

APPENDIX A



THE CORPORATION OF THE TOWN OF MARKHAM

EXTRACT FROM THE MINUTES OF THE COUNCIL MEETING HELD ON Apr 29, 2008 REPORT NO. 18 - GENERAL COMMITTEE (April 21, 2008)

(10) DEVELOPMENT CHARGES UPDATE (10.0)

Presentation

That the presentation regarding the Development Charges Update be received; and,

That Council directs staff to prepare the Development Charge Background Study incorporating the following:

That local services be excluded from the calculation of Development Charges;

That all capital projects required for full build-out within the current urban boundary be included;

That the limited exemption on Non-Residential Developments continue until August 31, 2009 to coincide with the natural expiry of the 2004 by-laws – ASDC By-law No. 2004-225;

That the change in calculation base be considered in the next Development Charge Background Study;

That the exemption on expansions/additions to buildings where lot levies were previously paid be discontinued;

That the exemption/credit where a change of use exists be amended to provide a credit for an amount equal to the Development Charges originally paid (unindexed);

That the following services be transferred to Town Wide Hard (TWH) where appropriate: 3rd lanes (roads), intersection improvements/signals, illumination, watermains >300mm; and further,

That staff continue to meet with representatives from the development industry to review the implementation of this by-law and if necessary after the review, the matter be brought back to General Committee; and,

APPENDIX A

cont'd

That staff be further directed to:

- **Review the quantum of the internal cost recovery to the Town included in overall land acquisition costs**
- **Consider whether infrastructure currently included in the 2008 Town Wide Hard capital project list should have a portion of cost deferred as a post period benefit (future growth not included in the current growth projections)**
- **Continue to work with the developers to address credit agreement issues.**

CARRIED AS AMENDED

(See following motion to amend)

Moved by Regional Councillor G. Landon

Seconded by Regional Councillor T. Wong

That Clause (10), Report No. 18 be amended to add the following:

That staff be further directed to:

- **Review the quantum of the internal cost recovery to the Town included in overall land acquisition costs**
- **Consider whether infrastructure currently included in the 2008 Town Wide Hard capital project list should have a portion of cost deferred as a post period benefit (future growth not included in the current growth projections)**
- **Continue to work with the developers to address credit agreement issues.**

CARRIED

(The following paragraph was withdrawn)

Review the appropriateness of four mid block crossings over Hwy 404 being required to service the existing growth forecast to 2031 in advance of the Growth Management Strategy work currently underway.

DEVELOPMENT CHARGES BACKGROUND STUDY:

TOWN-WIDE HARD SERVICES & AREA-SPECIFIC CHARGES

Town of Markham

HEMSON Consulting Ltd.

May 2008
as amended June 2008

EXECUTIVE SUMMARY

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.
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 ASDC's are levied on a planning area-specific basis. The basis for the current charges is the Town's most recent development charges background study, completed in 2004.

(ii) THE TOWN INITIATED A REVIEW OF DEVELOPMENT CHARGES POLICIES AND PRACTICES

In 2006, the Town initiated a review of the Town-wide hard and area-specific development charges projects and cost recovery approach. The review was driven by two main factors:

- the rapidly increasing cost of capital projects; and
- the fiscal soundness, equitability and complexity of the Town's current development charges regime.

(iii) THE STUDY HAS FOCUSED ON TWO OBJECTIVES

- The Study has focused on achieving two key objectives:
 - Update the cost of the growth-related projects and set new development charges rates to ensure that growth is fully funding all eligible growth-related costs; and
 - Examine approaches of providing a more efficient and fiscally viable method of recovering growth-related costs, while maintaining equitability, through a reduction in the number of area-specific by-laws, enhancing local service policies and recoveries, and by funding more projects through the Town-wide charges.
- The Study process has included extensive consultation with the Markham developers.

(iv) STUDY CONSISTENT WITH LEGISLATION

- This Town of Markham Development Charges Background Study is presented as part of a process to lead to the approval of new TWH and ASDC development charges by-laws in compliance with the *Development Charges Act, 1997 (DCA)* and its related regulation (*Ontario Regulation 82/98*).

- The current TWS development charges by-law and rates are not being addressed as part of this Background Study.

(v) *ENGINEERED SERVICES WITH GROWTH-RELATED COSTS INCLUDED IN THE ANALYSIS*

- The following Town services have been included in the development charges analysis:
 - Roads (including associated structures, sidewalks, streetlights, etc.);
 - Water distribution;
 - Sanitary sewers; and
 - Storm water management.
- The other eligible Town services, often referred to as Town-wide soft services, have not been included in this development charges analysis.

(vi) *THE GROWTH FORECAST COVERS THE PERIOD 2008–2031*

- As this development charges study deals only with engineered services — roads and associated works, water, sanitary sewers and storm water management programs — the longer forecast period, 2008–2031, forms the basis of the calculations.
- The forecast represents the build-out of lands currently designated under the Town's Official Plan for residential and non-residential development.
- The growth forecast used in the study is based on the forecasts prepared by Hemson in conjunction with the Town's Planning & Urban Design Department.
- The residential forecast provides for an additional 30,990 households, over the period 2008–2031, and a population in the new households of approximately 86,500.

- It is forecast that 795 hectares of additional non-residential land will be developed over the planning period.

(vii) TWO APPROACHES ARE USED TO CALCULATE DEVELOPMENT CHARGES

Town-Wide Hard Development Charges

- This approach results in uniform charges throughout the Town for each of the Town-wide soft and Town-wide hard services. The scope of works to be funded from the Town-wide hard development charges has been expanded from the Town's previous practices. The Town-wide hard services include the following:
 - roads and related infrastructure, e.g. the 3rd and 4th travelled lanes, sidewalks, street lights, intersection improvements, bridges, culverts, streetscape improvements, related land acquisition needs, and traffic management;
 - storm water management (watercourse improvements);
 - watermains in excess of 300 mm; and
 - studies related to the above.
- The resulting development charges for these services would be imposed against all development anywhere in the Town.

Area-Specific Development Charges

- The scope of works being recovered for under the area-specific development charges has been narrowed since the Town's 2004 Development Charges Study. Some costs previously recovered for under the area-specific charges are now proposed to be recovered through the Town-wide hard charges and as local service contributions. The area-specific charges now recover primarily for the following services:
 - sanitary sewers;
 - storm water management facilities (storm water ponds); and

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- growth-related studies.
- In some situations, the area specific charges will continue to recover for some outstanding costs for projects undertaken through credit agreements with various landowners and to recovery costs for other outstanding area specific issues.

(viii) PROPOSED TOWN-WIDE HARD SERVICE CHARGES

- The following summarizes the proposed residential and non-residential charges for Town-wide hard services:

Residential Development Charges	\$/unit
Single and Semi-Detached Units	\$7,965
Townhouse and Other Multiples	\$6,267
Apartments	
Large	\$4,928
Small	\$2,961
Non-Residential Development Charges	\$/Net Hectare
All Non-Residential Development	\$166,889

(ix) AREA-SPECIFIC CHARGES

- Area-specific development charges are recommended for sanitary sewers, storm water management facilities, growth-related studies and other outstanding area-specific growth-related costs.
- The area-specific approach more closely aligns costs and benefits for services where benefits are more localized and can be identified.

- The following summarizes the proposed area-specific development charges for various areas in the Town:

	<u>\$/Net Hectare</u>
Area 4 - Don Mills/Browns Corner	\$ 29,371
Area 5 - Armadale	\$ 10,694
Area 7 - Armadale NE	\$ 13,911
Area 8 - Milliken Mills	\$196,289
Area 9 - PD 1 - 7	\$508,403
Area 17 - Rodick/Miller Road Planning District	\$293,218
Area 42A - South Unionville	\$ 54,775
Area 42A-1 - South Unionville - Helen Ave	\$770,062
Area 42B - Markham Centre	\$ 45,474
Area 42B.2 - Markham Centre - Clegg	\$ 64,003
Area 42B.4 - Markham Centre - Hotel	\$848,772
Area 42B.6 - Markham Centre - South Hwy 7	\$321,738
Area 42B.8 - Markham Centre - Sciberras	\$541,610
Area 42B.9 - Markham Centre - East Precinct	\$524,837
Area 43 - Greensborough	\$ 2,736
Area 44A - Rouge North East	\$ 6,892
Area 45A - Wismer	\$ 6,647
Area 46 - Cathedral	\$ 3,106
Area 47A - Angus Glen	\$ 11,046
Area 47B - York Downs and	\$ 24,175
Area 49 - 404 North	\$ 17,229

(x) *MODIFICATIONS TO THE TOWN'S DEVELOPMENT CHARGES BY-LAW AND LOCAL SERVICE DEFINITIONS ARE PROPOSED*

- The Town is proposing to modify a few provisions of the development charges by-law. The proposed draft by-law is available, under separate cover, and all the by-law provisions are provided in the draft. Some of the changes being proposed include:
 - Definition of large and small 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.
 - Limited exemption on non-residential developments is to continue until August 31, 2009 to coincide with the natural expiry of the 2004 by-laws.
 - The exemption on expansions/additions to buildings where lot levies were previously paid will be discontinued.
 - 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.
 - The proposed draft by-laws 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.
- The Town has reviewed and updated the definition of local services.
 - The reason for establishing this definition is to determine the capital costs eligible for inclusion in the development charges calculation for the Town.
 - The functions or services deemed to be local in nature are not to be included in the determination of the development charges rates.

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- The provision of local services is considered to be a direct developer responsibility under s.59 of the *DCA* and will (or may) be recovered under other agreement(s) with the landowner or developer.
- The Background Study contains details on the Town's new local service definitions and policies.
- It is recommended that Town's other practices regarding collection of development charges and by-law administration continue to the extent possible, having regard to any requirements of the *DCA*.
- It is recommended that the Town continue to actively encourage the use of front-ending agreements or developer agreements (and services-in-lieu arrangements), whichever are practical and desirable by the development industry and the Town;
- It is recommended that Council adopt "in principle" the growth-related capital forecast for Town-wide and area-specific services included in this background study, subject to annual review through the Town's normal capital budget process.
- The adoption "in principle" of the growth-related capital forecast will signify Council's intention to ensure that the increase in need for services attributable to growth will be met as required under the *DCA*, s.5.(1) 3. It is recognized, however, that specific projects and project timing as contained in the forecast included in this study may be revised from time to time at the discretion of Council.



MINUTES
DEVELOPMENT CHARGES
PUBLIC MEETING
2008-05-27

Attendance

Council

Mayor F. Scarpitti
 Deputy Mayor J. Heath
 Regional Councillor J. Jones
 Regional Councillor T. Wong
 Regional Councillor G. Landon
 Councillor V. Burke (a: 6:32)
 Councillor E. Shapero
 Councillor J. Virgilio
 Councillor C. Moretti (a: 6:28)
 Councillor J. Webster
 Councillor D. Horchik
 Councillor L. Kanapathi
 Councillor A. Chiu

Staff

J. Livey, Chief Administrative Officer
 J. Baird, Commissioner of Development Services
 A. Taylor, Commissioner of Corporate Services
 P. Loukes, Acting Commissioner, Asset Management
 A. Seabrooke, Acting Commissioner, Markham Public Libraries, Fire & Emergency Services, Recreation Services and Culture
 C. Conrad, Town Solicitor
 K. Kitteringham, Deputy Clerk
 M. Visser, Manager, Strategy and Innovations
 C. Raynor, Committee Clerk
 B. Cribbett, Treasurer
 K. Ross, Acting Manager, Development Finance
 A. Cachola, Manager, Capital Administration
 J. Wong, Technology Support Specialist

The public information meeting dealing with the proposed Development Charges By-law convened at 6:20 p.m., with Mayor F. Scarpitti in the Chair.

1. DEVELOPMENT CHARGES PUBLIC MEETING (7.11)
Presentation

It was noted that this Public Meeting was held under section 12 of the Development Charges Act and that Notice of the Development Charges Public Meeting for this date was published in the Markham Economist & Sun and Thornhill Liberal on May 1, 2008.

Council received a copy of a report titled DC Transition Rules that was approved by General Committee on May 26, 2008

Mr. Craig Binning, Hemson Consulting Ltd., provided a presentation on the proposed development charges by-laws. Mr. Binning provided some background on the Development

Development Charges Public Meeting
2008-05-27
MINUTES
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Charges Study and the proposed changes to the Development Charges framework. It was noted that only the Town Wide Hard and Area Specific Development Charges will be impacted.

Council sought clarification on the changes and were advised that some increases to the Town wide hard Developments Charges are offset by decreases in the area specific Development Charges.

2. COMMENTS FROM THE PUBLIC

Letters

Council received the following comments regarding the proposed development charges by-laws:

- a) Letter dated May 12, 2008 from Matthew Nisker, IBI Group (addressed to Frank J. Spaziani, Angus Glen Development Ltd./Kylemore Communities).
- b) Letter dated May 14, 2008 from Julie Bottos, SCS Consulting Group Ltd.
- c) Memorandum dated May 22, 2008 from Patrick O'Hanlon, President, Angus Glen Development Ltd.
- d) Letter dated May 27, 2008 from M. Filice, Liberty Development Corporation.

Mr. R. Grimes, IBI Group suggested that the changes to the Development Charges framework will increase development costs in some areas and not others. Mr. Grimes suggested that those areas that are already partially developed be grandfathered and that the new regime apply only to new developments. Additionally, he stated that the proposed financing charges were too high.

Mr. P. O'Hanlon, Angus Glen Developments, spoke to reiterate that the new regime impacts developments differently. Mr. Hanlon requested a 10 year transition plan in order to allow time for higher density development.

Mr. N. Mracic, Metrus Developments Inc., advised that analysis of the impacts of the new regime is still underway.

It was noted that the final report on the proposed Development Charges By-law will go to General Committee on June 9, 2008 and to a subsequent Council meeting for adoption.

Moved by Regional Councillor G. Landon
Seconded by Councillor J. Virgilio

That the following comments regarding the proposed development charges by-laws be received and referred to staff:

- a) Letter dated May 12, 2008 from Matthew Nisker, IBI Group (addressed to Frank J. Spaziani, Angus Glen Development Ltd./Kylemore Communities);
- b) Letter dated May 14, 2008 from Julie Bottos, SCS Consulting Group Ltd;
- c) Memorandum dated May 22, 2008 from Patrick O'Hanlon, President, Angus Glen Development Ltd;

- d) Letter dated May 27, 2008 from M. Filice, Liberty Development Corporation;
- e) Deputation from Mr. R. Grimes, IBI Group, at the public meeting on May 27, 2008;
- f) Deputation from Mr. P. O'Hanlon, Angus Glen Development, at the public meeting on May 27, 2008;
- g) Deputation from Mr. N. Mracic, Metrus Developments Inc., at the public meeting on May 27, 2008.

