

# Municipality of Bluewater Development Charge Background Study



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 Planning for growth

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## **List of Acronyms and Abbreviations**

|              |   |
|--------------|---|
| D.C.         | Development Charge                                      |
| D.C.A.       | Development Charges Act                                 |
| E.A.         | Environmental Assessment                                |
| E.S.A.       | Environmentally Sensitive Areas                         |
| G.F.A.       | Gross floor area  |
| I.S.D.       | Investigative Services Division                         |
| M.T.O.       | Ministry of Transportation Ontario                      |
| N.F.P.O.W.   | No Fixed Place of Work                                  |
| O.M.A.F.R.A. | Ontario Ministry of Agriculture, Food and Rural Affairs |
| O.M.B.       | Ontario Municipal Board                                 |
| O.P.A.       | Official Plan Amendment                                 |
| O.Reg.       | Ontario Regulation                                      |
| P.O.A.       | Provincial Offences Act                                 |
| P.P.U.       | Persons per unit  |
| S.D.E.       | Single detached equivalent                              |
| S.D.U.       | Single detached unit                                    |
| s.s.         | Subsection  |
| S.W.M.       | Sewer/water management                                  |
| sq.ft.       | Square footage  |

# Executive Summary

1. The report provided herein represents the Development Charge Background Study for the Municipality of Bluewater required by the *Development Charges Act* (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 – Summary of the residential and non-residential growth forecasts for the Municipality;
  - Chapter 3 – Approach to calculating the development charge;
  - Chapter 4 – Review of historic service standards and identification of future capital requirements to service growth and related deductions and allocations;
  - Chapter 5 – Calculation of the development charges;
  - Chapter 6 – Development charge policy recommendations and rules; and
  - Chapter 7 – By-law implementation.
  
2. Development charges provide for the recovery of growth-related capital expenditures from new development. The *Development Charges Act* is the statutory basis to recover these charges. The methodology is detailed in Chapter 3; 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. The growth forecast (Chapter 2) on which the Municipal-wide development charge is based, projects the following population, housing and non-residential floor area for the 10-year (2016-2025) and 20-year (2016-2035) periods.

| Measure  | 10 Year   | 20 Year   |
|--|-----------|-----------|
|  | 2016-2025 | 2016-2035 |
| (Net) Population Increase                                    | 777       | 1,443     |
| Residential Unit Increase                                    | 402       | 755       |
| Non-Residential Gross Floor Area Increase (ft <sup>2</sup> ) | 157,300   | 348,500   |

Source: Watson & Associates Economists Ltd. Forecast 2016

4. The growth forecast (Chapter 2) on which the water and wastewater area-specific charges are based, projects the following population, housing, and non-residential floor area for each area's respective buildout forecast.

| Measure  | Urban Build Out<br>Bayfield &<br>Bluewater-<br>Lakeshore<br>Water | Urban Build Out<br>Hensall Water | Urban Build Out<br>Zurich Water | Urban Build Out<br>Bayfield<br>Wastewater | Urban Build Out<br>Hensall<br>Wastewater | Urban Build Out<br>Zurich<br>Wastewater |
|--|---|----------------------------------|---------------------------------|---|--|---|
|  | (Net) Population Increase   | 1,049                            | 402                             | 115                                       | 519                                      | 402                                     |
| Residential Unit Increase                                    | 211   | 192                              | 64                              | 258                                       | 192                                      | 64                                      |
| Non-Residential Gross Floor Area Increase (ft <sup>2</sup> ) | 143,400   | 205,000                          | -                               | 143,400                                   | 205,000                                  | -                                       |

Source: Watson & Associates Economists Ltd. Forecast 2016

5. The Municipality of Bluewater does not currently have a development charge by-law in place. The Municipality is undertaking a development charge public process and anticipates passing a new by-law in February, 2017. The mandatory public meeting is scheduled for January 23, 2017.
6. The *Development Charges Act* 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 5-5. A summary of these costs is provided below:

|   |                   |
|---|-------------------|
| Total gross expenditures planned over the next five years | \$ 446,100        |
| Less:   |                   |
| Benefit to existing development                           | \$ 146,250        |
| Post planning period benefit                              | \$ -              |
| Ineligible re: Level of Service                           | \$ -              |
| Mandatory 10% deduction for certain services              | \$ 17,808         |
| Grants, subsidies and other contributions                 | \$ -              |
| <b>Net Costs to be recovered from development charges</b> | <b>\$ 282,042</b> |

Hence, \$0.16 million (or an annual amount of \$33,000) will need to be contributed from taxes and rates, or other sources.

Based on the above table, Bluewater plans to spend \$0.45 million over the next five years, of which \$0.28 million (63%) is recoverable from development charges. Of this net amount, \$0.24 million is recoverable from residential development and \$0.04 million from non-residential development. It is noted also that any exemptions or reductions in the charges would reduce this recovery further.

7. 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 on a capacity basis:

- Wastewater Services; and
- Water Services.

The following services are calculated based on a 20-year forecast:

- Services Related to a Highway; and
- Fire Protection Services.

All other services are calculated based on a 10-year forecast. These include:

- Outdoor Recreation Services;
- Waste Diversion Services; and
- Administration Studies;

Bayfield wastewater, Hensall water & wastewater, and Zurich wastewater are provided on an area-specific basis.

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 the use of area rating;
- 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**

| Service                              | RESIDENTIAL                       |                           |                                     |                 | NON-RESIDENTIAL                           |               |
|--------------------------------------|-----------------------------------|---------------------------|-------------------------------------|-----------------|---|---------------|
|                                      | Single and Semi-Detached Dwelling | Apartments - 2 Bedrooms + | Apartments - Bachelor and 1 Bedroom | Other Multiples | (per ft <sup>2</sup> of Gross Floor Area) | Wind Turbines |
| <b>Municipal Wide Services:</b>      |                                   |                           |                                     |                 |   |               |
| Services Related to a Highway        | 838                               | 617                       | 401                                 | 666             | 0.48                                      | 838           |
| Outdoor Recreation Services          | 672                               | 494                       | 322                                 | 533             | 0.09                                      | -             |
| Administration                       | 387                               | 285                       | 185                                 | 307             | 0.25                                      | 387           |
| Waste Diversion                      | 21                                | 15                        | 10                                  | 17              | 0.01                                      | -             |
| <b>Total Municipal Wide Services</b> | <b>1,918</b>                      | <b>1,411</b>              | <b>918</b>                          | <b>1,523</b>    | <b>0.83</b>                               | <b>1,225</b>  |
| <b>Urban Services</b>                |                                   |                           |                                     |                 |   |               |
| Wastewater                           |                                   |                           |                                     |                 |   |               |
| Bayfield                             | 7,320                             | 5,398                     | 3,510                               | 5,811           | 1.26                                      | -             |
| Hensall                              | 3,034                             | 2,237                     | 1,455                               | 2,409           | 0.16                                      | -             |
| Zurich                               | 6,481                             | 4,779                     | 3,108                               | 5,145           | 0.00                                      | -             |
| Water                                |                                   |                           |                                     |                 |   |               |
| Hensall                              | 2,495                             | 1,840                     | 1,196                               | 1,981           | 0.13                                      | -             |
| GRAND TOTAL RURAL AREA               | 1,918                             | 1,411                     | 918                                 | 1,523           | 0.83                                      | 1,225         |
| GRAND TOTAL BAYFIELD AREA            | 9,239                             | 6,794                     | 4,422                               | 7,334           | 2.09                                      | 1,225         |
| GRAND TOTAL HENSALL AREA             | 7,447                             | 5,477                     | 3,564                               | 5,912           | 1.12                                      | 1,225         |
| GRAND TOTAL ZURICH AREA              | 8,400                             | 6,177                     | 4,020                               | 6,668           | 0.83                                      | 1,225         |

# 1. Introduction

## 1.1 Purpose of this Document

This background study has been prepared pursuant to the requirements of the *Development Charges Act, 1997* (s.10) and, accordingly, recommends new development charges and policies for the Municipality of Bluewater.

The Municipality retained Watson & Associates Economists Ltd. (Watson), to undertake the development charges (D.C.) study process throughout 2015 and 2016. Watson worked with municipal staff in preparing the D.C. analysis and policy recommendations.

This development charge background study, containing the proposed development charge 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 Municipality's development charge background study, as summarized in Chapter 3. It also addresses the requirement for "rules" (contained in Chapter 6) 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 3) 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 7) 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 development charge is provided herein.

## 1.2 Summary of the Process

The public meeting required under Section 12 of the *Development Charges Act, 1997*, is scheduled for January 23, 2017. 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 development charges.

In accordance with the legislation, the background study and proposed D.C. by-law will be available for public review on December 19, 2016.

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 development charge by-law adoption process.

**Figure 1-1  
Schedule of Key Development Charge Process Dates for the Municipality of  
Bluewater**

|   |                                |
|---|--------------------------------|
| 1. Data collection, staff review, engineering work, D.C. calculations and policy work | January – December 2016        |
| 2. Background study and proposed by-law available to public                           | December 19, 2016              |
| 3. Public meeting advertisement placed in newspaper(s)                                | No later than January 8, 2017  |
| 4. Council Workshop   | January 12, 2017               |
| 5. Public meeting of Council  | January 23, 2017               |
| 6. Council considers adoption of background study and passage of by-law               | Not before February 18, 2017   |
| 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. Municipality makes pamphlet available (where by-law not appealed)                  | By 60 days after in force date |

### **1.3 Changes to the Development Charges Act: 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 Municipality is in compliance with the D.C.A., as amended. The following provides an explanation of the

changes to the Act that affect the Municipality's D.C. 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, 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 December 19, 2016 to ensure the new requirements for release of the study is met.

#### ***1.3.4 Timing of Collection of Development Charges***

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. 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 Municipality 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. The changes to transit do not impact the Municipality, however, waste diversion has been included as a service in the D.C.

## **2. Anticipated Development in the Municipality of Bluewater**

### **2.1 Requirement of the Act**

Chapter 3 provides the methodology for calculating a development charge as per the Development Charges Act, 1997. Figure 3-1 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 Municipality of Bluewater will be required to provide services, over a 10-year and longer term time horizon.

### **2.2 Basis of Population, Household and Non-Residential Gross Floor Area Forecast**

The D.C. growth forecast has been derived from the Huron County Official Plan, 2015. In compiling the growth forecast, the following information sources were also relied upon to help assess residential and non-residential development potential for the Municipality over the forecast period; including:

- Water/Waste Water Reserve Capacity Memo, BM Ross and Associates Ltd. March 2016;
- Huron County Employment Lands Strategy, Final Report, Nov 2015
- 2001, 2006, and 2011 Census Data;
- A review of historical residential and non-residential activity; and

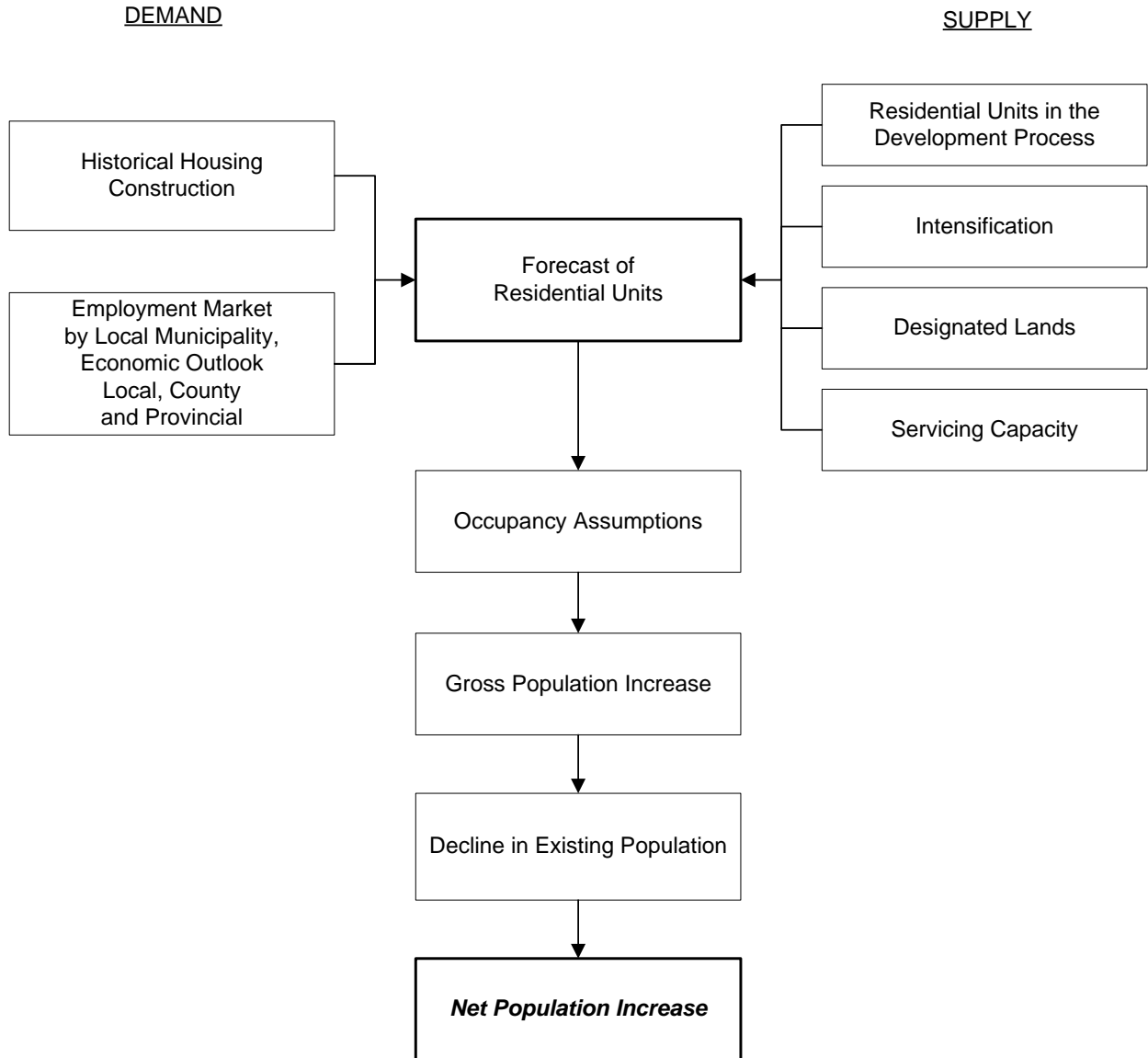
Discussions with Municipal staff regarding the anticipated residential and non-residential development trends.

