ 363,000	\$ -	\$ - \$ -	\$ - \$ -	\$ 363,000 \$ 363,000	\$ 363,000 \$ 363,000	90% 90%	\$ - \$ -
5.1		2016		\$ -		<u> </u>		<u> </u>			90%	
	Subtotal Major Waterplay		\$ 3,993,000	\$ -	\$ 3,993,000	\$ -	\$ 726,000	\$ 1,452,000	\$ 1,815,000	\$ 3,993,000		\$ 1,306,800
5.12 Play	grounds (Senior & Junior)											
5.13		2009	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ 135,596	90%	\$ -
5.1		2009	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ 135,596	90%	\$ -
5.1		2009	\$ 135,596	\$ -	\$ 135,596		\$ 135,596	\$ -	\$ -	\$ 135,596	90%	\$ -
5.1:		2009	\$ 135,596	\$ -	\$ 135,596		\$ 135,596	\$ -	\$ -	\$ 135,596	90%	\$ -
5.1:		2009	\$ 135,596	\$ -	\$ 135,596		\$ 135,596	\$ -	\$ -	\$ 135,596	90%	\$ -
5.1:		2009 2010	\$ 135,596 \$ 135,596	\$ - \$ -	\$ 135,596	\$ -	\$ 135,596 \$ 135,596	\$ -	\$ -	\$ 135,596	90% 90%	\$ -
5.1: 5.1:		2010	\$ 135,596 \$ 135,596	\$ -	\$ 135,596 \$ 135,596	\$ -	\$ 135,596 \$ 135,596	\$ - \$ -	\$ - \$ -	\$ 135,596 \$ 135,596	90%	\$ - \$ -
5.1.		2010	\$ 135,596	\$ -	\$ 135,596	9 -	\$ 135,596	\$ -	\$ -	\$ 135,596	90%	\$ -
	2.10 Angus Glen West Village Central Green	2010	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ 133,390	\$ 135.596	\$ -	\$ 135,596	90%	\$ 122.036
5.1:		2011	\$ 135,596	\$ -	\$ 135,596		\$ -	\$ 135,596	\$ -	\$ 135,596	90%	\$ 122,036
	2.12 Boxgrove Southeast Heritage House Parkette	2011	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ 135,596	\$ -	\$ 135,596	90%	\$ 122,036
	2.13 Cornell Madison East Woodlot Park	2011	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ 135,596	\$ -	\$ 135,596	90%	\$ 122,036
5.1	2.14 Boxgrove Community Park	2012	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ 135,596	\$ -	\$ 135,596	90%	\$ 122,036
5.1	2.15 Cornell Gowland N.P.	2012	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ 135,596	\$ -	\$ 135,596	90%	\$ 122,036
5.1	2.16 Cornell Secondary School N.P.	2012	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ 135,596	\$ -	\$ 135,596	90%	\$ 122,036
	2.17 Liberty Markham Centre Oak Park Warden W.	2012	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ 135,596	\$ -	\$ 135,596	90%	\$ 122,036
	2.18 Markham Sports Park	2012	\$ 271,191	\$ -	\$ 271,191	\$ -	\$ -	\$ 271,191	\$ -	\$ 271,191	90%	\$ 244,072
	2.19 Northwest Cathedral Neighbourhood Park S.	2012	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ 135,596	\$ -	\$ 135,596	90%	\$ 122,036
	2.20 South East Markham Community Centre Park	2012	\$ 135,596 \$ 135,596	\$ - \$ -	\$ 135,596 \$ 135,596	\$ -	\$ - \$ -	\$ 135,596 \$ 135,596	\$ - \$ -	\$ 135,596	90%	\$ 122,036
5.1:		2012 2012	\$ 135,596 \$ 135,596	\$ - \$ -	\$ 135,596 \$ 135,596	\$ -	\$ - \$ -	\$ 135,596 \$ 135,596	\$ - \$ -	\$ 135,596 \$ 135,596	90% 90%	\$ 122,036 \$ 122,036
	2.22 Wismer Hwy. #48 Hamersley Woodlot Park 2.23 Yonge/Steeles Meadowale Ave. Parkette	2012	\$ 135,596	\$ -	\$ 135,596		\$ -	\$ 135,596	\$ -	\$ 135,596	90%	\$ 122,036
	2.24 Berczy Northeast McCowan Parkette	2012	\$ 135,596	\$ -	\$ 135,596	s -	\$ -	\$ 135,590	\$ 135,596	\$ 135,596	90%	\$ 122,030
	2.25 Greensborough Alfred Patterson Neighbourhood Park	2013	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ -	\$ 135,596	\$ 135,596	90%	\$ -
	2.26 Southwest Cathedral Monarch Memorial Parkette	2013	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ -	\$ 135,596	\$ 135,596	90%	\$ -
5.1		2014	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ -	\$ 135,596	\$ 135,596	90%	\$ -
5.1	2.28 Greensborough Williamson NP	2014	\$ 135,596	\$ -	\$ 135,596		\$ -	\$ -	\$ 135,596	\$ 135,596	90%	\$ -
	2.29 Berczy Beckett East Parkette	2015	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ -	\$ 135,596	\$ 135,596	90%	\$ -
	2.30 Berczy Beckett Neighbourhood Park	2015	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ -	\$ 135,596	\$ 135,596	90%	\$ -
5.1		2015	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ -	\$ 135,596	\$ 135,596	90%	\$ -
	2.32 Cornell Community Park	2015	\$ 271,191	\$ -	\$ 271,191	\$ -	\$ -	\$ -	\$ 271,191	\$ 271,191	90%	\$ -
	2.33 Remington Markham Centre East Central Parkette	2015	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ -	\$ 135,596	\$ 135,596	90%	\$ -
	2.34 Cornell Centre Mattamy N.P.	2016	\$ 135,596 \$ 135,596	\$ - \$ -	\$ 135,596 \$ 135,596		\$ - \$ -	\$ - \$ -	\$ 135,596 \$ 135,596	\$ 135,596	90%	\$ - \$ -
	2.35 Northwest Cathedral Woodlot Park 2.36 Cornell Madison East Channel Park	2016 2017	\$ 135,596 \$ 135,596	\$ -	\$ 135,596 \$ 135,596	ş -	\$ - \$ -	\$ - \$ -	\$ 135,596 \$ 135,596	\$ 135,596 \$ 135,596	90% 90%	\$ - \$ -
5.1.		2017	\$ 135,596 \$ 135.596	\$ -	\$ 135,596	φ - \$ -	\$ -	\$ -	\$ 135,596	\$ 135,596 \$ 135,596	90%	\$ -
	2.38 Greensborough North Parkway N.P. East	2018	\$ 135,596	\$ -	\$ 135,596	ls -	\$ -	\$ -	\$ 135,596	\$ 135,596	90%	\$ -
	2.39 Greensborough North Parkway N.P. West	2018	\$ 135,596	\$ -	\$ 135,596	\$ -	\$ -	\$ -	\$ 135,596	\$ 135,596	90%	\$ -
0	Subtotal Playgrounds (Senior & Junior)	==.5	\$ 5,559,423	\$ -	\$ 5,559,423	<u>s</u> -	\$ 1,220,361	\$ 2,033,935	\$ 2,305,127	\$ 5,559,423	1370	\$ 1,830,542
	Cabician i laygrounds (Genior & Junior)		Ψ 5,555,425	_	ψ J,JJJ,423	_	Ψ 1,220,301	Ψ 2,000,900	Ψ 2,505,127	Ψ 5,555,425		ψ 1,000,042



104

			Total	Less		Total	Replacement		Growth-Related Costs							2009-2018 Discounted		
Service	Project Description	Timing	Project	Grants		Municipal	and Benefit		Prior		2009-		Post			Gro	wth-R	elated
			Cost	/Subsidies		Cost	To Existing		Growth		2018		2018		Total	Net (Capital	Costs
5.0 PARK DEVELO	PMENT AND FACILITIES																	
5.13 Playgrou	inds (Senior)																	
5.13.1	Angus Glen Community Centre Park	2009	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	92,413	\$	-	\$	-	\$	92,413	90%	\$	-
5.13.2	Boxgrove South Village N. P.	2009	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	92,413	\$	-	\$	-	\$	92,413	90%	\$	-
5.13.3	East Cathedral Community Park	2009	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	92,413	\$	-	\$	-	\$	92,413	90%	\$	-
5.13.4	Fairtree West Village Eastvale Neighbourhood Park	2009	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	92,413	\$	-	\$	-	\$	92,413	90%	\$	-
5.13.5	Greensborough Amos Court Parkette	2009	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	92,413	\$	-	\$	-	\$	92,413	90%	\$	-
5.13.6	Greensborough Stalmaster N.P.	2009	\$ 92,4		\$	92,413	\$ -	\$	92,413	\$	-	\$		\$	92,413	90%	\$	-
5.13.7	H&R Grand Cornell Horseshoe Park	2009	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	92,413	\$	-	\$	-	\$	92,413	90%	\$	-
5.13.8	King David Cathedraltown Town Square	2009	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	92,413	\$	-	\$	-	\$	92,413	90%	\$	-
5.13.9	Villages of Fairtree Community Park and Cricket Pitch	2009	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	92,413	\$	-	\$	-	\$	92,413	90%	\$	-
5.13.10	Wismer Roy Rainey Neighbourhood Park	2009	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	92,413	\$	-	\$	-	\$	92,413	90%	\$	-
5.13.11	Boxgrove Town Centre 14th Ave. Gateway Parkette N.	2010	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	92,413	\$	-	\$		\$	92,413	90%	\$	-
5.13.12	H&R Grand Cornell Linear Finger Park	2010	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	92,413	\$	-	\$	-	\$	92,413	90%	\$	-
5.13.13	Tridel Markham Centre Linear Park E.	2010	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	92,413	\$	-	\$	-	\$	92,413	90%	\$	-
5.13.14	Cornell Community Centre Square	2011	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	-	\$	92,413	\$	-	\$	92,413	90%	\$	83,172
5.13.15	Greensborough Solace Rd. N.P.	2011	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	-	\$	92,413	\$	-	\$	92,413	90%	\$	83,172
5.13.16	Remington Markham Centre Active Park East	2011	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	-	\$	92,413	\$	-	\$	92,413	90%	\$	83,172
5.13.17	Remington Markham Centre Heritage House Parkette	2011	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	-	\$	92,413	\$	-	\$	92,413	90%	\$	83,172
5.13.18	Boxgrove Community Park	2012	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	-	\$	92,413	\$	-	\$	92,413	90%	\$	83,172
5.13.19	Markham Sports Park	2012	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	-	\$	92,413	\$	-	\$	92,413	90%	\$	83,172
5.13.20	South East Markham Community Centre Park	2012	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	-	\$	92,413	\$	-	\$	92,413	90%	\$	83,172
5.13.21	South Unionville Ray Street Parkette W.	2012	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	-	\$	92,413	\$	-	\$	92,413	90%	\$	83,172
5.13.22	Angus Glen West Village Parkette	2013	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	-	\$		\$	92,413	\$	92,413	90%	\$	
5.13.23	Main Street Milliken Armadale N.P.	2013	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	-	\$	-	\$	92,413	\$	92,413	90%	\$	-
5.13.24	Wismer Alexander Lowrey Neighbourhood Park East	2013	\$ 92,4	3 \$ -	\$	92,413	\$ -	\$	_	\$	-	\$	92,413	\$	92,413	90%	\$	-
5.13.25	Wismer Alexander Lowrey Neighbourhood Park West	2013	\$ 92,4		\$	92,413		\$	_	\$	-	\$		\$	92,413	90%	\$	-
5.13.26	Boxgrove Hill South East Parkette	2014	\$ 92,4		\$	92,413		\$	_	\$	-	\$		\$	92,413	90%	\$	-
5.13.27	Main Street Milliken NE Parkette	2014	\$ 92.4		\$	92,413	\$ -	\$	_	\$	-	\$		\$	92,413	90%	\$	_
5.13.28	Victoria Square Community Park N. Phase	2014		3 \$ -	\$	92,413	\$ -	\$	_	ŝ	-	\$		\$	92,413	90%	\$	_
5.13.29	Wismer Greenspire North Central Parkette	2014	\$ 92.4	3 \$ -	\$	92,413		\$	_	\$	-	\$	92,413	\$	92,413	90%	\$	-
5.13.30	Cornell Community Park	2015	\$ 92.4	3 \$ -	\$	92,413	\$ -	\$	_	\$	-	\$	92,413	\$	92,413	90%	\$	-
5.13.31	Cornell Madison Rouge Blvd. Park	2015	\$ 92.4	3 \$ -	\$	92,413	\$ -	\$	-	\$	-	\$		\$	92,413	90%	\$	-
5.13.32	Cornell Madison Rouge Blvd. Park S.	2015	\$ 92,4		\$	92,413		\$	-	\$	-	\$		\$	92,413	90%	\$	-
5.13.33	Cornell Mattamy East Church Street Parkette	2015		3 \$ -	\$	92,413		\$	_	ŝ	-	\$		\$	92,413	90%	\$	_
5.13.34	Fairtree East Village Remington Parkview Parkette	2015	\$ 92,4		\$	92,413		\$	_	\$	-	\$		\$	92,413	90%	\$	_
5.13.35	Remington Markham Centre East Central Parkette	2015	\$ 92,4		\$	92,413		\$	-	\$	-	\$		\$	92,413	90%	\$	-
5.13.36	Tridel Markham Centre Linear Park W.	2015	\$ 92,4		\$	92,413		\$	-	\$	-	\$		\$	92,413	90%	\$	-
5.13.37	Cornell Centre Mattamy Woodlot Park	2016	\$ 92.4		\$	92,413		\$	-	\$	-	\$		\$	92,413	90%	\$	-
5.13.38	Main Street Milliken SW Parkette	2016		3 \$ -	ŝ	92,413		\$	-	ŝ	-	\$. , .	\$	92,413	90%	\$	-
5.13.39	Northwest Cathedral Neighbourhood Park N.	2016	\$ 92.4		\$	92,413		\$	-	\$	-	\$		\$	92,413	90%		-
5.13.40	Remington Markham Centre N.W. Valley Edge Parkette	2016	\$ 92,4		\$	92,413		\$	-	ŝ	_	\$		\$	92,413	90%	\$	_
5.13.41	Wismer McCowan Woodlot Park	2016	\$ 92,4		ŝ	92,413		\$	_	s		\$		\$	92,413	90%	\$	_
5.13.42	Remington Markham Centre East Valley Edge Linear Park	2017	\$ 92,4		ŝ	92,413	\$ -	\$	_	\$	-	\$		\$	92,413	90%	\$	_
5.13.43		2017	\$ 92,4		ŝ	92,413		ŝ	_	ŝ	-	\$		\$	92,413	90%	\$	_
5.13.43	South Unionville Community Park W.	2017		_ -	- "			- S	1,201,372	4	739.306	<u> </u>			3.973.768	3070	\$	665,375
	Subtotal Playgrounds (Senior)		\$ 3,973,70	- ¢ o	ф	3,973,768	ъ -	Э	1,201,372	\$	739,306	Ъ	∠,∪33,∪90	\$	3,973,768		Э	005,3/5



105

			Total	Less	Total	Replacement		Growth-	Related Cos	sts		2009-2018 Discounte	
Service	Project Description	Timing	Project	Grants	Municipal	and Benefit	Prior	2009-	Pos				vth-Related
			Cost	/Subsidies	Cost	To Existing	Growth	2018	201	8	Total	Net C	apital Costs
5.0 PARK DI	EVELOPMENT AND FACILITIES												
5.14 Pla	aygrounds (Junior)												
5.	.14.1 Angus Glen Community Centre Park	2009	\$ 66,268	\$ -	\$ 66,268	\$ -	\$ 66,268	\$ -	\$	-	\$ 66,268	90%	\$ -
5.	.14.2 Boxgrove Hill Northeast Collingham Parkette	2009	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	\$		\$ 66,268	90%	\$ -
	.14.3 Boxgrove Hill Northeast Rizal Parkette	2009	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	\$		\$ 66,268	90%	\$ -
	.14.4 Boxgrove South Village N. P.	2009	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	\$		\$ 66,268	90%	\$ -
	.14.5 Cornell Madison Albert Lewis Square	2009	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	\$		\$ 66,268	90%	\$ -
	.14.6 Cornell Madison Morning Dove Woodlot Park	2009	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	\$		\$ 66,268	90%	\$ -
	.14.7 East Cathedral Community Park	2009	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	\$		\$ 66,268	90%	\$ -
	.14.8 Fairtree South Village Billingsley Parkettte	2009	\$ 66,268	*	\$ 66,268		\$ 66,268	\$ -	\$		\$ 66,268	90%	\$ -
	.14.9 Fairtree West Village Eastvale Neighbourhood Park	2009	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	\$		\$ 66,268	90%	\$ -
	.14.10 Greensborough Amos Court Parkette	2009	\$ 66,268 \$ 66,268		\$ 66,268 \$ 66,268	\$ -	\$ 66,268 \$ 66,268	\$ -	\$		\$ 66,268	90%	\$ - \$ -
	.14.11 Greensborough North West Parkettes	2009 2009	\$ 66,268 \$ 66,268		\$ 66,268 \$ 66,268		\$ 66,268 \$ 66,268	\$ - \$ -	\$		\$ 66,268 \$ 66,268	90% 90%	\$ -
	.14.12 Greensborough Stalmaster N.P14.13 H&R Grand Cornell Gateway Parkette N	2009	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	\$		\$ 66,268	90%	\$ -
		2009	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	\$		\$ 66,268	90%	\$ -
	.14.14 H&R Grand Cornell Gateway Parkette S .14.15 H&R Grand Cornell Horseshoe Park	2009	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	\$		\$ 66,268	90%	\$ -
	.14.16 King David Cathedraltown Arbouretum	2009	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	\$		\$ 66,268	90%	\$ - \$ -
	.14.17 King David Cathedraltown Arbouretum .14.17 King David Cathedraltown Crescent Parkette	2009	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	s S		\$ 66,268	90%	\$ -
	.14.18 King David Cathedraltown Panorama Park	2009	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	s S		\$ 66,268	90%	\$ -
	.14.19 King David Cathedraltown Town Square	2009	\$ 66.268		\$ 66.268		\$ 66.268	\$ -	s		\$ 66,268	90%	\$ -
	.14.20 South Unionville Caboto Trail Parkette	2009	\$ 66,268	*	\$ 66,268		\$ 66,268	\$ -	s s		\$ 66,268	90%	\$ -
	.14.21 Villages of Fairtree Community Park	2009	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	\$		\$ 66,268	90%	\$ -
	.14.22 Wismer Roy Rainey Neighbourhood Park	2009	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	s		\$ 66,268	90%	\$ -
	.14.23 Boxgrove Town Centre 14th Ave. Gateway Parkette S.	2010	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	s		\$ 66,268	90%	\$ -
	.14.24 H&R Grand Cornell Linear Finger Park	2010	\$ 66,268		\$ 66,268		\$ 66,268	\$ -	s		\$ 66,268	90%	\$ -
	.14.25 Wismer Donald Mingay Parkette on Mingay	2010	\$ 66,268		\$ 66,268		\$ 66,268	š -	ŝ		\$ 66,268	90%	\$ -
	.14.26 Angus Glen West Village Triangle Parkette	2011	\$ 66,268		\$ 66,268		\$ -	\$ 66.268	3 \$		\$ 66,268	90%	\$ 59.64
	.14.27 Angus Glen West Village Valley Edge Park	2011	\$ 66,268	\$ -	\$ 66,268		\$ -	\$ 66,268	3 \$	-	\$ 66,268	90%	\$ 59,64
	.14.28 Remington Markham Centre Active Park East	2011	\$ 66,268	\$ -	\$ 66,268	\$ -	\$ -	\$ 66,268		-	\$ 66,268	90%	\$ 59,6
5.	.14.29 Elgin St. Honsburger Park	2012	\$ 66,268	\$ -	\$ 66,268	\$ -	\$ -	\$ 66,268	3 \$	-	\$ 66,268	90%	\$ 59,6
5.	.14.30 Markham Sports Park	2012	\$ 66,268	\$ -	\$ 66,268	\$ -	\$ -	\$ 66,268	3 \$	-	\$ 66,268	90%	\$ 59,6
5.	.14.31 Main Street Milliken Armadale N.P.	2013	\$ 66,268	\$ -	\$ 66,268	\$ -	\$ -	\$ -	\$ 6	66,268	\$ 66,268	90%	\$ -
5.	.14.32 South Unionville West Greenburg Parkette	2013	\$ 66,268	\$ -	\$ 66,268	\$ -	\$ -	\$ -	\$ 6	66,268	\$ 66,268	90%	\$ -
5.	.14.33 Wismer Alexander Lowrey Neighbourhood Park East	2013	\$ 66,268	\$ -	\$ 66,268	\$ -	\$ -	\$ -	\$ 6	66,268	\$ 66,268	90%	\$ -
5.	.14.34 Wismer Alexander Lowrey Neighbourhood Park West	2013	\$ 66,268		\$ 66,268		\$ -	\$ -			\$ 66,268	90%	\$ -
5.	.14.35 Cornell Madison Rouge/Riverlands Square	2014	\$ 66,268		\$ 66,268		\$ -	\$ -			\$ 66,268	90%	\$ -
5.	.14.36 Main Street Milliken NW Parkette	2014	\$ 66,268		\$ 66,268		\$ -	\$ -			\$ 66,268	90%	\$ -
	.14.37 Cornell Community Park	2015	\$ 66,268		\$ 66,268		\$ -	\$ -			\$ 66,268	90%	\$ -
	.14.38 Cornell Madison Rouge Blvd. Park S.	2015	\$ 66,268		\$ 66,268		\$ -	\$ -			\$ 66,268	90%	\$ -
	.14.39 Cornell Mattamy East Church Street Parkette	2015	\$ 66,268		\$ 66,268		\$ -	\$ -			\$ 66,268	90%	\$ -
	.14.40 Fairtree East Village Remington Parkview Parkette	2015	\$ 66,268		\$ 66,268		\$ -	\$ -			\$ 66,268	90%	\$ -
	.14.41 Remington Markham Centre East Central Parkette	2015	\$ 66,268		\$ 66,268		\$ -	\$ -			\$ 66,268	90%	\$ -
	.14.42 Tridel Markham Centre Linear Park W.	2015	\$ 66,268		\$ 66,268		\$ -	\$ -			\$ 66,268	90%	\$ -
	.14.43 Cornell Centre Mattamy Woodlot Park	2016	\$ 66,268		\$ 66,268		\$ -	\$ -			\$ 66,268	90%	\$ -
	.14.44 East Cathedral North Parkette	2016	\$ 66,268		\$ 66,268		\$ -	\$ -			\$ 66,268	90%	\$ -
	.14.45 Main Street Milliken SE Parkette	2016	\$ 66,268		\$ 66,268	\$ -	\$ -	\$ -			\$ 66,268	90%	\$ -
	.14.46 Remington Markham Centre N.E. Valley Edge Parkette	2016	\$ 66,268		\$ 66,268	\$ -	\$ -	\$ -			\$ 66,268	90%	\$ -
	.14.47 Wismer McCowan Woodlot Park	2016	\$ 66,268		\$ 66,268		\$ -	\$ -			\$ 66,268	90%	\$ -
	.14.48 Boxgrove Hill East Parkette	2017	\$ 66,268		\$ 66,268		\$ -	\$ - \$ -			\$ 66,268	90%	\$ -
	.14.49 Yonge/Colbourne St. Parkette	2017	\$ 66,268		\$ 66,268 \$ 66,268	\$ -	\$ -	\$ - \$ -			\$ 66,268	90%	\$ -
5.	.14.50 Yonge/John St. Parkette	2017	\$ 66,268		* ***	<u>э</u> -	3 -	<u> </u>		66,268	\$ 66,268	90%	\$ -
	Subtotal Playgrounds (Junior)	ı	\$ 3,313,398	\$ -	\$ 3,313,398	1.8	\$ 1,656,699	\$ 331,340	\$ 1.32	25,359	\$ 3,313,398	1	\$ 298,20



			Total	Less	Total	Replacement			elated Costs			18 Discount
ervice	Project Description	Timing	Project Cost	Grants /Subsidies	Municipal Cost	and Benefit To Existing	Prior Growth	2009- 2018	Post 2018	Total		wth-Related apital Costs
5.0 PARK DEVELOR	PMENT AND FACILITIES											•
5.15 Major Gaz												
5.15.1	Angus Glen Community Centre Park	2009	\$ 211,200	\$ -	\$ 211,200		\$ 211,200		\$ -	\$ 211,200		\$
5.15.2	Cornell Mattamy Country Glen Triangle Parkette	2009	\$ 211,200	\$ -	\$ 211,200		\$ 211,200	\$ -	\$ -	\$ 211,200		\$
5.15.3	H&R Grand Cornell Horseshoe Park	2009	\$ 211,200	\$ -	\$ 211,200			\$ -	\$ -	\$ 211,200		\$
5.15.4	Highway No. 7 & Warden Ave. Park	2009	\$ 211,200	\$ -	\$ 211,200		\$ 211,200	\$ -	\$ -	\$ 211,200		\$
5.15.5	Villages of Fairtree Community Park and Cricket Pitch	2009	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ 211,200	90%	\$
5.15.6	Berczy Community Park S. Phase 2	2010	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ 211,200	90%	\$
5.15.7	H&R Grand Cornell Linear Finger Park	2010	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ 211,200	90%	\$
5.15.8	South Unionville Ray Street Parkette E.	2010	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ 211,200	90%	\$
5.15.9	Swan Lake Park Block 31	2010	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ 211,200	90%	\$
5.15.10	Tridel Markham Centre Linear Park E.	2010	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ 211,200	90%	\$
5.15.11	Victoria Square Community Park S. Phase Playground and Waterplay	2010	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ 211,200	90%	\$
5.15.12	Wismer Donald Mingay Parkette on Mingay	2010	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ 211,200	90%	\$
5.15.13	Angus Glen West Village Central Green	2011	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ 211,200	\$ -	\$ 211,200	90%	\$ 190,
5.15.14	Angus Glen West Village Valley Edge Park	2011	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ 211,200	\$ -	\$ 211,200	90%	\$ 190
5.15.15	Boxgrove Southeast Heritage House Parkette	2011	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ 211,200	\$ -	\$ 211,200	90%	\$ 190
5.15.16	Cornell Madison East Woodlot Park	2011	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ 211,200	\$ -	\$ 211,200	90%	\$ 190
5.15.17	Greensborough Solace Rd. N.P.	2011	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ 211,200	\$ -	\$ 211,200		\$ 190
5.15.18	Remington Markham Centre Active Park East	2011	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ 211,200	\$ -	\$ 211,200		\$ 190
5.15.19	Boxgrove Community Park	2012	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ 211,200	\$ -	\$ 211,200		\$ 190
5.15.20	Cornell Gowland N.P.	2012	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ 211,200		\$ 211,200		\$ 19
5.15.21	Cornell Secondary School N.P.	2012	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ 211,200	\$ -	\$ 211,200		\$ 19
5.15.22	Markham Sports Park	2012	\$ 422,400	\$ -	\$ 422,400		\$ -	\$ 422,400		\$ 422,400		\$ 38
5.15.23	Northwest Cathedral Neighbourhood Park S.	2012	\$ 211,200	\$ -	\$ 211,200			\$ 211,200		\$ 211,200		\$ 19
5.15.24	Remington Markham Centre Central Park N. Phase 1	2012	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ 211,200		\$ 211,200		\$ 19
5.15.25	South East Markham Community Centre Park	2012	\$ 211,200	\$ -	\$ 211,200	¢ _	\$ -	\$ 211,200	\$ -	\$ 211,200		\$ 19
5.15.26	Southwest Cathedral Monarch Memorial Neighbourhood Park	2012	\$ 422,400	\$ -	\$ 422,400	\$ -	\$ -	\$ 422,400	\$ -	\$ 422,400		\$ 380
5.15.27	Wismer Hwy. #48 Hamersley Woodlot Park	2012	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ 211,200	\$ -	\$ 211,200		\$ 190
5.15.28	Yonge/Steeles Meadowvale Ave. Parkette	2012	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ 211,200	\$ -	\$ 211,200		\$ 190
5.15.29		2012	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ 211,200		\$ 211,200		\$ 190
5.15.29	Berczy Northeast McCowan Parkette Greensborough Alfred Patterson Neighbourhood Park	2013	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200 \$ 211,200	\$ 211,200		\$
	Southwest Cathedral Monarch Memorial Parkette	2013	\$ 211,200	\$ -	,		\$ -					\$
5.15.31												\$
5.15.32	Wismer Alexander Lowrey Neighbourhood Park West	2013	\$ 211,200 \$ 211,200		\$ 211,200		Ÿ	\$ -	\$ 211,200			
5.15.33	Cornell Mattamy Cornell Park Ave. N.P.	2014			\$ 211,200		Ψ	\$ -	\$ 211,200			\$
5.15.34	Greensborough Williamson NP	2014	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.35	Victoria Square Community Park N. Phase	2014	\$ 422,400	\$ -	\$ 422,400		\$ -	\$ -	\$ 422,400	\$ 422,400		\$
5.15.36	Wismer Greenspire North Central Parkette	2014	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.37	Berczy Beckett East Parkette	2015	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.38	Berczy Beckett Neighbourhood Park	2015	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -		\$ 211,200		\$
5.15.39	Berczy Beckett West Parkette	2015	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.40	Cornell Community Park	2015	\$ 422,400	\$ -	\$ 422,400		\$ -	\$ -	\$ 422,400	\$ 422,400		\$
5.15.41	Cornell Madison Rouge Blvd. Park S.	2015	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.42	Cornell Mattamy East Church Street Parkette	2015	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.43	Fairtree East Village Remington Parkview Parkette	2015	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.44	Remington Markham Centre East Central Parkette	2015	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.45	Berczy Beckett Central Parkette	2016	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.46	Cornell Centre Mattamy N.P.	2016	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.47	Cornell Centre Mattamy Woodlot Park	2016	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200			\$
5.15.48	East Cathedral North Parkette	2016	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ -	\$ 211,200	\$ 211,200	90%	\$
5.15.49	Northwest Cathedral Neighbourhood Park N.	2016	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.50	Remington Markham Centre Civic Mall Phase 3	2016	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.51	Remington Markham Centre N.W. Valley Edge Parkette	2016	\$ 211,200	\$ -	\$ 211,200	\$ -	\$ -	\$ -	\$ 211,200	\$ 211,200	90%	\$
5.15.52	Wismer Hwy. #48 Museum North	2016	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.53	Wismer McCowan Woodlot Park	2016	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.54	Cornell Madison East Channel Park	2017	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.55	H & R Grand Cornell South Valley Edge Park East and West Banks	2017	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.56	Remington Markham Centre Civic Mall Phase 4	2017	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		\$
5.15.57	South Unionville Community Park W.	2017	\$ 211,200	\$ -	\$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		s S
5.15.58	Cornell Madison South Woodlot Park	2017	\$ 211,200	\$ -	\$ 211,200 \$ 211,200		\$ -	\$ -	\$ 211,200	\$ 211,200		\$ \$
				\$ -			\$ - \$ -					
5.15.59	Greensborough North Parkway N.P. East	2018		ф -	\$ 211,200	\$ -	*	Ÿ		\$ 211,200		\$
5.15.60	Greensborough North Parkway N.P. West	2018	\$ 211,200 \$ 13,516,800	\$ -	\$ 211,200 \$ 13,516,800	<u>a</u> -	\$ - \$ 2,534,400	\$ - \$ 3,801,600	\$ 211,200	\$ 211,200	-	\$ 3,42
	Subtotal Major Gazebos/Shelters			·\$ -								