CARRIED

3. ADJOURNMENT

The public information meeting adjourned at 7:13 p.m.

APPENDIX D

APPENDIX B

**TOWN OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
TOWN-WIDE GROWTH-RELATED PROJECTS SUMMARY**

APPENDIX B
TABLE 2

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

TOWN -WIDE HARD CHARGES		Location	From / To	Timing of Project	Total Gross Cost	Level Annual 2008 to 2026	Non-Development Recoverable Costs			Town-Wide Development Charge Recoverable		
ILLUMINATION	Aiden Road						Share	Local Costs	Non-Growth (Benefit to Existing) Cost	Share	Cost	
N&W	Esha Park to Warden Ave.						0%	0	65%	35%	61,090	
W.S.	14th Avenue to Royal Cres.						0%	0	65%	35%	11,709	
E.S.	Denison St. to 14th Avenue						0%	0	65%	35%	33,454	
B.S.	Royal Cres. To Highway 407						0%	0	100%	100%	174,636	
S.S.	Birchmount Rd. to Gonvette Drive						0%	0	0%	0%	0	
N.S.	Warden Ave. to Birchmount Rd.						0%	0	65%	35%	37,636	
N.S.	Woodbine to Esha Park						0%	0	65%	35%	40,726	
N.S.	Woodbine to Steelecase						0%	0	65%	35%	44,799	
E.S.	N of Simonston to John Street						0%	0	65%	35%	25,090	
Don Mills	Aldan Road to Woodbine						0%	0	65%	35%	12,545	
Esha Park Road	W.S.						0%	0	65%	35%	37,636	
Fourteenth Avenue	Steeles to Alden Road						0%	0	65%	35%	48,872	
Fourteenth Avenue	GO Rail to Kennedy Rd.						0%	0	0%	0%	41,840	
Fourteenth Avenue	N.S.						0%	0	0%	0%	71,726	
Fourteenth Avenue	Horstman St. To Roxbury St.						0%	0	0%	0%	0	
Fourteenth Avenue	S.S.						0%	0	0%	0%	0	
Fourteenth Avenue	Markham Rd. to Roxbury Street						0%	0	0%	0%	0	
Fourteenth Avenue	S.S. to Brimley Rd.						0%	0	0%	0%	0	
John Street	N.S.						0%	0	65%	35%	14,636	
Kennedy Road	Leslie Street to Woodbine						0%	0	65%	35%	63,126	
Kennedy Road	Highglen to Lee Avenue						0%	0	65%	35%	31,090	
Main St. north, Markham	E.S.						0%	0	65%	35%	16,727	
Main Street, South	Keaylin Road to N of Lee Avenue						0%	0	65%	35%	12,545	
Major Mackenzie	E.S.						0%	0	35%	35%	46,391	
Major Mackenzie	Castlemore to Major Mackenzie						0%	0	65%	35%	16,727	
Major Mackenzie	W.S.						0%	0	65%	35%	113,565	
Major Mackenzie	Highway 7 to Rouge River						0%	0	0%	0%	0	
Major Mackenzie	CNR to Markham by-pass						0%	0	0%	0%	0	
Major Mackenzie	N.S.						0%	0	0%	0%	0	
Major Mackenzie	Kennedy Rd. to McCowan Rd.						0%	0	0%	0%	0	
Major Mackenzie	McCowan Rd. to Markham Rd.						0%	0	0%	0%	0	
Major Mackenzie	OHEPC to Warden Avenue						0%	0	0%	0%	0	
Major Mackenzie	S.S.						0%	0	65%	35%	59,053	
Donald Cousens Parkway	Warden to Glenboume Park						0%	0	65%	35%	16,727	
Donald Cousens Parkway	Woodbine Ave. to Warden Ave.						0%	0	65%	35%	31,090	
Donald Cousens Parkway	E.S.						0%	0	65%	35%	83,489	
Donald Cousens Parkway	16th Avenue to 9th Line						0%	0	0%	0%	0	
Markham Road	E.S.						0%	0	0%	0%	0	
Markham Road	Highway 407 N. to 16th Avenue						0%	0	0%	0%	0	
Markham Road	E.S.						0%	0	0%	0%	0	
Miller Extension	E.S.						0%	0	0%	0%	0	
Ninth Line	B.S.						0%	0	0%	0%	0	
Ninth Line	Highway 407 S. to 9th Line						0%	0	0%	0%	0	
Victoria Park	E.S.						0%	0	0%	0%	0	
Victoria Park	James Scott Rd. to Highway 7						0%	0	0%	0%	0	
Victoria Park	E.S.						0%	0	0%	0%	0	
Victoria Park	Parkway Avenue to 16th Avenue						0%	0	0%	0%	0	
Victoria Park	E.S.						0%	0	0%	0%	0	
Victoria Park	Rodick Road to Birchmount Rd.						0%	0	0%	0%	0	
Victoria Park	B.S.						0%	0	0%	0%	0	
Victoria Park	14th Avenue to Miller Avenue						0%	0	0%	0%	0	
Victoria Park	E.S.						0%	0	0%	0%	0	
Victoria Park	Riviera Drive to 14th Avenue						0%	0	0%	0%	0	
Victoria Park	E.S.						0%	0	0%	0%	0	
Warden Avenue	S.S.						0%	0	0%	0%	0	
Warden Avenue	Markham Rd. to 300m westerly						0%	0	0%	0%	0	
Warden Avenue	Markham Rd. to Fincham Ave.						0%	0	0%	0%	0	
Warden Avenue	N.S.						0%	0	0%	0%	0	
Warden Avenue	Warden Ave. to York Downs						0%	0	0%	0%	0	
Warden Avenue	N.S.						0%	0	0%	0%	0	
Warden Avenue	CNR to Old Kennedy Rd.						0%	0	0%	0%	0	
Warden Avenue	E.S.						0%	0	0%	0%	0	
Warden Avenue	Steelecase to Denison						0%	0	0%	0%	0	
Warden Avenue	E.S.						0%	0	0%	0%	0	
Warden Avenue	16th Ave. to Major McKenzie						0%	0	0%	0%	0	
Warden Avenue	E.S.						0%	0	0%	0%	0	
W.S.	Calvert Dr. to Major McKenzie						0%	0	0%	0%	0	

APPENDIX B
TABLE 2

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

TOWN - WIDE HARD CHARGES		Location	From / To	Timing of Project	Total Gross Cost	Level Annual 2008 to 2026	Non-Development Charge Recoverable Costs			Town-Wide Development Charge Recoverable		
ILLUMINATION	E.S.						Local Costs	Share	Non-Growth (Benefit to Existing) Cost	Share	Cost	
Woodbine Avenue		Buittonville Crescent S to N			47,817	0%	0	65%	31,090	35%		
Yorktech Drive		Rodick Rd. to Enterprise Dr.			165,322	0%	0	0%	0	100%	16,727	
Castlemore /Anderson		Markham Rd. to CNR			45,426	0%	0	0%	0	100%	165,322	
Clegg Road Extension		East of Rodick to Town-Centre			47,817	0%	0	0%	0	100%	45,426	
Elgin Mills Road		Highway 404 to Hamlet E of Kennedy to Noble St.			174,636	0%	0	0%	0	100%	47,817	
Fourteenth Avenue		Markham by-pass to 9th by-pass			53,794	0%	0	0%	0	100%	53,794	
Fourteenth Avenue		McCowan Rd to Markham Rd.			174,636	0%	0	0%	0	100%	174,636	
Fourteenth Avenue		Ninth Line to Ninth Line by-pass Roxbury St. To 9th Line			244,490	0%	0	0%	0	100%	244,490	
Fourteenth Avenue		Woodbine Ave. to Rodick Road			116,424	0%	0	0%	0	100%	116,424	
Fourteenth Avenue		Woodbine to W. of Hwy 404			139,709	0%	0	0%	0	100%	139,709	
Fourteenth Avenue		9th to Markham By-Pass			71,726	0%	0	0%	0	100%	71,726	
Highway 7		N. 16th Ave to Major Mackenzie			107,588	0%	0	0%	0	100%	107,588	
Main St. north, Markham Main Street, South		Rouge River to south end			419,126	0%	0	0%	0	100%	419,126	
Major Mackenzie		CNR to Markham by-pass			174,636	0%	0	0%	0	100%	174,636	
Major Mackenzie		Glenbourne to Kennedy			53,794	0%	0	0%	0	100%	53,794	
Major Mackenzie		Kennedy Rd. to McCowan Rd.			59,771	0%	0	0%	0	100%	59,771	
Major Mackenzie		Markham Rd. to CNR			197,921	0%	0	0%	0	100%	197,921	
Major Mackenzie		Markland Street to Woodbine			244,490	0%	0	0%	0	100%	244,490	
Major Mackenzie		McCowan Rd. to Markham Rd.			53,794	0%	0	0%	0	100%	53,794	
Major Mackenzie		Warden Avenue to Kennedy			59,771	0%	0	0%	0	100%	59,771	
Major Mackenzie		Woodbine Avenue to OHPC Highway 407 N. to 16th Avenue			244,490	0%	0	0%	0	100%	244,490	
Major Mackenzie		Highway 407 S. to 9th Line			71,726	0%	0	0%	0	100%	71,726	
Donald Cousens Parkway		Major Mackenzie to Highway 48			325,987	0%	0	0%	0	100%	325,987	
Donald Cousens Parkway		Major Mackenzie to Ninth Line			349,272	0%	0	0%	0	100%	349,272	
Donald Cousens Parkway		Woodbine Ave. to Rodick Road			314,345	0%	0	0%	0	100%	314,345	
Miller Avenue		14th Avenue to Highway 407			174,636	0%	0	0%	0	100%	174,636	
Ninth Line		16th Ave. to Major Mackenzie			190,935	0%	0	0%	0	100%	190,935	
Ninth Line		16th Ave. to Markham By-Pass			116,424	0%	0	0%	0	100%	116,424	
Ninth Line		Church St. to 16th Avenue			232,848	0%	0	0%	0	100%	232,848	
Ninth Line		OHEPC to South of Highway 407 Steeles Ave. to Denison St.			107,588	0%	0	0%	0	100%	107,588	
Old Kennedy Road		9th to Markham By-Pass			157,172	0%	0	0%	0	100%	157,172	
Sixteenth Avenue		Bruce River to Highway 404			272,432	0%	0	0%	0	100%	272,432	
Sixteenth Avenue		Woodbine to Rouge River			419,126	0%	0	0%	0	100%	419,126	
Sixteenth Avenue		York Downs to Kennedy Road			71,726	0%	0	0%	0	100%	71,726	
Sixteenth Avenue		Markham Rd. to CNR			47,817	0%	0	0%	0	100%	47,817	
Sixteenth Avenue		16th Ave. to Calvert Road			59,771	0%	0	0%	0	100%	59,771	
Warden Avenue		Enterprise to Riverside Dr.			162,994	0%	0	0%	0	100%	162,994	
Woodbine Avenue		N. limit of Cathederal to 13th Avenue			47,817	0%	0	0%	0	100%	47,817	
Woodbine Avenue		Hamlet to N. of Cathederal			71,726	0%	0	0%	0	100%	71,726	
Woodbine By-pass		Major Mackenzie to Hamlet S			193,846	0%	0	0%	0	100%	193,846	
Woodbine By-pass		Lord Melbone to Existing Woodbine			52,001	0%	0	0%	0	100%	52,001	
Woodbine By-pass		Elgin Mills to Lord Melbone			151,351	0%	0	0%	0	100%	151,351	
Woodbine By-pass					186,278	0%	0	0%	0	100%	186,278	
Woodbine By-pass					59,771	0%	0	0%	0	100%	59,771	

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

TOWN -WIDE HARD CHARGES		Location	From / To	Timing of Project	Total Gross Cost	Non-Development Charge Recoverable Costs			Town-Wide Development Charge Recoverable		
Level	Annual					Local Costs	Share	Cost	Share	Cost	
ILLUMINATION											
Woodbine By-pass	Major Mackenzie to Elgin Mills			2008 to 2026	488,981	0%	0	0%	0	100%	488,981
YMCA Boulevard	GO Station to Kennedy Road				114,096	0%	0	0%	0	100%	114,096
Church Street	Country Glen to Bur Oak				38,254	0%	0	0%	0	100%	38,254
Fourteenth Avenue	Rodlick Rodick to Alden Road				139,709	0%	0	65%	90,837	35%	48,872
Donald Cousens Parkway	Steeles Ave. to OHFPC				133,888	0%	0	0%	0	100%	133,888
Donald Cousens Parkway	Steeles Ave. to OHFPC				133,888	0%	0	0%	0	100%	133,888
Nineteenth Avenue	Highway 404 to Woodbine				244,490	0%	0	0%	0	100%	244,490
Raeor Road	North to south of Highway 7				238,669	0%	0	0%	0	100%	238,669
Town-wide illumination requests	0				1,075,000	0%	0	65%	698,953	35%	376,047
Warden Avenue Widening, illumination 10	125,668				125,668	0%	0	0%	0	100%	125,668
Woodbine Avenue	Through Hamlet				59,771	0%	0	65%	38,863	35%	20,909
TOTAL ILLUMINATION					\$ 16,085,612	0%	\$ -	19%	\$ 3,036,569	81%	\$ 13,059,044

