

DEVELOPMENT CHARGES BACKGROUND STUDY

Peterborough Utilities Commission

HEMSON Consulting Ltd.

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EXECUTIVE SUMMARY

Hemson Consulting Ltd. was retained by the Peterborough Utilities Commission (PUC) to complete a Development Charges (DC) Background Study. This background study provides the basis and background to update the PUC's development charges to accurately reflect the servicing needs of new development in the City of Peterborough.

The following summarizes the findings of the Development Charges Background Study.

- The study calculates development charges for the PUC under an approach that combines a City-wide with an area-specific cost recovery approach within various designated planning areas. This approach is in compliance with the provisions of the *Development Charges Act, 1997 (DCA)* and its associated regulations, including the amendments that came into force on January 1, 2016.
- The PUC currently levies development charges for the recovery of water services under By-law 13-174. In order to continue levying development charges, a new by-law will need to be passed by the City of Peterborough.
- Area-specific development charges are calculated for the recovery of water services in the City of Peterborough. This approach results in ten different charges that vary by planning area. The area-specific approach more closely aligns costs and benefits for services where benefits are more localized and can be identified.
- The PUC needs to continue implementing DCs to help fund capital projects throughout Peterborough so that development continues to be serviced in a fiscally responsible manner. The calculated changes to the development charges rates are required to reflect the revised costs associated with the infrastructure requirements.
- The development forecast for the City of Peterborough projects an increase of 19,615 units from the present time to build-out. The population arising from these newly constructed units is anticipated to be roughly 50,811 persons. The growth forecast also projects an additional growth of 854,000 square metres in new non-residential building space.
- The capital program recovers for the Southwest reservoir, a low lift pump, and various trunk watermains and oversizing mains.

- The total project costs amount to \$31.58 million. The addition of financing costs adds another \$9.94 million to the recoveries. However, not all of the project costs are related to new development, and as such, a share of \$5.22 million has been removed from the DC calculation. The total DC recoverable amount brought forward to the development charges calculation is reduced to \$36.29 million.
- The proposed development charge rates provide for the full recovery of all eligible development-related costs and is fully defensible under the *DCA*.
- The calculated charges are the maximum charges the PUC may adopt. Lower charges can be approved; however, this will require a reduction in the capital plan and reduced service levels or financing from other sources, most likely water utility rates.
- The fully calculated residential charges are recommended to vary by unit type, reflecting the difference in occupancy patterns expected in various unit types and the associated differences in demand that would be placed on water services.
- Based on the growth forecast and capital program contained in this study, the following PUC rates for residential and non-residential development has been calculated, and are shown below:

Planning Area	Total Charge Per Capita	Total Residential Development Charge Rates (1)			Non-Residential Charge (\$/square metre)
		Residential A Singles & Semis	Residential B Other Multiples	Residential C Apartments	
1. Auburn North	\$ 776.35	\$ 2,251	\$ 1,941	\$ 1,320	\$ 5.82
2. Jackson	\$ 908.89	\$ 2,636	\$ 2,272	\$ 1,545	\$ 5.82
3. Carnegie West	\$ 753.77	\$ 2,186	\$ 1,884	\$ 1,281	\$ 5.82
4. Chemong West	\$ 599.27	\$ 1,738	\$ 1,498	\$ 1,019	\$ 5.82
5. Lily Lake	\$ 886.73	\$ 2,572	\$ 2,217	\$ 1,507	\$ 5.82
6. Liftlock	\$ 607.19	\$ 1,761	\$ 1,518	\$ 1,032	\$ 5.82
7. Coldsprings	\$ 763.69	\$ 2,215	\$ 1,909	\$ 1,298	\$ 5.82
8. Outside Planning Areas	\$ 490.42	\$ 1,422	\$ 1,226	\$ 834	\$ 5.82
9. Carnegie East	\$ 232.81	\$ 675	\$ 582	\$ 396	\$ 5.82
10. Chemong East	\$ 353.85	\$ 1,026	\$ 885	\$ 602	\$ 5.82
(1) Based on Persons Per Unit of:		2.9	2.5	1.7	

I INTRODUCTION

In December 2013, the Corporation of the City of Peterborough passed a development charges by-law, By-law 13-174, on behalf of the Peterborough Utilities Commission (PUC), for the recovery of net development-related capital costs in the City related to water services. Since the passage of By-law 13-174, the PUC has identified future projects triggered by growth in the planning areas designated by the City of Peterborough and also by water pressure zones as assigned by the PUC. The capital forecast completed by the PUC details the development-related costs associated with the provision of water services in the City of Peterborough.

The PUC retained Hemson Consulting Ltd. to complete a development charges background study to recover the development-related capital costs associated with the provision of water service in the City of Peterborough.

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

The main objective of the study is to calculate PUC's development charge rates for the provision of water services within the City of Peterborough, in compliance with the provisions of the *DCA* and *O.Reg. 82/98*. This study identifies the development-related net capital costs attributable to development that is forecast to occur in the City to build-out. The costs are apportioned to types of development (residential and non-residential) in a manner that reflects the increase in the need for service attributable to each type of development. The study therefore calculates development charges for each type of development.

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

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

Section II of the report details the methodology used in the development charges background study.

Section III outlines the residential and non-residential growth forecasts on which the development charges are based.

Section IV summarizes the future development-related capital costs associated with the PUC.

Section V details the proposed new development charges rates for the PUC and describes the impact of the proposed rates on future operating costs.

Section VI presents an Asset Management Plan for the PUC, demonstrating the financial sustainability of assets over the life cycle of the 2019 DC By-law and satisfying the requirements of the amendment to the *Development Charges Act*.

Section VII provides the approach and requirements for administering an additional development charges by-law, including local services definitions.

II METHODOLOGY IS AN AREA-SPECIFIC APPROACH TO ALIGN DEVELOPMENT-RELATED COSTS AND BENEFITS

Several key steps are required when calculating a development charge. However, specific circumstances arise in each municipality which must be reflected in the calculation. In this study, we have tailored our approach to the Peterborough Utilities Commission's unique circumstances. The approach to the proposed development charges is focused on providing a reasonable alignment of growth-related costs with the development that necessitates them. This background study combines a City-wide approach with an area-specific approach for the residential rates. The development charge applicable to non-residential development has been calculated as a City-wide uniform charge. The approach used herein is consistent with the PUC's 2013 DC Background Study.

A. BOTH CITY-WIDE AND AREA-SPECIFIC CHARGES HAVE BEEN CALCULATED

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

1. Development Charge Based on a Combined City-Wide and Area-Specific Approach

A widely accepted method for sharing the development-related capital costs for such City services is to apportion them over all new growth anticipated in the City. The resulting development charge for services would be imposed against all development anywhere in the City. A share of the development-related capital cost for the provision of water services such as water supply, storage and major trunk distributions benefits growth throughout the City and is therefore most appropriately recovered on a City-wide basis.

City-wide charges are proposed for the PUC, combined with area-specific charges.

2. Area-Specific Charges are Proposed

For some of the infrastructure the PUC provides, the need for development-related capital additions to support anticipated development is more localized. For such infrastructure where costs and benefits are more localized, an alternative technique – the area-specific approach – is employed. The area-specific charges are consistent with the PUC's existing development charges for such works. The water distribution systems require additional, identifiable and independent projects in order to service anticipated development.

With regard to the PUC, a share of the development-related water infrastructure costs can be triggered by specific planning areas and water pressure zones and therefore area-specific charges are proposed.

The area-specific approach also facilitates front-end financing agreements for designated services if the PUC chooses to use the front-ending provisions of the *DCA*. As an alternative, the area-specific charges also facilitate the use of developer group agreements.

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

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

1. Development Forecast

The first step in the methodology requires a development forecast to be prepared for the study period, in this case from mid-year 2019 to build-out. The forecast of the future residential development potential of approved and potential units was provided by the City of Peterborough planning department. The total number of units is then translated into the forecast population in new dwelling units.