### **2.3 Summary of Growth Forecast**

A detailed analysis of the residential and non-residential growth forecasts is provided in Appendix A. The discussion provided herein summarizes the anticipated growth for the Municipality and describes the basis for the forecast. The results of the residential

growth forecast analysis are summarized in Figure 2-1 below, and Schedule 1 in Appendix A.

**Figure 2-1**  
**Household Formation-based Population and Household Projection Model**





As identified in Table 2-1 and Schedule 1 of Appendix A, the Municipality's population is anticipated to reach approximately 7,905 by 2026 and 8,570 by 2036. This represents an increase of 775 persons and 1,445 persons, respectively, over the 10-year and 20-year forecast periods. The population forecast summarized herein from Table 2-1 (Appendix A, 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 Bluewater, 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 Bluewater D.C. growth forecast.

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

- The unit mix for the Municipality was derived from historical development activity (as per Schedule 6) and discussions with planning staff regarding anticipated development trends for the Municipality.
- Based on the above, the long-term (2016-2036) household growth forecast is comprised of a housing unit mix of approximately 72% low density (single detached and semi-detached), 25% medium density (multiples except apartments) and 3% high density (bachelor, 1 bedroom and 2+ bedroom apartments).

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

- *Schedule 2* summarizes the anticipated amount, type and location of development for the Municipality of Bluewater by development location. The percentage of forecast housing growth between 2016 and 2036 by settlement area and remaining rural area is summarized below.

|                               |     |
|-------------------------------|-----|
| ○ Bayfield (Water/Wastewater) | 34% |
| ○ Bluewater Lakeshore         | 28% |
| ○ Hensall                     | 26% |
| ○ Zurich                      | 9%  |
| ○ Rural                       | 3%  |

**Table 2-1**  
**Municipality of Bluewater**  
**Residential Growth Forecast Summary**

| Year        |                                | Permanent Population <sup>1</sup> | Permanent Population (Including Census Undercount) | Housing Units           |                        |                         |            |            | Permanent Person Per Unit (PPU) |
|-------------|--------------------------------|-----------------------------------|--|-------------------------|------------------------|-------------------------|------------|------------|---------------------------------|
|             |                                |                                   |  | Singles & Semi-Detached | Multiples <sup>2</sup> | Apartments <sup>3</sup> | Other      | Total      |                                 |
| Historical  | <i>Mid 2006</i>                | 7,120                             | 7,405  | 2,515                   | 0                      | 245                     | 10         | 2,770      | 2.57                            |
|             | <i>Mid 2011</i>                | 7,044                             | 7,326  | 2,480                   | 105                    | 200                     | 40         | 2,825      | 2.49                            |
| Forecast    | <i>Early 2016</i>              | 7,127                             | 7,412  | 2,575                   | 122                    | 213                     | 40         | 2,950      | 2.42                            |
|             | <i>Early 2021</i>              | 7,430                             | 7,727  | 2,730                   | 142                    | 217                     | 40         | 3,129      | 2.37                            |
|             | <i>Early 2026</i>              | 7,904                             | 8,221  | 2,888                   | 199                    | 225                     | 40         | 3,352      | 2.36                            |
|             | <i>Early 2031</i>              | 8,301                             | 8,633  | 3,024                   | 258                    | 234                     | 40         | 3,556      | 2.33                            |
|             | <i>Early 2036</i>              | 8,570                             | 8,913  | 3,117                   | 307                    | 241                     | 40         | 3,705      | 2.31                            |
| Incremental | <b>Mid 2001 - Mid 2006</b>     | <b>201</b>                        | <b>209</b>   | <b>210</b>              | <b>-60</b>             | <b>90</b>               | <b>-60</b> | <b>180</b> |                                 |
|             | <b>Mid 2006 - Mid 2011</b>     | <b>-76</b>                        | <b>-79</b>   | <b>-35</b>              | <b>105</b>             | <b>-45</b>              | <b>30</b>  | <b>55</b>  |                                 |
|             | <b>Mid 2011 - Early 2016</b>   | <b>83</b>                         | <b>86</b>  | <b>95</b>               | <b>17</b>              | <b>13</b>               | <b>0</b>   | <b>125</b> |                                 |
|             | <b>Early 2016 - Early 2021</b> | <b>303</b>                        | <b>315</b>   | <b>155</b>              | <b>20</b>              | <b>4</b>                | <b>0</b>   | <b>179</b> |                                 |
|             | <b>Early 2016 - Early 2026</b> | <b>777</b>                        | <b>809</b>   | <b>313</b>              | <b>77</b>              | <b>12</b>               | <b>0</b>   | <b>402</b> |                                 |
|             | <b>Early 2016 - Early 2031</b> | <b>1,174</b>                      | <b>1,221</b>                                       | <b>449</b>              | <b>136</b>             | <b>21</b>               | <b>0</b>   | <b>606</b> |                                 |
|             | <b>Early 2016 - Early 2036</b> | <b>1,443</b>                      | <b>1,501</b>                                       | <b>542</b>              | <b>185</b>             | <b>28</b>               | <b>0</b>   | <b>755</b> |                                 |

Source: Watson & Associates Economists Ltd., 2015.

1. Population excludes net Census Undercount of approximately 4%.
2. Includes townhomes and apartments in duplexes.
3. Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

### 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 and fire services utilize a longer forecast period.

### 4. Population in New Units (Appendix A - Schedules 2 through 7)

- The number of housing units to be constructed in the Municipality of Bluewater during the short-term and long-term periods is presented on Figure 2-2. Over the long term forecast period, the Municipality is anticipated to average 38 new housing units per year.
- Population in new units is derived from Schedules 3, 4, and 5, which incorporate historical development activity, anticipated units (see unit mix discussion) and average persons per unit by dwelling type for new units.
- Schedule 7 summarizes the average number of persons per unit (P.P.U.) for the new housing units by age and type of dwelling, based on 2011 custom Census data for the Municipality of Bluewater. Due to data limitation, medium and high-density P.P.U.'s were derived based on Huron County data. The 15-year average P.P.U.'s by dwelling type are as follows:
  - Low density: 2.57
  - Medium density: 2.04
  - High density: 1.67

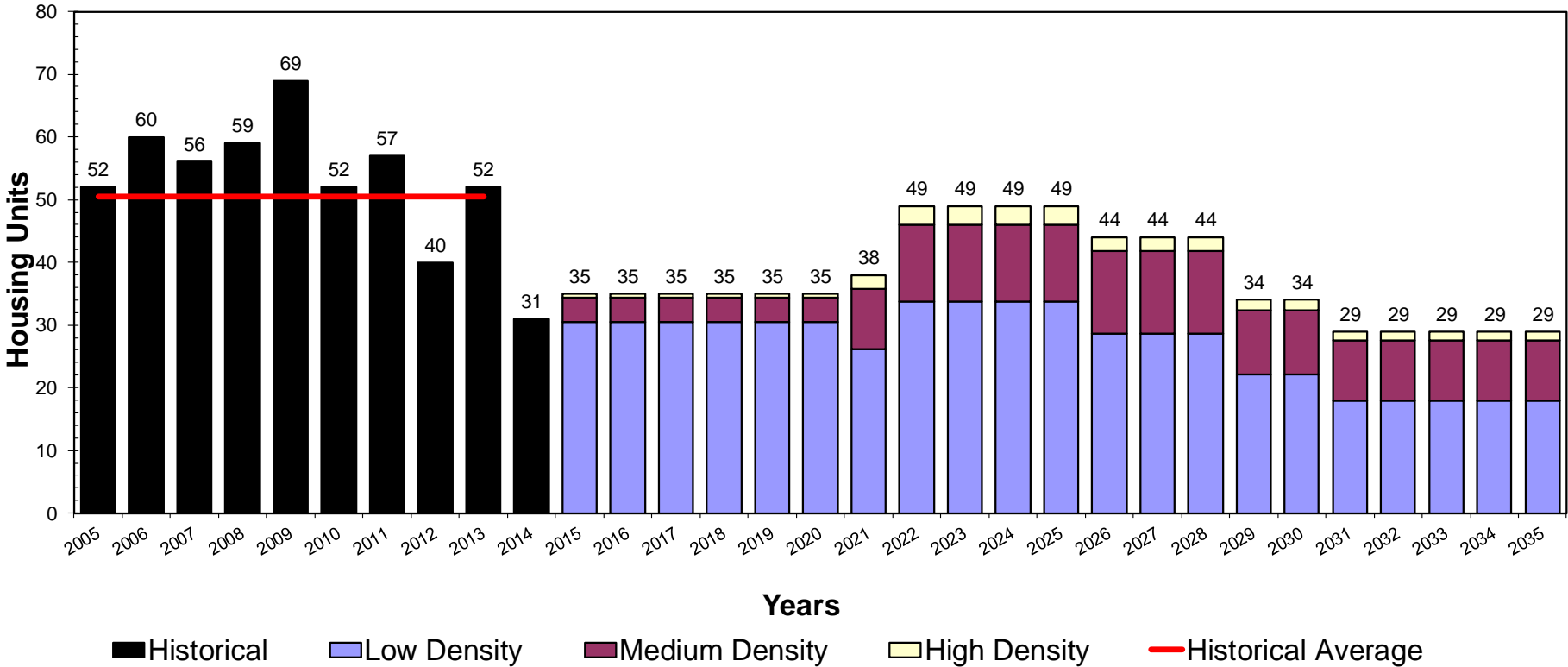
### 5. Existing Units and Population Change (Appendix A - Schedules 2, 3, 4, and 5)

- Existing households as of 2016 are based on the 2011 Census households, plus estimated residential units constructed between 2011 and 2016, assuming a 6-month lag between construction and occupancy (see Schedule 2).

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 2016 to 2036 forecast period is estimated at approximately 372.

Figure 2-2

ANNUAL HOUSING FORECAST<sup>1</sup>



Source: Historical housing activity (2005-2014) based on Municipality of Bluewater building department permit data

## 6. Employment (Appendix A, Schedules 9a through 10)

- Employment projections are largely based on the activity rate method, which is defined as the number of jobs in the Municipality 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 Municipality's 2011<sup>1</sup> employment base by place of work is outlined in Schedule 9a. The 2011 employment base is comprised of the following sectors:
  - 350 primary (approx. 13%);
  - 410 work at home employment (approx. 15%);
  - 785 industrial (approx. 29%);
  - 671 commercial/population-related (approx. 24%); and
  - 525 institutional (approx. 19%).
- The 2011 employment base by usual place of work, including work at home, is approximately 2,740 jobs. This figure is anticipated to reach approximately 3,140 by 2026 and 3,380 by 2036.
- Schedule 9b, 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. Accordingly, work at home employees have been removed from the D.C.A. employment forecast and calculation.
- Total employment for the Municipality of Bluewater (excluding work at home employment) is anticipated to reach approximately 2,680 by 2026 and 2,880 by 2036. This represents an employment increase of 205 and 405 additional jobs over the 10-year and 20-year forecast periods, respectively.

## 7. 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:<sup>2</sup>
  - 2,500 sq.ft. per employee for industrial;
  - 550 sq.ft. per employee for commercial/population-related; and

<sup>1</sup> 2011 Employment is based on Statistics Canada 2011 Places of Work Employment dataset.

<sup>2</sup> Based on Watson & Associates Economists Ltd. employment surveys.

- 700 sq.ft. per employee for institutional employment.
- The Municipal-wide incremental non-residential G.F.A. increase is anticipated to be approximately 157,300 sq.ft. over the 10-year forecast period and 348,500 sq.ft. over the 20-year forecast period.
- In terms of percentage growth, the long term incremental G.F.A. forecast by sector is broken down as follows:
  - industrial – approx. 54%;
  - commercial/population-related – approx. 24%; and
  - institutional – approx. 22%.

# **3. The Approach to Calculation of the Charge**

## **3.1 Introduction**

This chapter addresses the requirements of s.s.5(1) of the D.C.A., 1997 with respect to the establishment of the need for service which underpins the development charge calculation. These requirements are illustrated schematically in Figure 3-1.

## **3.2 Services Potentially Involved**

Table 3-1 lists the full range of municipal service categories which are provided within the Municipality.

A number of these services are defined in s.s.2(4) of the D.C.A., 1997 as being ineligible for inclusion in development charges. These are shown as “ineligible” on Table 3-1. 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 Municipality’s development charge are indicated with a “Yes.”