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

TOWN - WIDE HARD CHARGES		From / To	Location	Timing of Project	Total Gross Cost	Share	Local Costs	Cost	Non-Development Charge Recoverable	Non-Growth (Benefit to Existing)	Cost	Share	Town-Wide Development Charge Recoverable
INTERSECTION													
Carlton Road		at Manhattan Drive		Level Annual 2008 to 2026	209,622	0%	0	0	65%	136,294	35%	73,328	
Commerce Valley Drive		at Leslie Street			658,088	0%	0	0	65%	427,881	35%	230,207	
Denise Lane		at Birchmount Road			446,292	0%	0	0	35%	157,640	65%	288,652	
Henderson Street		at Aileen / Willowbrook			446,292	0%	0	0	65%	290,174	35%	156,118	
Henderson Street		at John Street			209,622	0%	0	0	65%	136,294	35%	73,328	
Mid-block Crossing Hwy 404	0	at Princeton Avenue between Elgin Mills & 19th Ave.			684,411	0%	0	0	65%	444,966	35%	239,415	
Mid-block Crossing Hwy 404	0	at between Highway 7 and 16th Ave.			209,622	0%	0	0	0%	0	100%	209,622	
Rodick Road		at Clegg Road			209,622	0%	0	0	0%	0	100%	209,622	
Rodick Road		at Cox Blvd.			209,622	0%	0	0	0%	0	100%	209,622	
Rodick Road		at Macmill / Rachel			209,622	0%	0	0	0%	0	100%	209,622	
Town Centre Blvd.		at Apple Creek Blvd.			446,292	0%	0	0	65%	290,174	35%	156,118	
Birchmount Extension		at Miller Avenue			209,622	0%	0	0	0%	0	100%	209,622	
Emmiley Road		at Winston / Wilcay			209,622	0%	0	0	35%	74,043	65%	135,579	
Bur Oak Avenue		at Alford Paterson Drive			209,622	0%	0	0	0%	0	100%	209,622	
Bur Oak Avenue		at Church Street			209,622	0%	0	0	0%	0	100%	209,622	
Bur Oak Avenue		at Mingay Avenue			209,622	0%	0	0	0%	0	100%	209,622	
Bur Oak Avenue		at Roy Raney Avenue			209,622	0%	0	0	0%	0	100%	209,622	
Bur Oak Avenue		at Stonebridge Drive			209,622	0%	0	0	0%	0	100%	209,622	
Bur Oak Avenue		at The Bridlewalk			209,622	0%	0	0	0%	0	100%	209,622	
Bur Oak Avenue		at White's Hill Avenue			209,622	0%	0	0	0%	0	100%	209,622	
Bur Oak Avenue		at Williamson Road			209,622	0%	0	0	0%	0	100%	209,622	
Bur Oak Avenue		at Village Parkway			209,622	0%	0	0	0%	0	100%	209,622	
Bur Oak Avenue		at Delray Drive			209,622	0%	0	0	0%	0	100%	209,622	
Bur Oak Avenue		at Mingay Avenue			209,622	0%	0	0	0%	0	100%	209,622	
Bur Oak Avenue		at Roy Raney Avenue			209,622	0%	0	0	0%	0	100%	209,622	
Bur Oak Avenue		at Stonebridge Drive			209,622	0%	0	0	0%	0	100%	209,622	
Bur Oak Avenue		at The Bridlewalk			209,622	0%	0	0	0%	0	100%	209,622	
Bur Oak Avenue		at Sciberras Road			209,622	0%	0	0	0%	0	100%	209,622	
Bur Oak Avenue		at West Valley Road			209,622	0%	0	0	0%	0	100%	209,622	
Bur Oak Avenue		at Rivera Drive (east of Rodick)			675,632	0%	0	0	0%	0	100%	675,632	
Bur Oak Avenue		at East side of Kennedy Road			209,622	0%	0	0	0%	0	100%	209,622	
Highway 7		Between 8th Line and Markham by-pass			612,021	0%	0	0	0%	0	0	612,021	
Main Street, Markham		at Bur Oak Avenue			209,622	0%	0	0	0%	0	100%	209,622	
Main Street, Markham		at Castlemore Avenue			251,419	0%	0	0	0%	0	100%	251,419	
Markham Centre Turning Lane & Unionville		at Hillmount Road			545,000	0%	0	0	0%	0	100%	545,000	
Markland		at Old Kennedy Road			209,622	0%	0	0	0%	0	100%	209,622	
Midland Avenue		at YMCA Blvd.			175,309	0%	0	0	0%	0	100%	175,309	
Rivas Drive		at Birchmount Extension			209,622	0%	0	0	0%	0	100%	209,622	

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

TOWN -WIDE HARD CHARGES		From / To	Timing of Project	Total Gross Cost	Local Costs	Share	Non-Development Charge Recoverable Costs Existing)	Benefit to Existing)	Non-Development Charge Recoverable Costs		Share	Town-Wide Development Charge Recoverable Cost
Intersection	Location								Cost	Cost		
Riverside Drive	at Sciberras Road			209,622	0%	0	0%	0	0	0	0%	209,622
Riverside Drive	at Verclair Gate			209,622	0%	0	0%	0	0	0	100%	209,622
Riverwalk Drive	at Fieldside Street			209,622	0%	0	0%	0	0	0	100%	209,622
Riverwalk Drive	at Oakbrook Drive			209,622	0%	0	0%	0	0	0	100%	209,622
Steeles Avenue	at Innamount Crescent			256,956	0%	0	0%	0	0	0	100%	256,956
Steeles Avenue	at Shadlock Street			256,956	0%	0	0%	0	0	0	100%	256,956
Town Centre Blvd.	at Clegg Road			209,622	0%	0	0%	0	0	0	100%	209,622
Village Gate	at Calvert Road			209,622	0%	0	0%	0	0	0	100%	209,622
White's Hill Avenue	at Existing Markham by-pass			209,622	0%	0	0%	0	0	0	100%	209,622
Woodbine Avenue	at Stony Hill Blvd.			209,622	0%	0	0%	0	0	0	100%	209,622
Woodbine Avenue	at Vinecliff Blvd.			209,622	0%	0	0%	0	0	0	100%	209,622
404 North employment Land N-S Road Internal Traffic Signals (3)	at Bentley Street			612,021	0%	0	0%	0	0	0	100%	612,021
Aden Road	at Old Kennedy Road			209,622	0%	0	0%	0	0	0	100%	209,622
Alder Grove Drive	at McNabb			446,292	0%	0	65%	136,294	35%	73,328	35%	288,652
Birchmount (Int. Imp.)	at Cardiff / Worthing			209,622	0%	0	35%	74,043	65%	135,579	65%	135,579
Brimley Road	at Randall			209,622	0%	0	35%	74,043	65%	135,579	65%	135,579
Bur Oak Avenue	btwn Bindle Walk and Glenbrook (IPS)			83,318	0%	0	50%	41,659	50%	41,659	50%	41,659
Bur Oak Avenue	at Country Glen Road			209,622	0%	0	0%	0	0	0	100%	209,622
Bur Oak Avenue	at Dog Wood			209,622	0%	0	0%	0	0	0	100%	209,622
Bur Oak Avenue	at East-West Road			209,622	0%	0	0%	0	0	0	100%	209,622
Bur Oak Avenue	at GO Station, east of HWY 48			209,622	0%	0	0%	0	0	0	100%	209,622
Bur Oak Avenue	at Greensborough Village Cir. (IPS)			83,318	0%	0	65%	136,294	35%	73,328	35%	73,328
Cartion Road	at Main Street, Unionville			209,622	0%	0	50%	41,659	50%	41,659	50%	41,659
Church Street	at Country Glen Road			209,622	0%	0	65%	136,294	35%	73,328	35%	73,328
Fairburn Drive	at Wooten Way			209,622	0%	0	0%	0	0	0	100%	209,622
Fourteenth Avenue	at First Markham Place			209,622	0%	0	65%	136,294	35%	73,328	35%	73,328
Fourteenth Avenue	at Mid Block (east of Woodbine)			209,622	0%	0	65%	136,294	35%	73,328	35%	73,328
Rodick Road	at Rodick Road			209,622	0%	0	0%	0	0	0	100%	209,622
Highway 7	at Main Street, Markham			1,947,094	50%	973,547	33%	632,989	17%	340,558	35%	340,558
Hood Road	at McPherson Road			209,622	0%	0	65%	136,294	35%	73,328	35%	73,328
Joseph / Washington / George intersection improvements	at Between Major Mac. & Elgin Mills.			446,292	0%	0	65%	290,174	35%	156,118	35%	156,118
Mid-block Crossing Hwy 404	0			209,622	0%	0	0%	0	0	0	100%	209,622
Middlefield (Int. Imp.)	at Elson Street			446,292	0%	0	50%	223,146	50%	223,146	50%	223,146
Midland Avenue	at Steeles Avenue			209,622	0%	0	0%	0	0	0	100%	209,622
Ramona Blvd.	at Wooten Way			209,622	0%	0	65%	136,294	35%	73,328	35%	73,328
Rizal Avenue	at Copper Creek			209,622	0%	0	0%	0	0	0	100%	209,622
Rizal Avenue	at Riverwalk Drive			209,622	0%	0	0%	0	0	0	100%	209,622
Rodick Road	at East-West Collection (Miller)			209,622	0%	0	0%	0	0	0	100%	209,622
Rodick Road	at Miller Avenue			209,622	0%	0	0%	0	0	0	100%	209,622
Sixteenth Avenue	at Yorktech Road			209,622	0%	0	0%	0	0	0	100%	209,622
Sixteenth Avenue	at Main Street, Markham			1,234,978	46%	567,378	19%	235,525	35%	431,975	35%	431,975
Town-wide Intersection Improvements	at Cedarland Drive			209,622	0%	0	0%	0	0	0	100%	209,622
Victoria Park and Steelcase Intersection Improvements	at 19th Avenue			686,042	0%	0	0%	0	0	0	100%	686,042
Honda Blvd.				446,292	0%	0	33%	157,640	65%	288,652	65%	288,652
				209,622	0%	0	0%	0	0	0	100%	209,622

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

TOWN -WIDE HARD CHARGES		Timing of Project	Total Gross Cost	Non-Development Charge Recoverable Costs			Share	Cost	Town-Wide Development Charge Recoverable
Location	From / To			Local Costs	Share	Cost			
INTERSECTION									
Carlton Road	at West of Manhattan (IPS)	Level Annual 2008 to 2026	\$3,318	0%	0	100%	\$3,318	0%	0
John Street	at West of Don Mills (IPS)		\$3,318	0%	0	100%	\$3,318	0%	0
Main Street, Markham	at Edward Jeffery's Avenue		209,622	0%	0	0%	0	100%	209,622
TOTAL INTERSECTION			\$ 26,726,680	6%	\$ 1,540,925	21%	\$ 5,488,914	74%	\$ 19,696,842

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

TOWN -WIDE HARD CHARGES		Location	From / To	Timing of Project	Total Gross Cost	Non-Development Charge Recoverable Costs			Town-Wide Development Charge Recoverable		
Share	Cost	Local Costs	Share	Cost	Non-Growth (Benefit to Existing)	Share	Cost	Share	Cost		
ROADS											
14th Avenue Reconstruction	Town settlement with Cedarand Relocation of Concanmar Pond N. limit CNR to N limit Hwy 407 S of CNR to S of 14th Avenue Enterprise to Rouge River	2008	270,500	0%	0	0%	0	0%	0	270,500	
Birchmount Road	Highway 7 to Rouge River Hwy 407 to Enterprise Drive	2008	4,728,914	0%	0	0%	0	0%	0	4,728,914	
Birchmount Road	Riverlands Ave. to Michilina Terrace	2009	1,784,489	0%	0	0%	0	0%	0	1,784,489	
Birchmount Road, 4th lane	Langstaff Rd to Richmond Hill	2008	1,206,041	0%	0	0%	0	0%	0	1,206,041	
Birchmount Road, 4th lane	Commerce Valley Drive East Widening to 4 lanes	2015	1,182,500	0%	0	0%	0	0%	0	1,182,500	
Bur Oak Avenue, 4th lane	Enterprise Drive West Widening to 4 lanes	2010	1,067,485	0%	0	0%	0	0%	0	1,067,485	
Cedar Avenue Extension	Rivas Road to GO Line Sciberras to CNR Rivas Road to Main Street S Warden to Sciberras	2008	1,338,366	0%	0	0%	0	0%	0	1,338,366	
Commerce Valley Drive	16th Ave. to Major Mackenzie Drive Highway 407 to Highway 7 Rodick Road to Birchmount Rd.	2008	2,648,166	0%	0	0%	0	0%	0	2,648,166	
Riverside Drive, 4th lane	Riverside (N-S Connection Road), 4th Lane Warden to Birchmount	2015	1,531,338	50%	0	0%	0	0%	0	1,531,338	
Main St. North, Markham	Rodick (2 to 4 lanes) Rodick Extension	2010	1,887,378	0%	0	0%	0	0%	0	1,887,378	
Main St. South, Markham	Highway 407 to Highway 7 YMCA Boulevard	2010	1,209,375	0%	0	0%	0	0%	0	1,209,375	
Miller (2) / Yorktech (2)	Riviera Drive to Esna Park Drive Riviera Drive to 14th Avenue Kennedy Rd / Town Owned ROW	2011	6,039,880	0%	0	0%	0	0%	0	6,039,880	
Riviera Drive (N-S Connection Road)	14th Avenue to Miller Avenue Riviera Drive to 14th Avenue Kennedy Rd / Town Owned ROW	2012	3,284,617	0%	0	0%	0	0%	0	3,284,617	
Riverside Drive, 4th lane	Rodick to Birchmount	2016	5,586,889	0%	0	0%	0	0%	0	5,586,889	
South Unionville, 4th lane	Town Centre Blvd. widening Unionville Gate widening YMCA Boulevard 16th Avenue Birchmount Road, 3rd lane Birchmount Road, 3rd lane Bur Oak Avenue, 3rd lane Clegg Road Ext. (3rd lane) Enterprise Drive, 3rd lane Enterprise Drive, 3rd lane Enterprise Drive, 3rd lane(3m) Enterprise Drive, 3rd lane(3m) Existing Markham by-pass Kirkham Drive Midland Avenue Ninth Line improvements Rivers Drive (N-S Connection Road), 3rd Lane Riverside Drive, 3rd lane Sciberras Drive, 3rd lane South Unionville, 3rd lane	2010	2,970,000	0%	0	0%	0	0%	0	2,970,000	
South Unionville, 4th lane	Town-wide Soil Decommission / Demolitions Main Street S to Kennedy Road GO Station to Kennedy Road Warden Avenue to 9th Line Enterprise to Rouge River Hwy 407 to Enterprise Drive Riverlands Ave. to Michilina Terrace Town-Centre to Warden Ave. Rivas Road to GO Line Sciberras to CNR Rivas Road to Main Street S Warden to Sciberras	2008	1,988,800	100%	1,988,800	0%	0%	0	0%	1,988,800	
South Unionville, 4th lane	Included Above	2009	2,322,136	0%	0	35%	0	0%	0	2,322,136	
South Unionville, 4th lane	Included Above	2009	5,068,093	0%	0	0%	0	0%	0	5,068,093	
South Unionville, 4th lane	Included Above	2010	869,000	68%	588,090	0%	0%	0	0%	588,090	
South Unionville, 4th lane	Included Above	2010	549,081	0%	0	0%	0	0%	0	549,081	
South Unionville, 4th lane	Included Above	2012	2,150,000	0%	0	0%	0	0%	0	2,150,000	
South Unionville, 4th lane	Included Above	2009	3,562,654	0%	0	0%	0	0%	0	3,562,654	
South Unionville, 4th lane	Included Above	2008	1,554,847	0%	0	0%	0	0%	0	1,554,847	
South Unionville, 4th lane	Included Above	2012	8,005,459	23%	1,880,000	42%	0	0%	0	1,880,000	
South Unionville, 4th lane	Included Above	2008	2,422,510	0%	0	0%	0	0%	0	2,422,510	
South Unionville, 4th lane	Included Above	2008	1,436,763	20%	1,000,000	42%	0	0%	0	1,436,763	
South Unionville, 4th lane	Included Above	2012	1,433,988	0%	0	0%	0	0%	0	1,433,988	
South Unionville, 4th lane	Included Above	2009	321,989	0%	0	0%	0	0%	0	321,989	
South Unionville, 4th lane	Included Above	2017	1,752,384	0%	0	75%	0	0%	0	1,752,384	
South Unionville, 4th lane	Included Above	2008	962,677	0%	0	0%	0	0%	0	962,677	
South Unionville, 4th lane	Included Above	2010	962,677	0%	0	0%	0	0%	0	962,677	