			Total	Less	Total		Replacement				-Relat	ted Costs	 		18 Discounted
Service	Project Description	Timing	Project Cost	Grants /Subsidies	Municipa Cost		and Benefit To Existing		Prior Growth	2009- 2018		Post 2018	Total		vth-Related apital Costs
			Cost	/Subsidies	Cost		10 Existing		Frowth	2016		2018	Total	Net C	apitai Costs
5.0 PARK DEVELO	PMENT AND FACILITIES														
5.16 Minor Ga							_	_		_					_
5.16.1	Angus Glen Community Centre Park	2009	\$ 66,0			000		\$	66,000		\$		\$ 66,000	90%	\$ -
5.16.2	Boxgrove Hill Woodlot Park	2009	\$ 66,0				\$ -	\$,	\$ -	\$		\$ 66,000	90%	\$ -
5.16.3	Boxgrove South Village N. P.	2009	\$ 66,0				\$ -	\$		\$ -	1.7		\$ 66,000	90%	\$ -
5.16.4	Cornell Madison Morning Dove Woodlot Park	2009	\$ 66,0				\$ -	\$	00,000	\$ -			\$ 66,000	90%	\$ -
5.16.5	East Cathedral Community Park	2009	\$ 66,0 \$ 66.0				\$ -	\$,	\$ -	-		\$ 66,000	90%	\$ -
5.16.6 5.16.7	Greensborough Amos Court Parkette	2009 2009	\$ 66,0 \$ 66,0				\$ - \$ -	\$	66,000 66,000	\$ - \$ -	-		\$ 66,000 66,000	90% 90%	\$ - \$ -
	Greensborough Stalmaster N.P.	2009					*	\$		Ÿ				90%	*
5.16.8	H&R Grand Cornell Gateway Parkette N		\$ 66,0				\$ -		,	Ψ			\$ 66,000		\$ -
5.16.9 5.16.10	H&R Grand Cornell Gateway Parkette S Highway No. 7 & Warden Ave. Park	2009 2009	\$ 66,0 \$ 66,0				\$ - \$ -	\$ \$,	\$ - \$ -	\$		\$ 66,000 66,000	90% 90%	\$ - \$ -
5.16.11	King David Cathedraltown Panorama Park	2009	\$ 66,0				\$ - \$ -	\$		\$ -			\$ 66,000	90%	\$ -
5.16.12	Leitchcroft (Times) Community Park	2009	\$ 66,0				\$ - \$ -	\$		\$ -			\$ 66,000	90%	\$ -
5.16.13	Wismer Roy Rainey Neighbourhood Park	2009	\$ 66.0				\$ - \$ -	s s		\$ -	\$		\$ 66,000	90%	\$ -
5.16.14	Boxgrove Town Centre 14th Ave. Gateway Parkette N.	2009	\$ 66,0				\$ -	\$,	\$ -	\$		\$ 66,000	90%	\$ -
		2010	\$ 66,0				\$ - \$ -	\$,	\$ -	\$		\$ 66,000	90%	\$ -
5.16.15	Boxgrove Town Centre 14th Ave. Gateway Parkette S.						*	-		Ψ					
5.16.16	Cornell Greenway Fence and Landscaping North of 16th	2010	\$ 66,0 \$ 66.0				\$ -	\$ \$,	\$ -	\$		\$ 66,000	90%	\$ - \$ -
5.16.17	H&R Grand Cornell Linear Finger Park	2010					\$ -	-		\$ -	1.7		\$ 66,000	90%	*
5.16.18	Markham Main St. Merin Linear Park Library Connection	2010	\$ 66,0 \$ 66,0				\$ -	\$	00,000	\$ -	-		66,000	90%	Ψ.
5.16.19	South Unionville Ray Street Parkette E.	2010					\$ -	\$	66,000	\$ -	-		\$ 66,000	90%	\$ -
5.16.20	Swan Lake Park Block 31	2010	\$ 66,0				\$ -	\$	66,000	\$ -	-		\$ 66,000	90%	\$ -
5.16.21	Angus Glen West Village Central Green	2011	\$ 66,0				\$ -	\$	00,000	\$ -	\$		\$ 66,000	90%	\$ -
5.16.22	Angus Glen West Village Triangle Parkette	2011	\$ 66,0				\$ -	\$	-	\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.23	Cornell Community Centre Square	2011	\$ 66,0			000		\$		\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.24	Cornell Madison East Woodlot Park	2011	\$ 132,0				\$ -	\$		\$ 132,0			\$ 132,000	90%	\$ 118,80
5.16.25	Greensborough Solace Rd. N.P.	2011	\$ 66,0				\$ -	\$		\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.26	Jessamyn Settler's Park Landscaping	2011	\$ 66,0				\$ -	\$		\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.27	Markham Centre Majestic Court Central Parkette	2011	\$ 66,0				\$ -	\$	-	\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.28	Remington Markham Centre Active Park East	2011	\$ 66,0				\$ -	\$		\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.29	Remington Markham Centre Civic Mall Phase 1	2011	\$ 132,0				\$ -	\$		\$ 132,0			\$ 132,000	90%	\$ 118,80
5.16.30	Remington Markham Centre Heritage House Parkette	2011	\$ 66,0				\$ -	\$		\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.31	Boxgrove Community Park	2012	\$ 66,0				\$ -	\$		\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.32	Cornell Gowland N.P.	2012	\$ 66,0				\$ -	\$		\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.33	Cornell Secondary School N.P.	2012	\$ 66,0				\$ -	\$		\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.34	Elgin St. Honsburger Park	2012	\$ 66,0				\$ -	\$		\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.35	Liberty Markham Centre Oak Park Warden E.	2012	\$ 66,0				\$ -	\$		\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.36	Liberty Markham Centre Oak Park Warden W.	2012	\$ 66,0				\$ -	\$		\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.37	Markham Sports Park	2012	\$ 264,0			000		\$		\$ 264,0			\$ 264,000	90%	\$ 237,60
5.16.38	Remington Markham Centre Civic Mall Phase 2	2012	\$ 132,0			000	\$ -	\$		\$ 132,0			\$ 132,000	90%	\$ 118,80
5.16.39	South East Markham Community Centre Park	2012	\$ 132,0				\$ -	\$		\$ 132,0			\$ 132,000	90%	\$ 118,80
5.16.40	South Unionville Ray Street Parkette W.	2012	\$ 66,0				\$ -	\$		\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.41	Southwest Cathedral Monarch Memorial Neighbourhood Park	2012	\$ 66,0				\$ -	\$		\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.42	Yonge/Steeles Meadowvale Ave. Parkette	2012	\$ 66,0				\$ -	\$		\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.43	Angus Glen West Village Parkette	2013	\$ 66,0				\$ -	\$		\$ 66,0			\$ 66,000	90%	\$ 59,40
5.16.44	Greensborough Alfred Patterson Neighbourhood Park	2013	\$ 66,0				\$ -	\$		\$ -	\$		\$ 66,000	90%	\$ -
5.16.45	Greensborough Alfred Patterson Woodlot	2013	\$ 132,0				\$ -	\$		\$ -			\$ 132,000	90%	\$ -
5.16.46	Main Street Milliken Armadale N.P.	2013	\$ 66,0				\$ -	\$		\$ -			\$ 66,000	90%	\$ -
5.16.47	South Unionville West Greenburg Parkette	2013	\$ 66,0				\$ -	\$	-	\$ -			\$ 66,000	90%	\$ -
5.16.48	Southwest Cathedral Monarch Memorial Parkette	2013	\$ 66,0				\$ -	\$	-	\$ -	-		\$ 66,000	90%	\$ -
5.16.49	Times-Murphy Hull Warden & Hwy. #7 Oval Parkette	2013	\$ 66,0				\$ -	\$	-	\$ -	Ψ		\$ 66,000	90%	\$ -
5.16.50	Wismer Alexander Lowrey Neighbourhood Park East	2013	\$ 66,0				\$ -	\$		\$ -	Ψ		\$ 66,000	90%	\$ -
5.16.51	Wismer Alexander Lowrey Neighbourhood Park West	2013	\$ 66,0				\$ -	\$	-	\$ -	-		\$ 66,000	90%	\$ -
5.16.52	Boxgrove Hill South East Parkette	2014	\$ 66,0				\$ -	\$	-	\$ -			\$ 66,000	90%	\$ -
5.16.53	Cornell Madison Rouge/Riverlands Square	2014	\$ 66,0		\$ 66,	000	\$ -	\$	-	\$ -			\$ 66,000	90%	\$ -
5.16.54	Cornell Mattamy Cornell Park Ave. N.P.	2014	\$ 66,0	00 \$ -	\$ 66,	000	\$ -	\$	-	\$ -	\$	66,000	\$ 66,000	90%	\$ -
5.16.55	Greensborough Williamson NP	2014	\$ 66,0	00 \$ -	\$ 66,	000	\$ -	\$	-	\$ -	\$	66,000	\$ 66,000	90%	\$ -
5.16.56	Main Street Milliken NE Parkette	2014	\$ 66,0	00 \$ -	\$ 66,	000	\$ -	\$	-	\$ -	\$	66,000	\$ 66,000	90%	\$ -
5.16.57	Main Street Milliken NW Parkette	2014	\$ 66,0				\$ -	\$	-	\$ -	\$		66,000	90%	\$ -
5.16.58	Wismer Community Park Phase 3 Castlemore Frontage	2014	\$ 132,0				\$ -	\$	-	\$ -			\$ 132,000	90%	\$ -
5.16.59	Berczy Beckett East Parkette	2015	\$ 66,0				\$ -	\$		\$ -			\$ 66,000	90%	\$ -
5.16.60	Berczy Beckett Neighbourhood Park	2015	\$ 66,0				\$ -	\$		\$ -			\$ 66,000	90%	\$ -
	,	20.0	, 50,0	- 1 T	, JO,						Ψ	00,000	 _ 5,000	0070	



			Total	Less	Total	Replacement		Growth-R	elated Costs		2009-20	18 Discounted
Service	Project Description	Timing	Project Cost	Grants /Subsidies	Municipal Cost	and Benefit To Existing	Prior Growth	2009- 2018	Post 2018	Total		vth-Related apital Costs
5.0 PARK D	DEVELOPMENT AND FACILITIES		Cusi	/Subsidies	COSI	TO Existing	Glowali	2010	2010	Total	Net O	apital Costs
5 16 M	linor Gazebos/Shelters (Cont'd)											
	5.16.61 Cornell Community Park	2015	\$ 66,000	\$ -	\$ 66,000	\$ -	s -	s -	\$ 66,000	\$ 66,000	90%	\$ -
	5.16.62 Cornell Community Park Washroom Pavilion and Maintenance Station	2015	\$ 66,000	*	\$ 66,000		\$ -	\$ -	\$ 66,000	\$ 66,000		\$ -
	5.16.63 Cornell Madison Rouge Blvd. Park	2015	\$ 66,000	\$ -	\$ 66,000		\$ -	\$ -	\$ 66,000	\$ 66,000		\$ -
	5.16.64 Remington Markham Centre East Central Parkette	2015	\$ 66,000	*	\$ 66,000		\$ -	\$ -	\$ 66,000	\$ 66,000		\$ -
	5.16.65 Times-Murphy Hull Hwy. #7 Window Park	2015	\$ 66,000	\$ -	\$ 66,000		\$ -	\$ -	\$ 66,000	\$ 66,000		\$ -
	5.16.66 Tridel Markham Centre Linear Park W.	2015	\$ 66,000	\$ -	\$ 66,000		\$ -	\$ -	\$ 66,000	\$ 66,000		\$ -
	5.16.67 Cornell Centre Mattamy N.P.	2015	\$ 66,000	\$ -	\$ 66,000		\$ -	\$ -	\$ 66,000	\$ 66,000		\$ -
	5.16.68 Cornell Centre Mattamy Woodlot Park	2016	\$ 66,000	\$ -	\$ 66,000		\$ -	\$ -	\$ 66,000	\$ 66,000		\$ -
	5.16.69 Main Street Milliken SE Parkette	2016	\$ 66,000	\$ -	\$ 66,000		\$ -	\$ -	\$ 66,000			\$ -
	5.16.70 Main Street Milliken SW Parkette	2016	\$ 66,000	\$ -	\$ 66,000		\$ -	\$ -	\$ 66,000	\$ 66,000		\$ -
	5.16.71 Northwest Cathedral Woodlot Park	2016	\$ 66,000	\$ -	\$ 66,000		\$ -	\$ -	\$ 66,000			\$ -
	5.16.72 Remington Markham Centre N.E. Valley Edge Parkette	2016	\$ 66,000	\$ -	\$ 66,000	*	\$ - \$ -		\$ 66,000	\$ 66,000		\$ -
	5.16.73 Remington Markham Centre N.E. Valley Edge Parkette 5.16.73 Remington Markham Centre N.W. Valley Edge Parkette	2016	\$ 66,000	\$ -	\$ 66,000		\$ - \$ -	\$ -	\$ 66,000	+,		\$ -
	5.16.73 Remington Markham Centre N.W. Valley Edge Parkette 5.16.74 Wismer McCowan Woodlot Park	2016	\$ 66,000	\$ -	+,	*	\$ - \$ -		\$ 66,000			\$ -
			+,	*	+,		Ŧ	\$ -		,		Ŧ
	5.16.75 H & R Grand Cornell South Valley Edge Park East and West Banks	2017	\$ 132,000 \$ 66,000	\$ -	+,		\$ -	\$ -	\$ 132,000	\$ 132,000		\$ -
	5.16.76 Remington Markham Centre Civic Mall Phase 4	2017	+,	\$ -	\$ 66,000		\$ -	\$ -	\$ 66,000	\$ 66,000		\$ -
	5.16.77 Remington Markham Centre East Valley Edge Linear Park	2017	\$ 66,000	\$ -	\$ 66,000	*	\$ -	\$ -	\$ 66,000	\$ 66,000		\$ -
	5.16.78 Yonge/Colbourne St. Parkette	2017	\$ 66,000	\$ -	\$ 66,000		\$ -	\$ -	\$ 66,000	\$ 66,000		\$ -
	5.16.79 Yonge/John St. Parkette	2017	\$ 66,000	\$ -	\$ 66,000		\$ -	\$ -	\$ 66,000	\$ 66,000		\$ -
	5.16.80 Cornell Madison South Woodlot Park 5.16.81 Yonge/Elgin St. Parkette	2018 2018	\$ 66,000 \$ 66,000	\$ - \$ -	\$ 66,000 \$ 66,000	\$ -	\$ -	\$ -	\$ 66,000 \$ 66,000	\$ 66,000 \$ 66,000		\$ - \$ -
5		2016	-	<u> </u>		<u> </u>	\$ -	Ψ	y			<u></u>
	Subtotal Minor Gazebos/Shelters		\$ 6,006,000	\$ -	\$ 6,006,000	\$ -	\$ 1,386,000	\$ 1,914,000	\$ 2,706,000	\$ 6,006,000		\$ 1,722,600
	Buildings & Washrooms											
	5.17.1 Angus Glen Community Centre Park Washroom Pavillion and Maintenance Station	2009	\$ 501,600	*	\$ 501,600		\$ 501,600		\$ -	\$ 501,600		\$ -
	5.17.2 Berczy Community Park Washroom Pavilion and Maintenance Station	2009	\$ 1,003,200		\$ 1,003,200		\$ 1,003,200	\$ -	\$ -	\$ 1,003,200		\$ -
	5.17.3 WismerCommons Community Park Washroom Pavillion and Maintenance Station	2011	\$ 300,960	\$ -	\$ 300,960		\$ - \$ -	\$ 300,960		\$ 300,960		\$ 270,864
	5.17.4 Boxgrove Community Park Washroom Pavilion and Pedestrian Bridge 5.17.5 Markham Sports Park	2012 2012	\$ 300,960 \$ 877,800	\$ - \$ -	\$ 300,960 \$ 877,800		\$ - \$ -	\$ 300,960 \$ 877,800		\$ 300,960 \$ 877,800		\$ 270,864 \$ 790,020
	5.17.5 Markham Sports Park 5.17.6 Cornell Community Park Washroom Pavilion and Maintenance Station	2012	\$ 300,960	\$ -	\$ 300,960	\$ -	ъ - е	\$ 677,000	\$ 300,960	\$ 300,960		\$ 790,020
5	Subtotal Buildings & Washrooms	2015	\$ 3,285,480	\$ -	\$ 3,285,480	\$ -	\$ 1,504,800	\$ 1,479,720		\$ 3,285,480	- 1	\$ 1,331,748
E 10 F:	•										000/	
	ield Houses/Worksheds 5.18.1 Angus Glen Community Centre Park Washroom Pavillion and Maintenance Station	2000	\$ 445.500	¢	\$ 445.500	•	\$ 445.500	•	•	\$ 445.500	90%	\$ -
	5.18.1 Angus Glen Community Centre Park Washroom Pavillion and Maintenance Station 5.18.2 WismerCommons Community Park Washroom Pavillion and Maintenance Station	2009 2011	\$ 445,500 \$ 445.500		\$ 445,500 \$ 445,500		\$ 445,500 \$ -	\$ - \$ 445.500	\$ -	\$ 445,500 \$ 445,500		\$ 400.950
	5.18.3 Boxgrove Community Park Washroom Pavilion and Pedestrian Bridge	2011	\$ 445,500	\$ -	\$ 445,500 \$ 445,500		\$ -	\$ 445,500 \$ 445.500		\$ 445,500 \$ 445,500		\$ 400,950
	5.18.4 Markham Sports Park	2012	\$ 1,069,200		\$ 1,069,200		\$ -	\$ 1,069,200		\$ 1,069,200		\$ 962,280
	5.18.5 South East Markham Community Centre Park	2012	\$ 445,500	\$ -	\$ 445,500		\$ -	\$ 445,500		\$ 445,500		\$ 400,950
	5.18.6 Cornell Community Park Washroom Pavilion and Maintenance Station	2012	\$ 445,500	\$ -	\$ 445,500		š -	\$ -	\$ 445,500	\$ 445,500		\$ 400,330
Ü	Subtotal Field Houses/Worksheds		\$ 3,296,700	\$ -	\$ 3,296,700		\$ 445,500	\$ 2,405,700		\$ 3,296,700	-	\$ 2,165,130
	Captolai : 15.6 Floudod/FFORGHOGO	1	Ψ 0,200,700	· ·	\$ 0,200,700	· ·	Ψ 440,000	Ψ 2,400,700	\$ 440,000	\$ 0,200,700	1	Ψ 2,100,100



			Total	Les		Total	Replacement			Growth-Re						18 Discount
Service	Project Description	Timing	Project Cost	Gra /Subs		Municipal Cost	and Benefit To Existing	Prior Growth		2009- 2018		Post 2018		Total		vth-Related apital Costs
			Cost	/Subs	iules	Cost	TO Existing	Growth		2010		2010		TOTAL	Net	apitai Costs
5.0 PARK DEVELOR	PMENT AND FACILITIES												i			
5.19 Concrete		0000	. 450.4			A 450 400		450 400						450 400	000/	•
5.19.1	Angus Glen Community Centre Park Washroom Pavillion and Maintenance Station	2009	\$ 158,4 \$ 118.8		-	\$ 158,400		\$ 158,400		-	\$	-	\$	158,400	90%	\$ - \$ -
5.19.2 5.19.3	Berczy Community Park Washroom Pavilion and Maintenance Station Berczy Community Park S. Phase 2	2009 2010	\$ 118,8 \$ 99,0		-	\$ 118,800 \$ 99,000		\$,	\$ \$	-	\$		\$	118,800 99,000	90% 90%	\$ -
5.19.4	Boxgrove Town Centre 14th Ave. Gateway Parkette N.	2010	\$ 39,6			\$ 39,600		\$	\$	-	\$		\$	39,600	90%	\$ -
5.19.5	Boxgrove Town Centre 14th Ave. Gateway Parkette N. Boxgrove Town Centre 14th Ave. Gateway Parkette S.	2010	\$ 39,6		-	\$ 39,600	\$ -	\$	\$		\$		\$	39,600	90%	\$ -
5.19.6	Cornell Greenway Fence and Landscaping North of 16th	2010	\$ 39.6		_	\$ 39,600	\$ -	\$ 39,600	\$	_	\$		\$	39,600	90%	\$ -
5.19.7	H&R Grand Cornell Linear Finger Park	2010	\$ 59,4		-	\$ 59,400	\$ -	\$,	\$	-	\$	-	\$	59,400	90%	\$ -
5.19.8	Markham Main St. Merin Linear Park Library Connection	2010	\$ 79,2		-	\$ 79,200	\$ -	\$,	\$	-	\$	-	\$	79,200	90%	\$ -
5.19.9	South Unionville Ray Street Parkette E.	2010	\$ 59,4		-	\$ 59,400		\$	\$	-	\$		\$	59,400	90%	\$ -
5.19.10	Swan Lake Park Block 31	2010	\$ 79,2	00 \$	-	\$ 79,200	\$ -	\$ 79,200	\$	-	\$	-	\$	79,200	90%	\$ -
5.19.11	Tridel Markham Centre Linear Park E.	2010	\$ 198,0	00 \$	-	\$ 198,000	\$ -	\$ 198,000	\$	-	\$	-	\$	198,000	90%	\$ -
5.19.12	Victoria Square Community Park S. Phase Playground and Waterplay	2010	\$ 99,0		-	\$ 99,000	\$ -	\$ 00,000	\$	-	\$	-	\$	99,000	90%	\$ -
5.19.13	Wismer Donald Mingay Parkette on Mingay	2010	\$ 39,6		-	\$ 39,600	\$ -	\$ 39,600	\$	-	\$	-	\$	39,600	90%	\$ -
5.19.14	Angus Glen West Village Central Green	2011	\$ 297,0		-	\$ 297,000		\$ -	\$	297,000	\$	-	\$	297,000	90%	\$ 267,3
5.19.15	Angus Glen West Village Triangle Parkette	2011	\$ 49,5		-	\$ 49,500		\$ -	\$	49,500	\$		\$	49,500	90%	\$ 44,5
5.19.16	Angus Glen West Village Valley Edge Park	2011	\$ 89,1		-	\$ 89,100		\$	\$	89,100	\$		\$	89,100	90%	\$ 80,1
5.19.17	Boxgrove Southeast Heritage House Parkette	2011	\$ 59,4		-	\$ 59,400		\$	\$	59,400	\$		\$	59,400	90%	\$ 53,4
5.19.18	Cornell Community Centre Square	2011	\$ 198,0		-	\$ 198,000		\$	\$	198,000	\$		\$	198,000	90%	\$ 178,2
5.19.19	Cornell Madison East Woodlot Park	2011	\$ 79,2		-	\$ 79,200	\$ -	\$	\$	79,200	\$		\$	79,200	90%	\$ 71,2
5.19.20 5.19.21	Greensborough Solace Rd. N.P.	2011 2011	\$ 39,6 \$ 59,4		-	\$ 39,600 \$ 59,400	\$ -	\$	\$	39,600	\$	-	\$	39,600 59,400	90% 90%	\$ 35,6
5.19.21	Jessamyn Settler's Park Landscaping Markham Centre Majestic Court Central Parkette	2011	\$ 59,4 \$ 99,0		-	\$ 59,400	\$ - \$ -	\$	\$	59,400 99,000	\$		\$	99,000	90%	\$ 53,4 \$ 89,1
5.19.23	Remington Markham Centre Active Park East	2011	\$ 79,2		-	\$ 79,200		\$	\$	79,200	\$		\$	79,200	90%	\$ 71,
5.19.24	Remington Markham Centre Civic Mall Phase 1	2011	\$ 495,0		-	\$ 495,000		\$	\$	495,000	\$		\$	495,000	90%	\$ 445,
5.19.25	Remington Markham Centre Heritage House Parkette	2011	\$ 99,0		-	\$ 99,000		\$	\$	99,000	\$		\$	99,000	90%	\$ 445,
5.19.26	WismerCommons Community Park Washroom Pavillion and Maintenance Station	2011	\$ 79,2		-	\$ 79,200	\$ -	\$	\$	79,200	\$	-	\$	79,200	90%	\$ 71,
5.19.27	Boxgrove Community Park	2012	\$ 297.0		-	\$ 297,000	\$ -	\$ _	\$	297.000	\$	_	\$	297,000	90%	\$ 267,
5.19.28	Cornell Gowland N.P.	2012	\$ 59,4		-	\$ 59,400	\$ -	\$ _	\$	59,400	ŝ	-	\$	59,400	90%	\$ 53,4
5.19.29	Cornell Secondary School N.P.	2012	\$ 99,0		-	\$ 99,000		\$ -	\$	99,000	\$	-	\$	99,000	90%	\$ 89,1
5.19.30	Elgin St. Honsburger Park	2012	\$ 59,4		-	\$ 59,400		\$ -	\$	59,400	\$	-	\$	59,400	90%	\$ 53,4
5.19.31	Liberty Markham Centre Oak Park Warden E.	2012	\$ 59,4	00 \$	-	\$ 59,400		\$ -	\$	59,400	\$	-	\$	59,400	90%	\$ 53,4
5.19.32	Liberty Markham Centre Oak Park Warden W.	2012	\$ 297,0	00 \$	-	\$ 297,000	\$ -	\$ -	\$	297,000	\$	-	\$	297,000	90%	\$ 267,
5.19.33	Markham Sports Park	2012	\$ 396,0	00 \$	-	\$ 396,000	\$ -	\$ -	\$	396,000	\$	-	\$	396,000	90%	\$ 356,
5.19.34	Northwest Cathedral Neighbourhood Park S.	2012	\$ 99,0	00 \$	-	\$ 99,000	\$ -	\$ -	\$	99,000	\$	-	\$	99,000	90%	\$ 89,
5.19.35	Remington Markham Centre Central Park N. Phase 1	2012	\$ 297,0		-	\$ 297,000	\$ -	\$ -	\$	297,000	\$	-	\$	297,000	90%	\$ 267,3
5.19.36	Remington Markham Centre Civic Mall Phase 2	2012	\$ 396,0		-	\$ 396,000		\$	\$	396,000	\$		\$	396,000	90%	\$ 356,4
5.19.37	South East Markham Community Centre Park	2012	\$ 118,8		-	\$ 118,800		\$	\$	118,800	\$		\$	118,800	90%	\$ 106,9
5.19.38	South Unionville Ray Street Parkette W.	2012	\$ 99,0		-	\$ 99,000		\$	\$	99,000	\$		\$	99,000	90%	\$ 89,
5.19.39	Southwest Cathedral Monarch Memorial Neighbourhood Park	2012	\$ 138,6		-	\$ 138,600		\$	\$	138,600	\$		\$	138,600	90%	\$ 124,
5.19.40	Wismer Hwy. #48 Hamersley Woodlot Park	2012	\$ 79,2		-	\$ 79,200		\$	\$	79,200	\$		\$	79,200	90%	\$ 71,
5.19.41	Yonge/Steeles Meadowvale Ave. Parkette	2012	\$ 396,0		-	\$ 396,000		\$	\$	396,000	\$	-	\$	396,000	90%	\$ 356,
5.19.42	Angus Glen West Village Parkette	2013	\$ 59,4 \$ 79.2		-	\$ 59,400		\$	\$	-	\$		\$	59,400	90% 90%	\$
5.19.43 5.19.44	Berczy Northeast McCowan Parkette Greensborough Alfred Patterson Neighbourhood Park	2013 2013	\$ 79,2 \$ 89,1		-	\$ 79,200 \$ 89,100		\$	\$	-	\$		\$	79,200 89,100	90%	\$ \$
5.19.44	Greensborough Alfred Patterson Neignbournood Park Greensborough Alfred Patterson Woodlot	2013	\$ 89,1		-	\$ 118,800		\$	\$	-	\$		\$	118,800	90%	\$ \$
5.19.45	Main St. Markham Town Square	2013	\$ 396,0		-	\$ 396,000	\$ -	\$	\$	-	\$		\$	396,000	90%	+
5.19.46	Main Street Milliken Armadale N.P.	2013	\$ 59,0		-	\$ 59,400	\$ -	\$	\$	-	\$		\$	59,400	90%	\$ \$
5.19.48	South Unionville West Greenburg Parkette	2013	\$ 39,6		-	\$ 39,600	\$ -	\$ 	\$		\$		\$	39,600	90%	\$
5.19.49	Southwest Cathedral Monarch Memorial Parkette	2013	\$ 39,6		-	\$ 39,600	T	\$ _	\$	-	\$		\$	39,600	90%	\$
5.19.50	Times-Murphy Hull Warden & Hwy. #7 Oval Parkette	2013	\$ 99,0		-	\$ 99,000		\$	\$	-	\$		\$	99,000	90%	\$
5.19.51	Wismer Alexander Lowrey Neighbourhood Park East	2013	\$ 39,6		-	\$ 39,600		\$	\$	-	\$		\$	39,600	90%	\$
5.19.52	Wismer Alexander Lowrey Neighbourhood Park West	2013	\$ 59.4		-	\$ 59,400		\$	\$	-	\$		\$	59,400	90%	\$
5.19.53	Boxgrove Hill South East Parkette	2014	\$ 39,6		-	\$ 39,600		\$ -	\$	-	\$		\$	39,600	90%	\$
5.19.54	Clark Ave. Woodlot Park	2014	\$ 59,4		-	\$ 59,400	\$ -	\$ -	\$	-	\$		\$	59,400	90%	\$
5.19.55	Cornell Madison Rouge/Riverlands Square	2014	\$ 79,2		-	\$ 79,200	\$ -	\$ -	\$	-	\$		\$	79,200	90%	\$
5.19.56	Cornell Mattamy Cornell Park Ave. N.P.	2014	\$ 59,4		-	\$ 59,400	\$ -	\$ -	\$	-	\$		\$	59,400	90%	\$
5.19.57	Greensborough Williamson NP	2014	\$ 89,1		-	\$ 89,100		\$ -	\$	-	\$	89,100		89,100	90%	\$
5.19.58	Main Street Milliken NE Parkette	2014	\$ 69,3		-	\$ 69,300		\$ -	\$	-	\$		\$	69,300	90%	\$
5.19.59	Main Street Milliken NW Parkette	2014	\$ 69,3	00 \$	-	\$ 69,300	\$ -	\$ -	\$	-	\$	69,300	\$	69,300	90%	\$
																\$