2. Service Categories and Historical Service Levels

The *DCA* stipulates that development charges cannot be recovered for the shares of the capital program that exceed the historical 10-year average service level for each service. However, this provision does not apply to water servicing as engineering standards and provincial health and environmental requirements take precedent.

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

A development-related capital forecast has been prepared by the staff at the PUC as part of the current study. The capital forecast identifies development-related projects required to service new development. There are no capital grants, subsidies or other

contributions that require deductions. The capital program includes some projects that provide a benefit to the existing population, and this portion, as identified by the PUC, has been excluded from the calculation of the development charges.

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

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

The development-related capital forecast prepared for this study ensures that development charges are only imposed to pay for projects that have been or are intended to be purchased or built in order to accommodate future anticipated development. There must also be a demonstrated commitment to continue to install facilities or infrastructure in the future. In this regard, Ontario Regulation 82/98, s.3 states that:

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

Finally, when calculating development charges, the development-related net capital costs must be reduced by 10 per cent for all services except water, wastewater, storm drainage, services related to highways, police services and fire (*DCA*, s.5.(1)8.). As this study deals with water service capital costs, 100 per cent of the net growth-related costs are recoverable through development charges.

4. Attribution to Types of Development

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

Where reasonable data exist, the apportionment is based on the expected demand for, and use of, the service by each sector as well as a consideration of other factors affecting the demand for specific municipal services.

Finally, the residential component of the City-wide development charge is applied to different housing types on the basis of average occupancy factors. The non-residential component is applied on the basis of gross building space in square metres. This unit breakdown is consistent with the City's current development charges by-law.

5. Final Adjustment

The final determination of the development charge results from adjustments made to development-related net capital costs for each project resulting from a cash flow analysis that takes account of the timing of projects and receipt of development charges. Borrowing costs are therefore accounted for in the calculation as allowed under the *DCA*.

III DEVELOPMENT FORECAST

This section provides the basis for the development forecasts used in calculating the development charges and provides a summary of the forecast results. The forecast is largely based on the forecast completed by the City of Peterborough's Planning Department for the 2017 Planning Area-Specific DC Background Study. The 2017 forecast has been updated to reflect building activity in the City over the period from 2017 to mid-2018. This is followed by a summary of the results of the housing unit and population forecast and the non-residential employment and space forecast.

A. RESIDENTIAL FORECAST

The PUC has organized the City by water pressure zones, whereas the City of Peterborough organizes the City into planning areas. To be consistent with the City's current by-law, the City's planning areas have been allocated to the PUC-defined water pressure zones for the purposes of calculating the development charges per planning area. The PUC Water Pressure Zone 1 costs will then be allocated to Auburn North, Coldsprings, Liftlock and the area defined as "Outside the Planning Areas". It should be noted that the area designated as "Outside the Planning Areas" is to encompass development that falls outside of all of the other planning areas, and is not intended to capture any development outside of the City of Peterborough's municipal boundaries.

Water Pressure Zone 3W encompasses the Lily Lake and Jackson planning areas. The costs in Water Pressure Zone 3N will be shared by the Carnegie West, Chemong East and Chemong West Areas. Water Pressure Zone 2 costs will be shared City-wide and although Carnegie lies geographically within this zone, it is not allocated Water Pressure Zone 2 costs due to its small proportionate share. Carnegie East, therefore, will only recover planning area costs and the City-wide uniform charge. The planning areas in the City are shown on Map 1.

Table 1 provides a summary of the residential forecast for all of the planning areas within the City. The planning period for the forecast is from mid-2018 to build-out. This is the planning period used throughout this study.