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

TOWN -WIDE HARD CHARGES		Location	From / To	Timing of Project	Total Gross Cost	Non-Development Charge Recoverable Costs			Town-Wide Development Charge Recoverable		
ROADS						Local Costs	Share	Non-Growth (Benefit to Existing)	Cost	Share	Cost
Village Parkway Realignment	Highway 7 to Buchanan Drive			By the local Developer	0%	0	10%	184,150	90%	1,657,348	
Woodbine urbanize - By-pass to Hamlet (S and)		2015	1,841,498	0%	0	0%	127,488	90%	1,147,395		
Woodbine urbanize - Hamlet (N end) to by-pass		2015	1,274,983	0%	0	100%	861,782	0%	0		
Woodbine urbanize - Thought Hamlet		2015	861,782	0%	0	0%	0	100%	0		
Centurion Drive Reconstruction	Allstate Parkway to Woodbine	2010	2,101,007	0%	0	0%	0	0	2,101,007		
Church Street	Ninth Line to Bur Oak Blvd.	2013	1,181,318	0%	0	0%	0	0	1,181,318		
Miller Reconstruction	Woodbine Avenue to Rodick Road	2010	2,511,394	0%	0	0%	0	0	2,511,394		
Main Street South, Unionville Reconstruction, south of Highway 7		2009	934,539	0%	0	100%	934,539	0%	0		
Main Street, Markham	Highway 7 to 16th Avenue	2012	3,173,181	0%	0	100%	3,173,181	0%	0		
Elgin Mills Reconstruction	Woodbine by-pass to Woodbine			Region of York DC project	0%	0	0%	0	100%	0	
Nineteenth Ave. Reconstruction	Highway 404 to Woodbine Avenue	2010	2,824,274	0%	0	0%	0	0	2,824,274		
Reesor Reconstruction	North to south of Highway 7	2016	5,437,118	0%	0	0%	0	0	5,437,118		
Honda Boulevard	Woodbine By-pass to 19th Avenue	2009	2,956,250	0%	0	0%	0	0	470,313		
Street I	Woodbine Avenue to Honda Blvd.	2011	1,182,500	0%	0	0%	0	0	168,125		
Town-wide Road Projects		2009	500,000	0%	0	0%	0	0	500,000		
South Unionville, local ROW (Holdout Property)		2010	726,630	0%	0	0%	0	0	726,630		
Copper Creek Drive, 4th lane	9th Line to 9th Line By-pass	2009	0	0%	0	0%	0	0	0		
Copper Creek Drive, 4th lane	9th Line By-pass to Markham By-pass		1,300,750	0%	0	0%	0	0	1,300,750		
TOTAL ROADS			\$ 107,834,950	6%	\$ 6,222,559	13%	\$ 13,832,438	67%	\$ 72,440,462		

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

TOWN - WIDE HARD CHARGES		Timing of Project		Total Gross Cost	Local Costs		Non-Growth (Benefit to Existing)		Non-Development Charge Recoverable Costs		Town-Wide Development Charge Recoverable Costs	
Location	From / To	Share	Cost	Share	Cost	Share	Cost	Share	Cost	Share	Cost	
PROPERTIES ACQUISITION												
A - ROADS PROPERTIES ACQUISITION												
Birchmount Road ROW	CNR to N. limit Hwy 407	2008	2,216,100	0%	0	0%	0	0%	0	100%	2,216,100	
Birchmount Road ROW	South of 14th Avenue to CNR	2009	836,902	0%	0	0%	0	0%	0	100%	836,902	
Birchmount Road, 4th ROW	Hwy 407 to Rouge River	2008	625,064	0%	0	0%	0	0%	0	100%	625,064	
Birchmount Road, 6m ROW	Highway 7 to Rouge River	2012	432,700	0%	0	0%	0	0%	0	100%	432,700	
Box Grove temporary Markham by-pass, properties (20m ROW)	properties (20m ROW)	2009	4,484,078	0%	0	0%	0	0%	0	100%	4,484,078	
Bur Oak Avenue, 4th ROW	Riverlands Ave. to Michilina Terrace Property	2008	379,232	0%	0	0%	0	0%	0	100%	379,232	
Cedar Avenue Extension	Quan Property	2008	2,258,130	50%	1,129,065	0%	0	0%	0	50%	1,129,065	
Enterprise, Property (over 26m)	Sciberras to CNR	2008	7,428,765	0%	0	0%	0	0%	0	61%	4,546,124	
Enterprise Drive, 4th lane (3m)	Warden to Sciberras	2008	135,174	0%	0	0%	0	0%	0	100%	135,174	
Main St. North, properties	16th Ave. to Markham By-pass	2008	900,680	0%	0	0%	0	0%	0	100%	900,680	
Main St. south, Markham additional ROW	Miller / Yorklech R. ROW	2011	625,690	0%	0	10%	0	62,569	0	90%	563,121	
Riverside Drive, 4th lane (3m)	Rodick Road to Birchmount Rd.	2012	1,956,558	0%	0	0%	0	0	0	100%	1,956,558	
South Unionville, 4th lane (3m)	Warden to Birchmount	2016	8,656,235	0%	0	0%	0	0	0	100%	8,656,235	
Birchmount Road, 3rd ROW	Kennedy Rd / Town Owned ROW	2010	0	0%	0	0%	0	0	0	0%	0	
Birchmount Road, 3rd ROW	Highway 7 to Rouge River	2012	263,532	0%	0	0%	0	0	0	100%	263,532	
Bur Oak Avenue, 3rd ROW	Hwy 407 to Rouge River	2008	216,350	0%	0	0%	0	0	0	100%	216,350	
East Precinct Property	Riverlands Ave. to Michilina Terrace	2008	625,064	0%	0	0%	0	0	0	100%	625,064	
Enterprise Drive, 3rd lane (3m)	GIC Holding	2008	379,232	0%	0	0%	0	0	0	100%	379,232	
Enterprise Drive, 3rd lane (3m)	Quan Property	2008	3,009,000	0%	0	0%	0	0	0	38%	1,158,159	
Enterprise Drive, 3rd lane (3m)	Included Above	2008	0	0%	0	0%	0	0	0	0%	0	
Riverside Drive, 3rd lane (3m)	Sciberras to CNR	2008	135,174	0%	0	0%	0	0	0	100%	135,174	
Riverside Drive, 3rd lane (3m)	Warden to Sciberras	2008	900,680	0%	0	0%	0	0	0	100%	900,680	
Rodick Extension Properties	14th Avenue to Esna Park Drive	2008	0	0%	0	0%	0	0	0	100%	0	
South Unionville, 3rd lane (3m)	Kennedy Rd / Town Owned ROW	2010	263,532	0%	0	0%	0	0	0	100%	263,532	
Centurion Drive Reconstruction	Commerce Valley Drive ROW requirements	2010	117,920	0%	0	0%	0	0	0	100%	117,920	
Midland Avenue (over local ROW requirement)	0	0	0%	0	0	0%	0	0	0	100%	0	
Town-wide properties Acquisition request and Business Losses	2009	1,304,338	0%	0	0%	0	0	0	0	100%	1,304,338	
Unionville Gate widening - property requirements	2011	1,618,769	0%	0	0%	0	0	0	0	100%	1,618,769	
Hardy Boulevard R.O.W. (6m)	Woodbine By-pass to 19th Avenue	2009	0	0%	0	0%	0	0	0	100%	0	
Street 1 R.O.W. (6m)	Woodbine Avne to Honda Blvd.	2011	58,581	0%	0	0%	0	0	0	100%	144,035	
Copper Creek Drive, 4th Lane Property Tributary B to Donald Cousens Parkw	Woodline Avne to Honda Blvd.	2009	314,547	0%	0	0%	0	0	0	100%	58,581	
R.O.W. requisition for sidewalks construction	B - PROPERTIES ACQUISITION for SIDEWALKS	2008 - 2026	1,046,000	0%	0	65%	0	679,447	35%	35%	365,553	
C - PROPERTIES ACQUISITION for 2004 STRUCTURE PROJECTS												
Mid-block Crossing Hwy 404 property - Hwy 7 to 16th Avenue	2009	4,851,712	67%	3,234,476	0%	0	0	0	0	33%	1,617,237	
Mid-block Crossing Hwy 404 property - Major Mac. to Elgin Mills	2018	2,758,800	67%	1,839,200	0%	0	0	0	0	33%	919,600	
C - NEW PROPERTIES ACQUISITION												
Fourteenth Avenue Grade Separation, Property	2013	525,776	0%	873,045	0%	0	0%	0	0	33%	525,776	
Mid-block Crossing Hwy 404 Easements - 16th avenue to Major Mackenzie	2009	1,309,568	67%	0	0	0	0	0	0	33%	436,523	
Mid-block Crossing Hwy 404 property - Elgin Mills to 19th Avenue	2020	2,069,100	67%	1,379,400	0%	0	0	0	0	17%	344,850	
Ramps to Hwy 404 Property	2010	1,306,591	0%	0	0	0	0	0	0	100%	1,306,591	
Ramps to Hwy 404 Property	Highway 7 Major Mackenzie Drive	0	Dedicates under Planning Act	0	Dedicates under Planning Act	0	Dedicates under Planning Act	0	Dedicates under Planning Act	0	Dedicates under Planning Act	
TOTAL PROPERTIES ACQUISITION												
\$ 54,567,328	15% \$	\$ 8,455,185	1% \$	\$ 742,016	74% \$	\$ 40,291,796						

TOTAL PROPERTIES ACQUISITION

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

TOWN - WIDE HARD CHARGES

Location	From / To	Timing of Project	Total Gross Cost	Local Costs	Non-Growth (Benefit to Existing)	Non-Development Charge Recoverable Costs	Share	Town-Wide Development Charge Recoverable	Cost
SIDEWALKS									
Bayview Ave.	E.S. Green Line to Willowbrook Rd	2008 - 2026	90,399	0%	0	65% 58,777	35%	31,623	
Birchmount Rd.	B.S. Royal Cres. To N. limit of Hwy 407		172,431	0%	0	0% 0	100%	172,431	
Don Mills	E.S. Simonston Blvd. S to N		105,466	0%	0	35% 37,253	65%	68,1213	
Fourteenth Avenue	N.S. Birchmount Rd to Kennedy Rd		190,756	0%	0	35% 67,379	65%	123,377	
Fourteenth Avenue	S.S. Boxwood Cres. To 9th Line		97,933	0%	0	65% 63,675	35%	34,258	
Highway 7	N.S. Kennedy Rd. to Bullock Dr		146,735	0%	0	0% 0	100%	146,735	
Highway 7	S.S. W of Swansea to Oakcrest Rd.		60,266	0%	0	65% 39,184	35%	21,082	
Highway 7	N.S. W. of Wardan to Verclaire		22,600	0%	0	65% 14,694	35%	7,906	
Highway 7	S.S. Yonge St. to Bayview Ave.		293,471	0%	0	65% 190,811	35%	102,659	
Kennedy Road	W.S. Danby Cr. To 16th Avenue		218,413	0%	0	65% 142,009	35%	76,403	
Kennedy Road	E.S. Highway 407 Crossing		117,388	0%	0	65% 76,325	35%	41,064	
Main St. north, Markham	E.S. N. 16th Ave to Major Mackenzie		293,471	0%	0	35% 103,680	65%	189,811	
Major Mackenzie	S.S. Markham Rd. to CNR		53,115	0%	0	65% 34,535	35%	18,580	
Major Mackenzie	S.S. Warden to Glenbourne Park		47,213	0%	0	65% 30,698	35%	16,516	
Major Mackenzie	S.S. Woodbine to Warden Avenue		235,656	0%	0	65% 153,221	35%	82,435	
Donald Cousens Parkway	W.S. Highway 407 Crossing (north)		60,266	0%	0	0% 0	100%	60,266	
Donald Cousens Parkway	W.S. Highway 407 Crossing (south)		60,266	0%	0	0% 0	100%	60,266	
Markham Road	W.S. Princess Rd. to Highway 7		132,062	0%	0	65% 85,865	35%	46,197	
Miller Extension	1. Rodick Road to Birchmount Rd.		212,665	0%	0	0% 0	100%	212,665	
Ninth Line	E.S. Highway 407 Crossing (north)		60,266	0%	0	0% 0	100%	60,266	
Ninth Line	E.S. Highway 407 Crossing (south)		60,266	0%	0	0% 0	100%	60,266	
Ninth Line	W.S. Highway 407 to 16th Avenue		304,628	0%	0	65% 198,066	35%	106,562	
Rodick Extension	B.S. Riviera Drive to Esna Park Drive		86,812	0%	0	35% 30,664	65%	56,148	
Rodick Road	B.S. Yorktech Road to Millar Avenue		151,952	0%	0	35% 53,673	65%	98,279	
Rodick Widening	W.S. 14th Avenue to Millar Avenue		89,773	0%	0	35% 31,710	65%	58,063	
Sidewalks construction crossing	B.S. Riviera Drive to 14th Avenue		25,956	0%	0	65% 16,876	35%	9,080	
Sixteenth Avenue	N.S. Highway / water course		1,612,500	0%	0	65% 1,048,429	35%	564,071	
Steeles Avenue	N.S. Warden Ave. to York Downs		234,777	0%	0	65% 152,649	35%	82,128	
Warden Avenue	N.S. CNR to Old Kennedy Rd.		30,133	0%	0	0% 0	100%	30,133	
Warden Avenue	E.S. 16th Ave. to Major Mackenzie		308,144	0%	0	65% 200,352	35%	107,792	
Woodbine Ave	W.S.. Calvert Dr. to Major Mackenzie		249,450	0%	0	65% 162,190	35%	87,261	
Woodbine Ave	E.S. Highway 407 Crossing		117,388	0%	0	35% 41,464	65%	75,924	
Woodbine Ave	W.S. Highway 407 Crossing		117,388	0%	0	35% 41,464	65%	75,924	
Woodbine Ave	W.S.. Hooper Rd to Rouge River		52,733	0%	0	65% 34,286	35%	18,447	
Woodbine Ave	E.S. Persona to Major Mackenzie		117,388	0%	0	65% 76,325	35%	41,064	
Yorktech Drive	1. Rodick Rd. to Warden Road		163,235	0%	0	0% 0	100%	163,235	
Alden Road	N.S. Esna Park to Warden Ave.		220,103	0%	0	65% 143,108	35%	76,995	
Birchmount Rd.	B.S. 14th Avenue to Royal Cres.		84,373	0%	0	65% 54,858	35%	29,515	
Castlemore / Anderson	B.S. Markham Rd. to CNR		114,506	0%	0	0% 0	100%	114,506	
Denison St.	N.S. E of Clayton to Milliken Meadows		42,186	0%	0	0% 0	100%	42,186	
Denison St.	S.S. Victoria Park to Esna Park		108,479	0%	0	100% 108,479	0%	0	0%
Denison St.	N.S. Warden Ave. to E of Clayton Dr		220,103	0%	0	100% 220,103	0%	0	0%
Denison St.	S.S. Woodbine to Steelecase		90,399	0%	0	100% 90,399	0%	0	0%