			Total	Less	Total	Replacement		Growtn-R	elated Costs		2009-20	18 Discounted
Service	Project Description	Timing	Project	Grants	Municipal	and Benefit	Prior	2009-	Post		Grov	vth-Related
			Cost	/Subsidies	Cost	To Existing	Growth	2018	2018	Total	Net C	apital Costs
5.0 PARK DEVELO	PMENT AND FACILITIES											
0.0 17 22.1220.												
	Plaza Spaces (Cont'd)			1.								
5.19.61	Wismer Community Park Phase 3 Castlemore Frontage	2014	\$ 435,600		\$ 435,600		\$ -	\$ -	\$ 435,600			\$ -
5.19.62	Wismer Greenspire North Central Parkette	2014	\$ 49,500		\$ 49,500		\$ -	\$ -	\$ 49,500			\$ -
5.19.63	Berczy Beckett East Parkette	2015	\$ 69,300		\$ 69,300		\$ -	\$ -	\$ 69,300	\$ 69,300	90%	\$ -
5.19.64	Berczy Beckett Neighbourhood Park	2015	\$ 89,100		\$ 89,100		\$ -	\$ -	\$ 89,100			\$ -
5.19.65	Berczy Beckett West Parkette	2015	\$ 59,400		\$ 59,400		\$ -	\$ -	\$ 59,400	\$ 59,400	90%	\$ -
5.19.66	Cornell Community Park	2015	\$ 297,000		\$ 297,000		\$ -	\$ -	\$ 297,000		90%	\$ -
5.19.67	Cornell Community Park Washroom Pavilion and Maintenance Station	2015	\$ 19,800		\$ 19,800		\$ -	\$ -	\$ 19,800	\$ 19,800	90%	\$ -
5.19.68	Cornell Madison Rouge Blvd. Park	2015	\$ 396,000	*	\$ 396,000		\$ -	\$ -	\$ 396,000		90%	\$ -
5.19.69	Cornell Madison Rouge Blvd. Park S.	2015	\$ 69,300		\$ 69,300		\$ -	\$ -	\$ 69,300	\$ 69,300	90%	\$ -
5.19.70	Cornell Mattamy East Church Street Parkette	2015	\$ 79,200		\$ 79,200		\$ -	\$ -	\$ 79,200	\$ 79,200	90%	\$ -
5.19.71	Fairtree East Village Remington Parkview Parkette	2015	\$ 59,400		\$ 59,400		\$ -	\$ -	\$ 59,400			\$ -
5.19.72	Remington Markham Centre East Central Parkette	2015	\$ 297,000		\$ 297,000		\$ -	\$ -	\$ 297,000	\$ 297,000		\$ -
5.19.73	Times-Murphy Hull Hwy. #7 Window Park	2015	\$ 297,000		\$ 297,000		\$ -	\$ -	\$ 297,000		90%	\$ -
5.19.74	Tridel Markham Centre Linear Park W.	2015	\$ 297,000		\$ 297,000		\$ -	\$ -	\$ 297,000			\$ -
5.19.75	Berczy Beckett Central Parkette	2016	\$ 49,500		\$ 49,500		\$ -	\$ -	\$ 49,500			\$ -
5.19.76	Cornell Centre Mattamy N.P.	2016	\$ 49,500		\$ 49,500		\$ -	\$ -	\$ 49,500	\$ 49,500	90%	\$ -
5.19.77	Cornell Centre Mattamy Woodlot Park	2016	\$ 59,400		\$ 59,400		\$ -	\$ -	\$ 59,400			\$ -
5.19.78	East Cathedral North Parkette	2016	\$ 19,800		\$ 19,800		\$ -	\$ -	\$ 19,800	\$ 19,800	90%	\$ -
5.19.79	Main Street Milliken SE Parkette	2016	\$ 69,300		\$ 69,300		\$ -	\$ -	\$ 69,300			\$ -
5.19.80	Main Street Milliken SW Parkette	2016	\$ 69,300	\$ -	\$ 69,300		\$ -	\$ -	\$ 69,300	\$ 69,300	90%	\$ -
5.19.81	Northwest Cathedral Neighbourhood Park N.	2016	\$ 49,500		\$ 49,500		\$ -	\$ -	\$ 49,500	\$ 49,500	90%	\$ -
5.19.82	Northwest Cathedral Woodlot Park	2016	\$ 69,300		\$ 69,300		\$ -	\$ -	\$ 69,300	\$ 69,300	90%	\$ -
5.19.83	Remington Markham Centre Civic Mall Phase 3	2016	\$ 297,000		\$ 297,000		\$ -	\$ -	\$ 297,000			\$ -
5.19.84	Remington Markham Centre N.E. Valley Edge Parkette	2016	\$ 29,700		\$ 29,700		\$ -	\$ -	\$ 29,700		90%	\$ -
5.19.85	Remington Markham Centre N.W. Valley Edge Parkette	2016	\$ 59,400		\$ 59,400		\$ -	\$ -	\$ 59,400			\$ -
5.19.86	Wismer Hwy. #48 Museum North	2016	\$ 79,200		\$ 79,200		\$ -	\$ -	\$ 79,200			\$ -
5.19.87	Wismer McCowan Woodlot Park	2016	\$ 49,500		\$ 49,500		\$ -	\$ -	\$ 49,500	\$ 49,500		\$ -
5.19.88	Boxgrove Hill East Parkette	2017	\$ 49,500		\$ 49,500		\$ -	\$ -	\$ 49,500			\$ -
5.19.89	Cornell Madison East Channel Park	2017	\$ 49,500		\$ 49,500		\$ -	\$ -	\$ 49,500	\$ 49,500	90%	\$ -
5.19.90	H & R Grand Cornell South Valley Edge Park East and West Banks	2017	\$ 99,000		\$ 99,000		\$ -	\$ -	\$ 99,000			\$ -
5.19.91	Remington Markham Centre Civic Mall Phase 4	2017	\$ 297,000		\$ 297,000		\$ -	\$ -	\$ 297,000	\$ 297,000	90%	\$ -
5.19.92	Remington Markham Centre East Valley Edge Linear Park	2017	\$ 49,500		\$ 49,500		\$ -	\$ -	\$ 49,500		90%	\$ -
5.19.93	South Unionville Community Park W.	2017	\$ 69,300		\$ 69,300		\$ -	\$ -	\$ 69,300	\$ 69,300	90%	\$ -
5.19.94	Swan Lake Park South Williamson Phase 6	2017	\$ 59,400		\$ 59,400		\$ -	\$ -	\$ 59,400		90%	\$ -
5.19.95	Yonge/Colbourne St. Parkette	2017	\$ 297,000		\$ 297,000		\$ -	\$ -	\$ 297,000	\$ 297,000	90%	\$ -
5.19.96	Yonge/John St. Parkette	2017	\$ 297,000		\$ 297,000		\$ -	\$ -	\$ 297,000	\$ 297,000	90%	\$ -
5.19.97	Cornell Madison South Woodlot Park	2018	\$ 59,400		\$ 59,400		\$ -	\$ -	\$ 59,400		90%	\$ -
5.19.98	Greensborough North Parkway N.P. East	2018	\$ 49,500		\$ 49,500		\$ -	\$ -	\$ 49,500	\$ 49,500		\$ -
5.19.99	Greensborough North Parkway N.P. West	2018	\$ 39,600	11	\$ 39,600	\$ -	\$ -	\$ -	\$ 39,600	\$ 39,600	90%	\$ -
5.19.100	- g., g	2018	\$ 39,600	\$ -	\$ 39,600	\$ -	\$ -	\$ -	\$ 39,600	\$ 39,600	90%	\$ -
	Subtotal Concrete Plaza Spaces		\$ 12,315,600	\$ -	\$ 12,315,600	\$ -	\$ 1,108,800	\$ 4,613,400	\$ 6,593,400	\$ 12,315,600		\$ 4,152,060



			Tota	Less	Total		Replacement				Growth-Re	elated					18 Discounte
Service	Project Description	Timing	Proje Cos	Grants /Subsidies	Municip Cost	al	and Benefit To Existing	Π.	Prior Growth		2009- 2018		Post 2018		Total		wth-Related apital Costs
			Cos	/Subsidies	Cost		TO EXISTING	<u> </u>	Growth		2010		2016		Total	Net C	apital Costs
5.0 PARK DEVELO	PMENT AND FACILITIES																
5.20 Pathways				 •	•		•					_		_			•
5.20.1	Angus Glen Community Centre Park	2009		\$ -		,312		\$	231,312		-	\$	-	\$	231,312	90%	\$ -
5.20.2	Boxgrove Hill Woodlot Park	2009		\$ -			\$ -	\$		\$	-	\$		\$	21,045	90%	\$ -
5.20.3	Boxgrove South Village N. P.	2009		\$ - \$ -			\$ -	\$		\$ \$	-	\$		\$	32,811	90%	\$ - \$ -
5.20.4 5.20.5	Cornell Madison Albert Lewis Square	2009 2009	\$	\$ - \$ -		,	\$ - \$ -	\$	0,00.	\$	-	\$		\$	6,391 14,218	90% 90%	\$ -
5.20.5	Cornell Madison Morning Dove Woodlot Park Cornell Mattamy Country Glen Triangle Parkette	2009	\$	\$ -		,218 .861	\$ -	\$,	\$	-	\$	-	\$	4.861	90%	\$ -
5.20.6	East Cathedral Community Park	2009		\$ -		,	\$ -	\$		Ф \$	-	\$		\$	21.873	90%	\$ -
5.20.7	Fairtree South Village Billingsley Parkettte	2009		\$ -		,	\$ -	\$		\$	-	\$		\$	16,163	90%	\$ -
5.20.9	Fairtree West Village Eastvale Neighbourhood Park	2009	\$	\$ -			\$ -	\$		\$		\$		\$	5,469	90%	\$ -
5.20.9	Greensborough Amos Court Parkette	2009		\$ -			\$ -	\$		\$		\$		\$	16,284	90%	\$ -
5.20.11	Greensborough Stalmaster N.P.	2009		\$ -			\$ -	\$		\$	-	\$		\$	24,305	90%	\$ -
5.20.12	H&R Grand Cornell Gateway Parkette N	2009	\$	\$ -			\$ -	\$		\$	-	\$		\$	3,889	90%	\$ -
5.20.12	H&R Grand Cornell Gateway Parkette S	2009	\$	\$ -		.889	\$ -	\$		\$	-	s s		\$	3,889	90%	\$ -
5.20.14	H&R Grand Cornell Horseshoe Park	2009		\$ -		,	\$ -	\$		\$		\$	-	\$	27,463	90%	\$ -
5.20.15	John Daniels - Phase 2 (Fairty Park)	2009	\$	\$ -		,	\$ -	\$,	\$	_	\$	_	\$	4,918	90%	\$ -
5.20.16	King David Cathedraltown Arbouretum	2009	\$	\$ -			\$ -	\$		\$	_	\$	_	\$	4,617	90%	\$ -
5.20.17	Leitchcroft (Times) Community Park	2009		\$ -			\$ -	\$		\$	-	s s		\$	26,552	90%	\$ -
5.20.17	Villages of Fairtree Community Park and Cricket Pitch	2009		\$ -			\$ -	\$		\$	-	s s		\$	98,357	90%	\$ -
5.20.19	Wismer Roy Rainey Neighbourhood Park	2009		\$ -			\$ -	\$		\$	-	\$		\$	24,061	90%	\$ -
5.20.20	Berczy Community Park S. Phase 2	2010		\$ -		.400	\$ -	\$		s S	-	s s		\$	59.400	90%	\$ -
5.20.21	Boxgrove Town Centre 14th Ave. Gateway Parkette N.	2010		\$ - \$ -		,	\$ -	\$		\$	-	\$	-	\$	19,800	90%	\$ -
5.20.21	Boxgrove Town Centre 14th Ave. Gateway Parkette N. Boxgrove Town Centre 14th Ave. Gateway Parkette S.	2010		\$ - \$ -			\$ -	\$		\$		\$		\$	19,800	90%	\$ -
5.20.23	Cornell Greenway Fence and Landscaping North of 16th	2010		\$ -			\$ -	\$		\$	-	S.		\$	29,700	90%	\$ -
5.20.24	H&R Grand Cornell Linear Finger Park	2010		\$ -			\$ -	\$		\$	-	\$		\$	59,400	90%	\$ -
5.20.25	South Unionville Ray Street Parkette E.	2010		\$ -	+		\$ -	\$		\$	-	\$		\$	39,600	90%	\$ -
5.20.26	Swan Lake Park Block 31	2010		\$ -			\$ -	\$		s S	-	\$	-	\$	19,800	90%	\$ -
5.20.27	Tridel Markham Centre Linear Park E.	2010		\$ -		,800	\$ -	\$		\$		\$	-	\$	59.400	90%	\$ -
5.20.28	Victoria Square Community Park S. Phase Playground and Waterplay	2010		\$ -		,	\$ -	\$		Ф \$	16,529	\$		\$	19,800	90%	\$ 14,87
5.20.29	Wismer Donald Mingay Parkette on Mingay	2010		\$ -			\$ -	\$		Ф \$	19,800	\$		\$	19,800	90%	\$ 17,82
5.20.30	Angus Glen West Village Central Green	2010		\$ -			\$ -	\$		\$	49,500	\$		\$	49,500	90%	\$ 44,55
5.20.31	Angus Glen West Village Triangle Parkette	2011	\$	\$ -		,	\$ -	\$		\$	9,900	\$		\$	9,900	90%	\$ 8,91
5.20.32	Angus Glen West Village Valley Edge Park	2011		\$ - \$ -			\$ -	\$		\$	11,880	\$		\$	11,880	90%	\$ 10,69
5.20.32	Boxgrove Southeast Heritage House Parkette	2011		\$ -			\$ -	\$		\$	39,600	\$	-	\$	39,600	90%	\$ 35,64
5.20.33	Cornell Community Centre Square	2011		\$ -		.600	\$ -	\$		\$	39,600	\$	-	\$	39,600	90%	\$ 35,64
5.20.35	Cornell Madison East Woodlot Park	2011		\$ -		,	\$ -	\$		\$ \$	39,600	\$		\$	39,600	90%	\$ 35,64
5.20.36	Greensborough Solace Rd. N.P.	2011		\$ -			\$ -	\$		\$	29,700	\$		\$	29,700	90%	\$ 26,73
5.20.37	Jessamyn Settler's Park Landscaping	2011		\$ -			\$ -	\$		\$	19,800	\$		\$	19,800	90%	\$ 17,82
5.20.38	Markham Centre Majestic Court Central Parkette	2011		\$ -	+	,600	Ŧ	\$		\$	39,600	s s		\$	39,600	90%	\$ 35,64
5.20.39	Remington Markham Centre Active Park East	2011		\$ -	+		\$ -	\$		\$	26,730	\$		\$	26,730	90%	\$ 24,05
5.20.40	Remington Markham Centre Civic Mall Phase 1	2011		\$ -			\$ -	\$		\$	118,800	\$	-	\$	118,800	90%	\$ 106,92
5.20.41	Remington Markham Centre Heritage House Parkette	2011		\$ -			\$ -	\$		\$	25,740	\$	-	\$	25,740	90%	\$ 23,16
5.20.41	Boxgrove Community Park	2011		\$ -			\$ -	\$		\$	128,700	\$		\$	128,700	90%	\$ 115,83
5.20.42	Cornell Gowland N.P.	2012		\$ -			\$ -	\$		\$	29,700	\$		\$	29,700	90%	\$ 26,73
5.20.44	Cornell Secondary School N.P.	2012		\$ -			\$ -	\$		\$ \$	19,800	\$		\$	19,800	90%	\$ 20,73
5.20.44	Elgin St. Honsburger Park	2012		\$ -	+		\$ -	\$		\$	11,880	s s		\$	11,880	90%	\$ 17,62
5.20.46	Liberty Markham Centre Oak Park Warden E.	2012		\$ -		,	\$ -	\$		\$ \$	49,500	\$		\$	49,500	90%	\$ 10,68
5.20.46	Liberty Markham Centre Oak Park Warden E. Liberty Markham Centre Oak Park Warden W.	2012		\$ -			\$ -	\$		\$	49,500	\$	-	\$	49,500	90%	\$ 44,55
5.20.47	Markham Sports Park Markham Sports Park	2012		\$ -		,500	\$ -	\$		\$	148,500	\$	-	\$	148,500	90%	\$ 133,65
5.20.49	Northwest Cathedral Neighbourhood Park S.	2012		\$ -			\$ -	\$		\$	16,830	\$	-	\$	16,830	90%	\$ 155,00
5.20.49	Remington Markham Centre Central Park N. Phase 1	2012		\$ -			\$ -	\$		\$	79,200	\$		\$	79,200	90%	\$ 71,28
5.20.51	Remington Markham Centre Civic Mall Phase 2	2012		\$ -			\$ -	\$		\$	79,200	\$		\$	79,200	90%	\$ 71,28
5.20.52	South East Markham Community Centre Park	2012		\$ -		,200	Ŧ	\$		\$	59,400	s s		\$	59,400	90%	\$ 53,46
5.20.53	South Unionville Ray Street Parkette W.	2012		\$ -		,	\$ -	\$		\$ \$	19,800	\$		\$	19,800	90%	\$ 17,82
5.20.54	South Onionville Ray Street Parkette W. Southwest Cathedral Monarch Memorial Neighbourhood Park	2012		\$ -			\$ -	\$		\$	37,620	\$	-	\$	37,620	90%	\$ 33,85
5.20.55	Wismer Hwy. #48 Hamersley Woodlot Park	2012		\$ -			\$ -	\$		\$ \$	19,800	\$	-	\$	19,800	90%	\$ 33,63
5.20.56		2012		\$ - \$ -			\$ -	\$		\$	19,600	\$		\$	19,800	90%	\$ 17,02
5.20.56	Angus Glen West Village Parkette	2013		\$ - \$ -			\$ -	\$		\$	-			\$	19,800	90%	\$ -
5.20.57	Berczy Northeast McCowan Parkette Greensborough Alfred Patterson Neighbourhood Park	2013		\$ - \$ -			\$ -	\$		\$	-	\$		\$	29,700	90%	\$ -
				*			+										
5.20.59	Greensborough Alfred Patterson Woodlot Main Street Milliken Armadale N.P.	2013 2013		\$ - \$ -		,800 ,700	\$ -	\$		\$ \$	-	\$		\$	19,800 29,700	90% 90%	\$ - \$ -
5.20.60																	



				Total		Less		Total	Replacement				Growth-Re	elate	d Costs			2009-2	018 Di	scounted
Service		Project Description	Timing	Projec		Grants		Municipal	and Benefit		Prior		2009-		Post					elated
				Cost		/Subsidies	↓	Cost	To Existing		Growth		2018		2018		Total	Net (Capita	I Costs
5.0 PARI	K DEVELOP!	MENT AND FACILITIES																		
5.20	Pathways (Concrete (Cont'd)																		
	5.20.61	South Unionville West Greenburg Parkette	2013	\$	4,950	\$ -	\$	4,950	\$ -	\$	-	\$	-	\$	4,950	\$	4,950	90%	\$	-
	5.20.62	Southwest Cathedral Monarch Memorial Parkette	2013		9,800	\$ -	\$	19,800	\$ -	\$	-	\$	-	\$	19,800	\$	19,800	90%	\$	-
	5.20.63	Times-Murphy Hull Warden & Hwy. #7 Oval Parkette	2013			\$ -	\$	29,700		\$	-	\$	-	\$		\$	29,700	90%	\$	-
	5.20.64	Wismer Alexander Lowrey Neighbourhood Park East	2013	\$ 1	9,800	\$ -	\$	19,800	\$ -	\$	-	\$	-	\$	19,800	\$	19,800	90%	\$	-
	5.20.65	Wismer Alexander Lowrey Neighbourhood Park West	2013		9,700	\$ -	\$	29,700	\$ -	\$	-	\$	-	\$		\$	29,700	90%	\$	-
	5.20.66	Boxgrove Hill South East Parkette	2014		.,	\$ -	\$	11,880	\$ -	\$	-	\$	-	\$		\$	11,880	90%	\$	-
	5.20.67	Cornell Madison Rouge/Riverlands Square	2014			\$ -	\$	29,700	\$ -	\$	-	\$	-	\$		\$	29,700	90%	\$	-
	5.20.68	Cornell Mattamy Cornell Park Ave. N.P.	2014			\$ -	\$	9,900	\$ -	\$	-	\$	-	\$		\$	9,900	90%	\$	-
	5.20.69	Greensborough Williamson NP	2014			\$ -	\$	27,720	\$ -	\$	-	\$	-	\$		\$	27,720	90%	\$	-
	5.20.70	Main Street Milliken NE Parkette	2014			\$ -	\$	14,850	\$ -	\$	-	\$	-	\$		\$	14,850	90%	\$	-
	5.20.71	Main Street Milliken NW Parkette	2014			\$ -	\$	14,850		\$	-	\$	-	\$		\$	14,850	90%	\$	-
	5.20.72	Victoria Square Community Park N. Phase	2014			\$ -	\$	79,200	\$ -	\$	-	\$	-	\$		\$	79,200	90%	\$	-
	5.20.73	Wismer Community Park Phase 3 Castlemore Frontage	2014		-,	\$ -	\$	89,100	\$ -	\$	-	\$	-	\$		\$	89,100	90%	\$	-
	5.20.74	Wismer Greenspire North Central Parkette	2014		-,	\$ -	\$	9,900	\$ -	\$	-	\$	-	\$		\$	9,900	90%	\$	-
	5.20.75	Berczy Beckett East Parkette	2015			\$ -	\$	9,900		\$	-	\$	-	\$	-,	\$	9,900	90%	\$	-
	5.20.76	Berczy Beckett Neighbourhood Park	2015			\$ -	\$	29,700		\$	-	\$	-	\$		\$	29,700	90%	\$	-
	5.20.77	Berczy Beckett West Parkette	2015		-,	\$ -	\$	19,800	\$ -	\$	-	\$	-	\$		\$	19,800	90%	\$	-
	5.20.78	Cornell Community Park	2015		-,	\$ -	\$	158,400	\$ -	\$	-	\$	-	\$		\$	158,400	90%	\$	-
	5.20.79	Cornell Madison Rouge Blvd. Park	2015		,	\$ -	\$	24,750		\$	-	\$	-	\$,	\$	24,750	90%	\$	-
	5.20.80	Cornell Madison Rouge Blvd. Park S.	2015			\$ -	\$	9,900	\$ -	\$	-	\$	-	\$		\$	9,900	90%	\$	-
	5.20.81	Cornell Mattamy East Church Street Parkette	2015		-,	\$ -	\$	6,930	\$ -	\$	-	\$	-	\$	-,	\$	6,930	90%	\$	-
	5.20.82	Fairtree East Village Remington Parkview Parkette	2015		-,	\$ -	\$	9,900	\$ -	\$	-	\$	-	\$		\$	9,900	90%	\$	-
	5.20.83	Remington Markham Centre East Central Parkette	2015	-		\$ -	\$	39,600		\$	-	\$	-	\$,	\$	39,600	90%	\$	-
	5.20.84	Tridel Markham Centre Linear Park W.	2015			\$ -	\$	34,650		\$	-	\$	-	\$		\$	34,650	90%	\$	-
	5.20.85	Berczy Beckett Central Parkette	2016			\$ - \$ -	\$	6,930	\$ -	\$	-	\$		\$		\$ \$	6,930	90%	\$	-
	5.20.86	Cornell Centre Mattamy N.P.	2016		-,	Ŧ	\$	29,700	\$ -	-	-	-		\$		\$	29,700	90%	-	-
	5.20.87	Cornell Centre Mattamy Woodlot Park	2016	-		\$ - \$ -	\$	39,600	\$ - \$ -	\$	-	\$	-	\$,	\$	39,600	90%	\$	-
	5.20.88 5.20.89	East Cathedral North Parkette Main Street Milliken SE Parkette	2016 2016	7	.,	\$ -	\$	4,950 14,850	\$ -	\$	-	\$	-	\$		э \$	4,950 14,850	90% 90%	\$	-
	5.20.89	Main Street Milliken SW Parkette	2016			\$ -	\$	14,850	ф -	\$	-	\$	- :	\$		э \$	14,850	90%	\$	-
	5.20.90	Northwest Cathedral Neighbourhood Park N.	2016		.,	\$ -	\$	9,900	\$ -	\$	-	\$	-	\$		\$	9,900	90%	s S	-
ı	5.20.91	Remington Markham Centre Civic Mall Phase 3	2016			\$ -	\$	99.000	\$ -	\$	-	\$	-	\$		\$	99,000	90%	\$	-
	5.20.92	Remington Markham Centre N.E. Valley Edge Parkette	2016	-		\$ -	\$	9,900	Ψ	\$		\$	-	\$		\$	9.900	90%	\$	
	5.20.94	Remington Markham Centre N.E. Valley Edge Parkette	2016		,,,,,	\$ -	\$	19,800	\$ -	\$		\$	_	\$.,	\$	19,800	90%	\$	
	5.20.95	Wismer Hwy. #48 Museum North	2016			\$ -	\$	19,800	T	\$	-	\$	-	\$		\$	19,800	90%	\$	-
1	5.20.96	Wismer McCowan Woodlot Park	2016			\$ -	\$	36,630	š -	\$	_	s s	-	\$		\$	36,630	90%	\$	_
	5.20.97	Boxgrove Hill East Parkette	2017	-		\$ -	\$	9,900	\$ -	\$		\$	-	\$		\$	9,900	90%		
	5.20.98	Cornell Madison East Channel Park	2017	7		\$ -	\$	29,700	\$ -	\$	_	\$	_	ŝ		\$	29,700	90%	\$	
	5.20.99	H & R Grand Cornell South Valley Edge Park East and West Banks	2017			\$ -	\$	39,600	\$ -	\$	_	\$	-	\$		\$	39,600	90%	\$	-
	5.20.100	Remington Markham Centre Civic Mall Phase 4	2017			\$ -	\$	99,000	\$ -	\$	-	\$	-	\$		\$	99,000	90%	\$	
	5.20.101	Remington Markham Centre East Valley Edge Linear Park	2017			\$ -	\$	19.800	*	\$	-	\$	-	\$		\$	19,800	90%	\$	
	5.20.102	South Unionville Community Park W.	2017			\$ -	\$	49,500	\$ -	\$		\$	-	\$		\$	49,500	90%	\$	-
	5.20.103	Swan Lake Park South Williamson Phase 6	2017			\$ -	\$	19,800	\$ -	\$	-	\$	-	\$		\$	19,800	90%		-
	5.20.104	Yonge/Colbourne St. Parkette	2017			\$ -	\$	14,850		\$		\$	-	\$		\$	14,850	90%	\$	-
	5.20.105	Yonge/John St. Parkette	2017			\$ -	\$	14,850	\$ -	\$	-	\$	-	\$		\$	14,850	90%	\$	-
	5.20.106	Cornell Madison South Woodlot Park	2018			\$ -	\$	16,830	\$ -	\$		\$	-	\$		\$	16,830	90%	\$	-
	5.20.107	Greensborough North Parkway N.P. East	2018			\$ -	\$	19,800	\$ -	\$	-	\$	-	\$		\$	19,800	90%	\$	-
	5.20.108	Greensborough North Parkway N.P. West	2018	\$	9,900	\$ -	\$	9,900	\$ -	\$	-	\$	-	\$	9,900	\$	9,900	90%	\$	-
	5.20.109	Yonge/Elgin St. Parkette	2018	\$ 1	1,850	\$ -	\$	14,850	\$ -	\$	-	\$	-	\$	14,850	\$	14,850	90%	\$	-
		Subtotal Pathways Concrete		\$ 3.65	2,526	\$ -	\$		\$ -	\$	898,646	\$	1,236,209	\$	1,517,670	\$	3,652,526		\$	1,112,588
				,	,	•	1	-,,	l '	1	,- 10	1 -	,,	l Ť	, ,	-	.,,		1 *	,,



