



**Town of Bradford West
Gwillimbury
Development Charge
Background Study for Water,
Wastewater, and Road
Services**



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 **Planning for growth**

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List of Acronyms and Abbreviations

Acronym	Full Description of Acronym
B.S.A.	Bradford Settlement Area
B.H.S.A.	Bond Head Settlement Area
B.W.G.	Bradford West Gwillimbury
B.W.G.S.S.E.A.	B.W.G. Strategic Settlement Employment Area
D.C.	Development Charges
D.C.A.	Development Charges Act, as amended
G.F.A.	Gross floor area
N.F.P.O.W.	No Fixed Place of Work
O.M.B.	Ontario Municipal Board
O.P.A.	Official Plan Amendment
O.Reg.	Ontario Regulation
P.P.U.	Persons per unit
S.D.E.	Single detached equivalent
S.D.U.	Single detached unit
s.s.	Subsection
S.W.M.	Stormwater management
sq.ft.	Square footage

Executive Summary

1. The report provided herein represents the Development Charges (D.C.) Background Study for the Town of Bradford West Gwillimbury required by the D.C.s Act, 1997, as amended. (D.C.A.). This report has been prepared in accordance with the methodology required under the D.C.A. The contents include the following:
 - Chapter 1 – Overview of the legislative requirements of the Act;
 - Chapter 2 – Review of present D.C. policies of the Town;
 - Chapter 3 – Summary of the residential and non-residential growth forecasts for the Town;
 - Chapter 4 – Approach to calculating the D.C.;
 - Chapter 5 – Review of historic service standards and identification of future capital requirements to service growth and related deductions and allocations;
 - Chapter 6 – Calculation of the D.C.s;
 - Chapter 7 – D.C. policy recommendations and rules; and
 - Chapter 8 – By-law implementation.

2. D.C.s provide for the recovery of growth-related capital expenditures from new development. The D.C.A. is the statutory basis to recover these charges. The methodology is detailed in Chapter 4; a simplified summary is provided below:
 - 1) Identify amount, type and location of growth;
 - 2) Identify servicing needs to accommodate growth;
 - 3) Identify capital costs to provide services to meet the needs;
 - 4) Deduct:
 - Grants, subsidies and other contributions;
 - Benefit to existing development;
 - Statutory 10% deduction (soft services);
 - Amounts in excess of 10-year historic service calculation;
 - D.C. reserve funds (where applicable);

- 5) Net costs are then allocated between residential and non-residential benefit; and
 - 6) Net costs divided by growth to provide the D.C. charge.
3. A number of changes to the D.C. process need to be addressed as a result of Bill 73. These changes have been incorporated throughout the report and in the updated draft by-law, as necessary. These items include:
- a. Area-rating: Council must consider the use of area specific charges.
 - b. Asset Management Plan for New Infrastructure: The D.C. background study must include an asset management plan that deals with all assets proposed to be funded, in whole or in part, by D.C.s. The asset management plan must show that the assets are financially sustainable over their full lifecycle.
 - c. 60-day Circulation Period: The D.C. background study must be released to the public at least 60-days prior to passage of the D.C. by-law.
 - d. Timing of Collection of Development Charges: The D.C.A. now required D.C.s to be collected at the time of the first building permit.
4. The growth forecast (Chapter 3) on which the Town-wide (Roads) is based, projects the following “All Areas” increases in population, housing and non-residential floor area for the 14-year (2018-2031) period. The growth forecast on which the urban area specific development charges (water and wastewater services) are based, projects the following increases in population, housing units and non-residential floor area for a 14-year planning period. These areas consist of the Bradford Settlement Area (B.S.A.) along with the Bond Head Settlement Area (B.H.S.A.) and the B.W.G. Strategic Settlement Employment Area (B.W.G.S.S.E.A.).

Measure	All Areas	Bradford Settlement Area	Bond Head Settlement Area/BWG Strategic Settlement Employment Area
(Net) Population Increase	21,063	8,573	12,490
Residential Unit Increase	4,918	3,618	1,300
Non-Residential Gross Floor Area Increase (ft ²)	9,804,300	1,956,000	7,848,300

Source: Watson & Associates Economists Ltd. Forecast 2018

5. In 2013, the Town of Bradford West Gwillimbury passed By-law 2013-29 under the D.C.A. The by-law imposes D.C.s on residential and non-residential uses. The Town is undertaking a D.C. public process and anticipates passing a new by-law in March, 2018. The mandatory public meeting has been set for February 6, 2018 with adoption of the by-law subsequently.
6. The Town's D.C.s currently in effect for single detached dwelling units for full services are \$40,582 in the urban Bradford Settlement Area, \$55,439 in the Bond Head Settlement Area, and \$24,957 in the rural area. Non-residential charges per square foot for full services are \$17.12 in the urban Bradford Settlement Area, \$7.02 in the rural area, and \$15.52 in the Bond Head Settlement Area and the B.W.G. Strategic Settlement Employment Area.

This report has undertaken a recalculation of the charge for roads, water, and wastewater services based on future identified needs (presented in Schedule ES-1 for residential and non-residential). Charges have been provided on a Town-wide basis for roads and an urban-area basis for water and wastewater. The corresponding single-detached unit charges for roads, water and wastewater are \$32,167 in the Bradford Settlement Area, \$17,514 in the rural area, and \$59,059 in the Bond Head Settlement area. The non-residential charges per square foot are \$16.16 in the Bradford Settlement Area, \$6.12 in the rural area, and \$16.04 in the Bond Head Settlement Area and the B.W.G. Strategic Settlement Employment Area. These rates are submitted to Council for its consideration.

7. The *D.C.A.* requires a summary be provided of the gross capital costs and the net costs to be recovered over the life of the by-law. This calculation is provided by service and is presented in Table 6-5. A summary of these costs is provided below:

Total gross expenditures planned over the next five years	\$296,483,213
Less:	
Benefit to existing development	29,695,417
Post planning period benefit	34,972,221
Other Deductions	36,000,000
Net Costs to be recovered from development charges	\$195,815,576

Hence, \$100.67 million (or an annual amount of \$20.13 million) will need to be contributed from taxes and rates, or other sources. Of this amount, 34.97 million will be included in subsequent D.C. study updates to reflect the portion of capital that benefits growth in the post period D.C. forecasts.

Based on the above table, the Town plans to spend \$296.48 million over the next five years, of which \$195.82 million (66%) is recoverable from D.C.s. Of this net amount, \$105.29 million is recoverable from residential development and \$90.49 million from non-residential development. It is noted also that any exemptions or reductions in the charges would reduce this recovery further.

8. Considerations by Council – The background study represents the service needs arising from residential and non-residential growth over the forecast periods.

The following services are calculated based on an urban 14-year forecast:

- Wastewater Services; and
- Water Services.

The following services are calculated based on a municipal wide 14-year forecast:

- Roads

9. Council will consider the findings and recommendations provided in the report and, in conjunction with public input, approve such policies and rates it deems appropriate. These directions will refine the draft D.C. by-law which is appended in Appendix G. These decisions may include:

- adopting the charges and policies recommended herein;
- considering additional exemptions to the by-law; and
- considering reductions in the charge by class of development (obtained by removing certain services on which the charge is based and/or by a general reduction in the charge)

TABLE ES-1
SCHEDULE OF DEVELOPMENT CHARGES
2018\$

Service	RESIDENTIAL				NON-RESIDENTIAL
	Single and Semi-Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples	(per ft ² of Gross Floor Area)
Municipal Wide Services:					
Roads (not including roads related)	\$17,514	\$8,884	\$6,346	\$12,387	\$6.12
Total Municipal Wide Services	\$17,514	\$8,884	\$6,346	\$12,387	\$6.12
Urban Services					
Water:					
Studies - All Urban Areas	80	41	29	57	0.02
Treatment & Distribution (Bradford Settlement Area)	6,610	3,353	2,395	4,675	3.78
Treatment & Distribution (Bond Head Settlement Area & BWG Strategic Settlement Employment Area)	15,192	7,706	5,504	10,744	4.88
Wastewater:					
Studies - All Urban Areas	60	30	22	42	0.02
Treatment (Bradford Settlement Area)	4,526	2,296	1,640	3,201	3.08
Treatment (Bond Head Settlement Area & BWG Strategic Settlement Employment Areas)	4,138	2,099	1,499	2,926	1.03
Collection (Bradford Settlement Area)	3,377	1,713	1,224	2,389	3.14
Collection (Bond Head Settlement Area & BWG Strategic Settlement Employment Areas)	22,075	11,198	7,998	15,613	3.97
GRAND TOTAL RURAL AREA	\$17,514	\$8,884	\$6,346	\$12,387	\$6.12
GRAND TOTAL URBAN AREA - BRADFORD SETTLEMENT AREA	\$32,167	\$16,317	\$11,656	\$22,751	\$16.16
GRAND TOTAL URBAN AREA - BOND HEAD SETTLEMENT AREA & BWG STRATEGIC SETTLEMENT EMPLOYMENT AREA	\$59,059	\$29,958	\$21,398	\$41,769	\$16.04

1. Introduction

1.1 Purpose of this Document

This background study has been prepared pursuant to the requirements of the Development Charges Act, as amended (D.C.A.) (s.10) and, accordingly, recommends new development charges related to roads, water and wastewater along with policies for the Town of Bradford West Gwillimbury.

The Town retained Watson & Associates Economists Ltd. (Watson), to undertake the development charge (D.C.) study process in 2017. Watson worked with Town staff in preparing the D.C. analysis and policy recommendations.

This D.C. background study, containing the proposed D.C. by-law, will be distributed to members of the public in order to provide interested parties with sufficient background information on the legislation, the study's recommendations and an outline of the basis for these recommendations.

This report has been prepared, in the first instance, to meet the statutory requirements applicable to the Town's D.C. background study, as summarized in Chapter 4. It also addresses the requirement for "rules" (contained in Chapter 7) and the proposed by-law to be made available as part of the approval process (included as Appendix G).

In addition, the report is designed to set out sufficient background on the legislation (Chapter 4), Bradford West Gwillimbury's current D.C. policy (Chapter 2) and the policies underlying the proposed by-law, to make the exercise understandable to those who are involved.

Finally, it addresses post-adoption implementation requirements (Chapter 8) which are critical to the successful application of the new policy.

The Chapters in the report are supported by Appendices containing the data required to explain and substantiate the calculation of the charge. A full discussion of the statutory requirements for the preparation of a background study and calculation of a D.C. is provided herein.

1.2 Summary of the Process

The public meeting required under Section 12 of the *D.C.A.*, has been scheduled for February 6, 2018. Its purpose is to present the study to the public and to solicit public

input. The meeting is also being held to answer any questions regarding the study's purpose, methodology and the proposed modifications to the Town's D.C.s.

In accordance with the legislation, the background study and proposed D.C. by-law will be available for public review on January 5, 2018.

The process to be followed in finalizing the report and recommendations includes:

- consideration of responses received prior to, at, or immediately following the Public Meeting; and
- finalization of the report and Council consideration of the by-law subsequent to the public meeting.

Figure 1-1 outlines the proposed schedule to be followed with respect to the D.C. by-law adoption process.

Figure 1-1
Schedule of Key D.C. Process Dates for the Town of Bradford West Gwillimbury

1. Data collection, staff review, engineering work, D.C. calculations and policy work	Mid to late 2017
2. Public meeting advertisement placed in newspaper(s)	January 11, 2018 (Bradford West Gwillimbury Community News)
3. Background study and proposed by-law available to public	January 5, 2018
4. Stakeholder meeting	End of January, 2018
5. Public meeting of Council	February 6, 2018
6. Council considers adoption of background study and passage of by-law	March 6, 2018
7. Newspaper notice given of by-law passage	By 20 days after passage
8. Last day for by-law appeal	40 days after passage
9. Town makes pamphlet available (where by-law not appealed)	By 60 days after in force date

1.3 Changes to the D.C.A.: Bill 73

With the amendment of the D.C.A. (as a result of Bill 73 and O.Reg. 428/15), there are a number of areas that must be addressed to ensure that the Town is in compliance with the D.C.A., as amended. The following provides an explanation of the changes to the Act that affect the Town's Background Study and how they have been dealt with to ensure compliance with the amended legislation.

1.3.1 Area Rating

Bill 73 has introduced two new sections where Council must consider the use of area specific charges:

- 1) Section 2(9) of the Act now requires a municipality to implement area-specific D.C.s for either specific services which are prescribed and/or for specific municipalities which are to be regulated. (Note that at this time, no municipalities or services are prescribed by the Regulations.)
- 2) Section 10(2)c.1 of the D.C.A. requires that, "the development charges background study shall include consideration of the use of more than one development charge by-law to reflect different needs for services in different areas."

In regard to the first item, there are no services or specific municipalities identified in the regulations which must be area rated. The second item requires Council to consider the use of area rating.

1.3.2 Asset Management Plan for New Infrastructure

The new legislation now requires that a D.C. background study must include an Asset Management Plan (s.10 (2) c.2). The asset management plan must deal with all assets that are proposed to be funded, in whole or in part, by D.C.s. The current regulations provide very extensive and specific requirements for the asset management plan related to transit services; however, they are silent with respect to how the asset management plan is to be provided for all other services. As part of any asset management plan, the examination should be consistent with the municipality's existing assumptions, approaches and policies on asset management planning. This examination may include both qualitative and quantitative measures such as examining the annual future lifecycle contributions needs (discussed further in Appendix F of this report).

1.3.3 60-Day Circulation of D.C. Background Study

Previously the legislation required that a D.C. background study be made available to the public at least two weeks prior to the public meeting. The amended legislation now provides that the D.C. background study must be made available to the public (including posting on the municipal website) at least 60 days prior to passage of the D.C. by-law. No other changes were made to timing requirements for such things as notice of the public meeting and notice of by-law passage.

This D.C. study is being provided to the public on January 5, 2018 to ensure the new requirements for release of the study is met.

1.3.4 Timing of Collection of D.C.s

The D.C.A. has been refined by Bill 73 to require that D.C.s are collected at the time of the first building permit. For the majority of development, this will not impact the Town's present process. However, there may be instances where several building permits are to be issued and either the size of the development or the uses will not be definable at the time of the first building permit. In these instances, the Town may enter into a delayed payment agreement in order to capture the full development.

1.3.5 Other Changes

It is also noted that a number of other changes were made through Bill 73 and O.Reg. 428/15 including changes to the way in which Transit D.C. service standards are calculated, the inclusion of Waste Diversion and the ability for collection of additional levies; however, these sections do not impact the Town's D.C. related to roads, water and wastewater services.

2. Current Town of Bradford West Gwillimbury Policy

2.1 Schedule of Charges

The Town presently has two development charge by-laws, by-law 2013-29 under the D.C.A. This by-law imposes D.C.s for residential and non-residential uses for roads, water, and wastewater services and by-law 2014-73 which imposes D.C.s for residential and non-residential uses for roads related facilities and vehicles, transit, parking, fire, police, indoor and outdoor recreation, library, and administration (studies).

The table below provides the rates currently in effect, as at January 1, 2018.

**Table 2-1
Schedule of Development Charges
As at January 1, 2018**

Service	By-law Number	Residential				Non-Residential
		Single & Semi Detached	Other Multiples	Apartments with 2 Bedrooms +	Apartments Bachelor & 1 Bedroom	per sq.ft. of Gross Floor Area
Municipal Wide Services						
Roads	2013-29	14,776	12,447	8,312	5,937	5.84
Roads and Related Facilities and Vehicles	2014-73	1,138	905	637	467	0.45
Transit Services	2014-73	-	-	-	-	-
Parking Services	2014-73	35	27	20	13	0.01
Fire Protection Services	2014-73	617	492	345	253	0.10
Police Services	2014-73	457	364	254	188	0.15
Outdoor Recreation Services	2014-73	1,164	927	651	478	0.03
Indoor Recreation Services	2014-73	5,237	4,169	2,925	2,150	0.20
Library Services	2014-73	1,021	813	570	419	0.04
Administration	2014-73	512	408	286	209	0.20
Total Municipal Wide Services		24,957	20,552	14,000	10,114	7.02
Urban Services - Bradford Settlement Area						
Water:						
Studies	2013-29	54	45	29	20	0.02
Treatment & Distribuion	2013-29	7,374	6,211	4,148	2,962	4.19
Wastewater:						
Studies	2013-29	40	34	21	14	0.03
Treatment	2013-29	5,651	4,759	3,179	2,270	4.08
Collection	2013-29	2,506	2,112	1,409	1,007	1.78
Total Urban Services - Bradford Settlement Area		15,625	13,161	8,786	6,273	10.10
Grand Total Urban Area - Bradford Settlement Area		40,582	33,713	22,786	16,387	17.12
Urban Services - Bond Head Settlement Area & BWG Strategic Settlement Employment Area:						
Water:						
Studies	2013-29	54	45	29	20	0.02
Treatment & Distribuion	2013-29	13,994	11,786	7,870	5,623	5.46
Wastewater:						
Studies	2013-29	40	34	21	14	0.03
Treatment	2013-29	4,493	3,785	2,529	1,806	1.36
Collection	2013-29	11,901	10,025	6,692	4,781	1.63
Total Urban Services - Bond Head Settlement Area & BWG Strategic Settlement Employment Area		30,482	25,675	17,141	12,244	8.50
Grand Total Urban Area - Bond Head Settlement Area & BWG Strategic Settlement Employment Area		55,439	46,227	31,141	22,358	15.52

2.2 Services Covered

The following services are covered under By-laws 2013-29 and 2014-73:

By-law 2013-29:

- Roads;
- Water – Studies;
- Water – Treatment and Distribution;
- Wastewater – Studies;
- Wastewater – Treatment; and
- Wastewater – Collection.

By-law 2014-73:

- Roads Related Facilities and Vehicles
- Transit;
- Parking;
- Fire Protection;
- Police;
- Outdoor Recreation;
- Indoor Recreation;
- Library; and
- Administration.

2.3 Timing of D.C. Calculation and Payment

D.C.s are payable at the time of building permit issuance and are collected by the Town of Bradford West Gwillimbury Building Department. Deferrals are available for all non-residential developments, apartment developments, and residential facility developments for up to a maximum of 5 years. The deferral agreement is subject to interest charges and administration fees.

2.4 Indexing

Rates shall be indexed annually on January 1st by the percentage change recorded in the average annual Non-Residential Construction Price Index produced by Statistics Canada.

2.5 Redevelopment Allowance

As a result of the redevelopment of land, a building or structure existing on the same land within 5 years prior to the date of payment of D.C.s in regard to such redevelopment was, or is to be demolished, in whole or in part, or converted from one principal use to another principal use on the same land, in order to facilitate the redevelopment, the D.C.s otherwise payable with respect to such redevelopment shall be reduced by the following amounts:

- (a) in the case of a residential building or structure, or in the case of a mixed-use building or structure, the residential uses in the mixed-use building or structure, an amount calculated by multiplying the applicable D.C. under Section 15 of the By-law by the number, according to type, of dwelling units that have been or will be demolished or converted to another principal use; and
- (b) in the case of a non-residential building or structure or, in the case of mixed-use building or structure, the non-residential uses in the mixed-use building or structure, an amount calculated by multiplying the applicable D.C.s under Section 16 of the By-law by the gross floor area that has been or will be demolished or converted to another principal use;
- (c) provided that such amounts shall not exceed, in total, the amount of the D.C.s otherwise payable with respect to the redevelopment.

2.6 Exemptions

The following non-statutory exemptions are provided under By-laws 2013-29 and 2014-73:

- a public hospital, as exempt from taxation pursuant to para. 3(1)3 of the Assessment Act; and
- a non-residential farm building, save and except for the G.F.A. within a greenhouse that is used for retail purposes.

3. Anticipated Development in the Town of Bradford West Gwillimbury

3.1 Requirement of the Act

Chapter 4 provides the methodology for calculating a development charge as per the Development Charges Act, 1997. Figure 4-1 presents this methodology graphically. It is noted in the first box of the schematic that in order to determine the development charge that may be imposed, it is a requirement of Section 5 (1) of the Development Charges Act that “the anticipated amount, type and location of development, for which development charges can be imposed, must be estimated.”

The growth forecast contained in this chapter (with supplemental tables in Appendix A) provides for the anticipated development for which the Town of Bradford West Gwillimbury will be required to provide services over the buildout time horizon.

3.2 Basis of Population, Household and Non-Residential Gross Floor Area Forecast

In compiling the growth forecast for the Town of Bradford West Gwillimbury the following reports were consulted:

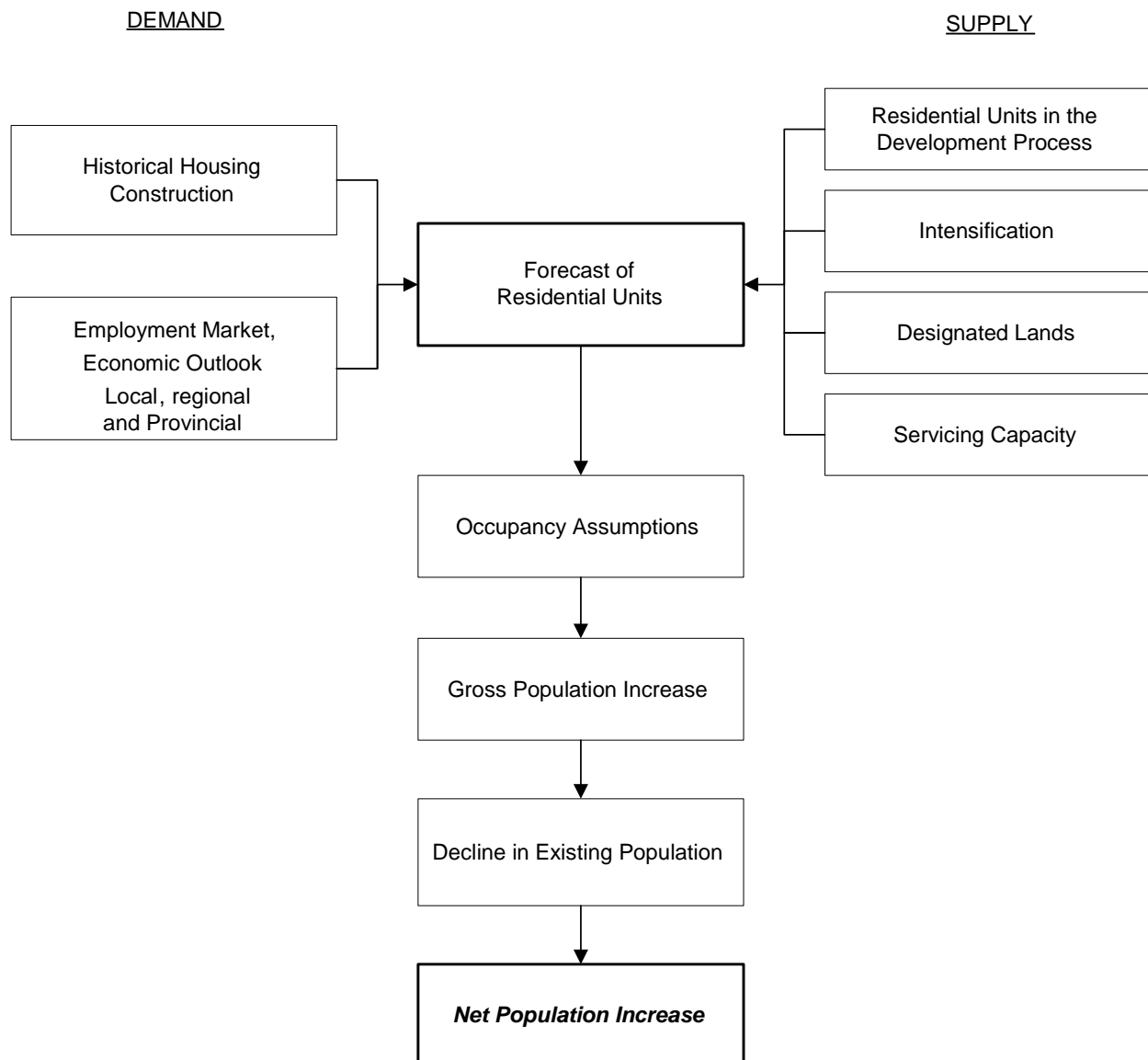
- Town of Bradford Development Charge Background Study Update, January 10, 2010 by Watson & Associates Economists Ltd;
- Consolidated Background Study, Feb.4, 2013 prepared by Watson & Associates Economists Ltd;
- Water Supply and Wastewater Servicing Master Plan Update, Town of Bradford West Gwillimbury Class Environmental Assessment Study Final Report, Tatham & Associates Ltd. March 31, 2011;
- Bond Head Settlement Area Secondary Plan, O.P.A. 16, approved by the Ontario Municipal Board, August 19, 2009;
- Hwy 400 Strategic Industrial Employment Area Secondary Plan, O.P.A. 15, approved by the Ontario Municipal Board, August 7, 2009 and December 10, 2009; and

- Growth Plan for the Greater Golden Horseshoe (GGH), 2017, May 2017 – Schedule 7.

3.3 Summary of Growth Forecast

A detailed analysis of the residential and non-residential growth forecasts are provided in Appendix A. The discussion provided herein summarizes the anticipated growth for the Town and describes the basis for the forecast. The results of the residential growth forecast analysis are summarized in Figure 3-1 below, and Schedule 1 in Appendix A.

**Figure 3-1
Population and Household Forecast Model**



As identified in Table 3-1 and Schedule 1, the Town's population is anticipated to reach approximately 46,680 by 2028 and 49,610 at buildout. This represents an increase of 12,313 persons, over the long-term forecast period. The population forecast summarized in Schedule 1 excludes the net Census undercount, which is estimated at approximately 4%. The Census undercount represents the net number of persons missed during Census enumeration. In calculating the D.C. for Town of Bradford West Gwillimbury, the net Census undercount has been excluded from the growth forecast. Accordingly, all references provided herein to the population forecast exclude the net Census undercount.

Provided below is a summary of the key assumptions and findings regarding the D.C. growth forecast.

1. Unit Mix (Appendix A – Schedules 1 through 6)

- The unit mix for the Town was derived from the 2017 Land Needs Analysis Report, as well as historical development activity (as per Schedule 7) and discussions with planning staff regarding anticipated development trends for the Town.
- Based on the above, the long-term (2018-Buildout) household growth forecast is comprised of a housing unit mix of approximately 69% low density (single detached and semi-detached), 16% medium density (multiples except apartments) and 15% high density (bachelor, 1 bedroom and 2+ bedroom apartments).

2. Geographic Location of Residential Development (Appendix A – Schedules 2a and 2b)

- Schedule 2a summarizes the anticipated amount, type and location of residential development for Town of Bradford West Gwillimbury by development location. The percentage of forecast housing growth between 2017 and buildout by area within the Town is summarized below.
 - Bradford Settlement Area – Greenfield Area: 47%
 - Bradford Settlement Area – Built Boundary: 26%
 - Bond Head Settlement Area: 26%
 - Rural: 1%
- Schedule 2b summarizes the anticipated population at buildout by area. The urban serviced area (Bradford Settlement Area and Bond Head Settlement Area) is anticipated to reach approximately 46,000 residents at

buildout and the rural area is anticipated to reach 3,700 residents at the time of urban service area buildout.

**Table 3-1
Town of Bradford West Gwillimbury
Residential Growth Forecast Summary**

Year	Including Census Undercount ¹	Excluding Census Undercount			Housing Units					Persons in Private Households/ Total Households	
		Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi-Detached	Multiple Dwellings ²	Apartments ³	Other	Total Households		
Historical	<i>Mid 2001</i>	23,120	22,228	88	22,140	5,735	570	795	30	7,130	3.11
	<i>Mid 2006</i>	25,000	24,039	224	23,815	6,475	820	620	30	7,945	3.00
	<i>Mid 2011</i>	29,200	28,077	357	27,720	7,675	1,000	740	45	9,460	2.93
	<i>Mid 2016</i>	36,740	35,325	360	34,965	9,415	1,365	780	35	11,595	3.02
Forecast	<i>Early 2018</i>	38,790	37,297	380	36,917	10,060	1,422	789	35	12,306	3.00
	<i>Early 2028</i>	48,540	46,677	477	46,200	12,773	1,955	1,301	35	16,064	2.88
	<i>Buildout⁴</i>	51,590	49,610	506	49,104	13,512	2,194	1,543	35	17,284	2.84
Incremental	Mid 2001 - Mid 2006	1,880	1,811	136	1,675	740	250	-175	0	815	
	Mid 2006 - Mid 2011	4,200	4,038	133	3,905	1,200	180	120	15	1,515	
	Mid 2011 - Mid 2016	7,540	7,248	3	7,245	1,740	365	40	-10	2,135	
	Mid 2016 - Early 2018	2,050	1,972	20	1,952	645	57	9	0	711	
	Early 2018 - Early 2028	9,750	9,380	97	9,283	2,713	533	512	0	3,758	
	Early 2018 - Buildout	12,800	12,313	126	12,187	3,452	772	754	0	4,978	

Source: Watson & Associates Economists Ltd., 2018.

1. Census Undercount estimated at approximately 4%. Note: Population Including the Undercount has been rounded.

2. Includes townhomes and apartments in duplexes.

3. Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

4. Buildout population increment based on the Tatham & Associates Ltd. Water Supply and Wastewater Servicing Master Plan Update, Town of Bradford West Gwillimbury, Environmental Assessment Study Final Report, March 31, 2011. Total population of urban serviced area at buildout for the urban serviced area is 51,590 with 4% undercount (49,600 excluding undercount).

3. Planning Period

- Short- and longer-term time horizons are required for the D.C. process. The D.C.A. limits the planning horizon for certain services, such as parks, recreation and libraries, to a 10-year planning horizon. Roads, water and wastewater services utilize a long-term forecast period.

4. Population in New Units (Appendix A - Schedules 2 through 6)

- The number of housing units to be constructed in the Town of Bradford West Gwillimbury during the long-term period is presented on Figure 3-2. Over the buildout forecast period, the Town is anticipated to average 311 housing units annually.
- Population in new units is derived from Schedules 3, 4, 5 and 6, which incorporate historical development activity, anticipated units (see unit mix discussion) and average persons per unit by dwelling type for new units.
- Schedule 8 summarizes the average number of persons per unit (P.P.U.) for the new permanent residential housing units by age and type of dwelling, based on 2016 custom Census data. P.P.U. data for low- and medium-density dwelling units was derived based on 2016 Census data for the Town of Bradford West Gwillimbury as outlined in Schedule 8a. Due to data limitations, medium and high-density P.P.U.s were derived from the Simcoe Area as outlined in Schedule 8b. The 20-year average P.P.U.'s by dwelling type are as follows:
 - Low density: 3.45
 - Medium density: 2.44
 - High density: 1.64

5. Existing Units and Population Change (Appendix A - Schedules 2 through 6)

- Existing households as of 2018 are based on the 2016 Census households, plus estimated residential units constructed between 2016 and 2018, assuming a 6-month lag between construction and occupancy (see Schedule 3).
- The decline in average occupancy levels for existing housing units is calculated in Schedules 3 through 5, by aging the existing population over the forecast period. The forecast population decline in existing households over the 2018 to buildout forecast period is estimated at approximately 2,850.