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TABLE 2

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

TOWN -WIDE HARD CHARGES		Location	From / To	Timing of Project	Total Gross Cost	Local Costs	Non-Development Charge Recoverable Costs			Town-Wide Development Charge Recoverable Costs		
							Share	Cost	Share	Existing) Cost	Share	Cost
SIDEWALKS												
Elgin Mills Road	B.S.	Highway 404 to Hamlet			183,926	0%	0	0%	176,082	0	100%	183,926
Etna Park Road	W.S.	IBM to Alden Road			176,082	0%	0	100%	82,866	0	0%	0
Etna Park Road	N.S.	Woodbine to 550 m westerly			82,866	0%	0	100%	82,866	0	0%	0
Fourteenth Avenue	N.S.	Brimley Road to McCowan Rd			105,486	0%	0	0%	0	0	100%	105,486
Fourteenth Avenue	N.S.	McCowan Rd to Markham Rd			45,200	0%	0	0%	0	0	100%	45,200
Fourteenth Avenue	B.S.	Ninth Line to Markham by-pass			287,385	0%	0	0%	0	0	100%	287,385
Fourteenth Avenue	N.S.	Foxbury St. To 9th Line			183,419	0%	0	0%	0	0	100%	183,419
Fourteenth Avenue	S.S.	Woodbine Ave. to Alden Road			264,124	0%	0	0%	93,294	0	100%	170,830
Fourteenth Avenue	S.S.	Woodbine to W of Hwy 404			132,062	0%	0	0%	0	0	65%	132,062
Highway 7	B.S.	9th to Markham By-Pass			413,834	0%	0	0%	0	0	100%	413,834
Highway 7	S.S.	Fairburn Dr. to Rodick Road			82,866	0%	0	50%	41,433	0	50%	41,433
Highway 7	N.S.	Montgomery Dr. to Rodick Rd.			82,866	0%	0	50%	41,433	0	50%	41,433
Highway 7	N.S.	Rodick Road to Warden Ave.			146,735	0%	0	0%	0	0	100%	146,735
Highway 7	S.S.	Rodick Road to Warden Ave.			146,735	0%	0	0%	0	0	100%	146,735
Highway 7	N.S.	Verclaire to Sciberras			161,409	0%	0	0%	0	0	100%	161,409
Highway 7	S.S.	Warden Avenue to CNR			249,450	0%	0	0%	0	0	100%	249,450
Highway 7	E.S.	Highway 407 to Castan Avenue			70,820	0%	0	0%	0	0	100%	70,820
Main St. north, Markham	W.S.	N. 16th Ave to Major Mackenzie			212,665	0%	0	0%	0	0	100%	212,665
Main Street South	W.S.	Rouge River to S end			75,333	0%	0	0%	0	0	100%	75,333
Main Street South	E.S.	Rouge River to S end			75,333	0%	0	100%	75,333	0	0%	0
Major Mackenzie	S.S.	CNR to Markham by-pass			183,926	0%	0	0%	0	0	100%	183,926
Major Mackenzie	S.S.	Glenbourne to Kennedy			136,422	0%	0	0%	0	0	100%	136,422
Major Mackenzie	S.S.	McCowan Rd. to Markham Rd.			241,403	0%	0	0%	0	0	100%	241,403
Major Mackenzie	N.S.	Warden Avenue to Kennedy			241,403	0%	0	0%	0	0	100%	241,403
Major Mackenzie	N.S.	Woodbine Avenue to OHEPC			70,820	0%	0	0%	0	0	100%	70,820
Major Mackenzie	N.S.	Woodbine to Highway 404			120,702	0%	0	0%	0	0	100%	120,702
Major Mackenzie	N.S.	Highway 407 N. to 8th Line			551,779	0%	0	0%	0	0	100%	551,779
Major Mackenzie	W.S.	Highway 407 S. to 9th Line			344,982	0%	0	0%	0	0	100%	344,982
Major Mackenzie	N.S.	Major Mackenzie to Ninth Line			186,422	0%	0	0%	0	0	100%	186,422
Major Mackenzie	E.S.	Limit of Area 7 to 200m north			30,133	0%	0	0%	0	0	100%	30,133
Donald Cousens Parkway	E.S.	Bur Oak to Major Mackenzie			154,072	0%	0	0%	0	0	100%	154,072
Donald Cousens Parkway	W.S.	Bur Oak to Major Mackenzie			154,072	0%	0	0%	0	0	100%	154,072
Donald Cousens Parkway	E.S.	16th Ave. to Burr Oak Avenue			48,863	0%	0	0%	0	0	100%	48,863
Markham Road	W.S.	16th Ave. to Major Mackenzie			229,908	0%	0	0%	0	0	100%	229,908
McCowan Road	E.S.	Burr Oak to Markham by-pass			49,468	0%	0	0%	0	0	100%	49,468
McCowan Road	E.S.	Highway 407 to Church St.			160,936	0%	0	0%	0	0	100%	160,936
North Line	E.S.	OHEPC to Highway 407			268,992	0%	0	50%	0	0	100%	134,496
North Line	B.S.	Markham by-pass to Ninth Line			333,367	0%	0	0%	0	0	100%	333,367
Old Kennedy	B.S.	Steeles Ave. to Denison St.			275,276	0%	0	0%	0	0	100%	275,276
Rodick Road	E.S.	14th Avenue to Miller Avenue			89,773	0%	0	65%	58,369	0	35%	31,404
Sixteenth Avenue	B.S.	Bur Oak to Markham By-Pass			413,834	0%	0	0%	0	0	100%	413,834
Sixteenth Avenue	N.S.	Kennedy to The Brindle Walk			183,419	0%	0	0%	0	0	100%	183,419
Sixteenth Avenue	N.S.	McCowan Rd to Mingay Ave.			149,440	0%	0	0%	0	0	100%	149,440

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

TOWN -WIDE HARD CHARGES		From / To	Timing of Project	Total Gross Cost	Local Costs	Share	Non-Development Charge Recoverable Costs	Non-Growth (Benefit to Existing) Cost	Share	Town-Wide Development Charge Recoverable Cost
Location	Level Annual									
SIDEWALKS										
Sixteenth Avenue	N.S.	York Downs to Kennedy Road		60,266	0%	0	0%	0%	100%	60,266
Feeor Road	W.S.	North to south of Highway 7		235,656	0%	0	0%	0%	100%	235,656
Warden Avenue	E.S.	14th Ave. to Highway 407		60,266	0%	0	70%	42,186	30%	18,080
Warden Avenue	W.S.	6th Ave. to Calvert Dr.		60,266	0%	0	0%	0	100%	60,266
Warden Avenue	W.S.	Alden Rd. to Highway 407		60,266	0%	0	70%	42,186	30%	18,080
Gibson Drive / Denison St.	E.S.	Gibson Drive / OHEPC		45,200	0%	0	0%	0	100%	45,200
Highway 7 to OHEPC	E.S.	14th Ave to OHEPC		139,399	0%	0	0%	0	100%	139,399
Woodbine Ave	W.S.	Highway 7 to Hooper Rd		176,082	0%	0	0%	0	100%	176,082
Woodbine Avenue	W.S.	Hamlet to 19th Avenue		53,115	0%	0	0%	0	100%	53,115
Woodbine Avenue	W.S.	Hamlet to N. of Cathedral		53,115	0%	0	0%	0	100%	53,115
Woodbine Avenue	E.S.	Through Hamlet		90,399	0%	0	65%	58,777	35%	31,623
Woodbine Avenue	E.S.	Woodbine By-pass to Hamlet		149,440	0%	0	0%	0	100%	149,440
Woodbine Avenue	B.S.	Lord Malbone to Existing Woodbine		183,926	0%	0	0%	0	100%	183,926
Woodbine Avenue	B.S.	Elgin Mills to N. of Cathedral		106,230	0%	0	0%	0	100%	106,230
Woodbine Avenue	B.S.	Major Mackenzie to Lord Malbone		581,749	0%	0	0%	0	100%	581,749
Woodbine By-pass	B.S.	GO Station to Kennedy Road		119,224	0%	0	0%	0	100%	119,224
Woodbine By-pass	N.S.	9th Line to Country Glen		25,967	0%	0	65%	16,884	35%	9,084
Woodbine By-pass	S.S.	9th Line to Country Glen		25,967	0%	0	65%	16,884	35%	9,084
Church Street	S.S.	Country Glen to Bur Oak		37,771	0%	0	0%	0	100%	37,771
Church Street	N.S.	OHEPC to Warden Avenue		166,683	0%	0	65%	108,376	35%	58,308
Major Mackenzie	N.S.	Warden Avenue to Kennedy		241,403	0%	0	0%	0	100%	241,403
Major Mackenzie	B.S.	Woodbine to Redick		197,502	0%	0	0%	0	100%	197,502
Miller Avenue	B.S.	Highway 404 to Woodbine Avenue		241,403	0%	0	0%	0	100%	241,403
Nineteenth Avenue	N.S.	Highway 404 to Woodbine Avenue		1,075,000	0%	0	0%	0	100%	1,075,000
Miscellaneous new sidewalks	0			97,933	0%	0	0%	0	100%	97,933
Sixteenth Ave	N.S.	9th Line to Bur Oak Ave								
TOTAL SIDEWALKS				\$ 19,423,405	0% \$	-	25% \$	4,791,780	75% \$	14,631,625

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

TOWN -WIDE HARD CHARGES		From / To	Timing of Project	Total Gross Cost	Non-Development Charge Recoverable Costs			Town-Wide Development Charge Recoverable		
Location	Level Annual				Local Costs	Non-Growth (Benefit to Existing) Cost	Share	Cost	Share	Cost
STORM WATER MANAGEMENT										
Don Mills Industrial Drainage Ditch Improvements			2008 - 2028	2,512,233	0%	0	65%	1,633,425	35%	878,808
Enterprise water course crossing at Tributary # 4 (over local)				1,716,000	0%	0	0%	0	32%	549,120
Glynwood Pond Improvements				827,310	0%	0	65%	537,907	35%	289,403
Town's Watercourses				57,077,611	25%	14,000,023	35%	20,161,040	40%	22,916,548
Wismer, Culvert Crossing Highway 48 south of Major Mackenzie				397,901	0%	0	0%	0	100%	397,901
Woodbine Culvert				249,961	0%	0	0%	0	100%	249,961
Miller Avenue Storm				1,094,823	0%	0	0%	0	17%	180,646
Rodick Road Storm				1,004,685	0%	0	0%	0	52%	524,603
TOTAL STORM WATER MANAGEMENT				\$ 64,980,524	22%	\$ 14,000,023	34%	\$ 22,332,372	40%	\$ 25,986,990

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

TOWN -WIDE HARD CHARGES		From / To	Location	Timing of Project	Non-Development Charge Recoverable Costs			Town-Wide Development Charge Recoverable		
STRUCTURES					Total Gross Cost	Local Costs	Non-Growth (Benefit to Existing)	Cost	Share	Cost
Birchmount Overpass	at	Rouge River		2012	14,967,222	0%	0	0%	0	14,967,222
Birchmount Underpass	at	CNR		2009	10,390,634	0%	0	0%	0	10,390,634
Cedar Avenue Underpass	at	Highway 7 and Highway 407		2015	4,986,000	83%	4,155,000	0%	0	831,000
Enterprise Underpass	at	CNR		2008	12,920,592	8%	1,006,935	0%	0	11,913,658
Main St. South, Markham widening at Rouge River		Rouge River		2012	8,071,476	0%	0	10%	807,148	90%
Markland Avenue	at	Rouge River		2011	6,807,219	0%	0	0%	0	7,264,328
Mid-block Crossing Hwy 404		between Highway 7 and 16th Ave.		2009	14,103,287	67%	9,402,192	0%	0	6,807,219
Mid-block Crossing Hwy 404	at	Crossing Improvements		2018	9,714,821	67%	6,476,547	0%	0	33%
Miller Avenue	at	Warden Avenue		2019	7,233,308	0%	0	0%	0	8%
Rodick Overpass	at	Beaver Crossing Structure		2009	3,381,227	0%	0	0%	0	100%
Rodick Overpass	at	Highway 407		2008	9,573,282	33%	3,191,094	0%	0	100%
Rodick Overpass	at	CNR		2009	5,973,990	0%	0	0%	0	6,382,188
Schierras Crossing	at	Rouge River		2015	8,030,295	0%	0	0%	0	5,973,990
404 access ramp modification	at	Elgin Mills Road		2010	2,234,361	0%	0	0%	0	8,030,295
404 access ramp modification	at	Highway 7		2010	2,923,463	0%	0	0%	0	2,234,361
404 access ramp modification	at	Major Mackenzie Drive		2010	2,234,361	0%	0	0%	0	2,923,463
Fourteenth Avenue	at	CNR		2013	17,336,857	0%	0	0%	0	2,234,361
Main Street South, Unionville, Rouge River Structure Rehabilitation				2009	1,118,851	0%	0	100%	0	17,336,857
Mid-block Crossing Hwy 404		between 16th Ave. to Major Mac.		2014	10,491,264	0%	0	100%	1,118,851	0%
Mid-block Crossing Hwy 404		between Elgin Mills & 19th Ave.		2020	10,503,270	67%	7,002,180	0%	0	1,748,544
Miller Avenue	at	Beaver Creek		2016	1,058,663	0%	0	0%	0	875,272
Yorktech Drive Crossing	at	Crossing Rouge River Tributary		2016	3,268,895	0%	0	0%	0	1,058,663
Verclaire Crossing / Town Centre Blvd. Crossing				2013	9,285,725	0%	0	0%	0	3,288,895
404 access ramp	at	19th Avenue		2018	18,000,000	0%	0	0%	0	9,265,725
9th Line Tributary Crossings (3 Locations)				2009	1,078,715	88%	943,875	0%	0	16,877,999
TOTAL STRUCTURES					\$ 195,687,777	16% \$	32,177,822	1% \$	1,925,998	75% \$ 146,664,712