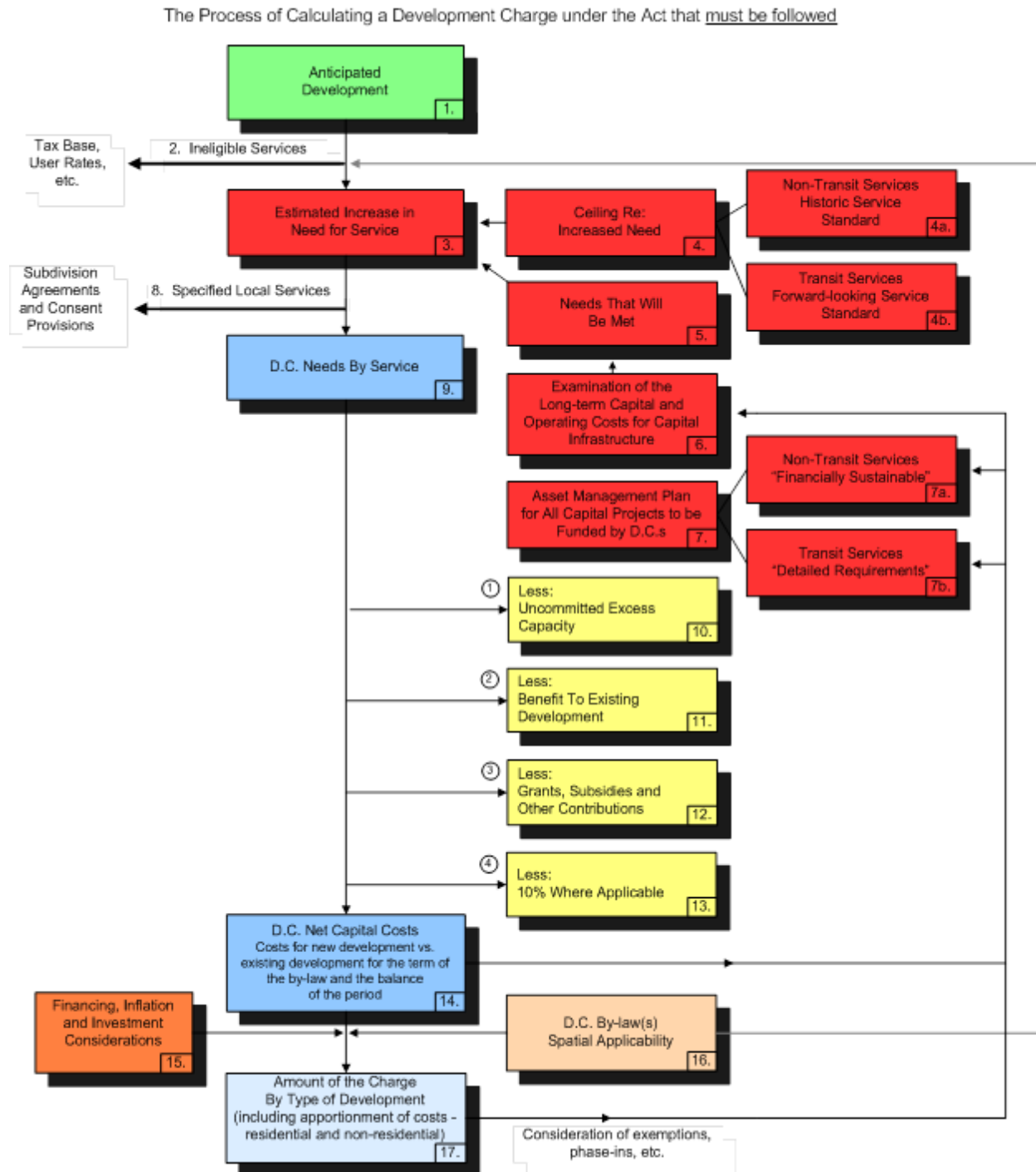
## **3.3 Increase in the Need for Service**

The development charge 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 Municipal 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.

## **3.4 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 3-1**  
**The Process of Calculating a Development Charge under the D.C.A., 1997, as amended**





**Table 3-1  
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            | Yes   | 1.1 Arterial roads                            | 100                               |
|   | Yes   | 1.2 Collector roads                           | 100                               |
|   | Yes   | 1.3 Bridges, Culverts and Roundabouts         | 100                               |
|   | No  |   | 0                                 |
|   | Yes   | 1.4 Local municipal roads                     | 100                               |
|   | Yes   | 1.5 Traffic signals                           | 100                               |
|   | No  | 1.6 Sidewalks and streetlights                | 100                               |
| 2. Other Transportation Services            |   | 1.7 Active Transportation                     |                                   |
|   | n/a   | 2.1 Transit vehicles & facilities             | 100                               |
|   | n/a   | 2.2 Other transit infrastructure              | 100                               |
|   | n/a   | 2.3 Municipal parking spaces - indoor         | 90                                |
|   | No  | 2.4 Municipal parking spaces - outdoor        | 90                                |
|   | Yes   | 2.5 Works Yards                               | 100                               |
|   | Yes   | 2.6 Rolling stock <sup>1</sup>                | 100                               |
|   | n/a   | 2.7 Ferries                                   | 90                                |
| n/a   | 2.8 Airport                                       | 90  |                                   |
| 3. Stormwater Drainage and Control Services | No  | 3.1 Main channels and drainage trunks         | 100                               |
|   | No  |   | 100                               |
|   | No  | 3.2 Channel connections                       | 100                               |
| 4. Fire Protection Services                 |   | 3.3 Retention/detention ponds                 |                                   |
|   | Yes   | 4.1 Fire stations                             | 100                               |
|   | Yes   | 4.2 Fire pumpers, aerials and rescue vehicles | 100                               |
|   | Yes   | 4.3 Small equipment and gear                  | 100                               |

<sup>1</sup>with 7+ year life time

\*same percentage as service component to which it pertains  
computer equipment excluded throughout

| Categories of Municipal Services  | Eligibility for Inclusion in the D.C. Calculation | Service Components   | Maximum Potential D.C. Recovery % |
|---|---|--|-----------------------------------|
| 5. Outdoor Recreation Services (i.e. Parks and Open Space)                            | Ineligible  | 5.1 Acquisition of land for parks, woodlots and E.S.A.s                                | 0                                 |
|   | Yes   | 5.2 Development of area municipal parks  | 90                                |
|   | Yes   | 5.3 Development of district parks  | 90                                |
|   | Yes   | 5.4 Development of municipal-wide parks  | 90                                |
|   | Yes   | 5.5 Development of special purpose parks   | 90                                |
|   | Yes   | 5.6 Parks rolling stock <sup>1</sup> and yards   | 90                                |
| 6. Indoor Recreation Services   | Yes   | 6.1 Arenas, indoor pools, fitness facilities, community centres, etc. (including land) | 90                                |
|   | No  | 6.2 Recreation vehicles and equipment <sup>1</sup>                                     | 90                                |
| 7. Library Services   | Yes   | 7.1 Public library space (incl. furniture and equipment)                               | 90                                |
|   | n/a   | 7.2 Library Vehicles <sup>1</sup>  | 90                                |
|   | n/a   | 7.3 Library materials  | 90                                |
| 8. Electrical Power Services  | Ineligible  | 8.1 Electrical substations   | 0                                 |
|   | Ineligible  | 8.2 Electrical distribution system   | 0                                 |
|   | Ineligible  | 8.3 Electrical system rolling stock <sup>1</sup>                                       | 0                                 |
| 9. Provision of Cultural, Entertainment and Tourism Facilities and Convention Centres | Ineligible  | 9.1 Cultural space (e.g. art galleries, museums and theatres)                          | 0                                 |
|   | Ineligible  | 9.2 Tourism facilities and convention centres  | 0                                 |
| 10. Waste-water Services  | Yes   | 10.1 Treatment plants  | 100                               |
|   | No  | 10.2 Sewage trunks   | 100                               |
|   | n/a   | 10.3 Local systems   | 0                                 |
|   | No  | 10.4 Vehicles and equipment  | 100                               |

<sup>1</sup>with 7+ year life time

| Categories of Municipal Services    | Eligibility for Inclusion in the D.C. Calculation | Service Components   | Maximum Potential D.C. Recovery % |
|-------------------------------------|---|--|-----------------------------------|
| 11. Water Supply Services           | Yes   | 11.1 Treatment plants, Pumping and Storage                           | 100                               |
|                                     | No  | 11.2 Distribution systems  | 100                               |
|                                     | n/a   | 11.3 Local systems   | 0                                 |
|                                     | No  | 11.4 Vehicles and equipment  | 100                               |
| 12. Waste Management Services       | Ineligible  | 12.1 Collection related to landfill, transfer vehicles and equipment | 0                                 |
|                                     | Ineligible  | 12.2 Landfills and other disposal facilities                         | 0                                 |
|                                     | NO  | 12.3 Waste diversion facilities and related vehicles                 | 90                                |
|                                     | Yes   | 12.4 Waste Diversion related vehicles                                | 90                                |
| 13. Police Services                 | n/a   | 13.1 Police detachments  | 100                               |
|                                     | n/a   | 13.2 Police rolling stock <sup>1</sup>                               | 100                               |
|                                     | n/a   | 13.3 Small equipment and gear  | 100                               |
| 14. Homes for the Aged              | n/a   | 14.1 Homes for the aged space  | 90                                |
| 15. Child Care                      | n/a   | 15.1 Child care space  | 90                                |
| 16. Health                          | n/a   | 16.1 Health department space   | 90                                |
|                                     | n/a   | 16.2 Health department vehicles <sup>1</sup>                         | 90                                |
| 17. Social Housing                  | n/a   | 17.1 Social Housing space  | 90                                |
| 18 Provincial Offences Act (P.O.A.) | n/a   | 18.1 P.O.A. space  | 90                                |
| 19. Social Services                 | n/a   | 19.1 Social service space  | 90                                |
| 20. Ambulance                       | n/a   | 20.1 Ambulance station space   | 90                                |
|                                     | n/a   | 20.2 Vehicles <sup>1</sup>   | 90                                |
| 21. Hospital Provision              | Ineligible  | 21.1 Hospital capital contributions                                  | 0                                 |

<sup>1</sup>with 7+ year life time

| Categories of Municipal Services  | Eligibility for Inclusion in the D.C. Calculation | Service Components  | Maximum Potential D.C. Recovery % |
|---|---|---|-----------------------------------|
| 22. Provision of Head-quarters for the General Administration of Municipalities and Area Municipal Boards | Ineligible<br>Ineligible<br>Ineligible            | 22.1 Office space<br>22.2 Office furniture<br>22.3 Computer equipment   | 0<br>0<br>0                       |
| 23. Other Services  | Yes   | 23.1 Studies in connection with acquiring buildings, rolling stock, materials and equipment, and improving land <sup>2</sup> and facilities, including the D.C. background study cost | 0-100                             |
|   | Yes   | 23.2 Interest on money borrowed to pay for growth-related capital   | 0-100                             |

<sup>1</sup>with a 7+ year life time

<sup>2</sup>same 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. |
| n/a   | Municipality does not provide the service.   |
| Ineligible  | Service is ineligible for inclusion in the D.C. calculation.                               |

### 3.5 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 development charge background study.

In order for an increase in need for service to be included in the D.C. calculation, 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 Municipality's approved and proposed capital budgets and master servicing/needs studies.

### **3.6 Treatment of Credits**

Section 8 para. 5 of O.Reg. 82/98 indicates that a development charge 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 development charges," if the credit pertains to an ineligible service. This implies that a credit for eligible services can be recovered from future development charges. As a result, this provision should be made in the calculation, in order to avoid a funding shortfall with respect to future service needs. There are no credit obligations to include in the D.C. calculations as the proposed by-law will result in the emplacement of the Municipality's first D.C. by-law.

### **3.7 Eligible Debt and Committed Excess Capacity**

Section 66 of the D.C.A., 1997 states that, for the purposes of developing a development charge 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 development charges or other similar charges; for example, this may have been done as part of previous development charge 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.

### **3.8 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 Municipality spending all reserve fund monies prior to renewing each by-law, which would not be a sound basis for capital budgeting. Thus, the Municipality will use these reserve funds for the Municipality’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).

The Municipality does not have balances in their reserve funds as the emplacement of the proposed by-law will result in Bluewater’s first D.C. by-law.

### **3.9 Deductions**

The D.C.A., 1997 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:

### ***3.9.1 Reduction Required by Level of Service Ceiling***

This is designed to ensure that the increase in need included in 3.3 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.

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

### ***3.9.2 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 Municipality’s “excess capacity,” other than excess capacity which is “committed” (discussed above in 3.6).

“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.

### ***3.9.3 Reduction for Benefit to Existing Development***

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 3.4 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 municipal-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.

### ***3.9.4 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).

### ***3.9.5 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, waste water services, storm water drainage and control services, services related to a highway, transit, 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, waste diversion, homes for the aged, and health.

The 10% is to be netted from the capital costs necessary to provide the increased services, once the other deductions have been made, as per the infrastructure costs sheets in Chapter 4.

# 4. Development Charge Eligible Cost Analysis by Service

## 4.1 Introduction

This chapter outlines the basis for calculating eligible costs for the development charges 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., 1997 and described in Chapter 3, 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, municipal 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.

## 4.2 Service Levels and 10-Year Capital Costs for D.C. Calculation

This section evaluates the development-related capital requirements for all of the "softer" services over a 10-year planning period. Each service component is evaluated on two format sheets: the average historical 10-year level of service calculation (see Appendix B), which "caps" the D.C. amounts; and, the infrastructure cost calculation, which determines the potential D.C. recoverable cost.

### 4.2.1 *Outdoor Recreation Services*

The Municipality currently has 45.8 acres of parkland within its jurisdiction. This parkland consists of various sized parkettes, neighbourhood/community parks, natural parks, and open space area. The Municipality has sustained the current level of service over the historic 10-year period (2006-2015), with an average of 6.5 acres of parkland, and 5.6 parkland amenities items, and 1.4 parks and recreation vehicles, per 1,000 population. The Municipality also provides 5.5 marina and docks-related infrastructure items per 1,000 population. Including parkland, parkland amenities (e.g. ball diamonds, playground equipment, soccer fields, etc.), marinas and docks, and parks and recreation vehicles, the level of service provided is approximately \$827 per capita. When applied over the forecast period, this average level of service translates into a D.C.-eligible amount of \$642,680.

Based on the projected growth over the 10-year forecast period, the Municipality has identified a provision for additional parkland development in the amount of \$300,000.

Specific growth-related projects will not be identified until the Parks and Recreation Master Plan is complete. Therefore, the net growth capital cost after the mandatory 10% deduction is \$270,000. This amount has been included in the D.C.

As the predominant users of outdoor recreation tend to be residents of the Municipality, the forecast growth-related costs have been allocated 95% to residential and 5% to non-residential.



#### ***4.2.2 Indoor Recreation***

With respect to recreation facilities, there are currently four (4) arena/ community centres provided by the Municipality, each located in Bayfield, Hensall, Zurich, and Stanley, amounting to a total of 90,994 sq.ft. of space. The average historic level of service for the previous ten years has been approximately 12.82 sq.ft. of space per capita or an investment of \$2,620 per capita. Based on this service standard, the Municipality would be eligible to collect \$2,035,950 from D.C.s for facility space.

The Municipality has no needs identified at this time with respect to recreation facilities.

#### **4.2.4 Administration**

The D.C.A. permits the inclusion of studies undertaken to facilitate the completion of the Municipality's capital works program. The Municipality has made provision for the inclusion of new studies undertaken to facilitate this D.C. process, as well as other studies which benefit growth (in whole or in part). The list of studies includes such studies as the following:

- Development Charge Studies;
- Parks and Recreation Master Plan;
- Roads Needs Studies; and
- Water and Wastewater Master Plans.