			Total		Less	Total	Replacement				-Relat	ted Costs				8 Discounted
ervice	Project Description	Timing	Project Cost		Grants /Subsidies	Municipal Cost	and Benefit To Existing		Prior Growth	2009- 2018		Post 2018	Total			th-Related apital Costs
E O BARK DEVE	LOPMENT AND FACILITIES		Cost		Joubsidies	Cost	TO Existing	<u> </u>	Glowali	2010		2010	Total		Net Ca	ipitai Costs
5.21 Pathw 5.21.1	rays Paved Asphalt 1 Angus Glen Community Centre Park	2009	\$ 39	101 \$		\$ 39,101	e -	\$	39,101	¢ .	\$	_	\$ 39	,101	90%	\$ -
5.21.2		2009		287 \$		\$ 11,287		\$		\$ -	\$,287		\$ -
5.21.3		2009		595 \$		\$ 17,595		\$		\$ -				,595		\$ -
5.21.4		2009		428 \$		\$ 3,428		\$		\$ -				,428		\$ -
5.21.5		2009		625 \$		\$ 7,625		\$		\$ -	-			,625		\$ -
5.21.6		2009		606 \$		\$ 2,606		\$		\$ -				.606		\$ -
5.21.7		2009		730 \$	-	\$ 11.730		\$,	\$ -	\$	-		,730		\$ -
5.21.8		2009		668 \$	-	\$ 8,668	\$ -	\$	8,668	\$ -	\$	-		,668	90%	\$ -
5.21.9		2009		933 \$	-	\$ 2,933		\$		\$ -	\$	-		,933	90%	\$ -
5.21.1	10 Greensborough Amos Court Parkette	2009	\$ 8	733 \$	-	\$ 8,733	\$ -	\$	8,733	\$ -	\$	-	\$ 8	,733	90%	\$ -
5.21.1	11 Greensborough Stalmaster N.P.	2009	\$ 13	034 \$	-	\$ 13,034	\$ -	\$	13,034	\$ -	\$	-	\$ 13	,034	90%	\$ -
5.21.1	12 H&R Grand Cornell Horseshoe Park	2009	\$ 14	728 \$	-	\$ 14,728	\$ -	\$	14,728	\$ -	\$	-	\$ 14	,728	90%	\$ -
5.21.1	13 John Daniels - Phase 2 (Fairty Park)	2009	\$ 2	637 \$	-	\$ 2,637	\$ -	\$	2,637	\$ -	\$	-	\$ 2	,637	90%	\$ -
5.21.1	14 King David Cathedraltown Arbouretum	2009		477 \$	-	\$ 2,477	\$ -	\$		\$ -	\$	-		,477		\$ -
5.21.1	15 Leitchcroft (Times) Community Park	2009	\$ 14	239 \$	-	\$ 14,239	\$ -	\$	14,239	\$ -	\$	-	\$ 14	,239	90%	\$ -
5.21.1	16 Villages of Fairtree Community Park and Cricket Pitch	2009	\$ 52	747 \$	-	\$ 52,747	\$ -	\$	52,747	\$ -	\$	-	\$ 52	,747	90%	\$ -
5.21.1	17 Wismer Roy Rainey Neighbourhood Park	2009	\$ 12	903 \$	-	\$ 12,903	\$ -	\$	12,903	\$ -	\$	-	\$ 12	,903	90%	\$ -
5.21.1	18 Berczy Community Park S. Phase 2	2010		680 \$	-	\$ 31,680	\$ -	\$	-	\$ 31,6	30 \$	-	\$ 31	,680	90%	\$ 28,51
5.21.1	19 Cornell Greenway Fence and Landscaping North of 16th	2010	\$ 11	880 \$	-	\$ 11,880	\$ -	\$	-	\$ 11,8	30 \$	-	\$ 11	,880	90%	\$ 10,69
5.21.2	20 H&R Grand Cornell Linear Finger Park	2010	\$ 15	840 \$	-	\$ 15,840	\$ -	\$	-	\$ 15,8	40 \$	-	\$ 15	,840	90%	\$ 14,25
5.21.2	21 Markham Main St. Merin Linear Park Library Connection	2010	\$ 15	840 \$	-	\$ 15,840	\$ -	\$	-	\$ 15,8	40 \$	-	\$ 15	,840	90%	\$ 14,25
5.21.2	22 South Unionville Ray Street Parkette E.	2010		920 \$	-	\$ 7,920	\$ -	\$	-	\$ 7,9	20 \$	-	\$ 7	,920		\$ 7,12
5.21.2	23 Swan Lake Park Block 31	2010	\$ 11.	880 \$	-	\$ 11,880	\$ -	\$	-	\$ 11,8	30 \$	-	\$ 11	,880	90%	\$ 10,6
5.21.2	24 Tridel Markham Centre Linear Park E.	2010	\$ 15	840 \$	-	\$ 15,840	\$ -	\$	-	\$ 15,8	40 \$	-	\$ 15	,840	90%	\$ 14,2
5.21.2	25 Victoria Square Community Park S. Phase Playground and Waterplay	2010	\$ 15	840 \$	-	\$ 15,840	\$ -	\$	-	\$ 15,8	40 \$	-	\$ 15	,840	90%	\$ 14,2
5.21.2	26 Wismer Donald Mingay Parkette on Mingay	2010	\$ 7	920 \$	-	\$ 7,920	\$ -	\$	-	\$ 7,9	20 \$	-	\$ 7	,920	90%	\$ 7,12
5.21.2	27 Angus Glen West Village Triangle Parkette	2011	\$ 11.	088 \$	-	\$ 11,088	\$ -	\$	-	\$ 11,0	38 \$	-	\$ 11	,088	90%	\$ 9,97
5.21.2	28 Angus Glen West Village Valley Edge Park	2011	\$ 11.	880 \$	-	\$ 11,880	\$ -	\$	-	\$ 11,8	30 \$	-	\$ 11	,880	90%	\$ 10,69
5.21.2	29 Boxgrove Southeast Heritage House Parkette	2011	\$ 15	840 \$	-	\$ 15,840	\$ -	\$	-	\$ 15,8	40 \$	-	\$ 15	,840	90%	\$ 14,25
5.21.3	30 Greensborough Solace Rd. N.P.	2011	\$ 7	920 \$	-	\$ 7,920	\$ -	\$	-	\$ 7,9	20 \$	-	\$ 7	,920	90%	\$ 7,12
5.21.3	31 Jessamyn Settler's Park Landscaping	2011	\$ 11.	880 \$	-	\$ 11,880	\$ -	\$	-	\$ 11,8	30 \$	-	\$ 11	,880	90%	\$ 10,69
5.21.3	Remington Markham Centre Active Park East	2011	\$ 14	256 \$	-	\$ 14,256	\$ -	\$	-	\$ 14,2	56 \$	-	\$ 14	,256	90%	\$ 12,83
5.21.3	Boxgrove Community Park Washroom Pavilion and Pedestrian Bridge	2012	\$ 23	760 \$	-	\$ 23,760	\$ -	\$	-	\$ 23,7	30 \$	-	\$ 23	,760	90%	\$ 21,38
5.21.3	34 Cornell Gowland N.P.	2012	\$ 11.	880 \$	-	\$ 11,880	\$ -	\$	-	\$ 11,8	30 \$	-	\$ 11	,880	90%	\$ 10,69
5.21.3	35 Cornell Secondary School N.P.	2012	\$ 19	800 \$	-	\$ 19,800	\$ -	\$	-	\$ 19,8	00 \$	-	\$ 19	,800	90%	\$ 17,82
5.21.3	36 Elgin St. Honsburger Park	2012	\$ 23	760 \$	-	\$ 23,760	\$ -	\$	-	\$ 23,7	30 \$	-	\$ 23	,760	90%	\$ 21,3
5.21.3	37 Liberty Markham Centre Oak Park Warden W.	2012	\$ 9	504 \$	-	\$ 9,504	\$ -	\$	-	\$ 9,5	04 \$	-	\$ 9	,504	90%	\$ 8,5
5.21.3	38 Markham Sports Park	2012	\$ 198		-	\$ 198,000	\$ -	\$	-	\$ 198,0				,000		\$ 178,2
5.21.3	Remington Markham Centre Central Park N. Phase 1	2012	\$ 7	920 \$	-	\$ 7,920	\$ -	\$	-	\$ 7,9	20 \$	-	\$ 7	,920	90%	\$ 7,1
5.21.4	40 South East Markham Community Centre Park	2012	\$ 43	560 \$	-	\$ 43,560	\$ -	\$	-	\$ 43,5	30 \$	-	\$ 43	,560	90%	\$ 39,2
5.21.4	41 Yonge/Steeles Meadowvale Ave. Parkette	2012	\$ 11	880 \$	-	\$ 11,880	\$ -	\$	-	\$ 11,8	30 \$	-	\$ 11	,880	90%	\$ 10,69
5.21.4	42 Angus Glen West Village Parkette	2013	\$ 7	920 \$	-	\$ 7,920	\$ -	\$	-	\$ -	\$	7,920	\$ 7	,920		\$ -
5.21.4		2013		880 \$		\$ 11,880		\$		\$ -	Ψ			,880		\$ -
5.21.4		2013		840 \$		\$ 15,840		\$	-	\$ -	-			,840		\$ -
5.21.4		2013		720 \$		\$ 27,720		\$		\$ -				,720		\$ -
5.21.4	46 South Unionville West Greenburg Parkette	2013		880 \$		\$ 11,880		\$	-	\$ -				,880		\$ -
5.21.4		2013		296 \$		\$ 10,296		\$		\$ -				,296		\$ -
5.21.4		2013		068 \$	-	\$ 13,068		\$	-	\$ -	-			,068		\$ -
5.21.4		2013		068 \$		\$ 13,068		\$	-	\$ -	Ψ			,068		\$ -
5.21.5		2014		860 \$		\$ 13,860		\$		\$ -	Ψ			,860		\$.
5.21.5		2014		176 \$		\$ 22,176		\$	-	\$ -	-			,176		\$.
5.21.5		2014		360 \$		\$ 63,360		\$	-	\$ -				,360		\$
5.21.5		2014		760 \$		\$ 23,760		\$		\$ -	-			,760		\$ -
5.21.5		2014		920 \$		\$ 7,920		\$	-	\$ -				,920		\$ -
5.21.5	55 Berczy Beckett East Parkette	2015		880 \$		\$ 11,880		\$	-	\$ -	-			,880		\$ -
5.21.5	56 Berczy Beckett Neighbourhood Park	2015		760 \$	-	\$ 23,760	\$ -	\$	-	\$ -	\$,760		\$ -
5.21.5		2015	\$ 15	840 \$	-	\$ 15,840	\$ -	\$	-	\$ -	\$,840	90%	\$ -
5.21.5		2015		000 \$		\$ 198,000		\$	-	\$ -				,000		\$ -
5.21.5		2015		920 \$	-	\$ 7,920		\$		\$ -	\$,920		\$ -
5.21.6		2015		920 \$	-	\$ 7,920		\$		\$ -				,920		\$ -
	<u> </u>	1	1			,		1 '			1 "	,				



114

			Total	Less		Total	Replacement				Growth-Re	elateu	Costs			2009-20	18 Discour	nted
Service	Project Description	Timing	Project	Grants /Subsidies		Municipal Cost	and Benefit		Prior Growth		2009- 2018		Post 2018	Tota			vth-Related	
			Cost	/Subsidies	+	Cost	To Existing	-	Growth		2018		2018	1 Ota	II .	Net C	apital Cost	its
5.0 PARK DEVELOR	PMENT AND FACILITIES																	
5.21 Pathways	Paved Asphalt (Cont'd)																	
5.21.61	Cornell Madison Rouge Blvd. Park S.	2015	\$ 11,88	0 \$ -	\$	11,880	\$ -	\$	-	\$	-	\$	11,880	\$ 1	1,880	90%	\$	-
5.21.62	Cornell Mattamy East Church Street Parkette	2015	\$ 11,08	8 \$ -	\$	11,088	\$ -	\$	-	\$	-	\$	11,088	\$ 1	1,088	90%	\$	-
5.21.63	Fairtree East Village Remington Parkview Parkette	2015	\$ 11,88	0 \$ -	\$	11,880	\$ -	\$	-	\$	-	\$	11,880	\$ 1	1,880	90%	\$	-
5.21.64	Berczy Beckett Central Parkette	2016	\$ 7,92	0 \$ -	\$	7,920	\$ -	\$	-	\$	-	\$	7,920	\$	7,920	90%	\$	-
5.21.65	Cornell Centre Mattamy N.P.	2016	\$ 23,76	0 \$ -	\$	23,760	\$ -	\$	-	\$	-	\$	23,760	\$ 2	23,760	90%	\$	-
5.21.66	Cornell Centre Mattamy Woodlot Park	2016	\$ 11,88	0 \$ -	\$	11,880	\$ -	\$	-	\$	-	\$	11,880	\$ 1	1,880	90%	\$	-
5.21.67	East Cathedral North Parkette	2016	\$ 7,92	0 \$ -	\$	7,920	\$ -	\$	-	\$	-	\$	7,920	\$	7,920	90%	\$	-
5.21.68	Northwest Cathedral Neighbourhood Park N.	2016	\$ 11,88	0 \$ -	\$	11,880	\$ -	\$	-	\$	-	\$	11,880	\$ 1	1,880	90%	\$	-
5.21.69	Northwest Cathedral Woodlot Park	2016	\$ 11,88	0 \$ -	\$	11,880	\$ -	\$	-	\$	-	\$	11,880	\$ 1	1,880	90%	\$	-
5.21.70	Remington Markham Centre Civic Mall Phase 3	2016	\$ 39,60	0 \$ -	\$	39,600	\$ -	\$	-	\$	-	\$	39,600	\$ 3	9,600	90%	\$	-
5.21.71	Wismer McCowan Woodlot Park	2016	\$ 19,40	4 \$ -	\$	19,404	\$ -	\$	-	\$	-	\$	19,404	\$ 1	9,404	90%	\$	-
5.21.72	Boxgrove Hill East Parkette	2017	\$ 7,92	0 \$ -	\$	7,920	\$ -	\$	-	\$	-	\$	7,920	\$	7,920	90%	\$	-
5.21.73	Cornell Madison East Channel Park	2017	\$ 55,44	0 \$ -	\$	55,440	\$ -	\$	-	\$	-	\$	55,440	\$ 5	5,440	90%	\$	-
5.21.74	H & R Grand Cornell South Valley Edge Park East and West Banks	2017	\$ 71,28	0 \$ -	\$	71,280	\$ -	\$	-	\$	-	\$	71,280	\$ 7	1,280	90%	\$	-
5.21.75	Remington Markham Centre East Valley Edge Linear Park	2017	\$ 15,84	0 \$ -	\$	15,840	\$ -	\$	-	\$	-	\$	15,840	\$ 1	5,840	90%	\$	-
5.21.76	South Unionville Community Park W.	2017	\$ 23,76	0 \$ -	\$	23,760	\$ -	\$	-	\$	-	\$	23,760	\$ 2	23,760	90%	\$	-
5.21.77	Swan Lake Park South Williamson Phase 6	2017	\$ 27,72	0 \$ -	\$	27,720		\$	-	\$	-	\$	27,720	\$ 2	7,720	90%	\$	-
5.21.78	Cornell Madison South Woodlot Park	2018	\$ 19,80	0 \$ -	\$	19,800	\$ -	\$	-	\$	-	\$	19,800	\$ 1	9,800	90%	\$	-
5.21.79	Greensborough North Parkway N.P. East	2018	\$ 19,80	0 \$ -	\$	19,800	\$ -	\$	-	\$	-	\$	19,800	\$ 1	9,800	90%	\$	-
5.21.80	Greensborough North Parkway N.P. West	2018	\$ 11,88	0 \$ -	\$	11,880	\$ -	\$	-	\$	-	\$	11,880	\$ 1	1,880	90%	\$	-
	Subtotal Pathways Paved Asphalt		\$ 1,714,63	9 \$ -	\$	1,714,639	\$ -	\$	226,471	\$	557,568	\$	930,600	\$ 1,71	4,639		\$ 501	1,811
5.22 Pathways	Granular																	
5.22 Fatilways 5.22.1	Angus Glen Community Centre Park	2009	\$ 7,95	6 \$ -	\$	7,956	e	\$	7,956	\$	_	\$	_	\$	7,956	90%	\$	
5.22.1	Boxgrove Hill Woodlot Park	2009	\$ 7,95		\$	2.297	\$ -	\$	2,297	\$	-	\$		\$ \$	2,297	90%	\$ \$	-
5.22.3	Boxgrove South Village N. P.	2009	\$ 3,58		\$, -	\$ -	\$	3,581	\$		\$		\$	3,581	90%	\$	-
5.22.4	East Cathedral Community Park	2009	\$ 2,38		\$		\$ -	\$	2,387	\$		\$		\$	2,387	90%	\$	-
5.22.5	Fairtree South Village Billingsley Parkettte	2009	\$ 1,76		\$	1,764	\$ -	\$	1,764	\$	-	\$		\$	1,764	90%	\$	-
5.22.6	Greensborough Amos Court Parkette	2009	\$ 1,7		\$		\$ -	\$	1,704	\$	-	\$		\$	1,777	90%	\$ \$	-
5.22.7	Greensborough Stalmaster N.P.	2009	\$ 2.65		\$	2,652	φ - •	\$	2.652	\$	-	\$		\$	2,652	90%	\$	-
5.22.8	H&R Grand Cornell Horseshoe Park	2009	\$ 2,99		\$,	\$ -	\$	2,997	\$	-	\$		\$	2,997	90%	\$	-
5.22.9	Leitchcroft (Times) Community Park	2009	\$ 2,89		\$	2,898	\$ -	\$	2,898	\$	-	\$		\$	2,898	90%	\$ \$	-
5.22.10	Villages of Fairtree Community Park and Cricket Pitch	2009	\$ 10,73		\$	10,734	\$ - \$	\$	10,734	\$	-	\$			0,734	90%	\$	-
5.22.10	Wismer Roy Rainey Neighbourhood Park	2009	\$ 2,62		\$	2,625	\$ -	\$	2,625	\$	-	\$		\$	2,625	90%	\$	
5.22.12	Swan Lake Park Block 31	2010	\$ 5.94			5.940	Ÿ	\$	2,023	\$	5.940	\$		\$	5,940	90%		5,346
5.22.12	Wismer Donald Mingay Parkette on Mingay	2010	\$ 7,92		\$	7.920	\$ -	\$		\$	7,920	\$			7,920	90%		5,346 7,128
5.22.14	Cornell Madison East Woodlot Park	2011	\$ 27,72		\$	27,720	Ψ	\$		\$	27,720	\$			7,720	90%		4.948
5.22.15	Jessamyn Settler's Park Landscaping	2011	\$ 13,86		\$	13,860		\$	_	\$	13,860	\$			3,860	90%		2,474
5.22.16	Boxgrove Community Park	2012	\$ 29,70		\$	29,700		\$		\$	29,700	s s			9,700	90%		6,730
5.22.17	Markham Sports Park	2012	\$ 99,00		\$	99,000		\$	_	\$	99,000	\$			9,000	90%		9,100
5.22.18	Northwest Cathedral Neighbourhood Park S.	2012	\$ 1,79		\$	1,790		\$		\$	1,790	\$			1,790	90%		1,611
5.22.19	South East Markham Community Centre Park	2012	\$ 37,62		\$	37,620		\$	_	\$	37,620	s			7,620	90%		3,858
5.22.19	Southwest Cathedral Monarch Memorial Neighbourhood Park	2012	\$ 4,08		\$	4,084	\$ -	\$	-	\$	4,084	\$			4,084	90%		3,676
5.22.21	Wismer Hwy. #48 Hamersley Woodlot Park	2012	\$ 9.90		\$	9,900	Ψ	\$		\$	9,900	\$			9,900	90%		3,076 8,910
5.22.22	Greensborough Alfred Patterson Woodlot	2012	\$ 31,68	-	\$	31,680		\$		\$	9,900	\$			31,680	90%	\$	0,910
5.22.23	Clark Ave. Woodlot Park	2013	\$ 7,92		\$	7,920		\$		\$	-	\$			7.920	90%	\$ \$	-
5.22.24	Cornell Centre Mattamy Woodlot Park	2014	\$ 47.52		\$	47.520	· -	\$		\$	-	\$			7,520	90%	\$	-
5.22.25	Northwest Cathedral Woodlot Park	2016	\$ 49,50		\$	49,500	· -	\$		\$	-	\$			19,500	90%	\$	-
5.22.25	Wismer Hwy. #48 Museum North	2016	\$ 49,50		\$	11,880		\$		\$	-	\$			1,880	90%	\$ \$	-
		2016	+,		\$		φ - •	\$	-	\$		\$					\$	-
5.22.27 5.22.28	Wismer McCowan Woodlot Park Swan Lake Park South Williamson Phase 6	2016	\$ 7,92 \$ 47,52		\$	7,920 47,520	φ - •	\$	-	\$	-	\$			7,920 7,520	90% 90%	\$ \$	-
5.22.28	Cornell Madison South Woodlot Park	2017	\$ 47,52		φ	47,520 83,160	φ - •	-	-	\$	-	\$			3,160	90%	\$	-
5.22.29		2018	\$ 566,30	-	- \$		\$ -	\$		-		\$			6,302	90%		3,781
	Subtotal Pathways Granular			2 \$ -		566,302			41,667	\$	237,535							



					Total		Less		Total	Replacemen	t			Growth-Re	elated Costs			2009-20	18 Dis	scounted
Service		Project Description	Timing		Project Cost		rants Ibsidies		Municipal Cost	and Benefit To Existing		Prior Growth		2009- 2018	Post 2018		Total			elated Costs
5.0 PAR	K DEVELOP	MENT AND FACILITIES																		
5 23	Pathways \	Woodchin																		
0.20	5.23.1	Angus Glen Community Centre Park	2009	\$	1.485	\$		\$	1,485	s -	\$	1,485	\$	-	\$ -	\$	1,485	90%	\$	-
	5.23.2	Villages of Fairtree Community Park and Cricket Pitch	2009	\$	1,766	\$	-	\$	1,766	\$ -	\$	1,766	\$	-	\$ -	\$	1,766	90%	\$	-
		Subtotal Pathways Woodchip		\$	3,251	\$	-	\$	3,251	\$ -	\$	3,251	\$	-	\$ -	\$	3,251		\$	-
5 24	Wooden Br	ridnes																		
	5.24.1	Swan Lake Park South Williamson Phase 6	2017	\$	387,552	\$		\$	387,552	\$ -	\$	-	\$	-	\$ 387,552	\$	387,552	90%	\$	-
		Subtotal Wooden Bridges		\$	387,552	\$	-	\$	387,552	\$ -	\$	-	\$	-	\$ 387,552		387,552		\$	-
5 25	Steel Bridg	nac.																90%		
3.23	5.25.1	Swan Lake Park Block 31	2010	\$	408,672	\$	_	\$	408,672	s -	\$	_	\$	408,672	s -	\$	408,672	90%	\$	367.805
	5.25.2	Jessamyn Settler's Park Landscaping	2011	\$	306,504	\$	-	\$	306,504	\$ -	\$	-	\$	306,504	\$ -	\$	306,504	90%	\$	275,854
	5.25.3	Boxgrove Community Park Washroom Pavilion and Pedestrian Bridge	2012	\$	919,512	\$	-	\$	919,512	\$ -	\$	-	\$	919,512	\$ -	\$	919,512	90%		827,561
	5.25.4	Wismer Alexander Lowrey Neighbourhood Park West	2013	\$	613,008	\$	-	\$	613,008	\$ -	\$	-	\$	-	\$ 613,008	\$ \$	613,008	90%		-
	5.25.5	Cornell Community Park	2015	\$	510,840	\$	-	\$	510,840	\$ -	\$	-	\$	-	\$ 510,840	\$	510,840	90%	\$	-
	5.25.6	H & R Grand Cornell South Valley Edge Park East and West Banks	2017	\$	613,008	\$	-	\$	613,008	\$ -	\$	-	\$	-	\$ 613,008	3 \$	613,008	90%	\$	-
	5.25.7	Swan Lake Park South Williamson Phase 6	2017	\$	306,504	\$	-	\$	306,504	\$ -	\$	-	\$	-	\$ 306,504		306,504	90%	\$	-
	5.25.8	Cornell Madison South Woodlot Park	2018	\$	204,336	\$		\$	204,336	\$ -	\$	-	\$	-	\$ 204,336	\$	204,336	90%	\$	-
		Subtotal Steel Bridges		\$	3,882,384	\$	-	\$	3,882,384	\$ -	\$	-	\$	1,634,688	\$ 2,247,696	\$	3,882,384		\$	1,471,219
5.26	Paved Park	king Lots																		
	5.26.1	Angus Glen Community Centre Park	2009	\$	26,400	\$	-	\$	26,400	\$ -	\$	26,400	\$	-	\$ -	\$	26,400	90%	\$	-
	5.26.2	Villages of Fairtree Community Park and Cricket Pitch	2009	\$	39,600	\$	-	\$	39,600	\$ -	\$	39,600	\$	-	\$ -	\$	39,600		\$	-
	5.26.3	Berczy Community Park S. Phase 2	2010	\$	165,000	\$	-	\$	165,000	\$ -	\$	-	\$	165,000	\$ -	\$	165,000	90%		148,500
	5.26.4	WismerCommons Community Park Washroom Pavillion and Maintenance Station	2011	\$	99,000	\$	-	\$	99,000	\$ -	\$	-	\$	99,000	\$ -	\$	99,000		\$	89,100
	5.26.5	Boxgrove Community Park	2012	\$	198,000	\$	-	\$	198,000	\$ -	\$	-	\$	198,000	\$ -	\$	198,000	90%		178,200
	5.26.6	Cornell Secondary School N.P.	2012	\$	132,000	\$	-	\$	132,000	\$ -	\$	-	\$	132,000	\$ -	\$	132,000	90%		118,800
	5.26.7	Markham Sports Park	2012	\$	792,000	\$	-	\$	792,000	\$ -	\$	-	\$	792,000	\$ -	\$	792,000	90%		712,800
	5.26.8	South East Markham Community Centre Park	2012	\$	99,000	\$	-	\$	99,000	\$ -	\$	-	\$	99,000	\$ -	\$	99,000	90%		89,100
	5.26.9	Victoria Square Community Park N. Phase	2014 2014	\$	330,000 396.000	\$	-	\$	330,000	\$ -	\$	-	\$	-	\$ 330,000 \$ 396,000		330,000	90% 90%	\$	-
	5.26.10 5.26.11	Wismer Community Park Phase 3 Castlemore Frontage Cornell Community Park	2014	\$	264.000	\$	-	\$	396,000 264,000	\$ -	\$	-	\$	-	\$ 396,000		396,000 264,000	90%		-
	5.26.11	Cornell Community Park Cornell Community Park Washroom Pavilion and Maintenance Station	2015	\$	66,000	Φ		\$	66,000	ф -	\$		\$		\$ 66,000		66,000	90%	\$	
	5.20.12	Subtotal Paved Parking Lots	2013	\$	2,607,000	\$		\$	2,607,000	s -	- \$	66,000	<u> </u>	1,485,000	\$ 1,056,000		2,607,000	30 /8		1,336,500
		· ·		1	, ,	Ť		ľ	, ,		ľ			,,	, ,,,,,,,,		,,		•	,,
5.27	Parking Lo		2000	\$	44.500			\$	14 500	\$ -	\$	44.500					44.500	90%	•	
	5.27.1 5.27.2	Angus Glen Community Centre Park Villages of Fairtree Community Park and Cricket Pitch	2009 2009	\$	14,520 29.040	\$	-	\$	14,520 29.040	\$ -	\$	14,520 29,040	\$	-	\$ - \$ -	\$	14,520 29,040	90%		-
	5.27.2	Berczy Community Park S. Phase 2	2009	\$	72,600	\$		\$	72,600	\$ -	\$	29,040	\$	72,600	\$ -	\$	72,600	90%		65,340
	5.27.4	WismerCommons Community Park Washroom Pavillion and Maintenance Station	2010	\$	29,040	\$	-	\$	29,040	\$ -	\$	_	\$	29,040	\$ -	\$	29,040	90%		26,136
	5.27.5	Boxgrove Community Park	2011	\$	72,600	\$	-	\$	72,600	\$ -	\$	-	\$	72,600	\$ -	\$	72,600	90%		65,340
	5.27.6	Cornell Secondary School N.P.	2012	\$	72,600	\$	-	\$	72,600	\$ -	\$		\$	72,600	\$ -	\$	72,600		\$	65,340
	5.27.7	Markham Sports Park	2012	\$	232,320	\$	-	\$	232,320	\$ -	\$	-	\$	232,320	\$ -	\$	232,320	90%		209,088
	5.27.8	South East Markham Community Centre Park	2012	\$	72,600	\$	-	\$	72,600	\$ -	\$	-	\$	72,600	\$ -	\$	72,600	90%		65,340
	5.27.9	Victoria Square Community Park N. Phase	2014	\$	58,080	\$	-	\$	58,080	\$ -	\$	-	\$	-	\$ 58,080	\$	58,080	90%	\$	-
	5.27.10	Wismer Community Park Phase 3 Castlemore Frontage	2014	\$	101,640	\$	-	\$	101,640	\$ -	\$	-	\$	-	\$ 101,640		101,640		\$	-
	5.27.11	Cornell Community Park	2015	\$	72,600	\$	-	\$	72,600	\$ -	\$	-	\$	-	\$ 72,600		72,600		\$	-
	5.27.12	Cornell Community Park Washroom Pavilion and Maintenance Station	2015	\$	29,040	\$	-	\$	29,040	\$ -	\$	-	\$	-	\$ 29,040		29,040		\$	-
	5.27.13	Cornell Madison East Channel Park	2017	\$	7,260	\$	-	\$	7,260	\$ -	\$	-	\$	-	\$ 7,260		7,260	90%	\$	-
		Subtotal Parking Lot Lighting		\$	863,940	\$	-	\$	863,940	\$ -	\$	43,560	\$	551,760	\$ 268,620	\$	863,940		\$	496,584
				1				<u> </u>										1		