1. Employment (Appendix A, Schedules 10a, 10b and 10c)

- Employment projections are largely based on the activity rate method, which is defined as the number of jobs in the Town divided by the number of residents. Key employment sectors include primary, industrial, commercial/ population-related, institutional, and work at home, which are considered individually below.
- The Town's 2011¹ employment base by place of work is outlined in Schedule 10a. The 2011 employment base is comprised of the following sectors:
 - 280 primary (approx. 4%);
 - 830 work at home employment (approx. 11%);
 - 2,730 industrial (approx.36%);
 - 2,310 commercial/population-related (approx. 31%); and
 - 1,350 institutional (approx. 18%).
- The 2011 employment base by usual place of work, including work at home, is approximately 7,510 jobs. An additional 1,430 jobs have been identified for Town of Bradford West Gwillimbury as having no fixed place of work (N.F.P.O.W.).² The total employment including N.F.P.O.W. in 2011 is 8,840. As of early-2018 the Town's total employment base is estimated at 10,540.
- Schedule 10b, Appendix A, summarizes the employment forecast, excluding work at home employment, which is the basis for the D.C.A. employment forecast. The impact on municipal services from work at home employees has already been included in the population forecast. The need for municipal services related to N.F.P.O.W. employees has largely been included in the employment forecast by usual place of work (i.e. employment and G.F.A. in the retail and accommodation sectors generated from N.F.P.O.W. construction employment). Furthermore, since these employees have no fixed work address, they cannot be captured in the non-residential gross floor area (G.F.A.) calculation. Accordingly, work-at-home and N.F.P.O.W. employees have been removed from the D.C. employment forecast and calculation.

¹ 2011 Employment is based on Statistics Canada 2011 Places of Work Employment dataset.

² Statistics Canada defines "No Fixed Place of Work" (N.F.P.O.W.) employees as, "persons who do not go from home to the same work place location at the beginning of each shift. Such persons include building and landscape contractors, travelling salespersons, independent truck drivers, etc."

- Total employment for Town of Bradford West Gwillimbury (excluding work at home and no fixed place of work employment) is anticipated to reach approximately 17,130 by buildout. This represents an employment increase of 9,510 additional jobs over the buildout forecast period.

6. Non-Residential Sq.ft. Estimates (Gross Floor Area (G.F.A.)), Appendix A, Schedule 9b)

- Square footage estimates were calculated in Schedule 9b based on the following employee density assumptions:¹
 - 1,300 sq.ft. per employee for industrial;
 - 500 sq.ft. per employee for commercial/population-related;
 - 700 sq.ft. per employee for institutional employment.
- The Town-wide incremental non-residential G.F.A. increase is anticipated to be approximately 9,804,300 sq.ft. at buildout.
- In terms of percentage growth, the long-term incremental G.F.A. forecast by sector is broken down as follows:
 - industrial – approx. 82%;
 - commercial/population-related – approx.14%; and
 - institutional – approx.5%.

¹ Based on Watson & Associates Economists Ltd. employment surveys.

4. The Approach to Calculation of the Charge

4.1 Introduction

This chapter addresses the requirements of s.s.5(1) of the D.C.A. with respect to the establishment of the need for service which underpins the D.C. calculation. These requirements are illustrated schematically in Figure 4-1.

4.2 Services Potentially Involved

Table 4-1 lists the full range of Town service categories which are provided within the Town.

A number of these services are defined in s.s.2(4) of the D.C.A. as being ineligible for inclusion in D.C.s. These are shown as “ineligible” on Table 4-1. Two ineligible costs defined in s.s.5(3) of the D.C.A. are “computer equipment” and “rolling stock with an estimated useful life of (less than) seven years...” In addition, local roads are covered separately under subdivision agreements and related means (as are other local services). Services which are potentially eligible for inclusion in the Town’s D.C. are indicated with a “Yes.”

4.3 Increase in the Need for Service

The D.C. calculation commences with an estimate of “the increase in the need for service attributable to the anticipated development,” for each service to be covered by the by-law. There must be some form of link or attribution between the anticipated development and the estimated increase in the need for service. While the need could conceivably be expressed generally in terms of units of capacity, s.s.5(1)3, which requires that Town Council indicate that it intends to ensure that such an increase in need will be met, suggests that a project-specific expression of need would be most appropriate.

4.4 Local Service Policy

Some of the need for services generated by additional development consists of local services related to a plan of subdivision. As such, they will be required as a condition of subdivision agreements or consent conditions.

Figure 4-1
The Process of Calculating a D.C. under the D.C.A.

The Process of Calculating a Development Charge under the Act that must be followed

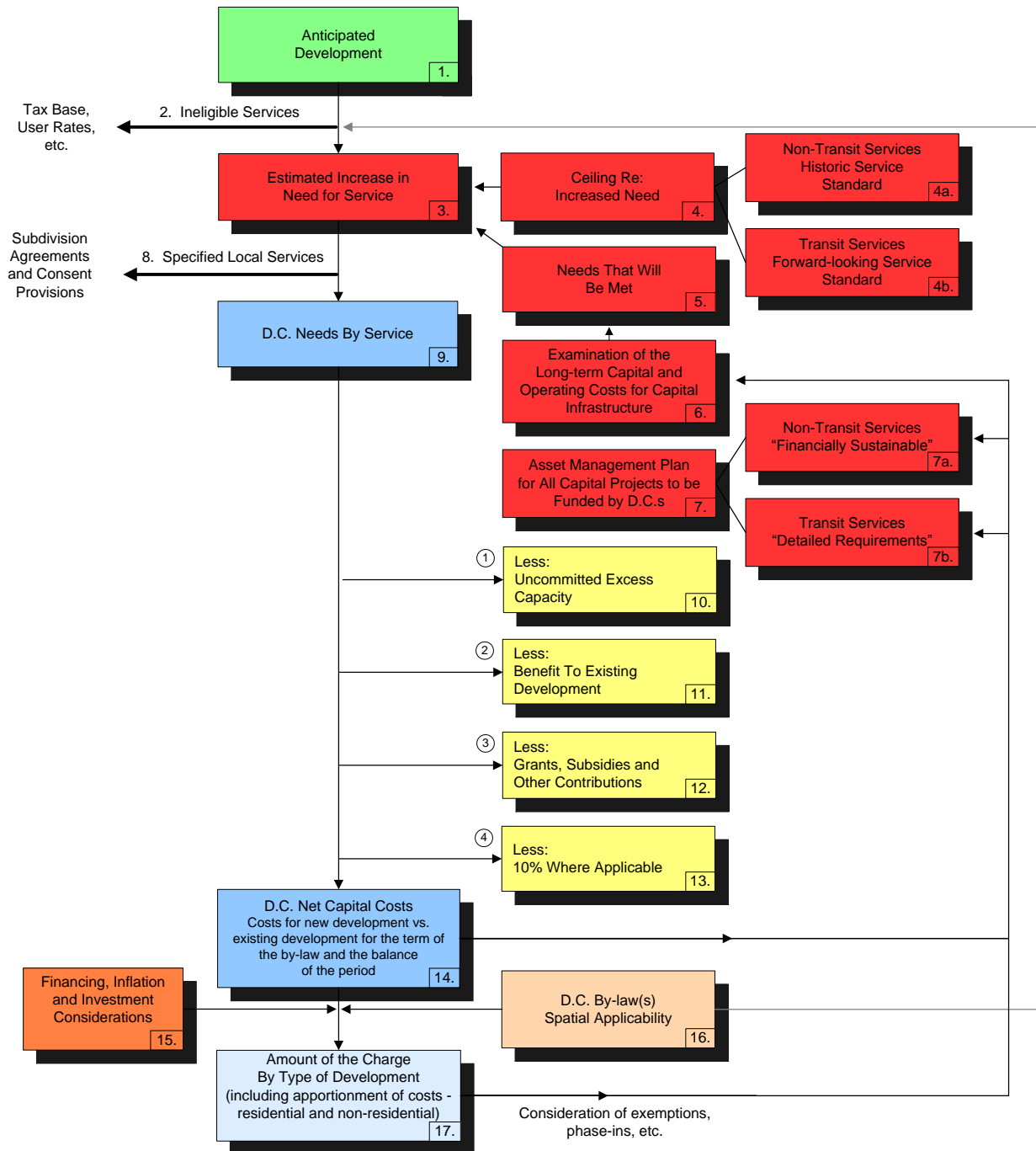


Table 4-1
Categories of Municipal Services to be Addressed as Part of the Calculation

Categories of Municipal Services	Eligibility for Inclusion in the D.C. Calculation	Service Components	Maximum Potential D.C. Recovery %
1. Services Related to a Highway - Roads	Yes	1.1 Arterial roads	100
	Yes	1.2 Collector roads	100
	Yes	1.3 Bridges, Culverts and Roundabouts	100
	No	1.4 Local municipal roads	0
	Yes	1.5 Traffic signals	100
	Yes	1.6 Sidewalks and streetlights	100
	Yes	1.7 Active Transportation	100
2. Wastewater Services	Yes	2.1 Treatment plants	100
	Yes	2.2 Sewage trunks	100
	n/a	2.3 Local systems	0
	No*	2.4 Vehicles and equipment ¹	100
3. Water Supply Services	Yes	3.1 Treatment plants	100
	Yes	3.2 Distribution systems	100
	n/a	3.3 Local systems	0
	No*	3.4 Vehicles and equipment ¹	100
4. Other Services	Yes	4.1 Studies in connection with acquiring buildings, rolling stock, materials and equipment, and improving land ² and facilities, including the D.C. background study cost	0-100
	Yes	4.2 Interest on money borrowed to pay for growth-related capital	0-100

¹with a 7+ year life time

²same percentage as service component to which it pertains

Eligibility for Inclusion in the D.C. Calculation	Description
Yes	Municipality provides the service – service has been included in the D.C. calculation.
No*	Municipality provides the service – service has not been included in the D.C. calculation related to Roads, Water and Wastewater Services.
n/a	Municipality does not provide the service.
Ineligible	Service is ineligible for inclusion in the D.C. calculation.

4.5 Capital Forecast

Paragraph 7 of s.s.5(1) of the D.C.A. requires that “the capital costs necessary to provide the increased services must be estimated.” The Act goes on to require two potential cost reductions and the Regulation sets out the way in which such costs are to be presented. These requirements are outlined below.

These estimates involve capital costing of the increased services discussed above. This entails costing actual projects or the provision of service units, depending on how each service has been addressed.

The capital costs include:

- a) costs to acquire land or an interest therein (including a leasehold interest);
- b) costs to improve land;
- c) costs to acquire, lease, construct or improve buildings and structures;
- d) costs to acquire, lease or improve facilities, including rolling stock (with a useful life of 7 or more years), furniture and equipment (other than computer equipment), materials acquired for library circulation, reference or information purposes;
- e) interest on money borrowed to pay for the above-referenced costs;
- f) costs to undertake studies in connection with the above-referenced matters; and
- g) costs of the D.C. background study.

In order for an increase in need for service to be included in the D.C. calculation, Town Council must indicate “...that it intends to ensure that such an increase in need will be met” (s.s.5 (1)3). This can be done if the increase in service forms part of a Council-approved Official Plan, capital forecast or similar expression of the intention of Council (O.Reg. 82/98 s.3). The capital program contained herein reflects the Town’s approved and proposed capital budgets and master servicing/needs studies.

4.6 Treatment of Credits

Section 8 para. 5 of O.Reg. 82/98 indicates that a D.C. background study must set out “the estimated value of credits that are being carried forward relating to the service.” s.s.17 para. 4 of the same Regulation indicates that “...the value of the credit cannot be recovered from future D.C.s,” if the credit pertains to an ineligible service. This implies that a credit for eligible services can be recovered from future D.C.s. As a result, this provision should be made in the calculation, in order to avoid a funding shortfall with

respect to future service needs. Outstanding credit obligations that would affect the development charge calculation have been included in the calculations.

4.7 Eligible Debt and Committed Excess Capacity

Section 66 of the D.C.A. states that, for the purposes of developing a D.C. by-law, a debt incurred with respect to an eligible service may be included as a capital cost, subject to any limitations or reductions in the Act. Similarly, s.18 of O.Reg. 82/98 indicates that debt with respect to an ineligible service may be included as a capital cost, subject to several restrictions.

In order for such costs to be eligible, two conditions must apply. First, they must have funded excess capacity which is able to meet service needs attributable to the anticipated development. Second, the excess capacity must be “committed,” that is, either before or at the time it was created, Council must have expressed a clear intention that it would be paid for by D.C.s or other similar charges; for example, this may have been done as part of previous D.C. processes. It is noted that projects which have been debentured to-date and to which the principal and interest costs need to be recovered are included within the capital detail sheets.

4.8 Existing Reserve Funds

Section 35 of the D.C.A. states that:

“The money in a reserve fund established for a service may be spent only for capital costs determined under paragraphs 2 to 8 of subsection 5(1).”

There is no explicit requirement under the D.C.A. calculation method set out in s.s.5(1) to net the outstanding reserve fund balance as part of making the D.C. calculation; however, s.35 does restrict the way in which the funds are used in future.

For services which are subject to a per capita based, service level “cap,” the reserve fund balance should be applied against the development-related costs for which the charge was imposed, once the project is constructed (i.e. the needs of recent growth). This cost component is distinct from the development-related costs for the next 10-year period, which underlie the D.C. calculation herein.

The alternative would involve the Town spending all reserve fund monies prior to renewing each by-law, which would not be a sound basis for capital budgeting. Thus, the Town will use these reserve funds for the Town’s cost share of applicable development-related projects, which are required but have not yet been undertaken, as

a way of directing the funds to the benefit of the development which contributed them (rather than to future development, which will generate the need for additional facilities directly proportionate to future growth).

4.9 Deductions

The D.C.A. potentially requires that five deductions be made to the increase in the need for service. These relate to:

- the level of service ceiling;
- uncommitted excess capacity;
- benefit to existing development;
- anticipated grants, subsidies and other contributions; and
- 10% reduction for certain services.

The requirements behind each of these reductions are addressed as follows:

4.9.1 Reduction Required by Level of Service Ceiling

This is designed to ensure that the increase in need included in 4.3 does “...not include an increase that would result in the level of service (for the additional development increment) exceeding the average level of the service provided in the Municipality over the 10-year period immediately preceding the preparation of the background study...” O.Reg. 82.98 (s.4) goes further to indicate that “...both the quantity and quality of a service shall be taken into account in determining the level of service and the average level of service.”

In many cases, this can be done by establishing a quantity measure in terms of units as floor area, land area or road length per capita and a quality measure, in terms of the average cost of providing such units based on replacement costs, engineering standards or recognized performance measurement systems, depending on circumstances. When the quantity and quality factor are multiplied together, they produce a measure of the level of service, which meets the requirements of the Act, i.e. cost per unit.

With respect to transit services, the changes to the Act as a result of Bill 73 have provided for an alternative method for calculating the services standard ceiling. Transit services must now utilize a forward-looking service standard analysis, described later in this section.

The average service level calculation sheets for each service component in the D.C. calculation are set out in Appendix B.

4.9.2 Reduction for Uncommitted Excess Capacity

Paragraph 5 of s.s.5(1) requires a deduction from the increase in the need for service attributable to the anticipated development that can be met using the Town's "excess capacity," other than excess capacity which is "committed" (discussed above in 4.6).

"Excess capacity" is undefined, but in this case, must be able to meet some or all of the increase in need for service, in order to potentially represent a deduction. The deduction of uncommitted excess capacity from the future increase in the need for service would normally occur as part of the conceptual planning and feasibility work associated with justifying and sizing new facilities, e.g. if a road widening to accommodate increased traffic is not required because sufficient excess capacity is already available, then widening would not be included as an increase in need, in the first instance.

4.9.3 Reduction for Benefit to Existing Development

Section 5(1)6 of the D.C.A. provides that, "The increase in the need for service must be reduced by the extent to which an increase in service to meet the increased need would benefit existing development." The general guidelines used to consider benefit to existing development included the following:

- the repair or unexpanded replacement of existing assets that are in need of repair;
- an increase in average service level of quantity or quality (compare water as an example);
- the elimination of a chronic servicing problem not created by growth; and
- providing services where none previously existed (generally considered for water or wastewater services).

This step involves a further reduction in the need, by the extent to which such an increase in service would benefit existing development. The level of services cap in 4.4 is related, but is not the identical requirement. Sanitary, storm and water trunks are highly localized to growth areas and can be more readily allocated in this regard than other services such as services related to a highway, which do not have a fixed service area.

Where existing development has an adequate service level which will not be tangibly increased by an increase in service, no benefit would appear to be involved. For example, where expanding existing library facilities simply replicates what existing residents are receiving, they receive very limited (or no) benefit as a result. On the other hand, where a clear existing service problem is to be remedied, a deduction should be made accordingly.

In the case of services such as recreation facilities, community parks, libraries, etc., the service is typically provided on a Town-wide system basis. For example, facilities of the same type may provide different services (i.e. leisure pool vs. competitive pool), different programs (i.e. hockey vs. figure skating) and different time availability for the same service (i.e. leisure skating available on Wednesday in one arena and Thursday in another). As a result, residents will travel to different facilities to access the services they want at the times they wish to use them, and facility location generally does not correlate directly with residence location. Even where it does, displacing users from an existing facility to a new facility frees up capacity for use by others and generally results in only a very limited benefit to existing development. Further, where an increase in demand is not met for a number of years, a negative service impact to existing development is involved for a portion of the planning period.

4.9.4 Reduction for Anticipated Grants, Subsidies and Other Contributions

This step involves reducing the capital costs necessary to provide the increased services by capital grants, subsidies and other contributions (including direct developer contributions required due to the local service policy) made or anticipated by Council and in accordance with various rules such as the attribution between the share related to new vs. existing development. That is, some grants and contributions may not specifically be applicable to growth or where Council targets fundraising as a measure to offset impacts on taxes (O.Reg. 82.98 s.6).

4.9.5 The 10% Reduction

Paragraph 8 of s.s.(1) of the D.C.A. requires that, “the capital costs must be reduced by 10 percent.” This paragraph does not apply to water supply services, wastewater services, storm water drainage and control services, services related to a highway, police and fire protection services. The primary services to which the 10% reduction does apply include services such as parks, recreation, libraries, childcare/social services, the *Provincial Offences Act*, ambulance, homes for the aged, and health.

The 10% reduction does not apply to this study, as the services included are roads, water, and wastewater.

4.10 Municipal-Wide vs. Area Rating

This step involves determining whether all of the subject costs are to be recovered on a uniform municipal-wide basis or whether some or all are to be recovered on an area-specific basis. Under the amended D.C.A., it is now mandatory to “consider” area-rating of services (providing charges for specific areas and services), however, it is not mandatory to implement area-rating. Further discussion is provided in Section 7.4.4.

4.11 Allocation of Development

This step involves relating the costs involved to anticipated development for each period under consideration and using allocations between residential and non-residential development and between one type of development and another, to arrive at a schedule of charges.

4.12 Asset Management

The new legislation now requires that a D.C. Background Study must include an Asset Management Plan (s. 10 (2)c.2). The asset management plan must deal with all assets that are proposed to be funded, in whole or in part, by D.C.s. The current regulations provide very extensive and specific requirements for the asset management plan related to transit services (as noted in the subsequent subsection) however, are silent with respect to how the asset management plan is to be provided for all other services. As part of any asset management plan, the examination should be consistent with the municipality’s existing assumptions, approaches and policies on the asset management planning. This examination has been included in Appendix F.

4.13 Transit

The most significant changes to the Act relate to the transit service. These changes relate to four areas of the calculations, as follows:

- A. Transit no longer requires the statutory 10% mandatory deduction from the net capital cost (section 5.2.(i) of the D.C.A.).
- B. The Background Study requires the following in regard to transit costs (as per section 8(2) of the Regulations):

1. The calculations that were used to prepare the estimate for the planned level of service for the transit services, as mentioned in subsection 5.2 (3) of the Act.
 2. An identification of the portion of the total estimated capital cost relating to the transit services that would benefit,
 - i. the anticipated development over the 10-year period immediately following the preparation of the background study, or
 - ii. the anticipated development after the 10-year period immediately following the preparation of the background study.
 3. An identification of the anticipated excess capacity that would exist at the end of the 10-year period immediately following the preparation of the background study.
 4. An assessment of ridership forecasts for all modes of transit services proposed to be funded by the development charge over the 10-year period immediately following the preparation of the background study, categorized by development types, and whether the forecasted ridership will be from existing or planned development.
 5. An assessment of the ridership capacity for all modes of transit services proposed to be funded by the development charge over the 10-year period immediately following the preparation of the background study.
- C. A new forward-looking service standard (as per 6.1(2) of the Regulations):
1. The service is a discrete service.
 2. No portion of the service that is intended to benefit anticipated development after the 10-year period immediately following the preparation of the background study may be included in the estimate.
 3. No portion of the service that is anticipated to exist as excess capacity at the end of the 10-year period immediately following the preparation of the background study may be included in the estimate.
- D. A very detailed asset management strategy and reporting requirements (section 6.1(3) of the Regulation) that includes lifecycle costs, action plans that will enable

the assets to be sustainable, summary of how to achieve the proposed level of service, discussion on procurement measures and risk.

The Town will review these requirements when conducting a study process to implement a by-law to replace By-law 2014-73. Therefore, the above calculations and reporting requirements are not required for this study.

5. D.C. Eligible Cost Analysis by Service

5.1 Introduction

This chapter outlines the basis for calculating eligible costs for the D.C.s to be applied on a uniform basis. In each case, the required calculation process set out in s.5(1) paragraphs 2 to 8 in the D.C.A. and described in Chapter 4, was followed in determining D.C. eligible costs.

The nature of the capital projects and timing identified in the Chapter reflects Council's current intention. However, over time, Town projects and Council priorities change and accordingly, Council's intentions may alter and different capital projects (and timing) may be required to meet the need for services required by new growth.

5.2 Engineering Overview of Water, Wastewater, and Road Services

5.2.1 Introduction

The following information was prepared with input from staff and provides the servicing requirements for the roads, water and wastewater services for the 2018-2031 forecast period.

The background information and reports which assisted in preparation of the D.C. calculations include the following:

- 2009 Development Charge Background Study (Watson & Burnside, Sept. 4, 2009).
- 2013 Development Charges Background Study (Watson & Burnside, Consolidated Report date February 4, 2013)
- Lakeshore Water Treatment Plant Expansion, Municipal Class Environmental Assessment, Environmental Study Report, Town of Innisfil (AECOM, January 2011)
- Environmental Study Report for Southwest Arterial Roadway (SWAR) (Lea, May 2010).
- Master Servicing Study for Planned Service Area (Burnside, July 2010).
- Environmental Study Report for Southeast Arterial Roadway (SEAR) (Lea, October 2010).
- Water Supply and Wastewater Servicing Master Plan Update (Tatham, March 31, 2011).

- Input from Town staff with respect to Early Payment Agreement (EPA) status.
- Bradford West Gwillimbury Water Pollution Control Plant Environmental Study Report Phases 3 and 4 (Ainley, Final – March 2012)
- 2011 Development Charges Update Transportation/Roadway Network Assessment (Poulos & Chung, March 2012).

The general approach to determining the D.C. growth-related eligible costs on a project-by-project basis included the following:

- Identifying the project need and description.
- Estimating gross capital project costs.
- Identifying and deducting post-planning period project cost or sources of external funding, if any.
- Estimating the value of benefit to existing system users, if any.
- Identifying the amount of any applicable grants or subsidies.
- Estimating the proportion of the remaining growth-related project cost attributable to future residential and non-residential users.

5.2.2 Project Identification

The projects included in the 2013 D.C. Background Study were reviewed and updated as necessary to reflect supporting Master Servicing Studies/Reports and Transportation Assessments, current budgets and the growth forecast included in this D.C. study. New projects that have been added were necessary to support planned and approved growth. In addition, estimated financing charges on debt anticipated to be issued in 2018 have been included.

5.2.3 Gross Capital Cost Estimates

Based on the review of background Master Planning documents and supporting material, capital cost estimates were updated to reflect the currently understood scope and scale of projects in 2018 dollars. All costs estimates continue to include such things as construction as well as bonding, insurance, surveying, site offices, traffic control plan and implementation, dewatering, and installing and maintaining environmental controls. In addition, contingency allowances of 15 percent where applicable and have been extended to all aspects of project estimates to reflect experience on recently completed Town projects. Engineering allowances have similarly included at 15 percent of total construction costs based on the Town's completed project experience. This allowance accounts for the complexity of many projects as they advance from conceptual or preliminary design to a completed project

including public relations issues/meetings, utility coordination and agency/ministry approvals.

Land costs, where eligible, are included based on actual average costs paid by the Town for land on recently completed projects and include estimated costs for appraisals, land surveys and plan registration, legal and land negotiation and/or expropriation costs.

5.2.4 Post Period Benefit

Where water and wastewater Master Planning documents recommend infrastructure, which will service growth beyond the current planning period (i.e. 2031) as noted in the growth forecast, the cost associated with growth beyond 2031 has been identified as a post planning period benefit. Employment lands identified as developing within the post period are the “MZO3” lands on each side of Highway 400 and a total of 155.6 ha of employment lands in the Bradford Settlement Area (B.S.A.) adjacent to the Bradford Bypass corridor.

The relevant infrastructure cost curves provided in the report entitled “Water and Wastewater Asset Cost Study, Ministry of Public Infrastructure Renewal (Burnside, May 2005)” form the basis for quantifying the value of the post period benefit. The ratio of the costs at build-out versus year 2031 (i.e. end of the current planning period) based on the cost curves was applied to the current project costs to estimate the post period benefit. The relationship between cost and capacity or project size may be exponential (i.e. marginal cost) or linear (i.e. average cost) based on the cost curves.

Where applicable, an estimate of sewer and water distribution system project oversizing formed the basis for estimating post period benefit for these services. In the case of some projects which service only post planning growth areas, the full project cost is considered a post period benefit.

A post period benefit continues to be identified for the water pollution control plant debenture for construction of Plant D as a result of the assignment of employment lands in the Bradford Urban Area to the post period.

Transportation projects were evaluated on the basis of services required for the current planning period to year 2031. However, the following four projects were identified as post planning period projects expected to be implemented shortly after 2031 in order to service growth in the Highway 400 employment lands:

- Road project no. 43 – Line 8 – From Sideroad 10 to Highway 400
- Road project no. 45 – Highway 400/Line 6 overpass
- Road project no. 46 – Highway 400/Line 8 overpass
- Road project no. RDS-06 – Portion of 400-404 link

5.2.5 Benefit to Existing Development

The benefit received by existing development has been identified for projects where an improvement in existing service levels can be expected from installation of the new service.

Wastewater treatment service for the existing residential population in Bond Head has been identified as a Benefit to Existing based on peak flow. A benefit to existing amount has been identified for sewers, forcemains, and pumping stations proposed to service the existing residential population in Bond Head, based on net design flows, incremental pipe sizing and pumping station capacities. In addition, a benefit to existing has been assigned to the proposed water tower east of Bond Head based on the proportion of maximum day demand from the existing Bond Head population to the system wide demand.

The benefit to existing amount for road widening projects is based on cost estimates for typical paving, grading or gravelling the Town would normally undertake on existing roadways. Where growth-related truck traffic services growth areas via existing roadways and contribute to degradation of the service, a nominal amount is assigned as a growth-related share of the project.

5.2.6 Town-Wide Charge versus Area-Specific Charge

A Town-wide development charge was calculated for the roads projects following the same format used in previous D.C. by-laws.

Water supply and distribution, and wastewater treatment and sewer projects follow an area-specific charge format. Projects generally located east of Sideroad 10 were considered to service the Bradford Settlement Area (B.S.A.) while projects located west of Sideroad 10 were considered to service the combined Bond Head Settlement Area (B.H.S.A.) and the B.W.G. Strategic Settlement Employment Area (B.W.G.S.S.E.A).

Noted exceptions are the dedicated sanitary forcemains from the employment lands to the water pollution control plant (project nos. 28 to 31 inclusive) which are geographically east of Sideroad 10 however are considered part of the services for the

lands west of Sideroad 10. In addition, two proposed watermains on Sideroad 10 from Line 6 to Holland Street West (project nos. 8a and 8b) are considered to service both geographic areas (i.e. the B.S.A. and B.H.S.A. & B.W.G.S.S.E.A.). Therefore, the costs for these two projects have been apportioned in the same ratios as the water treatment plant expansion project (WSS-9b) which also services all growth areas.

5.2.7 Residential and Non-Residential Shares

5.2.7.1 Water Facilities

The proportion of costs for water facility projects was based on the proportion of maximum day demands and assigned to various areas as noted below:

- Phase 2 of Booster Pumping Station expansion (WSS-8a): Costs have been proportioned to B.S.A. users based on the proportion of residential and non-residential maximum day demands, on the basis the level of service provided by this expansion does not apply to the B.H.S.A./B.W.G.S.S.E.A. lands.
- Phase 3 of Booster Pumping Station expansion (WSS-8b) and a new water supply main (WSS-10): Costs have been proportioned to the B.H.S.A./B.W.G.S.S.E.A. Lands users and the B.S.A. residential intensification lands users based on the proportion of residential and non-residential maximum day demands. This approach is taken on the basis that water demands in the B.S.A. other than the residential intensification users have been met through the Phase 2 Booster Pumping Station expansion project and construction of the original water supply main from Innisfil to Bradford West Gwillimbury.
- Class E.A. Study and capital expansion of the Innisfil Water Treatment Plant Phase 3 (WSS-9b): Costs proportioned to all growth areas benefitting from this project on the basis of the proportion of maximum day water demands. The population growth in the B.S.A. from 2007 to 2017 has been included in this calculation in order to distribute costs across development in the urban area.

5.2.7.2 Water Distribution

The residential and non-residential proportion of the eligible development charge cost for watermains are based on the respective maximum day demands within the geographic areas noted above which define the area specific charges. Following the same procedure used in calculations for the Innisfil Water Treatment Plan Phase 3 and related Class E.A. projects, the population growth in the B.S.A. from 2007 to 2017 has been included in the total B.S.A. growth for distribution of project costs.

5.2.7.3 Wastewater Treatment

The growth-related costs of the wastewater treatment plant expansion and the Class Environmental Assessment Study projects were apportioned based on flow from B.S.A. residential “infilling” and residential growth and non-residential growth in the current planning period for Bond Head and the Highway 400 Strategic Employment lands respectively.

The residential and non-residential share proportions for the Plant D debenture and interest account for the deferral of some B.S.A. non-residential lands adjacent to the Bradford By-pass to the post planning period.

5.2.7.4 Wastewater - Sewers

The assignment of residential and non-residential share of project costs was based on estimates of the proportion of flow from the respective land uses serviced by the proposed projects.

5.2.7.5 Roads

The assignment of residential and non-residential proportions for growth-related roads projects was based on the relationship of population to employment over the 14-year period of the growth projection (2018-2031).

5.3 Service Levels and 14-Year Capital Costs for Bradford West Gwillimbury’s D.C. Calculation

This section evaluates the development-related capital requirements for those services with 14-year capital costs.