APPENDIX B
TABLE 2

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

TOWN -WIDE HARD CHARGES		From / To Location	Timing of Project Level Annual	Non-Development Charge Recoverable Costs			Town-Wide Development Charge Recoverable		
STUDIES	Local Costs	Non-Growth (Benefit to Existing) Cost	Share	Share	Cost	Share	Cost	Share	Cost
Don Mills Channel Study	80,500	0%	0	90%	72,450	10%	8,050		
Markham Centre Transportation Studies	336,000	0%	0	0%	0	100%	336,000		
Markham Transportation Planning Study	545,000	0%	0	0%	0	100%	545,000		
Town Wide Studies - Trans., Servicing, Environmental...etc.	5,400,000	0%	0	0%	0	100%	5,400,000		
TOTAL STUDIES	\$ 6,361,500	0% \$	-	1% \$	72,450	99% \$	6,289,050		

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

TOWN -WIDE HARD CHARGES		Location	From / To	Timing of Project	Total Gross Cost	Local Costs	Non-Development Charge Recoverable Costs			Town-Wide Development Charge Recoverable Costs		
Project	Level Annual						Share	Cost	Share	Cost	Share	Cost
WATER												
E.P. Phase I, Enterprise, Rivas & YMCA Blvd. (300 to 400mm)	Seberras Road to CNR			2008 - 2018	\$41,693	0%	0%	0	0%	0	34%	282,417
Enterprise Drive (300 to 400mm)	Warden to Seberras Road				127,269	0%	0%	0	0%	0	100%	127,269
Enterprise Drive (300 to 400mm)	Rivas Rd. to Main Street S				687,500	0%	0%	0	0%	0	9%	62,190
Enterprise, Phase II (300 to 400mm)	Markham Rd. to Boxwood Cres.				429,192	0%	0%	0	0%	0	39%	166,673
Fourteenth Ave. (400mm)	McCowan Rd to Markham Rd				1,351,911	0%	0%	0	0%	0	100%	1,351,911
Karachi Drive, 19T-05017	Markham Rd to Kirkham Drive				5,227,949	0%	0%	0	0%	0	100%	5,227,949
Kennedy Road (400mm)	16th Ave. to Major Mackenzie Dr.				552,552	0%	0%	0	0%	0	28%	156,648
Kirkham Drive (300 to 400mm)	N limit Lot 4, Con. 8 to Markham by-pass				711,258	0%	0%	0	0%	0	50%	354,945
Kirkham Drive (400mm)	Karachi Drive to S limit Lot 4, Con. 8 through Golf Course to 9th line				579,117	0%	0%	0	0%	0	28%	164,180
Kirkham Drive (400mm)	Cornell South to Church Street				484,546	0%	0%	0	0%	0	100%	484,546
Ninth Line (300 to 400mm)	Church Street to 16th Avenue				769,398	0%	0%	0	0%	0	100%	769,398
Ninth Line North (400mm)	14th Avenue to Highway 407				775,913	0%	0%	0	0%	0	26%	199,520
Ninth Line South (400mm)	0				500,000	0%	0%	0	0%	0	10%	50,000
Realignment of PD 5 and PD 6	1,096,333	0%	0%	0	0%	0%	0%	0	0%	0	79%	860,697
Rodick Road (400mm)	Millar Avenue to 14th Avenue				460,000	0%	0%	0	0%	0	24%	112,416
Rodick Road (400mm)	Yorktech Drive to Millar Avenue				579,117	0%	0%	0	0%	0	100%	579,117
Sixteenth Avenue East	Minileaf Gate to 9th Line				1,206,598	0%	0%	0	0%	0	100%	1,206,598
Warden Ave. (600/400mm)	0				0	0%	0%	0	0%	0	0%	0
Woodbine Avenue	Project Compliated by CP # 4717				221,923	0%	0%	0	0%	0	100%	221,923
Woodbine by-pass (400mm)	Burr Cres / Millbrook Gate				212,520	0%	0%	0	0%	0	15%	31,878
Woodbine by-pass (400mm)	Elgin Mills to Lord Melbroune				552,552	0%	0%	0	0%	0	15%	82,883
Woodbine Avenue (400mm)	Lord Melbroune to Woodbine Avenue				992,772	0%	0%	0	0%	0	15%	148,916
Unionville Gate Trunk Recovery to Fre 0	Woodbine By-pass to 19th Avenue				84,314	0%	0%	0	0%	0	100%	84,314
Church St. Watermain replacement	Ninth Line to Country Glen Road				64,009	0%	0%	0	0%	0	100%	64,009
Church Street Watermain	Country Glen Road to Bur Oak				113,344	0%	0%	0	0%	0	100%	113,344
Miller Road (200mm to 400mm)	Woodbine to Rodlick Road				678,394	0%	0%	0	0%	0	100%	502,273
Steeles Avenue	Turf Avenue to Midland Avenue				247,940	0%	0%	0	0%	0	100%	247,940
404 North Watermain Oversizing	19th Ave, Honda Blvd. & Woodbine by-pass				414,300	0%	0%	0	0%	0	100%	414,300
Boxgrove Watermain Oversizing	Rizal, Rouge Bank & Ninth Line				102,101	0%	0%	0	0%	0	100%	102,101
TOTAL WATER					\$ 20,064,515	0%	1%	\$ 176,122	71%	\$ 14,170,355		

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

TOWN-WIDE HARD CHARGES		Location	From / To	Timing of Project	Total Gross Cost		Local Costs	Non-Development Cost	Non-Growth (Benefit to Existing) Cost	Share	Share	Cost	Town-Wide Development Charge Recoverable
SPECIAL PROJECTS	ENGINEERING				Level Annual	Share							
Bike Lanes on Town, Regional and Developers				2008 - 2018	26,042,500	60%	15,570,000	26%	6,808,592	14%	3,663,908		
Town-wide Street Safety and Traffic Calming, various locations					4,837,500	0%	0	65%	3,145,286	35%	1,692,214		
Travel Demand Management	<u>STREETSCAPE</u>				2,687,500	0%	0	0%	0	100%	2,687,500		
Birchmount Overpass	Rouge River				169,665	0%	0	0%	0	0%	54%	91,619	
Birchmount Road	Hwy 407 to Rouge River				1,311,260	0%	0	0%	0	0%	25%	327,815	
Birchmount Road	Hwy 7 to Rouge River				823,230	0%	0	0%	0	0%	25%	155,808	
Clegg Road Extension	Town-Centre to Warden Ave.				577,667	0%	0	0%	0	0%	25%	144,417	
Commerce Valley Drive East Widening					220,944	0%	0	0%	0	0%	25%	165,708	
Commerce Valley Drive West Widening					149,009	0%	0	0%	0	0%	25%	37,252	75%
Denison Street					158,307	0%	0	0%	0	0%	25%	111,757	
Rivas Road					280,307	25%	72,577	25%	39,577	50%	79,153		
Enterprise Drive	Enterprise Drive to YMCA Blvd.				565,062	0%	0	0%	0	0%	25%	72,577	
Enterprise Drive	Main Street S to NS Collector				503,468	0%	0	0%	0	0%	25%	141,266	
Enterprise Drive	NS Collector to GO Line				315,922	0%	0	0%	0	0%	25%	125,867	
Enterprise Drive	Sciberras to CNR				1,839,075	0%	0	0%	0	0%	25%	78,981	
Existing Cedarland Drive	Warden to Sciberras				107,681	0%	0	0%	0	0%	25%	409,769	
Existing Ninth Line Improvements	Town-Centre to Warden Ave.				480,939	0%	0	0%	0	0%	25%	26,920	
Highway 7	Padlock to E of Sciberras				4,507,456	0%	0	0%	0	0%	25%	240,469	
Kirkham Drive	Markham Road to Denison St.				246,635	0%	0	0%	0	0%	25%	2,253,728	50%
Main St. north, Markham	16th Ave. to Markham By-pass				538,487	0%	0	0%	0	0%	25%	61,659	50%
Markham Road	Streets to 14th Ave				411,059	0%	0	0%	0	0%	25%	134,622	75%
Markland Extension (Woodbine North)	Ramps to Hwy 404				86,524	0%	0	0%	0	0%	25%	403,865	
Riverside Drive	W. end Area 42B-8 to Sciberras				115,086	0%	0	0%	0	0%	25%	102,765	75%
Riverside Drive	Warden to Birchmount				153,834	0%	0	0%	0	0%	25%	21,631	75%
Riverside Drive	Birchmount to east end Area 42B-6				252,705	0%	0	0%	0	0%	25%	28,774	75%
Sciberras Crossing	Rouge River				71,355	0%	0	0%	0	0%	25%	63,176	25%
Sciberras Drive	Highway 7 to Rouge River				38,597	0%	0	0%	0	0%	25%	17,839	25%
Streetscape Woodbine - Thought Hamlet					90,816	0%	0	0%	0	0%	25%	9,649	54%
Unionville Gate widening	Main Street S to Kennedy Road				123,318	0%	0	0%	0	0%	25%	80,180	35%
Verclaire Extension	Highway 7 to Rouge River				418,383	0%	0	0%	0	0%	25%	17,839	25%
Village Parkway Realignment	Highway 7 to Landmark Crt.				585,473	0%	0	0%	0	0%	25%	146,368	25%
Warden Avenue	Highway 407 to Highway 7				394,851	0%	0	0%	0	0%	25%	98,713	50%
Warden Avenue	Highway 7 to Applecreek				1,602,982	0%	0	0%	0	0%	25%	450,746	50%
YMCA Boulevard	GO Station to Kennedy Road				684,778	0%	0	0%	0	0%	25%	432,231	35%
Yorktech Drive	Rodick Rd. to Enterprise Dr.				814,353	0%	0	0%	0	0%	25%	203,589	50%
Yorktech Drive Crossing	Rodick Rd. to Enterprise Dr.				298,018	0%	0	0%	0	0%	25%	74,505	
Yorktech Drive Crossing	Beaver Creek				298,018	0%	0	0%	0	0%	25%	160,930	
Verclaire Crossing	Rouge River				16,883	0%	0	0%	0	0%	25%	9,117	
Regional Road Streetscape					192,508	0%	0	0%	0	0%	25%	103,954	
Highway 7	at 9th Line to Markham By-pass				5,300,000	0%	0	0%	0	0%	25%	3,445,998	35%
Enhanced Streetscapes (Midland, Convente & Old Kennedy)					2,950,335	25%	737,584	25%	737,584	50%	28,000	50%	1,475,167
TOTAL SPECIAL PROJECTS					\$ 61,164,501	27%	\$ 16,403,160	32%	\$ 19,746,692	32%	\$ 19,490,200		

APPENDIX B
TABLE 2

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

TOWN -WIDE HARD CHARGES				Timing of Project		Total Gross Cost		Local Costs		Non-Growth (Benefit to Existing)		Town-Wide Development Charge Recoverable Cost	
Location	From / To	Level	Annual		Share	Cost	Share	Cost	Share	Cost	Share	Cost	
PROJECTS undertaken by CREDIT AGREEMENT, 3a													
ROADS	South Unionville Avenue (4th lane)	McCowan to w of Oakcrest Ave.	64,833	0%	0	0%	0	0%	0	100%	64,833		
	South Unionville Avenue	Additional R.O.W. for 4th lane	134,612	0%	0	0%	0	0%	0	100%	134,612		
Burr Oak Avenue		At Grade crossing @ CNR	200,000	0%	0	0%	0	0%	0	100%	200,000		
Burr Oak Avenue	CNR to Anderson Avenue	east of Highway 48	138,968	0%	0	0%	0	0%	0	100%	138,968		
Anderson Avenue widening			102,706	0%	0	0%	0	0%	0	100%	102,706		
PROJECTS undertaken by CREDIT AGREEMENT, 3a													
WOODBINE AVENUE	Woodbine Avenue	W.S., Hooper Road / 16th Avenue	0	0%	0	0%	0	0%	0	0%	0		0
SIDEWALKS													
Woodbine Avenue	Woodbine Avenue	E.S., Rouge River / 16th Ave.	0	0%	0	0%	0	0%	0	0%	0		0
	Woodbine Avenue	W.S., Rouge River / 16th Ave.	0	0%	0	0%	0	0%	0	0%	0		0
PROJECTS undertaken by CREDIT AGREEMENT, 41													
ILLUMINATION	Church Street	S.S., Ninth Line / 250 m east of 9th Line	41,097	0%	0	0%	0	0%	0	100%	41,097		
INTERSECTION													
Intersection Improvement	at	Church Street and Hospital entrance	50,000	0%	0	0%	0	0%	0	100%	50,000		
ROADS													
Church Street Widening		Ninth Line / 250 m east of 9th Line	103,103	0%	0	0%	0	0%	0	100%	103,103		
SIDEWALKS													
Church Street	N.S., Ninth Line / 250 m east of 9th Line	33,475	0%	0	0%	0	0%	0	100%	33,475			
WATER													
Realignment of PD 5 and PD 6	Ninth Line North (400mm)	Church Street to 16th Avenue	460,000	0%	0	0%	0	0%	0	31%	143,868		
	Sixteenth Avenue East	Minileaf Gate to 9th Line	500,000	0%	0	0%	0	0%	0	90%	450,000		
Church Street	E of Ninth Line / Part Lot 4	1,000,000	0%	0	0%	0	0%	0	61%	612,900			
PROJECTS undertaken by CREDIT AGREEMENT, 42a													
INTERSECTION	Highway 7 (Right in and right out)	at Oakcrest Street	100,000	0%	0	0%	0	0%	0	100%	0		100,000
ROADS													
South Unionville Avenue	(3rd la 0	McCowan to w of Oakcrest Ave.	124,419	0%	0	0%	0	0%	0	100%	124,419		
South Unionville Avenue	0	Additional R.O.W. for 3rd lane	258,331	0%	0	0%	0	0%	0	100%	258,331		
N-S Connector Road	0	Minor Collector to Avoca Drive	72,000	0%	0	0%	0	0%	0	100%	72,000		