The total gross cost of these studies is \$452,400, of which \$258,750 is attributable to existing benefit. The net growth-related capital cost, after the mandatory 10% deduction, is approximately \$187,000 and has been included in the development charge.

These costs have been allocated 79% residential and 21% non-residential based on the incremental growth in population to employment for the 10-year forecast period.

**INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION**

Municipality of Bluewater  
Service: Administration Studies

| Prj.No    | Increased Service Needs Attributable to Anticipated Development | Timing (year) | Gross Capital Cost Estimate (2016\$) | Post Period Benefit | Other Deductions | Net Capital Cost | Less:                           |   | Subtotal       | Less:                                | Potential DC Recoverable Cost |                   |                       |
|-----------|---|---------------|--------------------------------------|---------------------|------------------|------------------|---------------------------------|---|----------------|--------------------------------------|-------------------------------|-------------------|-----------------------|
|           |   |               |                                      |                     |                  |                  | Benefit to Existing Development | Grants, Subsidies and Other Contributions Attributable to New Development |                | Other (e.g. 10% Statutory Deduction) | Total                         | Residential Share | Non-Residential Share |
| 2016-2025 |   |               |                                      |                     |                  |                  |                                 |   |                |                                      | 79%                           | 21%               |                       |
| 1         | Development Charge Study  | 2016          | 28,700                               | -                   |                  | 28,700           | -                               |   | 28,700         | 2,870                                | 25,830                        | 20,396            | 5,434                 |
| 2         | Development Charge Study  | 2021          | 28,700                               | -                   |                  | 28,700           | -                               |   | 28,700         | 2,870                                | 25,830                        | 20,396            | 5,434                 |
| 3         | Parks and Recreation Master Plan                                | 2016          | 45,000                               | -                   |                  | 45,000           | 33,750                          |   | 11,250         | 1,125                                | 10,125                        | 7,995             | 2,130                 |
| 4         | Road Needs Study  | 2017          | 25,000                               | -                   |                  | 25,000           | 22,500                          |   | 2,500          |                                      | 2,500                         | 1,974             | 526                   |
| 5         | Road Needs Study  | 2022          | 25,000                               | -                   |                  | 25,000           | 22,500                          |   | 2,500          |                                      | 2,500                         | 1,974             | 526                   |
| 6         | Water/Wastewater Master Plans                                   | 2019          | 150,000                              | -                   |                  | 150,000          | 90,000                          |   | 60,000         |                                      | 60,000                        | 47,378            | 12,622                |
| 7         | Water/Wastewater Master Plans                                   | 2024          | 150,000                              | -                   |                  | 150,000          | 90,000                          |   | 60,000         |                                      | 60,000                        | 47,378            | 12,622                |
|           |   |               |                                      |                     |                  |                  |                                 |   |                |                                      |                               |                   |                       |
|           |   |               |                                      |                     |                  |                  |                                 |   |                |                                      |                               |                   |                       |
|           |   |               |                                      |                     |                  |                  |                                 |   |                |                                      |                               |                   |                       |
|           |   |               |                                      |                     |                  |                  |                                 |   |                |                                      |                               |                   |                       |
|           |   |               |                                      |                     |                  |                  |                                 |   |                |                                      |                               |                   |                       |
|           |   |               |                                      |                     |                  |                  |                                 |   |                |                                      |                               |                   |                       |
|           |   |               |                                      |                     |                  |                  |                                 |   |                |                                      |                               |                   |                       |
|           | <b>Total</b>  |               | <b>452,400</b>                       | <b>-</b>            | <b>-</b>         | <b>452,400</b>   | <b>258,750</b>                  | <b>-</b>  | <b>193,650</b> | <b>6,865</b>                         | <b>186,785</b>                | <b>147,492</b>    | <b>39,293</b>         |

### ***4.2.3 Library Services***

Within the Municipality of Bluewater, Huron County funds and administers the library services. The County also purchases the materials for the library service. The Municipality is responsible for funding the facility space for which the library service may operate.

The Municipality provides five (5) library facilities which total 17,957 sq.ft. in library space. Over the past ten years, the average level of service was 1.56 sq.ft. of space per capita or an investment of \$313 per capita. Based on the service standard over the past ten years and the anticipated growth over the next ten years, the Municipality would be eligible to collect approximately \$243,000 from D.C.s for library services.

No capital needs have been identified by the Municipality at this time.



#### **4.2.4 Waste Diversion Services**

Within the Municipality of Bluewater, the Municipality utilizes a contracted service to provide waste diversion collection. As the Municipality's contract, does not provide a breakdown between the capital and operating costs included of collection vehicles related to waste diversion, a review of other municipal service standards for waste diversion collection was undertaken. Based on this review, a service standard of 0.054 vehicles per 1,000 population was applied to the population of Bluewater.

The contract currently provides for pick-up at 2,925 households and includes capital and operating expenditures. It is estimated that the capital costs related to the vehicles used for diversion activities equates to 0.39 vehicles currently. Over the past ten years, the average level of service was \$14 per capita. Based on the service standard over the past ten years and the anticipated growth over the next ten years, the Municipality would be eligible to collect approximately \$11,200 from D.C.s for Waste Diversion Services.

The capital component of the delivery contract has been included as required to service the capital component of the service contract related to growth over the forecast period. Therefore, \$11,200 has been included as a gross capital cost for service. After the 10% mandatory deduction, the net growth-related capital cost included in the D.C. is \$10,080.

These costs have been allocated 79% residential and 21% non-residential based on the incremental growth in population to employment for the 10-year forecast period.

**INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION**

Municipality of Bluewater

Service: Waste Diversion - Vehicles & Equipment

| Prj .No | Increased Service Needs<br>Attributable to Anticipated<br>Development<br><br>2016-2025 | Timing<br>(year) | Gross<br>Capital Cost<br>Estimate<br>(2016\$) | Post Period<br>Benefit | Other<br>Deductions | Net Capital<br>Cost | Less:                                 |  | Subtotal      | Less:   | Potential DC Recoverable Cost |                                 |                                     |
|---------|--|------------------|---|------------------------|---------------------|---------------------|---------------------------------------|--|---------------|---|-------------------------------|---------------------------------|-------------------------------------|
|         |  |                  |   |                        |                     |                     | Benefit to<br>Existing<br>Development | Grants, Subsidies and<br>Other Contributions<br>Attributable to New<br>Development |               | Other (e.g.<br>10%<br>Statutory<br>Deduction) | Total                         | Residential<br>Share<br><br>79% | Non-Residential<br>Share<br><br>21% |
| 1       | Growth-related Capital Component<br>of Collection related to Waste<br>Diversion        | 2018-2024        | 11,200  | -                      |                     | 11,200              | -                                     |  | 11,200        | 1,120   | 10,080                        | 7,960                           | 2,120                               |
|         |  |                  |   |                        |                     |                     |                                       |  |               |   |                               |                                 |                                     |
|         |  |                  |   |                        |                     |                     |                                       |  |               |   |                               |                                 |                                     |
|         |  |                  |   |                        |                     |                     |                                       |  |               |   |                               |                                 |                                     |
|         | <b>Total</b>   |                  | <b>11,200</b>                                 | <b>-</b>               | <b>-</b>            | <b>11,200</b>       | <b>-</b>                              | <b>-</b>   | <b>11,200</b> | <b>1,120</b>                                  | <b>10,080</b>                 | <b>7,960</b>                    | <b>2,120</b>                        |

Note: Other deduction required due to exceedence of service standard

### **4.3 Service Levels and 20-Year Capital Costs for Bluewater's D.C. Calculation**

This section evaluates the development-related capital requirements for those services with 20-year capital costs.

#### ***4.3.1 Services Related to a Highway***

Bluewater owns and maintains 284 km of arterial and collector roads. Over the historical 10-year period, the average level of service is 0.04 km per capita. This provides an average level of investment of \$4,785 per capita, resulting in a D.C.-eligible recovery amount of \$6.9 million over the 20-year forecast period. Further, the Municipality provides 23 km of sidewalks. Over the historical 10-year period, the average level of service was 3.2 km per 1,000 population or an average investment of \$292 per capita. Over the forecast period, this results in a D.C.-eligible amount of approximately \$421,000.

No capital needs have been identified for expansion to roads or sidewalks at this time.

The Municipality also has 75 bridges and culverts throughout the Municipality which equates to an investment of \$2,037 per capita and a D.C. recoverable amount of approximately \$2.9 million over the 20-year forecast period.

The Municipality has identified the need to replace and expand the Airport Line Bridge to allow two-way traffic as it is currently a one-lane bridge. The gross total cost of this project is estimated to be \$594,000, with 90% (or \$534,600) benefitting existing development. Therefore the net growth-related capital cost of \$59,400 is included in the D.C.

Bluewater currently has 22,252 square feet of depots and domes space. Over the historical 10-year period, the average level of service was 3.14 sq.ft. per capita, or an investment of \$443 per capita. Based on this service standard, the Municipality would be eligible to collect approximately \$639,000 from D.C.s for depots and domes space.

Over the 20-year forecast period, two projects have been identified; the expansion of space for two more bays, and a provision for Public Works office expansion. The total gross capital cost of these projects is \$355,600. As these projects are 100% growth-related, the amount included in the D.C. for depots and domes is \$355,600.

The Municipality's current fleet related to Services Related to a Highway, include 23 vehicles & equipment. Over the 10-year historical period, the average level of service

was 3.2 vehicles per 1,000 population. This results in an average investment of \$440 per capita. Therefore the D.C.-eligible amount for Services Related to a Highway related Vehicles is approximately \$635,000.

Over the forecast period, two (2) additional vehicles have been identified as required to service growth; a tractor and blower and a single axel truck. The gross capital cost of these vehicles is \$344,000. As these vehicles are considered to be 100% required to service growth, the capital cost included in the D.C. is \$344,000.

The residential/non-residential allocation for all services related to a highway, is based on the ratio of population to employment over the 20-year forecast period. This results in a residential share of 78% and a non-residential share of 22%.

**INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION**

Municipality of Bluewater

Service: Bridges, Culverts & Structures

| Prj .No | Increased Service Needs Attributable to Anticipated Development<br><br>2016-2035 | Timing (year) | Gross Capital Cost Estimate (2016\$) | 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<br>78% | Non-Residential Share<br>22% |
| 1       | Airport Line Bridge Replacement and Expansion                                    | 2022          | 594,000                              | -                   |                  | 594,000          | 534,600                         |   | 59,400                        | 46,332                   | 13,068                       |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         | <b>Total</b>   |               | <b>594,000</b>                       | <b>-</b>            | <b>-</b>         | <b>594,000</b>   | <b>534,600</b>                  | <b>-</b>  | <b>59,400</b>                 | <b>46,332</b>            | <b>13,068</b>                |

**INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION**

Municipality of Bluewater  
Service: Depots and Domes

| Prj .No | Increased Service Needs Attributable to Anticipated Development | Timing (year) | Gross Capital Cost Estimate (2016\$) | 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<br>78% | Non-Residential Share<br>22% |
|         | 2016-2035   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
| 1       | Expansion of space for two more Bays                            | 2018-2035     | 265,600                              | -                   |                  | 265,600          | -                               |   | 265,600                       | 207,168                  | 58,432                       |
| 2       | Provision for Public Works Office Expansion                     | 2018-2035     | 90,000                               | -                   |                  | 90,000           | -                               |   | 90,000                        | 70,200                   | 19,800                       |
|         |   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |   |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         | <b>Total</b>  |               | <b>355,600</b>                       | <b>-</b>            | <b>-</b>         | <b>355,600</b>   | <b>-</b>                        | <b>-</b>  | <b>355,600</b>                | <b>277,368</b>           | <b>78,232</b>                |

Note: Assumed approximately 500 sq.ft. expansion for provision

**INFRASTRUCTURE COSTS COVERED IN THE DC CALCULATION**

Municipality of Bluewater

Service: Roads and Related Vehicles

| Prj .No | Increased Service Needs Attributable to Anticipated Development<br><br>2016-2035 | Timing (year) | Gross Capital Cost Estimate (2016\$) | 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<br>78% | Non-Residential Share<br>22% |
| 1       | Tractor & Blower   | 2021-2035     | 139,000                              | -                   |                  | 139,000          | -                               |   | 139,000                       | 108,420                  | 30,580                       |
| 2       | Single Axel  | 2021-2035     | 205,000                              | -                   |                  | 205,000          | -                               |   | 205,000                       | 159,900                  | 45,100                       |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         |  |               |                                      |                     |                  |                  |                                 |   |                               |                          |                              |
|         | <b>Total</b>   |               | <b>344,000</b>                       | <b>-</b>            | <b>-</b>         | <b>344,000</b>   | <b>-</b>                        | <b>-</b>  | <b>344,000</b>                | <b>268,320</b>           | <b>75,680</b>                |

### ***4.3.2 Fire Protection Services***

The Municipality of Bluewater currently operates its fire services from 15,621 sq.ft. of facility space with one (1) station each in Bayfield, Brucefield, Hensall, and Zurich. This provides for a per capita average level of service of 2.2 sq.ft. per capita or \$447 per capita. This level of service provides the Municipality with a maximum D.C.-eligible amount for recovery over the forecast period of approximately \$645,400.

The Municipality also has a current inventory of 13 vehicles. The total D.C.-eligible amount calculated for fire vehicles over the forecast period is approximately \$515,000, based on a standard of \$357 per capita.

Further, Bluewater provides 701 items of equipment and gear for the use in fire services. This results in a calculated average level of service for the historical 10-year period of \$85 per capita, providing for a D.C.-eligible amount over the forecast period of approximately \$123,000 for small equipment and gear.

No growth-related capital needs have been identified at this time for fire services.



## 4.4 Service Levels and Urban Buildout Capital Costs for Bluewater's D.C. Calculation

This section evaluates the development-related capital requirements for those services with an urban buildout forecasted capital costs.