5.3.1 Services Related to a Highway

Town Engineering staff undertook an updated assessment of the road needs within the serviced areas of the Town. This review considered the road needs associated with all development including the development of the B.S.A., the B.H.S.A. and B.W.G.S.S.E.A. for the 2018-2031 forecast period. In addition to these costs, outstanding principal and interest costs for debt has been included along with an estimate of interest costs for debt anticipated to be issued in 2018. Further, the deficit in the D.C. reserve fund for this service, totalling \$21.77 million has been included. In total, \$223.32 million in works, debt and reserve deficit are required for inclusion in the study. Of this amount, \$20.4 million has been identified as benefiting existing development within the Town, \$36.0 million identified as funding associated with other levels of government, and \$30.58 million attributable to growth in the post 14-year period. This leaves a net

amount of \$136.34 attributable to growth over the 14-year forecast period to be recovered from D.C.s. The Roads Service Standard has been calculated and is provided in Appendix B.

The residential/non-residential allocation of capital costs for roads is based on a split of 56%/44% based on the incremental growth in population to employment, for the 14-year forecast period.

INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION

Town of Bradford West Gwillimbury

Service: Roads

Project No.*	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2017\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Potential DC Recoverable Cost		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share	Non-Residential Share
	2018-2031								56%	44%	
RDS-01 3 & 4, 5 & 6, 29	Holland Street Project including: Holland Street East - Barrie Street to Bridge Street, Holland Street West - Barrie Street to Melbourne Drive and Holland Street Corridor - Sideroad 10 to Bridge Street	2020-2022	17,483,500	-	-	17,483,500	12,206,800		5,276,700	2,954,952	2,321,748
RDS-00 11 12 16	Dissette Street including: Dissette Street - Bridge Street to Artesian Industrial Parkway Line 8 - Artesian Industrial Parkway to County Road 4 Bridge Street - Dissette Street to Bradford CO-OP	2018	350,000	-		350,000	165,800		184,200	103,152	81,048
14	Professor Day Drive - Line 8 to Crossland Blvd./McKenzie Way	2018	3,398,100	-		3,398,100	-		3,398,100	1,902,936	1,495,164
RDS-02 18 19 32	Southwt Arterial Road Project including: Line 6 - 600 m east of Sideroad 10 to southwest arterial road roundabout, Sideroad 10 - Line 6 to Holland Street West, and Southwest Arterial Road (Sideroad 10 & Line 5) - from Line 6 to Coffey Road	2018	22,881,000	-		22,881,000	2,468,200		20,412,800	11,431,168	8,981,632
RDS-05 20 & 33 21 & 22 23	Line 8 Widening and Reconstruction including: Sideroad 10 - Reagens Industrial Parkway to 300 m north of 8th Line, Line 8 - Barrie Street to Professor Day Drive, and Line 88 - Professor Day Drive to Sideroad 10	2018-2025	29,106,600	-	-	29,106,600	2,600,600		26,506,000	14,843,360	11,662,640
24	Southeast arterial road - Simcoe Road to Bridge Street	2018	1,485,933	-	-	1,485,933	743,000		742,933	416,043	326,891
RDS-03 26 27 28	Line 6/Walker Ave. Urbanization includes: Line 6 - Simcoe Road to Walker Avenue and Walker Avenue - Line 6 to Morris Street Simcoe Road - Line 6 to 60 m south of Golfview Blvd.	2019 2018	1,683,500 612,100	- -	- -	1,683,500 612,100	282,900 99,600		1,400,600 512,500	784,336 287,000	616,264 225,500
30	Professor Day Drive & Melbourne Drive corridors - Miller Park Ave. to Northgate Dr.	2023	286,000	-	-	286,000	-		286,000	160,160	125,840
31	Line 5/Hwy 400 full interchange	2018	54,000,000	-	36,000,000	18,000,000	600,000		17,400,000	9,744,000	7,656,000
38	Professor Day Drive at Breeze Drive	2014	689,900	-	-	689,900	197,900		492,000	275,520	216,480
39	Line 6 - From Sideroad 10 to Highway 400	2023	8,023,000	-	-	8,023,000	75,450		7,947,550	4,450,628	3,496,922
RDS-04 40	OPA 15 & OPA 16 Servicing includes: Sideroad 5 - From County Road 88 to 300 m north of 6th Line and	2026	8,435,600	-	-	8,435,600	188,300		8,247,300	4,618,488	3,628,812
41	Line 6 - From Highway 400 to Sideroad 27										
42	Line 6 - From Langford Boulevard to southwest arterial roundabout	2026	764,000	-	-	764,000	20,580		743,420	416,315	327,105
43	Line 8 - From Sideroad 10 to Highway 400	2031	2,058,700	2,058,700	-	-	-		-	-	-
44	Sideroad 10/Bradford By-pass partial interchange	2028	7,514,000	-	-	7,514,000	751,450		6,762,550	3,787,028	2,975,522
45	Highway 400/Line 6 overpass	2031	9,260,000	9,260,000	-	-	-		-	-	-
46	Highway 400/Line 8 overpass	2031	9,260,000	9,260,000	-	-	-		-	-	-
RDS-06	Portion of 400-404 link	2025	10,000,000	10,000,000	-	-	-		-	-	-
RDS-07	Signalizations at various locations	2020-2031	3,000,000	-	-	3,000,000	-		3,000,000	1,680,000	1,320,000
47	Outstanding Growth Related Debt - Principal	2019-2021	7,082,557	-	-	7,082,557	-		7,082,557	3,966,232	3,116,325
48	Outstanding Growth Related Debt - Interest (Discounted)	2019-2021	606,890	-	-	606,890	-		606,890	339,858	267,031
49	Interest on Debentures required in 2018 (discounted)	2018-2027	3,570,181	-	-	3,570,181	-		3,570,181	1,999,301	1,570,880
50	DC Reserve Adjustment		21,772,245	-	-	21,772,245	-		21,772,245	12,192,457	9,579,788
	Total		223,323,806	30,578,700	36,000,000	156,745,106	20,400,580	-	136,344,526	76,352,935	59,991,592

* Project Numbers are consistent with project numbers in past DC studies

Note: Some projects are partially completed and therefore cost estimates reflect the unfunded balance of the projects as of December 31, 2017

5.4 Service Levels and Urban 14-Year Capital Costs for Bradford West Gwillimbury's D.C. Calculation

This section evaluates the development-related capital requirements for those services with urban 14-year capital costs. For this evaluation we have calculated the water and wastewater works on the following basis:

- Water Treatment & Distribution – Bradford Settlement Area
- Water Treatment & Distribution - Bond Head Settlement Area/B.W.G. Strategic Settlement Employment Area
- Wastewater Treatment & Collection - Bradford Settlement Area
- Wastewater Treatment & Collection - Bond Head Settlement Area/B.W.G. Strategic Settlement Employment Area
- Water and Wastewater Studies – All urban areas

5.4.1 Water Services

For the purposes of the D.C. calculation relating to water, costs associated with water treatment and water distribution have been updated to reflect current estimates for the works which are still to be undertaken. The capital costs for water treatment and distribution have both been separated between the Bradford Settlement Area and the Bond Head Settlement Area (O.P.A. 16)/B.W.G. Strategic Settlement Employment Area (O.P.A. 15), for D.C. calculation purposes. The D.C. associated with water studies has been calculated on an urban-wide basis with one charge for all urban areas within the Town.

Studies related to Water Services, estimated at \$500,000 over the forecast period, have been allocated over all urban areas and shared between residential and non-residential development of 69%/31% based on proportionate water flows.

Water treatment capital needs identified total \$47.24 million, of which \$13.1 million is attributable to growth outside the 2018-2031 forecast period and \$34.14 million is attributable to growth over the current 2018-2031 forecast period. The cost of water distribution servicing is \$325.93 million. Of this amount, \$3.71 million is a benefit to development in the period post 2031, \$782,131 is a benefit to existing development and the balance of \$21.44 million is attributable to growth within the urban areas. In addition to these works, the work completed to date required under the land developer servicing agreements for treatment, totaling \$52.77 million has been included in the D.C. calculations. Further, the Town anticipates issuing debt in 2018 in the amount of \$9.2

million attributable to capital infrastructure required in the B.S.A. and \$20 million attributable to capital infrastructure required in the B.H.S.A./ B.W.G.S.S.E.A. therefore, estimated financing costs (discounted) have been included in the calculations. These expenditures result in a total to be recovered through D.C.s for water treatment & Distribution is \$113,369,058.

The following is a summary of the gross and net recoverable costs related to water treatment and distribution:

Water		
	Treatment & Distribution	Studies
Outstanding Works	\$73,173,488	\$500,000
Less:		
Post Period	16,812,188	0
Existing Benefit	782,131	0
Total Deductions	17,594,319	0
Total Net Cost of Outstanding Works	55,579,169	500,000
Works to Date	52,773,932	-
Estimated Interest on Future Debt (Discounted)	4,738,604	-
Total to be included in DC Calculation	113,091,705	500,000

The costs associated with studies are effective for all urban areas. The treatment and distribution costs have been allocated between the Bradford Settlement Area and the Bond Head Settlement Area/B.W.G. Strategic Settlement Employment Area, and further by the benefit to residential and non-residential development within the areas, based on the Engineering assessment that was undertaken by R.J. Burnside during the 2013 D.C. study, as follows:

Water Treatment & Distribution				
Allocation by Area	Bradford Settlement Area		Bond Head Settlement Area/BWG Strategic Settlement Employment Area	
	Residential	Non-Residential	Residential	Non-Residential
Total to be included in DC Calculation	49,982,316	7,394,711	17,394,820	38,319,858

INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION

Town of Bradford West Gwillimbury
 Service: Water Studies (All Urban Areas)

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Total		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share	Non-Residential Share
	2011-2031 Urban									69%	31%
WDS-29	Allowance for municipal growth-related studies (ie. Class EA water system	Various	500,000	0		500,000	0		500,000	345,000	155,000
	Total		500,000	0	0	500,000	0	0	500,000	345,000	155,000

INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION

Town of Bradford West Gwillimbury
Service: Water Facilities (All Urban Areas)

Prj.No	Increased Service Needs Attributable to Anticipated Development 2011-2031 Urban	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Total
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	
WSS-8a	Full project cost for Phase 2 of the existing booster pumping station - Town of Innisfil Line 3	2018	3,016,000	1,311,518		1,704,482	0		1,704,482
WSS-8b	Full project cost for Phase 3 of the existing booster pumping station - Town of Innisfil Line 3	2018	2,000,000	983,088		1,016,912	0		1,016,912
WSS-9b	BWG proportionate project cost for Innisfil Water Treatment Plant Expansion - Phase 3	2018	19,310,800	7,044,178		12,266,622	0		12,266,622
WSS-10	Full project cost for additional supply main (300 mm dia. to 600 mm dia.) from Innisfil Lakeshore water treatment plant to John Fennell reservoir - 25 km	2018-2020	22,916,488	3,762,344		19,154,144	0		19,154,144
	Total		47,243,288	13,101,128	0	34,142,160	0	0	34,142,160

INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION

Town of Bradford West Gwillimbury

Service: Water Distribution (All Urban Areas)

Prj.No	Increased Service Needs Attributable to Anticipated Development 2011-2031 Urban	Full Project (FP)/ Oversizing (O)	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Total
								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	
6	WDS-6	Full project cost for 250 m - 300 mm diameter watermain replacement on Holland Street West from Barrie Street to Holland Court	FP	2022	688,300	0	688,300	550,640		137,660
8a	WDS-8a	Full project cost for 350 m - 300 mm diameter watermain on 10th Sideroad from 50 m south of Holland St. West to Miller Park Ave. extension	FP	2022	378,000	0	378,000	0		378,000
8b	WDS-8b	Full project cost for 1150 m - 300 mm diameter watermain on 10th Sideroad from Miller Park Avenue extension to 100 m south of 6th Line	FP	2018	2,720,000	0	2,720,000	0		2,720,000
9	WDS-9	Oversizing cost for 300 mm diameter watermain in/near Community Area 3: 850 m on Langford Blvd., 500 m on West Park Ave. and 250 m on Summerlyn Trail all north of Holland St. West and 650 m in Smart Centres site east of Sideroad 10	O	2018	213,400	0	213,400	21,340		192,060
10	WDS-10	Full project cost for addition of valve chambers and hydrants on existing watermain on 8th Line from Sideroad 10 to Professor Day Drive	FP	2022	213,000	0	213,000	21,300		191,700
11	WDS-11	Oversizing cost for 1830 m - 300 mm diameter trunk watermain on Crossland Blvd. in Community Area 4 (area north of 8th Line, west of Professor Day Dr.)	O	2022	240,000	0	240,000	0		240,000
12	WDS-12	Full project cost for 320 m - 300 mm diameter trunk watermain on Professor Day Dr. extension from 8th Line to Crossland Blvd./McKenzie Way	FP	2018	196,000	0	196,000	0		196,000
13	WDS-13	Full project cost for 1920 m - 350 mm diameter watermain on Professor Day Dr. extension from Crossland Blvd./McKenzie Way to County Road 4	FP	2026	1,801,000	263,461	1,537,539	0		1,537,539
14	WDS-14	Oversizing cost for 380 m - 300 mm diameter watermain on industrial/commercial lands north of 8th Line west of Artesian Industrial Parkway plus full project cost for 300 m - 300 mm diameter watermain crossing proposed Bradford By-pass corridor and connecting to watermain project WDS-16 north of the By-pass	FP/O	2018	396,500	0	396,500	0		396,500
15	WDS-15	Oversizing cost for 550 m - 300 mm diameter watermain north of the Bradford By-pass, west of Artesian Industrial Parkway and east of County Road 4 on industrial/commercial lands plus full project cost for 400 m - 300 mm diameter watermain north of the Bradford By-pass and immediately east of County Road 4 through an environmental wooded/steep slope area	FP/O	2026	334,000	0	334,000	0		334,000

INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION

Town of Bradford West Gwillimbury
 Service: Water Distribution (All Urban Areas)

Prj.No	Increased Service Needs Attributable to Anticipated Development 2011-2031 Urban	Full Project (FP)/ Oversizing (O)	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Total	
								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development		
16	WDS-16	Oversizing cost for 1150 m - 300 mm diameter watermain north of Bradford By-pass, west of Artesian Industrial Parkway and east of County Road 4 on industrial/commercial lands plus full project cost for 400 m - 300 mm diameter trunk watermain on 9th Line west of Artesian Industrial Pkwy.	FP/O	2031	517,000	517,000	0	0		0	
19	WDS-19	Full project cost for 380 m - 300 mm diameter watermain on 6th Line from Simcoe Road to Parkwood Avenue	FP	2018	2,600	0	2,600	0		2,600	
20	WDS-20	Full project cost for 2100 m - 600 mm diameter watermain on 8th Line from Sideroad 10 to the east side of Highway 400	FP	2018	1,232,800	392,200	840,600	30,930		809,670	
21	WDS-21	Full project cost for 950 m - 400 mm diameter watermain on 8th Line from the future east collector road intersection to Sideroad 5	FP	2018	575,600	0	575,600	21,179		554,421	
22	WDS-22	Full project cost for 4600 m - 400 mm diameter watermain on 8th Line from the west limit of OPA 15 to County Road 27 and on County Road 27 from 8th Line to County Road 88/Line 7 in Bond Head	FP	2018	2,256,600	0	2,256,600	83,031		2,173,569	
23	WDS-23	Full project cost for 600 m - 300 mm diameter watermain on 6th Line from the west limit of Brookfield Developments to Sideroad 10	FP	2018	210,200	0	210,200	0		210,200	
24	WDS-24	Full project cost for 1300 m - 400 mm diameter watermain on Sideroad 10 from 6th Line to 5th Line plus 1750 m - 400 mm diameter watermain on 5th Line from Sideroad 10 to 500 m east of Highway 400	FP	2018	1,090,900	0	1,090,900	0		1,090,900	
25	WDS -25	Full project cost for 4500 cu.m. water tower including 400 m-300 mm diameter watermain east of Bond Head north of County Road 88		2019	8,558,000	2,338,500	6,219,500	53,711		6,165,789	
26	WDS-26	Full project cost for 2800 m - 400 mm diameter watermain on Sideroad 5 from County Road 88 to 5th Line plus 1400 m - 400 mm diameter watermain on 5th Line from 500 m east of Highway 400 to Sideroad 5	FP	2020	2,999,000	0	2,999,000	0		2,999,000	
27	WDS-27	Full project cost for 1400 m - 400 mm diameter watermain on Sideroad 5 from County Road 88 to 8th Line	FP	2020	624,300	199,900	424,400	0		424,400	
28	WDS-28	Full project cost for 1200 m-300 mm diameter watermain on 6th Line between Sideroad 5 and the future north/south collector road on the east side of Highway 400 in OPA 15	FP	2018	683,000	0	683,000	0		683,000	
Total					25,930,200	3,711,061	0	22,219,139	782,131	0	21,437,009

5.4.2 Wastewater Services

Similar to water, capital costs associated with wastewater treatment and wastewater collection have been updated to reflect current estimates for capital works to be constructed during the forecast period. The capital costs for wastewater treatment and collection have been separated for D.C. calculation purposes. The D.C. associated with wastewater studies has been calculated on an urban wide basis. The D.C. associated with wastewater treatment and collection has been calculated on an urban area specific basis with one charge for the Bradford Settlement Area and a separate charge for the Bond Head Settlement Area/B.W.G. Strategic Settlement Employment Area.

Studies related to Wastewater Services are estimated at \$500,000 over the forecast period. These have been allocated over all urban areas and shared between residential and non-residential development of 51%/49% based on proportionate total flows.

For wastewater treatment, capital works totalling \$25.95 million have been identified. Outstanding debt for past growth-related works, in the amount of \$5.49 million has also been included in the D.C. calculation. Of these amounts \$4.17 million is attributed to growth outside the current forecast period and \$5.72 million is attributable to existing development. In addition to these works, the works to date, required under the land developer servicing agreements for treatment, totalling \$31.54 million has been included. Therefore, the total to be recovered through D.C.s for wastewater treatment is \$53,083,449.

The cost of the wastewater collection system totals \$64,095,696. Of this amount, \$17.7 million benefits growth in the post 2031 period, \$1.9 million is benefits existing development. In addition to these works, the work completed to date required under the land developer servicing agreements for collection of \$38.44 million has been included in the D.C. calculations. Further, the Town anticipates the need to issue debentures in 2018 in the amount of \$20 million for the B.H.S.A./B.W.G.S.S.E.A. and \$12 million of the B.S.A. as such, the estimated financing costs (discounted) have been included at a total of \$5.19 million.

The following is a summary of the gross and net recoverable costs, for wastewater services:

Wastewater			
To be Recovered from DC:	Treatment	Collection	Studies
Outstanding Works	\$25,953,400	\$64,095,696	\$500,000
Add:			
Outstanding Debt Obligations	\$5,485,592	\$0	\$0
Less:			
Post Period	4,172,895	17,698,501	0
Other Recoveries	0	34,778	0
Existing Benefit	5,724,146	1,897,463	0
Total Deductions	9,897,041	19,630,742	0
Total Net Cost of Outstanding Works	21,541,951	44,464,954	500,000
Work to Date	31,541,498	38,436,541	-
Estimated Interest on Future Debt		5,192,990	
Total to be included in DC Calculation	53,083,449	88,094,486	500,000

The net growth-related treatment and collection costs have been allocated between the Bradford Settlement Area and the Bond Head Settlement Area/B.W.G. Strategic Settlement Employment Area, and further by the benefit to residential and non-residential development within the areas, based on the prior Engineering assessment undertaken by R.J. Burnside that was undertaken during the 2013 D.C. study, as follows:

Wastewater				
Allocation by Area	Bradford Settlement Area		Bond Head Settlement	
	Residential	Non-Residential	Residential	Non-Residential
Treatment	34,221,189	6,029,940	4,737,853	8,094,467
Collection	25,537,740	6,143,051	25,276,311	31,137,383
Total to be included in DC Calculation	59,758,929	12,172,991	30,014,165	39,231,850

INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION

Town of Bradford West Gwillimbury

Service: Wastewater Studies (All Urban Areas)

Prj.No	Increased Service Needs Attributable to Anticipated Development	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Total		
							Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	Total	Residential Share	Non-Residential Share
	2011-2031 Urban									51%	49%
38	Allowance for municipal growth related studies (ie. Class EA wastewater system updates)	Various	500,000	0		500,000	0		500,000	255,000	245,000
	Total		500,000	0	0	500,000	0	0	500,000	255,000	245,000

INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION

Town of Bradford West Gwillimbury

Service: Wastewater Facilities

Prj.No	Increased Service Needs Attributable to Anticipated Development 2011-2031 Urban	Full Project (FP)/ Oversizing (O)	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Total
								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	
WPCP-4	WPCP Capital Upgrade / Expansion	FP	2018	25,953,400	3,974,763		21,978,637	5,724,146		16,254,491
	Plant D - Debenture Principal		2018-2021	5,153,695	186,144		4,967,550	0		4,967,550
	Plant D - Debenture Interest (Discounted)		2018-2021	331,898	11,988		319,910	0		319,910
	Total			31,438,992	4,172,895	0	27,266,097	5,724,146	0	21,541,951

INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION

Town of Bradford West Gwillimbury
 Service: Wastewater Collection

Prj.No	Increased Service Needs Attributable to Anticipated Development 2011-2031 Urban	Full Project (FP)/ Oversizing (O)	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Total
								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	
8th-San 1	Full project cost for 1150 m-375 mm diameter sewer on 8th Line from Summerlyn Trail to Reagens Industrial Parkway	FP	2018	375,940	23,000		352,940	0	0	352,940
WB-San 2c	Oversizing cost for 1200 m-375 mm diameter sewer north of Blue Dasher Blvd. to the south side of 8th Line at Professor Day Drive	O	2019	230,000	62,000		168,000	0	0	168,000
8th-San 2a	Full project cost for 400 m-300 mm diameter trunk sewer on Professor Day Drive from the south side of 8th Line to Crossland Blvd./McKenzie Way	FP	2019	135,000	20,000		115,000	0	0	115,000
8th-San 2b	Full project cost for 380 m-300 mm diameter trunk sewer on Professor Day Drive from Crossland Blvd./McKenzie Way to the north side of the Bradford By-pass corridor	FP	2026	459,600	459,600		0	0	0	0
8th-PS 2	Full project cost for reconstruction of the Artesian Industrial Parkway sanitary pumping station	FP	2018	15,000,000	7,493,450		7,506,550	1,007,225	0	6,499,325
8th-San 3a	Full project cost for 600 m-450 mm diameter sewer from Artesian Industrial Parkway pumping station to west of Artesian Industrial Parkway and north of the Bradford By-pass	FP	2018	7,000,000	4,755,083		2,244,917	0	0	2,244,917
8th-San 3b	25% full project cost and 75% oversizing cost for 1320 m-375 mm diameter sewer from the north side of Bradford By-pass, including tunnel crossing, to County Road 4	25/75: FP/O	2018	3,500,000	1,079,926		2,420,074	0	0	2,420,074
GV-San 1	Full project costs for 400 m-375 mm diameter sewer and oversizing costs for 400 m - 375 mm diameter sewer and oversizing costs for 150 m-300 mm diameter sanitary sewer all from Simcoe Road to the Green Valley sanitary pumping station	FP/O	2018	565,900	0		565,900	77,346	0	488,554
9th-San 1	Oversizing cost for 800 m-375 mm diameter sewer north of Bradford By-pass from west of Artesian Industrial Parkway to lands on the west side of County Rd. 4, south of 9th Line	O	2026	2,000,000	1,200,000		800,000	0	0	800,000
9th- PS1	Full project cost for expansion of the Artesian Industrial Parkway sanitary pumping station	FP	2026	2,000,000	1,000,000		1,000,000	0	0	1,000,000
GV-San 2	Full project cost for 160m-300 mm diameter sewer from east side to west side of Simcoe Road, including tunnel crossing, south of 6th Line	FP	2019	39,800	0		39,800	0	34,778	5,022
OPA15-PS 1	Full project cost for first phase of Highway 400 sanitary pumping station including 950 m-300 mm diameter and 350 mm diameter forcemains from the site located east of Highway 400 to the 5th Line and 50 m-600 mm diameter sanitary inlet gravity sewer	FP	2020	5,571,900	735,610		4,836,290	150,984	0	4,685,306
OPA15-FM 1a	Full project cost for 2300 m-300 mm diameter and 350 mm diameter forcemains on 5th Line from east of Highway 400 to Sideroad 10	FP	2020	930,200	66,650		863,550	33,325	0	830,225
OPA15-FM 1b	Full project cost for 2300 m-300 mm diameter and 350 mm diameter forcemains on 5th Line from east of Highway 400 to Sideroad 10	FP	2020	767,000	54,956		712,044	27,478	0	684,565
OPA15-FM 2	Full project cost for 3750 m-300 mm diameter and 350 mm diameter forcemains on 5th Line, existing easement, Simcoe Road and 6th Line from Simcoe Road to Parkwood Avenue	FP	2020	494,855.61	34,500		460,356	17,225	0	443,131
OPA15-FM 4	Full project cost for 710 m-300 mm diameter and 350 mm diameter forcemains on Dissette Street from Bridge Street to the WPCP driveway	FP	2018	612,800	64,939		547,861	32,469	0	515,392

INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION

Town of Bradford West Gwillimbury
Service: Wastewater Collection

Prj.No	Increased Service Needs Attributable to Anticipated Development 2011-2031 Urban	Full Project (FP)/ Oversizing (O)	Timing (year)	Gross Capital Cost Estimate (2018\$)	Post Period Benefit	Other Deductions	Net Capital Cost	Less:		Total
								Benefit to Existing Development	Grants, Subsidies and Other Contributions Attributable to New Development	
OPA15-San 1	Full project cost for 720 m - 675 mm diameter sewer in OPA 15 from 6th Line to Highway 400 pumping station site, east side of Highway 400	FP	2018	1,874,600	575,616		1,298,984	0	0	1,298,984
OPA15-San 2	Full project costs for 650 m - 450 mm diameter sewer on 6th Line from Sideroad 5 to Highway 400 and 100 m - 525 mm diameter sewer on 6th Line crossing Highway 400	FP	2018	864,000	0		864,000	22,132	0	841,868
OPA15-PS 2	Full project cost for upgrade of pumping capacity of Highway 400 sanitary pumping station	FP	2031	546,500	73,172		473,328	14,777	0	458,552
OPA16-PS 1	Full project cost for construction of first phase of Bond Head sanitary pumping station including 50 m-200 mm diameter and 250 mm diameter forcemains from the site located west of County Road 27 and north of 7th Line	FP	2018	5,417,400	0		5,417,400	362,051	0	5,055,349
OPA16-FM 1	Full project cost for 5000 m-200 mm diameter and 250 mm diameter forcemains from pumping station site south on Hearn St. to 7th Line, west on Line 7 to CR 27, south on CR 27 to 6th Line and east on 6th Line to Sideroad 5	FP	2018	3,367,700	0		3,367,700	134,573	0	3,233,127
OPA16-PS 2	Full project cost for upgrade of pumping capacity of Bond Head sanitary pumping station	FP	2022	267,500	0		267,500	17,877	0	249,623
OPA15-San 5	Oversizing cost for 1300 m-375 mm diameter sewer and 840 m-450 mm diameter sewer in OPA15, from County Road 88 to the 6th Line, west of Highway 400	O	2020	2,000,000	0		2,000,000	0	0	2,000,000
OPA15-San 6	Oversizing cost for 960 m-450 mm diameter sewer from half concession north of County Road 88 to County Road 88 and full project cost for 50 m-450 mm diameter sewer crossing County Road 88 all east of Highway 400	FP/O	2020	2,000,000	0		2,000,000	0	0	2,000,000
OPA15-San 7	Oversizing cost for 840 m-450 mm diameter sewer in OPA15 on east side of Highway 400 south of 8th Line and oversizing cost for 1140 m-300 mm diameter sewer in OPA15 on west side of Highway 400 north of 8th Line and full project cost for 400 m-450 mm diameter sewer on 8th Line crossing Highway 400	FP	2031	5,000,000	0		5,000,000	0	0	5,000,000
OPA15-San 8	Oversizing cost for 600 m-300 mm diameter sewer and 1440 m-375 mm diameter sewer north of 5th Line, east of Highway 400 servicing MZ01 and MZ02 lands	O	2018	3,000,000	0		3,000,000	0	0	3,000,000
	Funding of DC Credit Obligation re: 167 m - 600 mm dia. san. Sewer diversion from Jay Street to WPCP driveway on Dissette Street		n/a	75,000	0		75,000	0	0	75,000
	Total			64,095,696	17,698,501	0	46,397,194	1,897,463	34,778	44,464,954

6. D.C. Calculation

Table 6-1 calculates the proposed uniform D.C.s to be imposed for roads services based upon a 14-year horizon. Tables 6-2 to 6-5 calculate the proposed D.C.s to be imposed on anticipated development in the urban areas of the Town for water and wastewater services over an urban buildout planning horizon by area.

The D.C.-eligible costs for each service component were developed in Chapter 5 for each service, based on their proposed capital programs.

The residential calculations are provided by dividing the D.C.-eligible costs for the roads, water studies and wastewater studies residential development (as provided in Chapter 5) by the gross population over each forecast period, thus providing a “cost per capita”. The cost per capita is then multiplied by the average occupancy (persons per unit) for low, medium and high density building forms to derive the development charge. (Appendix A provides for the gross population figures for each forecast period along with the average occupancy by unit type.) Similar calculations are provided for non-residential development; however, the DC-eligible cost for each service is divided by the forecast building area (square footage) to provide the non-residential charge on a cost per square foot basis.

The residential calculations for water treatment and distribution as well as wastewater treatment and collection are provided by dividing the D.C.-eligible costs by the total single detached equivalent units, including those that have taken place to date and those anticipated over the balance of the forecast (as per the Early Payment Agreements). This provides a cost per single detached equivalent unit which is then multiplied by the relationship between average occupancy (persons per unit) for low, medium and high-density building forms to derive the development charge.

With respect to non-residential development, the total costs in the uniform charge allocated to non-residential development (based on need for service) have been divided by the anticipated development over the planning period to calculate a cost per sq.ft. of gross floor area.

Table 6-6 summarizes the roads, water and wastewater D.C.s that are applicable for Town-wide roads services and each urban area for water and wastewater services. Table 6-7 summarizes the gross capital expenditures and sources of revenue for works to be undertaken during the 5-year life of the by-law.