TABLE 1

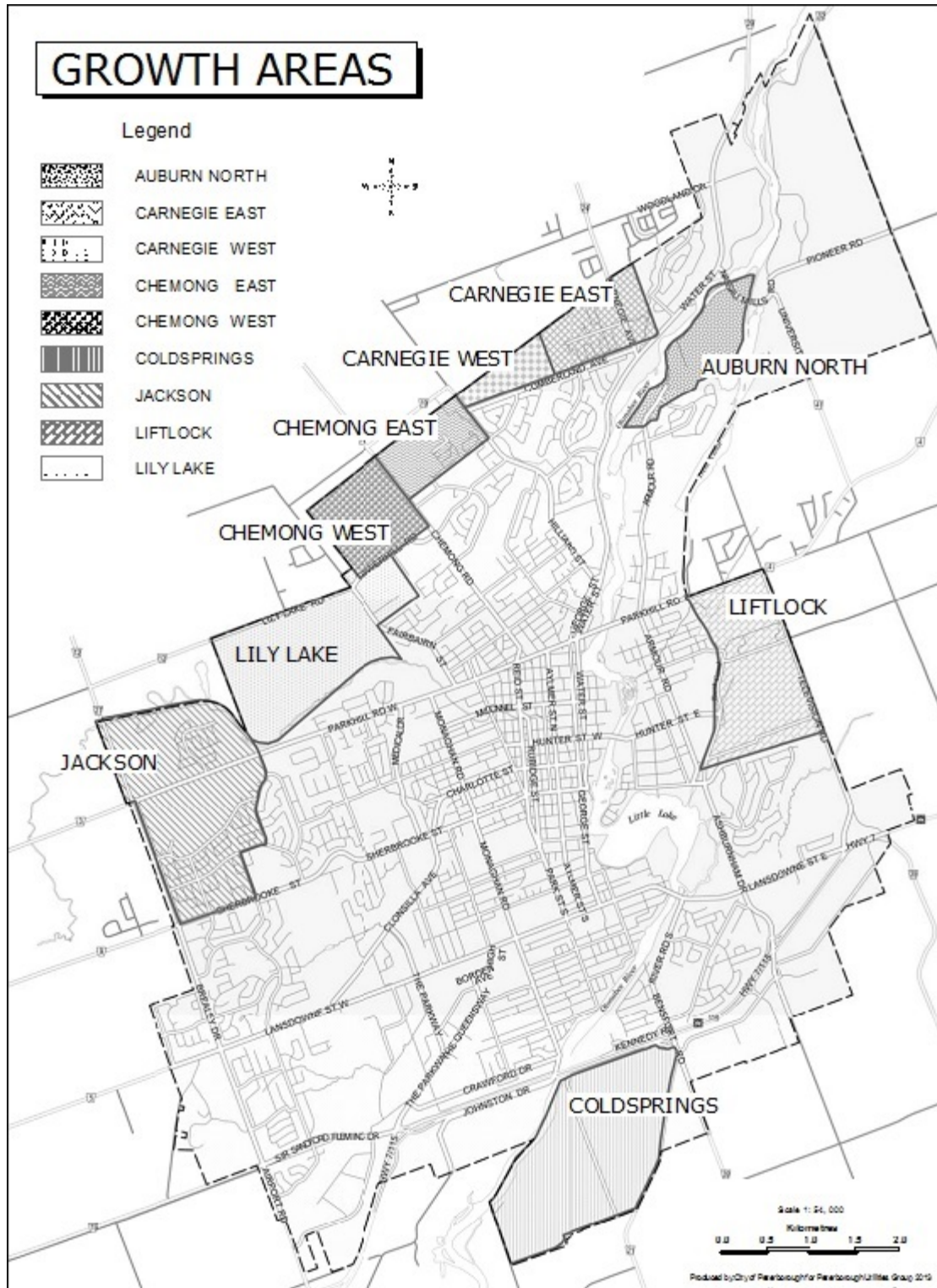
**PETERBOROUGH UTILITIES COMMISSION
RESIDENTIAL DEVELOPMENT POTENTIAL**

Growth Areas	Approved Units	Potential Units	Total Units	Population in New Units ¹	Share of Water Pressure Zone 1 Growth
Auburn North Planning Area					
Low Density Units	61	350	411	1,192	
Medium Density Units	41	425	466	1,165	
High Density Units	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	
Total Auburn North Planning Area	102	775	877	2,357	9.67%
Liftlock Planning Area					
Low Density Units	93	866	959	2,781	
Medium Density Units	0	416	416	1,040	
High Density Units	<u>0</u>	<u>173</u>	<u>173</u>	<u>294</u>	
Total Liftlock Planning Area	93	1,455	1,548	4,115	16.89%
Coldsprings Planning Area					
Low Density Units	29	2,446	2,475	7,178	
Medium Density Units	0	1,792	1,792	4,480	
High Density Units	<u>0</u>	<u>449</u>	<u>449</u>	<u>763</u>	
Total Coldsprings Planning Area	29	4,687	4,716	12,421	50.98%
Outside the Planning Areas					
Low Density Units	0	160	160	464	
Medium Density Units	29	720	749	1,873	
High Density Units	<u>43</u>	<u>1,800</u>	<u>1,843</u>	<u>3,133</u>	
Total Outside the Planning Areas	72	2,680	2,752	5,470	22.45%
Growth Areas	Approved Units	Potential Units	Total Units	Population in New Units¹	Share of Water Pressure Zone 3W Growth
Lily Lake Planning Area					
Low Density Units	414	1,229	1,643	4,765	
Medium Density Units	191	1,196	1,387	3,468	
High Density Units	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	
Total Lily Lake Planning Area	605	2,425	3,030	8,232	53.03%
Jackson Planning Area					
Low Density Units	1,289	731	2,020	5,858	
Medium Density Units	327	223	550	1,375	
High Density Units	<u>0</u>	<u>35</u>	<u>35</u>	<u>60</u>	
Total Jackson Planning Area	1,616	989	2,605	7,293	46.97%
Growth Areas	Approved Units	Potential Units	Total Units	Population in New Units¹	Share of Water Pressure Zone 3N Growth
Carnegie East Planning Area					
Low Density Units	389	343	732	2,123	
Medium Density Units	181	165	346	865	
High Density Units	<u>0</u>	<u>69</u>	<u>69</u>	<u>117</u>	
Total Carnegie East Planning Area	570	577	1,147	3,105	0.00%
Carnegie West Planning Area					
Low Density Units	0	373	373	1,082	
Medium Density Units	4	179	183	458	
High Density Units	<u>0</u>	<u>75</u>	<u>75</u>	<u>128</u>	
Total Carnegie West Planning Area	4	627	631	1,667	21.32%
Chemong East Planning Area					
Medium Density Units	583	0	583	1,691	
High Density Units	143	0	143	358	
Total Lily Lake Planning Area	<u>91</u>	<u>0</u>	<u>91</u>	<u>155</u>	
Total Chemong East Planning Area	817	0	817	2,203	28.18%
Chemong West Planning Area					
Low Density Units	21	876	897	2,601	
Medium Density Units	0	420	420	1,050	
High Density Units	<u>0</u>	<u>175</u>	<u>175</u>	<u>298</u>	
Total Chemong West Planning Area	21	1,471	1,492	3,949	50.51%
Total	3,929	15,686	19,615	50,811	

1) Based on persons per unit of:

Low 2.9
Medium 2.5
High 1.7

PETERBOROUGH UTILITIES COMMISSION MAP OF PLANNING AREAS



Over the planning period from mid-2018 to build-out, the total number of new residential units in the growth areas will increase by approximately 19,615 which translates into a population in new units of approximately 50,811. The planning area with the largest proportion of growth is Coldsprings, with over 4,700 approved and potential units.

Of the 19,615 new units, 3,929 units have been approved by the City, and the remainder are potential new units. The forthcoming units are predominantly low density (roughly 52 per cent), while 33 per cent will be medium density and the remainder will be high density units. The forecast of new units is translated into a population in new units forecast by applying a persons per unit (PPU) factor of 2.9, 2.5, and 1.7 to low, medium and high density units, respectively.

B. NON-RESIDENTIAL FORECAST

The non-residential space forecast prepared for development charges purposes is the basis for the non-residential development charge calculation. About 854,000 square metres of building space is forecast to come on-stream over the planning period to build-out. Keeping the City's activity rate consistent with historical trends, the employment to build-out is forecasted to grow by 21,340 jobs.

IV DEVELOPMENT-RELATED CAPITAL FORECAST

The development-related capital forecast has been compiled by PUC staff. The capital costs to be recovered through the development charges are consistent with the PUC capital budget with long-term servicing plans and objectives. The costs are shown in Table 2.

The PUC's capital works projects are separated into three components: City-wide capital projects, PUC-designated water pressure zone-specific costs, and planning-area-specific costs. The total value of the capital program after adjusting for cash flow consideration is \$41.51 million.

The total construction cost of the works is \$31.58 million; \$6.21 million of this cost is for City-wide water pumping and storage works. A further \$21.54 million of works are water pressure zone costs and are largely trunk watermain works related to servicing to the proposed Southwest Reservoir. The final \$3.82 million is for planning area-specific water distribution works. Financing costs have been added to projects over one million dollars. A total of \$9.94 million is included in the capital forecast for financing costs.

A share of the capital forecast is deemed to benefit the existing development within the City of Peterborough. Portions of the low lift pump (\$88,000), Southwest reservoir (\$2.56 million), the trunk main along Sir Sandford Fleming Drive (\$1.53 million) and the trunk main on Sherbrooke (\$1.04 million) all have non-growth shares associated with the projects. In total, \$5.22 million is identified as the non-growth share and this has been removed from the development charges calculation. The DC recoverable share is then reduced to \$36.29 million.

All of the individual projects, costing, financing assumptions and non-growth share assumptions are included in Table 2.

PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF GROWTH-RELATED CAPITAL COSTS

PUC CAPITAL PROJECTS	Project Costs	Financing Costs ¹	Non-Growth Shares	DC Recoverable
CITY-WIDE COSTS				
Projects				
Low Lift Pump	\$ 110,000	\$ -	\$ 88,000	\$ 22,000
SW Reservoir	\$ 6,100,000	\$ 2,128,000	\$ 2,563,000	\$ 5,665,000
Total City-Wide Costs	\$ 6,210,000	\$ 2,128,000	\$ 2,651,000	\$ 5,687,000
WATER PRESSURE ZONE COSTS				
Water Pressure Zone 1				
Cameron PI W to SW Reservoir via SS Fleming Dr	\$ 3,689,000	\$ 1,287,000	\$ 1,150,000	\$ 3,826,000
Guthrie - Neal Dr/Bensfort - River	\$ 1,370,000	\$ 478,000	\$ -	\$ 1,848,000
Across the river - Johnston to east side	\$ 602,000	\$ -	\$ -	\$ 602,000
Subtotal Water Pressure Zone 1	\$ 5,661,000	\$ 1,765,000	\$ 1,150,000	\$ 6,276,000
Water Pressure Zone 2				
Cameron PI W to SW Reservoir via SS Fleming Dr	\$ 1,231,000	\$ 430,000	\$ 380,000	\$ 1,281,000
Reservoir to Lansdowne @ Spillsbury	\$ 2,876,000	\$ 1,003,000	\$ -	\$ 3,879,000
SW Reservoir BPS	\$ 803,000	\$ 279,979	\$ -	\$ 1,082,979
Subtotal Water Pressure Zone 2	\$ 4,910,000	\$ 1,712,979	\$ 380,000	\$ 6,242,979
Water Pressure Zone 3N				
Cameron PI W to SW Reservoir via SS Fleming Dr	\$ 1,229,000	\$ 429,000	\$ -	\$ 1,658,000
SW Reservoir BPS	\$ 401,000	\$ 139,815	\$ -	\$ 540,815
Subtotal Water Pressure Zone 3N	\$ 1,630,000	\$ 568,815	\$ -	\$ 2,198,815
Water Pressure Zone 3W				
Cameron PI W to SW Reservoir via SS Fleming Dr	\$ 1,229,000	\$ 429,000	\$ -	\$ 1,658,000
SW Reservoir to Sherbrooke/Brealey	\$ 4,263,000	\$ 1,487,000	\$ -	\$ 5,750,000
Sherbrooke - Brealey to Storage Tank	\$ 1,481,000	\$ 517,000	\$ 1,040,000	\$ 958,000
Parkhill Rd - Brealey to Ravenwood	\$ 1,969,000	\$ 687,000	\$ -	\$ 2,656,000
SW Reservoir BPS	\$ 401,000	\$ 139,815	\$ -	\$ 540,815
Subtotal Water Pressure Zone 3W	\$ 9,343,000	\$ 3,259,815	\$ 1,040,000	\$ 11,562,815
Total Water Pressure Zone Costs	\$ 21,544,000	\$ 7,306,610	\$ 2,570,000	\$ 26,280,610

PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF GROWTH-RELATED CAPITAL COSTS

PUC CAPITAL PROJECTS	Project Costs	Financing Costs ¹	Non-Growth Shares	DC Recoverable
PLANNING AREA COSTS				
Auburn North				
250m Trunk Watermain	\$ 450,000	\$ -	\$ -	\$ 450,000
1,000m Oversizing Main	\$ 100,000	\$ -	\$ -	\$ 100,000
Subtotal Auburn North	\$ 550,000	\$ -	\$ -	\$ 550,000
Carnegie East				
215m Oversizing Main	\$ 21,500	\$ -	\$ -	\$ 21,500
Subtotal Carnegie East	\$ 21,500	\$ -	\$ -	\$ 21,500
Carnegie West				
1,160m Oversizing Main	\$ 116,000	\$ -	\$ -	\$ 116,000
Subtotal Carnegie West	\$ 116,000	\$ -	\$ -	\$ 116,000
Chemong East				
1,230m Oversizing Main	\$ 123,000	\$ -	\$ -	\$ 123,000
Subtotal Chemong East	\$ 123,000	\$ -	\$ -	\$ 123,000
Chemong West				
1,930m Oversizing Main	\$ 111,000	\$ -	\$ -	\$ 111,000
Subtotal Chemong West	\$ 111,000	\$ -	\$ -	\$ 111,000
Coldsprings				
800m Trunk Watermain	\$ 1,440,000	\$ 502,000	\$ -	\$ 1,942,000
75m Trunk Watermain (River Crossing)	\$ 600,000	\$ -	\$ -	\$ 600,000
1,400m Oversizing Main	\$ 140,000	\$ -	\$ -	\$ 140,000
Subtotal Coldsprings	\$ 2,180,000	\$ 502,000	\$ -	\$ 2,682,000
Jackson				
2,725m Oversizing Main	\$ 250,000	\$ -	\$ -	\$ 250,000
Subtotal Jackson	\$ 250,000	\$ -	\$ -	\$ 250,000
Liftlock				
2,400m Oversizing Main	\$ 240,000	\$ -	\$ -	\$ 240,000
Subtotal Liftlock	\$ 240,000	\$ -	\$ -	\$ 240,000
Lily Lake				
2,610m Oversizing Main	\$ 230,000	\$ -	\$ -	\$ 230,000
Subtotal Lily Lake	\$ 230,000	\$ -	\$ -	\$ 230,000
Total Planning Area Costs	\$ 3,821,500	\$ 502,000	\$ -	\$ 4,323,500
GRAND TOTAL	\$ 31,575,500	\$ 9,936,610	\$ 5,221,000	\$ 36,291,110

Note 1:

Debt Repayment Terms		
Amortization Period	Financing Rate	Debt Factor
15	4.00%	0.089927

V PROPOSED DEVELOPMENT CHARGES ARE CALCULATED IN ACCORDANCE WITH THE *DCA*

This section summarizes the calculation of development charges and the resulting total development charge by type of development. For City-wide and planning areas, the calculation of the per capita (residential) and per square metre (non-residential) charges is reviewed. For residential development, an adjusted total per capita amount is applied to different housing types on the basis of average occupancy factors. For non-residential development, the calculated development charges rates are based on gross floor area (GFA) of building space.

The PUC has brought forward development-related capital costs which can be linked to specific planning areas that trigger these costs. The proposed development charges combine City-wide and area-specific development charges for the recovery of all development-related capital costs.

A. CALCULATED DEVELOPMENT CHARGES FOR CITY-WIDE COSTS

A share of the capital costs has been identified as providing a broad City-wide benefit and is proposed to be recovered by a City-wide uniform charge. The balance of the development-related costs is triggered by, or provides direct benefit to, development within specific planning areas or water pressure zones. These costs are proposed to be recovered on an area-specific basis which will yield a different development charge in each of the planning areas.

The costs to be recovered on a City-wide basis are shown in Table 3. The total cost of the works is \$19.45 million. The cost is comprised of three types of works: future (or planned) infrastructure works are the bulk of the cost at \$14.58 million, or 97 per cent of the costs. Also included in the calculation of the development charges are studies which the PUC will undertake within the planning horizon. Also brought forward is the recovery of the existing negative position in the City-wide development charge reserve fund balance and has negative value of \$3.65 million relating to previously constructed infrastructure with committed excess capacity available to meet a share of the needs of development. Of the total costs, \$2.65 million has been identified as a replacement or benefit to existing share and thus is removed from the development charges calculation.

**PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
CITY-WIDE DEVELOPMENT CHARGES CAPITAL FORECAST**

Development Potential:	
Growth in Population in New Units	50,811
Growth in Number of New Units	19,615
Growth in Square Metres	854,000

	Growth-Related Capital Forecast				Residential Share		Non-Residential Share	
	Total Gross Costs	Non-Growth Share	Available DC Reserves	Total DC Eligible Costs	%	\$	%	\$
PROJECTS								
Low Lift Pump	\$ 110,000	\$ 88,000	\$ -	\$ 22,000	70%	\$ 15,492.96	30%	\$ 6,507
SW Reservoir	\$ 8,228,000	\$ 2,563,000	\$ -	\$ 5,665,000	70%	\$ 3,989,437	30%	\$ 1,675,563
City-wide Water Pressure Zone 2 Costs	\$ 6,242,979	\$ -	\$ -	\$ 6,242,979	70%	\$ 4,396,464	30%	\$ 1,846,515
STUDIES								
Development Charges Studies	\$ 100,000	\$ -	\$ -	\$ 100,000	70%	\$ 70,423	30%	\$ 29,577
Capacity Study	\$ 175,000	\$ -	\$ -	\$ 175,000	70%	\$ 123,239	30%	\$ 51,761
Master Servicing Study	\$ 175,000	\$ -	\$ -	\$ 175,000	70%	\$ 123,239	30%	\$ 51,761
RECOVERY OF NEGATIVE RESERVE FUND BALANCE								
City-wide Balance	\$ 4,417,571	\$ -	\$ -	\$ 4,417,571	70%	\$ 3,110,966	30%	\$ 1,306,606
TOTAL COSTS	\$ 19,448,550	\$ 2,651,000	\$ -	\$ 16,797,550		\$ 11,829,261		\$ 4,968,290
Unadjusted Development Charge Per Capita (\$)					\$	232.81		
Unadjusted Development Charge Per Sq.M. (\$)							\$	5.82

Water: Residential	Charge Per Capita	Charge By Unit Type (1)		
		Residential A Singles/Semi	Residential B Other Multiples	Residential C Apartments
Calculated Water Charge	\$ 232.81	\$ 675	\$ 582	\$ 396

Water: Non-Residential**Calculated Charge**

Per Square Metre of GFA	\$ 5.82
Per Square Foot of GFA	\$ 0.54

Notes:

1) Based on Persons Per Unit Of:

2.90

2.50

1.70

The remaining \$16.80 million is development-related and has been attributed: \$11.83 million to residential development and \$4.97 million to non-residential development. The City-wide costs are allocated 70 per cent to residential and 30 per cent to non-residential to reflect proportional shares in anticipation of future new water demands.

The residential development charge is calculated by taking the total cost of the residential share (\$11.83 million) and dividing that by the growth in population in the new units expected in the planning areas (50,811). This results in a charge per capita of \$232.81. This value is then multiplied by the persons per unit factor to each respective residential unit type. The resulting residential City-wide charges range from a high of \$675 for a single or semi-detached unit to a low of \$396 per apartment unit. The ranges in DC rate reflect the different occupancy patterns of each development type.