### 4.4.1 Bayfield Wastewater Services

The Bayfield wastewater system currently serves 904 customers, residential and non-residential. As per the municipality's engineer, B.M. Ross and Associates Limited (B.M. Ross), the existing average sewage flow based on the most recent information (2013 to 2015) is 1,056 m<sup>3</sup>/d. Although the average current per customer flow is 1.21 m<sup>3</sup>/d, B.M. Ross is projecting that future per customer flows will be 1.0 m<sup>3</sup>/d for new residential single detached customers due to efficiencies being built into new homes and businesses.

With current growth commitments of 240 additional residential customers as well as other additional future growth anticipated over the forecast, there is a need to expand the treatment plant to address the capacity needs. A Class Environmental Assessment (E.A.), is currently underway to determine a preferred method of expanding the plant. B.M. Ross provided a presentation to Council on October 17, 2016 with a tentative preferred solution to the expansion of the plant. The preferred solution was to construct a treatment plant to operate in parallel with the existing facilities which would provide a total rated capacity in the system of 1,780 m<sup>3</sup>/d. This additional capacity would allow new, growth-related, customers to connect to the system. An anticipated cost for these works has been identified at \$5.3 million.

The capacity available for growth is 724 m<sup>3</sup>/d (1,780 m<sup>3</sup>/d less 1,056 m<sup>3</sup>/d). Table WWB-1 provides the cost per m<sup>3</sup>/d calculation, equating to \$7,320. With the assumption that a residential single detached unit (customer) will use 1m<sup>3</sup>/d, the D.C. for a single detached equivalent (SDE) is equal to \$7,320.

**Table WWB-1**

|                                       |             |
|---------------------------------------|-------------|
| Cost of Works                         | \$5,300,000 |
| Growth Capacity (m <sup>3</sup> /day) | 724         |
| Cost per m <sup>3</sup> /day          | \$7,320     |
| Required m <sup>3</sup> /day for SDE  | 1           |

To calculate the D.C. for other residential development densities, the relationship (ratio) between the persons per unit, as identified in Appendix A, Schedule 5, for various residential densities has been calculated relative to 1 single detached unit equivalent (SDE). This ratio and the corresponding D.C. is provided in Table WWB-2 for apartments with 2 or more bedrooms, bachelor and 1 bedroom apartments, and other multiples.

**Table WWB-2**

| <b>Residential</b>                  | <b>Residential SDE Ratio</b> | <b>Development Charge</b> |
|-------------------------------------|------------------------------|---------------------------|
| Single and Semi-Detached Dwelling   | 1.00                         | \$7,320                   |
| Apartments - 2 Bedrooms +           | 0.74                         | \$5,398                   |
| Apartments - Bachelor and 1 Bedroom | 0.48                         | \$3,510                   |
| Other Multiples                     | 0.79                         | \$5,811                   |

For non-residential D.C. calculation purposes, the cost of storage for a Single Detached Equivalent unit is first divided by the persons per unit (P.P.U.) for a single detached unit of 2.57. This results in a cost per capita of \$2,852. B.M. Ross provided an employee to resident ratio of 27% (based on Ontario Building Code employee usage relative to a residential person). When this percentage is applied to the cost per capita it equates to a cost of \$770 per employee. The average square footage per employee, based on the growth forecast in Bayfield, is 613. Therefore, the non-residential D.C. is \$1.26 per sq.ft., as per Table WWB-3.

**Table WWB-3**

| <b>Non-Residential</b>                    | <b>Development Charge</b> |
|---|---------------------------|
| Cost per Single Detached Equivalent (SDE) | \$7,320                   |
| Single Detached P.P.U.                    | 2.57                      |
| Cost per capita                           | \$2,852                   |
| Employee to Resident Ratio                | 0.27                      |
| Cost per employee                         | \$770                     |
| Average Sq.ft. per employee               | 613                       |
| Non-Residential D.C. per sq.ft.           | 1.26                      |

#### **4.4.2 Hensall Wastewater Services**

Wastewater services have recently been expanded and upgrade for the Hensall sewage works. The works included desludging the existing lagoons, repairs to and replacement of some existing facilities and construction of new works to expand the capacity for growth and increase the level of treatment from secondary to tertiary. Adding filtration facilities provided for both the expansion of capacity and the increase in level of treatment.

The existing three-year average flow (2013-2015) was 481 m<sup>3</sup>/d or 1.25 m<sup>3</sup>/d/customer. With the expansion and upgrades, the capacity increased to 980 m<sup>3</sup>/d which provides 499 m<sup>3</sup>/d for growth. Table WWH-1 provides a summary of this information.

**Table WWH-1**

|  |      |
|--|------|
| Existing Flows (2013-2015 avg) (m <sup>3</sup> /d) | 481  |
| Number of Existing Customers                       | 385  |
| Per Customer Flows (m <sup>3</sup> /d)             | 1.25 |
| Expanded Capacity (m <sup>3</sup> /d)              | 980  |

The total cost of the works was \$3.98 million. The municipality received grant funding from O.M.A.F.R.A. in the amount of \$1.575 million. Table WWH-2 provides a summary of the breakdown of costs associated with desludging and repairs and those related to the expansion and upgrades. The grant funding received has been proportioned based on these costs.

**Table WWH-2**

| <b>Cost of Works</b> | <b>Total</b> | <b>Expansion &amp; Upgrades</b> | <b>Desludging and Repairs</b> |
|----------------------|--------------|---------------------------------|-------------------------------|
| Gross Cost           | \$3,980,000  | \$3,541,000                     | \$439,000                     |
| Grant                | 1,575,000    | 1,401,275                       | 173,725                       |
| Net of grant         | \$2,405,000  | \$2,139,725                     | \$265,275                     |

Based on the current average flows for existing customers and the additional capacity provided by the expansion, there is 499 m<sup>3</sup>/d available to service growth. This provides for a growth share of 51% of the costs related to the expansion & upgrades (as per Table WWH-3).

**Table WWH-3**

|                          | Capacity<br>(m <sup>3</sup> /d) | Growth/Non-<br>Growth<br>Share | Share of<br>Expansion &<br>Upgrades (Net) |
|--------------------------|---------------------------------|--------------------------------|---|
| Existing (Average Flows) | 481                             | 49%                            | \$1,050,212                               |
| Growth                   | 499                             | 51%                            | \$1,089,513                               |
| Total                    | 980                             |                                | \$2,139,725                               |

The Municipality has issued debt to assist in funding the costs of the project in the amount of \$1.8 million. The percentage of total cost to debenture financing is therefore 119% (as per Table WWH-4).

**Table WWH-4**

|   |             |
|---|-------------|
| Total Cost of Expansion & Upgrades              | \$2,139,725 |
| Total debenture financing (principal)           | \$1,800,000 |
| Percentage of Total Cost to Debenture Financing | 119%        |

The D.C. is calculated based on capacity. The total cost of the works associated with the expansion and upgrades is \$2,139,725. The discounted interest on the debenture is added to these costs based on the relationship between the total cost and amount of financing (as per WWH-4), resulting in an additional \$240,125 to be included in the D.C. calculation. In total, the D.C. calculation is based on \$2,379,850, as per Table WWH-5

**Table WWH-5**

|  |             |
|--|-------------|
| Cost of Works  | \$3,980,000 |
| Less Costs Related to Desludging, Repairs & Replacement                      | \$439,000   |
| Net Cost of Expansion & Upgrade Works  | \$3,541,000 |
| Less Grant Related to Expansion & Upgrades                                   | \$1,401,275 |
| Net Cost of Works Related to Expansion & Upgrades                            | \$2,139,725 |
| Total Discounted Financing Costs (Interest) Related to Expansion & Upgrades* | \$240,125   |
| Net Cost of Works Related to Expansion & Upgrades including Financing Costs  | \$2,379,850 |

\* Based on Equivalent Interest for Debt of \$2,139,725

The total cost of the works, including financing costs (interest) is divided by the total expanded capacity of 980 m<sup>3</sup>/d to provide a cost per m<sup>3</sup> of \$2,428. As per B.M. Ross, the flow per customer is 1.25 m<sup>3</sup>/d for a single detached equivalent unit. This result in a cost per \$3,034 per SDE (see Table WWH-6).

**Table WWH-6**

|   |             |
|---|-------------|
| Net Cost of Works Related to Expansion & Upgrades including Financing Costs | \$2,379,850 |
| Total Expanded Capacity (m <sup>3</sup> /day)                               | 980         |
| Cost per m <sup>3</sup> /day  | \$2,428     |
| Required m <sup>3</sup> /day for SDE  | 1.25        |
| Cost of Works for SDE   | \$3,034     |

The D.C. calculation, for various residential dwelling units, is provided in Table WWH-7. These are based on the persons per unit ratio to a single detached unit.

**Table WWH-7**

| <b>Residential</b>                  | <b>Residential SDE Ratio</b> | <b>Development Charge</b> |
|-------------------------------------|------------------------------|---------------------------|
| Single and Semi-Detached Dwelling   | 1.00                         | \$3,034                   |
| Apartments - 2 Bedrooms +           | 0.74                         | \$2,237                   |
| Apartments - Bachelor and 1 Bedroom | 0.48                         | \$1,455                   |
| Other Multiples                     | 0.79                         | \$2,409                   |

For non-residential growth, the cost per SDE is divided by the single detached P.P.U., resulting in a cost per capita of \$1,182. This amount is then divided by the employee to resident ratio of 27% to calculate a cost per employee of \$319. In Hensall, the average square foot per employee is 2,010. To complete the calculation of the D.C., the cost per employee is divided by the average square foot per employee, resulting in a D.C. of \$0.16 per square foot. Table WW-8 provides a summary of this calculation.

**Table WWH-8**

| <b>Non-Residential</b>                             | <b>Development Charge</b> |
|--|---------------------------|
| Capacity cost per Single Detached Equivalent (SDE) | \$3,034                   |
| Single Detached P.P.U.                             | 2.57                      |
| Capacity cost per capita                           | \$1,182                   |
| Employee to Resident Ratio                         | 0.27                      |
| Cost per employee                                  | \$319                     |
| Average Sq.ft. per employee                        | 2,010                     |
| Non-Residential D.C. per sq.ft.                    | \$0.16                    |

#### **4.4.3 Zurich Wastewater Services**

Work on the Zurich wastewater system has been undertaken recently. These works included desludging of existing lagoons, repairs and replacements of some existing facilities and the construction on new works which increased the level of treatment from secondary to tertiary and provided expanded capacity to service future growth.

Filtration facilities were added to the system to facilitate the capacity expansion and increase level of treatment.

The existing three-year average flow (2013-2015) was 360 m<sup>3</sup>/d or 0.93 m<sup>3</sup>/d/customer based on 388 existing customers. With the expansion and upgrades, the new capacity has increased to 495 m<sup>3</sup>/d which provides capacity of 135 m<sup>3</sup>/d for growth. Table WW-1 summarizes this information.

**Table WWZ-1**

|  |      |
|--|------|
| Existing Flows (2013-2015 avg) (m <sup>3</sup> /d) | 360  |
| Number of Existing Customers                       | 388  |
| Per Customer Flows (m <sup>3</sup> /d)             | 0.93 |
| Expanded Capacity (m <sup>3</sup> /d)              | 495  |

The total cost of the works was \$3.98 million and the municipality received grant funding of \$1,140,975. Table WWZ-2 summarizes the breakdown of costs associated with the expansion and upgrades vs. the costs associated with the desludging, repairs and replacement. Grant funding has been proportioned based on these costs.

**Table WWZ-2**

| <b>Cost of Works</b> | <b>Total</b> | <b>Expansion &amp; Upgrades</b> | <b>Desludging and Repairs</b> |
|----------------------|--------------|---------------------------------|-------------------------------|
| Gross Cost           | \$3,890,000  | \$3,364,607                     | \$525,393                     |
| OMAFRA Grant         | 1,050,975    | 909,028                         | 141,947                       |
| Net of grant         | \$2,839,025  | \$2,455,579                     | \$383,446                     |

Based on the current average flows for existing customers and the additional capacity provided with the expansion, there is 135 m<sup>3</sup>/d available to service growth. This provides for a growth share of 27% of the costs related to the expansion and updates (as per Table WWZ-3).

**Table WWZ-3**

|                          | <b>Capacity<br/>(m<sup>3</sup>/d)</b> | <b>Growth/<br/>Non-<br/>Growth<br/>Share</b> | <b>Share of<br/>Expansion<br/>&amp; Upgrades<br/>(Net Costs<br/>after Grant)</b> |
|--------------------------|---------------------------------------|--|--|
| Existing (Average Flows) | 360                                   | 73%  | \$1,785,876  |
| Growth                   | 135                                   | 27%  | \$669,703  |
| Total                    | 495                                   |  | \$2,455,579  |

To assist in funding the project, the Municipality issued debt financing in the amount of \$1,571,750. The percentage of total cost to debenture financing is therefore 156% (as per Table WWZ-4).

**Table WWZ-4**

|   |             |
|---|-------------|
| Total Cost of Expansion & Upgrades              | \$2,455,579 |
| Total debenture financing (principal)           | \$1,571,750 |
| Percentage of Total Cost to Debenture Financing | 156%        |

The Total costs included in the D.C., associated with the growth over the forecast period, equate to \$2,455,972 plus discounted financing costs (interest) of \$993,763. The interest is the equivalent interest based on the cost of the works of \$2,455,972 (based on the percentage of total cost to debenture financing of 156% multiplied by the discounted interest on the debenture). Therefore, the total cost of the works is \$3,449,735 (as per Table WWZ-5).

**Table WWZ-5**

|  |             |
|--|-------------|
| Cost of Works  | \$3,890,000 |
| Less Costs Related to Desludging, Repairs & Replacement                      | \$525,000   |
| Net Cost of Expansion & Upgrade Works  | \$3,365,000 |
| Less OMAFRA Grant Related to Expansion & Upgrades                            | \$909,028   |
| Net Cost of Works Related to Expansion & Upgrades                            | \$2,455,972 |
| Total Discounted Financing Costs (Interest) Related to Expansion & Upgrades* | \$993,763   |
| Net Cost of Works Related to Expansion & Upgrades including Financing Costs  | \$3,449,735 |

\* Based on Equivalent Interest for Debt of \$2,455,866

The total cost of the works, including financing costs (interest) is divided by the total expanded capacity of 495 m<sup>3</sup>/d to provide a cost per m<sup>3</sup> of \$6,969. As per B.M. Ross, the flow per customer is 0.93 m<sup>3</sup>/d for a single detached equivalent unit. This result in a cost per \$6,481 per SDE (see Table WWZ-6).