TABLE 6-1
TOWN OF BRADFORD WEST GWILLIMBURY
DEVELOPMENT CHARGE CALCULATION
Municipal-wide Services
2018-2031

SERVICE	2018 \$ DC Eligible Cost		2018 \$ DC Eligible Cost	
	Residential	Non-Residential	SDU	per ft ²
1. <u>Services Related to a Highway</u>	\$	\$	\$	\$
1.1 Roads	76,352,935	59,991,592	17,514	6.12
	76,352,935	59,991,592	17,514	6.12
TOTAL	\$76,352,935	\$59,991,592	\$17,514	\$6.12
DC ELIGIBLE CAPITAL COST	\$76,352,935	\$59,991,592		
14 Year Gross Population / GFA Growth (ft ² .)	15,040	9,804,300		
Cost Per Capita / Non-Residential GFA (ft ² .)	\$5,076.66	\$6.12		
<u>By Residential Unit Type</u>	<u>p.p.u</u>			
Single and Semi-Detached Dwelling	3.45	\$17,514		
Apartments - 2 Bedrooms +	1.75	\$8,884		
Apartments - Bachelor and 1 Bedroom	1.25	\$6,346		
Other Multiples	2.44	\$12,387		

TABLE 6-2
TOWN OF BRADFORD WEST GWILLIMBURY
DEVELOPMENT CHARGE CALCULATION
Municipal-wide Services
2018-Urban Build Out

SERVICE	2018 \$ DC Eligible Cost		2018 \$ DC Eligible Cost	
	Residential	Non-Residential	SDU	per ft ²
2. <u>Wastewater Services</u>	\$	\$	\$	\$
2.1 Studies	255,000	245,000	60	0.02
	255,000	245,000	60	0.02
3. <u>Water Services</u>				
3.1 Studies	345,000	155,000	80	0.02
	345,000	155,000	80	0.02
TOTAL	\$600,000	\$400,000	\$140	0.04
DC ELIGIBLE CAPITAL COST	\$600,000	\$400,000		
Build out Gross Population / GFA Growth (ft ² .)	14,832	9,804,300		
Cost Per Capita / Non-Residential GFA (ft ² .)	\$40.45	\$0.04		
<u>By Residential Unit Type</u>	<u>p.p.u</u>			
Single and Semi-Detached Dwelling	3.45	\$140		
Apartments - 2 Bedrooms +	1.75	\$71		
Apartments - Bachelor and 1 Bedroom	1.25	\$51		
Other Multiples	2.44	\$99		

Table 6-3a
Water Project Cost - Residential

Project	Description	Timing	Bradford Settlement Area	Bond Head Settlement Area & 400 Strategic Employment Settlement Area
Water Treatment:				
WSS-8a	Full project cost for Phase 2 of the existing booster pumping station - Town of Innisfil Line 3	2018	\$1,540,142	\$0
WSS-8b	Full project cost for Phase 3 of the existing booster pumping station - Town of Innisfil Line 3	2018	\$206,844	\$252,913
WSS-9b	BWG proportionate project cost for Innisfil Water Treatment Plant Expansion - Phase 3	2018	\$7,086,368	\$1,381,262
WSS-10	Full project cost for additional supply main (300 mm dia. to 600 mm dia.) from Innisfil Lakeshore water treatment plant to John Fennell reservoir - 25 km	2018-2020	\$3,896,025	\$4,763,776
Water Distribution:				
WDS-6	Full project cost for 250 m - 300 mm diameter watermain replacement on Holland Street West from Barrie Street to Holland Court	2022	\$124,387	\$0
WDS-8a	Full project cost for 350 m - 300 mm diameter watermain on 10th Sideroad from 50 m south of Holland St. West to Miller Park Ave. extension	2022	\$218,369	\$42,564
WDS-8b	Full project cost for 1150 m - 300 mm diameter watermain on 10th Sideroad from Miller Park Avenue extension to 100 m south of 6th Line	2018	\$1,571,331	\$306,281
WDS-9	Oversizing cost for 300 mm diameter watermain in/near Community Area 3: 850 m on Langford Blvd., 500 m on West Park Ave. and 250 m on Summerlyn Trail all north of Holland St. West and 650 m in Smart Centres site east of Sideroad 10	2018	\$173,542	\$0
WDS-10	Full project cost for addition of valve chambers and hydrants on existing watermain on 8th Line from Sideroad 10 to Professor Day Drive	2022	\$173,217	\$0
WDS-11	Oversizing cost for 1830 m - 300 mm diameter trunk watermain on Crossland Blvd. in Community Area 4 (area north of 8th Line, west of Professor Day Dr.)	2022	\$216,860	\$0
WDS-12	Full project cost for 320 m - 300 mm diameter trunk watermain on Professor Day Dr. extension from 8th Line to Crossland Blvd./McKenzie Way	2018	\$177,102	\$0
WDS-13	Full project cost for 1920 m - 350 mm diameter watermain on Professor Day Dr. extension from Crossland Blvd./McKenzie Way to County Road 4	2026	\$1,389,295	\$0
WDS-14	Oversizing cost for 380 m - 300 mm diameter watermain on industrial/commercial lands north of 8th Line west of Artesian Industrial Parkway plus full project cost for 300 m - 300 mm diameter watermain crossing proposed Bradford By-pass corridor and connecting to watermain project WDS-16 north of the By-pass	2018	\$358,271	\$0
WDS-15	Oversizing cost for 550 m - 300 mm diameter watermain north of the Bradford By-pass, west of Artesian Industrial Parkway and east of County Road 4 on industrial/commercial lands plus full project cost for 400 m - 300 mm diameter watermain north of the Bradford By-pass and immediately east of County Road 4 through an environmental wooded/steep slope area	2026	\$301,797	\$0
WDS-16	Oversizing cost for 1150 m - 300 mm diameter watermain north of Bradford By-pass, west of Artesian Industrial Parkway and east of County Road 4 on industrial/commercial lands plus full project cost for 400 m - 300 mm diameter trunk watermain on 9th Line west of Artesian Industrial Pkwy.	2031	\$0	\$0
WDS-19	Full project cost for 380 m - 300 mm diameter watermain on 6th Line from Simcoe Road to Parkwood Avenue	2018	\$2,349	\$0
WDS-20	Full project cost for 2100 m - 600 mm diameter watermain on 8th Line from Sideroad 10 to the east side of Highway 400	2018	\$0	\$252,789
WDS-21	Full project cost for 950 m - 400 mm diameter watermain on 8th Line from the future east collector road intersection to Sideroad 5	2018	\$0	\$173,097
WDS-22	Full project cost for 4600 m - 400 mm diameter watermain on 8th Line from the west limit of OPA 15 to County Road 27 and on County Road 27 from 8th Line to County Road 88/Line 7 in Bond Head	2018	\$0	\$678,615
WDS-23	Full project cost for 600 m - 300 mm diameter watermain on 6th Line from the west limit of Brookfield Developments to Sideroad 10	2018	\$121,432	\$23,669
WDS-24	Full project cost for 1300 m - 400 mm diameter watermain on Sideroad 10 from 6th Line to 5th Line plus 1750 m - 400 mm diameter watermain on 5th Line from Sideroad 10 to 500 m east of Highway 400	2018	\$0	\$340,593
WDS-25	Full project cost for 4500 cu.m. water tower including 400 m-300 mm diameter watermain east of Bond Head north of County Road 88	2019	\$0	\$1,925,037
WDS-26	Full project cost for 2800 m - 400 mm diameter watermain on Sideroad 5 from County Road 88 to 5th Line plus 1400 m - 400 mm diameter watermain on 5th Line from 500 m east of Highway 400 to Sideroad 5	2020	\$0	\$936,325
WDS-27	Full project cost for 1400 m - 400 mm diameter watermain on Sideroad 5 from County Road 88 to 8th Line	2020	\$0	\$132,503
WDS-28	Full project cost for 1200 m-300 mm diameter watermain on 6th Line between Sideroad 5 and the future north/south collector road on the east side of Highway 400 in OPA 15	2018	\$0	\$213,241
Water - Work Completed to Date and Estimated Interest on Future Debt:				
	Work Completed to Date		\$31,470,463	\$4,958,832
	Estimated Interest on Future Debt (Discounted)		\$954,522	\$1,013,323
	Total		\$49,982,316	\$17,394,820
	Single Detached Equivalent (S.D.E.) Units		7,562	1,145
	Cost Per S.D.E.		\$6,610	\$15,192
	By Residential Unit Type	S.D.E. Relationship (based on P.P.U.s)	Bradford Settlement Area	Bond Head Settlement Area & 400 Strategic Employment Settlement Area
	Single and Semi-Detached Dwelling	100%	\$6,610	\$15,192
	Apartments - 2 Bedrooms +	51%	\$3,353	\$7,706
	Apartments - Bachelor and 1 Bedroom	36%	\$2,395	\$5,504
	Other Multiples	48%	\$3,142	\$7,222

**Table 6-3b
Water Project Cost - Non-Residential**

Project	Description	Timing	Bradford Settlement Area	Bond Head Settlement Area & 400 Strategic Employment Settlement Area
Water Treatment:				
WSS-8a	Full project cost for Phase 2 of the existing booster pumping station - Town of Innisfil Line 3	2018	\$164,340	\$0
WSS-8b	Full project cost for Phase 3 of the existing booster pumping station - Town of Innisfil Line 3	2018	\$0	\$557,155
WSS-9b	BWG proportionate project cost for Innisfil Water Treatment Plant Expansion - Phase 3	2018	\$756,147	\$3,042,845
WSS-10	Full project cost for additional supply main (300 mm dia. to 600 mm dia.) from Innisfil Lakeshore water treatment plant to John Fennell reservoir - 25 km	2018-2020	\$0	\$10,494,343
Water Distribution:				
WDS-6	Full project cost for 250 m - 300 mm diameter watermain replacement on Holland Street West from Barrie Street to Holland Court	2022	\$13,273	\$0
WDS-8a	Full project cost for 350 m - 300 mm diameter watermain on 10th Sideroad from 50 m south of Holland St. West to Miller Park Ave. extension	2022	\$23,301	\$93,766
WDS-8b	Full project cost for 1150 m - 300 mm diameter watermain on 10th Sideroad from Miller Park Avenue extension to 100 m south of 6th Line	2018	\$167,668	\$674,720
WDS-9	Oversizing cost for 300 mm diameter watermain in/near Community Area 3: 850 m on Langford Blvd., 500 m on West Park Ave. and 250 m on Summerlyn Trail all north of Holland St. West and 650 m in Smart Centres site east of Sideroad 10	2018	\$18,518	\$0
WDS-10	Full project cost for addition of valve chambers and hydrants on existing watermain on 8th Line from Sideroad 10 to Professor Day Drive	2022	\$18,483	\$0
WDS-11	Oversizing cost for 1830 m - 300 mm diameter trunk watermain on Crossland Blvd. in Community Area 4 (area north of 8th Line, west of Professor Day Dr.)	2022	\$23,140	\$0
WDS-12	Full project cost for 320 m - 300 mm diameter trunk watermain on Professor Day Dr. extension from 8th Line to Crossland Blvd./McKenzie Way	2018	\$18,898	\$0
WDS-13	Full project cost for 1920 m - 350 mm diameter watermain on Professor Day Dr. extension from Crossland Blvd./McKenzie Way to County Road 4	2026	\$148,244	\$0
WDS-14	Oversizing cost for 380 m - 300 mm diameter watermain on industrial/commercial lands north of 8th Line west of Artesian Industrial Parkway plus full project cost for 300 m - 300 mm diameter watermain crossing proposed Bradford By-pass corridor and connecting to watermain project WDS-16 north of the By-pass	2018	\$38,229	\$0
WDS-15	Oversizing cost for 550 m - 300 mm diameter watermain north of the Bradford By-pass, west of Artesian Industrial Parkway and east of County Road 4 on industrial/commercial lands plus full project cost for 400 m - 300 mm diameter watermain north of the Bradford By-pass and immediately east of County Road 4 through an environmental wooded/steep slope area	2026	\$32,203	\$0
WDS-16	Oversizing cost for 1150 m - 300 mm diameter watermain north of Bradford By-pass, west of Artesian Industrial Parkway and east of County Road 4 on industrial/commercial lands plus full project cost for 400 m - 300 mm diameter trunk watermain on 9th Line west of Artesian Industrial Pkwy.	2031	\$0	\$0
WDS-19	Full project cost for 380 m - 300 mm diameter watermain on 6th Line from Simcoe Road to Parkwood Avenue	2018	\$251	\$0
WDS-20	Full project cost for 2100 m - 600 mm diameter watermain on 8th Line from Sideroad 10 to the east side of Highway 400	2018	\$0	\$556,881
WDS-21	Full project cost for 950 m - 400 mm diameter watermain on 8th Line from the future east collector road intersection to Sideroad 5	2018	\$0	\$381,324
WDS-22	Full project cost for 4600 m - 400 mm diameter watermain on 8th Line from the west limit of OPA 15 to County Road 27 and on County Road 27 from 8th Line to County Road 88/Line 7 in Bond Head	2018	\$0	\$1,494,953
WDS-23	Full project cost for 600 m - 300 mm diameter watermain on 6th Line from the west limit of Brookfield Developments to Sideroad 10	2018	\$12,957	\$52,142
WDS-24	Full project cost for 1300 m - 400 mm diameter watermain on Sideroad 10 from 6th Line to 5th Line plus 1750 m - 400 mm diameter watermain on 5th Line from Sideroad 10 to 500 m east of Highway 400	2018	\$0	\$750,307
WDS-25	Full project cost for 4500 cu.m. water tower including 400 m-300 mm diameter watermain east of Bond Head north of County Road 88	2019	\$0	\$4,240,752
WDS-26	Full project cost for 2800 m - 400 mm diameter watermain on Sideroad 5 from County Road 88 to 5th Line plus 1400 m - 400 mm diameter watermain on 5th Line from 500 m east of Highway 400 to Sideroad 5	2020	\$0	\$2,062,675
WDS-27	Full project cost for 1400 m - 400 mm diameter watermain on Sideroad 5 from County Road 88 to 8th Line	2020	\$0	\$291,897
WDS-28	Full project cost for 1200 m-300 mm diameter watermain on 6th Line between Sideroad 5 and the future north/south collector road on the east side of Highway 400 in OPA 15	2018	\$0	\$469,759
Water - Work Completed to Date and Estimated Interest on Future Debt:				
	Work Completed to Date		\$5,420,596	\$10,924,041
	Estimated Interest on Future Debt (Discounted)		\$538,463	\$2,232,296
	Total		\$7,394,711	\$38,319,858
	Urban GFA Growth (ft ² .)		1,956,000	7,848,300
	Cost Per Non-Residential GFA (ft².)		\$3.78	\$4.88

Table 6-4a
Wastewater Treatment Growth Related Project Cost - Residential (2018\$)

Project	Description	Timing	Bradford Settlement Area	Bond Head Settlement Area & 400 Strategic Employment Settlement Area
WPCP-4	WPCP Capital Upgrade / Expansion	2018	\$3,655,044	\$4,651,874
	Plant D - Debenture Principal	2018-2021	\$4,147,533	\$0
	Plant D - Debenture Interest (Discounted)	2018-2021	\$267,101	\$0
	Work Completed to Date		\$26,151,511	\$85,980
	Total		\$34,221,189	\$4,737,853
	Single Detached Equivalent Units		7,562	1,145
	Cost Per Single Detached Equivalent (S.D.E.)		\$4,526	\$4,138

	S.D.E. Relationship based on P.P.U.	Bradford Settlement Area	Bond Head Settlement Area & 400 Strategic Employment Settlement Area
By Residential Unit Type			
Single and Semi-Detached Dwelling	100%	\$4,526	\$4,138
Apartments - 2 Bedrooms +	51%	\$2,296	\$2,099
Apartments - Bachelor and 1 Bedroom	36%	\$1,640	\$1,499
Other Multiples	48%	\$2,151	\$1,967

Table 6-4b
Wastewater Treatment Growth Related Project Cost - Non-Residential (2018\$)

Project	Description	Timing	Bradford Settlement Area	Bond Head Settlement Area & 400 Strategic Employment Settlement Area
WPCP-4	WPCP Capital Upgrade / Expansion	2018	\$0	\$7,947,574
	Plant D - Debenture Principal	2018-2021	\$820,017	\$0
	Plant D - Debenture Interest (Discounted)	2018-2021	\$52,809	\$0
	Work Completed to Date		\$5,157,113	\$146,893
	Total		\$6,029,940	\$8,094,467
	Urban GFA Growth (ft ² .)		1,956,000	7,848,300
	Cost Per Non-Residential GFA (ft².)		\$3.08	\$1.03

**Table 6-5a
Wastewater Collection Growth Related Project Cost - Residential**

Project	Description	Timing	Bradford Settlement Area	Settlement Area & 400 Strategic Employment Settlement Area
Wastewater Collection:				
8th-San 1	Full project cost for 1150 m-375 mm diameter sewer on 8th Line from Summerlyn Trail to Reagens Industrial Parkway	FP	\$111,528	\$0
WB-San 2c	Oversizing cost for 1200 m-375 mm diameter sewer north of Blue Dasher Blvd. to the south side of 8th Line at Professor Day Drive	O	\$168,000	\$0
8th-San 2a	Full project cost for 400 m-300 mm diameter trunk sewer on Professor Day Drive from the south side of 8th Line to Crossland Blvd./McKenzie Way	FP	\$115,000	\$0
8th-San 2b	Full project cost for 380 m-300 mm diameter trunk sewer on Professor Day Drive from Crossland Blvd./McKenzie Way to the north side of the Bradford By-pass corridor	FP	\$0	\$0
8th-PS 2	Full project cost for reconstruction of the Artesian Industrial Parkway sanitary pumping station	FP	\$2,744,842	\$0
8th-San 3a	Full project cost for 600 m-450 mm diameter sewer from Artesian Industrial Parkway pumping station to west of Artesian Industrial Parkway and north of the Bradford By-pass	FP	\$2,244,917	\$0
8th-San 3b	25% full project cost and 75% oversizing cost for 1320 m-375 mm diameter sewer from the north side of Bradford By-pass, including tunnel crossing, to County Road 4	25/75: FP/O	\$2,420,074	\$0
GV-San 1	Full project costs for 400 m-375 mm diameter sewer and oversizing costs for 400 m - 375 mm diameter sewer and oversizing costs for 150 m-300 mm diameter sanitary sewer all from Simcoe Road to the Green Valley sanitary pumping station	FP/O	\$488,554	\$0
9th-San 1	Oversizing cost for 800 m-375 mm diameter sewer north of Bradford By-pass from west of Artesian Industrial Parkway to lands on the west side of County Rd. 4, south of 9th Line	O	\$800,000	\$0
9th-PS1	Full project cost for expansion of the Artesian Industrial Parkway sanitary pumping station	FP	\$422,327	\$0
GV-San 2	Full project cost for 160m-300 mm diameter sewer from east side to west side of Simcoe Road, including tunnel crossing, south of 6th Line	FP	\$5,022	\$0
OPA15-PS 1	Full project cost for first phase of Highway 400 sanitary pumping station including 950 m-300 mm diameter and 350 mm diameter forcemains from the site located east of Highway 400 to the 5th Line and 50 m-600 mm diameter sanitary inlet gravity sewer	FP	\$0	\$1,729,874
OPA15-FM 1a	Full project cost for 2300 m-300 mm diameter and 350 mm diameter forcemains on 5th Line from east of Highway 400 to Sideroad 10	FP	\$0	\$306,530
OPA15-FM 1b	Full project cost for 2300 m-300 mm diameter and 350 mm diameter forcemains on 5th Line from east of Highway 400 to Sideroad 10	FP	\$0	\$252,750
OPA15-FM 2	Full project cost for 3750 m-300 mm diameter and 350 mm diameter forcemains on 5th Line, existing easement, Simcoe Road and 6th Line from Simcoe Road to Parkwood Avenue	FP	\$0	\$163,610
OPA15-FM 4	Full project cost for 710 m-300 mm diameter and 350 mm diameter forcemains on Dissette Street from Bridge Street to the WPCP driveway	FP	\$0	\$190,289
OPA15-San 1	Full project cost for 720 m - 675 mm diameter sewer in OPA 15 from 6th Line to Highway 400 pumping station site, east side of Highway 400	FP	\$0	\$277,254
OPA15-San 2	Full project costs for 650 m - 450 mm diameter sewer on 6th Line from Sideroad 5 to Highway 400 and 100 m - 525 mm diameter sewer on 6th Line crossing Highway 400	FP	\$0	\$254,420
OPA15-PS 2	Full project cost for upgrade of pumping capacity of Highway 400 sanitary pumping station	FP	\$0	\$169,303
OPA16-PS 1	Full project cost for construction of first phase of Bond Head sanitary pumping station including 50 m-200 mm diameter and 250 mm diameter forcemains from the site located west of County Road 27 and north of 7th Line	FP	\$0	\$5,055,349
OPA16-FM 1	Full project cost for 5000 m-200 mm diameter and 250 mm diameter forcemains from pumping station site south on Hearn St. to 7th Line, west on Line 7 to CR 27, south on CR 27 to 6th Line and east on 6th Line to Sideroad 5	FP	\$0	\$3,233,127
OPA16-PS 2	Full project cost for upgrade of pumping capacity of Bond Head sanitary pumping station	FP	\$0	\$249,623
OPA15-San 5	Oversizing cost for 1300 m-375 mm diameter sewer and 840 m-450 mm diameter sewer in OPA15, from County Road 88 to the 6th Line, west of Highway 400	O	\$0	\$0
OPA15-San 6	Oversizing cost for 960 m-450 mm diameter sewer from half concession north of County Road 88 to County Road 88 and full project cost for 50 m-450 mm diameter sewer crossing County Road 88 all east of Highway 400	FP/O	\$0	\$0
OPA15-San 7	Oversizing cost for 840 m-450 mm diameter sewer in OPA15 on east side of Highway 400 south of 8th Line and oversizing cost for 1140 m-300 mm diameter sewer in OPA15 on west side of Highway 400 north of 8th Line and full project cost for 400 m-450 mm diameter sewer on 8th Line crossing Highway 400	FP	\$0	\$0
OPA15-San 8	Oversizing cost for 600 m-300 mm diameter sewer and 1440 m-375 mm diameter sewer north of 5th Line, east of Highway 400 servicing MZ01 and MZ02 lands	O	\$0	\$0
	Funding of DC Credit Obligation re: 167 m - 600 mm dia. san. Sewer diversion from Jay Street to WPCP driveway on Dissette Street		\$52,500	\$0
Water - Work Completed to Date and Estimated Interest on Future Debt:				
	Estimated Interest on Future Debt (Discounted)		\$1,315,686	\$1,272,931
	Work Completed to Date		\$14,649,290	\$12,121,253
	Total		\$25,537,740	\$25,276,311
	Single Detached Equivalent Units		7,562	1,145
	Cost Per Single Detached Equivalent (S.D.E.)		\$3,377	\$22,075
	By Residential Unit Type	S.D.E.		
	Single and Semi-Detached Dwelling	100%	\$3,377	\$22,075
	Apartments - 2 Bedrooms +	51%	\$1,713	\$11,198
	Apartments - Bachelor and 1 Bedroom	36%	\$1,224	\$7,998
	Other Multiples	48%	\$1,605	\$10,494

**Table 6-5b
Wastewater Collection Growth Related Project Cost - Non-Residential**

Project	Description	Timing	Bradford Settlement Area	Bond Head Settlement Area & 400 Strategic Employment Settlement Area
Wastewater Collection:				
8th-San 1	Full project cost for 1150 m-375 mm diameter sewer on 8th Line from Summerlyn Trail to Reagens Industrial Parkway	FP	\$241,412	\$0
WB-San 2c	Oversizing cost for 1200 m-375 mm diameter sewer north of Blue Dasher Blvd. to the south side of 8th Line at Professor Day Drive	O	\$0	\$0
8th-San 2a	Full project cost for 400 m-300 mm diameter trunk sewer on Professor Day Drive from the south side of 8th Line to Crossland Blvd./McKenzie Way	FP	\$0	\$0
8th-San 2b	Full project cost for 380 m-300 mm diameter trunk sewer on Professor Day Drive from Crossland Blvd./McKenzie Way to the north side of the Bradford By-pass corridor	FP	\$0	\$0
8th-PS 2	Full project cost for reconstruction of the Artesian Industrial Parkway sanitary pumping station	FP	\$3,754,483	\$0
8th-San 3a	Full project cost for 600 m-450 mm diameter sewer from Artesian Industrial Parkway pumping station to west of Artesian Industrial Parkway and north of the Bradford By-pass	FP	\$0	\$0
8th-San 3b	25% full project cost and 75% oversizing cost for 1320 m-375 mm diameter sewer from the north side of Bradford By-pass, including tunnel crossing, to County Road 4	25/75: FP/O	\$0	\$0
GV-San 1	Full project costs for 400 m-375 mm diameter sewer and oversizing costs for 400 m - 375 mm diameter sewer and oversizing costs for 150 m-300 mm diameter sanitary sewer all from Simcoe Road to the Green Valley sanitary pumping station	FP/O	\$0	\$0
9th-San 1	Oversizing cost for 800 m-375 mm diameter sewer north of Bradford By-pass from west of Artesian Industrial Parkway to lands on the west side of County Rd. 4, south of 9th Line	O	\$0	\$0
9th- PS1	Full project cost for expansion of the Artesian Industrial Parkway sanitary pumping station	FP	\$577,673	\$0
GV-San 2	Full project cost for 160m-300 mm diameter sewer from east side to west side of Simcoe Road, including tunnel crossing, south of 6th Line	FP	\$0	\$0
OPA15-PS 1	Full project cost for first phase of Highway 400 sanitary pumping station including 950 m-300 mm diameter and 350 mm diameter forcemains from the site located east of Highway 400 to the 5th Line and 50 m-600 mm diameter sanitary inlet gravity sewer	FP	\$0	\$2,955,432
OPA15-FM 1a	Full project cost for 2300 m-300 mm diameter and 350 mm diameter forcemains on 5th Line from east of Highway 400 to Sideroad 10	FP	\$0	\$523,696
OPA15-FM 1b	Full project cost for 2300 m-300 mm diameter and 350 mm diameter forcemains on 5th Line from east of Highway 400 to Sideroad 10	FP	\$0	\$431,815
OPA15-FM 2	Full project cost for 3750 m-300 mm diameter and 350 mm diameter forcemains on 5th Line, existing easement, Simcoe Road and 6th Line from Simcoe Road to Parkwood Avenue	FP	\$0	\$279,522
OPA15-FM 4	Full project cost for 710 m-300 mm diameter and 350 mm diameter forcemains on Dissette Street from Bridge Street to the WPCP driveway	FP	\$0	\$325,103
OPA15-San 1	Full project cost for 720 m - 675 mm diameter sewer in OPA 15 from 6th Line to Highway 400 pumping station site, east side of Highway 400	FP	\$0	\$1,021,730
OPA15-San 2	Full project costs for 650 m - 450 mm diameter sewer on 6th Line from Sideroad 5 to Highway 400 and 100 m - 525 mm diameter sewer on 6th Line crossing Highway 400	FP	\$0	\$587,448
OPA15-PS 2	Full project cost for upgrade of pumping capacity of Highway 400 sanitary pumping station	FP	\$0	\$289,249
OPA16-PS 1	Full project cost for construction of first phase of Bond Head sanitary pumping station including 50 m-200 mm diameter and 250 mm diameter forcemains from the site located west of County Road 27 and north of 7th Line	FP	\$0	\$0
OPA16-FM 1	Full project cost for 5000 m-200 mm diameter and 250 mm diameter forcemains from pumping station site south on Hearn St. to 7th Line, west on Line 7 to CR 27, south on CR 27 to 6th Line and east on 6th Line to Sideroad 5	FP	\$0	\$0
OPA16-PS 2	Full project cost for upgrade of pumping capacity of Bond Head sanitary pumping station	FP	\$0	\$0
OPA15-San 5	Oversizing cost for 1300 m-375 mm diameter sewer and 840 m-450 mm diameter sewer in OPA15, from County Road 88 to the 6th Line, west of Highway 400	O	\$0	\$2,000,000
OPA15-San 6	Oversizing cost for 960 m-450 mm diameter sewer from half concession north of County Road 88 to County Road 88 and full project cost for 50 m-450 mm diameter sewer crossing County Road 88 all east of Highway 400	FP/O	\$0	\$2,000,000
OPA15-San 7	Oversizing cost for 840 m-450 mm diameter sewer in OPA15 on east side of Highway 400 south of 8th Line and oversizing cost for 1140 m-300 mm diameter sewer in OPA15 on west side of Highway 400 north of 8th Line and full project cost for 400 m-450 mm diameter sewer on 8th Line crossing Highway 400	FP	\$0	\$5,000,000
OPA15-San 8	Oversizing cost for 600 m-300 mm diameter sewer and 1440 m-375 mm diameter sewer north of 5th Line, east of Highway 400 servicing MZ01 and MZ02 lands	O	\$0	\$3,000,000
	Funding of DC Credit Obligation re: 167 m - 600 mm dia. san. Sewer diversion from Jay Street to WPCP driveway on Dissette Street		\$22,500	\$0
Water - Work Completed to Date and Estimated Interest on Future Debt:				
	Estimated Interest on Future Debt (Discounted)		\$631,686	\$1,972,689
	Work Completed to Date		\$915,298	\$10,750,700
	Total		\$6,143,051	\$31,137,383
	Urban GFA Growth (ft ²)		1,956,000	7,848,300
	Cost Per Non-Residential GFA (ft²)		\$3.14	\$3.97

7. D.C. Policy Recommendations and D.C. By-law Rules

7.1 Introduction

s.s.5(1)9 states that rules must be developed:

“...to determine if a development charge is payable in any particular case and to determine the amount of the charge, subject to the limitations set out in subsection 6.”

Paragraph 10 of the section goes on to state that the rules may provide for exemptions, phasing in and/or indexing of D.C.s.

s.s.5(6) establishes the following restrictions on the rules:

- the total of all D.C.s that would be imposed on anticipated development must not exceed the capital costs determined under 5(1) 2-8 for all services involved;
- if the rules expressly identify a type of development, they must not provide for it to pay D.C.s that exceed the capital costs that arise from the increase in the need for service for that type of development; however, this requirement does not relate to any particular development; and
- if the rules provide for a type of development to have a lower D.C. than is allowed, the rules for determining D.C.s may not provide for any resulting shortfall to be made up via other development.

With respect to “the rules,” Section 6 states that a D.C. by-law must expressly address the matters referred to above re s.s.5(1) para. 9 and 10, as well as how the rules apply to the redevelopment of land.

The rules provided are based on the Town’s existing policies; however, there are items under consideration at this time and these may be refined prior to adoption of the by-law.

7.2 D.C. By-law Structure

It is recommended that:

- the Town uses a uniform Town-wide D.C. calculation for Roads services;

- water and wastewater services, as well as related studies, be imposed on the urban service areas of the Town; and
- one Municipal D.C. by-law be used for roads, water, and wastewater services.

7.3 D.C. By-law Rules

The following subsections set out the recommended rules governing the calculation, payment and collection of D.C.s in accordance with Section 6 of the D.C.A.

It is recommended that the following sections provide the basis for the D.C.s:

7.3.1 Payment in any Particular Case

In accordance with the D.C.A., s.2(2), a D.C. be calculated, payable and collected where the development requires one or more of the following:

- a) the passing of a zoning by-law or of an amendment to a zoning by-law under section 34 of the Planning Act;
- b) the approval of a minor variance under Section 45 of the Planning Act;
- c) a conveyance of land to which a by-law passed under section 50(7) of the Planning Act applies;
- d) the approval of a plan of subdivision under Section 51 of the Planning Act;
- e) a consent under Section 53 of the Planning Act;
- f) the approval of a description under section 50 of the Condominium Act; or
- g) the issuing of a building permit under the Building Code Act in relation to a building or structure.