The non-residential development charge is calculated in a similar manner by taking the total non-residential share (\$4.97 million) and dividing it by the non-residential growth in square metres (854,000 square metres). The resulting non-residential charge is \$5.82 per square metre.

B. ALLOCATION OF WATER PRESSURE ZONE COSTS

The next costs that are recovered are the PUC-designated water pressure zone costs. To calculate area-specific charges, the water pressure zone costs have been allocated to planning areas to be consistent with the recovery of other planning area-specific charges.

These costs are then allocated to the planning areas based upon their share of population growth in their respective water pressure zones (see Table 1). The allocation of these costs is shown in Table 4. For example the planning areas that lie within Water Pressure Zone 1 are Auburn North, Liftlock, Coldsprings, and “Outside the Planning Area”. The population in new dwellings is used to determine each of the planning area’s share of the Water Pressure Zone 1 costs. As most of the development in Water Pressure Zone 1 is occurring in Coldsprings, more of the costs are allocated to this planning area.

PETERBOROUGH UTILITIES COMMISSION
ALLOCATION OF PRESSURE ZONE COSTS TO PLANNING AREAS

		Allocation of Pressure Zone Costs to Planning Areas ¹										
		Pressure Zone 1				Pressure Zone 2		Pressure Zone 3N			Pressure Zone 3W	
		Auburn North	Liftlock	Coldsprings	Outside Planning Area	City-Wide	Carnegie East	Carnegie West	Chemong East	Chemong West	Jackson	Lily Lake
Pressure Zone 1 Costs	\$ 6,276,000	\$ 607,159	\$ 1,060,113	\$ 3,199,710	\$ 1,409,018	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Pressure Zone 2 Costs	\$ 6,242,979	\$ -	\$ -	\$ -	\$ -	\$ 6,242,979	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Pressure Zone 3N Costs	\$ 2,198,815	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 468,736	\$ 619,535	\$ 1,110,545	\$ -	\$ -
Pressure Zone 3W Costs	\$ 11,562,815	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,431,463	\$ 6,131,353
TOTAL COSTS	\$ 26,280,610	\$ 607,159	\$ 1,060,113	\$ 3,199,710	\$ 1,409,018	\$ 6,242,979	\$ -	\$ 468,736	\$ 619,535	\$ 1,110,545	\$ 5,431,463	\$ 6,131,353
1) Based on Development Potential:		9.67%	16.89%	50.98%	22.45%			21.32%	28.18%	50.51%	46.97%	53.03%

C. CALCULATED DEVELOPMENT CHARGES FOR THE PLANNING AREAS

The PUC designated water pressure zone costs are then added to the planning area-specific costs to determine the development charge. The development charge is expressed in a per capita basis, and is then translated into a charge-by-unit-type basis. The residential unit types are singles/semi-detached, other multiples and apartments, and they are based on a persons per unit of 2.9, 2.5 and 1.7, respectively. The calculated area-specific development charges can be found in Appendix A, Tables 2-11.

The City-wide combined with the planning area charges are summarized below in Table 5.

The total development charge would be the addition of the City-wide and area-specific charges. The total development charges for residential and non-residential development is shown in Table 6.

D. SUMMARY

The development charges brought forward are supportable and defensible under the *Development Charges Act*. The calculated development charges are the maximum permissible charges under the *DCA* and provide for full growth-related cost recovery.

Summaries for the calculated development charges rates are shown in Table 7 and Table 8 below. This side-by-side comparison displays the variances between the proposed and current development charges. Many of the calculated charges are lower than the rate that is currently being levied. This is due to higher development forecasts than in the last study, changes in the capital projects and the utilization of existing DC reserves to offset the cost of new capital projects.

As with the residential City-wide charge, the non-residential rate is also experiencing a decrease from the existing to proposed charge. The non-residential charge only recovers for City-wide costs (see Table 3). The reason for the decrease in the rate is that this Study is now recovering for City-wide related costs over a larger employment forecast.

**PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF RESIDENTIAL DEVELOPMENT CHARGES**

Planning Area	Charge Per Capita		
	City-Wide Charge	Planning Area Charge	Total Charge Per Capita
1. Auburn North	\$ 232.81	\$ 543.54	\$ 776.35
2. Jackson	\$ 232.81	\$ 676.08	\$ 908.89
3. Carnegie West	\$ 232.81	\$ 520.96	\$ 753.77
4. Chemong West	\$ 232.81	\$ 366.46	\$ 599.27
5. Lily Lake	\$ 232.81	\$ 653.92	\$ 886.73
6. Liftlock	\$ 232.81	\$ 374.38	\$ 607.19
7. Coldsprings	\$ 232.81	\$ 530.88	\$ 763.69
8. Outside Planning Areas	\$ 232.81	\$ 257.61	\$ 490.42
9. Carnegie East	\$ 232.81	\$ -	\$ 232.81
10. Chemong East	\$ 232.81	\$ 121.04	\$ 353.85

**PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF RESIDENTIAL DEVELOPMENT CHARGES**

Planning Area	Total Charge Per Capita	Total Residential Development Charge Rates (1)			Non-Residential Charge (\$/square metre)
		Residential A Singles & Semis	Residential B Other Multiples	Residential C Apartments	
1. Auburn North	\$ 776.35	\$ 2,251	\$ 1,941	\$ 1,320	\$ 5.82
2. Jackson	\$ 908.89	\$ 2,636	\$ 2,272	\$ 1,545	\$ 5.82
3. Carnegie West	\$ 753.77	\$ 2,186	\$ 1,884	\$ 1,281	\$ 5.82
4. Chemong West	\$ 599.27	\$ 1,738	\$ 1,498	\$ 1,019	\$ 5.82
5. Lily Lake	\$ 886.73	\$ 2,572	\$ 2,217	\$ 1,507	\$ 5.82
6. Liftlock	\$ 607.19	\$ 1,761	\$ 1,518	\$ 1,032	\$ 5.82
7. Coldsprings	\$ 763.69	\$ 2,215	\$ 1,909	\$ 1,298	\$ 5.82
8. Outside Planning Areas	\$ 490.42	\$ 1,422	\$ 1,226	\$ 834	\$ 5.82
9. Carnegie East	\$ 232.81	\$ 675	\$ 582	\$ 396	\$ 5.82
10. Chemong East	\$ 353.85	\$ 1,026	\$ 885	\$ 602	\$ 5.82
(1) Based on Persons Per Unit of:		2.9	2.5	1.7	

**PETERBOROUGH UTILITIES COMMISSION
DEVELOPMENT CHARGES RATE COMPARISONS**

Development Charges by Planning Area	Charge Per Single & Semi-Detached Unit - Residential A			
	Calculated Charge	Existing Charge (Jan 1/19)	% Difference	
			\$	%
1. Auburn North	\$ 2,251	\$ 3,057	\$ (806)	-26%
2. Jackson	\$ 2,636	\$ 2,907	\$ (271)	-9%
3. Carnegie West	\$ 2,186	\$ 2,108	\$ 78	4%
4. Chemong West	\$ 1,738	\$ 1,825	\$ (87)	-5%
5. Lily Lake	\$ 2,572	\$ 3,780	\$ (1,208)	-32%
6. Liftlock	\$ 1,761	\$ 1,728	\$ 33	2%
7. Coldsprings	\$ 2,215	\$ 2,166	\$ 49	2%
8. Outside Planning Areas	\$ 1,422	\$ 1,522	\$ (100)	-7%
9. Carnegie East	\$ 675	\$ 772	\$ (97)	-13%
10. Chemong East	\$ 1,026	\$ 1,885	\$ (859)	-46%

**PETERBOROUGH UTILITIES COMMISSION
DEVELOPMENT CHARGES RATE COMPARISONS**

Development Charges by Planning Area	Non-Residential (\$/square metre)			
	Calculated Charge	Existing Charge (Jan 1/19)	% Difference	
			\$	%
1. Auburn North	\$ 5.82	\$ 6.65	\$ (0.83)	-12%
2. Jackson	\$ 5.82	\$ 6.65	\$ (0.83)	-12%
3. Carnegie West	\$ 5.82	\$ 6.65	\$ (0.83)	-12%
4. Chemong West	\$ 5.82	\$ 6.65	\$ (0.83)	-12%
5. Lily Lake	\$ 5.82	\$ 6.65	\$ (0.83)	-12%
6. Liftlock	\$ 5.82	\$ 6.65	\$ (0.83)	-12%
7. Coldsprings	\$ 5.82	\$ 6.65	\$ (0.83)	-12%
8. Outside Planning Areas	\$ 5.82	\$ 6.65	\$ (0.83)	-12%
9. Chemong East	\$ 5.82	\$ 6.65	\$ (0.83)	-12%
10. Chemong East	\$ 5.82	\$ 6.65	\$ (0.83)	-12%

VI ASSET MANAGEMENT PLAN

The *DCA* now requires that an Asset Management Plan must be completed before the passing of a development charges by-law. A key function of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life cycle.