**Table WWZ-6**

|   |             |
|---|-------------|
| Net Cost of Works Related to Expansion & Upgrades including Financing Costs | \$3,449,735 |
| Total Expanded Capacity (m <sup>3</sup> /day)                               | 495         |
| Cost per m <sup>3</sup> /day  | \$6,969     |
| Required m <sup>3</sup> /day for SDE  | 0.93        |
| Cost of Works for SDE   | \$6,481     |

The D.C. calculation, for various residential dwelling units, is provided in Table WWZ-7. These are based on the persons per unit ratio to a single detached unit.

**Table WWZ-7**

| <b>Residential</b>                  | <b>Residential SDE Ratio</b> | <b>Development Charge</b> |
|-------------------------------------|------------------------------|---------------------------|
| Single and Semi-Detached Dwelling   | 1.00                         | \$6,481                   |
| Apartments - 2 Bedrooms +           | 0.74                         | \$4,779                   |
| Apartments - Bachelor and 1 Bedroom | 0.48                         | \$3,108                   |
| Other Multiples                     | 0.79                         | \$5,145                   |

There is no non-residential growth anticipated in the Zurich area, therefore, a non-residential charge has not been provided.



#### 4.4.4 Hensall Water Services

Bluewater’s Engineer, B.M. Ross has undertaken a number of reviews in relation to water storage needs for Hensall. These studies identified a water storage deficit and recommended the construction of a new elevated tank which would replace the existing facility and provide additional storage to service future growth. The studies determined that the capacity of the new storage facility should be 1,632 m<sup>3</sup> for the community (both current and future). The design of the facility is based on two days’ storage for average day demand.

With current average day flows of 314m<sup>3</sup> for 401 current customers, the storage required per customer for two days equates to 1.566 m<sup>3</sup> (as provided in Table WH-1). The Cost per m<sup>3</sup> of \$1,593 is multiplied by the two-day storage requirement of 1.566 to provide a cost per (SDE) of \$2,495.

**Table WH-1**

|   |             |
|---|-------------|
| Cost of new Elevated Tank                                   | \$2,600,000 |
| Available Storage Capacity for the community m <sup>3</sup> | 1,632       |
| Storage cost per m <sup>3</sup>                             | \$1,593     |
| Current average day demands (m <sup>3</sup> )               | 314         |
| Current Customers   | 401         |
| Current m <sup>3</sup> /day/customer                        | 0.783       |
| Storage require (# of days)                                 | 2           |
| Two days storage requirement m <sup>3</sup> /day/customer   | 1.566       |
| Cost per m <sup>3</sup>                                     | \$1,593     |
| Two days storage m <sup>3</sup> /day/customer               | 1.566       |
| Storage cost per Single Detached Equivalent (SDE)           | \$2,495     |

The D.C. calculation, for various residential dwelling units, is provided in Table WH-2. These are based on the persons per unit ratio to a single detached unit.

**Table WH-2**

| <b>Residential</b>                  | <b>Residential SDE Ratio</b> | <b>Development Charge</b> |
|-------------------------------------|------------------------------|---------------------------|
| Single and Semi-Detached Dwelling   | 1.00                         | \$2,495                   |
| Apartments - 2 Bedrooms +           | 0.74                         | \$1,840                   |
| Apartments - Bachelor and 1 Bedroom | 0.48                         | \$1,196                   |
| Other Multiples                     | 0.79                         | \$1,981                   |

For non-residential, the cost per SDE has been divided by the single detached P.P.U. of 2.57 to provide a storage cost per capita of \$972. This amount is then multiplied by 27% (based on the employee to resident ratio), resulting in a cost per employee of \$262. The average square footage per employee in Hensall is 2,010 based on the growth forecast. The cost per employee is divided by the average square footage per employee, resulting in a D.C. of \$0.13 per sq.ft. (as provided in the Table WH-3).

**Table WH-3**

| <b>Non-Residential</b>                            | <b>Development Charge</b> |
|---|---------------------------|
| Storage cost per Single Detached Equivalent (SDE) | \$2,495                   |
| Single Detached P.P.U.                            | 2.57                      |
| Storage cost per capita                           | \$972                     |
| Employee to Resident Ratio                        | 0.27                      |
| Storage cost per employee                         | \$262                     |
| Average Sq.ft. per employee                       | 2,010                     |
| Non-Residential D.C. per sq.ft.                   | \$0.13                    |

**Table WH-2**

| Growth                      | Residential Units | Weighted PPU Average | Residential People | Non-Residential Employees | Non-Residential Employees equivalent to resident for water usage | Non-res employees converted to residential customer equivalent |
|-----------------------------|-------------------|----------------------|--------------------|---------------------------|--|--|
| Growth in Hensall - to 2036 | 192               | 2.43                 | 466                | 102                       | 28   | 12   |

The share of capacity between existing customers and growth customers has been provided in Table WH-3 based on the capacity requirements, resulting in a share of 62% for growth and 38% for existing.

**Table WH-3**

| Storage Facility Capacity   | Customers | m <sup>3</sup> |
|---|-----------|----------------|
| Total customers serviced by new tower (available to community/2 day storage m <sup>3</sup> /day/customer) | 1,042     | 1,632          |
| Less existing customers   | 401       | 628            |
| Growth Customers to be serviced   | 641       | 1,004          |
| Growth  | 1,004     | 62%            |
| Non-Growth  | 628       | 38%            |
| Total   | 1,632     | 100%           |

The storage facility will service the growth anticipated over the forecast period to 2036 as well as additional growth in the Hensall area post 2036. Capacity required to service growth in the current period equates to 319 m<sup>3</sup> or 32% of the capacity available for growth, resulting in 68% of the capacity available for growth in the post 2036 period. Table WH-4 provides for this breakdown along with the share of current period capacity for residential and non-residential development.

**Table WH-4**

|  | Customers | Storage Required (m3) | Res/Non-Res Split and Current/Post Period Split |
|--|-----------|-----------------------|---|
| Current Period (to 2036) Res                           | 192       | 301                   | 94%   |
| Current Period (to 2036) Non-Res (customer equivalent) | 12        | 19                    | 6%  |
| Total Current Period                                   | 204       | 319                   | 32%   |
| Total Post Period                                      | 437       | 684                   | 68%   |
| Grand Total Growth Customers to be Serviced            | 641       | 1,004                 |   |

The elevated storage is estimated at a total gross cost of \$2.6 million. Deductions to this amount include \$1,000,600 which has been identified as benefiting existing

development and \$1,090,400 has been identified as costs that will benefit growth in the post 20-year period in Hensall. The result of these deductions is a net growth-related cost of \$509,000, which has been included in the D.C. calculations.

As identified in Table WH-4, the growth-related costs have been allocated between residential and non-residential development based on flow requirements which results in a 94% allocation to residential and a 6% allocation to non-residential.

## 5. Development Charge Calculation

Table 5-1 calculates the proposed uniform development charge to be imposed on anticipated development in the Municipality for municipal-wide services over a 20-year planning horizon. Table 5-2 calculates the proposed uniform development charge to be imposed on anticipated development in the Municipality for municipal-wide services over a 10-year planning horizon. Table 5-3 provides the area specific water and wastewater charges based on the capacity calculations provided in chapter 4.

The calculation for residential development is generated on a per capita basis and is based upon five forms of housing types (single and semi-detached, apartments 2+ bedrooms, apartment's bachelor and 1 bedroom, all other multiples and special care/special dwelling units). The non-residential development charge has been calculated on a per sq.ft. of gross floor area basis for all types of non-residential development (industrial, commercial and institutional).

The D.C.-eligible costs for each service component were developed in Chapter 4 for all municipal services, based on their proposed capital programs.

For the residential calculations, the total cost is divided by the "gross" (new resident) population to determine the per capita amount. The eligible D.C. cost calculations set out in Chapter 4 are based on the net anticipated population increase (the forecast new unit population less the anticipated decline in existing units). The cost per capita is then multiplied by the average occupancy of the new units (Appendix A, Schedule 5) to calculate the charge in Table 5-1 and Table 5-2.

Wind Turbines are deemed to be equivalent to a residential single detached unit as it relates to Services Related to a Highway and Administration only.

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 5-4 summarizes the total development charge that is applicable to each area of the Municipality and Table 5-5 summarizes the gross capital expenditures and sources of revenue for works to be undertaken during the 5-year life of the by-law.

**TABLE 5-1**  
**MUNICIPALITY OF BLUEWATER**  
**DEVELOPMENT CHARGE CALCULATION**  
**Municipal-wide Services**  
**2016-2035**

| SERVICE   | 2016 \$ DC Eligible Cost |                  | 2016 \$ DC Eligible Cost |                     |
|---|--------------------------|------------------|--------------------------|---------------------|
|   | Residential              | Non-Residential  | SDU                      | per ft <sup>2</sup> |
|   | \$                       | \$               | \$                       | \$                  |
| 1. <u>Services Related to a Highway</u>                   |                          |                  |                          |                     |
| 1.1 Bridges and Culverts                                  | 46,332                   | 13,068           | 66                       | 0.04                |
| 1.2 Depots and Domes                                      | 277,368                  | 78,232           | 393                      | 0.22                |
| 1.3 PW Rolling Stock                                      | 268,320                  | 75,680           | 379                      | 0.22                |
| <b>TOTAL</b>  | <b>\$592,020</b>         | <b>\$166,980</b> | <b>\$838</b>             | <b>\$0.48</b>       |
| <b>DC ELIGIBLE CAPITAL COST</b>                           | <b>\$592,020</b>         | <b>\$166,980</b> |                          |                     |
| 20 Year Gross Population / GFA Growth (ft <sup>2</sup> .) | 1,815                    | 348,500          |                          |                     |
| Cost Per Capita / Non-Residential GFA (ft <sup>2</sup> .) | \$326                    | \$0.48           |                          |                     |
| <u>By Residential Unit Type</u>                           | <u>D.P.U</u>             |                  |                          |                     |
| Single and Semi-Detached Dwelling                         | 2.57                     | \$838            |                          |                     |
| Apartments - 2 Bedrooms +                                 | 1.89                     | \$616            |                          |                     |
| Apartments - Bachelor and 1 Bedroom                       | 1.23                     | \$401            |                          |                     |
| Other Multiples   | 2.04                     | \$665            |                          |                     |

**TABLE 5-2**  
**MUNICIPALITY OF BLUEWATER**  
**DEVELOPMENT CHARGE CALCULATION**  
**Municipal-wide Services**  
**2016-2025**

| SERVICE   | 2016 \$ DC Eligible Cost |                 | 2016 \$ DC Eligible Cost |                     |
|---|--------------------------|-----------------|--------------------------|---------------------|
|   | Residential              | Non-Residential | SDU                      | per ft <sup>2</sup> |
|   | \$                       | \$              | \$                       | \$                  |
| 2. <u>Outdoor Recreation Services</u>                     |                          |                 |                          |                     |
| 2.1 Parkland development, amenities, vehicles, & trails   | 256,500                  | 13,500          | 672                      | 0.09                |
| 3. <u>Administration</u>                                  |                          |                 |                          |                     |
| 3.1 Studies   | 147,492                  | 39,293          | 387                      | 0.25                |
| 4. <u>Waste Diversion</u>                                 |                          |                 |                          |                     |
| 4.1 Waste diversion vehicles and equipment                | 7,960                    | 2,120           | 21                       | 0.01                |
| <b>TOTAL</b>  | <b>\$411,951</b>         | <b>\$54,914</b> | <b>\$1,080</b>           | <b>\$0.35</b>       |
| <b>DC ELIGIBLE CAPITAL COST</b>                           | <b>\$411,951</b>         | <b>\$54,914</b> |                          |                     |
| 10 Year Gross Population / GFA Growth (ft <sup>2</sup> .) | 980                      | 157,300         |                          |                     |
| Cost Per Capita / Non-Residential GFA (ft <sup>2</sup> .) | \$420                    | \$0.35          |                          |                     |
| <u>By Residential Unit Type</u>                           | <u>D.P.U</u>             |                 |                          |                     |
| Single and Semi-Detached Dwelling                         | 2.57                     | \$1,080         |                          |                     |
| Apartments - 2 Bedrooms +                                 | 1.89                     | \$794           |                          |                     |
| Apartments - Bachelor and 1 Bedroom                       | 1.23                     | \$517           |                          |                     |
| Other Multiples   | 2.04                     | \$858           |                          |                     |

**Table 5-3**  
**Municipality of Bluewater**  
**Development Charge Calculation**  
**Area Specific Water and Wastewater Services**

|                          | 2016 \$ DC Eligible Cost |                 | 2016 \$ DC Eligible Cost |            |
|--------------------------|--------------------------|-----------------|--------------------------|------------|
|                          | Residential              | Non-Residential | SDU                      | per sq.ft. |
|                          | \$                       | \$              | \$                       | \$         |
| Bayfield Area Wastewater | 4,831,802                | 468,198         | 7,320                    | 1.26       |
| Zurich Wastewater        | 3,449,735                | 0               | 6,481                    | 0.00       |
| Hensall Wastewater       | 2,260,858                | 118,993         | 3,034                    | 0.16       |
| Hensall Water            | 2,447,059                | 152,941         | 2,495                    | 0.13       |