7.3.2 Determination of the Amount of the Charge

The following conventions be adopted:

- 1) Costs allocated to residential uses will be assigned to different types of residential units based on the average occupancy for each housing type constructed during the previous decade. Costs allocated to non-residential uses will be assigned based on the amount of square feet of gross floor area constructed for eligible uses (i.e. industrial, commercial and institutional).
- 2) Costs allocated to residential and non-residential uses are based upon a number of conventions, as may be suited to each municipal circumstance, e.g.
 - for Roads, a 56% residential/44% non-residential attribution has been made based on a population vs. employment growth ratio over the 14-year forecast period;

- for Water treatment, the residential/non-residential attributions have been made based on the water flows as provided by R.J. Burnside and Associates (during the previous D.C. study) as follows:
 - In the Bradford Settlement Area 90% is attributable to residential and 10% to non-residential for all projects except projects WSS-8b and WSS-10 where 100% is attributable to residential;
 - In the Bond Head Settlement Area/B.W.G. Strategic Settlement Employment Area 31% is attributable to residential and 69% to non-residential.
- for water distribution, the residential/non-residential attributions have been made based on the water flows as provided by R.J. Burnside and Associates (during the previous D.C. study) as follows:
 - In the Bradford Settlement Area 90% is attributable to residential and 10% to non-residential;
 - In the Bond Head Settlement Area/B.W.G. Strategic Settlement Employment Area 31% is attributable to residential and 69% to non-residential.
- for water studies, a 69% residential/31% non-residential allocation has been made based on the total water flow needs for all urban areas;
- for wastewater treatment, the residential/non-residential attribution have been made based on the total flows as provided by R.J. Burnside and Associates (during the previous D.C. study) for the residential vs. non-residential development as follows:
 - In the Bradford Settlement Area, a 100% residential share has been attributed to the WPCP Capital Upgrade/Expansion. Further an 83%/17% residential/non-residential share has been made for the Plant D outstanding debenture.
 - In the Bond Head Settlement Area/B.W.G. Strategic Settlement Employment Area, a 37% residential/17% non-residential share has been made towards the WPCP Capital Upgrade/Expansion.
- for wastewater collection, the residential/non-residential attribution has been made for each individual project as provided by R.J. Burnside and Associates (during the previous D.C. study) for the residential vs. non-residential development in both the Bradford Settlement Area and the Bond

Head Settlement Area/B.W.G. Strategic Settlement Employment Area, based on the benefit to each area and development type;

- for wastewater studies a 51% residential/49% non-residential allocation has been made based on the total wastewater flows for all urban areas.

7.3.3 Application to Redevelopment of Land (Demolition and Conversion)

If a development involves the demolition of and replacement of a building or structure on the same site, or the conversion from one principal use to another, the developer shall be allowed a credit equivalent to:

- (a) in the case of a residential building or structure, or in the case of a mixed-use building or structure, the residential uses in the mixed-use building or structure, an amount calculated by multiplying the applicable D.C. under Section 15 of the By-law by the number, according to type, of dwelling units that have been or will be demolished or converted to another principal use; and
- (b) in the case of a non-residential building or structure or, in the case of mixed-use building or structure, the non-residential uses in the mixed-use building or structure, an amount calculated by multiplying the applicable D.C.s under Section 16 of the By-law by the gross floor area that has been or will be demolished or converted to another principal use;
- (c) provided that such amounts shall not exceed, in total, the amount of the D.C.s otherwise payable with respect to the redevelopment.

The demolition credit is allowed only if the land was improved by occupied structures and if the demolition permit related to the site was issued less than 5 years prior to the issuance of a building permit. The credit can, in no case, exceed the amount of D.C.s that would otherwise be payable.

7.3.4 Exemptions (full or partial)

- a) Statutory exemptions
 - industrial building additions of up to and including 50% of the existing gross floor area (defined in O.Reg. 82/98, s.1) of the building; for industrial building additions which exceed 50% of the existing gross floor area, only the portion of the addition in excess of 50% is subject to D.C.s (s.4(3)) of the D.C.A.;

- buildings or structures owned by and used for the purposes of any municipality, local board or Board of Education (s.3);
 - residential development that results only in the enlargement of an existing dwelling unit, or that results only in the creation of up to two additional dwelling units (based on prescribed limits set out in s.2 of O.Reg. 82/98).
- b) Non-statutory exemptions
- a public hospital, as exempt from taxation pursuant to para. 3(1)3 of the Assessment Act.
 - a non-residential farm building, save and except for the G.F.A. within a greenhouse that is used for retail purposes.

7.3.5 Phasing in

No provisions for phasing in the D.C. are provided in the D.C. by-law.

7.3.6 Special Provisions

The following special provisions are provided for under the current By-law:

Where:

- (c) there is no municipal water and/or municipal sanitary sewer feasibly available within five hundred feet of the building site itself; and
- (d) no municipal water and/or sanitary sewer main service is scheduled to service the subject lands within five years of the date of approval of the building permit issuance,

the Treasurer of the Municipality shall rebate the water services component and/or the sanitary sewer component of the residential or non-residential development charge to the registered owner who applies, and provides proof satisfactory to the Municipality, that adequate private water and/or sanitary services, as the case may be, have been installed and are properly functioning so as to provide ample service to the subject lands.

7.3.7 Timing of Collection

A D.C. that is applicable under Section 5 of the D.C.A. shall be calculated and payable;

- at the time of execution of a subdivision agreement under section 51 of the *Planning Act* or an agreement entered into as a condition of consent under section 53 of the *Planning Act*, subject to any applicable exemptions or reductions under the by-law; and
- Despite above, Council, from time to time, and at any time, may enter into agreements providing for all or any part of a D.C. to be paid before or after it would otherwise be payable.

7.3.8 Indexing

Indexing of the D.C.s shall be implemented on a mandatory basis annually commencing on January 1, 2019 and each anniversary date thereafter, in accordance with the Statistics Canada Quarterly, Non-Residential Building Construction Price Index (CANSIM Table 327-0043)¹ for the most recent year-over-year period.

7.3.9 The Applicable Areas

The charges developed herein provide for varying charges within the Town, as follows:

- Water and Wastewater Studies will be imposed within all urban services areas of the Town;
- Wastewater Treatment and Collection charges will be imposed on an urban area specific basis;
- Water Treatment and Distribution will be imposed on an urban area specific basis;
- Roads Service – the full residential and non-residential charges will be imposed on all other lands within the Town.

7.4 Other D.C. By-law Provisions

It is recommended that:

7.4.1 Categories of Services for Reserve Fund and Credit Purposes

The Town's D.C. collections for water, wastewater, and roads are currently reserved in five separate reserve funds: Roads, Water Services – Bradford Settlement Area, Water

¹ O.Reg. 82/98 referenced "The Statistics Canada Quarterly, Construction Price Statistics, catalogue number 62-007" as the index source. As of the end of December, 2013 this catalogue has been discontinued and replaced by this web based table.

Services – Bond Head Settlement Area/B.W.G. Strategic Employment Lands Settlement Area, Wastewater Services – Bradford Settlement Area, and Wastewater Services – Bond Head Settlement Area/B.W.G. Strategic Employment Lands Settlement Area. Appendix D outlines the reserve fund policies that the Town is required to follow as per the D.C.A. The Background Study includes calculations for the following services:

- Roads;
- Water Studies (all urban areas);
- Water Treatment & Distribution (Bradford Settlement Area);
- Water Treatment and Distribution (Bond Head Settlement Area/B.W.G. Strategic Settlement Employment Area);
- Wastewater Studies (all urban areas);
- Wastewater Treatment (Bradford Settlement Area);
- Wastewater Treatment (Bond Head Settlement Area/B.W.G. Strategic Settlement Employment Area);
- Wastewater Collection (Bradford Settlement Area); and
- Wastewater Collection (Bond Head Settlement Area/B.W.G. Strategic Settlement Employment Area).

It is recommended that this breakdown be implemented in conjunction with the new by-law.

7.4.2 *By-law In-force Date*

A by-law under the D.C.A. comes into force on the day in which the by-law is passed by Council or the day specified in the by-law, whichever is later.

7.4.3 *Minimum Interest Rate Paid on Refunds and Charged for Inter-Reserve Fund Borrowing*

The minimum interest rate is the Bank of Canada rate on the day on which the by-law comes into force (as per s.11 of O.Reg. 82/98).

7.4.4 *Area Rating*

As noted earlier, Bill 73 has introduced two new sections where Council must consider the use of area specific charges:

1. Section 2(9) of the Act now requires a municipality to implement area specific D.C.s for either specific services which are prescribed and/or for specific municipalities which are to be regulated. (note that at this time, no municipalities or services are prescribed by the Regulations)
2. Section 10(2)c.1 of the D.C.A. requires that “the development charges background study shall include consideration of the use of more than one development charge by-law to reflect different needs for services in different areas”

In regard to the first item, there are no services or specific municipalities identified in the regulations which must be area rated. The second item requires Council to consider the use of area rating.

Presently, the Town’s by-law does provide for area rating for water and wastewater services. All other Town services are recovered based on a uniform, Town-wide basis. There have been several reasons why they have not been imposed including:

1. All Town services, with the exception of water and wastewater, require that the average 10-year service standard be calculated. This average service standard multiplied by growth in the Town, establishes an upper ceiling on the amount of funds which can be collected from all developing landowners. Section 4(4) of O. Reg. 82/98 provides that “...if a development charge by-law applies to a part of the municipality, the level of service and average level of service cannot exceed that which would be determined if the by-law applied to the whole municipality.” Put in layman terms, the average service standard multiplied by the growth within the specific area, would establish an area specific ceiling which would significantly reduce the total revenue recoverable for the Town hence potentially resulting in D.C. revenue shortfalls and impacts on property taxes.
2. Extending on item 1, attempting to impose an area charge potentially causes equity issues in transitioning from a Town-wide approach to an area specific approach. For example, if all services were now built (and funded) within area A (which is 75% built out) and this was funded with some revenues from areas B and C, moving to an area rating approach would see Area A contribute no funds to the costs of services in Areas B & C. The development charges would be lower in Area A (as all services are now funded) and higher in B and C. As well, funding shortfalls may then potentially encourage the municipality to provide less services to B and C due to reduced revenue.

3. Many services which are provided (roads, parks, recreation facilities, library) are not restricted to one specific area and are often used by all residents. For example, arenas located in different parts of the Town will be used by residents from all areas depending on the programming of the facility (i.e. a public skate is available each night, but at a different arena; hence usage of any one facility at any given time is based on programming availability).

For the reasons noted above, it is recommended that Council continue the D.C. approach to calculate the Roads development charges on a uniform Town-wide basis and calculate the water and wastewater development charges on an urban-specific basis.

7.5 Other Recommendations

It is recommended that Council:

“Whenever appropriate, request that grants, subsidies and other contributions be clearly designated by the donor as being to the benefit of existing development or new development, as applicable;”

“Adopt the assumptions contained herein as an ‘anticipation’ with respect to capital grants, subsidies and other contributions;”

“Continue the D.C. approach to calculate the charges on a uniform Municipal-wide basis for roads services and on a uniform urban-area basis for water and wastewater services”;

“Approve the capital project listing set out in Chapter 5 of the D.C.s Background Study dated January 5, 2018, subject to further annual review during the capital budget process;”

“Approve the D.C.s Background Study dated January 5, 2018, as amended (if applicable);”

“Determine that no further public meeting is required;” and

“Approve the D.C. By-law as set out in Appendix G.”

8. By-law Implementation

8.1 Public Consultation Process

8.1.1 Introduction

This chapter addresses the mandatory, formal public consultation process (Section 8.1.2), as well as the optional, informal consultation process (Section 8.1.3). The latter is designed to seek the co-operation and participation of those involved, in order to produce the most suitable policy. Section 8.1.4 addresses the anticipated impact of the D.C. on development from a generic viewpoint.

8.1.2 Public Meeting of Council

Section 12 of the D.C.A. indicates that before passing a D.C. by-law, Council must hold at least one public meeting, giving at least 20 clear days' notice thereof, in accordance with the Regulation. Council must also ensure that the proposed by-law and background report are made available to the public at least two weeks prior to the (first) meeting.

Any person who attends such a meeting may make representations related to the proposed by-law.

If a proposed by-law is changed following such a meeting, Council must determine whether a further meeting (under this section) is necessary (i.e. if the proposed by-law which is proposed for adoption has been changed in any respect, Council should formally consider whether an additional public meeting is required, incorporating this determination as part of the final by-law or associated resolution. It is noted that Council's decision, once made, is final and not subject to review by a Court or the O.M.B.).

8.1.3 Other Consultation Activity

There are three broad groupings of the public who are generally the most concerned with Town D.C. policy:

1. The first grouping is the residential development community, consisting of land developers and builders, who are typically responsible for generating the majority of the D.C. revenues. Others, such as realtors, are directly impacted by D.C. policy. They are, therefore, potentially interested in all aspects of the charge,

particularly the quantum by unit type, projects to be funded by the D.C. and the timing thereof, and Town policy with respect to development agreements, D.C. credits and front-ending requirements.

2. The second public grouping embraces the public at large and includes taxpayer coalition groups and others interested in public policy.
3. The third grouping is the industrial/commercial/institutional development sector, consisting of land developers and major owners or organizations with significant construction plans, such as hotels, entertainment complexes, shopping centres, offices, industrial buildings and institutions. Also involved are organizations such as Industry Associations, the Chamber of Commerce, the Board of Trade and the Economic Development Agencies, who are all potentially interested in Town D.C. policy. Their primary concern is frequently with the quantum of the charge, gross floor area exclusions such as basements, mechanical or indoor parking areas, or exemptions and phase-in or capping provisions in order to moderate the impact.

8.2 Anticipated Impact of the Charge on Development

The establishment of sound D.C. policy often requires the achievement of an acceptable balance between two competing realities. The first is that high non-residential D.C.s can, to some degree, represent a barrier to increased economic activity and sustained industrial/commercial growth, particularly for capital intensive uses. Also, in many cases, increased residential D.C.s can ultimately be expected to be recovered via higher housing prices and can impact project feasibility in some cases (e.g. rental apartments).

On the other hand, D.C.s or other Town capital funding sources need to be obtained in order to help ensure that the necessary infrastructure and amenities are installed. The timely installation of such works is a key initiative in providing adequate service levels and in facilitating strong economic growth, investment and wealth generation.

8.3 Implementation Requirements

8.3.1 Introduction

Once the Town has calculated the charge, prepared the complete background study, carried out the public process and passed a new by-law, the emphasis shifts to implementation matters.

These include notices, potential appeals and complaints, credits, front-ending agreements, subdivision agreement conditions and finally the collection of revenues and funding of projects.

The sections which follow overview the requirements in each case.

8.3.2 Notice of Passage

In accordance with s.13 of the D.C.A., when a D.C. by-law is passed, the Town clerk shall give written notice of the passing and of the last day for appealing the by-law (the day that is 40 days after the day it was passed). Such notice must be given no later than 20 days after the day the by-law is passed (i.e. as of the day of newspaper publication or the mailing of the notice).

Section 10 of O.Reg. 82/98 further defines the notice requirements which are summarized as follows:

- notice may be given by publication in a newspaper which is (in the Clerk's opinion) of sufficient circulation to give the public reasonable notice, or by personal service, fax or mail to every owner of land in the area to which the by-law relates;
- s.s.10(4) lists the persons/organizations who must be given notice; and
- s.s.10(5) lists the eight items which the notice must cover.

8.3.3 By-law Pamphlet

In addition to the "notice" information, the Town must prepare a "pamphlet" explaining each D.C. by-law in force, setting out:

- a description of the general purpose of the D.C.s;
- the "rules" for determining if a charge is payable in a particular case and for determining the amount of the charge;
- the services to which the D.C.s relate; and
- a general description of the general purpose of the Treasurer's statement and where it may be received by the public.

Where a by-law is not appealed to the O.M.B., the pamphlet must be readied within 60 days after the by-law comes into force. Later dates apply to appealed by-laws.

The Town must give one copy of the most recent pamphlet without charge, to any person who requests one.

8.3.4 Appeals

Sections 13-19 of the D.C.A. set out the requirements relative to making and processing a D.C. by-law appeal and O.M.B. Hearing in response to an appeal. Any person or organization may appeal a D.C. by-law to the O.M.B. by filing a notice of appeal with the Town clerk, setting out the objection to the by-law and the reasons supporting the objection. This must be done by the last day for appealing the by-law, which is 40 days after the by-law is passed.

The Town is carrying out a public consultation process, in order to address the issues which, come forward as part of that process, thereby avoiding or reducing the need for an appeal to be made.

8.3.5 Complaints

A person required to pay a D.C., or his agent, may complain to the Town Council imposing the charge that:

- the amount of the charge was incorrectly determined;
- the reduction to be used against the D.C. was incorrectly determined; or
- there was an error in the application of the D.C..

Sections 20-25 of the D.C.A. set out the requirements that exist, including the fact that a complaint may not be made later than 90 days after a D.C. (or any part of it) is payable. A complainant may appeal the decision of Town Council to the O.M.B.

8.3.6 Credits

Sections 38-41 of the D.C.A. set out a number of credit requirements, which apply where a Town agrees to allow a person to perform work in the future that relates to a service in the D.C. by-law.

These credits would be used to reduce the amount of D.C.s to be paid. The value of the credit is limited to the reasonable cost of the work which does not exceed the average level of service. The credit applies only to the service to which the work relates, unless the Town agrees to expand the credit to other services for which a D.C. is payable.

8.3.7 Front-Ending Agreements

The Town and one or more landowners may enter into a front-ending agreement which provides for the costs of a project which will benefit an area in the Town to which the D.C. by-law applies. Such an agreement can provide for the costs to be borne by one or more parties to the agreement who are, in turn, reimbursed in future by persons who develop land defined in the agreement.

Part III of the D.C.A. (Sections 44-58) addresses front-ending agreements and removes some of the obstacles to their use which were contained in the D.C.A., 1989. Accordingly, the Town assesses whether this mechanism is appropriate for its use, as part of funding projects prior to Town funds being available.

8.3.8 Severance and Subdivision Agreement Conditions

Section 59 of the D.C.A. prevents a Municipality from imposing directly or indirectly, a charge related to development or a requirement to construct a service related to development, by way of a condition or agreement under s.51 or s.53 of the *Planning Act*, except for:

- “local services, related to a plan of subdivision or within the area to which the plan relates, to be installed or paid for by the owner as a condition of approval under section 51 of the *Planning Act*,” and
- “local services to be installed or paid for by the owner as a condition of approval under Section 53 of the *Planning Act*.”

It is also noted that s.s.59(4) of the D.C.A. requires that the municipal approval authority for a draft plan of subdivision under s.s.51(31) of the *Planning Act*, use its power to impose conditions to ensure that the first purchaser of newly subdivided land is informed of all the D.C.s related to the development, at the time the land is transferred.

In this regard, if the Town in question is a commenting agency, in order to comply with subsection 59(4) of the *D.C.A.* it would need to provide to the approval authority, information regarding the applicable Town D.C.s related to the site.

If the Town is an approval authority for the purposes of section 51 of the *Planning Act*, it would be responsible to ensure that it collects information from all entities which can impose a D.C.

The most effective way to ensure that purchasers are aware of this condition would be to require it as a provision in a registered subdivision agreement, so that any purchaser

of the property would be aware of the charges at the time the title was searched prior to closing a transaction conveying the lands.

Appendix A – Background Information on Residential and Non-residential Growth Forecast

**Schedule 1
Bradford West Gwillimbury
Residential Growth Forecast Summary**

Year	Including Census Undercount ¹	Excluding Census Undercount			Housing Units					Persons in Private Households/ Total Households	
		Population	Institutional Population	Population Excluding Institutional Population	Singles & Semi-Detached	Multiple Dwellings ²	Apartments ³	Other	Total Households		
Historical	<i>Mid 2001</i>	23,120	22,228	88	22,140	5,735	570	795	30	7,130	3.11
	<i>Mid 2006</i>	25,000	24,039	224	23,815	6,475	820	620	30	7,945	3.00
	<i>Mid 2011</i>	29,200	28,077	357	27,720	7,675	1,000	740	45	9,460	2.93
	<i>Mid 2016</i>	36,740	35,325	360	34,965	9,415	1,365	780	35	11,595	3.02
Forecast	<i>Early 2018</i>	38,790	37,297	380	36,917	10,060	1,422	789	35	12,306	3.00
	<i>Early 2028</i>	48,540	46,677	477	46,200	12,773	1,955	1,301	35	16,064	2.88
	<i>Buildout⁴</i>	51,590	49,610	506	49,104	13,512	2,194	1,543	35	17,284	2.84
Incremental	Mid 2001 - Mid 2006	1,880	1,811	136	1,675	740	250	-175	0	815	
	Mid 2006 - Mid 2011	4,200	4,038	133	3,905	1,200	180	120	15	1,515	
	Mid 2011 - Mid 2016	7,540	7,248	3	7,245	1,740	365	40	-10	2,135	
	Mid 2016 - Early 2018	2,050	1,972	20	1,952	645	57	9	0	711	
	Early 2018 - Early 2028	9,750	9,380	97	9,283	2,713	533	512	0	3,758	
	Early 2018 - Buildout	12,800	12,313	126	12,187	3,452	772	754	0	4,978	

Source: Watson & Associates Economists Ltd., 2018.

1. Census Undercount estimated at approximately 4%. Note: Population Including the Undercount has been rounded.

2. Includes townhomes and apartments in duplexes.

3. Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

4. Buildout population increment based on the Tatham & Associates Ltd. Water Supply and Wastewater Servicing Master Plan Update, Town of Bradford West Gwillimbury, Environmental Assessment Study Final Report, March 31, 2011. Total population of urban serviced area at buildout for the urban serviced area is 51,590 with 4% undercount (49,600 excluding undercount).

Schedule 2a
Bradford West Gwillimbury
Estimate of the Anticipated Amount, Type and Location of Residential Development for Which Development Charges can be Imposed

Development Location	Timing	Single & Semi-Detached	Multiples ¹	Apartments ²	Total Residential Units	Gross Population in New Units	Existing Unit Population Change	Net Population Increase	Institutional Population	Net Population Including Institutional
Bradford Settlement Area - Greenfield Area (Urban) ³	2018 - 2028	1,938	188	47	2,173	7,229	-823	6,406	32	6,438
	2018 - Buildout	2,046	254	28	2,328	7,732	-1,227	6,505	42	6,547
Bradford Settlement Area - Built Boundary (Urban) ³	2018 - 2028	425	325	410	1,160	2,932	-1,035	1,897	65	1,962
	2018 - Buildout	425	325	540	1,290	3,144	-1,202	1,942	84	2,026
Bond Head Settlement Area (Urban) ³	2018 - 2028	300	20	55	375	1,175	-32	1,143	0	1,143
	2018 - Buildout	921	193	186	1,300	3,956	-39	3,917	0	3,917
Total Urban Area (sub-total) ^{3,4}	2018 - 2028	2,663	533	512	3,708	11,336	-1,890	9,446	97	9,543
	2018 - Buildout	3,392	772	754	4,918	14,832	-2,468	12,364	126	12,490
Rural ³	2018 - 2028	50	0	0	50	173	-335	-162	0	-162
	2018 - Buildout	60	0	0	60	207	-385	-178	0	-178
Bradford West Gwillimbury	2018 - 2028	2,713	533	512	3,758	11,508	-2,225	9,380	97	9,380
	2018 - Buildout	3,452	772	754	4,978	15,040	-2,853	12,313	126	12,313

Source: Watson & Associates Economists Ltd., 2018

Residential distribution based on a combination of historical permit activity, available housing supply and previous Bradford West Gwillimbury DC Background Study prepared by Watson & Associates Economists Ltd.

1. Includes townhomes and apartments in duplexes.

2. Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

3. Refer to Map A-1.

4. Buildout population increment based on the Tatham & Associates Ltd. Water Supply and Wastewater Servicing Master Plan Update, Town of Bradford West Gwillimbury, Environmental Assessment Study Final Report, March 31, 2011. Total population of urban serviced area at buildout for the urban serviced area is 46,000 (excluding 4% undercount).

Schedule 2b
Town of Bradford West Gwillimbury
Summary of Buildout Population by Geographic Area

Location	Period	Population (Including Undercount)	Population (Excluding Undercount)
Bradford Settlement Area - Greenfield Area (Urban) ¹	Mid-2011	7,360	7,080
	Mid-2016	13,230	12,720
	Early 2018	14,850	14,280
	Buildout	21,660	20,830
Bradford Settlement Area - Built Boundary (Urban) ¹	Mid-2011	17,390	16,720
	Mid-2016	18,970	18,240
	Early 2018	19,360	18,620
	Buildout	21,480	20,650
Bond Head Settlement Area (Urban) ¹	Mid-2011	520	500
	Mid-2016	560	540
	Early 2018	590	570
	Buildout	4,670	4,490
Bradford West Gwillimbury Urban Serviced Area Subtotal ¹	Mid-2011	25,270	24,300
	Mid-2016	32,760	31,500
	Early 2018	34,800	33,470
	Buildout (rounded)	47,810	45,960
Rural	Mid-2011	3,930	3,780
	Mid-2016	3,980	3,830
	Early 2018	3,980	3,830
	Buildout	3,800	3,650
Bradford West Gwillimbury	Mid-2011	29,200	28,080
	Mid-2016	36,740	35,330
	Early 2018	38,790	37,300
	Buildout	51,590	49,610

Note: Buildout figures have been rounded. May not add up precisely due to rounding.

Source: Watson & Associates Economists Ltd. 2011 and 2016 is based on Statistics Canada, 2011 and 2016 Census. 2018 is an estimated based on building permit activity. Buildout is based on the based on the Tatham & Associates Ltd. Water Supply and Wastewater Servicing Master Plan Update, Town of Bradford West Gwillimbury, Environmental Assessment Study Final Report, March 31, 2011. Total population of urban serviced area at buildout for the urban serviced area is 51,590 with 4% undercount (49,600 excluding undercount).

1. Refer to Map A-1.

Schedule 3
Bradford West Gwillimbury
Current Year Growth Forecast
Mid 2016 to Early 2018

		Population
Mid 2016 Population		35,325
Occupants of New Housing Units, Mid 2016 Early 2018	<i>Units (2)</i>	711
	<i>multiplied by persons per unit (3)</i>	3.46
	<i>gross population increase</i>	2,458
		2,458
Occupants of New Equivalent Institutional Units Mid 2016 Early 2018	<i>Units</i>	18
	<i>multiplied by persons per unit</i>	1.10
	<i>gross population increase</i>	20
		20
Decline in Housing Unit Occupancy, Mid 2016 Early 2018	<i>Units (4)</i>	11,595
	<i>multiplied by ppu decline rate (5)</i>	-0.0436
	<i>total decline in population</i>	-506
		-506
Population Estimate to Early 2018		37,297
<i>Net Population Increase, Mid 2016 Early 2018</i>		1,972

- (1) 2016 population based on StatsCan Census unadjusted for Census Undercount.
- (2) Estimated residential units constructed, Mid 2016 to the beginning of the growth period, assuming a six month lag between construction and occupancy. Building permits issued for new residential units may not align precisely with growth in occupied households.
- (3) Average number of persons per unit (ppu) is assumed to be:

Structural Type	Persons Per Unit ¹	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.57	91%	3.24
<i>Multiples (6)</i>	2.51	8%	0.20
<i>Apartments (7)</i>	1.63	1%	0.02
Total		100%	3.46

¹ Based on 2016 Census custom database

² Based on Building permit/completion activity

- (4) 2011 households taken from StatsCan Census.
- (5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.
- (6) Includes townhomes and apartments in duplexes.
- (7) Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

Schedule 4
Bradford West Gwillimbury
Ten Year Growth Forecast
Early 2018 to Early 2028

		Population
Early 2018 Population		37,297
Occupants of New Housing Units, Early 2018 to Early 2028	<i>Units (2)</i>	3,758
	<i>multiplied by persons per unit (3)</i>	3.06
	<i>gross population increase</i>	11,508
		11,508
Occupants of New Equivalent Institutional Units Early 2018 to Early 2028	<i>Units</i>	89
	<i>multiplied by persons per unit</i>	1.10
	<i>gross population increase</i>	97
		97
Decline in Housing Unit Occupancy, Early 2018 to Early 2028	<i>Units (4)</i>	12,306
	<i>multiplied by ppu decline rate (5)</i>	-0.1808
	<i>total decline in population</i>	-2,225
		-2,225
Population Estimate to Early 2028		46,677
<i>Net Population Increase, Early 2018 to Early 2028</i>		9,380

(1) Early 2018 Population based on:

2016 Population (35,325) + Mid 2016 to Early 2018 estimated housing units to beginning of forecast period (711 x 3.46 = 2,458) + (11,595 x -0.0436 = -506) = 37,297

(2) Estimated residential units constructed, Mid 2016 to the beginning of the growth period, assuming a six month lag between construction and occupancy. Building permits issued for new residential units may not align precisely with growth in occupied households.

(3) Average number of persons per unit (ppu) is assumed to be:

Structural Type	Persons Per Unit ¹	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.45	72%	2.49
<i>Multiples (6)</i>	2.44	14%	0.35
<i>Apartments (7)</i>	1.64	14%	0.22
<i>one bedroom or less</i>	1.25		
<i>two bedrooms or more</i>	1.75		
Total		100%	3.06

¹ Persons per unit based on adjusted Statistics Canada Custom 2016 Census database.

² Forecast unit mix based upon historical trends and housing units in the development process.

(4) Early 2018 households based upon 11,595 (2016 Census) + 711 (Mid 2016 to Early 2018 unit estimate) = 12,306

(5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

(6) Includes townhomes and apartments in duplexes.

(7) Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

Schedule 5
Bradford West Gwillimbury
Buildout Growth Forecast
Early 2018 to Buildout

		Population
Early 2018 Population		37,297
Occupants of New Housing Units, Early 2018 to Buildout	<i>Units (2)</i>	4,978
	<i>multiplied by persons per unit (3)</i>	3.02
	<i>gross population increase</i>	15,040
		15,040
Occupants of New Equivalent Institutional Units Early 2018 to Buildout	<i>Units</i>	115
	<i>multiplied by persons per unit</i>	1.10
	<i>gross population increase</i>	126
		126
Decline in Housing Unit Occupancy, Early 2018 to Buildout	<i>Units (4)</i>	12,306
	<i>multiplied by ppu. decline rate (5)</i>	-0.2318
	<i>total decline in population</i>	-2,853
		-2,853
Population Estimate to Buildout		49,610
<i>Net Population Increase, Early 2018 to Buildout</i>		12,313

(1) Early 2018 Population based on:

2016 Population (35,325) + Mid 2016 to Early 2018 estimated housing units to beginning of forecast period (711 x 3.46 = 2,458) + (11,595 x -0.0436 = -506) = 37,297

(2) Estimated residential units constructed, Mid 2016 to the beginning of the growth period, assuming a six month lag between construction and occupancy. Building permits issued for new residential units may not align precisely with growth in occupied households.

(3) Average number of persons per unit (ppu) is assumed to be:

Structural Type	Persons Per Unit ¹	% Distribution of Estimated Units ²	Weighted Persons Per Unit Average
<i>Singles & Semi Detached</i>	3.45	69%	2.40
<i>Multiples (6)</i>	2.44	16%	0.38
<i>Apartments (7)</i>	1.64	15%	0.25
<i>one bedroom or less</i>	1.25		
<i>two bedrooms or more</i>	1.75		
Total		100%	3.02

¹ Persons per unit based on adjusted Statistics Canada Custom 2016 Census database.