				Total		Less	Total	Replacement				Relate	ed Costs				18 Discounted
Service		Project Description	Timing	Project Cost		Grants ubsidies	Municipal Cost	and Benefit To Existing		Prior rowth	2009- 2018		Post 2018	To	tal		vth-Related apital Costs
				0031	- '	ubsidies	0031	TO Existing	<u> </u>	Owar	2010		2010		···	Net	upitui 003t3
5.0 PARK D	DEVELOP	MENT AND FACILITIES															
	athway Li																
	5.28.1	Angus Glen Community Centre Park	2009	\$ 52,8		-	\$ 52,800		\$	02,000	\$ -	\$	-	\$	52,800	90%	\$ -
	5.28.2	Villages of Fairtree Community Park and Cricket Pitch	2009	\$ 42,2		-	\$ 42,240		\$, .	\$ -	\$		\$	42,240	90%	\$ -
	5.28.3	Berczy Community Park S. Phase 2	2010	\$ 147,8		-	\$ 147,840		\$		\$ 147,84				147,840	90%	\$ 133,056
	5.28.4	Boxgrove Town Centre 14th Ave. Gateway Parkette N.	2010	\$ 26,4		-	\$ 26,400	\$ -	\$		\$ 26,40			\$	26,400	90%	\$ 23,760
	5.28.5	Boxgrove Town Centre 14th Ave. Gateway Parkette S.	2010	\$ 26,4		-	\$ 26,400	\$ -	\$		\$ 26,40			\$	26,400	90%	\$ 23,760
	5.28.6	H&R Grand Cornell Linear Finger Park	2010	\$ 132,0		-	\$ 132,000		\$		\$ 132,00				132,000	90%	\$ 118,800
	5.28.7	Markham Main St. Merin Linear Park Library Connection	2010	\$ 168,9		-	\$ 168,960		\$		\$ 168,96				168,960	90%	\$ 152,064
	5.28.8	Tridel Markham Centre Linear Park E.	2010	\$ 158,4		-	\$ 158,400		\$		\$ 158,40				158,400	90%	\$ 142,560
	5.28.9	Angus Glen West Village Central Green	2011	\$ 105,6		-	\$ 105,600		\$		\$ 105,60				105,600	90%	\$ 95,040
	5.28.10	Angus Glen West Village Triangle Parkette	2011	\$ 63,3		-	\$ 63,360	\$ -	\$		\$ 63,36			\$	63,360	90%	\$ 57,024
	5.28.11	Angus Glen West Village Valley Edge Park	2011	\$ 52,8		-	\$ 52,800 \$ 52,800	5 -	\$ \$	-	\$ 52,80		-	\$	52,800	90%	\$ 47,520
	5.28.12	Cornell Community Centre Square	2011	\$ 52,8			,		-		\$ 52,80		-	\$	52,800	90%	\$ 47,520
	5.28.13	Markham Centre Majestic Court Central Parkette	2011	\$ 52,8 \$ 158.4		-	\$ 52,800		\$		\$ 52,80		-	\$	52,800	90%	\$ 47,520
	5.28.14	Remington Markham Centre Active Park East	2011			-	\$ 158,400 \$ 158,400		\$ \$		\$ 158,40				158,400	90%	\$ 142,560
	5.28.15	Remington Markham Centre Civic Mall Phase 1	2011	\$ 158,4			+,	\$ -			\$ 158,40				158,400	90%	\$ 142,560
	5.28.16	Remington Markham Centre Heritage House Parkette	2011	\$ 79,2		-	\$ 79,200	\$ -	\$ \$		\$ 79,20			\$	79,200	90%	\$ 71,280
	5.28.17	WismerCommons Community Park Washroom Pavillion and Maintenance Station	2011	\$ 63,3		-	\$ 63,360	\$ -	\$		\$ 63,36		-	\$	63,360	90%	\$ 57,024
	5.28.18	Boxgrove Community Park	2012	\$ 158,4 \$ 52,8		-	\$ 158,400		\$		\$ 158,40				158,400	90% 90%	\$ 142,560
	5.28.19	Boxgrove Community Park Washroom Pavilion and Pedestrian Bridge	2012			-	\$ 52,800				\$ 52,80			\$	52,800		\$ 47,520
	5.28.20	Cornell Secondary School N.P.	2012			-	\$ 105,600 \$ 26,400		\$ \$		\$ 105,60			\$	105,600	90% 90%	\$ 95,040
	5.28.21 5.28.22	Elgin St. Honsburger Park Liberty Markham Centre Oak Park Warden E.	2012 2012	\$ 26,4 \$ 79,2			\$ 26,400 \$ 79,200	\$ -	\$		\$ 26,40 \$ 79,20		-	\$	26,400 79,200	90%	\$ 23,760 \$ 71,280
	5.28.23	Liberty Markham Centre Oak Park Warden E. Liberty Markham Centre Oak Park Warden W.	2012	\$ 105,6			\$ 79,200 \$ 105,600	Ψ	S S		\$ 79,20		-		105,600	90%	\$ 95,040
				+,-		-			-								
	5.28.24	Markham Sports Park	2012			-	\$ 844,800		\$		\$ 844,80				344,800	90%	\$ 760,320
	5.28.25 5.28.26	Remington Markham Centre Central Park N. Phase 1	2012 2012	\$ 132,0 \$ 105,6			\$ 132,000		\$ \$		\$ 132,00 \$ 105,60				132,000	90%	\$ 118,800 \$ 95,040
	5.28.27	Remington Markham Centre Civic Mall Phase 2	2012	\$ 211.2		-	\$ 105,600 \$ 211,200	ъ -	\$						105,600	90% 90%	
	5.28.28	South East Markham Community Centre Park Southwest Cathedral Monarch Memorial Neighbourhood Park	2012	\$ 211,2		-	\$ 211,200 \$ 184,800	\$ -	\$		\$ 211,20 \$ 184.80		-		184.800	90%	\$ 190,080 \$ 166,320
	5.28.29	Yonge/Steeles Meadowvale Ave. Parkette	2012	\$ 79,2			\$ 79,200	Ψ	\$		\$ 104,00	\$	79,200	\$	79,200	90%	\$ 100,320
	5.28.30		2012	\$ 79,2			\$ 79,200		\$		Ÿ	\$		\$	31,680	90%	\$ -
		Angus Glen West Village Parkette	2013						\$		Ψ	\$		\$		90%	\$ -
	5.28.31	Berczy Northeast McCowan Parkette	2013	\$ 79,2 \$ 79,2		-			\$		\$ - \$ -	\$		\$	79,200	90%	Ŧ
	5.28.32	Main St. Markham Town Square	2013	\$ 79,2			\$ 79,200 \$ 52,800		\$			\$		\$	79,200 52,800	90%	\$ - \$ -
	5.28.33 5.28.34	Main Street Milliken Armadale N.P. South Unionville West Greenburg Parkette	2013	\$ 79,2			\$ 79,200		\$	-	\$ - \$ -	\$		\$	79,200	90%	\$ -
	5.28.35	Times-Murphy Hull Warden & Hwy. #7 Oval Parkette	2013	\$ 79,2			\$ 79,200 \$ 79,200		\$	-	\$ -	\$		\$	79,200	90%	\$ -
	5.28.36	Wismer Alexander Lowrey Neighbourhood Park West	2013	\$ 211,2			\$ 211,200		\$	-	\$ -	\$			211,200	90%	\$ -
	5.28.37	Main Street Milliken NE Parkette	2013	\$ 52,8			\$ 52,800		s S	-	\$ -	\$		\$	52,800	90%	\$ -
	5.28.38	Main Street Milliken NW Parkette	2014	\$ 52,8		-	\$ 52,800	· ·	\$		\$ -	\$		\$	52,800	90%	\$ -
	5.28.39	Victoria Square Community Park N. Phase	2014	\$ 316,8			\$ 316,800	\$ -	\$	-	\$ -	\$			316,800	90%	\$ -
	5.28.40	Wismer Community Park Phase 3 Castlemore Frontage	2014	\$ 95,0			\$ 95,040	\$ -	s S	-	\$ -	\$		\$	95,040	90%	\$ -
	5.28.41	Cornell Community Park	2015	\$ 316.8			\$ 316,800		s s		\$ -	\$			35,040	90%	\$ -
	5.28.42	Remington Markham Centre East Central Parkette	2015	\$ 105.6			\$ 105,600		s S		\$ -	\$			105,600	90%	\$ -
	5.28.43	Times-Murphy Hull Hwy. #7 Window Park	2015	\$ 52,8			\$ 52,800		s S		\$ -	\$		\$	52,800	90%	\$ -
	5.28.44	Tridel Markham Centre Linear Park W.	2015	\$ 79,2		_	\$ 79,200		\$		\$ -	\$		\$	79,200	90%	\$ -
	5.28.45	Main Street Milliken SE Parkette	2016	\$ 52,8		-	\$ 52,800		s s		\$ -	\$		\$	52,800	90%	\$ -
	5.28.46	Main Street Milliken SW Parkette	2016	\$ 52,8		_	\$ 52,800		\$		\$ -	\$		\$	52,800	90%	\$ -
	5.28.47	Remington Markham Centre Civic Mall Phase 3	2016	\$ 132.0		-	\$ 132,000		\$		\$ -	\$			132.000	90%	\$ -
	5.28.48	Remington Markham Centre N.E. Valley Edge Parkette	2016	\$ 52.8		_	\$ 52.800		\$		\$ -	\$		\$	52,800	90%	\$ -
	5.28.49	Remington Markham Centre N.W. Valley Edge Parkette	2016	\$ 63,3		-		\$ -	s s		\$ -	\$		\$	63,360	90%	\$ -
	5.28.50	Wismer Hwy. #48 Museum North	2016	\$ 52,8			\$ 52,800	\$ -	\$		\$ -	\$		\$	52,800	90%	\$ -
	5.28.51	H & R Grand Cornell South Valley Edge Park East and West Banks	2017	\$ 168,9		-	\$ 168,960	\$ -	\$	_	\$ -	\$			168,960	90%	\$ -
	5.28.52	Remington Markham Centre Civic Mall Phase 4	2017	\$ 132,0			\$ 132,000	Ÿ	\$		\$ -	\$			132,000	90%	\$ -
	5.28.53	Remington Markham Centre Civic Mail Phase 4 Remington Markham Centre East Valley Edge Linear Park	2017	\$ 79,2			\$ 79,200		\$		\$ -	\$		\$	79,200	90%	\$ -
	5.28.54	South Unionville Community Park W.	2017	\$ 79,2			\$ 79,200		\$		\$ -	\$		\$	79,200	90%	\$ -
	5.28.55	Yonge/Colbourne St. Parkette	2017	\$ 63,3			\$ 63,360		\$		\$ -	\$		\$	63,360	90%	\$ -
	5.28.56	Yonge/John St. Parkette	2017	\$ 63,3			\$ 63,360	\$ -	\$		\$ - \$ -	\$		\$	63,360	90%	\$ -
	5.28.56	Cornell Madison South Woodlot Park	2017	\$ 63,3		-	\$ 63,360	Ψ	\$		\$ -	\$		\$	63,360	90%	\$ - \$ -
	5.28.58	Yonge/Elgin St. Parkette	2018			-		φ -		- 1	φ -	\$		φ			•
-		TURGE/CROID St. PAIKERE	1 2018	\$ 31,6	οU ֆ	-	\$ 31,680	φ -	\$	-	J -	1.3	31,680	D D	31,680	90%	\$ -
5	3.20.30	Subtotal Pathway Lighting		\$ 6,399,3	60 \$	-	\$ 6,399,360	6	\$	95,040	\$ 3,453,12	0 6	2,851,200	\$ 6,3	399,360		\$ 3,107,808



			Total		Less		Total	Replacement			Growth-Re	elate	d Costs		2009-20)18 Di	iscounted
Service	Project Description	Timing	Project		Grants		Municipal	and Benefit		Prior	2009-		Post				Related
			Cost		/Subsidies		Cost	To Existing		Growth	2018		2018	Total	Net 0	Capita	al Costs
5.0 PARK DEVEL	OPMENT AND FACILITIES																
5 20 Irrigatio	n - Sports Pitches																
5.29 irrigatio	Angus Glen Community Centre Park	2009	\$ 39	600 \$		\$	39.600	٠ .	\$	39,600	\$	\$	_	\$ 39,600	90%	s	
5.29.2	Boxgrove South Village N. P.	2009		800 \$		\$	19,800	\$ -	s s	19,800	\$ _	\$	_	\$ 19,800	90%	\$	
5.29.3	East Cathedral Community Park	2009		800 \$		\$	19,800	Ŧ	\$	19,800	\$ _	\$		\$ 19,800	90%	\$	_
5.29.4	Greensborough Stalmaster N.P.	2009		800 \$		\$	19,800	\$ -	\$	19,800	\$ _	\$	_	\$ 19,800	90%	\$	_
5.29.5	H&R Grand Cornell Horseshoe Park	2009		800 \$		\$	19,800	\$ -	\$	19,800	\$ _	\$	-	\$ 19,800	90%		-
5.29.6	Leitchcroft (Times) Community Park	2009		800 \$		\$	19,800	\$ -	\$	19,800	\$ _	\$	_	\$ 19,800	90%	\$	
5.29.7	Villages of Fairtree Community Park and Cricket Pitch	2009		400 \$	-	\$	59,400	\$ -	\$	59,400	\$ -	\$	-	\$ 59,400	90%	ŝ	-
5.29.8	Wismer Roy Rainey Neighbourhood Park	2009		800 \$		\$	19,800		\$	19,800	\$ -	\$		\$ 19,800	90%	\$	-
5.29.9	Berczy Community Park S. Phase 2	2010		600 \$	-	\$	39,600		\$	-	\$ 39.600	\$	-	\$ 39,600	90%	\$	35,640
5.29.10		2010		600 \$	-	\$	39,600		\$	-	\$ 39,600	\$	-	\$ 39,600	90%	\$	35,640
5.29.11	Swan Lake Park Block 31	2010		800 \$	-	\$	19,800		\$	-	\$ 19,800	\$		\$ 19,800	90%		17,820
5.29.12	Angus Glen West Village Valley Edge Park	2011	\$ 19	800 \$	-	\$	19,800	\$ -	\$	-	\$ 19,800	\$	-	\$ 19,800	90%	\$	17,820
5.29.13		2011	\$ 19	800 \$	-	\$	19,800	\$ -	\$	-	\$ 19,800	\$	-	\$ 19,800	90%	\$	17,820
5.29.14	Greensborough Solace Rd. N.P.	2011	\$ 19	800 \$	-	\$	19,800	\$ -	\$	-	\$ 19,800	\$	-	\$ 19,800	90%	\$	17,820
5.29.15	Remington Markham Centre Active Park East	2011	\$ 19	800 \$	-	\$	19,800	\$ -	\$	-	\$ 19,800	\$	-	\$ 19,800	90%	\$	17,820
5.29.16	Boxgrove Community Park	2012	\$ 99	000 \$	-	\$	99,000	\$ -	\$	-	\$ 99,000	\$	-	\$ 99,000	90%	\$	89,100
5.29.17	Cornell Gowland N.P.	2012	\$ 39	600 \$	-	\$	39,600	\$ -	\$	-	\$ 39,600	\$	-	\$ 39,600	90%	\$	35,640
5.29.18	Cornell Secondary School N.P.	2012	\$ 19	800 \$	-	\$	19,800	\$ -	\$	-	\$ 19,800	\$	-	\$ 19,800	90%	\$	17,820
5.29.19		2012	\$ 19	800 \$	-	\$	19,800	\$ -	\$	-	\$ 19,800	\$	-	\$ 19,800	90%	\$	17,820
5.29.20	Markham Sports Park	2012	\$ 475	200 \$	-	\$	475,200	\$ -	\$	-	\$ 475,200	\$	-	\$ 475,200	90%	\$	427,680
5.29.21	Northwest Cathedral Neighbourhood Park S.	2012	\$ 19	800 \$	-	\$	19,800	\$ -	\$	-	\$ 19,800	\$	-	\$ 19,800	90%	\$	17,820
5.29.22	South East Markham Community Centre Park	2012	\$ 39	600 \$	-	\$	39,600	\$ -	\$	-	\$ 39,600	\$	-	\$ 39,600	90%	\$	35,640
5.29.23	South Unionville Ray Street Parkette W.	2012	\$ 19	800 \$	-	\$	19,800	\$ -	\$	-	\$ 19,800	\$	-	\$ 19,800	90%	\$	17,820
5.29.24	Southwest Cathedral Monarch Memorial Neighbourhood Park	2012	\$ 19	800 \$	-	\$	19,800	\$ -	\$	-	\$ 19,800	\$	-	\$ 19,800	90%	\$	17,820
5.29.25	Wismer Hwy. #48 Hamersley Woodlot Park	2012		800 \$	-	\$	19,800	\$ -	\$	-	\$ 19,800	\$	-	\$ 19,800	90%	\$	17,820
5.29.26	Greensborough Alfred Patterson Woodlot	2013		800 \$	-	\$	19,800	\$ -	\$	-	\$ -	\$	19,800	\$ 19,800	90%	\$	-
5.29.27	Main Street Milliken Armadale N.P.	2013		800 \$	-	\$	19,800	\$ -	\$	-	\$ -	\$	19,800	\$ 19,800	90%	\$	-
5.29.28	Southwest Cathedral Monarch Memorial Parkette	2013	\$ 19	800 \$	-	\$	19,800	\$ -	\$	-	\$ -	\$	19,800	\$ 19,800	90%	\$	-
5.29.29		2013		800 \$		\$	19,800		\$	-	\$ -	\$		\$ 19,800	90%	\$	-
5.29.30	Wismer Alexander Lowrey Neighbourhood Park West	2013	\$ 19	800 \$	-	\$	19,800	\$ -	\$	-	\$ -	\$	19,800	\$ 19,800	90%	\$	-
5.29.31	Cornell Mattamy Cornell Park Ave. N.P.	2014		800 \$	-	\$	19,800	\$ -	\$	-	\$ -	\$	19,800	\$ 19,800	90%	\$	-
5.29.32	Greensborough Williamson NP	2014		800 \$	-	\$	19,800	\$ -	\$	-	\$ -	\$	19,800	\$ 19,800	90%	\$	-
5.29.33	Victoria Square Community Park N. Phase	2014	\$ 19	800 \$	-	\$	19,800	\$ -	\$	-	\$ -	\$	19,800	\$ 19,800	90%	\$	-
5.29.34	Berczy Beckett Neighbourhood Park	2015	\$ 39	600 \$	-	\$	39,600	\$ -	\$	-	\$ -	\$	39,600	\$ 39,600	90%	\$	-
5.29.35		2015		600 \$		\$	138,600		\$	-	\$ -	\$		\$ 138,600	90%	\$	-
5.29.36		2015		800 \$		\$	19,800		\$	-	\$ -	\$		\$ 19,800	90%	\$	-
5.29.37		2016		800 \$		\$	19,800		\$	-	\$ -	\$	- 1	\$ 19,800	90%	\$	-
5.29.38		2016		800 \$		\$	19,800		\$	-	\$ -	\$		\$ 19,800	90%	\$	-
5.29.39		2016		600 \$		\$	39,600		\$	-	\$ -	\$		\$ 39,600	90%	\$	-
5.29.40		2016		800 \$		\$,		\$	-	\$ -	\$		\$ 19,800	90%	\$	-
5.29.41	Remington Markham Centre N.W. Valley Edge Parkette	2016		800 \$		\$	19,800		\$	-	\$ -	\$		\$ 19,800	90%	\$	-
5.29.42		2016		600 \$		\$	39,600	\$ -	\$	-	\$ -	\$		\$ 39,600	90%	\$	-
5.29.43		2017		800 \$		\$	19,800	\$ -	\$	-	\$ -	\$		\$ 19,800	90%	\$	-
5.29.44	. 3	2017		800 \$		\$	19,800	\$ -	\$	-	\$ -	\$		\$ 19,800	90%	\$	-
5.29.45		2017		600 \$		\$	39,600	\$ -	\$	-	\$ -	\$		\$ 39,600	90%	\$	-
5.29.46		2018		600 \$		\$	39,600	\$ -	\$	-	\$ -	\$		\$ 39,600	90%	\$	-
5.29.47		2018		600 \$	-	\$	39,600	\$ -	\$	-	\$ -	\$		\$ 39,600	90%	\$	-
5.29.48	Greensborough North Parkway N.P. West	2018	\$ 19	800	-	\$	19,800	\$ -	\$		\$ -	\$	19,800	\$ 19,800	90%	\$	-
	Subtotal Irrigation - Sports Pitches		\$ 1,861	200 \$	-	\$	1,861,200	\$ -	\$	217,800	\$ 950,400	\$	693,000	\$ 1,861,200		\$	855,360
	•	1	1	1.		1		I							l	l	



			Total	Less	Total	Replacement			elated Costs			18 Discounted
Service	Project Description	Timing	Project Cost	Grants /Subsidies	Municipal Cost	and Benefit To Existing	Prior Growth	2009- 2018	Post 2018	Total		wth-Related apital Costs
5.0 PARK DEVELO	PMENT AND FACILITIES											
	pe Irrigation Large Parks											
5.30.1	Angus Glen Community Centre Park #7827, # 9085	2009	\$ 39,600	\$ -	\$ 39,600		\$ 39,600		\$ -	\$ 39,600	90%	
5.30.2	Villages of Fairtree Community Park and Cricket Pitch #7259	2009	\$ 52,800	\$ -	\$ 52,800		\$ 52,800	\$ -	\$ -	\$ 52,800	90%	\$ -
5.30.3	Berczy Community Park S. Phase 2	2010	\$ 8,250	\$ - \$ -	\$ 8,250	\$ -	\$ -	\$ 8,250		\$ 8,250	90%	\$ 7,42
5.30.4 5.30.5	Boxgrove Town Centre 14th Ave. Gateway Parkette N. Boxgrove Town Centre 14th Ave. Gateway Parkette S.	2010 2010	\$ 6,600 \$ 6,600	\$ - \$ -	\$ 6,600 \$ 6,600	\$ - \$ -	\$ - \$ -	\$ 6,600 \$ 6,600		\$ 6,600 \$ 6,600	90% 90%	\$ 5,94 \$ 5,94
5.30.6	H&R Grand Cornell Linear Finger Park	2010	\$ 11,550	\$ -	\$ 11,550	T	\$ -	\$ 11,550		\$ 11,550	90%	\$ 5,94
5.30.7	Markham Main St. Merin Linear Park Library Connection	2010	\$ 11,550	\$ -	\$ 11,550		\$ -	\$ 4,950		\$ 4,950	90%	\$ 10,39
5.30.8	South Unionville Ray Street Parkette E.	2010	\$ 9,900	\$ -	\$ 9,900		\$ -	\$ 9,900		\$ 9,900	90%	\$ 8,91
5.30.9	Tridel Markham Centre Linear Park E.	2010	\$ 8,250	\$ -	\$ 8,250		\$ -	\$ 8,250		\$ 8,250	90%	\$ 7,42
5.30.10		2010	\$ 6,600	\$ -	\$ 6,600		\$ -	\$ 6,600		\$ 6,600	90%	\$ 5,94
5.30.11	Wismer Donald Mingay Parkette on Mingay	2010	\$ 6,600	\$ -			\$ -	\$ 6,600		\$ 6,600	90%	\$ 5,94
5.30.12		2011	\$ 23,100	\$ -	\$ 23,100	\$ -	\$ -	\$ 23,100	\$ -	\$ 23,100	90%	\$ 20,79
5.30.13		2011	\$ 13,200	\$ -	\$ 13,200	\$ -	\$ -	\$ 13,200		\$ 13,200	90%	\$ 11,88
5.30.14	Angus Glen West Village Valley Edge Park	2011	\$ 6,600	\$ -	\$ 6,600		\$ -	\$ 6,600		\$ 6,600	90%	\$ 5,94
5.30.15		2011	\$ 6,600	\$ -	\$ 6,600		\$ -	\$ 6,600		\$ 6,600		\$ 5,94
5.30.16		2011	\$ 3,300	\$ -	\$ 3,300		\$ -	\$ 3,300		\$ 3,300	90%	\$ 2,97
5.30.17		2011	\$ 3,300	\$ -	\$ 3,300		\$ -	\$ 3,300		\$ 3,300	90%	\$ 2,97
5.30.18		2011	\$ 6,600	\$ -	Ψ 0,000	\$ -	\$ -	\$ 6,600		\$ 6,600	90%	\$ 5,94
5.30.19		2011	\$ 6,600	\$ -	\$ 6,600	\$ -	\$ -	\$ 6,600		\$ 6,600	90%	\$ 5,94
5.30.20		2011	\$ 16,500	\$ -	\$ 16,500		\$ -	\$ 16,500		\$ 16,500	90%	\$ 14,85
5.30.21	Remington Markham Centre Heritage House Parkette	2011	\$ 6,600	\$ - \$ -	\$ 6,600		\$ - \$ -	\$ 6,600		\$ 6,600	90%	\$ 5,94
5.30.22		2012	\$ 6,600 \$ 6,600	Ψ	\$ 6,600		\$ - \$ -	\$ 6,600		\$ 6,600	90% 90%	\$ 5,94 \$ 5,94
5.30.23	Cornell Secondary School N.P.	2012		7	\$ 6,600 \$ 6,600		\$ - \$ -	\$ 6,600		\$ 6,600		
5.30.24 5.30.25		2012 2012	\$ 6,600 \$ 13,200	\$ - \$ -	\$ 6,600 \$ 13,200		\$ - \$ -	\$ 6,600 \$ 13,200		\$ 6,600 \$ 13,200	90% 90%	\$ 5,94 \$ 11,88
5.30.26		2012	\$ 66,000	\$ -	\$ 66,000		\$ -	\$ 66,000		\$ 66,000	90%	\$ 59,4
5.30.27	Remington Markham Centre Central Park N. Phase 1	2012	\$ 16,500	\$ -	\$ 16,500	•	\$ -	\$ 16,500		\$ 16,500	90%	\$ 14,85
5.30.28		2012	\$ 33,000	\$ -	\$ 33,000	\$ -	\$ -	\$ 33,000		\$ 33,000	90%	\$ 29,70
5.30.29		2012	\$ 19,800	\$ -	\$ 19,800		\$ -	\$ 19,800		\$ 19,800	90%	\$ 17,82
5.30.30		2012	\$ 6,600	\$ -	\$ 6,600		\$ -	\$ 6,600		\$ 6,600	90%	\$ 5,94
5.30.31	Angus Glen West Village Parkette	2013	\$ 4,950	\$ -	\$ 4.950		\$ -	\$ -	\$ 4.950	\$ 4.950	90%	\$ -
5.30.32		2013	\$ 13,200	\$ -	\$ 13,200		\$ -	\$ -	\$ 13,200	\$ 13,200	90%	\$ -
5.30.33		2013	\$ 21,450	\$ -	\$ 21,450		\$ -	\$ -	\$ 21,450	\$ 21,450	90%	\$ -
5.30.34	Times-Murphy Hull Warden & Hwy. #7 Oval Parkette	2013	\$ 6,600	\$ -	\$ 6,600	\$ -	\$ -	\$ -	\$ 6,600	\$ 6,600	90%	\$ -
5.30.35	Boxgrove Hill South East Parkette	2014	\$ 6,600	\$ -	\$ 6,600	\$ -	\$ -	\$ -	\$ 6,600	\$ 6,600	90%	\$ -
5.30.36		2014	\$ 9,900	\$ -	\$ 9,900		\$ -	\$ -	\$ 9,900	\$ 9,900	90%	\$ -
5.30.37	Main Street Milliken NE Parkette	2014	\$ 3,300	\$ -	\$ 3,300	\$ -	\$ -	\$ -	\$ 3,300	\$ 3,300	90%	\$ -
5.30.38	Main Street Milliken NW Parkette	2014	\$ 3,300	\$ -	\$ 3,300		\$ -	\$ -	\$ 3,300	\$ 3,300	90%	\$ -
5.30.39		2014	\$ 13,200	\$ -	\$ 13,200		\$ -	\$ -	\$ 13,200	\$ 13,200	90%	\$ -
5.30.40		2014	\$ 16,500	\$ -	\$ 16,500		\$ -	\$ -	\$ 16,500	\$ 16,500	90%	\$ -
5.30.41	Wismer Greenspire North Central Parkette	2014	\$ 3,300	\$ -	\$ 3,300		\$ -	\$ -	\$ 3,300	\$ 3,300	90%	\$ -
5.30.42		2015	\$ 4,950 \$ 16,500	\$ - \$ -	\$ 4,950	\$ -	\$ -	\$ -	\$ 4,950	\$ 4,950	90%	\$ - \$ -
5.30.43 5.30.44		2015 2015	\$ 16,500 \$ 4,950	\$ - \$ -	\$ 16,500 \$ 4,950	\$ - \$ -	\$ - \$ -	\$ - \$ -	\$ 16,500 \$ 4,950	\$ 16,500 \$ 4,950	90% 90%	\$ -
			, , , , , , , , , , , , , , , , , , , ,	*			Ÿ	Ψ.				
5.30.45		2015	\$ 66,000 \$ 9,900	\$ - \$ -	\$ 66,000		\$ - \$ -	\$ - \$ -	\$ 66,000 \$ 9,900		90%	\$ - \$ -
5.30.46 5.30.47		2015 2015	\$ 9,900 \$ 3,300	\$ - \$ -	\$ 9,900 \$ 3,300		\$ - \$ -	\$ - \$ -	\$ 9,900 \$ 3,300	\$ 9,900 \$ 3,300	90% 90%	\$ - \$ -
5.30.48		2015	\$ 3,300	\$ -	\$ 3,300		\$ -	\$ -	\$ 3,300	\$ 3,300	90%	\$ -
5.30.49		2015	\$ 3,300	\$ -	\$ 3,300	š -	\$ -	\$ -	\$ 3,300	\$ 3,300	90%	\$ -
5.30.50		2015	\$ 16,500	\$ -	\$ 16,500	š -	\$ -	\$ -	\$ 16,500	\$ 16,500	90%	\$ -
5.30.51	Tridel Markham Centre Linear Park W.	2015	\$ 6,600	\$ -	\$ 6,600	\$ -	\$ -	\$ -	\$ 6,600	\$ 6,600	90%	\$ -
5.30.52		2016	\$ 8,250	\$ -	\$ 8,250	\$ -	\$ -	\$ -	\$ 8,250		90%	\$ -
5.30.53		2016	\$ 8,250	\$ -			\$ -	\$ -	\$ 8,250	\$ 8,250	90%	\$ -
5.30.54	East Cathedral North Parkette	2016	\$ 4,950	\$ -	\$ 4,950	\$ -	\$ -	\$ -	\$ 4,950	\$ 4,950	90%	\$ -
5.30.55		2016	\$ 3,300	\$ -	\$ 3,300		\$ -	\$ -	\$ 3,300	\$ 3,300	90%	\$ -
5.30.56	Main Street Milliken SW Parkette	2016	\$ 3,300	\$ -	\$ 3,300	\$ -	\$ -	\$ -	\$ 3,300	\$ 3,300	90%	\$ -
5.30.57	Northwest Cathedral Neighbourhood Park N.	2016	\$ 6,600	\$ -	\$ 6,600	\$ -	\$ -	\$ -	\$ 6,600	\$ 6,600	90%	\$ -
5.30.58		2016	\$ 8,250	\$ -	\$ 8,250	\$ -	\$ -	\$ -	\$ 8,250	\$ 8,250	90%	\$ -
5.30.59	Remington Markham Centre N.E. Valley Edge Parkette	2016	\$ 3,300	\$ -	\$ 3,300	\$ -	\$ -	\$ -	\$ 3,300	\$ 3,300	90%	\$ -
5.30.60	Remington Markham Centre N.W. Valley Edge Parkette	2016	\$ 9,900	\$ -	\$ 9,900	I @	S -	\$ -	\$ 9,900	\$ 9,900	90%	\$ -