**TABLE 5-4**  
**MUNICIPALITY OF BLUEWATER**  
**DEVELOPMENT CHARGE CALCULATION**  
**TOTAL ALL SERVICES**

|  | 2016 \$ DC Eligible Cost |                 | 2016 \$ DC Eligible Cost |                     |
|--|--------------------------|-----------------|--------------------------|---------------------|
|  | Residential              | Non-Residential | SDU                      | per ft <sup>2</sup> |
|  | \$                       | \$              | \$                       | \$                  |
| <b>Bayfield Area Wastewater</b>        | \$4,831,802              | \$468,198       | \$7,320                  | \$1.26              |
| <b>Zurich Wastewater</b>               | \$3,449,735              | \$0             | \$6,481                  | \$0.00              |
| <b>Hensall Water and Wastewater</b>    | \$4,707,917              | \$271,934       | \$5,529                  | \$0.29              |
| <b>Municipal-wide Services 20 Year</b> | 592,020                  | 166,980         | 838                      | 0.48                |
| <b>Municipal-wide Services 10 Year</b> | 411,951                  | 54,914          | 1,080                    | 0.35                |
| <b>TOTAL RURAL</b>                     | 1,003,971                | 221,894         | 1,918                    | 0.83                |
| <b>TOTAL BAYFIELD AREA</b>             | 5,835,773                | 690,092         | 9,239                    | 2.09                |
| <b>TOTAL ZURICH</b>                    | 4,453,706                | 221,894         | 8,400                    | 0.83                |
| <b>TOTAL HENSALL</b>                   | 5,711,888                | 493,827         | 7,447                    | 1.12                |

Table 5-5  
MUNICIPALITY OF BLUEWATER  
GROSS EXPENDITURE AND SOURCES OF REVENUE SUMMARY  
FOR COSTS TO BE INCURRED OVER THE LIFE OF THE BY-LAW

| SERVICE   | TOTAL GROSS COST | SOURCES OF FINANCING            |                     |               |                      |                        |                  |                 |   |
|---|------------------|---------------------------------|---------------------|---------------|----------------------|------------------------|------------------|-----------------|---|
|   |                  | TAX BASE OR OTHER NON-DC SOURCE |                     |               |                      | POST DC PERIOD BENEFIT | DC RESERVE FUND  |                 |   |
|   |                  | OTHER DEDUCTIONS                | BENEFIT TO EXISTING | OTHER FUNDING | LEGISLATED REDUCTION |                        | RESIDENTIAL      | NON-RESIDENTIAL |   |
| 1. Services Related to a Highway                        |                  |                                 |                     |               |                      |                        |                  |                 |   |
| 1.1 Bridges and Culverts                                | 0                | 0                               | 0                   | 0             | 0                    | 0                      | 0                | 0               | 0 |
| 1.2 Depots and Domes                                    | 59,267           | 0                               | 0                   | 0             | 0                    | 0                      | 46,228           | 13,039          |   |
| 1.3 PW Rolling Stock                                    | 0                | 0                               | 0                   | 0             | 0                    | 0                      | 0                | 0               |   |
| 2. Outdoor Recreation Services                          |                  |                                 |                     |               |                      |                        |                  |                 |   |
| 2.1 Parkland development, amenities, vehicles, & trails | 133,333          | 0                               | 0                   | 0             | 13,333               | 0                      | 114,000          | 6,000           |   |
| 3. Administration                                       |                  |                                 |                     |               |                      |                        |                  |                 |   |
| 3.1 Studies   | 248,700          | 0                               | 146,250             | 0             | 3,995                | 0                      | 77,743           | 20,712          |   |
| 4. Waste Diversion                                      |                  |                                 |                     |               |                      |                        |                  |                 |   |
| 4.1 Waste diversion vehicles and equipment              | 4,800            | 0                               | 0                   | 0             | 480                  | 0                      | 3,411            | 909             |   |
| <b>TOTAL EXPENDITURES &amp; REVENUES</b>                | <b>\$446,100</b> | <b>\$0</b>                      | <b>\$146,250</b>    | <b>\$0</b>    | <b>\$17,808</b>      | <b>\$0</b>             | <b>\$241,383</b> | <b>\$40,659</b> |   |

\* Hensall water and Bayfield wastewater projects will proceed based on capacity needs as the areas grow. It is unclear at this time how much of the expenditures will be incurred within the 5-year term of the by-law



# 6. Development Charge Policy Recommendations and Development Charge By-law Rules

## 6.1 Introduction

s.s.5(1)9 of the D.C.A. 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 development charges.

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

- the total of all development charges 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 development charges 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 development charge than is allowed, the rules for determining development charges 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 Region’s existing policies; however, there are items under consideration at this time and these may be refined prior to adoption of the by-law.

## **6.2 Development Charge By-law Structure**

**It is recommended that:**

- the Municipality uses a uniform municipal-wide development charge calculation for all Municipal services;
- water and wastewater services, be imposed on the respective urban service areas of the Municipality; and
- one Municipal development charge by-law be used for all services.

## **6.3 Development Charge By-law Rules**

The following subsections set out the recommended rules governing the calculation, payment and collection of development charges in accordance with Section 6 of the Development Charges Act, 1997.

**It is recommended that the following sections provide the basis for the development charges:**

### ***6.3.1 Payment in any Particular Case***

In accordance with the Development Charges Act, 1997, s.2(2), a development charge 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.

### ***6.3.2 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 Administration and Waste Diversion, the costs have been based on a population vs. employment growth ratio (79%/21%) for residential and non-residential, respectively) over the 10-year forecast period;
  - for Indoor and Outdoor Recreation and Library services, a 5% non-residential attribution has been made to recognize use by the non-residential sector;
  - for Services Related to a Highway, a 78% residential/22% non-residential attribution has been made based on a population vs. employment growth ratio over the 20-year forecast period; and
  - for Water and Wastewater services, the D.C. are calculated based on capacity and the relationship of a non-residential employee's usage (0.27) to a resident.

### ***6.3.3 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:

- 1) the number of dwelling units demolished/converted multiplied by the applicable residential development charge in place at the time the development charge is payable; and/or
- 2) the gross floor area of the building demolished/converted multiplied by the current non-residential development charge in place at the time the development charge is payable.

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 48 months prior to the issuance of a building permit. The credit can, in no case, exceed the amount of development charges that would otherwise be payable.

### ***6.3.4 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 development charges (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
- the development of non-residential farm buildings constructed for bona fide farm uses, being that which operates with a valid Farm Business Registration Number and is assessed in the Farmland Realty Tax Class;
  - places of worship, churchyards and cemeteries exempt from taxation under the Assessment Act.

### ***6.3.5 Phasing in***

No provisions for phasing in the development charge are provided in the development charge by-law.

### ***6.3.6 Timing of Collection***

A development charge that is applicable under Section 5 of the Development Charges Act shall be calculated and payable;

- where a permit is required under the Building Code Act in relation to a building or structure, the owner shall pay the development charge prior to the issuance of a permit or prior to the commencement of development or redevelopment as the case may be; and
- Despite above, Council, from time to time, and at any time, may enter into agreements providing for all or any part of a development charge to be paid before or after it would otherwise be payable.

### ***6.3.7 Wind Turbines***

As part of the Development Charge process, staff reviewed the projects included within the development charge background study and the various rules that would ultimately be incorporated into the development charge by-law. In regards to Wind Turbines, the

services that are impacted by this type of development include Services Related to a Highway, Fire Protection Services and Administration. The impact on these services are similar to a residential single detached unit and therefore, 100% of the Services Related to Highway and Administration is recommended as the charge for future Wind Turbines developed within the Municipality. Currently, Fire Protection is not included as there are no additional growth capital identify for inclusion in the D.C. however, if a future D.C. was to include a charge related to Fire Protection, this component would also be considered for recovery from Wind Turbines.

### ***6.3.8 Indexing***

Indexing of the development charges shall be implemented on a mandatory basis annually commencing on the first anniversary date of this by-law and each anniversary date thereafter, in accordance with the Statistics Canada Quarterly, Non-Residential Building Construction Price Index (CANSIM Table 327-0043)<sup>1</sup> for the most recent year-over-year period.

### ***6.3.9 The Applicable Areas***

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

- All Municipal-wide Services – the full residential and non-residential charge will be imposed on all lands within the Municipality; and
- Water and Wastewater – the full residential and non-residential charge will be imposed on each urban service area of the Municipality.

## **6.4 Other Development Charge By-law Provisions**

**It is recommended that:**

### ***6.4.1 Categories of Services for Reserve Fund and Credit Purposes***

The Municipality set up development charge reserve funds for collections. These reserve funds are recommended to be: Services Related to a Highway, Outdoor Recreation Services, Waste Diversion Services, Administration, Hensall Water Services, Hensall Wastewater Services, Bayfield Wastewater Services, and Zurich

<sup>1</sup> 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.

Wastewater Services. Appendix D outlines the reserve fund policies that the Municipality is required to follow as per the *Development Charges Act*.

#### ***6.4.2 By-law In-force Date***

A by-law under the D.C.A., 1997 comes into force on the day after which the by-law is passed by Council.

#### ***6.4.3 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).

### **6.5 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;”

“Consider the use of area-rating, as calculated herein”

“Approve the capital project listing set out in Chapter 4 of the Development Charges Background Study dated December 19, 2016, subject to further annual review during the capital budget process;”

“Approve the Development Charges Background Study dated December 19, 2016, as amended (if applicable);”

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

“Approve the Development Charge By-law as set out in Appendix G.”

# 7. By-law Implementation

## 7.1 Public Consultation Process

### *7.1.1 Introduction*

This chapter addresses the mandatory, formal public consultation process (Section 7.1.2), as well as the optional, informal consultation process (Section 7.1.3). 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 development charge on development from a generic viewpoint.

### *7.1.2 Public Meeting of Council*

Section 12 of the D.C.A., 1997 indicates that before passing a development charge 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 and 60 days prior to by-law passage. The D.C. background study must also be made available on the Municipality's website while the by-law remains in effect.

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.).

### *7.1.3 Other Consultation Activity*

There are three broad groupings of the public who are generally the most concerned with municipal development charge 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 development charge revenues. Others, such as realtors, are directly

impacted by development charge 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 municipal 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 municipal development charge 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.

## **7.2 Anticipated Impact of the Charge on Development**

The establishment of sound development charge policy often requires the achievement of an acceptable balance between two competing realities. The first is that high non-residential development charges 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 development charges 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, development charges or other municipal 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.



## **7.3 Implementation Requirements**

### ***7.3.1 Introduction***

Once the Municipality 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.

### ***7.3.2 Notice of Passage***

In accordance with s.13 of the D.C.A., when a D.C. by-law is passed, the municipal 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.

### ***7.3.3 By-law Pamphlet***

In addition to the "notice" information, the Municipality must prepare a "pamphlet" explaining each development charge by-law in force, setting out:

- a description of the general purpose of the development charges;
- 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 development charges 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 Municipality must give one copy of the most recent pamphlet without charge, to any person who requests one.

#### ***7.3.4 Appeals***

Sections 13-19 of the D.C.A., 1997 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 municipal 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 Municipality 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.

#### ***7.3.5 Complaints***

A person required to pay a development charge, or his agent, may complain to the Municipal Council imposing the charge that:

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

Sections 20-25 of the D.C.A., 1997 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 Council to the O.M.B.

#### ***7.3.6 Credits***

Sections 38-41 of the D.C.A., 1997 set out a number of credit requirements, which apply where a Municipality 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 development charges 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 Municipality agrees to expand the credit to other services for which a development charge is payable.

### ***7.3.7 Front-Ending Agreements***

The Municipality 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 Municipality 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., 1997 (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 Municipality assesses whether this mechanism is appropriate for its use, as part of funding projects prior to municipal funds being available.

### ***7.3.8 Severance and Subdivision Agreement Conditions***

Section 59 of the D.C.A., 1997 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., 1997 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 development charges related to the development, at the time the land is transferred.

In this regard, if the Municipality in question is a commenting agency, in order to comply with subsection 59(4) of the *Development Charges Act, 1997* it would need to provide to

the approval authority, information regarding the applicable municipal development charges related to the site.

If the Municipality 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 development charge.

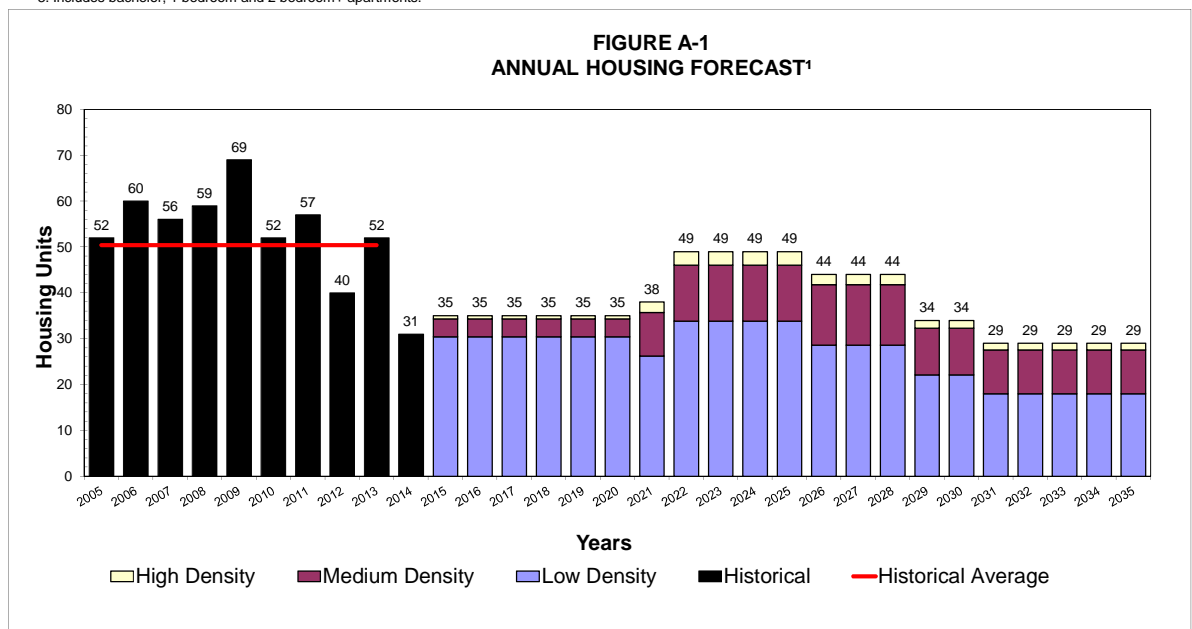
The most effective way to ensure that purchasers are aware of this condition would be to require it as a provision in a registered subdivision agreement, so that any purchaser of the property would be aware of the charges at the time the title was searched prior to closing a transaction conveying the lands.