² Forecast unit mix based upon historical trends and housing units in the development process.

(4) Early 2018 households based upon 11,595 (2016 Census) + 711 (Mid 2016 to Early 2018 unit estimate) = 12,306

(5) Decline occurs due to aging of the population and family life cycle changes, lower fertility rates and changing economic conditions.

(6) Includes townhomes and apartments in duplexes.

(7) Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

Schedule 6
Town of Bradford West Gwillimbury
Summary of Units In The Development Process

Location	Status	Singles & Semi-Detached	Multiples ¹	Apartments ²	Total Housing Units
Bradford - Built Boundary	Registered - Not Built	40	0	0	40
	Draft Approved	37	74	17	128
	Proposed/Pending	0	117	40	157
	Total Units	77	191	57	325
Bradford - Greenfield Area	Registered - Not Built	168	33	0	201
	Draft Approved	594	81	0	675
	Proposed/Pending	48	22	0	70
	Total Units	810	136	0	946
Bond Head	Registered - Not Built	0	0	0	0
	Draft Approved	334	0	0	334
	Proposed/Pending	481	171	165	817
	Total Units	815	171	165	1,151
Total Urban Service Area - sub-total	Registered - Not Built	208	33	0	241
	Draft Approved	965	155	17	1,137
	Proposed/Pending	529	310	205	1,044
	Total Units	1,702	498	222	2,422
	% of Units	70%	21%	9%	100%
Rural	Registered - Not Built	13	0	0	13
	Draft Approved	0	0	0	0
	Proposed/Pending	0	0	0	0
	Total Units	13	0	0	13
Town of Bradford West Gwillimbury	Registered - Not Built	221	33	0	254
	Draft Approved	965	155	17	1,137
	Proposed/Pending	529	310	205	1,044
	Total Units	1,715	498	222	2,435
	% of Units	70%	20%	9%	100%

Source: Derived from Town of Bradford West Gwillimbury Planning Services, November 2017 data.

Excludes Residential Intensification potential.

1. Includes townhomes and apartments in duplexes.

2. Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

Schedule 7

**Bradford West Gwillimbury
Historical Residential Building Permits
Years 2007 -2016**

Year	Residential Building Permits			
	Singles & Semi Detached	Multiples ¹	Apartments ²	Total
2007	246	0	0	246
2008	316	1	26	343
2009	268	94	2	364
2010	465	13	0	478
2011	627	8	14	649
Sub-total	1,922	116	42	2,080
Average (2007 - 2011)	384	23	8	416
% Breakdown	92.4%	5.6%	2.0%	100.0%
2012	326	49	0	375
2013	397	143	0	540
2014	231	2	0	233
2015	541	72	4	617
2016	645	57	9	711
Sub-total	2,140	323	13	2,476
Average (2012 - 2016)	428	65	3	495
% Breakdown	86.4%	13.0%	0.5%	100.0%
2007 - 2016 Total	4,062	439	55	4,556
Average	406	44	6	456
% Breakdown	89.2%	9.6%	1.2%	100.0%

Source: Historical housing activity (2007-2016) based on Statistics Canada building permits, Catalogue 64-001-XIB

1. Includes townhomes and apartments in duplexes.

2. Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

Schedule 8a

**Bradford West Gwillimbury
Persons Per Unit By Age And Type Of Dwelling
(2016 Census)**

Age of Dwelling	Singles and Semi-Detached						20 Year Average
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	-	-	-	3.468	4.806	3.567	
6-10	-	-	-	3.480	4.875	3.506	
11-15	-	-	2.357	3.486	3.950	3.422	
16-20	-	-	-	3.257	4.000	3.321	3.45
20-25	-	-	-	3.037	-	3.033	
25-35	-	-	-	3.022	4.219	3.100	
35+	-	1.500	1.750	2.713	4.118	2.702	
Total	-	1.636	1.944	3.169	4.323	3.193	

Schedule 8b

Simcoe Area
Persons Per Unit By Age And Type Of Dwelling
(2016 Census)

Age of Dwelling	Singles and Semi-Detached						20 Year Average
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	-	1.842	1.919	3.130	4.471	3.092	
6-10	-	1.500	1.948	3.045	3.948	3.005	
11-15	-	1.621	1.908	2.996	4.128	3.016	
16-20	-	1.485	1.822	2.918	3.906	2.913	3.01
20-25	-	1.731	1.789	2.764	3.776	2.778	
25-35	-	1.535	1.821	2.790	3.668	2.755	
35+	-	1.477	1.826	2.599	3.598	2.485	
Total	1.000	1.519	1.844	2.799	3.841	2.738	

Age of Dwelling	Multiples ¹						20 Year Average
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	-	1.857	1.884	2.572	-	2.407	
6-10	-	1.083	1.696	2.625	-	2.414	
11-15	-	1.520	1.923	2.611	4.278	2.474	
16-20	-	1.600	2.000	2.638	3.273	2.466	2.44
20-25	-	1.314	1.778	2.735	4.429	2.404	
25-35	0.063	1.340	1.798	2.520	5.480	2.317	
35+	-	1.326	1.948	2.717	3.250	2.350	
Total	0.720	1.375	1.880	2.636	3.967	2.393	

Age of Dwelling	Apartments ²						20 Year Average
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total	
1-5	-	1.277	1.647	2.138	-	1.627	
6-10	-	1.216	1.608	1.930	-	1.558	
11-15	-	1.203	1.606	2.432	-	1.635	
16-20	-	1.208	1.787	2.304	-	1.723	1.64
20-25	-	1.191	1.714	2.429	-	1.636	
25-35	-	1.170	1.676	2.561	-	1.607	
35+	1.243	1.201	1.781	2.603	3.059	1.624	
Total	1.298	1.201	1.724	2.445	3.000	1.623	

Age of Dwelling	All Density Types					
	< 1 BR	1 BR	2 BR	3/4 BR	5+ BR	Total
1-5	-	1.440	1.824	3.014	4.478	2.841
6-10	-	1.296	1.788	2.960	3.949	2.774
11-15	-	1.363	1.842	2.941	4.120	2.864
16-20	-	1.380	1.847	2.880	3.895	2.782
20-25	-	1.297	1.763	2.753	3.786	2.594
25-35	-	1.239	1.757	2.757	3.610	2.557
35+	1.140	1.282	1.823	2.607	3.568	2.345
Total	1.200	1.294	1.811	2.774	3.815	2.567

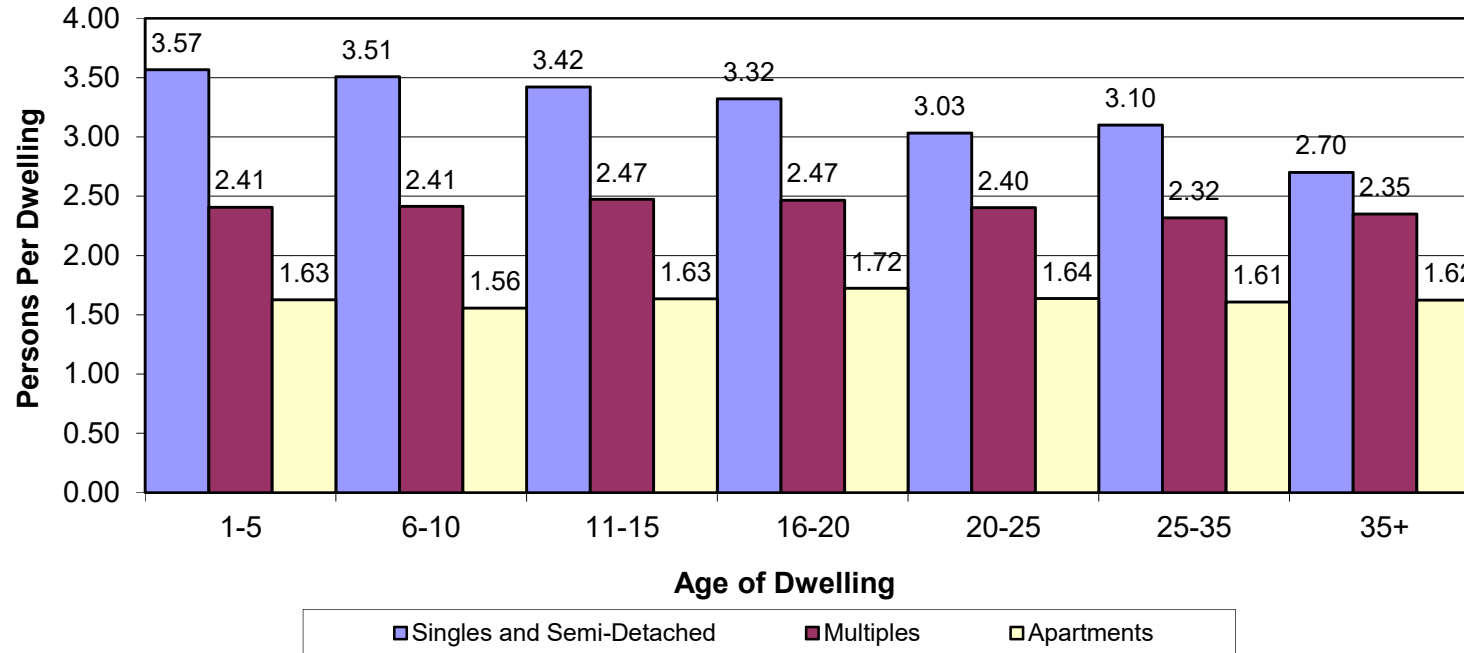
1. Includes townhomes and apartments in duplexes.

2. Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

Note: Does not include Statistics Canada data classified as 'Other'

PPU Not calculated for samples less than or equal to 50 dwelling units, and does not include institutional population

**Schedule 9
Bradford West Gwillimbury
Persons Per Unit By Structural Type And Age Of Dwelling
(2016 Census)**



Multiple and Apartment PPU's are based on the Simcoe Area.

**Schedule 10a
Bradford West Gwillimbury
Employment Forecast, 2018 to Buildout**

Period	Population	Activity Rate								Employment								Employment Total (Excluding Work at Home and No Fixed Place of Work)
		Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total	NFPOW ¹	Total Including NFPOW	Primary	Work at Home	Industrial	Commercial/ Population Related	Institutional	Total	NFPOW ¹	Total Employment (Including NFPOW)	
Mid 2006	24,039	0.015	0.036	0.115	0.072	0.046	0.284	0.048	0.333	355	875	2,755	1,740	1,110	6,835	1,165	8,000	5,960
Mid 2011	28,077	0.010	0.030	0.097	0.083	0.048	0.268	0.051	0.318	280	830	2,733	2,318	1,350	7,511	1,426	8,937	6,681
Early 2018	37,297	0.010	0.030	0.075	0.076	0.043	0.234	0.049	0.283	380	1,103	2,807	2,827	1,599	8,716	1,825	10,541	7,613
Early 2028	46,677	0.008	0.033	0.145	0.084	0.047	0.317	0.042	0.359	375	1,520	6,780	3,916	2,183	14,775	1,975	16,750	13,255
Buildout⁴	49,610	0.008	0.036	0.180	0.112	0.045	0.382	0.046	0.428	375	1,810	8,954	5,559	2,238	18,936	2,280	21,216	17,126
Incremental Change																		
Mid 2001 - Mid 2006	1,811	0.001	-0.004	0.030	-0.013	0.009	0.023	-0.024	-0.001	60	-15	870	-156	275	1,034	-450	584	1,049
Mid 2006 - Mid 2011	4,038	-0.0048	-0.0068	-0.0173	0.0102	0.0019	-0.0168	0	-0.0145	-75	-45	-22	578	240	676	261	937	721
Mid 2011 - Early 2018	9,220	0.0002	0.0000	-0.0221	-0.0068	-0.0052	-0.0338	-0.0019	-0.0357	100	273	74	509	249	1,205	399	1,604	932
Early 2018 - Early 2028²	9,380	-0.0022	0.0030	0.0700	0.0081	0.0039	0.0828	0.0019	0.0902	-5	417	3,973	1,089	584	6,059	150	6,209	5,642
Early 2018 - Buildout³	12,313	-0.0026	0.0069	0.1052	0.0363	0.0022	0.1480	-0.0030	0.1391	-105	707	6,147	2,732	639	10,220	455	10,675	9,513
Annual Average																		
Mid 2001 - Mid 2006	362	0.00030	-0.00073	0.00596	-0.00258	0.00172	0.00467	-0.00484	-0.00017	12	-3	174	-31	55	207	-90	117	210
Mid 2006 - Mid 2011	808	-0.0010	-0.0014	-0.0035	0.0020	0.0004	-0.0034	0.0005	-0.0029	-15	-9	-4	116	48	135	52	187	144
Mid 2011 - Early 2018	1,418	0.0000	0.0000	-0.0034	-0.0010	-0.0008	-0.0052	-0.0003	-0.0055	15	42	11	78	38	185	61	247	143
Early 2018 - Early 2028²	938	-0.00022	0.00030	0.00700	0.00081	0.00039	0.00828	0.00019	0.00902	-1	42	397	109	58	606	15	621	564
Early 2018 - Buildout³	770	-0.00016	0.00043	0.00658	0.00227	0.00014	0.00925	-0.00019	0.00870	-7	44	384	171	40	639	28	667	595

Source: Watson & Associates Economists Ltd., 2018.

1. Statistics Canada defines no fixed place of work (NFPOW) employees as "persons who do not go from home to the same work place location at the beginning of each shift". Such persons include building and landscape contractors, travelling salespersons, independent truck drivers, etc.

2. Growth forecast to 2028 is based on the 2031 forecast in the Places to Grow, Growth Plan for the Greater Golden Horseshoe (2017), Schedule 7.

4. Buildout is based on background work prepared by Watson & Associates Economists Ltd for previous Town of Bradford West Gwillimbury DC Background Studies. Memorandum - "Growth Forecast - Current vs. Post Period", dated July 4, 2017 prepared for the Town of Bradford West Gwillimbury by Watson & Associates Economists Ltd., includes a summary of the non-residential lands included in the buildout.

Schedule 10b
Bradford West Gwillimbury
Employment and Gross Floor Area (GFA) Forecast, 2018 to Buildout

Period	Population	Employment					Gross Floor Area in Square Feet (Estimated) ¹			
		Primary	Industrial	Commercial/ Population Related	Institutional	Total	Industrial	Commercial/ Population Related	Institutional	Total
Mid 2006	24,039	355	2,755	1,740	1,110	5,960				
Mid 2011	28,077	280	2,733	2,318	1,350	6,681				
Early 2018	37,297	380	2,807	2,827	1,599	7,613				
Early 2028	46,677	375	6,780	3,916	2,183	13,255				
Buildout	49,610	375	8,954	5,559	2,238	17,126				
Incremental Change										
Mid 2006 - Mid 2011	4,038	-75	-22	578	240	721				
Mid 2011 - Early 2018	9,220	95	4,314	1,897	249	932				
Early 2018 - Early 2028	9,380	-5	3,973	1,089	584	5,642	5,165,300	544,500	408,900	6,118,700
Early 2018 - Buildout	12,313	-5	6,147	2,732	639	9,513	7,991,100	1,366,000	447,200	9,804,300
Annual Average										
Mid 2006 - Mid 2011	808	-15	-4	116	48	144				
Mid 2011 - Early 2018	1,418	16	719	316	42	155				
Early 2018 - Early 2028	938	-1	397	109	58	564	516,530	54,450	40,890	611,870
Early 2018 - Buildout	770	0	384	171	40	595	499,444	85,375	27,950	612,769

Source: Watson & Associates Economists Ltd., 2018.

1. Square Foot Per Employee Assumptions

Industrial	1,300
Commercial/ Population Related	500
Institutional	700

Schedule 10c
Estimate of the Anticipated Amount, Type and Location of
Non-Residential Development for Which Development Charges can be Imposed

Development Location	Timing	Industrial GFA S.F.	Commercial GFA S.F.	Institutional GFA S.F.	Total Non-Res GFA S.F.	Employment Increase ¹
Bradford Settlement Area - Greenfield Area (Urban) ³	2018 - 2028	633,300	103,800	220,500	957,600	1,010
	2018 - Buildout	899,100	177,500	240,700	1,317,300	1,390
Bradford Settlement Area - Built Boundary (Urban) ³	2018 - 2028	372,000	35,800	78,500	486,300	470
	2018 - Buildout	484,100	75,500	79,100	638,700	636
Bond Head Settlement Area (Urban) ³	2018 - 2028	-	42,500	63,000	105,500	175
	2018 - Buildout	-	57,000	64,400	121,400	206
BWG Strategic Settlement Employment Area ³	2018 - 2028	4,160,000	362,500	46,900	4,569,400	3,992
	2018 - Buildout	6,607,900	1,056,000	63,000	7,726,900	7,285
Total Urban Area	2018 - 2028	5,165,300	544,600	408,900	6,118,800	5,647
	2018 - Buildout	7,991,100	1,366,000	447,200	9,804,300	9,518
Rural	2018 - 2028	-	-	-	-	-
	2018 - Buildout	-	-	-	-	-
Bradford West Gwillimbury	2018 - 2028	5,165,300	544,500	408,900	6,118,700	5,647
	2018 - Buildout	7,991,100	1,366,000	447,200	9,804,300	9,518

Source: Watson & Associates Economists Ltd., 2018

1. Employment Increase does not include No Fixed Place of Work.

2. Square feet per employee assumptions:

Industrial	1,300
Commercial	500
Institutional	700

3. Refer to Map A-2.

Schedule 11
Bradford West Gwillimbury
Non-Residential Construction Value
Years 2007 - 2016
(000's 2017 \$)

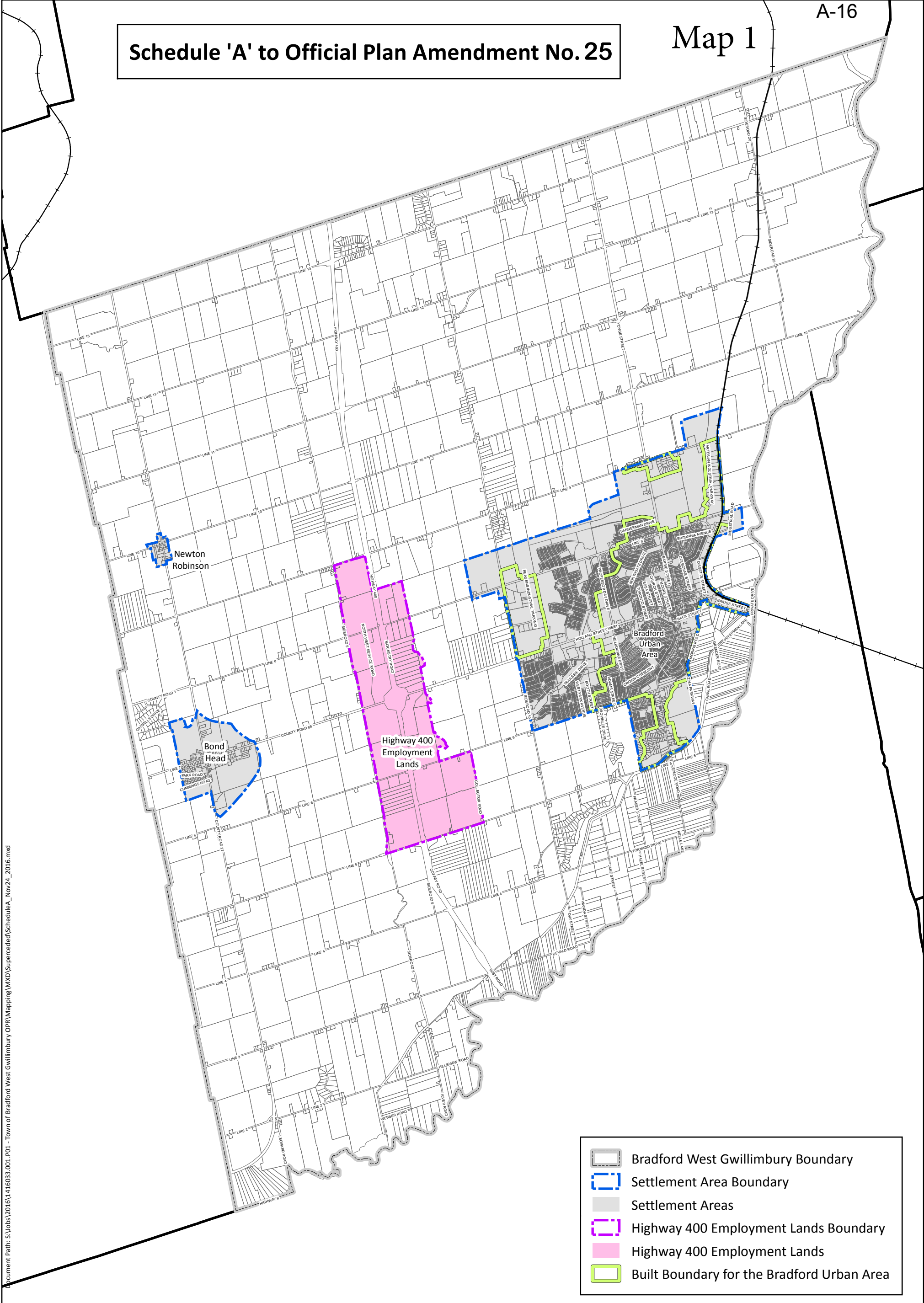
YEAR	Industrial				Commercial				Institutional				Total			
	New	Improve	Additions	Total	New	Improve	Additions	Total	New	Improve	Additions	Total	New	Improve	Additions	Total
2007	4,917	79	0	4,996	2,222	3,692	2,003	7,916	0	0	0	0	7,138	3,771	2,003	12,912
2008	178	0	3,864	4,043	33,193	297	0	33,490	95	6	1,962	2,063	33,466	303	5,826	39,596
2009	458	183	0	641	9,732	2,766	0	12,498	15,322	741	0	16,064	25,513	3,690	0	29,203
2010	1,049	173	1,611	2,833	50,254	10,873	0	61,127	256	1,490	0	1,745	51,559	12,535	1,611	65,705
2011	389	225	0	614	6,287	2,498	0	8,785	817	477	0	1,293	7,493	3,200	0	10,692
2012	717	210	0	927	6,349	1,038	1,900	9,288	0	973	0	973	7,066	2,221	1,900	11,188
2013	4,653	339	0	4,992	1,758	1,919	0	3,677	187	3,586	0	3,773	6,598	5,844	0	12,442
2014	1,398	1,331	439	3,168	2,639	2,847	1,398	6,884	1,937	2,099	8,933	12,969	5,974	6,277	10,770	23,021
2015	0	452	1,956	2,408	15	728	0	744	247	4,797	1,192	6,236	262	5,978	3,148	9,388
2016	1,380	262	0	1,643	286	12,864	971	14,122	339	1,494	0	1,832	2,005	14,620	971	17,596
Subtotal	15,139	3,255	7,870	26,264	112,736	39,523	6,273	158,531	19,199	15,662	12,087	46,948	147,075	58,439	26,229	231,743
Percent of Total	58%	12%	30%	100%	71%	25%	4%	100%	41%	33%	26%	100%	63%	25%	11%	100%
Average	1,514	325	787	2,626	11,274	3,952	627	15,853	1,920	1,566	1,209	4,695	14,707	5,844	2,623	23,174
2007 - 2011 Period Total				13,126				123,817				21,165				158,108
2007 - 2011 Average				2,625				24,763				4,233				31,622
% Breakdown				8.3%				78.3%				13.4%				100.0%
2012 - 2016 Period Total				13,138				34,714				25,782				73,635
2012 - 2016 Average				2,628				6,943				5,156				14,727
% Breakdown				17.8%				47.1%				35.0%				100.0%
2007 - 2016 Period Total				26,264				158,531				46,948				231,743
2007 - 2016 Average				2,626				15,853				4,695				23,174
% Breakdown				11.3%				68.4%				20.3%				100.0%

Source: Statistics Canada Publication, 64-001-XIB

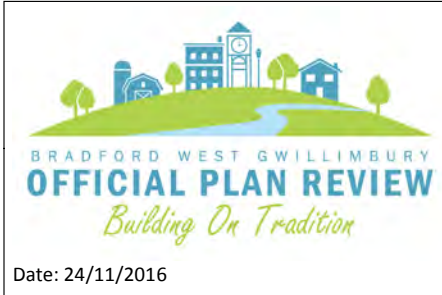
Note: Inflated to year-end 2016 (January, 2017) dollars using Reed Construction Cost Index

Schedule 'A' to Official Plan Amendment No. 25

Map 1



Document Path: S:\Jobs\2016\1416033.001.P01 - Town of Bradford West Gwillimbury OPR\Mapping\WXM\Supersceded\ScheduleA_Nov24_2016.mxd

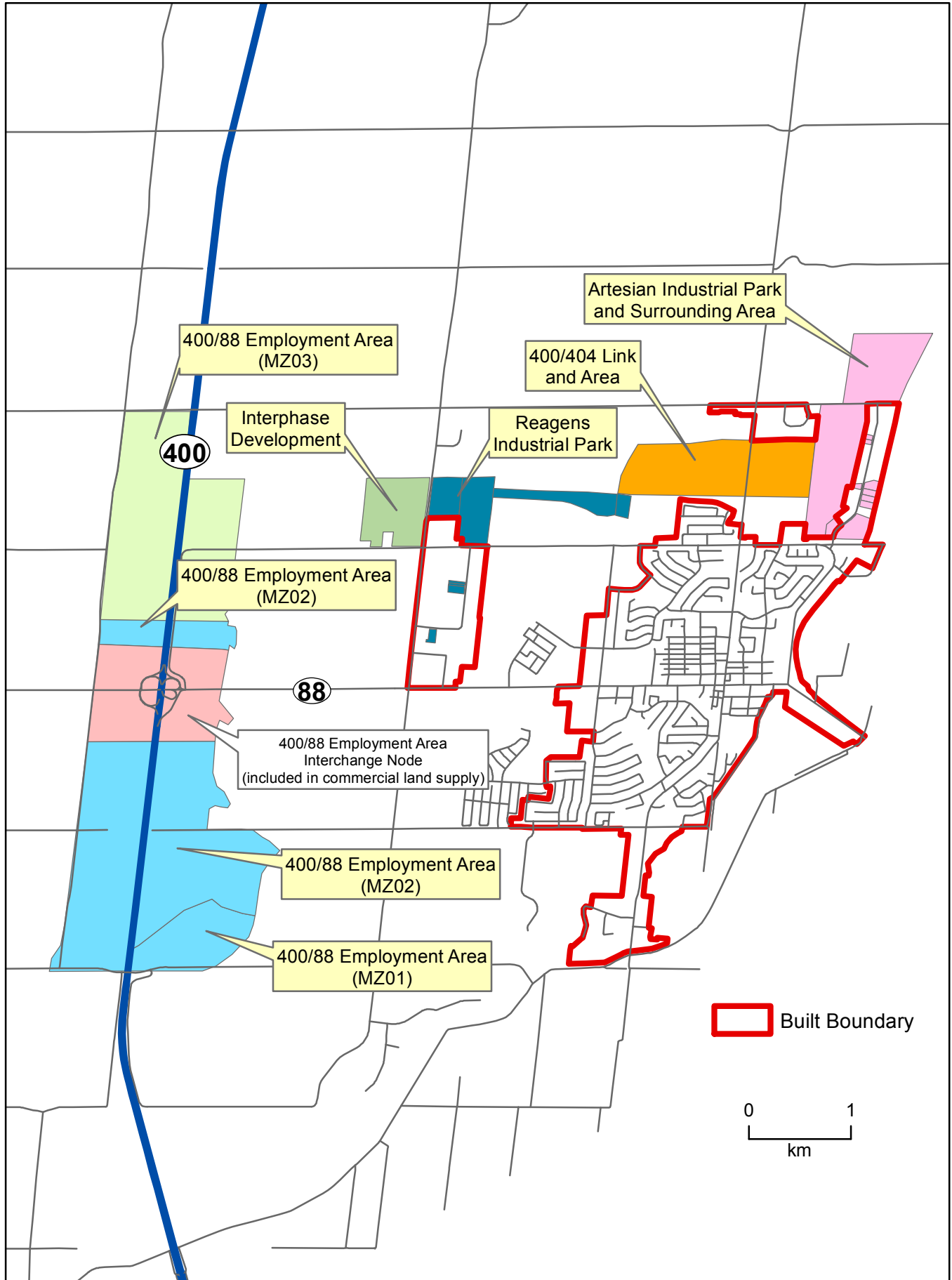


Date: 24/11/2016

Schedule B-1 – Urban Structure and Built Boundary Bradford West Gwillimbury



Town of Bradford West Gwillimbury Vacant Designated Employment Lands



Appendix B – Level of Service

APPENDIX B - LEVEL OF SERVICE CEILING
TOWN OF BRADFORD WEST GWILLIMBURY
SUMMARY OF SERVICE STANDARDS AS PER DEVELOPMENT CHARGES ACT, 1997

Service Category	Sub-Component	10 Year Average Service Standard			Maximum Ceiling LOS	Utilized	Remaining	
		Cost (per capita)	Quantity (per capita)					
Services Related to a Highway	Roads	\$17,437.90	0.0117	lane-km of roadways	1,490,419 per lane km	214,712,863	136,344,526	78,368,337

Appendix C – Long Term Capital and Operating Cost Examination

Appendix C – Long Term Capital and Operating Cost Examination

Town of Bradford West Gwillimbury Annual Capital and Operating Cost Impact

As a requirement of the D.C.A. under subsection 10(2)(c), an analysis must be undertaken to assess the long-term capital and operating cost impacts for the capital infrastructure projects identified within the D.C. As part of this analysis, it was deemed necessary to isolate the incremental operating expenditures directly associated with these capital projects, factor in cost saving attributable to economies of scale or cost sharing where applicable, and prorate the cost on a per unit basis (i.e. sq.ft. of building space, per vehicle, etc.). This was undertaken through a review of the Town's approved 2016 Financial Information Return (F.I.R.).

In addition to the operational impacts, over time the initial capital projects will require replacement. This replacement of capital is often referred to as life cycle cost. By definition, life cycle costs are all the costs which are incurred during the life of a physical asset, from the time its acquisition is first considered, to the time it is taken out of service for disposal or redeployment. The method selected for life cycle costing is the sinking fund method which provides that money will be contributed annually and invested, so that those funds will grow over time to equal the amount required for future replacement. The following factors were utilized to calculate the annual replacement cost of the capital projects (annual contribution = factor X capital asset cost) and are based on an annual growth rate of 2% (net of inflation) over the average useful life of the asset:

Asset	Lifecycle Cost Factors	
	Average Useful Life (Years)	Factor
Roads	50	0.0118232
Water	70	0.0066676
Wastewater	50	0.0118232

Table C-1 depicts the annual operating impact resulting from the proposed gross capital projects at the time they are all in place. It is important to note that, while Town program expenditures will increase with growth in population, the costs associated with the new infrastructure (i.e. facilities) would be delayed until the time these works are in place.