				T	Total		Less		Total	Replacement	E			Growth-Re	elated	d Costs		2009-20	18 Discounted
Service		Project Description	Timing	1	Project		Grants		Municipal	and Benefit		Prior		2009-		Post			th-Related
					Cost	/Sı	ubsidies		Cost	To Existing	-	Growth		2018		2018	Total	Net C	apital Costs
5.0 PARK	DEVELOP	MENT AND FACILITIES																	
5 00 I		- Industrian Laura Barba (contla)																	
	- апоѕсар е 5.30.61	e Irrigation Large Parks (cont'd) Wismer Hwv. #48 Museum North	2016	\$	13,200	\$	_	\$	13,200	e -	s		\$	_	\$	13,200	\$ 13,200	90%	\$ -
	5.30.62	Wismer McCowan Woodlot Park	2016	\$	14,850	\$	-	\$	14,850	\$ -	\$		\$	-	\$		\$ 14,850		\$ -
	5.30.63	Cornell Madison East Channel Park	2017	\$	9,900	\$		\$	9,900	Ÿ	\$		\$	-	\$		\$ 9,900		\$ -
	5.30.64	South Unionville Community Park W.	2017	\$	13,200	\$	-	\$	13,200		\$		\$	_	\$		\$ 13,200		\$ -
	5.30.65	Swan Lake Park South Williamson Phase 6	2017	\$	9,900	\$	-	\$	9,900	\$ -	\$		\$	_	\$		\$ 9,900		\$ -
	5.30.66	Cornell Madison South Woodlot Park	2018	\$	49,500	\$		\$	49,500	\$ -	\$	_	\$	_	\$	49,500	\$ 49,500		\$ -
·	0.00.00	Subtotal Landscape Irrigation Large Parks	20.0	\$	833,250	\$	-	\$	833,250	\$ -	\$	92,400	\$	336,600	\$		\$ 833,250		\$ 302,940
5.04		a hadronitary Occall Date lind Danks																	
		e Irrigation Small Detailed Parks	0000	\$	40.000				40.000			40.000			_		\$ 40.000	000/	•
	5.31.1 5.31.2	Angus Glen Community Centre Park Villages of Fairtree Community Park and Cricket Pitch	2009 2009	\$	19,800 26,400	\$	-	\$	19,800 26,400	\$ -	\$		\$		\$		\$ 19,800 26,400		\$ - \$ -
	5.31.2 5.31.3	Cornell Community Centre Square	2009	\$	6,600	\$		\$	6,600	Ÿ	\$	26,400	\$	6.600	\$		\$ 6,600		\$ 5.940
	5.31.3 5.31.4		2011	\$.,	\$		\$	13,200	ъ -	\$		_	13,200	\$		\$		\$ 5,940 \$ 11,880
	5.31.5	Remington Markham Centre Civic Mall Phase 1 Remington Markham Centre Heritage House Parkette	2011	\$	13,200 6,600	\$		\$		\$ -	\$		\$	6,600	\$		\$ 13,200 6,600		\$ 5,940
	5.31.5 5.31.6	WismerCommons Community Park Washroom Pavillion and Maintenance Station	2011	\$	3,300	\$		\$	3,300	Ÿ	\$		\$	3,300	\$		\$ 3,300		\$ 5,940
	5.31.7	Boxgrove Community Park Washroom Pavilion and Pedestrian Bridge	2011	\$	6,600	\$		\$	6,600		\$		\$	6,600	\$		\$ 6,600		\$ 5,940
	5.31.8	Liberty Markham Centre Oak Park Warden W.	2012	\$	13,200	\$	-	\$	13,200	\$ -	\$		\$	13,200	\$		\$ 13,200		\$ 11,880
	5.31.6 5.31.9	Markham Sports Park Markham Sports Park	2012	\$	13,200	\$		\$	13,200	ъ - е	\$		\$	13,200	\$		\$ 13,200		\$ 11,880
	5.31.10	Remington Markham Centre Central Park N. Phase 1	2012	\$	13,200	\$		\$	13,200	φ -	\$		\$	13,200	\$		\$ 13,200		\$ 11,880
	5.31.10	Remington Markham Centre Civic Mall Phase 2	2012	\$	6,600	\$	-	\$	6.600	\$ -	\$		\$	6.600	\$		\$ 6,600		\$ 5,940
	5.31.11	South East Markham Community Centre Park	2012	\$	3,300	\$		\$	3,300	Ψ	\$		\$	3,300	\$		\$ 3,300		\$ 2,970
	5.31.12	Southwest Cathedral Monarch Memorial Neighbourhood Park	2012	\$	6,600	\$	-	\$	6,600		\$		\$	6,600	\$		\$ 6,600		\$ 2,970 \$ 5,940
	5.31.13	Main St. Markham Town Square	2012	\$	26,400	\$	-	\$	26,400		\$		\$	- 0,000	\$		\$ 26,400		\$ 5,940
	5.31.14	Main Street Milliken Armadale N.P.	2013	\$	13,200	\$	-	\$	13,200		\$	-	\$	-	\$		\$ 13,200		\$ -
	5.31.16	Boxgrove Hill South East Parkette	2013	\$	660	\$	-	\$	660	φ -	\$	-	\$		\$		\$ 660		\$ - \$
	5.31.17	Clark Ave. Woodlot Park	2014	\$	990	\$		\$	990	φ - e -	\$		\$		\$		\$ 990		\$ -
	5.31.18	Main Street Milliken NE Parkette	2014	s s	1,320	\$	-	\$	1.320	\$ -	\$		\$	-	\$		\$ 1,320		\$ -
	5.31.19	Main Street Milliken NW Parkette	2014	\$	1,320	\$	-	\$	1,320	Ÿ	\$	_	\$	_	\$		\$ 1,320		\$ -
	5.31.20	Victoria Square Community Park N. Phase	2014	\$	6,600	\$	-	\$	6,600		\$		\$	-	\$		\$ 6,600		\$ -
	5.31.21	Berczy Beckett East Parkette	2015	\$	3,300	\$	-	\$	3,300	\$ -	\$		\$	_	\$		\$ 3,300		\$ -
	5.31.22	Berczy Beckett Neighbourhood Park	2015	\$	3,300	\$		\$	3.300	\$ -	\$	_	\$	_	\$		\$ 3.300		\$ -
	5.31.23	Berczy Beckett West Parkette	2015	\$	3,300	\$	-	\$	3,300	\$ -	\$		\$	_	\$		\$ 3,300		\$ -
	5.31.24	Cornell Community Park	2015	\$	9,900	\$	-	\$	9,900	\$ -	\$		\$	_	\$		\$ 9,900		\$ -
	5.31.25	Cornell Madison Rouge Blvd. Park	2015	\$	1,320	\$	-	\$		\$ -	\$		\$	_	ŝ		\$ 1,320		\$ -
	5.31.26	Cornell Madison Rouge Blvd. Park S.	2015	\$	3,300	\$	-	\$	3,300	\$ -	\$	_	\$	_	\$		\$ 3,300		\$ -
	5.31.27	Cornell Mattamy East Church Street Parkette	2015	\$	3,300	\$	-	\$	3,300		\$		\$	_	\$		\$ 3,300		\$ -
	5.31.28	Fairtree East Village Remington Parkview Parkette	2015	\$	3,300	\$	-	\$	3,300	\$ -	\$	-	\$	-	\$		\$ 3,300		\$ -
	5.31.29	Remington Markham Centre East Central Parkette	2015	\$	9,900	\$		\$	9,900	\$ -	\$	-	\$		\$		\$ 9,900		\$ -
	5.31.30	Times-Murphy Hull Hwy. #7 Window Park	2015	\$	13,200	\$		\$.,	\$ -	\$	-	\$		\$		\$ 13,200		\$ -
	5.31.31	Tridel Markham Centre Linear Park W.	2015	\$	3,300	\$		\$	3,300	\$ -	\$	-	\$		\$		\$ 3,300		\$ -
	5.31.32	Berczy Beckett Central Parkette	2016	\$	3,300	\$	-	\$	3,300	\$ -	\$	-	\$	-	\$		\$ 3,300		\$ -
	5.31.33	East Cathedral North Parkette	2016	\$	660	\$	-	\$		\$ -	\$	-	\$	-	\$		\$ 660		\$ -
	5.31.34	Main Street Milliken SE Parkette	2016	\$	1,320	\$	-	\$	1,320	\$ -	\$	-	\$	-	\$		\$ 1,320		\$ -
	5.31.35	Main Street Milliken SW Parkette	2016	\$	1,320	\$	-	\$	1,320	\$ -	\$	-	\$	-	\$		\$ 1,320		\$ -
	5.31.36	Remington Markham Centre Civic Mall Phase 3	2016	\$	6,600	\$	-	\$	6,600	\$ -	\$	-	\$	-	\$		\$ 6,600		\$ -
	5.31.37	Remington Markham Centre N.E. Valley Edge Parkette	2016	\$	6,600	\$	-	\$	6,600	\$ -	\$	-	\$	-	\$		\$ 6,600		\$ -
	5.31.38	Remington Markham Centre N.W. Valley Edge Parkette	2016	\$	6,600	\$	-	\$		\$ -	\$	-	\$	-	\$		\$ 6,600		\$ -
	5.31.39	Wismer Hwy. #48 Museum North	2016	\$	6,600	\$	-	\$	6,600	\$ -	\$	-	\$	-	\$		\$ 6,600	90%	\$ -
	5.31.40	Wismer McCowan Woodlot Park	2016	\$	6,600	\$	-	\$	6,600	\$ -	\$	-	\$	-	\$	6,600	\$ 6,600	90%	\$ -
	5.31.41	Remington Markham Centre Civic Mall Phase 4	2017	\$	660	\$	-	\$	660	\$ -	\$	-	\$	-	\$		\$ 660		\$ -
	5.31.42	Remington Markham Centre East Valley Edge Linear Park	2017	\$	3,300	\$	-	\$	3,300	\$ -	\$	-	\$	-	\$		\$ 3,300		\$ -
	5.31.43	Yonge/Colbourne St. Parkette	2017	\$	4,950	\$	-	\$	4,950	\$ -	\$	-	\$	-	\$	4,950	\$ 4,950	90%	\$ -
	5.31.44	Yonge/John St. Parkette	2017	\$	4,950	\$	-	\$	4,950	\$ -	\$	-	\$	-	\$	4,950	\$ 4,950	90%	\$ -
	5.31.45	Yonge/Elgin St. Parkette	2018	\$	4,950	\$	-	\$	4,950	\$ -	\$	-	\$	-	\$	4,950	\$ 4,950	90%	\$ -
		Subtotal Landscape Irrigation Small Detailed Parks		\$	304,920	\$	-	\$	304,920	\$ -	\$	46,200	\$	92,400	\$		\$ 304,920		\$ 83,160
				T	,	1		Ť	,-20	•	1	. 2,250	ľ	, .50	Ť	,	,0		
						1													



				Total	Less	Total	Replacement		_		-Rela	ited Costs				118 Discounte
Service	Project Description	Timing		Project Cost	Grants /Subsidies	Municipal Cost	and Benefit To Existing		Prior Growth	2009- 2018		Post 2018		Total		wth-Related apital Costs
FA DADK DEVELO	PMENT AND FACILITIES			COSI	/Subsidies	COST	10 Existing		Siowai	2010	1	2010		Total	Net	apital Costs
	relopment - Community/Town Wide	2009	•	1,488,010	\$ -	\$ 1,488,010	6	\$	1,488,010	e	s		\$	1,488,010	90%	\$ -
5.32.1 5.32.2	Angus Glen Community Centre Park Angus Glen Community Centre Park Washroom Pavillion and Maintenance Station	2009	\$		\$ -	\$ 248,002		\$		\$ -	\$		\$	248,002	90%	\$ -
5.32.3	Anina Court Pathway and Pedestrian Bridge	2009	\$	99,201	\$ -	\$	\$ -	\$		\$ -			\$	99,201	90%	\$ -
5.32.4	Berczy Community Park Washroom Pavilion and Maintenance Station	2009	ŝ		\$ -	\$ 248,002	Ψ.	\$		\$ -			\$	248,002	90%	\$ -
5.32.5	Berczy Community Park Waterplay and Tennis Courts	2009	\$	99,201	\$ -	\$	\$ -	\$		\$ -			\$	99,201	90%	\$ -
5.32.6	Boxgrove Hill Northeast Collingham Parkette	2009	\$	49,600	\$ -	\$ 49,600	\$ -	\$		\$ -			\$	49,600	90%	\$ -
5.32.7	Boxgrove Hill Northeast Rizal Parkette	2009	\$	49,600	\$ -	\$ 49,600	\$ -	\$	49,600	\$ -	\$	-	\$	49,600	90%	\$ -
5.32.8	Boxgrove Hill Woodlot Park	2009	\$	429,043	\$ -	\$ 429,043	\$ -	\$	429,043	\$ -	\$	-	\$	429,043	90%	\$ -
5.32.9	Boxgrove South Village Hedgerow Parkette	2009	\$	94,241	\$ -	\$ 94,241	\$ -	\$	94,241	\$ -	\$	-	\$	94,241	90%	\$ -
5.32.10	Boxgrove South Village N. P.	2009	\$	669,604	\$ -	\$ 000,001	\$ -	\$		\$ -	\$		\$	669,604	90%	\$ -
5.32.11	Brother Andre Mount Joy Community Park Pedestrian Bridge and Maintenance Station	2009	\$		\$ -	\$ 00,20.	\$ -	\$	00,20.	\$ -	Ψ.		\$	99,201	90%	\$ -
5.32.12	Cornell Madison Albert Lewis Square	2009	\$		\$ -	\$ 101,441	\$ -	\$,	\$ -	Ψ.		\$	131,441	90%	\$ -
5.32.13	Cornell Madison Morning Dove Woodlot Park	2009	\$		\$ -	\$ 376,962	\$ -	\$		\$ -	\$		\$	376,962	90%	\$ -
5.32.14	Cornell Mattamy Country Glen Triangle Parkette	2009	\$		\$ -	\$ 49,600	\$ -	\$.0,000	\$ -	\$	•	\$	49,600	90%	\$ -
5.32.15	Danbury Court Warden Woods Parkette	2009	\$		\$ -	\$ 01,041	\$ -	\$	01,011	\$ -	\$	•	\$	81,841	90%	\$ -
5.32.16	East Cathedral Community Park	2009	\$		\$ - \$ -	\$ 446,403		\$		\$ -	\$		\$	446,403	90%	\$ - \$
5.32.17	Fairtree South Village Billingsley Parkettte Fairtree West Village Eastvale Neighbourhood Park	2009 2009	\$	329,842 111,601	\$ - \$ -	\$ 329,842	\$ - \$ -	\$,	\$ - \$ -			\$	329,842 111,601	90% 90%	\$ -
5.32.18 5.32.19	Greensborough Amos Court Parkette	2009	\$	332,322	\$ -	\$ 111,601 332,322	÷ -	\$		\$ -			\$	332,322	90%	\$ -
5.32.20	Greensborough North West Parkettes	2009	\$	34,720	\$ -	\$ 34,720	s -	S.		\$ -			\$	34,720	90%	\$ -
5.32.21	Greensborough Remnant Woodlot	2009	\$	124.001	\$ -	\$ 124,001	s -	\$		\$ -	9		\$	124.001	90%	\$ -
5.32.22	Greensborough Stalmaster N.P.	2009	\$	496,003	\$ -	\$ 496,003	\$ -	\$,	\$ -			\$	496,003	90%	\$ -
5.32.23	H&R Grand Cornell Gateway Parkette N	2009	\$		\$ -	\$	\$ -	\$		\$ -			\$	79,361	90%	\$ -
5.32.24	H&R Grand Cornell Gateway Parkette S	2009	\$		\$ -	\$	\$ -	\$		\$ -			\$	79,361	90%	\$ -
5.32.25	H&R Grand Cornell Horseshoe Park	2009	\$		\$ -	\$	\$ -	\$		\$ -	\$	-	\$	560,484	90%	\$ -
5.32.26	Highway No. 7 & Warden Ave. Park	2009	\$		\$ -	\$ 49,600	\$ -	\$		\$ -	\$	-	\$	49,600	90%	\$ -
5.32.27	John Daniels - Phase 2 (Fairty Park)	2009	\$	99,201	\$ -	\$ 99,201	\$ -	\$	99,201	\$ -	\$	-	\$	99,201	90%	\$ -
5.32.28	King David Cathedraltown Arbouretum	2009	\$	553,044	\$ -	\$ 553,044	\$ -	\$	553,044	\$ -	\$	-	\$	553,044	90%	\$ -
5.32.29	King David Cathedraltown Crescent Parkette	2009	\$	62,000	\$ -	\$ 62,000	\$ -	\$	62,000	\$ -	\$	-	\$	62,000	90%	\$ -
5.32.30	King David Cathedraltown Panorama Park	2009	\$		\$ -	\$,	\$ -	\$,	\$ -	\$		\$	84,321	90%	\$ -
5.32.31	King David Cathedraltown Town Square	2009	\$		\$ -	\$ 0.,0	\$ -	\$,	\$ -			\$	81,841	90%	\$ -
5.32.32	Leitchcroft (Times) Community Park	2009	\$	803,525	\$ -	\$ 000,020	\$ -	\$	000,020	\$ -			\$	803,525	90%	\$ -
5.32.33	South Unionville Caboto Trail Parkette	2009	\$	84,321	\$ -	\$ 0.,02.	\$ -	\$	84,321	\$ -			\$	84,321	90%	\$ -
5.32.34	Trees for Tomorrow	2009	\$	595,204	\$ -	\$ 595,204	\$ -	\$	000,20.	\$ -	\$		\$	595,204	90%	\$ -
5.32.35	Villages of Fairtree Community Park and Cricket Pitch	2009	\$	2,006,333	\$ - \$ -	\$ 2,006,333	\$ -	\$	2,000,000	\$ -	Ψ		\$	2,006,333	90%	\$ -
5.32.36	Villages of Fairtree Community Park and Cricket Pitch Washroom Pavilion	2009	\$	99,201	Ψ	\$ 00,20.	\$ -	\$	33,201	\$ -	\$		\$	99,201	90% 90%	\$ - \$
5.32.37 5.32.38	Wismer Roy Rainey Neighbourhood Park Berczy Community Park S. Phase 2	2009 2010	\$		\$ - \$ -	\$ 491,043 882,886		\$,	\$ - \$ 882.8			\$	491,043 882,886	90%	\$ 794,59
5.32.39	Boxgrove Town Centre 14th Ave. Gateway Parkette N.	2010	\$		\$ -	\$ 62,000		\$		\$ 62,0		•	\$	62,000	90%	\$ 794,5
5.32.40	Boxgrove Town Centre 14th Ave. Gateway Parkette N. Boxgrove Town Centre 14th Ave. Gateway Parkette S.	2010	\$		\$ -	\$	\$ -	\$		\$ 62,0			\$	62,000	90%	\$ 55,8
5.32.41	Cornell Greenway Fence and Landscaping North of 16th	2010	\$		\$ -	\$ 101,681	s -	\$		\$ 101,6			\$	101,681	90%	\$ 91,5
5.32.42	H&R Grand Cornell Linear Finger Park	2010	\$		\$ -	\$	\$ -	\$		\$ 151,2			\$	151,281	90%	\$ 136,1
5.32.43	Markham Main St. Merin Linear Park Library Connection	2010	\$		\$ -	\$	\$ -	\$		\$ 161,2		•	\$	161,201	90%	\$ 145,0
5.32.44	South Unionville Ray Street Parkette E.	2010	\$		\$ -	\$ 297,602	\$ -	\$		\$ 297,6			\$	297,602	90%	\$ 267,8
5.32.45	Swan Lake Park Block 31	2010	\$		\$ -	\$ 322,402		\$		\$ 322,4		-	\$	322,402	90%	\$ 290,1
5.32.46	Tridel Markham Centre Linear Park E.	2010	\$	270,322	\$ -	\$ 270,322	\$ -	\$	-	\$ 270,3		-	\$	270,322	90%	\$ 243,2
5.32.47	Victoria Square Community Park S. Phase Playground and Waterplay	2010	\$	322,402	\$ -	\$ 322,402	\$ -	\$	-	\$ 322,4		-	\$	322,402	90%	\$ 290,1
5.32.48	Wismer Donald Mingay Parkette on Mingay	2010	\$	94,241	\$ -	\$ 94,241	\$ -	\$	-	\$ 94,2			\$	94,241	90%	\$ 84,8
5.32.49	Angus Glen West Village Central Green	2011	\$	186,001	\$ -	\$ 186,001	\$ -	\$	-	\$ 186,0			\$	186,001	90%	\$ 167,4
5.32.50	Angus Glen West Village Triangle Parkette	2011	\$		\$ -	\$ 1.0,0	\$ -	\$		\$ 119,0			\$	119,041	90%	\$ 107,1
5.32.51	Angus Glen West Village Valley Edge Park	2011	\$		\$ -	\$,	\$ -	\$		\$ 124,0			\$	124,001	90%	\$ 111,6
5.32.52	Boxgrove Southeast Heritage House Parkette	2011	\$		\$ -	\$,0	\$ -	\$		\$ 121,5		,	\$	121,521	90%	\$ 109,3
5.32.53	Cornell Community Centre Square	2011	\$		\$ -	\$ 33,201	\$ -	\$		\$ 99,2			\$	99,201	90%	\$ 89,2
5.32.54	Cornell Madison East Woodlot Park	2011	\$		\$ -	\$ 280,242	\$ -	\$		\$ 280,2			\$	280,242	90%	\$ 252,2
5.32.55	Greensborough Solace Rd. N.P.	2011	\$	148,801	\$ -	\$ 148,801	\$ -	\$		\$ 148,8			\$	148,801	90%	\$ 133,9
5.32.56	Jessamyn Settler's Park Landscaping	2011	\$		\$ -	\$ 100,011	\$ -	\$		\$ 168,6		•	\$	168,641	90%	\$ 151,7
5.32.57	Markham Centre Majestic Court Central Parkette	2011	\$		\$ -	\$ 00,20.	\$ -	\$		\$ 99,2			\$	99,201	90%	\$ 89,2
5.32.58	Remington Markham Centre Active Park East	2011	\$		\$ -	\$,	\$ -	\$		\$ 386,8			\$	386,882	90%	\$ 348,1
5.32.59 5.32.60	Remington Markham Centre Civic Mall Phase 1	2011 2011	\$	215,761	\$ - \$ -	\$ 215,761	\$ -	\$		\$ 215,7 \$ 74.4			\$	215,761	90%	\$ 194,1
	Remington Markham Centre Heritage House Parkette	∠011	Ф	74,400	\$ -	\$ 74,400	φ -	\$	-	\$ 74,4	υU I \$	-	Φ.	74,400	90%	\$ 66,9



			Total		Less	Tota		Replacement				Growth-Re						18 Discounted
Service	Project Description	Timing	Project		Grants	Munici		and Benefit		Prior		2009-		Post		Tatal		vth-Related
			Cost		/Subsidies	Cos	it	To Existing	+-	Growth		2018	-	2018		Total	Net C	apital Costs
5.0 PARK DEVELO	PMENT AND FACILITIES																	
	relopment - Community/Town Wide (Cont'd)	0044		200			40.000	•				0.40.000			•	040.000	000/	• 000.00
5.32.61 5.32.62	WismerCommons Community Park Washroom Pavillion and Maintenance Station Boxgrove Community Park	2011 2012	\$ 248,0 \$ 2,308,8				18,002 08,895		\$		\$	248,002 2,308,895	\$ \$		\$	248,002 2,308,895	90% 90%	\$ 223,20 \$ 2,078,00
5.32.63	Boxgrove Community Park Boxgrove Community Park Washroom Pavilion and Pedestrian Bridge	2012	\$ 2,306,6				18,002		\$		\$	248,002	\$		\$	248,002	90%	\$ 2,078,00
5.32.64	Cornell Gowland N.P.	2012	\$ 503,4				3,443		\$		\$	503,443	\$		\$	503,443	90%	\$ 453,09
5.32.65	Cornell Secondary School N.P.	2012	\$ 434,0		-			\$ -	\$	-	\$	434,003	\$	-	\$	434,003	90%	\$ 390,60
5.32.66	Elgin St. Honsburger Park	2012	\$ 248,0	002 \$	-	\$ 24	18,002	\$ -	\$	-	\$	248,002	\$	-	\$	248,002	90%	\$ 223,20
5.32.67	Liberty Markham Centre Oak Park Warden E.	2012	\$ 49,6		-		19,600	\$ -	\$	-	\$	49,600	\$	-	\$	49,600	90%	\$ 44,64
5.32.68	Liberty Markham Centre Oak Park Warden W.	2012	\$ 210,8				. 0,00 .	\$ -	\$		\$	210,801	\$		\$	210,801	90%	\$ 189,72
5.32.69	Markham Sports Park	2012	\$ 5,019,5				19,552		\$		\$	5,019,552	\$		\$	5,019,552	90%	\$ 4,517,59
5.32.70	Northwest Cathedral Neighbourhood Park S.	2012	\$ 394,3 \$ 176.0				,,,,,	\$ -	\$		\$	394,323	\$		\$	394,323	90%	\$ 354,89
5.32.71 5.32.72	Remington Markham Centre Central Park N. Phase 1 Remington Markham Centre Civic Mall Phase 2	2012 2012	\$ 176,0 \$ 136,4				0,001	\$ - \$ -	\$		\$	176,081 136,401	\$ \$		\$	176,081 136,401	90% 90%	\$ 158,47 \$ 122,76
5.32.73	South East Markham Community Centre Park	2012	\$ 1.584.7				34,730	\$ -	\$		\$	1.584.730	\$	-	\$	1,584,730	90%	\$ 1,426,25
5.32.74	South Unionville Ray Street Parkette W.	2012	\$ 138,8				38,881	\$ -	\$		\$	138,881	\$		\$	138,881	90%	\$ 1,420,23
5.32.75	Southwest Cathedral Monarch Memorial Neighbourhood Park	2012	\$ 803,5				03,525	\$ -	\$	-	\$	803,525	\$		\$	803,525	90%	\$ 723,17
5.32.76	Wismer Hwy. #48 Hamersley Woodlot Park	2012	\$ 248,0		-		18,002	\$ -	\$	-	\$	248,002	\$		\$	248,002	90%	\$ 223,20
5.32.77	Yonge/Steeles Meadowvale Ave. Parkette	2012	\$ 124,0	001 \$	-	\$ 12	24,001	\$ -	\$	-	\$	124,001	\$	-	\$	124,001	90%	\$ 111,60
5.32.78	Angus Glen West Village Parkette	2013	\$ 49,6	\$ 000	-	\$ 4	19,600	\$ -	\$	-	\$	49,600	\$	-	\$	49,600	90%	\$ 44,64
5.32.79	Berczy Northeast McCowan Parkette	2013	\$ 248,0				18,002	\$ -	\$		\$	248,002	\$		\$	248,002	90%	\$ 223,20
5.32.80	Greensborough Alfred Patterson Neighbourhood Park	2013	\$ 496,0				96,003	\$ -	\$		\$	496,003	\$		\$	496,003	90%	\$ 446,40
5.32.81	Greensborough Alfred Patterson Woodlot	2013	\$ 570,4				70,404	\$ -	\$		\$	570,404	\$		\$	570,404	90%	\$ 513,36
5.32.82	Main St. Markham Town Square	2013	\$ 99,2				00,201	\$ -	\$		\$	99,201	\$		\$	99,201	90%	\$ 89,28
5.32.83 5.32.84	Main Street Milliken Armadale N.P.	2013 2013	\$ 500,9 \$ 106,6				,	\$ - \$ -	\$		\$	500,963	\$ \$		\$	500,963 106,641	90% 90%	\$ 450,86 \$ 95,97
5.32.85	South Unionville West Greenburg Parkette Southwest Cathedral Monarch Memorial Parkette	2013	\$ 106,6 \$ 394,3				,0,0	\$ -	\$		\$	106,641 262,309	\$		\$	394,323	90%	\$ 95,97
5.32.86	Times-Murphy Hull Warden & Hwy. #7 Oval Parkette	2013	\$ 89,2					\$ -	\$		\$	202,309	\$		\$	89,281	90%	\$ 250,07
5.32.87	Wismer Alexander Lowrey Neighbourhood Park East	2013	\$ 496.0				96.003	\$ -	\$		ŝ	-	\$		\$	496,003	90%	š -
5.32.88	Wismer Alexander Lowrey Neighbourhood Park West	2013	\$ 496,0				96,003	\$ -	\$	-	\$	-	\$		\$	496,003	90%	\$ -
5.32.89	Boxgrove Hill South East Parkette	2014	\$ 64,4	480 \$	-	\$ 6	64,480	\$ -	\$	-	\$	-	\$	64,480	\$	64,480	90%	\$ -
5.32.90	Clark Ave. Woodlot Park	2014	\$ 106,6				06,641	\$ -	\$		\$	-	\$		\$	106,641	90%	\$ -
5.32.91	Cornell Madison Rouge/Riverlands Square	2014	\$ 52,0				52,080	\$ -	\$		\$	-	\$		\$	52,080	90%	\$ -
5.32.92	Cornell Mattamy Cornell Park Ave. N.P.	2014	\$ 230,6				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$ -	\$		\$	-	\$		\$	230,641	90%	\$ -
5.32.93	Greensborough Williamson NP	2014	\$ 567,9				57,924	\$ -	\$		\$	-	\$		\$	567,924	90%	\$ -
5.32.94	Main Street Milliken NE Parkette Main Street Milliken NW Parkette	2014 2014	\$ 29,7 \$ 29,7				29,760	\$ - \$ -	\$		\$	-	\$ \$		\$	29,760 29,760	90% 90%	\$ - \$ -
5.32.95 5.32.96	Victoria Square Community Park N. Phase	2014	\$ 634,8			-	29,760 34,884	\$ -	\$		\$		\$		\$	634,884	90%	\$ -
5.32.97	Wismer Community Park N. Priase Wismer Community Park Phase 3 Castlemore Frontage	2014	\$ 652.2				52,244	\$ -	\$		\$		\$		\$	652,244	90%	\$ -
5.32.98	Wismer Greenspire North Central Parkette	2014	\$ 99.2					\$ -	\$		s.	-	\$		\$	99,201	90%	\$ -
5.32.99	Berczy Beckett East Parkette	2015	\$ 126,4				26,481	\$ -	\$	-	\$	_	\$		\$	126,481	90%	\$ -
5.32.100		2015	\$ 500,9		-		00,963	\$ -	\$	-	\$	-	\$		\$	500,963	90%	\$ -
5.32.101	Berczy Beckett West Parkette	2015	\$ 126,4			\$ 12	26,481	\$ -	\$		\$	-	\$	126,481	\$	126,481	90%	\$ -
5.32.102		2015	\$ 3,814,2				14,265	\$ -	\$		\$	-			\$	3,814,265	90%	\$ -
5.32.103		2015	\$ 248,0				.0,002	\$ -	\$		\$	-	\$		\$	248,002	90%	\$ -
5.32.104		2015	\$ 99,2				99,201	\$ -	\$		\$	-	\$		\$	99,201	90%	\$ -
5.32.105		2015 2015	\$ 161,2 \$ 131,4				31,201 31,441	\$ - \$ -	\$		\$	-	\$		\$	161,201 131,441	90% 90%	\$ - \$ -
5.32.106 5.32.107		2015	\$ 181,0				31,041	э - e -	\$		\$		\$		\$	181,041	90%	\$ -
5.32.107		2015	\$ 215,7				15,761	\$ -	\$		\$		\$		\$	215,761	90%	\$ -
5.32.109		2015	\$ 57.0				57,040	\$ -	\$		\$	_	\$		\$	57,040	90%	\$ -
5.32.110		2015	\$ 166,			-		\$ -	\$		\$	-	\$		\$	166,161	90%	\$ -
5.32.111		2016	\$ 250,4		-		50,482	\$ -	\$		\$	-	\$		\$	250,482	90%	\$ -
5.32.112		2016	\$ 250,4			\$ 25	50,482	\$ -	\$	-	\$	-	\$		\$	250,482	90%	\$ -
5.32.113		2016	\$ 778,7				78,725	\$ -	\$		\$		\$		\$	778,725	90%	\$ -
5.32.114		2016	\$ 99,2				99,201	\$ -	\$		\$	-	\$		\$	99,201	90%	\$ -
5.32.115		2016	\$ 29,7				29,760	\$ -	\$		\$	-	\$		\$	29,760	90%	\$ -
5.32.116		2016	\$ 29,7				29,760		\$		\$	-	\$		\$	29,760	90%	\$ -
5.32.117		2016	\$ 124,0				- 1,001	\$ -	\$		\$	-	\$		\$	124,001	90%	\$ -
5.32.118		2016 2016	\$ 1,959,2 \$ 158.7				59,213	ф - е	\$		\$	-	\$ ´ \$		\$	1,959,213 158,721	90% 90%	\$ - \$ -
5.32.119 5.32.120		2016	\$ 158,7 \$ 49,6				58,721 19,600	9 - 9 -	\$		\$	-	\$.00,.2.	\$	158,721 49,600	90%	\$ -
0.02.120	Nemington Markhani Cellile N.E. Valley Euge Falkette	2010	Ψ 49,0	200 Þ	-	ψ 4	10,000	Ψ -	φ		Φ		φ	49,000	Φ	49,000	90%	φ -