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TABLE 2

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

TOWN -WIDE HARD CHARGES		Location	From / To	Timing of Project	Total Gross Cost	Local Costs	Share	Cost	Non-Development Charge Recoverable Costs Existing	Non-Growth (Benefit to Existing) Cost	Share	Cost	Town-Wide Development Charge Recoverable												
Level	Annual																								
PROJECTS undertaken by CREDIT AGREEMENT, 43																									
PROJECTS undertaken by CREDIT AGREEMENT Phase I																									
ROADS																									
Burr Oak Avenue					400,000	0%	0	0%	0	50%	0	50%	200,000												
Burr Oak Avenue					277,936	0%	0	0%	0	50%	0	50%	138,968												
North Collector Road, Design Only					55,678	0%	0	0%	0	100%	0	100%	55,678												
North Collector Road, Design Only					30,000	0%	0	0%	0	100%	0	100%	30,000												
SIDEWALKS																									
16th Avenue	N.S.	Ninth Line to 285m westerly			17,225	0%	0	0%	0	100%	0	100%	17,225												
WATER																									
Realignment of PD 5 and PD 6					460,000	0%	0	0%	0	20%	0	20%	90,868												
Sixteenth Avenue East					1,000,000	0%	0	0%	0	39%	0	39%	387,100												
ROADS																									
North Collector Road, construction					1,055,884	0%	0	0%	0	100%	0	100%	1,055,884												
North Collector Road, construction					573,549	0%	0	0%	0	100%	0	100%	573,549												
North Collector Road (Property)					506,094	0%	0	0%	0	100%	0	100%	506,094												
PROJECTS undertaken by CREDIT AGREEMENT, 44a																									
WATER					1,036,333	0%	0	0%	0	21%	0	21%	235,636												
Ninth Line South (400mm)		14th Avenue to Highway 407																							
PROJECTS undertaken by CREDIT AGREEMENT, 45b																									
WATER																									
Realignment of PD 5 and PD 6	0				460,000	0%	0	0%	0	21%	0	21%	95,899												
Kennedy Road (400mm)	0	16th Ave. to Major Mackenzie Dr.			711,258	0%	0	0%	0	43%	0	43%	302,794												
PROJECTS undertaken by CREDIT AGREEMENT, 47a																									
WATER																									
Realignment of PD 5 and PD 6	0				460,000	0%	0	0%	0	4%	0	4%	16,960												
Kennedy Road (400mm)	0	16th Ave. to Major Mackenzie Dr.			711,258	0%	0	0%	0	8%	0	8%	53,519												
TOTAL					\$ 11,226,877	0%	\$ 0	0%	\$ 0	57%	\$ 0	57%	\$ 6,418,593												

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TABLE 3

TOWN OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA SPECIFIC GROWTH-RELATED PROJECTS
AREA 4: DON MILLS / BROWNS CORNER INDUSTRIAL

Location	From / To	Total Gross Cost	Non-Development Charge Recoverable Costs			ASDC Recoverable In AREA 4: DON MILLS / BROWNS CORNER INDUSTRIAL			Other Area Specific or TWH Development Charge Recoverable		
			Share	Cost	Non-Growth (Benefit to Existing)	Share	Cost	Share	Cost	Project Shared With Area	
STORM WATER MANAGEMENT											
General Sanitizing Improvements		1,500,000	0%	0	0%	0	0	100%	1,500,000	0%	0
SANITARY SEWERS											
Don Mills Sanitary Sewer Improvements (north of Steeles Ave.)		8,729,259	0%	0	90%	7,856,333	10%	872,926	0%	0	0 NG (Water Rate)
Rodick Road Sanitary Sewer		103,459	0%	0	0%	0	25%	25,865	75%	77,594	17
Rodick Road Sanitary Sewer		462,869	0%	0	0%	0	25%	115,717	75%	347,151	17
STUDIES											
No Projects											
SPECIAL PROJECTS											
No Projects											
PROJECTS undertaken by CREDIT AGREEMENT											
No Projects											
TOTAL AREA 4: DON MILLS / BROWNS CORNER INDUSTRIAL											
		\$ 10,795,586	\$ -	\$ 7,856,333	\$ 2,514,508	\$ 424,745					
ASDC for AREA 4: DON MILLS / BROWNS CORNER INDUSTRIAL											
			Adjustments		Balance in Reserve Fund as at December 31, 2007	\$ 283,966					
					Credit as per Agreement	\$ -					
					Projects Funded from Reserve	\$ 11,640					
			Total Recoverable Growth-Related Costs		\$ 2,218,902						
			Net Developable Land Area (ha)		75.5478						
			Area Specific Development Charge per Net Hectare		\$ 29,371						

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TABLE E 4

TOWN OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA SPECIFIC GROWTH-RELATED PROJECTS
AREA 5: ARMDALE

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TABLE 5

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

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TABLE 6

TABLE 6

TOWN OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA SPECIFIC GROWTH-RELATED PROJECTS
AREA 8 : MILLIKEN MILLS

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TABLE 7

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

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TABLE 8

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

Location		From / To		Non-Development Charge Recoverable Costs			ASDC Recoverable in AREA 17 : RODICK ROAD / MILLER ROAD PLANNING DISTRICT			Other Area Specific or TWH Development Charge Recoverable		
Total Gross Cost	Local Costs	Share	Cost	Non-Growth (Benefit to Existing)	Share	Cost	Share	Cost	Share	Cost	Project Shared With Area	
STORM WATER MANAGEMENT												
Miller / Rodick SWM pond and Channel improvements	566,331	0%	0	0%	0	0	100%	566,331	0%	0		
Miller Avenue Local Storm	1,094,823	0%	0	0%	0	0	84%	914,177	17%	180,646	TW	
Rodick Road Local Storm	1,004,685	0%	0	0%	0	0	48%	480,082	52%	524,603	TW	
Miller / Rodick SWM pond property	2,888,753	0%	0	0%	0	0	100%	2,888,753	0%	0		
SANITARY SEWERS												
Rodick Road Sanitary Sewer	103,459	0%	0	0%	0	0	75%	77,594	25%	25,865	4	
Miller Avenue to 14th Avenue	462,869	0%	0	0%	0	0	75%	347,151	25%	115,717	4	
Woodbine to Rodick	719,760	0%	0	0%	0	0	100%	719,760	0%	0		
STUDIES												
No Projects												
SPECIAL PROJECTS												
No Projects												
PROJECTS undertaken by CREDIT AGREEMENT												
No Projects												
TOTAL AREA 17 : RODICK ROAD / MILLER ROAD PLANNING DISTRICT	\$ 6,840,680		\$ -		\$ -		\$ -	\$ 5,983,849		\$ 846,830		
Adjustments												
Balance in Reserve Fund as at December 31, 2007								\$ 133,229				
Credit as per Agreement												
Projects Funded from Reserve												
ASDC for AREA 17 : RODICK ROAD / MILLER ROAD PLANNING DISTRICT												
Total Recoverable Growth-Related Costs								\$ 6,127,078				
Net Developable Land Area (ha)								20.90				
Area Specific Development Charge per Net Hectare								\$ 293,218				

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TABLE 9

TOWN OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA SPECIFIC GROWTH-RELATED PROJECTS
AREA 42A : SOUTH UNIONVILLE

Location	From / To	Total Gross Cost	Non-Development Charge Recoverable Costs			ASDC Recoverable in AREA 42A : SOUTH UNIONVILLE			Other Area Specific or TWH Development Charge Recoverable		
			Local Costs	Share	Cost	Non-Growth (Benefit to Existing)	Share	Cost	Share	Cost	Project Shared With Area
STORM WATER MANAGEMENT											
South Unionville West SWM Construction, Property and Outlet Sewer		3,713,118	0%	0	0%	0	0	0	100%	3,713,118	0%
SANITARY SEWERS											
No Projects											
STUDIES											
Secondary Plan Studies		850,000	0%	0	0%	0	0	0	27%	225,335	73%
SPECIAL PROJECTS											
No Projects											
PROJECTS undertaken by CREDIT AGREEMENT											
Traffic Calming - Swansas / Avoca	Pond # 7	100,000	0%	0	0%	0	0	0	100%	100,000	0%
Storm Water Facility SWM		2,070,506	0%	0	0%	0	0	0	100%	2,070,506	0%
Swansas/Avoca Traffic Calming Study		10,300	0%	0	0%	0	0	0	100%	10,300	0%
Stormwater and Floodplain Mgmt Study		125,000	0%	0	0%	0	0	0	28%	34,675	72%
Outlet Sewer to Y.D.S.S.	Campbell Ct. to Y.D.S.S.	307,920	0%	0	0%	0	0	0	100%	307,920	0%
Outlet Sewer to Y.D.S.S.	Kennedy Road to Y.D.S.S.	286,461	0%	0	0%	0	0	0	100%	286,461	0%
Local Sewer Improvements		500,000	0%	0	0%	0	0	0	100%	500,000	0%
Helen Avenue	Stage IV and V sanitary sewer	222,379	0%	0	0%	0	0	0	38%	84,048	62%
Helen Avenue Sanitary	East end to 697m westerly	281,787	0%	0	0%	0	0	0	59%	165,952	41%
TOTAL AREA 42A : SOUTH UNIONVILLE		\$ 8,447,472	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,478,315	\$ 968,157	\$ -
Adjustments											
Balance in Reserve Fund as at December 31, 2007											
Credit as per Agreement											
Projects Funded from Reserve											
ASDC for AREA 42A : SOUTH UNIONVILLE											
Total Recoverable Growth-Related Costs										\$ 878,420	
Net Developable Land Area (ha)										16.04	
Area Specific Development Charge per Net Hectare										\$ 54.775	

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

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

Location		From / To	Total Gross Cost	Non-Development Change Recoverable Costs	ASDC Recoverable in AREA 42B : MARKHAM CENTRE	Other Area Specific or TWH Development Charge Recoverable
			Share	Local Costs	Non-Growth (Benefit to Existing)	Project Shared With Area
			Cost	Share	Cost	Cost
STORM WATER MANAGEMENT						
SANITARY SEWERS						
No Projects						
STUDIES						
Secondary Plan Studies						
Stormwater and Floodplain Master Study						
No Projects						
SPECIAL PROJECTS						
Birchmount Overpass						
Birchmount Road						
Birchmount Road						
Ching Road Extension						
Pavas Road						
Enterprise Drive						
Enterprise Drive						
Enterprise Drive						
Enterprise Drive						
Existing Cedarhand Drive						
Highway 7						
Heronside Drive						
Heronside Drive						
Rivendale Drive						
Scabermars Crossing						
Scabermars Crossing						
Verdante Crossing						
Verdante Crossing						
Verdante Extension						
Warden Avenue						
YMCAs Boulevard						
Yorkdale Drive						
Yorkdale Drive Crossing						
Yorkestone Drive Crossing						
PROJECTS undertaken by CREDIT AGREEMENT						
No Projects						
TOTAL AREA 42B : MARKHAM CENTRE						
\$ 16,201,634	\$ 90,325	\$ 3,627,741	\$ 4,666,119	\$ 619,768	\$ 5,275,888	\$ 116.02
Adjustments						
Balance in Reserve Fund as at December 31, 2007						
Credit as per Agreement						
Projects Funded from Reserve						
Total Recoverable Growth Related Costs						
Net Developable Land Area (ha)						
Area Specific Development Change per Net Hectare						
\$ 45,474						

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

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

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

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

Location	From / To	Non-Development Charge Recoverable Costs						ASDC Recoverable In					
		Total Gross Cost	Local Costs	Share	Cost	Non-Growth (Benefit to Existing)	Share	Cost	Area 42B.8 - MARKHAM CENTRE - SCIBERRAS	Share	Cost	Other Area Specific or TWH Development Charge Recoverable Project Shared With Area	
ROADS Sciberras Drive, local ROW	Highway 7 to Rouge River	750,000	0%	0	0%	0	100%	0	750,000	0%	0	0	
STORM WATER MANAGEMENT													
East Highway 7 Stormwater Management Facilities (Pond # 2)		2,623,298	0%	0	0%	0	18%	472,194	82%	2,151,104	9 42b.6		
Shedden Storm Sewer		1,261,037	0%	0	0%	0	20%	252,207	80%	1,008,830	9 42b.6	ROY	
Property Pond # 2		2,948,648	0%	0	0%	0	18%	530,757	82%	2,417,891	9 42b.6	ROY	
Property Pond # 2		1,920,438	0%	0	0%	0	18%	345,679	82%	1,574,759	9 42b.6	ROY	
SANITARY SEWERS													
Highway 7 Sanitary Sewer	Village Parkway to YDSS	6,659,723	0%	0	0%	0	16%	1,065,556	84%	5,594,167	9 42b.6		
STUDIES													
No Projects													
SPECIAL PROJECTS													
No Projects													
PROJECTS undertaken by CREDIT AGREEMENT													
No Projects													
TOTAL AREA 42B.8 : MARKHAM CENTRE - SCIBERRAS		\$ 16,163,142	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,416,392	\$ 12,746,751				
ASDC for AREA 42B.8 : MARKHAM CENTRE - SCIBERRAS													
Adjustments													
	Balance in Reserve Fund as at December 31, 2007							\$ 115,170					
	Credit as per Agreement								\$ 475,258				
	Projects Funded from Reserve												
Total Recoverable Growth-Related Costs								\$ 3,056,303					
Net Developable Land Area (ha)								5,643					
Area Specific Development Charge per Net Hectare								\$ 541,610					