Table C-1
TOWN OF BRADFORD WEST GWILLIMBURY
OPERATING AND CAPITAL EXPENDITURE IMPACTS
FOR FUTURE CAPITAL EXPENDITURES

SERVICE	NET GROWTH RELATED EXPENDITURES	ANNUAL LIFECYCLE EXPENDITURES	ANNUAL OPERATING EXPENDITURES	TOTAL ANNUAL EXPENDITURES
1. Roads				
1.1 Roads	136,344,526	8,780,282	2,635,796	11,416,078
2. Wastewater Services				
2.1 Studies	500,000	0	0	0
2.2 Treatment	21,541,951	1,048,519	1,199,194	2,247,713
2.3 Collection	44,464,954	3,219,963	1,125,590	4,345,553
3. Water Services				
3.1 Studies	500,000	0	0	0
3.2 Treatment	34,142,160	2,470,739	3,808,435	6,279,174
3.3 Distribution	21,437,009	1,327,649	499,518	1,827,167

Appendix D – D.C. Reserve Fund Policy

Appendix D – D.C. Reserve Fund Policy

D.1 Legislative Requirements

The D.C.A. requires D.C. collections (and associated interest) to be placed in separate reserve funds. Sections 33 through 36 of the Act provide the following regarding reserve fund establishment and use:

- a Town shall establish a reserve fund for each service to which the D.C. by-law relates; s.7(1), however, allows services to be grouped into categories of services for reserve fund (and credit) purposes, although only 100% eligible and 90% eligible services may be combined (minimum of two reserve funds);
- the Town shall pay each D.C. it collects into a reserve fund or funds to which the charge relates;
- the money in a reserve fund shall be spent only for the “capital costs” determined through the legislated calculation process (as per s.5(1) 2-8);
- money may be borrowed from the fund but must be paid back with interest (O.Reg. 82/98, s.11(1) defines this as the Bank of Canada rate either on the day the by-law comes into force or, if specified in the by-law, the first business day of each quarter); and
- D.C. reserve funds may not be consolidated with other Town reserve funds for investment purposes (s.37).

Annually, the Treasurer of the Town is required to provide Council with a financial statement related to the D.C. by-law(s) and reserve funds. This statement must also be forwarded to the Minister of Municipal Affairs and Housing within 60 days of the statement being filed with Council.

O.Reg. 82/98 prescribes the information that must be included in the Treasurer’s statement, as follows:

- opening balance;
- closing balance;
- description of each service and/or service category for which the reserve fund was established;
- transactions for the year (e.g. collections, draws);

- list of credits by service or service category (outstanding at beginning of the year, given in the year and outstanding at the end of the year by holder);
- amounts borrowed, purpose of the borrowing and interest accrued during previous year;
- amount and source of money used by the Town to repay municipal obligations to the fund;
- schedule identifying the value of credits recognized by the Town, the service to which it applies and the source of funding used to finance the credit; and
- for each draw, the amount spent on the project from the D.C. reserve fund and the amount and source of any other monies spent on the project.

Based upon the above, Figure D-1 sets out the format for which annual reporting to Council should be provided.

D.2 D.C. Reserve Fund Application

Section 35 of the D.C.A. states that:

“The money in a reserve fund established for a service may be spent only for capital costs determined under paragraphs 2 to 8 of subsection 5(1).”

This provision clearly establishes that reserve funds collected for a specific service are only to be used for that service.

**Appendix D-1
Development Charge Reserve Fund
TOWN OF BRADFORD WEST GWILLIMBURY
as at December 31, 201X**

	Municipal Wide	Urban Areas							Total
	Roads	Wastewater Services				Water Services			
		Studies	Treatment - Bradford Settlement Area	Treatment - Bond Head Settlement Area/BWG Strategic Settlement Employment Area	Collection - Bradford Settlement Area	Collection - Bond Head Settlement Area/BWG Strategic Settlement Employment Area	Studies	Treatment & Distribution - Bradford Settlement Area	
Balance as of January 1,									-
Plus:									
Development Charge Proceeds									-
Other									-
Accrued Interest Allocation									-
Sub-Total						-			-
Less:									
Amounts Transferred to Operating Fund									-
Amounts Transferred to Capital Fund									-
Sub-Total						-			-
Closing Balance as of December 31,						-			-

**Attachment 1
SAMPLE DEVELOPMENT CHARGE RESERVE FUND STATEMENT
TOWN OF BRADFORD WEST GWILLIMBURY**

DISCOUNTED SERVICES RESERVE FUND TRANSFERS					
Capital Project	DC Reserve Fund Draw	Operating Fund Draw	Other Reserves Fund Draw	Debt	Total

Attachment 2
DEVELOPMENT CHARGE RESERVE FUND STATEMENT
TOWN OF BRADFORD WEST GWILLIMBURY

LISTING OF CREDITS UNDER DCA, 1997, s.38 BY HOLDER					
Credit Holder	Applicable DC Reserve Fund	Credit Balance Beginning of Year	Additional Credits Granted During Year	Credits Used by Holder During Year	Credit Balance End of Year

Appendix E – Local Service Policy for Roads, Water and Wastewater Services

Appendix E – Local Service Policy for Roads, Water and Wastewater Services

General

The cost of any development charge by-law infrastructure installed by a developer will be eligible for cost recovery, up to the amount of the cost actually charged in the Development Charge By-law, adjusted by indexing to the date of completion of the work. The credit for each project will be based on optimal routing as determined by the Town at the time of the Subdivision Agreement.

Temporary Services

In the event that development charge by-law infrastructure has not been installed when a developer wishes to proceed, that developer may use alternative servicing schemes (with the approval of the Town Engineer). Such alternatives including disconnection costs shall be funded by the developer. No credit will be available on the Development Charge payable.

Internal and External Services

External works are defined to be located outside of (or on an arterial road adjacent to) the developable area of properties designated for Residential, Commercial or Industrial development within the Bradford Urban Area as defined in the Official Plan, provided that the lotting pattern of the development does not rely on frontage to the works

Internal works are used to service a local development, within the developable area of properties designated for development within the Bradford Urban Area (per the Official Plan) and potentially have a wider use for other developments. Developers will be responsible for installing services throughout their entire local road network, including future road stubs and all proposed collector roads and collector road connections to existing roads.

Services Related to a Highway - Roads

Roads are defined to include road construction (grading and earthmoving, storm sewers, storm sewer manholes, culverts, bridges, retaining walls, noise mitigation measures associated with the roadway, dedicated stormwater control and treatment

measures such as ponds or oil/grit separators, gravel, asphalt, curbs, subdrains, signage, new traffic signals, traffic signal improvements and coordination at existing or future roadway intersections, pavement markings and utility relocations) all streetscape (grassed boulevards, trees, shrubs, fences, signage, safety barriers, streetlighting) and sidewalk costs etc.

Construction of new arterial roads, and improvement or widening of existing arterial and collector roads (including Lines and Concession Roads, all as designated in the Official Plan) shall be funded through Town-wide Development Charges to the extent eligible. No payments will be made for road allowance (i.e. land) widenings obtained as a condition of development approval. The cost of land will be included in the development charge calculation only for new arterial roads not providing direct lot frontage, widenings fronting properties not participating in the development process and new road allowances through adjacent lands external to the developable area in order to complete road connections, as indicated in the Official Plan or approved Community Plan (i.e. Secondary Planning) documents.

All new local and collector roads within the Bradford Urban Area, the Bond Head Settlement Area and the Highway 400/88 Special Policy Area (as defined in the Official Plan), including drop-off lanes for schools, bus bays and mail pick up areas shall be considered an internal service. Upgrades, modifications or widening of any portion of existing local or collector roads within the Community Plan Areas identified in the Official Plan shall be considered an Internal Service. In addition, traffic signals and medians, signage and pavement markings, turning, storage and taper lanes, which may be necessary to provide access at entrances to proposed industrial or commercial properties adjacent to the roadway, shall be considered an internal service. As such, they will be a direct developer responsibility under s.59 of the Development Charges Act.

Sanitary Sewers

Sanitary sewers are defined to include the cost of supply, installation and restoration of sanitary sewers (sewer pipes, connections, and manholes) and pumping stations etc. The cost of a 250mm sewer shall be determined at the time of the passage of the Development Charge By-Law establishing the oversizing amounts.

Construction of all Wastewater Treatment Plants, all External Pumping Stations (including land), all External Forcemains as well as all External Trunk Sewers having a

diameter greater than 250mm shall be funded through Town wide Development Charges to the extent eligible.

Construction of all Internal Pumping Stations required by the Master Servicing Study (not including land), Internal Forcemains and the incremental oversizing costs of Internal Trunk Sewers above the cost of a 250mm diameter shall be funded through Town wide Development Charges. No payment will be made for internal property restoration costs, manholes or connections.

All sewers up to and including 250mm diameter shall be considered a local service. As such, they will be a direct developer responsibility under s.59 of the Development Charges Act.

Water

Water costs are defined to include the supply, installation, and restoration of watermains (pipes, connections, hydrants, valves), supply and distribution facilities (wells, connection to external supply, treatment, storage) and booster stations etc. The cost of a 250mm diameter watermain shall be determined at the time of passage of the Development Charge By-Law establishing the oversizing amounts. Unused watermains greater than 10 metres in length will be terminated with a hydrant.

Construction of all Water Supply, all Storage Facilities, all External Booster Stations as well as all External Watermains in excess of 250mm diameter (including hydrants, check valves, pressure reducing/pressure sustaining valves, zone boundary valves and valve chambers) shall be funded through Town wide Development Charges to the extent eligible.

Construction of Internal Booster Stations (not including land) and the incremental oversizing cost of Internal Watermains in excess of 250mm in diameter (including the cost of valve chambers but not including the cost of hydrants, connections, check valves, pressure reducing/pressure sustaining valves or zone boundary valves) shall be funded through Town wide Development Charges.

Watermains up to and including 250mm in diameter defined as internal works (including all connections, hydrants, check valves, pressure reducing valves or pressure sustaining valves) shall be considered a local service. As such, they will be a direct developer responsibility under s.59 of the Development Charges Act.

Note: The above guidelines represent the general principles by which the Town staff will be guided in considering development applications. However, each application will be considered on its own merits having regard to, among other factors, the nature, type and location of the development, any existing and proposed development in the surrounding area, and subsection 59(2) of the Development Charges Act, 1997.

Appendix F – Asset Management Plan

Appendix F – Asset Management Plan

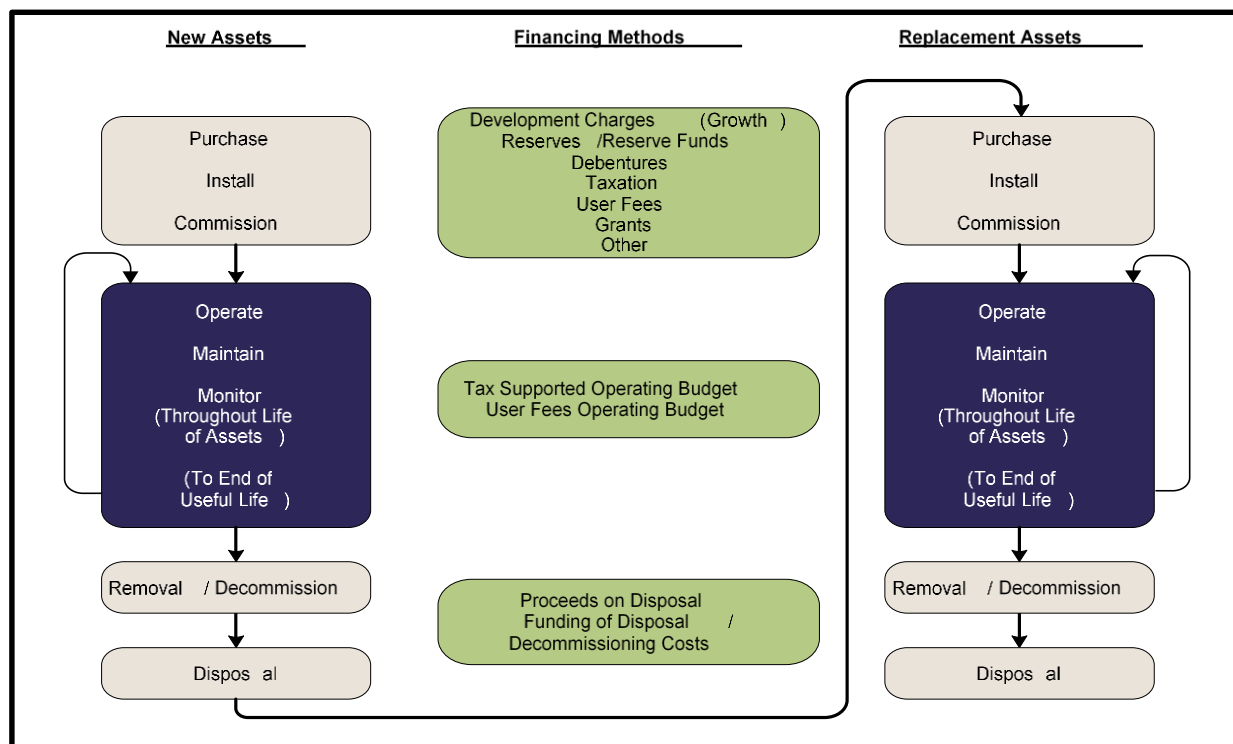
The recent changes to the D.C.A. (new section 10(2)(c.2)) require that the Background Study must include an asset management plan related to new infrastructure. Section 10(3) of the D.C.A. provides:

The asset management plan shall,

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

In regard to the above, section 8 of the Regulations was amended to include subsections (2), (3) and (4) which set out for specific detailed requirements for transit (only). For all services except transit, there are no prescribed requirements at this time thus requiring the municipality to define the approach to include within the Background Study.

At a broad level, the Asset Management Plan provides for the long-term investment in an asset over its entire useful life along with the funding. The schematic below identifies the costs for an asset through its entire lifecycle. For growth related works, the majority of capital costs will be funded by the D.C. Non-growth-related expenditures will then be funded from non-D.C. revenues as noted below. During the useful life of the asset, there will be minor maintenance costs to extend the life of the asset along with additional program related expenditures to provide the full services to the residents. At the end of the life of the asset, it will be replaced by non-D.C. financing sources.



In 2012, the Province developed *Building Together: Guide for municipal asset management plans* which outlines the key elements for an asset management plan (A.M.P.), as follows:

State of local infrastructure: asset types, quantities, age, condition, financial accounting valuation and replacement cost valuation.

Desired levels of service: defines levels of service through performance measures and discusses any external trends or issues that may affect expected levels of service or the municipality's ability to meet them (for example, new accessibility standards, climate change impacts).

Asset management strategy: the asset management strategy is the set of planned actions that will seek to generate the desired levels of service in a sustainable way, while managing risk, at the lowest lifecycle cost.

Financing strategy: having a financial plan is critical for putting an A.M.P. into action. By having a strong financial plan, municipalities can also demonstrate that they have made a concerted effort to integrate the A.M.P. with financial planning and municipal budgeting, and are making full use of all available infrastructure financing tools.

Commensurate with the above, the Town prepared an Asset Management Plan in 2016 for its existing assets and did not take into account future growth-related assets. As a result, the asset management requirement for the D.C. must be undertaken in the absence of this information.

In recognition to the schematic above, the following table has been developed to provide the annualized expenditures and revenues associated with new growth. Note that the D.C.A. does not require an analysis of the non-D.C. capital needs or their associated operating costs so these are omitted from the table below. As well, as all capital costs included in the D.C. eligible capital costs are not included in the Town's Asset Management Plan, the present infrastructure gap and associated funding plan have not been considered at this time. Hence the following does not represent a fiscal impact assessment (including future tax/rate increases) but provides insight into the potential affordability of the new assets:

1. The non-D.C. recoverable portion of the projects which will require financing from Town financial resources (i.e. taxation, rates, fees, etc.). This amount has been presented on an annual debt charge amount based on 20-year financing.
2. Lifecycle costs for the 2018 D.C. capital works have been presented based on a sinking fund basis. The assets have been considered over their estimated useful lives.
3. Incremental operating costs for the D.C. services (only) have been included.
4. The resultant total annualized expenditures are \$32.93 million.
5. Consideration was given to the potential new taxation and user fee revenues which will be generated as a result of new growth. These revenues will be available to finance the expenditures above. The new operating revenues are \$13.69 million. This amount, totalled with the existing operating revenues of \$126.96 million, provide annual revenues of \$140.65 million by the end of the period.
6. In consideration of the above, the capital plan is deemed to be financially sustainable.

**Town of Bradford West Gwillimbury
Asset Management – Future Expenditures and Associated Revenues
2018\$**

	2037 (Total)
Expenditures (Annualized)	
Annual Debt Payment on Non-Growth Related Capital ¹ (2014 D.C. and 2016 updates)	4,753,853
Annual Debt Payment on Post Period Capital ²	5,081,861
Lifecycle:	
Annual Lifecycle	\$18,905,390
Sub-Total - Annual Lifecycle	\$18,905,390
Incremental Operating Costs (for D.C. Services)	\$9,268,534
Total Expenditures	\$32,927,778
Revenue (Annualized)	
Total Existing Revenue ³	\$126,954,987
Incremental Tax and Non-Tax Revenue (User Fees, Fines, Licences, etc.)	\$13,692,466
Total Revenues	\$140,647,453

¹ Non-Growth Related component of Projects including 10% mandatory deduction on soft services

² Interim Debt Financing for Post Period Benefit

³ As per Sch. 10 of FIR

Appendix G – Proposed D.C. By-law

The Corporation of the Town of Bradford West Gwillimbury

By-law 2013 – 29

Water, Wastewater and Roads Development Charges By-Law

A By-law to update the water, wastewater and roads development charges for The Corporation of the Town of Bradford West Gwillimbury and to amend By-law 2009-134 of The Corporation of the Town of Bradford West Gwillimbury.

WHEREAS subsection 2(1) of the Act provides that the council of a municipality may pass by-laws for the imposition of development charges against land for increased capital costs required because of the need for services arising from development in the area to which the by-law applies;

AND WHEREAS subsection 19(1) of the Act provides that the council of a municipality may pass by-laws to amend a development charge by-law;

AND WHEREAS subsection 2(8) of the Act provides that more than one by-law to impose development charges may apply to the same area;

AND WHEREAS the Council of The Corporation of the Town of Bradford West Gwillimbury has given notice in accordance with Section 12 of the Act, of its intention to pass a by-law under subsections 2(1) and 19(1) of the Act;

AND WHEREAS the Council of The Corporation of the Town of Bradford West Gwillimbury heard all persons who applied to be heard no matter whether in objection to, or in support of, the development charge proposal at public meeting held on February 6, 2018;

AND WHEREAS the Council of The Corporation of the Town of Bradford West Gwillimbury at the public meeting held on February 6, 2018 had before it a report entitled Development Charges Background Study Update for Water, Wastewater and Roads Services dated January 5, 2018, prepared by Watson & Associates Economists Ltd. which indicated that the development of any land within the Town of Bradford West Gwillimbury will increase the need for water, wastewater and roads services as specified therein;

AND WHEREAS the Council of The Corporation of the Town of Bradford West Gwillimbury at its meetings held on February 6, 2018, had before it a Report from the Finance Department dated January __, 2018 and approved the Development Charges Background Study, dated January 5, 2018;

AND WHEREAS the Council of The Corporation of the Town of Bradford West Gwillimbury on March __, 2018 adopted the recommendations in the Report from the Finance Department dated _____, 2018 thereby expressing the intention that development related post-period capacity identified in the Development Charges

Background Study Update for Water, Wastewater and Roads Services dated January 5, 2018 shall be paid for by development charges or other similar charges and updated its capital budget and forecast where appropriate thereby indicating that it intends that the increase in need for services to service anticipated development will be met;

AND WHEREAS the Council of The Corporation of the Town of Bradford West Gwillimbury on _____, 2018, determined under section 12 of the Act that no additional public meetings were required.

NOW THEREFORE the Council of The Town of Bradford West Gwillimbury hereby enacts as follows:

DEFINITIONS

1. In this by-law:

- (1) "Act" means the *Development Charges Act*, S.O. 1997, c. 27, as amended and any successor legislation;
- (2) "agricultural use" means a bona fide farming operation, but does not include a Dwelling Unit;
- (3) "apartment dwelling" means any dwelling unit within a building containing more than four dwelling units where the units are connected by an interior corridor. Despite the foregoing, an apartment dwelling includes those stacked townhouse dwellings or back-to-back townhouse dwellings that are developed on a block approved for development at a minimum density of sixty (60) units per net hectare pursuant to plans approved under section 41 of the Planning Act;
- (4) "Assessment Act" means the *Assessment Act*, R.S.O. 1990, c. A.31, as amended and any successor legislation;
- (5) "back-to-back townhouse dwelling" means a building containing four or more dwelling units separated vertically by a common wall, including a rear common wall, that do not have rear yards;
- (6) "bedroom" means a habitable room of at least seven square metres (7 m²) used, designed or intended for use as sleeping quarters including a loft;
- (7) "Board of Education" means a board defined in ss. 1 (1) of the *Education Act*; R.S.O. 1990, c. E.2, as amended and any successor legislation;
- (8) "Bond Head Settlement Area (OPA 16)" means that area of the Town that is shown on Schedule "B" hereto;
- (9) "Bradford Settlement Area" means that area of the Town that is shown on Schedule "A" hereto and includes infill development;

- (10) "BWG Strategic Settlement Employment Area (OPA 15)" means that area of the Town that is shown on Schedule "C" hereto;
- (11) "building" means a building or structure occupying an area greater than ten (10) square metres (10 m²) consisting of a wall, roof or floor or any of them, or a structural system serving the function thereof, and includes, but is not limited to, an above grade storage tank, an air supported structure, a canopy and an industrial tent;
- (12) "Building Code Act" means the *Building Code Act*, S.O. 1992, c.23, as amended and any successor legislation;
- (13) "capital cost" means costs incurred or proposed to be incurred by the Municipality or a local board thereof directly or by others on behalf of, and as authorized by, the Municipality or local board:
- (a) to acquire land or an interest in land, including a leasehold interest;
 - (b) to improve land;
 - (c) to acquire, lease, construct or improve buildings and structures;
 - (d) to acquire, lease, construct or improve facilities including:
 - (i) rolling stock with an estimated useful life of seven years or more;
 - (ii) furniture and equipment, other than computer equipment; and
 - (iii) materials acquired for circulation, reference or information purposes by a library board as defined in the *Public Libraries Act*, R.S.O. 1990, c.P.44;
 - (e) to undertake studies in connection with any of the matters referred to in clauses (a) to (d);
 - (f) to complete the development charge background study under section 10 of the Act; and
 - (g) interest on money borrowed to pay for costs in (a) to (d);
- that are required for the provision of services designated in this By-law within or outside the Town.
- (14) "Condominium Act" means the *Condominium Act*, 1998, S.O. 1998, c . 19 as amended and any successor legislation or the *Condominium Act*, R.S.O. 1990, c. C.26, as amended and any successor legislation;

- (15) "Council" means the Council of The Corporation of the Town of Bradford West Gwillimbury;
- (16) "development" means any activity or proposed activity in respect of land that requires one or more of the actions referred to in section 8 of this By-law and includes the redevelopment of land or the redevelopment, expansion, extension or alteration of a use or a building (except interior alterations to an existing building which do not change or intensify the use of the building);
- (17) "development charge" means a charge imposed pursuant to this By-law or any other development charge by-law of The Corporation of the Town of Bradford West Gwillimbury;
- (18) "dwelling unit" means a room or suite of rooms used, or designed or intended for use by, one person or persons living together, in which culinary and sanitary facilities are provided for the exclusive use of such person or persons;
- (19) "existing industrial building" means a building existing on land in the Town on March 5, 2013 or the first building or buildings constructed on vacant land on or after March 5, 2013 for which development charges were paid in full and such buildings are used for or in connection with:
- (a) manufacturing, producing, processing, storing or distributing something;
 - (b) research or development in connection with manufacturing or processing something;
 - (c) retail sales by a manufacturer, producer or processor of something they manufactured, produced or processed, if the retail sales are at the site where the manufacturing, production or processing takes place; or
 - (d) office or administrative purposes, if they are:
 - (i) carried out with respect to manufacturing, producing, processing, storage or distributing of something;
 - (ii) in or attached to the building used for that manufacturing, producing, processing, storage or distribution; and
- despite the foregoing, self-service storage facilities and retail warehouses are not considered to be industrial buildings;

- (20) "farm building" means that part of a *bona fide* farm operation encompassing barns, silos, greenhouses and other ancillary development to an agricultural use, but excluding a residential use;
- (21) "grade" means the average level of finished ground adjoining a building at all exterior walls;
- (22) "gross floor area" means:
- (a) in the case of a residential building, or in the case of a mixed-use building with respect to the residential portion thereof, the total area of all floors above grade of a dwelling unit measured between the outside surfaces of exterior walls, or between the outside of exterior walls and, the centre line of party walls dividing one dwelling unit from another dwelling unit or other portion of a building; and
 - (b) in the case of a non-residential building, or in the case of a mixed-use building in respect of the non-residential portion thereof, the total area of all building floors above or below grade measured between the outside surfaces of the exterior walls, or between the outside surfaces of exterior walls and the centre line of party walls dividing a non-residential use and a residential use;
- (23) "local board" means a municipal service board, a municipal services corporation, transportation commission, public library board, board of health, police services board, planning board, or any other board, commission, committee, body or local authority established or exercising any power under any act with respect to the affairs or purposes of the Municipality or the County of Simcoe, but excluding a Board of Education, a conservation authority, any municipal services corporation that is not deemed to be a local board under O. Reg. 599/06 made under the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended or successor legislation and any corporation created under the *Electricity Act, 1998*, S.O. 1998, c. 15, Schedule A, as amended or any successor legislation;
- (24) "local services" means those services or facilities which are under the jurisdiction of the Municipality and are related to a plan of subdivision or within the area to which the plan relates, required as a condition of approval under section 51 of the *Planning Act*, or as a condition of approval under section 53 of the *Planning Act*;
- (25) "multiple dwelling" means all dwellings other than single detached dwellings, semi-detached dwellings and apartment dwellings;
- (26) "Municipality" means The Corporation of the Town of Bradford West Gwillimbury;

- (27) "non-residential uses" means a building used, designed or intended to be used for a purpose other than a residential purpose;
- (28) "Owner" means the owner of land or a person who has made application for an approval for the development of land;
- (29) "Planning Act" means the *Planning Act*, R.S.O. 1990, c.13, as amended and any successor legislation;
- (30) "redevelopment" means the construction, erection or placing of one or more buildings on land where all or part of a building on such land has previously been demolished, or changing the use of all or part of a building from a residential purpose to a non-residential purpose or from a non-residential purpose to a residential purpose, or changing all or part of a building from one form of residential development to another form of residential development or from one form of non-residential development to another form of non-residential development;
- (31) "Regulation" means any regulation made pursuant to the Act;
- (32) "residential purpose" means the use of land, buildings or parts thereof as living accommodation for one or more persons;
- (33) "residential uses" means lands, buildings or portions thereof used, or designed or intended for use for a residential purpose and includes a single detached dwelling, a semi-detached dwelling, a multiple dwelling, an apartment dwelling, a dwelling unit accessory to a development for non-residential uses and the residential portion of a mixed-use building;
- (34) "Rural Area" means that part of the Town located outside of the areas shown as Bradford Settlement Area, Bond Head Settlement Area (OPA 16) and BWG Strategic Settlement Employment Area (OPA 15) on Schedules "A", "B" and "C" respectively to this By-law;
- (35) "semi-detached dwelling" means a building divided vertically into two dwelling units each of which has a separate entrance and access to grade;
- (36) "services" means services listed in Schedule "D" to this By-law, or in an agreement under s. 44 of the Act;
- (37) "single detached dwelling" means a completely detached building containing only one dwelling unit;
- (38) "stacked townhouse dwelling" means a building containing two or more dwelling units where each dwelling unit is separated horizontally from another dwelling unit by a common wall;

- (39) "Town" means the geographic area of The Corporation of the Town of Bradford West Gwillimbury;
- (40) "Treasurer" means the Municipality's Director of Finance/Treasurer or his or her equivalent, deputy and their successors;
- (41) "wastewater services" means all facilities, buildings, services and things related to sanitary services, including, but not limited to, all works for the collection, transmission, treatment and disposal of sewage; and
- (42) "water services" means all facilities, buildings, services and things related to the provision of water, including, but not limited to, all works for the collection, production, treatment, storage, supply, transmission and distribution of water.

RULES

- 2. (1) For the purpose of complying with section 6 of the Act:
 - (a) the area to which this By-law applies shall be the area described in section 3 of this By-law;
 - (b) the rules developed under paragraph 9 of subsection 5(1) of the Act for determining if development charges are payable under this By-law in any particular case and for determining the amount of the charges shall be as set forth in sections 4, 8 through 16, inclusive, of this By-law;
 - (c) the rules for exemptions, relief, credits and adjustments shall be as set forth in sections 18 through 20, inclusive, and section 23 of this By-law;
 - (d) the indexing of charges shall be in accordance with section 27 of this By-law;
 - (e) there shall be no phasing-in; and
 - (f) except as set out in the Act and this By-law, there are no other credits, exemptions, relief or adjustments in respect of any land in the area to which this By-law applies

LANDS AFFECTED

- 3. (1) This By-law applies to all lands in the Town.
- (2) Where,

- (a) there are no water services and/or wastewater services feasibly available within one hundred and fifty-two (152) meters of a site for development; and
- (b) no water services and/or wastewater services are scheduled to service the site for development within five (5) years of the date of approval of a building permit for development on the site,

then the Treasurer shall rebate the water services component and/or the wastewater services component of the residential or non-residential development charge to the owner who applies in writing, and provides proof satisfactory to the Municipality, that adequate private water services and/or sanitary services have been installed and are properly functioning so as to provide ample service to the site.

OTHER DEVELOPMENT CHARGES

- 4. The development of land in the Town may be subject to one or more development charges by-laws of The Corporation of the Town of Bradford West Gwillimbury and the development charges under this By-law for a development are in addition to any other development charges that may be applicable to such development.

DESIGNATION OF SERVICES

- 5. It is hereby declared by Council that all development of land within the area to which this By-law applies will increase the need for services.
- 6. The development charges under this By-law applicable to a development shall apply without regard to the services required or used by a particular development.
- 7. Development charges under this By-law shall be imposed for the categories of services listed in Schedule "D" to this By-law to pay for the increased capital costs required because of increased needs for services arising from development.

APPROVALS FOR DEVELOPMENT

- 8. (1) Development charges under this By-law shall be imposed against all lands or buildings within the area to which this By-law applies if the development of such lands or buildings requires any of the following:
 - (a) the passing of a zoning by-law or of an amendment thereto under section 34 of the *Planning Act*;
 - (b) the approval of a minor variance under section 45 of the *Planning Act*;

- (c) a conveyance of land to which a by-law passed under subsection 50(7) of the *Planning Act* applies;
 - (d) the approval of a plan of subdivision under section 51 of the *Planning Act*;
 - (e) a consent under section 53 of the *Planning Act*;
 - (f) the approval of a description under section 50 of the *Condominium Act*, R.S.O., 1990, c. C.26, as amended or section 9 of the *Condominium Act*; or
 - (g) the issuance of a permit under the *Building Code Act, 1992*, S.O. 1992, c. 23, as amended or successor legislation, in relation to a building.
- (2) Subsection (1) shall not apply in respect to:
- (a) local services installed or paid for by the owner within a plan of subdivision or within the area to which the plan relates, as a condition of approval under section 51 of the *Planning Act*; and
 - (b) local services installed or paid for by the owner as a condition of approval under section 53 of the *Planning Act*.