TOWN OF MARKHAM GROWTH-RELATED CAPITAL PROGRAM

			Total	Less	Total	Replacement		Growth-Re	elated Costs		2009-201	8 Discounted
Service	Project Description	Timing	Project	Grants	Municipal	and Benefit	Prior	2009-	Post		Grow	th-Related
			Cost	/Subsidies	Cost	To Existing	Growth	2018	2018	Total	Net Ca	pital Costs
5.0 PARK DEVELO	OPMENT AND FACILITIES											
5.32 Park Dev	velopment - Community/Town Wide (Cont'd)											
5.32.121	1 Remington Markham Centre N.W. Valley Edge Parkette	2016	\$ 128,961	\$ -	\$ 128,96°	1 \$ -	\$ -	\$ -	\$ 128,961	\$ 128,961	90%	\$ -
5.32.122	2 Wismer Hwy. #48 Museum North	2016	\$ 126,481	\$ -	\$ 126,48	1 \$ -	\$ -	\$ -	\$ 126,481	\$ 126,481	90%	\$ -
5.32.123	3 Wismer McCowan Woodlot Park	2016	\$ 741,525	\$ -	\$ 741,525	5 \$ -	\$ -	\$ -	\$ 741,525	\$ 741,525	90%	\$ -
5.32.124	4 Boxgrove Hill East Parkette	2017	\$ 126,481	\$ -	\$ 126,48	1 \$ -	\$ -	\$ -	\$ 126,481	\$ 126,481	90%	\$ -
5.32.125	5 Cornell Madison East Channel Park	2017	\$ 582,804	\$ -	\$ 582,804	1 \$ -	\$ -	\$ -	\$ 582,804	\$ 582,804	90%	\$ -
5.32.126	H & R Grand Cornell South Valley Edge Park East and West Banks	2017	\$ 260,402	\$ -	\$ 260,402	2 \$ -	\$ -	\$ -	\$ 260,402	\$ 260,402	90%	\$ -
5.32.127	7 Remington Markham Centre Civic Mall Phase 4	2017	\$ 151,281	\$ -	\$ 151,28	1 \$ -	\$ -	\$ -	\$ 151,281	\$ 151,281	90%	\$ -
5.32.128	Remington Markham Centre East Valley Edge Linear Park	2017	\$ 339,762	\$ -	\$ 339,762	2 \$ -	\$ -	\$ -	\$ 339,762	\$ 339,762	90%	\$ -
5.32.129		2017	\$ 451,363	\$ -	\$ 451,363	3 \$ -	\$ -	\$ -	\$ 451,363	\$ 451,363	90%	\$ -
5.32.130		2017	\$ 401,763	\$ -	\$ 401,763		\$ -	\$ -	\$ 401,763			\$ -
5.32.131	1 Yonge/Colbourne St. Parkette	2017	\$ 49,600		\$ 49,600		\$ -	\$ -	\$ 49,600		90%	\$ -
5.32.132		2017	\$ 49,600	\$ -	\$ 49,600		\$ -	\$ -	\$ 49,600		90%	\$ -
5.32.133	· ·	2018	\$ 922,566	s -	\$ 922,566	s s -	s -	s -	\$ 922,566	\$ 922,566	90%	s -
5.32.134		2018	\$ 322,402		\$ 322,402		\$ -	\$ -	\$ 322,402			
5.32.135		2018	\$ 173,601	\$ -	\$ 173,60	ı İ s -	\$ -	\$ -	\$ 173,601	\$ 173,601	90%	\$ -
5.32.136		2018	\$ 24,800	\$ -	\$ 24.800) \$ -	\$ -	\$ -	\$ 24,800	\$ 24.800	90%	\$ -
	Subtotal Park Development - Community/Town Wide		\$ 49,870,642	\$ -	\$ 49,870,642	\$ -	\$ 11,817,276	\$ 19,961,076	\$ 18,092,289	\$ 49,870,642		\$ 17,964,969
5.33 Parks Bi	uildings											
5.33.1	East Yard Garage/Office	2013	\$ 2,968,700	\$ -	\$ 2,968,700	\$ -	\$ -	\$ -	\$ 2,968,700	\$ 2,968,700	90%	\$ -
	Subtotal Parks Buildings		\$ 2,968,700	\$ -	\$ 2,968,700	\$ -	\$ -	\$ -	\$ 2,968,700	\$ 2,968,700		\$ -
	Parks Buildings											
5.34.1	Parks Share of East Yard	2010	\$ 3,125,815	\$ -	\$ 3,125,815	5 \$ -	\$ 3,125,815	\$ -	\$ -	\$ 3,125,815	90%	\$ -
	Subtotal Land for Parks Buildings		\$ 3,125,815	\$ -	\$ 3,125,815	5 \$ -	\$ 3,125,815	\$ -	\$ -	\$ 3,125,815		\$ -
TOTAL	PARK DEVELOPMENT AND FACILITIES		\$ 172,887,759	\$ -	\$ 172,887,759	\$ -	\$ 36,703,118	\$ 66,304,709	\$ 69,879,932	\$ 172,887,759		\$ 59,674,238

Non-Chargeable Growth-Related Net Capital Cost: \$ 6,630,471

Residential Development Charge Calculation		
Residential Share of 2009-2018 Discounted Growth-Related Capital Program	100%	\$59,674,238
10 Year Growth in Population in New Units		61,022
Unadjusted Development Charge Per Capita (\$)		\$977.92
Non-Residential Development Charge Calculation		
Non-Residential Share of 2009-2018 Discounted Growth-Related Capital Program	0%	\$ -
10 Year Growth in Square Metres		1,512,480
Unadjusted Development Charge Per sq. m (\$)		\$0.00



APPENDIX B.5 TABLE 3

TOWN OF MARKHAM CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE PARK DEVELOPMENT AND FACILITIES RESIDENTIAL DEVELOPMENT CHARGE

5.00 PARK DEVELOPMENT AND FACILITIES

OPENING CASH BALANCE FROM APPLICABLE RESERVES				2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING CASH BALANCE (\$000)	Shai			\$0.00	\$8,536.93	\$13,412.96	\$12,803.65	(\$27,720.52)	(\$25,166.91)	(\$19,799.47)	(\$13,826.89)	(\$7,296.47)	(\$3,825.48)	
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS 5.00 PARK DEVELOPMENT AND FACILITIES - constant (\$000) 5.00 PARK DEVELOPMENT AND FACILITIES - current (\$000)	Res 100%	Non-Res 0%		\$0.0 \$0.0	\$4,275.4 \$4,360.9	\$9,944.9 \$10,346.7	\$43,294.7 \$45,944.7	\$2,159.2 \$2,337.2	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$59,674.2 \$62,989.5
NEW UNIT GROWTH - Population in New Units				8,182	8,471	8,714	5,577	5,717	5,861	6,010	6,084	3,168	3,238	61,022
REVENUE - current (\$000) - Dev. Charge Receipts	Rate for 2009 \$1,025.40 Balance:	Inflation:	2.0% Negative	\$8,390.1	\$8,859.4	\$9,296.8	\$6,069.0	\$6,345.3	\$6,635.5	\$6,940.1	\$7,165.5	\$3,805.7	\$3,967.9	\$67,475.3
Interest on Opening Balance Interest on In-year Transactions (excl.int.)	Rate: Rate:	3.5% 3.5%	5.5% 5.5%	\$0.0 \$146.8	\$298.8 \$78.7	\$469.5 (\$28.9)	\$448.1 (\$1,096.6)	(\$1,524.6) \$70.1	(\$1,384.2) \$116.1	(\$1,089.0) \$121.5	(\$760.5) \$125.4	(\$401.3) \$66.6	(\$210.4) \$69.4	(\$4,153.6) (\$330.8)
TOTAL REVENUE				\$8,536.9	\$9,236.9	\$9,737.4	\$5,420.5	\$4,890.8	\$5,367.4	\$5,972.6	\$6,530.4	\$3,471.0	\$3,826.9	\$62,991.0
CLOSING CASH BALANCE				\$8,536.9	\$13,413.0	\$12,803.7	(\$27,720.5)	(\$25,166.9)	(\$19,799.5)	(\$13,826.9)	(\$7,296.5)	(\$3,825.5)	\$1.5	
PARK DEVELOPMENT AND FACILITIES CHARGE PER CAPITA		\$1,025.40												



B.6 PUBLIC WORKS

The Town of Markham Public Works department operates from 555 Miller Avenue where its main office, storage sheds, salt and sand domes, sign shop, and wood domes are located.

TABLE 1 HISTORIC SERVICE LEVELS

The ten-year historic inventory of capital assets for Public Works includes over 60,000 square feet of building space with a replacement value of \$9.38 million. The buildings occupy 4.11 hectares of land area and is valued at \$8.63 million. The equipment at the shop and other equipment add another \$908,900 to the inventory. The 438 Town-wide central fleet are valued at \$32.73 million.

The current value of the Public Works' capital infrastructure including buildings, land, equipment and fleet is approximately \$51.66 million and has provided a ten-year average historic service level of \$118.55 per population and employment. This average historic service level multiplied by the ten-year forecast growth in population in new units and employment in the Town of Markham results in the maximum allowable of \$11.78 million. No excess capacity has been identified for this service and as such, the fully calculated maximum allowable is brought forward to the development charges calcualtion.

TABLE 2 2009– 2018 PROVISIONAL GROWTH-RELATED CAPITAL BUDGET AND THE CALCULATION OF THE DEVELOPMENT CHARGE

The capital program for Public Works includes the construction of a few public works buildings including a central greenhouse, a salt and sand brine facility, a four bay fleet garage addition, a new East Yard Garage/Office and a salt and sand brine dome for the East Yard. The total gross cost for the construction of these buildings is \$12.53 million. The purchase of land is required for the East Yard and the Public Works share of this purchase is \$9.38 million. Equipment for the East Yard adds \$259,600 to the capital program. A wide array of fleet additions is also include in Table 2 amounting to \$3.34 million.

Altogether, the capital program for Public Works amounts to \$24.50 million. Of this amount, approximately \$9.25 million is to be funded from the current Public Works development charges reserve fund and is therefore considered to be a prior growth share.

HEMSON

A share of \$4.46 million is related to growth beyond 2018 and will be recovered through future development charges. The remaining \$11.78 million is related to growth between 2009 and 2018. This service is subject to the legislated ten per cent reduction and therefore the amount brought forward to the development charge calculation is \$10.61 million.

The growth-related net capital cost of \$10.61 million is allocated 61 per cent against new residential development, and 39 per cent, against non-residential development. This yields an unadjusted development charge of \$106.70 per capita and \$2.71 per square metre.

TABLE 3 CASH FLOW ANALYSIS

After cash flow consideration, the calculated residential charge increases to \$110.15 per capita and the non-residential charge also increase to \$2.85 per square metre.

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

		PUBLIC W	ORKS SUMMAR	Y		
10-year Hist.	2	009-2018	Unadj	justed	Adju	sted
Service Level	Growth-Rela	ated Capital Program	Developme	ent Charge	Developme	ent Charge
per pop+empl	Total	Net DC Recoverable	\$/capita	\$/sq.m	\$/capita	\$/sq.m
\$118.55	\$25,497,885	\$10,605,185	\$106.70	\$2.71	\$110.15	\$2.85



126

TOWN OF MARKHAM INVENTORY OF CAPITAL ASSETS PUBLIC WORKS

DUU DINOC (#)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST
BUILDINGS (sq.ft.)											(\$/sq.ft.)
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	\$214.00
Metal Storage Shed	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	\$30.00
Salt Dome Structure	6,450	6,450	6,450	6,450	6,450	6,450	6,450	6,450	6,450	6,450	\$90.00
Sand Dome Structure	6,450	6,450	6,450	6,450	6,450	6,450	6,450	6,450	6,450	6,450	\$90.00
Sign Shop	3,988	3,988	3,988	3,988	3,988	3,988	3,988	3,988	3,988	3,988	\$214.00
Wood Dome Structure	7,900	7,900	7,900	7,900	7,900	7,900	7,900	7,900	7,900	7,900	\$30.00
Wood Storage Shed	560	560	560	560	560	560	560	560	560	560	\$30.00
Total (sq.ft.)	60,150	60,150	60,150	60,150	60,150	60,150	60,150	60,150	60,150	60,150	
Total (\$000)	\$9,384.7	\$9,384.7	\$9,384.7	\$9,384.7	\$9,384.7	\$9,384.7	\$9,384.7	\$9,384.7	\$9,384.7	\$9,384.7	
LAND (ha)											UNIT COST
	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11	\$2,100,000
LAND (ha) 555 Miller Ave. Total (ha)	4.11	4.11 4.11	4.11 4.11	4.11 4.11	4.11 4.11	4.11 4.11	4.11 4.11	4.11 4.11	4.11 4.11	4.11 4.11	

FURNITURE AND RELATED EQUIPMENT (\$)

· Older Olde Auto Reserved Eddin Institut (4)										
Shop Equipment	\$318,000	\$318,000	\$355,000	\$384,000	\$389,000	\$389,000	\$389,000	\$389,000	\$389,000	\$389,000
Other Equipment	\$199,825	\$223,025	\$302,455	\$323,904	\$373,663	\$415,667	\$436,230	\$443,730	\$490,161	\$519,896
Total (\$000)	\$517.8	\$541.0	\$657.5	\$707.9	\$762.7	\$804.7	\$825.2	\$832.7	\$879.2	\$908.9



127

TOWN OF MARKHAM
INVENTORY OF CAPITAL ASSETS
PUBLIC WORKS

TOWN-WIDE CENTRAL FLEET (#)	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	UNIT COST (\$/vehicle)
Utility Truckster	1	1	2	4	4	5	5	6	6	7	\$14,371
Rotary Walkbehind	10	11	11	11	15	19	22	24	24	30	\$4,687
Rotary Mower	-	1	1	3	4	4	4	5	5	6	\$26,217
Zero Turn Mower	-	-	3	3	7	19	31	37	37	39	\$13,113
Car Compact	-	3	3	5	5	5	5	5	5	5	\$17,006
Compact Pick-Up	27	27	27	27	23	19	16	15	13	12	\$21,248
Compact Van	8	8	9	9	10	11	13	14	15	17	\$25,658
Full Size 2WD Pick-Up	-	-	-	-	-	-	2	2	6	9	\$29,013
Full Size Van	1	2	2	6	8	11	15	20	20	23	\$29,338
1 Ton Full-Sized Pick-Up	1	1	1	1	1	1	1	2	2	2	\$32,592
Car Mid Size	-	_	-	-	-	3	4	4	4	4	\$34,364
Full Size 4WD Pick-Up	-	_	-	-	-	1	4	8	11	13	\$34,666
Sport Utility Vehicle	- 1	-	-	-	-	-	-	5	7	7	\$38,042
1 Ton Flat Bed	25	25	24	24	23	22	18	18	17	16	\$42,910
3 ton Trucks	2	2	2	2	2	2	2	2	2	1	\$84,780
Agricultural Tractors	20	20	21	21	21	21	21	21	21	21	\$48.816
Articulating Loader	1	1	1	1	1	1	1	1	1	1	\$171,600
Backhoe	1	1	1	1	1	1	1	1	1	1	\$86,125
Bucket Truck	1	1	1	1	1	1	1	1	1	1	\$205,600
Camera Truck	1	1	1	1	1	1	1	1	1	1	\$228,300
Crane Truck	1	1	1	1	1	1	1	1	1	1	\$124,500
Cube Van	1	1	1	1	1	1	1	1	1	2	\$34,172
Gradall	1	1	1	1	1	1	1	- 1	- 1		\$300,000
Grader	1	1	1	1	1	1	1	1	1	-	\$300,000
Landscape Loader	1	1	1	1	1	1	1	_	- 1	_	\$80,000
Mott Mowers	9	9	9	9	9	4	4	4	4	4	\$10,000
Rotary Mower 16' pull behind	1	1	1	1	1	1	1	1	1	1	\$12,300
Rotary mowers 16 foot cut	5	5	5	5	5	6	6	6	6	6	\$70,199
Rotary mowers 72" and under	24	21	21	17	5	3	3	3	3	3	\$29,263
Sewer Flusher	1	1	1	1	1	1	1	1	1	1	\$358,500
Sidewalk Tractors	4	4	3	3	3	3	3	3	3	4	\$131,021
Single Axle Dump Trucks	7	6	5	5	5	5	5	5	5	5	\$180,198
Sweeper	1	2	2	2	2	2	2	2	2	2	\$199,900
Tandem Dump Truck	1	2	2	2	2	2	2	2	2	2	\$193,266
Trailers	35	35	37	37	41	41	44	44	44	44	\$7,069
Water truck	1	1	1	1	1	1	1	1			\$130,000
Air Compressor	1	1	1	1	2	2	2	2	2	2	\$19,700
Brush Chipper	2	2	2	2	2	2	2	2	2	2	\$30,156
Compact Sidewalk Tractor				-			_	-	-	3	\$42,011
Excavator Vacuum			1	1	1	1	2	2	2	2	\$69,000
Forklift	1	1	1	1	1	1	1	1	1	1	\$36,700
Parks Compactor Truck	1	1	1	1	1	1	1	1	1	2	\$127,500
Flatbed (>8,000 KG RGVW)			1	1	2	3	5	11	13	13	\$63,236
Stump Cutter	-	-	1	1	1	1	1	1	13	13	\$41,300
Top Dressers	3	3	3	3	3	3	3	3	3	4	\$23,652
Sidewalk Ploughs	12	19	19	18	22	24	26	27	28	26	\$42,011
Sidewalk Flatbeds	4	7	7	8	10	10	11	12	9	6	\$63,236
Sander / Plough Trucks	10	10	10	11	13	13	14	16	17	18	\$193,266
Graders	26	26	26	28	30	32	33	35	37	39	\$300,000
Loaders	13	13	17	17	11	12	13	13	14	28	\$171,600
Loudoio	13	13		- 17		12	13	13	14	20	ψ171,000
Total (#)	266	280	292	301	306	326	358	393	403	438	
Total (\$000)	\$21,756.9	\$22,477.2	\$23,125.3	\$24,055.3	\$24,120.6	\$25,315.2	\$26,645.0	\$28,377.4	\$29,427.5	\$32,733.5	



TOWN OF MARKHAM
CALCULATION OF SERVICE LEVELS
PUBLIC WORKS

Historic Population Historic Employment Population+Employment	1999 193,736 <u>114,834</u> 308,570	2000 201,038 120,598 321,635	2001 208,615 <u>126,650</u> 335,265	2002 218,270 <u>133,070</u> 351,341	2003 228,373 <u>139,816</u> 368,189	2004 238,943 <u>146,904</u> 385,846	2005 250,002 <u>154,351</u> 404,353	2006 261,573 <u>162,175</u> 423,748	2007 268,342 <u>167,432</u> 435,774	2008 275,287 <u>172,859</u> 448,146	
INVENTORY SUMMARY (\$000)	300,370	321,635	335,200	351,341	368,169	385,640	404,333	423,740	435,114	448,140	
Buildings	\$9,384.7	\$9,384.7	\$9,384.7	\$9,384.7	\$9,384.7	\$9,384.7	\$9,384.7	\$9,384.7	\$9,384.7	\$9,384.7	
Land	\$8,631.0	\$8,631.0	\$8,631.0	\$8,631.0	\$8,631.0	\$8,631.0	\$8,631.0	\$8,631.0	\$8,631.0	\$8,631.0	
Furniture and Related Equipment	\$517.8	\$541.0	\$657.5	\$707.9	\$762.7	\$804.7	\$825.2	\$832.7	\$879.2	\$908.9	
Town-Wide Fleet	\$21,756.9	\$22,477.2	\$23,125.3	\$24,055.3	\$24,120.6	\$25,315.2	\$26,645.0	\$28,377.4	\$29,427.5	\$32,733.5	
Total (\$000)	\$40,290.4	\$41,033.8	\$41,798.4	\$42,778.8	\$42,898.9	\$44,135.5	\$45,485.9	\$47,225.8	\$48,322.3	\$51,658.0	
SERVICE LEVEL (\$/pop+empl)											Average Service Level
Buildings	\$30.41	\$29.18	\$27.99	\$26.71	\$25.49	\$24.32	\$23.21	\$22.15	\$21.54	\$20.94	\$25.19
Land	\$27.97	\$26.83	\$25.74	\$24.57	\$23.44	\$22.37	\$21.35	\$20.37	\$19.81	\$19.26	\$23.17
Furniture and Related Equipment	\$1.68	\$1.68	\$1.96	\$2.01	\$2.07	\$2.09	\$2.04	\$1.97	\$2.02	\$2.03	\$1.95
Town-Wide Fleet	\$70.51	\$69.88	\$68.98	\$68.47	\$65.51	\$65.61	\$65.90	\$66.97	\$67.53	\$73.04	\$68.24

\$121.76

\$116.51

\$114.39

\$112.49

\$111.45

\$110.89

\$115.27

\$118.55

TOWN OF MARKHAM CALCULATION OF MAXIMUM ALLOWABLE PUBLIC WORKS

Total (\$/pop+empl)

10 Year Average Service Level (1999-2008) \$118.55 per pop+empl

\$130.57

\$127.58

\$124.67

 2008 Population+Employment
 448,146

 Population in New Units + Employment 2009-2018
 99,397

 Population in New Units + Employment 2009-2031
 129,896

Excess Calculation (\$000) Average Maximum Allowable Using New Maximum Service 10 Years 2031 2008 Average Excess Allowable (\$000) 10 Years 2031 Level Inventory Service Level Capacity Total Public Works \$11,783.5 \$118.55 per pop+empl \$15,399.2 \$51,658.0 \$53,127.7 \$0.0 \$11,783.5 \$15,399.2



			Total	L	.ess		Total	Rep	placement			Growth-Re	elate	d Costs		2009-	2018	Discounted
Service	Project Description	Timing	Project	-	rants		Municipal	-	d Benefit	Prior		2009-		Post				-Related
			Cost	/Sul	osidies		Cost	To	Existing	Growth		2018		2018	Total	Net	Capi	tal Costs
6.0 PUBLIC WO	ORKS																	
6.1 Pub	olic Works Buildings																	
6.1.1		2010	\$ 120,000	\$	-	\$	120,000	\$	-	\$ 120,000	\$	-	\$	-	\$ 120,000	909	% \$	-
6.1.2	Salt Sand Brine Facility (West)	2010	\$ 800,000	\$	-	\$	800,000	\$	-	\$ 800,000	\$	-	\$	-	\$ 800,000	909	% \$	-
6.1.3	3 Four Bay Fleet Garage Addition (Miller)	2011	\$ 1,600,000	\$	-	\$	1,600,000	\$	-	\$ -	\$	1,600,000	\$	-	\$ 1,600,000	909	% \$	1,440,000
6.1.4	4 East Yard Garage/Office	2013	\$ 8,906,250	\$	-	\$	8,906,250	\$	-	\$ -	\$	7,280,772	\$	1,625,478	\$ 8,906,250	909	% \$	6,552,695
6.1.5	5 East Yard Salt Sand Brine Dome	2013	\$ 1,100,000	\$	-	\$	1,100,000	\$	-	\$ 	\$		\$	1,100,000	\$ 1,100,000	909	% \$	
	Subtotal Public Works Buildings		\$ 12,526,250	\$	-	\$	12,526,250	\$	-	\$ 920,000	\$	8,880,772	\$	2,725,478	\$ 12,526,250		\$	7,992,695
6.2 Lan	d for Public Works Buildings																	
6.2.1	Public Works Share of East Yard	2010	\$ 9,375,000	\$	-	\$	9,375,000	\$	-	\$ 7,599,574	\$	1,775,426	\$	-	\$ 9,375,000	909	% \$	1,597,883
	Subtotal Land for Public Works Buildings		\$ 9,375,000	\$	-	\$	9,375,000	\$	-	\$ 7,599,574	\$	1,775,426	\$	-	\$ 9,375,000		\$	1,597,883
6.3 Furr	niture and Equipment																	
6.3.1	1 East Yard Garage/Office	2013	\$ 259,600	\$	-	\$	259,600	\$	-	\$ -	\$	259,600	\$	-	\$ 259,600	909	% \$	233,640
	Subtotal Furniture and Equipment		\$ 259,600	\$	-	\$	259,600	\$	-	\$ -	\$	259,600	\$	-	\$ 259,600		\$	233,640
	1.1		.,								ľ	-,	1		-,		l i	



130

	•		Total	Less	To	otal	Replacement			Growth-Re	elated C	Costs		2009-20)18 Dis	counte
Service	Project Description	Timing	Project Cost	Grants /Subsidies		icipal ost	and Benefit To Existing	Prior Growt		2009- 2018		ost 018	Total		wth-Re Capital	
6.0 PUBLIC WOR	RKS															
6.4 Town	Fleet															
6.4.1	Full Size 2WD Pick-Up	2009	\$ 29,013	\$ -	\$	29,013	\$ -	\$ 29	,013	\$ -	\$	-	\$ 29,0	13 90%	\$	-
6.4.2	Compact Pick-Up	2009	\$ 21,248	\$ -	\$	21,248	\$ -	\$ 21	,248	\$ -	\$	-	\$ 21,2	48 90%	\$	-
6.4.3	Full Size 4WD Pick-Up	2009	\$ 34,666	\$ -	\$	34,666	\$ -	\$ 34	,666	\$ -	\$	-	\$ 34,6	66 90%	\$	-
6.4.4	Flatbed (>8,000 KG RGVW)	2009	\$ 63,236	\$ -	\$	63,236	\$ -	\$ 63	,236	\$ -	\$	-	\$ 63,2	36 90%	\$	-
6.4.5	1 Ton Flat Bed	2009	\$ 42,910	\$ -	\$	42,910	\$ -	\$ 42	,910	\$ -	\$	-	\$ 42,9	10 90%	\$	-
6.4.6	Compact Van	2009	\$ 25,658		\$	25,658	\$ -			\$ -	\$	-	\$ 25,6			-
6.4.7	Trailers	2009	\$ 7,069		\$	7,069	\$ -			\$ -	\$	-	\$ 7,0			-
6.4.8	Zero Turn Mower	2009	\$ 19,075		\$	19,075	\$ -			\$ -	\$	-	\$ 19,0			-
6.4.9	Rotary Walkbehind	2009	\$ 4,687		\$	4,687	\$ -			\$ -	\$	-	\$ 4,6			-
6.4.10		2009	\$ 29,338		\$	29,338	\$ -			\$ -	\$	-	\$ 29,3			-
6.4.11		2010	\$ 131,02			131,021	\$ -			\$ -	\$	-	\$ 131,0			-
6.4.12		2010	\$ 17,006		\$	17,006	\$ -			\$ -	\$	-	\$ 17,0			-
6.4.13		2010	\$ 26,217		\$	26,217	\$ -			\$ -	\$	-	\$ 26,2			-
6.4.14		2010	\$ 14,37		\$	14,371	\$ -			\$ -	\$	-	\$ 14,3			-
6.4.15		2010	\$ 38,042		\$	38,042	\$ -			\$ -	\$	-	\$ 38,0			-
6.4.16	· · · · · · · · · · · · · · · · · · ·	2010	\$ 34,666		\$	34,666	\$ -			\$ -	\$	-	\$ 34,6			-
6.4.17		2010	\$ 63,236		\$	63,236	\$ -			\$ -	\$	-	\$ 63,2			
6.4.18		2010	\$ 42,910		\$	42,910	\$ -			\$ -	\$	-	\$ 42,9			
6.4.19		2010	\$ 25,658		\$	25,658	\$ -		,658	\$ -	\$	-	\$ 25,6			
6.4.20		2010	\$ 7,069		\$	7,069	\$ -			\$ -	\$	-	\$ 7,0			
6.4.21		2010	\$ 19,075		\$	19,075	\$ -			\$ -	\$	-	\$ 19,0			
6.4.22		2010	\$ 4,687		\$	4,687	\$ -			\$ -	\$	-	\$ 4,6			
6.4.23		2010	\$ 29,338		\$	29,338	\$ -			\$ -	\$	-	\$ 29,3			27.0
6.4.24		2011	\$ 42,011		\$	42,011	\$ -	\$		\$ 42,011	\$	-	\$ 42,0			37,8
6.4.25		2011	\$ 34,364		\$		\$ -	\$		\$ 34,364	\$	-	\$ 34,3			30,9
6.4.26		2011	\$ 29,013		\$	29,013	\$ - \$ -	\$ \$		\$ 29,013 \$ 21,248	\$	-	\$ 29,0			26,1
6.4.27 6.4.28		2011 2011	\$ 21,248 \$ 42,910		\$	21,248 42,910	\$ -	\$		\$ 21,248 \$ 42,910	\$	-	\$ 21,2 \$ 42,9			19,1 38,6
6.4.28		2011	\$ 42,910		\$	25,658	\$ -	\$		\$ 42,910	\$	-	\$ 42,9 \$ 25,6			23,0
6.4.29		2011	\$ 7,069		\$	7,069	\$ -	\$		\$ 7,069	\$	-	\$ 7,0			6,3
6.4.31		2011	\$ 19,075		\$	19,075	\$ -	\$		\$ 19,075	\$	-	\$ 19,0			17,1
6.4.32		2011	\$ 4,687		\$	4,687	\$ -	\$		\$ 4,687	\$	-	\$ 4,6			4,2
6.4.33		2011	\$ 29,338		\$	29,338	\$ -	\$		\$ 29,338	\$	-	\$ 29,3			26,4
6.4.34		2011	\$ 131,02			131,021	\$ -	\$		\$ 131,021	\$	-	\$ 131,0			117,9
6.4.35		2012	\$ 14,37		\$	14,371	\$ -	\$		\$ 14,371	\$	-	\$ 131,0			12,9
6.4.36		2012	\$ 38.042		\$	38.042	\$ -	\$		\$ 38,042	\$		\$ 38,0			34.2
6.4.37		2012	\$ 21,248		\$	21,248	\$ -	\$		\$ 21,248	\$	-	\$ 21,2			19,
6.4.38		2012	\$ 34.666		\$	34.666	\$ -	\$		\$ 34,666	\$	_	\$ 34,6			31,
6.4.39	· · · · · · · · · · · · · · · · · · ·	2012	\$ 63,236		\$	63,236	\$ -	\$		\$ 63,236	\$	_	\$ 63,2			56,
6.4.40		2012	\$ 25,658		\$	25,658	\$ -	\$		\$ 25,658	\$	_	\$ 25,6			23,
6.4.41		2012	\$ 7,069		\$	7,069	\$ -	\$		\$ 7,069	\$	_	\$ 7,0			6,
6.4.42		2012	\$ 19,075		\$	19,075	\$ -	\$		\$ 19,075	\$	_	\$ 19,0			17,
6.4.43		2012	\$ 4.687		\$	4.687	\$ -	\$		\$ 4,687	\$	_	\$ 4,6			4.
6.4.44		2012	\$ 29,338	T	\$	29,338	\$ -	\$		\$ 29,338	\$	_	\$ 29,3			26,
6.4.45		2013	\$ 69,000		\$	69,000	\$ -	\$		\$ 69,000	\$	_	\$ 69,0			62,
6.4.46		2013	\$ 26,217		\$	26,217	\$ -	\$		\$ 26,217	\$	-	\$ 26,2			23,
6.4.47		2013	\$ 42,910		\$	42,910	\$ -	\$		\$ 42,910	\$	-	\$ 42,9			38,
6.4.48		2013	\$ 25,658		\$	25,658	\$ -	\$		\$ 25,658	\$	-	\$ 25,6			23,
6.4.49		2013	\$ 7,069		\$	7,069	\$ -	\$		\$ 7,069	\$	-	\$ 7,0			6,
6.4.50		2013	\$ 19,075		\$	19,075	\$ -	\$		\$ 19,075	\$	-	\$ 19,0			17,
6.4.51		2013	\$ 4.687		\$	4,687	\$ -	\$		\$ 4,687	\$	-	\$ 4,6			4,
6.4.52	,	2013	\$ 29,338		\$	29.338	\$ -	\$		\$ 29,338	\$	-	\$ 29,3			26,
6.4.53		2014	\$ 171,600			171,600	\$ -	\$		\$ -	\$	171,600	\$ 171,6			_0,
6.4.54		2014	\$ 131,02			131,021	\$ -	\$		\$ -	\$	131,021	\$ 131,0			
6.4.55		2014	\$ 36,700		\$		\$ -	\$		\$ -	\$	36,700	\$ 36,7			
		1	1	1.	1 '	-,	•	1 '			1 '	,			1 .	