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

Location	From / To	Non-Development Charge Recoverable Costs			ASDC Recoverable in AREA 42B.9 : MARKHAM CENTRE - EAST PRECINCT			Other Area Specific or TWH Development Charge Recoverable Project Shared With Area
		Total Gross Cost	Local Costs	Non-Growth (Benefit to Existing)	Cost	Share	Cost	
ILLUMINATION								
Rivias Drive	W.S. Enterprise Drive to YMCA Blvd.	21,518	0%	0	0%	0	100%	21,518
Enterprise Drive	B.S. GO Line to Main Street South	147,858	0%	0	0%	0	100%	147,858
ROADS								
Rivias Road, local	Rivias Road to Main Street S	565,399	0%	0	0%	0	68%	382,631
Enterprise Drive, local (Ph. II)	Rivias Road to GO Line	2,172,736	0%	0	0%	0	68%	1,470,387
Enterprise Drive, local (Ph. I)	GIC Holding	1,067,976	0%	0	0%	0	68%	722,747
East Precinct Property	Quan Property	3,009,000	0%	0	0%	0	62%	1,850,841
Enterprise, Property (23m)		7,646,345	0%	0	0%	0	39%	2,965,396
STORM WATER MANAGEMENT								
E.P., Enterprise Phase 1- Local Storm Sewers		895,423	0%	0	0%	0	100%	895,423
E.P., South Pond # 2 (001-T-04)		101,380	0%	0	0%	0	100%	101,380
Enterprise Phase II, Local Storm sewers		228,530	0%	0	0%	0	100%	228,530
SANITARY SEWERS								
E.P., Enterprise Phase I Sanitary Sewer (001-T-04)		730,262	0%	0	0%	0	100%	730,262
STUDIES								
East Precinct Serving Study		50,000	0%	0	0%	0	100%	50,000
WATER								
East Precinct, Phase I (400mm)	Rivias Rd. to Main Street S	841,693	0%	0	0%	0	68%	559,276
Enterprise, Phase II (400mm)		429,192	0%	0	0%	0	61%	262,519
SPECIAL PROJECTS								
No Projects								
PROJECTS undertaken by CREDIT AGREEMENT								
No Projects								
TOTAL AREA 42B.9 : MARKHAM CENTRE - EAST PRECINCT								
		\$ 17,907,312	\$ -	\$ -	\$ -	\$ -	\$ 10,388,766	\$ 7,518,546
Adjustments								
Balance in Reserve Fund as at December 31, 2007							\$ 3,006,536	
Credit as per Agreement							\$ 16,78	
Projects Funded from Reserve							\$ 4,566,969	
ASDC for AREA 42B.9 : MARKHAM CENTRE - EAST PRECINCT								
Total Recoverable Growth-Related Costs							\$ 8,808,333	
Net Developable Land Area (ha)								
Area Specific Development Charge per Net Hectare							\$ 524,837	

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TOWN OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA SPECIFIC GROWTH-RELATED PROJECTS
AREA 43 : GREENSBOROUGH

		Non-Development Charge Recoverable Costs		ASDC Recoverable In AREA 43 : GREENSBOROUGH		Other Area Specific or TWH Development Charge Recoverable Project Shared With Area	
Location	From / To	Total Gross Cost	Local Costs	Non-Growth (Benefit to Existing)	Share	Cost	Share
STORM WATER MANAGEMENT No Projects							
SANITARY SEWERS No Projects							
STUDIES No Projects							
SPECIAL PROJECTS No Projects							
PROJECTS undertaken by CREDIT AGREEMENT							
STORM WATER MANAGEMENT Exhibition Creek realignment and restoration		465,000	0%	0	0%	0	50%
TOTAL AREA 43 : GREENSBOROUGH		\$ 465,000	\$ -	\$ -	\$ -	\$ 232,500	50%
Adjustments							
						\$ 232,500	\$ 232,500
						\$ 132,899	
						\$ -	
						\$ -	
ASDC for AREA 43 : GREENSBOROUGH							
						Total Recoverable Growth-Related Costs	\$ 99,601
						Net Developable Land Area (ha)	36.41
						Area Specific Development Charge per Net Hectare	\$ 2,736

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TOWN OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA SPECIFIC GROWTH-RELATED PROJECTS
AREA 4A : ROUGE NORTH EAST

Location		From / To		Non-Development Charge Recoverable Costs		ASDC Recoverable in AREA 4A : ROUGE NORTH EAST		Other Area Specific or TWH Development Charge Recoverable	
		Total Gross Cost	Local Costs	Non-Growth (Benefit to Existing)	Cost	Share	Cost	Share	Cost
STORM WATER MANAGEMENT Environmental									
SANITARY SEWERS	No Projects	165,064	0%	0	0%	0	100%	0	165,064
STUDIES	No Projects								
SPECIAL PROJECTS	No Projects								
PROJECTS undertaken by CREDIT AGREEMENT	No Projects								
TOTAL AREA 4A : ROUGE NORTH EAST		\$ 165,064		\$ -		\$ -	\$ 165,064	\$ -	\$ -
ASDC for AREA 4A : ROUGE NORTH EAST									
Balance in Reserve Fund as at December 31, 2007									
Credit as per Agreement							\$ 99,077		
Projects Funded from Reserve							\$ -		
							\$ -		
Total Recoverable Growth-Related Costs							\$ 65,987		
Net Developable Land Area (ha)							9.57		
Area Specific Development Charge per Net Hectare							\$ 6,882		

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TABLE 18

TOWN OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA SPECIFIC GROWTH-RELATED PROJECTS
AREA 45A : WISMER

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

		Non-Development Charge Recoverable Costs			ASDC Recoverable In			Other Area Specific or TWH Development Charge Recoverable		
Location	From / To	Total Gross Cost	Local Costs	Share	Cost	Share	Cost	Share	Cost	Project Shared With Area
STORM WATER MANAGEMENT										
No Projects										
SANITARY SEWERS										
Exist. Sanitary Oversizing & Deepening S. of Major Mackenzie Dr. by Woodbine Catchet West Inc. by Woods and Mardyco Holdings I to 404 Region Trunk Sewer		399,500	0%	0	0%	0	100%	399,500	0%	0
Woodbine North Relief Sewer		205,800	0%	0	0%	0	100%	205,800	0%	0
STUDIES		770,988	0%	0	0%	0	70%	539,713	30%	230,375
No Projects										
SPECIAL PROJECTS										
No Projects										
PROJECTS undertaken by CREDIT AGREEMENT										
No Projects										
TOTAL AREA 46: CATHEDRAL		\$ 1,375,388	\$ -	\$ -	\$ -	\$ -	\$ 1,145,013	\$ 230,375		
ASDC for AREA 46: CATHEDRAL										
Adjustments										
Balance in Reserve Fund as at December 31, 2007							\$ 463,805			
Credit as per Agreement							\$ 382,400			
Projects Funded from Reserve							\$ 3,106			
Total Recoverable Growth-Related Costs							\$ 298,809			
Net Developable Land Area (ha)							96.21			
Area Specific Development Charge per Net Hectare							\$ 3,106			

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TABLE 21

TOWN OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA SPECIFIC GROWTH-RELATED PROJECTS
AREA 47A : ANGUS GLEN

Location	From / To	Total Gross Cost	Non-Development Charge Recoverable Costs			ASDC Recoverable In AREA 47A : ANGUS GLEN			Other Area Specific or TWH Development Charge Recoverable Project Shared With Area
			Local Costs	Share	Cost	Non-Growth (Benefit to Existing)	Share	Cost	
ROADS									
No Projects									
STORM WATER MANAGEMENT									
No Projects									
SANITARY SEWERS									
No Projects									
STUDIES									
No Projects									
SPECIAL PROJECTS									
No Projects									
PROJECTS undertaken by CREDIT AGREEMENT									
STUDIES									
Class E.A. Study - Sewer and Water		17,636	0%	0	0%	0	65%	11,436	35%
External Traffic Study		127,812	0%	0	0%	0	65%	82,878	33%
North Markham Subwatershed Study		29,542	0%	0	0%	0	65%	19,156	33%
SANITARY SEWERS									
Kennedy Road Temporary Pumping Station and Foreman		2,457,083	0%	0	0%	0	34%	842,440	66%
Operation & Maintenance for 15 Year Period		429,224	0%	0	0%	0	31%	134,887	69%
York Downe Sanitary		1,633,761	0%	0	0%	0	18%	293,219	82%
TOTAL AREA 47A : ANGUS GLEN		\$ 4,665,068	\$ -	\$ -	\$ -	\$ -	\$ 1,334,026	\$ 3,311,042	
Adjustments									
Balance in Reserve Fund as at December 31, 2007									
Credit as per Agreement									
Projects Funded from Reserve									
ASDC for AREA 47A : ANGUS GLEN									
Total Recoverable Growth-Related Costs								\$ 218,674	
Net Developable Land Area (ha)								19.80	
Area Specific Development Charge per Net Hectare								\$ 11,046	

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TOWN OF MARKHAM
DEVELOPMENT CHARGES BACKGROUND STUDY
AREA SPECIFIC GROWTH-RELATED PROJECTS
AREA 47B : YORK DOWNS

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TOWN OF MARKHAM

DEVELOPMENT CHARGES BACKGROUND STUDY

AREA SPECIFIC GROWTH-RELATED PROJECTS

AREA 49: 404 NORTH EMPLOYMENT LANDS

		Non-Development Charge Recoverable Costs		ASDC Recoverable In Other Area Specific or TWH Development Charge Recoverable	
Location	From / To	Total Gross Cost	Local Costs	Non-Growth (Benefit) to Existing)	AREA 49: 404 NORTH EMPLOYMENT LANDS
		Share	Cost	Share	Cost
ROADS No Projects					
STORM WATER MANAGEMENT No Projects					
SANITARY SEWERS Woodburn North Relief Sewer Woodburn by-pass Sanitary sewer, Phase 1 to Land Melbourne	to 404 Region Trunk Sewer	770,088 5,838,835	0% 0%	0 0%	0 0%
STUDIES No Projects					
SPECIAL PROJECTS No Projects					
PROJECTS undertaken by CREDIT AGREEMENT No Projects					
TOTAL AREA 49: 404 NORTH EMPLOYMENT LANDS		\$ 6,608,923	\$ -	\$ -	\$ 2,512,942
	Adjustments				\$ 4,086,981
				Balance in Reserve Fund as at December 31, 2007	\$ 81,541
				Credit as per Agreement Projects Funded from Reserve	\$ -
					\$ 237,600
ASDC for AREA 49: 404 NORTH EMPLOYMENT LANDS					
	Total Recoverable Growth-Related Costs				\$ 2,356,883
	Net Developable Land Area (ha)				136.80
	Area Specific Development Charge per Net Hectare				\$ 17,229

TOWN OF MARKHAM
2008 DEVELOPMENT CHARGES (HARD) REVIEW
After \$1.5M Bridge Contingency

OPTION #1

RESIDENTIAL DC's

Unit Type	Current 2004 Bylaw Rate Per Unit	Proposed 2008 Development Charge Per Unit (Before TWH Contingency)	Proposed 2008 Development Charge Per Unit (After TWH Contingency)	Variance After TWH Contingency	Variance After TWH Contingency
Singles and Semis	\$ 3,252	\$ 7,965	\$ 8,005	\$ 40	0.5%
Multiple Unit Dwelling (Townhouses)	2,554	6,267	6,299	32	0.5%
Apartments - Large (> 750 sq. ft.)	1,932	4,928	4,954	26	0.5%
Apartments - Small (= or < 750 sq. ft.)	1,383	2,961	2,976	15	0.5%

Cost per Capita	2,115	2,126
-----------------	-------	-------

NON-RESIDENTIAL DC's

Unit Type	Current 2004 Bylaw Rate Per Hectare	Proposed 2008 Development Charge Per Hectare (Before TWH Contingency)	Proposed 2008 Development Charge Per Hectare (After TWH Contingency)	Variance After TWH Contingency	Variance After TWH Contingency
Industrial/ Office/ Retail	\$ 81,007	\$ 166,889	\$ 167,741	\$ 852	0.5%



May 12, 2008

Frank J. Spaziani
Angus Glen Development Ltd. /
Kylemore Communities
10080 Kennedy Road
Markham, Ontario
L6C 1N9

Dear Mr. Spaziani:

Impact of Development Charge Transfer on Angus Glen, Area 47A

You asked us to examine the impact that the proposed development charge regime, being proposed by the Town of Markham (the Town), will have on Angus Glen, Area 47A, whereby the Town will be transferring most of the area specific development charges to Town Wide Hard.

We understand that Angus Glen currently has 734 units yet to be built, comprising of 166 singles, 130 townhouses, 120 garden apartments and 318 apartments on a multi-residential site, on approximately 18 hectares of land.

Based on the Town's estimates, as of May 2, 2008, after the transfer from ASDC to TWH, there will be a 35% increase in Markham TWH development charges across all unit types. As a result of the transfer, DCs for singles and semis will increase by \$1,988 per unit more than if the current policy remained in place, townhouse units will increase by \$1,564 per unit and apartment units increased by \$1,230 per unit. The total increase in TWH development charges relating to ASDC's to Angus Glen is \$1,072,068, under the proposed policy.

The total amount being transferred out of the area specific and into the TWH is \$238,604. The net increase in development charges specifically relating to the transfer of ASDC's to TWH's that Angus Glen will herein have to bear is \$833,464. This calculation is shown below.

Estimated ASDC to be Paid under Current Policy (not including Bridge and Credit Agreement Items)

Net Land Area to be Developed (per above)	18.238 Ha
Estimated Charge per Ha (per above)	\$13,083 per Ha
Total ASDC to be paid under current policy	\$238,604 (1)

Estimated Incremental TWH DC to be Paid under Proposed Policy

	Unit	Proposed Incremental Increase to TWH under New Policy	Total
Lots 1 to 166	166	\$1,988	\$ 330,008
Block 167 (garden apartments)	120	\$1,230	\$ 147,600
Multi Residential Site	318	\$1,230	\$ 391,140
Towns	130	\$1,564	\$ 203,320
Total	734		\$1,072,068 (2)

Net Additional Cost to be paid by Angus Glen under Proposed ASDC Policy \$833,464(2)-(1) above

Due to the differences in infrastructure requirements and relative stages of completion, certain areas including Angus Glen are disadvantaged by the proposed transfer of ASDC to the TWH. Because the transfer is revenue neutral to the Town of Markham, other development areas are revenue positive as a result of the transfer.

In order to alleviate this situation the Town could employ a grandfathering of areas whose development is mostly complete (keeping these area under the current regime) or provide a significant transition period before implementing the proposed new regime. The solution involving an equalization mechanism among the areas would require cooperation from all landowners and would be difficult to implement.

Sincerely,

Matthew Nisker