CALCULATION OF DEVELOPMENT CHARGES

9. Subject to the provisions of this By-law, development charges against land shall be imposed, calculated and collected in accordance with the rates set out in Schedule "E" to this By-law, which relate to the services set out in Schedule "0" to this By-law;
10. (1) Development charges under this By-law with respect to the development of any land or building shall be calculated as follows:
- (a) in the case of residential development or redevelopment or the
 - (b) residential portion of a mixed-use development or redevelopment, based on the number and type of dwelling units; and
 - (c) in the case of non-residential development or redevelopment, or the non-residential portion of a mixed-use development or redevelopment, based on the gross floor area of such development or redevelopment.
11. No more than one development charge under this By-law for each service designated in section 7 of this By-law shall be imposed upon any lands or buildings to which this By-law applies even though two or more of the actions

described in section 8 of this By-law are required before the lands or buildings can be developed.

12. (1) Despite sections 11 and 24 of this By-law, if
 - (a) two or more of the actions described in section 8 of this By-law occur at different times, or
 - (b) a second or subsequent building permit is issuedresulting in increased, additional or different development, then additional development charges under this By-law shall be imposed in respect of such increased, additional or different development permitted by such action or permit.
13. Where a development requires an approval described in section 8 of this By-law after the issuance of a building permit and no development charges have been paid, then development charges under this By-law shall be paid prior to the granting of the approval required under section 8 of this By-law.
14. Nothing in this By-law prevents Council from requiring, in an agreement under section 51 of the *Planning Act* or as a condition of consent or an agreement respecting same under section 53 of the *Planning Act*, that the owner, at his or her own expense, install such local services related to or within the area to which a plan of subdivision relates, as Council may require, in accordance with the Municipality's applicable local services policies in effect at the time.

AMOUNT OF CHARGE — RESIDENTIAL

15. Subject to section 4 of this By-law the development charges shall be calculated and payable for residential development within:
 - (1) the Bradford Settlement Area shall be the residential development charges shown as the Grand Total Urban Area — Bradford Settlement Area on Schedule "E" to this By-law;
 - (2) the Bond Head Settlement Area (OPA 16) and the BWG Strategic Settlement Employment Area (OPA 15) shall be the residential development charges shown as the Grand Total Urban Area — Bond Head Settlement Area (OPA 16) and the BWG Strategic Settlement Employment Area (OPA 15) on Schedule "E" to this By-law; and
 - (3) the Rural Area shall be the residential development charges shown as the Grand Total Rural Area on Schedule "E" to this By-law.

AMOUNT OF CHARGE - NON-RESIDENTIAL

16. Subject to section 4 of this By-law the development charges shall be calculated and payable for development for non-residential uses within:
- (1) the Bradford Settlement Area shall be the non-residential development charges shown as the Grand Total Urban Area — Bradford Settlement Area on Schedule "E" to this By-law;
 - (2) the Bond Head Settlement Area (OPA 16) and the BWG Strategic Settlement Employment Area (OPA 15) shall be the non-residential development charges shown as the Grand Total Urban Area — Bond Head Settlement Area (OPA 16) and the BWG Strategic Settlement Employment Area (OPA 15) on Schedule "E" to this By-law; and
 - (3) the Rural Area shall be the non-residential development charges shown as the Grand Total Rural Area on Schedule "E" to this By-law.

PHASE-IN OF DEVELOPMENT CHARGES

17. The development charges imposed pursuant to this By-law are not being phased-in and are payable in full, subject to any exemptions or specific rules herein, from the date of this By-law comes into force and effect pursuant to section 35 of this By-law.

EXEMPTIONS FOR CERTAIN BUILDINGS

18. (1) This By-law shall not apply to land that is owned by and used for the purposes of:
- (a) a Board of Education;
 - (b) any municipality or local board thereof;
 - (c) a public hospital, as exempt from taxation pursuant to paragraph 3(1)3 of the *Assessment Act*; and
 - (d) a non-residential farm building, save and except for the gross floor area within a greenhouse that is used for the purposes of carrying on retail sales to which development charges shall be imposed, calculated and collected in accordance with the rates set out in Schedule "E" based on the geographic location of such greenhouse.

RULES WITH RESPECT TO EXEMPTIONS FOR INTENSIFICATION OF EXISTING HOUSING

19. (1) Despite sections 8 and 15 above, no development charge shall be imposed with respect to developments or portions of developments as follows:

- (a) the enlargement of an existing residential dwelling unit;
- (b) the creation of one or two additional residential dwelling units in an existing single detached dwelling where the total gross floor area of the additional unit(s) does not exceed the gross floor area of the existing dwelling unit;
- (c) the creation of one additional dwelling unit in any other existing residential building provided the gross floor area of the additional unit does not exceed the smallest existing dwelling unit already in the building;
- (d) despite clause (b) above, development charges shall be calculated and payable in accordance with Schedule "E" to this By-law based on the geographic location of the dwelling unit where the total residential gross floor area of the additional one or two dwelling units is greater than the total gross floor area of the existing single detached dwelling unit; and
- (e) despite clause (c) above, development charges shall be calculated and payable in accordance with Schedule "E" to this By-law based on the geographic location of the dwelling unit where the additional dwelling unit has a residential gross floor area greater than:
 - (i) in the case of semi-detached house or multiple dwelling, the gross floor area of the existing dwelling unit, and
 - (ii) in the case of any other residential building, the residential gross floor area of the smallest existing dwelling unit.

RULES WITH RESPECT TO AN "INDUSTRIAL" EXPANSION EXEMPTION

20. (1) Despite sections 9, 10 and 16 above, there shall be an exemption for the enlargement of an existing industrial building up to a maximum of fifty (50) percent of the gross floor area of the existing industrial building before any enlargement for which an exemption from the payment of development charges was granted.
- (2) Development charges shall be imposed, calculated and payable pursuant to Schedule "E" to this By-law to the gross floor area of an enlargement that exceeds fifty (50) percent of the existing industrial building.
- (3) For greater certainty in applying the exemption in this section, the gross area of an existing industrial building is enlarged where there is a *bona fide* increase in the size of the existing industrial building, the enlarged area is attached to the existing industrial building, there is a direct means of ingress and egress from the existing industrial building to and from the enlarged area for persons, goods and equipment and the existing

industrial building and the enlarged area are used for or in connection with an industrial purpose as set out in subsection 1(19) of this By-law. Without limiting the generality of the foregoing, the exemption in this section shall not apply where the enlarged area is attached to the existing industrial building by means only of a tunnel, bridge, canopy, corridor or other passage-way, or through a shared below-grade connection such as a service tunnel, foundation, footing or a parking facility.

- (4) For the purpose of interpreting the definition of "existing industrial building" herein, regard shall be had to the classification of the lands in question pursuant to the *Assessment Act*, R.S.O. 1990, c. A.31 as amended or successor legislation and in particular:
- (a) whether the lands fall within a tax class such that taxes on the lands are payable at the industrial tax rate; and
 - (b) whether more than fifty percent (50%) of the gross area of the building has an industrial property code for assessment purposes.

LOCAL SERVICE INSTALLATION

21. Nothing in this By-law prevents Council from requiring, as a condition of an agreement under section 51 or section 53 of the *Planning Act*, that the Owner, at his or her own expense, install or pay for such local services, within the plan of subdivision or within the area to which the plan relates, as Council may require.

SERVICES IN LIEU

22. (1) Council may authorize an owner, through an agreement under Section 38 of the Act, to substitute such part of the development charge applicable to the owner's development as may be specified in the agreement, by the provision at the sole expense of the owner, of services in lieu. Such agreement shall further specify that where the owner provides services in lieu in accordance with the agreement, Council shall give to the owner a credit against the development charge in accordance with the provisions of the agreement and the provisions of Section 39 of the Act, equal to the reasonable cost to the owner of providing the services in lieu. In no case shall the agreement provide for a credit that exceeds the total development charge payable by an owner to the Municipality in respect of the development to which the agreement relates.
- (2) In any agreement under subsection (1) Council may also give a further credit to the owner equal to the reasonable cost of providing services in addition to, or of a greater size or capacity, than would be required under this By-law.
- (3) The credit provided for in subsection (2) shall not be charged to any development charge reserve fund.

RULES WITH RESPECT TO REDEVELOPMENT

23. (1) Despite any other provision of this By-Law, where as a result of the redevelopment of land, a building existing on the same land has been demolished in order to facilitate redevelopment, the development charges otherwise payable with respect to such redevelopment shall be reduced by the following amounts:
- (a) in the case of a residential building, or in the case of a mixed-use building, the residential uses in the mixed-use building, an amount calculated by multiplying the applicable development charge under Section 15 of this By-law by the number, according to type, of the dwelling units that have been or will be demolished; and
 - (b) in the case of a non-residential building, or in the case of a mixed-use building, the non-residential uses in the mixed-use building, an amount calculated by multiplying the applicable development charge under Section 16 of this By-law by the gross floor area that has been or will be demolished.
- (2) The amount of any reduction permitted under clauses (1)(a) and (b) above of this By-law shall not exceed, in total, the amount of the development charges otherwise payable with respect to the redevelopment.
- (3) Despite clauses (1)(a) and (b) above, any reduction applicable thereunder shall only apply where a building permit for the redevelopment has been issued within five (5) years of the date of the issuance of a permit for the demolition of any building on the same lands.
- (4) No reduction is available if the existing land use is otherwise exempt under this By-law.

TIMING OF CALCULATION AND PAYMENT

24. (1) Development charges under this By-law shall be calculated as of, and be payable, at the time of execution of a subdivision agreement under section 51 of the *Planning Act* or an agreement entered into as a condition of consent under section 53 of the *Planning Act*, subject to any applicable exemptions or reductions under this By-law and calculated as follows:
- (a) in the case of a development for residential uses, or the residential use portion of a mixed-use development, based upon:
 - (i) the proposed number and type of dwelling units; and
 - (ii) with respect to blocks intended for future development, the maximum number of dwelling units permitted under the then applicable zoning; and

- (b) in the case of development for non-residential uses, or the non-residential use portion of a mixed-use development, based upon:
 - (i) the actual gross floor area proposed to be constructed; or
 - (ii) if the actual gross floor area is not specified for the development, the gross floor area shall be deemed to be 25 percent of the related land area.

- (2) If at the time of issuance of building permit or permits related to a plan of subdivision for which payments have been made pursuant to subsection (1) above:
 - (a) the actual total number and type of dwelling units for which building permits have been and are being issued are greater than that used for the calculation and payment referred to in subsection (1) above, an additional payment shall, be required which additional payment shall be calculated by multiplying the additional number and type of dwelling units by the applicable amount in Schedule "E" to this By-law, based on the geographic location of the dwelling units and adjusted to the date of payment by indexing as provided in section 27 of this By-law;
 - (i) for the purpose of this subsection, the additional number and type of dwelling units is the difference between the number and type of dwelling units for which building permits have been and are being issued and the number and type of dwelling units for which payments have been made pursuant to subsection (1) above;

 - (b) the actual total non-residential gross floor area for which building permits have been and are being issued is greater than that used for the calculation and payment referred to in subsection (1) above, an additional payment shall be required which additional payment shall be calculated by multiplying the additional non-residential gross floor by the applicable amount in Schedule "E" to this By-law, based on the geographic location of the building containing the non-residential gross floor area and adjusted to the date of payment by indexing as provided in section 27 of this By-law;
 - (ii) for the purpose of this subsection, the additional non-residential gross floor is the difference between the total non-residential gross floor area for which building permits have been and are being issued and the total non-residential gross floor area, for which payments have been made pursuant to subsection (1) above;

- (c) the actual total number and type of dwelling units for which building permits have been and are being issued is less than that used for the calculation and payment referred to in subsection (1) above, a refund shall become payable by the Town to the person who originally made the payment which refund shall be calculated by multiplying the applicable amount of the development charges in Schedule "E" to this By-law based on the geographic location of the dwelling units by the difference between the number and type of dwelling units for which payments were made pursuant to subsection (1) above and the number and type of dwelling units for which building permits were issued; and
 - (d) the actual total non-residential gross floor area for which building permits have been and are being issued is less than that used for the calculation and payment referred to in subsection (1) above, a refund shall become payable by the Town to the person who originally made the payment which refund shall be calculated by multiplying the applicable amount of the development charges in Schedule "E" to this By-law based on the geographic location of the building containing the non-residential gross floor area in effect at the time of such payments were made by the difference between the total non-residential gross floor area for which payments were made pursuant to subsection (1) above and the total non-residential gross floor area for which building permits were issued.
- (3) Subsection (2) above applies with necessary modifications to a development for which development charges have been paid pursuant to a condition of consent or to an agreement respecting same.
 - (4) If the development to which this By-law applies does not require a plan of subdivision under section 51 of the *Planning Act* or a consent under section 53 of the *Planning Act*, or if a plan of subdivision has already received approval as of the date this By-law comes into force and effect pursuant to section 34 of this By-law, then the development charges hereunder shall be calculated as of, and shall be payable on, the date the first building permit is issued for a development to which the development charges hereunder apply.

RESERVE FUNDS

- 25. (1) Monies received from payment of development charges pursuant to this By-law shall be maintained in three (3) separate reserve funds as follows: roads and related water and wastewater services.
- (2) Monies received for the payment of development charges shall be used only in accordance with the provisions of Section 35 of the Act.

- (3) Council directs the Treasurer to divide the reserve funds created hereunder into separate subaccounts in accordance with the service sub-categories set out in Schedule "D" to this By-law to which the development charge payments shall be credited in accordance with the amounts shown, plus interest earned thereon.
- (4) Where any development charge, or part thereof, remains unpaid after the due date, the amount unpaid shall be added to the tax roll and shall be collected as taxes.
- (5) Where any unpaid development charges are collected as taxes under subsection (4), the monies so collected shall be credited to the development charge reserve funds referred to in subsection (2).
- (6) The Treasurer shall, in each year commencing in 2013 for the 2012 year, furnish to Council a statement in respect of the reserve funds established hereunder for the prior year, containing the information set out in Section 12 of O.Reg. 82/98, as may be amended or any successor to such regulation.

BY-LAW AMENDMENT OR APPEAL

26. (1) Where this By-law or any development charge prescribed thereunder is amended or repealed either by order of the Ontario Municipal Board or by resolution of Council, the Treasurer shall calculate forthwith the amount of any overpayment to be refunded as a result of said amendment or repeal.
- (2) Refunds that are required to be paid under subsection (1) shall be paid with interest to be calculated as follows:
 - (a) interest shall be calculated from the date on which the overpayment was collected to the date on which the refund is paid;
 - (b) the Bank of Canada interest rate in effect on the date this By-law comes into force and effect pursuant to section 33 of this By-law shall be used; and
 - (c) refunds that are required to be paid under subsection (1) shall include the interest owed under this section.

BY-LAW INDEXING

27. The development charges set out in Schedule "E" to this By-law shall be adjusted annually commencing January 1, 2013, without amendment to the By-law, in accordance with the most recent twelve (12) month change in the Statistics Canada Quarterly, "*Construction Price Statistics*" catalogue 62-007.

SEVERABILITY

28. In the event any provision, or part thereof, of this By-law is found by a court of competent jurisdiction to be *ultra vires*, such provision, or part thereof, shall be deemed to be severed, and the remaining portion of such provision and all other provisions of this By-law shall remain in full force and effect.

HEADINGS FOR REFERENCE ONLY

29. The headings inserted in this By-law are for convenience of reference only and shall not affect the construction or interpretation of this By-law.

BY-LAW REGISTRATION

30. A certified copy of this By-law may be registered on title to any land to which this By-law applies.

BY-LAW ADMINISTRATION

31. This By-law shall be administered by the Treasurer.

SCHEDULES

32. The following Schedules to this By-law form an integral part of this By-law:

Schedule "A"	Map of the Bond Head Settlement Area (OPA 16)
Schedule "B"	Map of the Bradford Settlement Area
Schedule "C"	Map of the BWG Strategic Settlement Employment Area (OPA 15)
Schedule "D"	Designated Municipal Services
Schedule "E"	Residential and Non-residential Development Charges for Roads, Water Studies, Treatment and Distribution and Wastewater Studies, Treatment and Collection

DATE BY-LAW EFFECTIVE

33. This By-law shall come into force and effect on the date it is enacted.

SHORT TITLE

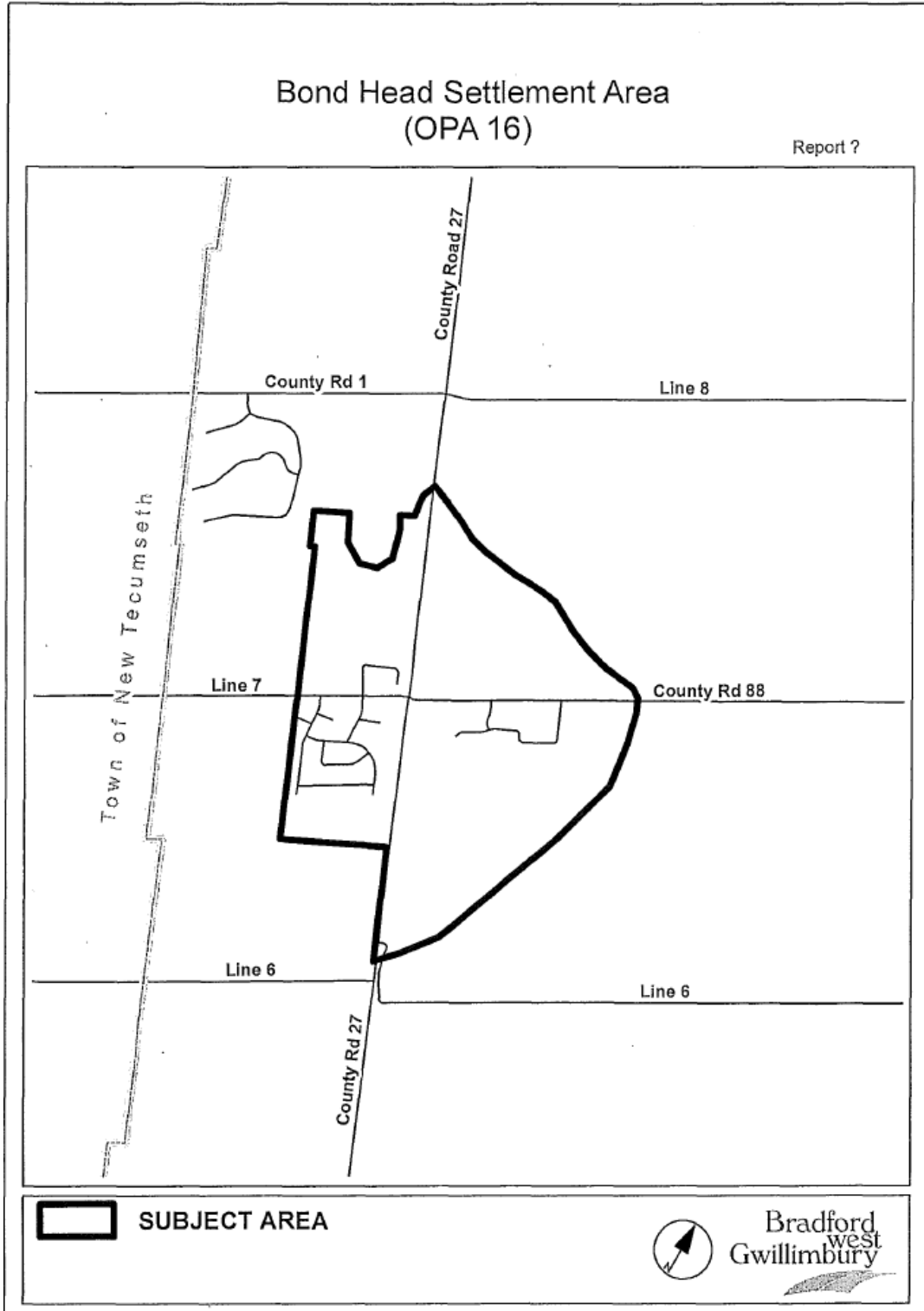
34. This By-law may be cited as the Town of Bradford West Gwillimbury "Water, Wastewater and Roads Development Charges By-law."

Enacted this _th day of March, 2018

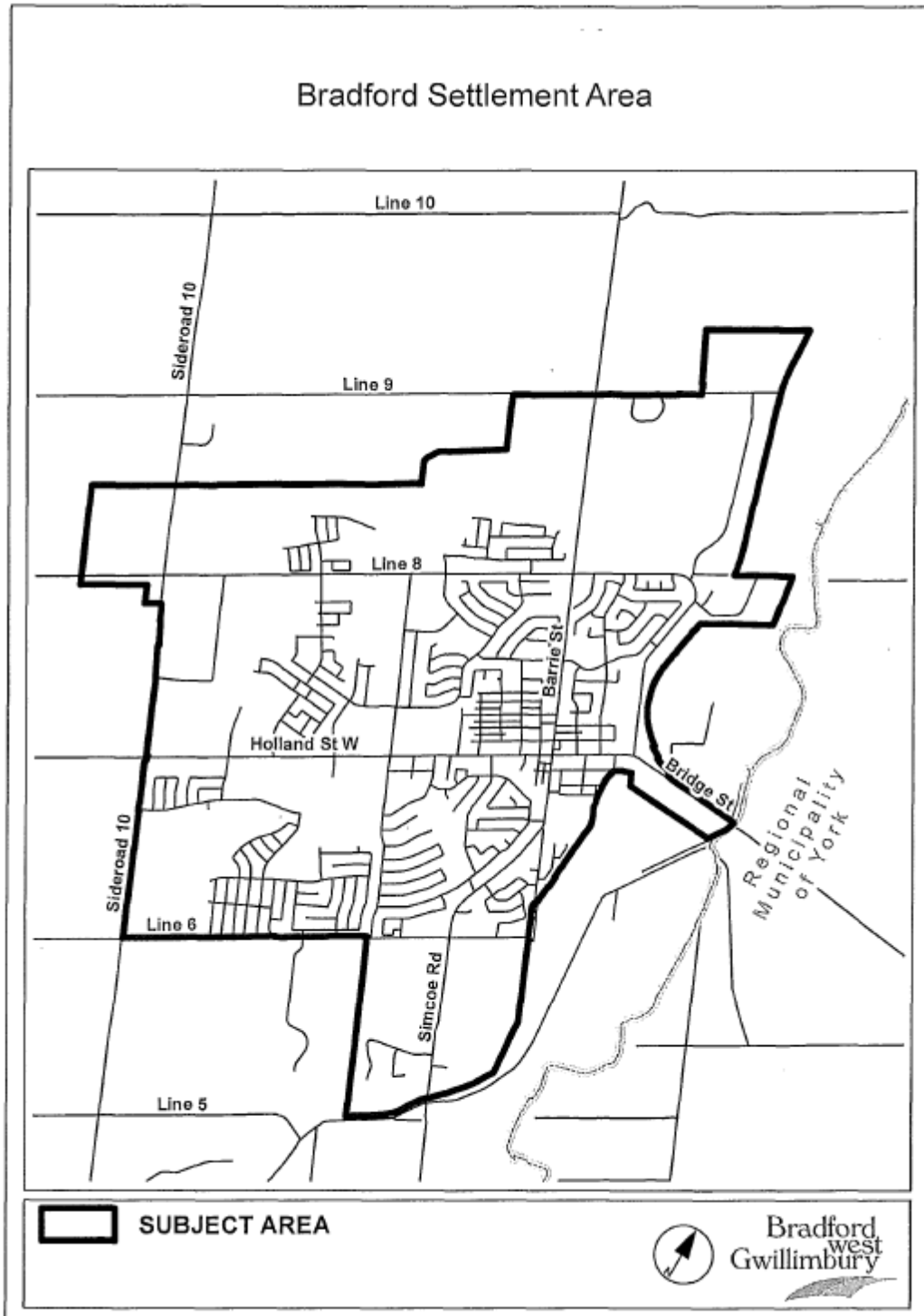
Clerk

Mayor

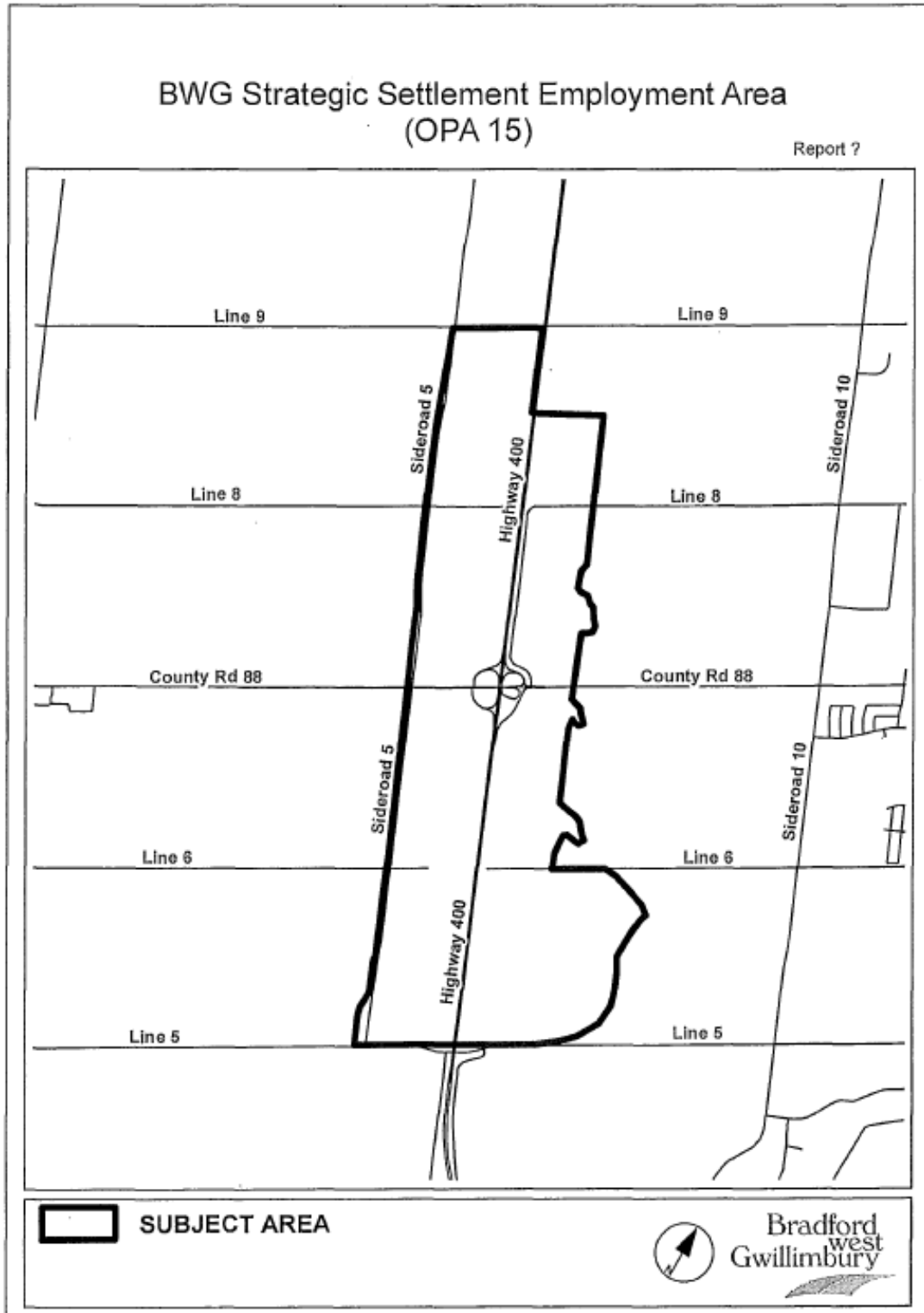
SCHEDULE "A"
BY-LAW 2018 - __
MAP OF THE BOND HEAD SETTLEMENT AREA (OPA 16)



SCHEDULE "B"
BY-LAW 2018 - __
MAP OF THE BRADFORD SETTLEMENT AREA



SCHEDULE "C"
BY-LAW 2018 - __
MAP OF THE BWG STRATEGIC SETTLEMENT EMPLOYMENT AREA
(OPA 15)



SCHEDULE "D"
BY-LAW 2018-__
DESIGNATED MUNICIPAL SERVICES UNDER THIS BY-LAW

Municipal Wide Services:

Roads

Urban Services:

Water Studies

Wastewater Studies

Bradford Settlement Area:

Water Treatment

Water Distribution

Wastewater Treatment

Wastewater Collection

Bond Head Settlement Area (OPA 16) & BWG Strategic Settlement Employment Area (OPA 15):

Water Treatment

Water Distribution

Wastewater Treatment

Wastewater Collection

SCHEDULE "E"
BY-LAW 2018 - __
RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES FOR ROADS, WATER TREATMENT AND DISTRIBUTION
AND WASTEWATER TREATMENT AND COLLECTION SERVICES

Service	RESIDENTIAL				NON-RESIDENTIAL
	Single and Semi-Detached Dwelling	Apartments - 2 Bedrooms +	Apartments - Bachelor and 1 Bedroom	Other Multiples	(per ft ² of Gross Floor Area)
Municipal Wide Services:					
Roads (not including roads related)	\$17,514	\$8,884	\$6,346	\$12,387	\$6.12
Total Municipal Wide Services	\$17,514	\$8,884	\$6,346	\$12,387	\$6.12
Urban Services					
Water:					
Studies - All Urban Areas	80	41	29	57	0.02
Treatment & Distribution (Bradford Settlement Area)	6,610	3,353	2,395	4,675	3.78
Treatment & Distribution (Bond Head Settlement Area & BWG Strategic Settlement Employment Area)	15,192	7,706	5,504	10,744	4.88
Wastewater:					
Studies - All Urban Areas	60	30	22	42	0.02
Treatment (Bradford Settlement Area)	4,526	2,296	1,640	3,201	3.08
Treatment (Bond Head Settlement Area & BWG Strategic Settlement Employment Areas)	4,138	2,099	1,499	2,926	1.03
Collection (Bradford Settlement Area)	3,377	1,713	1,224	2,389	3.14
Collection (Bond Head Settlement Area & BWG Strategic Settlement Employment Areas)	22,075	11,198	7,998	15,613	3.97
GRAND TOTAL RURAL AREA	\$17,514	\$8,884	\$6,346	\$12,387	\$6.12
GRAND TOTAL URBAN AREA - BRADFORD SETTLEMENT AREA	\$32,167	\$16,317	\$11,656	\$22,751	\$16.16
GRAND TOTAL URBAN AREA - BOND HEAD SETTLEMENT AREA & BWG STRATEGIC SETTLEMENT EMPLOYMENT AREA	\$59,059	\$29,958	\$21,398	\$41,769	\$16.04