TOWN OF MARKHAM GROWTH-RELATED CAPITAL PROGRAM

			Total	Less		Total	Replacement			Relat	ed Costs			2009-2018 Discounted		
Service	Project Description	Timing	Project	Grants	Municipal		and Benefit	Prior	2009-		Post					elated
			Cost	/Subsidies		Cost	To Existing	Growth	2018		2018		Total	Net C	apita	I Costs
6.0 PUBLIC WORK	s															
6.4 Town F	leet															
6.4.56	Tandem Dump Truck	2014	\$ 193,266	\$ -	\$	193,266	\$ -	\$ -	\$ -	\$	193,266	\$	193,266	90%	\$	-
6.4.57	Car Compact	2014	\$ 17,000	\$ -	\$	17,006	\$ -	\$ -	\$ -	\$	17,006	\$	17,006	90%	\$	-
6.4.58	Full Size 2WD Pick-Up	2014	\$ 29,013	\$ -	\$	29,013	\$ -	\$ -	\$ -	\$	29,013	\$	29,013	90%	\$	-
6.4.59	Compact Pick-Up	2014	\$ 21,248	\$ -	\$	21,248	\$ -	\$ -	\$ -	\$	21,248	\$	21,248	90%	\$	-
6.4.60	Full Size 4WD Pick-Up	2014	\$ 34,666	\$ -	\$	34,666	\$ -	\$ -	\$ -	\$	34,666	\$	34,666	90%	\$	-
6.4.61	Flatbed (>8,000 KG RGVW)	2014	\$ 63,236	\$ -	\$	63,236	\$ -	\$ -	\$ -	\$	63,236	\$	63,236	90%	\$	-
6.4.62	1 Ton Flat Bed	2014	\$ 42,910	\$ -	\$	42,910	\$ -	\$ -	\$ -	\$	42,910	\$	42,910	90%	\$	-
6.4.63	Zero Turn Mower	2014	\$ 19,075		\$	19,075	\$ -	\$ -	\$ -	\$	19,075		19,075	90%	\$	-
6.4.64	Rotary Walkbehind	2014	\$ 4,68	\$ -	\$	4,687	\$ -	\$ -	\$ -	\$	4,687	\$	4,687	90%	\$	-
6.4.65	Full Size Van	2014	\$ 29,338	\$ -	\$	29,338	\$ -	\$ -	\$ -	\$	29,338	\$	29,338	90%	\$	-
6.4.66	Full Size 4WD Pick-Up	2015	\$ 34,666	\$ -	\$	34,666	\$ -	\$ -	\$ -	\$	34,666	\$	34,666	90%	\$	-
6.4.67	Flatbed (>8,000 KG RGVW)	2015	\$ 63,236	\$ -	\$	63,236	\$ -	\$ -	\$ -	\$	63,236	\$	63,236	90%	\$	-
6.4.68	Compact Van	2015	\$ 25,658	\$ -	\$	25,658	\$ -	\$ -	\$ -	\$	25,658	\$	25,658	90%	\$	-
6.4.69	Trailers	2015	\$ 7,069	\$ -	\$	7,069	\$ -	\$ -	\$ -	\$	7,069	\$	7,069	90%	\$	-
6.4.70	Rotary Walkbehind	2015	\$ 4,68	\$ -	\$	4,687	\$ -	\$ -	\$ -	\$	4,687	\$	4,687	90%	\$	-
6.4.71	Full Size Van	2015	\$ 29,338	\$ -	\$	29,338	\$ -	\$ -	\$ -	\$	29,338	\$	29,338	90%	\$	-
6.4.72	Sidewalk Tractors	2016	\$ 131,02		\$	131,021	\$ -	\$ -	\$ -	\$	131,021	\$	131,021	90%	\$	-
6.4.73	Car Mid Size	2016	\$ 34,364		\$	34,364	\$ -	\$ -	\$ -	\$	34,364	\$	34,364	90%	\$	-
6.4.74	Utility Truckster	2016	\$ 14,37		\$	14,371	\$ -	\$ -	\$ -	\$	14,371	\$	14,371	90%	\$	-
6.4.75	Sport Utility Vehicle	2016	\$ 38,042		\$	38,042	\$ -	\$ _	\$ -	\$	38,042	\$	38,042	90%	\$	-
6.4.76	Compact Pick-Up	2016	\$ 21,248	\$ -	\$	21,248	\$ -	\$ -	\$ -	\$	21,248	\$	21,248	90%	\$	-
6.4.77	1 Ton Flat Bed	2016	\$ 42,910	\$ -	\$	42,910	\$ -	\$ -	\$ -	\$	42,910	\$	42,910	90%	\$	-
6.4.78	Compact Van	2016	\$ 25,658		\$	25,658	\$ -	\$ -	\$ -	\$	25,658		25,658	90%	\$	-
6.4.79	Trailers	2016	\$ 7,069		\$	7,069	\$ -	\$ -	\$ -	\$	7,069		7,069	90%	\$	-
6.4.80	Zero Turn Mower	2016	\$ 19.07		\$	19,075	\$ -	\$ -	\$ -	\$	19,075		19,075	90%	\$	-
6.4.81	Rotary Walkbehind	2016	\$ 4,68	\$ -	\$	4,687	\$ -	\$ -	\$ -	\$	4,687	\$	4,687	90%	\$	-
6.4.82	Rotary Mower	2017	\$ 26.21		\$	26,217	\$ -	\$ _	\$ -	\$	26,217	\$	26,217	90%	\$	_
6.4.83	Full Size 2WD Pick-Up	2017	\$ 29.013		\$	29,013	\$ -	\$ -	\$ -	\$	29,013		29,013	90%	\$	-
6.4.84	Zero Turn Mower	2017	\$ 19,075	s s -	\$	19,075	\$ -	\$ -	\$ -	\$	19,075	\$	19,075	90%	\$	-
6.4.85	Full Size Van	2017	\$ 29,338		\$	29,338	\$ -	\$ -	\$ -	\$	29,338	\$	29,338	90%	\$	-
6.4.86	Sidewalk Tractors	2018	\$ 131,02		\$	131,021	\$ -	\$ -	\$ -	\$	131,021	\$	131,021	90%	\$	-
6.4.87	Full Size 4WD Pick-Up	2018	\$ 34,666		\$	34,666	\$ -	\$ -	\$ -	\$	34,666	\$	34,666	90%	\$	-
6.4.88	Flatbed (>8,000 KG RGVW)	2018	\$ 63,236		\$	63,236	\$ -	\$ -	\$ -	\$	63,236	\$	63,236	90%	\$	-
6.4.89	1 Ton Flat Bed	2018	\$ 42,910		\$	42,910	\$ -	\$ -	\$ -	\$	42,910	\$	42,910	90%	\$	-
6.4.90	Compact Van	2018	\$ 25,658		\$	25,658	\$ -	\$ -	\$ -	\$	25,658	\$	25,658	90%	\$	-
6.4.91	Trailers	2018	\$ 7.069		\$	7,069	\$ -	\$ -	\$ -	\$	7.069	\$	7,069	90%	\$	-
6.4.92	Rotary Walkbehind	2018	\$ 4,68		\$	4,687	\$ -	\$ -	\$ -	\$	4,687	\$	4,687	90%	\$	-
6.4.93	Full Size Van	2018	\$ 29,338		\$	29,338	\$ -	\$ -	\$ -	\$	29,338	\$	29,338	90%	\$	-
3. 1.00	Subtotal Town Fleet		\$ 3,337,03	- -	\$	3,337,035	\$ -	\$ 730,198	\$ 867,740	\$	1,739,096	\$	3,337,035	2270	\$	780,966
TOTAL DUDGE	C MODICE		¢ 05 407 000			05 407 005	•	0.040.770	£ 44.702.504	. ا	4 404 574	_	05 407 005	000/		0.005.405
TOTAL PUBLIC	CWORKS		\$ 25,497,88	\$ -	\$	25,497,885	\$ -	\$ 9,249,772	\$ 11,783,538	\$	4,464,574	\$	25,497,885	90%	\$ 1	0,605,185

Non-Chargeable Growth-Related Net Capital Cost: \$ 1,178,354

Residential Development Charge Calculation		
Residential Share of 2009-2018 Discounted Growth-Related Capital Program	61%	\$6,510,694
10 Year Growth in Population in New Units		61,022
Unadjusted Development Charge Per Capita (\$)		\$106.70
Non-Residential Development Charge Calculation		
Non-Residential Share of 2009-2018 Discounted Growth-Related Capital Program	39%	\$ 4,094,490
10 Year Growth in Square Metres		1,512,480
Unadjusted Development Charge Per sq. m (\$)		\$2.71



TOWN OF MARKHAM CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE PUBLIC WORKS RESIDENTIAL DEVELOPMENT CHARGE

6.00 PUBLIC WORKS

OPENING CASH BALANCE FROM APPLICABLE RESE	RVES			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING CASH BALANCE (\$000)	Sha	rec		\$0.00	\$917.07	\$898.94	\$860.68	\$1,322.39	(\$2,702.30)	(\$2,125.65)	(\$1,484.02)	(\$782.47)	(\$409.55)	
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS 6.00 PUBLIC WORKS - constant (\$000) 6.00 PUBLIC WORKS - current (\$000)		Non-Res 39%		\$0.0 \$0.0	\$981.0 \$1,000.6	\$1,025.1 \$1,066.6	\$214.6 \$227.7	\$4,290.0 \$4,643.6	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$6,510.7 \$6,938.5
NEW UNIT GROWTH														
- Population in New Units				8,182	8,471	8,714	5,577	5,717	5,861	6,010	6,084	3,168	3,238	61,022
REVENUE - current (\$000)	Rate for 2009	9												
- Dev. Charge Receipts	\$110.15 Balance:	Inflation: Postive	2.0% Negative	\$901.3	\$951.7	\$998.7	\$651.9	\$681.6	\$712.8	\$745.5	\$769.7	\$408.8	\$426.2	\$7,248.2
- Interest on Opening Balance - Interest on In-year Transactions (excl.int.)	Rate: Rate:	3.5% 3.5%	5.5% 5.5%	\$0.0 \$15.8	\$32.1 (\$1.3)	\$31.5 (\$1.9)	\$30.1 \$7.4	\$46.3 (\$109.0)	(\$148.6) \$12.5	(\$116.9) \$13.0	(\$81.6) \$13.5	(\$43.0) \$7.2	(\$22.5) \$7.5	(\$272.8) (\$35.4)
TOTAL REVENUE				\$917.1	\$982.5	\$1,028.3	\$689.4	\$618.9	\$576.6	\$641.6	\$701.5	\$372.9	\$411.1	\$6,940.1
CLOSING CASH BALANCE				\$917.1	\$898.9	\$860.7	\$1,322.4	(\$2,702.3)	(\$2,125.7)	(\$1,484.0)	(\$782.5)	(\$409.5)	\$1.6	
PUBLIC WORKS CHARGE PER CAPITA		\$110.15												



TOWN OF MARKHAM CASHFLOW AND DETERMINATION OF DEVELOPMENT CHARGE PUBLIC WORKS NON-RESIDENTIAL DEVELOPMENT CHARGE

6.00 PUBLIC WORKS

OPENING CASH BALANCE FROM APPLICABLE RESE	RVES			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
OPENING CASH BALANCE (\$000)	01			\$0.00	\$438.64	\$259.23	\$39.95	\$361.02	(\$2,147.53)	(\$1,781.42)	(\$1,385.50)	(\$957.94)	(\$496.68)	
2009-2018 RESIDENTIAL FUNDING REQUIREMENTS 6.00 PUBLIC WORKS - constant (\$000) 6.00 PUBLIC WORKS - current (\$000)		ares Non-Res 39%		\$0.0 \$0.0	\$616.9 \$629.3	\$644.7 \$670.7	\$135.0 \$143.2	\$2,697.9 \$2,920.3	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	\$4,094.5 \$4,363.5
NON-RESIDENTIAL SPACE GROWTH - Growth in Sq. m				151,248	151,248	151,248	151,248	151,248	151,248	151,248	151,248	151,248	151,248	1,512,480
REVENUE - current (\$000)	Rate for 200	9												
- Dev. Charge Receipts	\$2.85 Balance:	Inflation: Postive	2.0% Negative	\$431.1	\$439.7	\$448.5	\$457.4	\$466.6	\$475.9	\$485.4	\$495.1	\$505.1	\$515.2	\$4,720.0
Interest on Opening Balance Interest on In-year Transactions (excl.int.)	Rate: Rate:	3.5% 3.5%	5.5% 5.5%	\$0.0 \$7.5	\$15.4 (\$5.2)	\$9.1 (\$6.1)	\$1.4 \$5.5	\$12.6 (\$67.5)	(\$118.1) \$8.3	(\$98.0) \$8.5	(\$76.2) \$8.7	(\$52.7) \$8.8	(\$27.3) \$9.0	(\$333.8) (\$22.4)
TOTAL REVENUE				\$438.6	\$449.8	\$451.5	\$464.3	\$411.8	\$366.1	\$395.9	\$427.6	\$461.3	\$496.9	\$4,363.7
CLOSING CASH BALANCE				\$438.6	\$259.2	\$39.9	\$361.0	(\$2,147.5)	(\$1,781.4)	(\$1,385.5)	(\$957.9)	(\$496.7)	\$0.2	
PUBLIC WORKS CHARGE PER SQ. M		\$2.85												



APPENDIX C

RESERVE FUND BALANCES

APPENDIX C

DEVELOPMENT CHARGES RESERVE FUND UNALLOCATED BALANCES

The DCA requires that a reserve fund be established for each service for which development charges are collected. Table 1 presents the uncommitted reserve fund balances that are available to help fund the growth-related net capital costs identified in this study. The opening balances of the development charges reserve funds as of December 31, 2008 have been adjusted to account for current commitments to reserve fund projects. All of the available reserve fund balances are therefore accounted for in this study.

As shown on Table 1, the December 31, 2008 total reserve fund balance was \$81.69 million. The application of the available uncommitted balance in each of the reserve funds is discussed in the appendix section related to each service. These funds are assigned to projects in the initial years of the capital program for each service. This has the effect of reducing and deferring capital costs brought forward to the development charges calculation and the cash flow analysis.



APPENDIX C TABLE 1

TOWN OF MARKHAM DEVELOPMENT CHARGES RESERVE FUND BALANCES BALANCES BY SERVICE AS AT DECEMBER 31, 2008

SERVICE	Closing Balance December 31, 2008
ADMINISTRATION Growth Related Studies SUB-TOTAL ADMINISTRATION	(\$2,971,903) (\$2,971,903)
FIRE Vehicles Equipment Buildings Land Furniture SUB-TOTAL FIRE	\$571,241 (\$21,248) \$1,897,879 (\$516,881) \$697,773 \$2,628,764
LIBRARY Building Land Furniture Collection SUB-TOTAL LIBRARY	\$270,828 (\$898,762) \$376,053 \$3,366,929 \$3,115,048
PARKLAND Equipment Buildings Land Development SUB-TOTAL PARKLAND	(\$634,844) \$815,191 \$1,792,493 \$34,730,278 \$36,703,118
RECREATION Equipment Land Facilities SUB-TOTAL RECREATION	\$485,269 (\$2,407,986) \$34,884,391 \$32,961,674
PUBLIC WORKS Equipment Land Facilities Fleet SUB-TOTAL PUBLIC WORKS	\$1,595,528 \$4,088,115 \$2,983,378 \$582,751 \$9,249,772
SUB-TOTAL TOWN WIDE SOFT SERVICES	\$81,686,473



APPENDIX D

LONG-TERM CAPITAL AND
OPERATING COST IMPACTS

APPENDIX D TABLE 1

TOWN OF MARKHAM ESTIMATED NET OPERATING COST OF THE PROPOSED GROWTH-RELATED CAPITAL PROGRAM (in constant 2009 dollars)

Net Cost Estimated Operating Costs (\$000) (in 2009 \$) 2009 2010 2011 2016 2017 2018 2013 2014 \$1,995.0 LIBRARY BOARD \$1,254.0 \$1,995.0 \$1,995.0 \$1,995.0 \$1,995.0 \$1,995.0 \$1,995.0 East Markham Branch \$57 per sq.ft. added \$1,254.0 \$1,254.0 \$1,254.0 \$1,254.0 \$1,254.0 \$1,254.0 \$1,254.0 \$1,254.0 Milliken Branch Expansion \$741.0 \$741.0 \$741.0 \$741.0 \$741.0 \$741.0 \$741.0 \$57 per sq.ft. added FIRE SERVICES \$2,640.0 \$5,544.0 \$5,544.0 \$5,544.0 \$5,544.0 \$5,544.0 \$5,544.0 \$5,544.0 \$8,448.0 Cathedral Station \$264 per sq.ft. added \$2,640.0 \$2,640.0 \$2,640.0 \$2,640.0 \$2,640.0 \$2,640.0 \$2,640.0 \$2,640.0 \$2,640.0 \$2,904.0 \$2,904.0 \$2,904.0 \$2,904.0 \$2,904.0 Cornell Station \$264 per sq.ft. added \$2,904.0 \$2,904.0 \$2,904.0 Markham Centre Station \$264 per sq.ft. added \$2,904.0 INDOOR RECREATION \$342.3 \$1,391.0 \$1,391.0 \$1,391.0 \$2,666.0 \$2,666.0 \$2,666.0 \$2,666.0 \$2,666.0 Centennial Community Centre Expansion \$10 per sq.ft. added \$342.3 \$342.3 \$342.3 \$342.3 \$342.3 \$342.3 \$342.3 \$342.3 \$342.3 \$1,048.7 \$1,048.7 \$1,048.7 \$1,048.7 \$1,048.7 \$1,048.7 \$1,048.7 \$1,048.7 East Markham Community Centre \$10 per sq.ft. added \$1,275.0 \$1,275.0 Provision for Additional Recreation Space \$10 per sq.ft. added \$1,275.0 \$1,275.0 \$1,275.0 PARK DEVELOPMENT AND FACILITIES \$270.2 \$1,092.8 \$1,133.8 \$1,133.8 \$81.2 \$1,133.8 \$1,133.8 \$1,133.8 \$1,133.8 \$19 per \$1,000 of total Total Park Development & Facilities Program ~ \$59.7 M \$81.2 \$270.2 \$1,092.8 \$1,133.8 \$1,133.8 \$1,133.8 \$1,133.8 \$1,133.8 \$1,133.8 infrastructure value PUBLIC WORKS \$79.9 \$163.4 \$180.9 \$530.3 \$530.3 \$530.3 \$530.3 \$530.3 \$530.3 \$50 per \$1,000 of total \$79.9 \$163.4 \$180.9 Total Public Works Program ~ \$10.6 M \$530.3 \$530.3 \$530.3 \$530.3 \$530.3 \$530.3 infrastructure value **GENERAL SERVICES OPERATING COSTS (\$000)** \$0.0 \$3,143.4 \$8,622.5 \$10,203.6 \$10,594.0 \$11,869.0 \$11,869.0 \$11,869.0 \$11,869.0 \$14,773.0



TOWN OF MARKHAM SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS

Net Capital Cost of Growth Related Projects	2009 (\$000)	2010 (\$000)	2011 (\$000)	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)	2017 (\$000)	2018 (\$000)	TOTAL (\$000)
GENERAL GOVERNMENT											
Total Net Cost (1)	3,918.6	946.7	946.7	946.7	946.7	946.7	946.7	946.7	946.7	946.7	12,439.0
Net Cost From Development Charges (2)	3,526.8	852.0	852.0	852.0	852.0	852.0	733.4	0.0	0.0	0.0	8,520.4
Net Cost From Non-DC Sources	391.9	94.7	94.7	94.7	94.7	94.7	213.3	946.7	946.7	946.7	3,918.6
- Discount Portion (3)	391.9	94.7	94.7	94.7	94.7	94.7	81.5	0.0	0.0	0.0	946.7
- Prior Growth (4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2018 Growth (5)	0.0	0.0	0.0	0.0	0.0	0.0	131.8	946.7	946.7	946.7	2,971.9
LIBRARY BOARD											
Total Net Cost (1)	1,212.8	12,820.2	3,958.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17,991.4
Net Cost From Development Charges (2)	1,091.5	8,734.6	840.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10,666.6
Net Cost From Non-DC Sources	121.3	4,085.6	3,117.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7,324.7
- Discount Portion (3)	121.3	970.5	93.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,185.2
- Prior Growth (4)	0.0	3,115.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,115.0
- Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2018 Growth (5)	0.0	0.0	3,024.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,024.5
FIRE SERVICES											
Total Net Cost (1)	6,113.2	5,052.1	650.0	0.0	0.0	1,324.3	0.0	840.0	4,663.2	0.0	18,643.0
Net Cost From Development Charges (2)	3,484.5	5,052.1	650.0	0.0	0.0	1,324.3	0.0	631.5	0.0	0.0	11,142.4
Net Cost From Non-DC Sources	2,628.8	0.0	0.0	0.0	0.0	0.0	0.0	208.5	4,663.2	0.0	7,500.5
- Discount Portion (3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- Prior Growth (4)	2,628.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,628.8
- Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2018 Growth (5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	208.5	4,663.2	0.0	4,871.8
INDOOR RECREATION											
Total Net Cost (1)	10,928.9	48,451.1	0.0	0.0	53,000.0	0.0	0.0	0.0	0.0	0.0	112,380.0
Net Cost From Development Charges (2)	0.0	23,776.5	0.0	0.0	45,186.9	0.0	0.0	0.0	0.0	0.0	68,963.4
Net Cost From Non-DC Sources	10,928.9	24,674.6	0.0	0.0	7,813.1	0.0	0.0	0.0	0.0	0.0	43,416.6
- Discount Portion (3)	0.0	2,641.8	0.0	0.0	5,020.8	0.0	0.0	0.0	0.0	0.0	7,662.6
- Prior Growth (4)	10,928.9	22,032.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32,961.7
- Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2018 Growth (5)	0.0	0.0	0.0	0.0	2,792.3	0.0	0.0	0.0	0.0	0.0	2,792.3

Notes: (1) For total growth-related capital forecast see Appendix B.

⁽⁵⁾ Post 2018 growth related net capital costs may be eligible for development charges in future DC by-laws, but interim financing of this share may be required



⁽²⁾ Share of Capital program to be funded from development charges if calculated rates are fully implemented

⁽³⁾ Mandatory 10% reduction for applicable services

⁽⁴⁾ Portion of growth-related capital forecast identified as prior growth (to be funded from present Development Charge reserve fund balances).

TOWN OF MARKHAM SUMMARY OF TAX SUPPORTED FUNDING REQUIREMENTS

Net Capital Cost of Growth Related Projects	2009 (\$000)	2010 (\$000)	2011 (\$000)	2012 (\$000)	2013 (\$000)	2014 (\$000)	2015 (\$000)	2016 (\$000)	2017 (\$000)	2018 (\$000)	TOTAL (\$000)
PARK DEVELOPMENT AND FACILITIES											
Total Net Cost (1)	28,109.3	13,278.2	11,115.9	48,547.5	14,104.4	9,358.2	20,254.0	12,667.2	10,580.6	4,872.4	172,887.8
Net Cost From Development Charges (2)	0.0	4,275.4	9,944.9	43,294.7	2,159.2	0.0	0.0	0.0	0.0	0.0	59,674.2
Net Cost From Non-DC Sources	28,109.3	9,002.8	1,171.0	5,252.7	11,945.2	9,358.2	20,254.0	12,667.2	10,580.6	4,872.4	113,213.5
- Discount Portion (3)	0.0	475.0	1,105.0	4,810.5	239.9	0.0	0.0	0.0	0.0	0.0	6,630.5
- Prior Growth (4)	28,109.3	8,527.8	66.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36,703.1
- Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2018 Growth (5)	0.0	0.0	0.0	442.2	11,705.3	9,358.2	20,254.0	12,667.2	10,580.6	4,872.4	69,879.9
PUBLIC WORKS											
Total Net Cost (1)	276.9	10,748.3	1,855.4	388.4	10,489.8	793.8	164.7	338.4	103.6	338.6	25,497.9
Net Cost From Development Charges (2)	0.0	1,597.9	1,669.8	349.6	6,987.9	0.0	0.0	0.0	0.0	0.0	10,605.2
Net Cost From Non-DC Sources	276.9	9,150.4	185.5	38.8	3,501.9	793.8	164.7	338.4	103.6	338.6	14,892.7
- Discount Portion (3)	0.0	177.5	185.5	38.8	776.4	0.0	0.0	0.0	0.0	0.0	1,178.4
- Prior Growth (4)	276.9	8,972.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9,249.8
- Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2018 Growth (5)	0.0	0.0	0.0	0.0	2,725.5	793.8	164.7	338.4	103.6	338.6	4,464.6
TOTAL GENERAL SERVICES											
Total Net Cost (1)	50,559.8	91,296.6	18,526.4	49,882.6	78,540.9	12,423.1	21,365.3	14,792.4	16,294.2	6,157.7	359,838.9
Net Cost From Development Charges (2)	8,102.7	44,288.5	13,957.3	44,496.3	55,186.0	2,176.4	733.4	631.5	0.0	0.0	169,572.2
Net Cost From Non-DC Sources	42,457.1	47,008.1	4,569.1	5,386.2	23,354.9	10,246.7	20,631.9	14,160.9	16,294.2	6,157.7	190,266.7
- Discount Portion (3)	513.1	4,359.6	1,478.6	4,944.0	6,131.8	94.7	81.5	0.0	0.0	0.0	17,603.3
- Prior Growth (4)	41,943.9	42,648.5	66.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84,658.4
- Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
- For Post 2018 Growth (5)	0.0	0.0	3,024.5	442.2	17,223.1	10,152.0	20,550.4	14,160.9	16,294.2	6,157.7	88,005.0

Notes: (1) For total growth-related capital forecast see Appendix B.



⁽²⁾ Share of Capital program to be funded from development charges if calculated rates are fully implemented

⁽³⁾ Mandatory 10% reduction for applicable services

⁽⁴⁾ Portion of growth-related capital forecast identified as prior growth (to be funded from present Development Charge reserve fund balances).

⁽⁵⁾ Post 2018 growth 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 E

DRAFT PROPOSED

DEVELOPMENT CHARGES BY-LAW

(Available Under Separate Cover)