A. ANNUAL CAPITAL PROVISIONS WILL REACH \$577,300 BY BUILD-OUT

Table 9 summarizes the annual capital provision required to replace the development eligible and ineligible costs associated with the capital infrastructure identified in the DC Background Study. This estimate is based on information obtained through discussions with PUC staff regarding useful life assumptions and the capital cost of acquiring and/or replacing each assets.

Table 9 illustrates that by build-out, the PUC will need to fund an additional \$577,300 per annum in order to properly fund the full life cycle costs of the new assets supported under the proposed Development Charges by-law.

The calculated annual funding provision should be considered within the context of the City's projected growth. From now until build-out, the City is projected to increase by 50,800 people. The City will also add approximately 21,340 new employees over this time period. This results in approximately 854,000 square metres of additional non-residential building space.

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

TABLE 9

**PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF ASSET MANAGEMENT REQUIREMENTS**

Service Area	2019 - Build Out Capital Program		Calculated AMP Annual Provision by Build-out	
	DC Recoverable	Non-DC Funded	DC Related	Non-DC Related
City-Wide Costs	\$ 15,307,061	\$ 7,135,400	\$ 112,898	\$ 52,628
Water Pressure Zone Costs	\$ 95,715,748	\$ 11,348,697	\$ 411,468	\$ 31,460
<i>Water Pressure Zone 1</i>	\$ 27,713,783	\$ 5,078,211	\$ 76,827	\$ 14,078
<i>Water Pressure Zone 2</i>	\$ 19,012,289	\$ 1,678,017	\$ 114,186	\$ 4,652
<i>Water Pressure Zone 3N</i>	\$ 8,777,107	\$ -	\$ 31,033	\$ -
<i>Water Pressure Zone 3W</i>	\$ 40,212,568	\$ 4,592,469	\$ 189,422	\$ 12,731
Planning Area Costs	\$ 19,091,865	\$ -	\$ 52,926	\$ -
<i>Auburn North</i>	\$ 2,428,710	\$ -	\$ 6,733	\$ -
<i>Carnegie East</i>	\$ 94,940	\$ -	\$ 263	\$ -
<i>Carnegie West</i>	\$ 512,237	\$ -	\$ 1,420	\$ -
<i>Chemong East</i>	\$ 543,148	\$ -	\$ 1,506	\$ -
<i>Chemong West</i>	\$ 490,158	\$ -	\$ 1,359	\$ -
<i>Coldsprings</i>	\$ 11,843,271	\$ -	\$ 32,832	\$ -
<i>Jackson</i>	\$ 1,103,959	\$ -	\$ 3,060	\$ -
<i>Liftlock</i>	\$ 1,059,801	\$ -	\$ 2,938	\$ -
<i>Lily Lake</i>	\$ 1,015,642	\$ -	\$ 2,816	\$ -
Total	\$ 130,114,673	\$ 18,484,097	\$ 577,292	\$ 84,088

VII DEVELOPMENT CHARGES ADMINISTRATION AND LOCAL SERVICE DEFINITIONS

A. DEVELOPMENT CHARGES BY-LAW ADMINISTRATION

As the City currently has a development by-law in force on behalf of the PUC and the proposed by-law is identical with respect to policies, practices and exemptions, no changes to the existing by-law administration are required.

B. LOCAL SERVICE DEFINITIONS

The following provides the definition of “local service”, under the *Development Charges Act, 1997 (DCA)*, for a number of services provided by the PUC. The purpose in establishing these definitions is to determine the eligible capital costs for inclusion in the development charges calculation for the provision of water services in the City of Peterborough. The functions or services deemed to be local in nature are not to be included in the determination of the development charges rates. The provision of local services is considered to be a direct developer responsibility under s.59 of the DCA and will (or may) be recovered under other agreement(s) with the landowner or developer. The issue of “local services” is being specifically considered for water services since it is the only service relevant to this background study.

1. All water supply, storage and treatment facilities as well as booster pumping stations are to be included in the development charges calculation.
2. Watermains within the development that are larger than 300 mm are to be included in the development charges calculation. The amount of cost contribution for watermains within a development shall be calculated using tendered unit prices and shall be the difference between the cost of the actual pipe diameter and the cost of a 300 mm pipe diameter.
3. Watermains 300 mm and under are deemed to be a local service and are a direct funding responsibility of the developer.
4. Connections to trunk mains and pumping stations to service specific areas are to be a direct developer responsibility.
5. Trunk watermains, generally outside the development area, identified by a Class Environmental Assessment, Servicing Study or by City staff will be included in the development charges calculation.

APPENDIX A

CALCULATED DEVELOPMENT CHARGES

**PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
CITY-WIDE DEVELOPMENT CHARGES CAPITAL FORECAST**

Development Potential:	
Growth in Population in New Units	50,811
Growth in Number of New Units	19,615
Growth in Square Metres	854,000

	Growth-Related Capital Forecast				Residential Share		Non-Residential Share	
	Total Gross Costs	Non-Growth Share	Available DC Reserves	Total DC Eligible Costs	%	\$	%	\$
PROJECTS								
Low Lift Pump	\$ 110,000	\$ 88,000	\$ -	\$ 22,000	70%	\$ 15,492.96	30%	\$ 6,507
SW Reservoir	\$ 8,228,000	\$ 2,563,000	\$ -	\$ 5,665,000	70%	\$ 3,989,437	30%	\$ 1,675,563
City-wide Water Pressure Zone 2 Costs	\$ 6,242,979	\$ -	\$ -	\$ 6,242,979	70%	\$ 4,396,464	30%	\$ 1,846,515
STUDIES								
Development Charges Studies	\$ 100,000	\$ -	\$ -	\$ 100,000	70%	\$ 70,423	30%	\$ 29,577
Capacity Study	\$ 175,000	\$ -	\$ -	\$ 175,000	70%	\$ 123,239	30%	\$ 51,761
Master Servicing Study	\$ 175,000	\$ -	\$ -	\$ 175,000	70%	\$ 123,239	30%	\$ 51,761
RECOVERY OF NEGATIVE RESERVE FUND BALANCE								
City-wide Balance	\$ 4,417,571	\$ -	\$ -	\$ 4,417,571	70%	\$ 3,110,966	30%	\$ 1,306,606
TOTAL COSTS	\$ 19,448,550	\$ 2,651,000	\$ -	\$ 16,797,550		\$ 11,829,261		\$ 4,968,290
Unadjusted Development Charge Per Capita (\$)						\$ 232.81		
Unadjusted Development Charge Per Square Metre (\$)								\$ 5.82

Water: Residential	Charge Per Capita	Charge By Unit Type (1)		
		Residential A Singles/Semi	Residential B Other Multiples	Residential C Apartments
Calculated Water Charge	\$ 232.81	\$ 675	\$ 582	\$ 396

Water: Non-Residential	
Calculated Charge	
Per Square Metre of GFA	\$ 5.82
Per Square Foot of GFA	\$ 0.54

Notes:

1) Based on Persons Per Unit Of:

2.90

2.50

1.70

30
APPENDIX A
TABLE 2

PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF PLANNING AREA SPECIFIC RESIDENTIAL DEVELOPMENT CHARGES
AUBURN NORTH PLANNING AREA

Total Approved & Potential Units	877
Population Growth in New Units	2,357

AUBURN NORTH PLANNING AREA	Growth-Related Capital Forecast			
	Total Gross Cost	Non-Growth Share	Available DC Reserves	Total DC Eligible Costs
Projects				
1 250m Trunk Watermain	\$ 450,000	\$ -	\$ -	\$ 450,000
2 1,000m Oversizing Main	\$ 100,000	\$ -	\$ -	\$ 100,000
Allocation of Water Pressure Zone 1 Costs	\$ 607,159	\$ -	\$ -	\$ 607,159
Recovery of Negative Reserve Fund Balance	\$ 123,911	\$ -	\$ -	\$ 123,911
TOTAL AUBURN NORTH PLANNING AREA	\$ 1,281,070	\$ -	\$ -	\$ 1,281,070
Development Charge Per Capita				\$ 543.54

AUBURN NORTH PLANNING AREA	Development Charge Per Capita	Charge By Unit Type (1)		
		<u>Residential A</u> Singles/Semi	<u>Residential B</u> Other Multiples	<u>Residential C</u> Apartments
AUBURN NORTH PLANNING AREA	\$ 543.54	\$ 1,576	\$ 1,359	\$ 924

(1) Based on Persons Per Unit Of:

2.90

2.50

1.70

HEMSON

31
APPENDIX A
TABLE 3

**PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF PLANNING AREA SPECIFIC RESIDENTIAL DEVELOPMENT CHARGES
CARNEGIE WEST PLANNING AREA**

Total Approved & Potential Units	631
Population Growth in New Units	1,667

CARNEGIE WEST PLANNING AREA	Growth-Related Capital Forecast			
	Total Gross Cost	Non-Growth Share	Available DC Reserves	Total DC Eligible Costs
Projects				
1 1,160m Oversizing Main	\$ 116,000	\$ -	\$ -	\$ 116,000
Allocation of Water Pressure Zone 3N Costs	\$ 468,736	\$ -	\$ -	\$ 468,736
Recovery of Negative Reserve Fund Balance	\$ 283,547	\$ -	\$ -	\$ 283,547
TOTAL CARNEGIE WEST PLANNING AREA	\$ 868,283	\$ -	\$ -	\$ 868,283
Development Charge Per Capita				\$ 520.96

CARNEGIE WEST PLANNING AREA	Development Charge Per Capita	Charge By Unit Type (1)		
		<u>Residential A</u> Singles/Semi	<u>Residential B</u> Other Multiples	<u>Residential C</u> Apartments
CARNEGIE WEST PLANNING AREA	\$ 520.96	\$ 1,511	\$ 1,302	\$ 886

(1) Based on Persons Per Unit Of:

2.90

2.50

1.70

32
APPENDIX A
TABLE 4

**PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF PLANNING AREA SPECIFIC RESIDENTIAL DEVELOPMENT CHARGES
CHEMONG WEST PLANNING AREA**

Total Approved & Potential Units	1,492
Population Growth in New Units	3,949

CHEMONG WEST PLANNING AREA	Growth-Related Capital Forecast			
	Total Gross Cost	Non-Growth Share	Available DC Reserves	Total DC Eligible Costs
Projects				
1 1,930m Oversizing Main	\$ 111,000	\$ -	\$ -	\$ 111,000
Allocation of Water Pressure Zone 3N Costs	\$ 1,110,545	\$ -	\$ -	\$ 1,110,545
Recovery of Negative Reserve Fund Balance	\$ 225,550	\$ -	\$ -	\$ 225,550
TOTAL CHEMONG WEST PLANNING AREA	\$ 1,447,095	\$ -	\$ -	\$ 1,447,095
Development Charge Per Capita				\$ 366.46

CHEMONG WEST PLANNING AREA	Development Charge Per Capita	Charge By Unit Type (1)		
		<u>Residential A</u> Singles/Semi	<u>Residential B</u> Other Multiples	<u>Residential C</u> Apartments
CHEMONG WEST PLANNING AREA	\$ 366.46	\$ 1,063	\$ 916	\$ 623

(1) Based on Persons Per Unit Of:

2.90

2.50

1.70

33
APPENDIX A
TABLE 5

PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF PLANNING AREA SPECIFIC RESIDENTIAL DEVELOPMENT CHARGES
CARNEGIE EAST PLANNING AREA

Total Approved & Potential Units	1,147
Population Growth in New Units	3,105

CARNEGIE EAST PLANNING AREA	Growth-Related Capital Forecast			
	Total Gross Cost	Non-Growth Share	Available DC Reserves	Total DC Eligible Costs
Projects				
1 215m Oversizing Main	\$ 21,500	\$ -	\$ 21,500	\$ -
Allocation of Water Pressure Zone 3N Costs	\$ -	\$ -	\$ -	\$ -
TOTAL CARNEGIE EAST PLANNING AREA	\$ 21,500	\$ -	\$ 21,500	\$ -
Development Charge Per Capita				\$ -

CARNEGIE EAST PLANNING AREA	Development Charge Per Capita	Charge By Unit Type (1)		
		<u>Residential A</u> Singles/Semi	<u>Residential B</u> Other Multiples	<u>Residential C</u> Apartments
CARNEGIE EAST PLANNING AREA	\$ -	\$ -	\$ -	\$ -

(1) Based on Persons Per Unit Of:

2.90

2.50

1.70

34
APPENDIX A
TABLE 6

PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF PLANNING AREA SPECIFIC RESIDENTIAL DEVELOPMENT CHARGES
CHEMONG EAST PLANNING AREA

Total Approved & Potential Units	817
Population Growth in New Units	2,203

CHEMONG EAST PLANNING AREA	Growth-Related Capital Forecast			
	Total Gross Cost	Non-Growth Share	Available DC Reserves	Total DC Eligible Costs
Projects				
1 1,230m Oversizing Main	\$ 123,000	\$ -	\$ 123,000	\$ -
Allocation of Water Pressure Zone 3N Costs	\$ 619,535	\$ -	\$ 352,901	\$ 266,634
TOTAL CHEMONG EAST PLANNING AREA	\$ 742,535	\$ -	\$ 475,901	\$ 266,634
Development Charge Per Capita				\$ 121.04

CHEMONG EAST PLANNING AREA	Development Charge Per Capita	Charge By Unit Type (1)		
		<u>Residential A</u> Singles/Semi	<u>Residential B</u> Other Multiples	<u>Residential C</u> Apartments
CHEMONG EAST PLANNING AREA	\$ 121.04	\$ 351	\$ 303	\$ 206

(1) Based on Persons Per Unit Of:

2.90

2.50

1.70

35
APPENDIX A
TABLE 7

**PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF PLANNING AREA SPECIFIC RESIDENTIAL DEVELOPMENT CHARGES
COLDSPRINGS PLANNING AREA**

Total Approved & Potential Units	4,716
Population Growth in New Units	12,421

COLDSPRINGS PLANNING AREA	Growth-Related Capital Forecast			
	Total Gross Cost	Non-Growth Share	Available DC Reserves	Total DC Eligible Costs
Projects				
1 800m Trunk Watermain	\$ 1,942,000	\$ -	\$ -	\$ 1,942,000
2 75m Trunk Watermain (River Crossing)	\$ 600,000	\$ -	\$ -	\$ 600,000
3 1,400m Oversizing Main	\$ 140,000	\$ -	\$ -	\$ 140,000
Allocation of Water Pressure Zone 1 Costs	\$ 3,199,710	\$ -	\$ -	\$ 3,199,710
Recovery of Negative Reserve Fund Balance	\$ 712,303	\$ -	\$ -	\$ 712,303
TOTAL COLDSPRINGS PLANNING AREA	\$ 6,594,013	\$ -	\$ -	\$ 6,594,013
Development Charge Per Capita				\$ 530.88

COLDSPRINGS PLANNING AREA	Development Charge Per Capita	Charge By Unit Type (1)		
		<u>Residential A</u> Singles/Semi	<u>Residential B</u> Other Multiples	<u>Residential C</u> Apartments
COLDSPRINGS PLANNING AREA	\$ 530.88	\$ 1,540	\$ 1,327	\$ 902

(1) Based on Persons Per Unit Of:

2.90

2.50

1.70

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APPENDIX A
TABLE 8

PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF PLANNING AREA SPECIFIC RESIDENTIAL DEVELOPMENT CHARGES
JACKSON PLANNING AREA

Total Approved & Potential Units	2,605
Population Growth in New Units	7,293

JACKSON PLANNING AREA	Growth-Related Capital Forecast			
	Total Gross Cost	Non-Growth Share	Available DC Reserves	Total DC Eligible Costs
Projects				
1 2,725m Oversizing Main	\$ 250,000	\$ -	\$ 250,000	\$ -
Allocation of Water Pressure Zone 3W Costs	\$ 5,431,463	\$ -	\$ 501,175	\$ 4,930,288
TOTAL JACKSON PLANNING AREA	\$ 5,681,463	\$ -	\$ 751,175	\$ 4,930,288
Development Charge Per Capita				\$ 676.08

JACKSON PLANNING AREA	Development Charge Per Capita	Charge By Unit Type (1)		
		<u>Residential A</u> Singles/Semi	<u>Residential B</u> Other Multiples	<u>Residential C</u> Apartments
JACKSON PLANNING AREA	\$ 676.08	\$ 1,961	\$ 1,690	\$ 1,149

(1) Based on Persons Per Unit Of:

2.90

2.50

1.70

37
APPENDIX A
TABLE 9

**PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF PLANNING AREA SPECIFIC RESIDENTIAL DEVELOPMENT CHARGES
LIFTLOCK PLANNING AREA**

Total Approved & Potential Units	1,548
Population Growth in New Units	4,115

LIFTLOCK PLANNING AREA	Growth-Related Capital Forecast			
	Total Gross Cost	Non-Growth Share	Available DC Reserves	Total DC Eligible Costs
Projects				
1 2,400m Oversizing Main	\$ 240,000	\$ -	\$ -	\$ 240,000
Allocation of Water Pressure Zone 1 Costs	\$ 1,060,113	\$ -	\$ -	\$ 1,060,113
Recovery of Negative Reserve Fund Balance	\$ 240,527	\$ -	\$ -	\$ 240,527
TOTAL LIFTLOCK PLANNING AREA	\$ 1,540,640	\$ -	\$ -	\$ 1,540,640
Development Charge Per Capita				\$ 374.38

LIFTLOCK PLANNING AREA	Development Charge Per Capita	Charge By Unit Type (1)		
		<u>Residential A</u> Singles/Semi	<u>Residential B</u> Other Multiples	<u>Residential C</u> Apartments
LIFTLOCK PLANNING AREA	\$ 374.38	\$ 1,086	\$ 936	\$ 636

(1) Based on Persons Per Unit Of:

2.90

2.50

1.70

38
APPENDIX A
TABLE 10

PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF PLANNING AREA SPECIFIC RESIDENTIAL DEVELOPMENT CHARGES
LILY LAKE PLANNING AREA

Total Approved & Potential Units	3,030
Population Growth in New Units	8,232

LILY LAKE PLANNING AREA	Growth-Related Capital Forecast			
	Total Gross Cost	Non-Growth Share	Available DC Reserves	Total DC Eligible Costs
Projects				
1 2,610m Oversizing Main	\$ 230,000	\$ -	\$ 230,000	\$ -
Allocation of Water Pressure Zone 3W Costs	\$ 6,131,353	\$ -	\$ 748,141	\$ 5,383,212
TOTAL LILY LAKE PLANNING AREA	\$ 6,361,353	\$ -	\$ 978,141	\$ 5,383,212
Development Charge Per Capita				\$ 653.92

LILY LAKE PLANNING AREA	Development Charge Per Capita	Charge By Unit Type (1)		
		<u>Residential A</u> Singles/Semi	<u>Residential B</u> Other Multiples	<u>Residential C</u> Apartments
LILY LAKE PLANNING AREA	\$ 653.92	\$ 1,896	\$ 1,635	\$ 1,112

(1) Based on Persons Per Unit Of:

2.90

2.50

1.70

39
APPENDIX A
TABLE 11

PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF PLANNING AREA SPECIFIC RESIDENTIAL DEVELOPMENT CHARGES
OUTSIDE THE PLANNING AREAS

Total Approved & Potential Units	2,752
Population Growth in New Units	5,470

OUTSIDE THE PLANNING AREAS	Growth-Related Capital Forecast			
	Total Gross Cost	Non-Growth Share	Available DC Reserves	Total DC Eligible Costs
Allocation of Water Pressure Zone 1 Costs	\$ 1,409,018	\$ -	\$ -	\$ 1,409,018
TOTAL OUTSIDE THE PLANNING AREAS	\$ 1,409,018	\$ -	\$ -	\$ 1,409,018
Development Charge Per Capita				\$ 257.61

OUTSIDE THE PLANNING AREAS	Development Charge Per Capita	Charge By Unit Type (1)		
		Residential A Singles/Semi	Residential B Other Multiples	Residential C Apartments
OUTSIDE THE PLANNING AREAS	\$ 257.61	\$ 747	\$ 644	\$ 438

(1) Based on Persons Per Unit Of:

2.90

2.50

1.70

40
APPENDIX A
TABLE 12

**PETERBOROUGH UTILITIES COMMISSION
SUMMARY OF RESIDENTIAL DEVELOPMENT CHARGES**

Planning Area	Charge Per Capita		
	City-Wide Charge	Planning Area Charge	Total Charge Per Capita
1. Auburn North	\$ 232.81	\$ 543.54	\$ 776.35
2. Jackson	\$ 232.81	\$ 676.08	\$ 908.89
3. Carnegie West	\$ 232.81	\$ 520.96	\$ 753.77
4. Chemong West	\$ 232.81	\$ 366.46	\$ 599.27
5. Lily Lake	\$ 232.81	\$ 653.92	\$ 886.73
6. Liftlock	\$ 232.81	\$ 374.38	\$ 607.19
7. Coldsprings	\$ 232.81	\$ 530.88	\$ 763.69
8. Outside Planning Areas	\$ 232.81	\$ 257.61	\$ 490.42
9. Carnegie East	\$ 232.81	-	\$ 232.81
10. Chemong East	\$ 232.81	\$ 121.04	\$ 353.85

Planning Area	Total Charge Per Capita	Total Residential Development Charge Rates (1)			Non-Residential Charge (\$/square metre)
		Residential A Singles & Semis	Residential B Other Multiples	Residential C Apartments	
1. Auburn North	\$ 776.35	\$ 2,251	\$ 1,941	\$ 1,320	\$ 5.82
2. Jackson	\$ 908.89	\$ 2,636	\$ 2,272	\$ 1,545	\$ 5.82
3. Carnegie West	\$ 753.77	\$ 2,186	\$ 1,884	\$ 1,281	\$ 5.82
4. Chemong West	\$ 599.27	\$ 1,738	\$ 1,498	\$ 1,019	\$ 5.82
5. Lily Lake	\$ 886.73	\$ 2,572	\$ 2,217	\$ 1,507	\$ 5.82
6. Liftlock	\$ 607.19	\$ 1,761	\$ 1,518	\$ 1,032	\$ 5.82
7. Coldsprings	\$ 763.69	\$ 2,215	\$ 1,909	\$ 1,298	\$ 5.82
8. Outside Planning Areas	\$ 490.42	\$ 1,422	\$ 1,226	\$ 834	\$ 5.82
9. Carnegie East	\$ 232.81	\$ 675	\$ 582	\$ 396	\$ 5.82
10. Chemong East	\$ 353.85	\$ 1,026	\$ 885	\$ 602	\$ 5.82
(1) Based on Persons Per Unit of:		2.9	2.5	1.7	