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

**Schedule 1  
Municipality Of Bluewater  
Residential Growth Forecast Summary**

| Year        | Permanent Population <sup>1</sup> | Permanent Population (Including Census Undercount) | Housing Units           |                        |                         |       |       | Permanent Person Per Unit (PPU) |      |
|-------------|-----------------------------------|--|-------------------------|------------------------|-------------------------|-------|-------|---------------------------------|------|
|             |                                   |  | Singles & Semi-Detached | Multiples <sup>2</sup> | Apartments <sup>3</sup> | Other | Total |                                 |      |
| Historical  | Mid 2006                          | 7,120  | 7,405                   | 2,515                  | 0                       | 245   | 10    | 2,770                           | 2.57 |
|             | Mid 2011                          | 7,044  | 7,326                   | 2,480                  | 105                     | 200   | 40    | 2,825                           | 2.49 |
| Forecast    | Early 2016                        | 7,127  | 7,412                   | 2,575                  | 122                     | 213   | 40    | 2,950                           | 2.42 |
|             | Early 2021                        | 7,430  | 7,727                   | 2,730                  | 142                     | 217   | 40    | 3,129                           | 2.37 |
|             | Early 2026                        | 7,904  | 8,221                   | 2,888                  | 199                     | 225   | 40    | 3,352                           | 2.36 |
|             | Early 2031                        | 8,301  | 8,633                   | 3,024                  | 258                     | 234   | 40    | 3,556                           | 2.33 |
|             | Early 2036                        | 8,570  | 8,913                   | 3,117                  | 307                     | 241   | 40    | 3,705                           | 2.31 |
|             | Mid 2001 - Mid 2006               | 201  | 209                     | 210                    | -60                     | 90    | -60   | 180                             |      |
|             | Mid 2006 - Mid 2011               | -76  | -79                     | -35                    | 105                     | -45   | 30    | 55                              |      |
| Incremental | Mid 2011 - Early 2016             | 83   | 86                      | 95                     | 17                      | 13    | 0     | 125                             |      |
|             | Early 2016 - Early 2021           | 303  | 315                     | 155                    | 20                      | 4     | 0     | 179                             |      |
|             | Early 2016 - Early 2026           | 777  | 809                     | 313                    | 77                      | 12    | 0     | 402                             |      |
|             | Early 2016 - Early 2031           | 1,174  | 1,221                   | 449                    | 136                     | 21    | 0     | 606                             |      |
|             | Early 2016 - Early 2036           | 1,443  | 1,501                   | 542                    | 185                     | 28    | 0     | 755                             |      |

Source: Watson & Associates Economists Ltd., 2015.  
 1. Population excludes net Census Undercount of approximately 4%.  
 2. Includes townhomes and apartments in duplexes.  
 3. Includes bachelor, 1 bedroom and 2 bedroom+ apartments.



Source: Historical housing activity (2005-2014) based on Municipality of Bluewater building department permit data  
 1. Growth Forecast represents calendar year.

**Schedule 2**  
**Municipality Of Bluewater**  
**Estimate Of The Anticipated Amount, Type And Location Of**  
**Development For Which Development Charges Can Be Imposed**

| DEVELOPMENT<br>LOCATION                     | TIMING      | SINGLES & SEMI-<br>DETACHED | MULTIPLES <sup>2</sup> | APARTMENTS <sup>3</sup> | TOTAL RESIDENTIAL<br>UNITS |
|---|-------------|-----------------------------|------------------------|-------------------------|----------------------------|
| Bayfield (Water/Wastewater)                 | 2016 - 2026 | 55                          | 52                     | 12                      | 119                        |
|   | 2016 - 2036 | 95                          | 135                    | 28                      | 258                        |
| Bluewater Lakeshore (Water)<br><sup>3</sup> | 2016 - 2026 | 128                         |                        |                         | 128                        |
|   | 2016-2036   | 211                         |                        |                         | 211                        |
| Hensall (Water/Wastewater))                 | 2016 - 2026 | 85                          | 25                     |                         | 110                        |
|   | 2016 - 2036 | 142                         | 50                     |                         | 192                        |
| Zurich (Water/Wastewater))                  | 2016 - 2026 | 30                          |                        |                         | 30                         |
|   | 2016 - 2036 | 64                          | -                      | -                       | 64                         |
| Rural                                       | 2016 - 2026 | 15                          |                        |                         | 15                         |
|   | 2016 - 2036 | 30                          |                        |                         | 30                         |
| Total                                       | 2016 - 2026 | 313                         | 77                     | 12                      | 402                        |
|   | 2016 - 2036 | 542                         | 185                    | 28                      | 755                        |

| GROSS<br>PERMANENT<br>POPULATION IN<br>NEW UNITS | EXISTING UNIT<br>POPULATION<br>CHANGE | PERMANENT NET<br>POPULATION<br>INCREASE | NET POPULATION<br>INCREASE |
|--|---------------------------------------|---|----------------------------|
| 267  | (28)                                  | 239                                     | 239                        |
| 566  | (47)                                  | 519                                     | 519                        |
| 329  | (7)                                   | 322                                     | 322                        |
| 542  | (12)                                  | 530                                     | 530                        |
| 269  | (38)                                  | 231                                     | 231                        |
| 466  | (64)                                  | 402                                     | 402                        |
| 77   | (30)                                  | 47                                      | 47                         |
| 164  | (49)                                  | 115                                     | 115                        |
| 39   | (100)                                 | (61)                                    | (61)                       |
| 77   | (200)                                 | (123)                                   | (123)                      |
| 980  | (203)                                 | 777                                     | 777                        |
| 1,815  | (372)                                 | 1,443                                   | 1,443                      |

Source: Watson & Associates Economists Ltd., 2015

Residential distribution based on a combination of historical permit activity and discussions with Town staff regarding future development prospects.

1. Includes townhomes and apartments in duplexes.

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

3. While the units constructed on the Bluewater Lakeshore water supply line are categorized as permanent dwellings, a portion of the existing housing stock in the area are considered semi-permeant residents, travelling during the winter months.

**Schedule 3  
Municipality Of Bluewater  
Current Year Growth Forecast  
Early 2011 to Early 2016**

|   |   | POPULATION |
|---|---|------------|
| Mid 2011 Population                                       |   | 7,044      |
| Occupants of New Housing Units, Mid 2011 to Early 2016    | <i>Units (2)</i>                          | 124        |
|   | <i>multiplied by persons per unit (3)</i> | 2.55       |
|   | <i>gross population increase</i>          | 316        |
|   |   | 316        |
| Decline in Housing Unit Occupancy, Mid 2011 to Early 2016 | <i>Units (4)</i>                          | 2,825      |
|   | <i>multiplied by ppu decline rate (5)</i> | -0.0825    |
|   | <i>total decline in population</i>        | -233       |
|   |   | -233       |
| Population Estimate to Early 2016                         |   | 7,127      |
| <i>Net Population Increase, Mid 2011 to Early 2016</i>    |   | 83         |

- (1) 2011 population based on StatsCan Census unadjusted for Census Undercount.
- (2) Estimated residential units constructed, Mid 2011 to the beginning of the growth period, assuming a six month lag between construction and occupancy.
- (3) Average number of persons per unit (ppu) is assumed to be:

| Structural Type                    | Persons Per Unit <sup>1</sup> | % Distribution of Estimated Units <sup>2</sup> | Weighted Persons Per Unit Average |
|------------------------------------|-------------------------------|--|-----------------------------------|
| <i>Singles &amp; Semi Detached</i> | 2.76                          | 76%  | 2.09                              |
| <i>Multiples (6)</i>               | 2.04                          | 14%  | 0.28                              |
| <i>Apartments (7)</i>              | 1.67                          | 10%  | 0.18                              |
| Total                              |                               | 100%   | 2.55                              |

<sup>1</sup> Based on 2011 Census custom database

<sup>2</sup> 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  
Municipality Of Bluewater  
Ten Year Growth Forecast  
Early 2016 to Early 2026**

|   |   | POPULATION |
|---|---|------------|
| Early 2016 Population                                       |   | 7,127      |
| Occupants of New Housing Units, Early 2016 to Early 2026    | <i>Units (2)</i>                          | 402        |
|   | <i>multiplied by persons per unit (3)</i> | 2.44       |
|   | <i>gross population increase</i>          | 980        |
|   |   | 980        |
| Decline in Housing Unit Occupancy, Early 2016 to Early 2026 | <i>Units (4)</i>                          | 2,950      |
|   | <i>multiplied by ppu decline rate (5)</i> | -0.0688    |
|   | <i>total decline in population</i>        | -203       |
|   |   | -203       |
| Population Estimate to Early 2026                           |   | 7,904      |
| <i>Net Population Increase, Early 2016 to Early 2026</i>    |   | <i>777</i> |

(1) Early 2016 Population based on:

2011 Population (7,044) + Mid 2011 to Early 2016 estimated housing units to beginning of forecast period (124 x 2.55 = 316) + (2,825 x -0.0825 = -233) = 7,127

(2) Based upon forecast building permits/completions assuming a lag between construction and occupancy.

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

| Structural Type                    | Persons Per Unit <sup>1</sup> | % Distribution of Estimated Units <sup>2</sup> | Weighted Persons Per Unit Average |
|------------------------------------|-------------------------------|--|-----------------------------------|
| <i>Singles &amp; Semi Detached</i> | 2.57                          | 78%  | 2.00                              |
| <i>Multiples (6)</i>               | 2.04                          | 19%  | 0.39                              |
| <i>Apartments (7)</i>              | 1.67                          | 3%   | 0.05                              |
| <i>one bedroom or less</i>         | 1.23                          |  |                                   |
| <i>two bedrooms or more</i>        | 1.89                          |  |                                   |
| Total                              |                               | 100%   | 2.44                              |

<sup>1</sup> Persons per unit based on adjusted Statistics Canada Custom 2011 Census database.

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

(4) Early 2016 households based upon 2,825 (2011 Census) + 124 (Mid 2011 to Early 2016 unit estimate) = 2,950

(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  
Municipality Of Bluewater  
Twenty Year Growth Forecast  
Early 2016 to Early 2036**

|   |   | POPULATION |
|---|---|------------|
| Early 2016 Population                                       |   | 7,127      |
| Occupants of New Housing Units, Early 2016 to Early 2036    | <i>Units (2)</i>                          | 755        |
|   | <i>multiplied by persons per unit (3)</i> | 2.40       |
|   | <i>gross population increase</i>          | 1,815      |
| Decline in Housing Unit Occupancy, Early 2016 to Early 2036 | <i>Units (4)</i>                          | 2,950      |
|   | <i>multiplied by ppu decline rate (5)</i> | -0.1261    |
|   | <i>total decline in population</i>        | -372       |
| Population Estimate to Early 2036                           |   | 8,570      |
| <i>Net Population Increase, Early 2016 to Early 2036</i>    |   | 1,443      |

(1) Early 2016 Population based on:

2011 Population (7,044) + Mid 2011 to Early 2016 estimated housing units to beginning of forecast period (124 x 2.55 = 316) + (2,825 x -0.0825 = -233) = 7,127

(2) Based upon forecast building permits/completions assuming a lag between construction and occupancy.

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

| Structural Type                    | Persons Per Unit <sup>1</sup> | % Distribution of Estimated Units <sup>2</sup> | Weighted Persons Per Unit Average |
|------------------------------------|-------------------------------|--|-----------------------------------|
| <i>Singles &amp; Semi Detached</i> | 2.57                          | 72%  | 1.84                              |
| <i>Multiples (6)</i>               | 2.04                          | 25%  | 0.50                              |
| <i>Apartments (7)</i>              | 1.67                          | 4%   | 0.06                              |
| <i>one bedroom or less</i> 1.23    |                               |  |                                   |
| <i>two bedrooms or more</i> 1.89   |                               |  |                                   |
| Total                              |                               | 100%   | 2.40                              |

<sup>1</sup> Persons per unit based on adjusted Statistics Canada Custom 2011 Census database.

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

(4) Early 2016 households based upon 2,825 (2011 Census) + 124 (Mid 2011 to Early 2016 unit estimate) = 2,950

(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**

**Municipality Of Bluewater  
Historical Residential Building Permits  
Years 2005 - 2014**

| Year                         | Residential Building Permits |                        |                         |           |
|------------------------------|------------------------------|------------------------|-------------------------|-----------|
|                              | Singles & Semi Detached      | Multiples <sup>1</sup> | Apartments <sup>2</sup> | Total     |
| 2005                         | 52                           | 0                      | 0                       | 52        |
| 2006                         | 48                           | 12                     | 0                       | 60        |
| 2007                         | 45                           | 11                     | 0                       | 56        |
| 2008                         | 49                           | 8                      | 2                       | 59        |
| 2009                         | 57                           | 10                     | 2                       | 69        |
| Sub-total                    | 251                          | 41                     | 4                       | 296       |
| <b>Average (2005 - 2009)</b> | <b>50</b>                    | <b>8</b>               | <b>1</b>                | <b>59</b> |
| % Breakdown                  | 84.8%                        | 13.9%                  | 1.4%                    | 100.0%    |
| 2010                         | 43                           | 9                      | 0                       | 52        |
| 2011                         | 54                           | 3                      | 0                       | 57        |
| 2012                         | 33                           | 7                      | 0                       | 40        |
| 2013                         | 38                           | 4                      | 10                      | 52        |
| 2014                         | 27                           | 4                      | 0                       | 31        |
| Sub-total                    | 195                          | 27                     | 10                      | 232       |
| <b>Average (2010 - 2014)</b> | <b>39</b>                    | <b>5</b>               | <b>2</b>                | <b>46</b> |
| % Breakdown                  | 84.1%                        | 11.6%                  | 4.3%                    | 100.0%    |
| 2005 - 2014<br>Total         | 446                          | 68                     | 14                      | 528       |
| <b>Average</b>               | <b>45</b>                    | <b>7</b>               | <b>1</b>                | <b>53</b> |
| % Breakdown                  | 84.5%                        | 12.9%                  | 2.7%                    | 100.0%    |

Source: Municipality of Bluewater Building Department

1. Includes townhomes and apartments in duplexes.
2. Includes bachelor, 1 bedroom and 2 bedroom+ apartments.

**Schedule 7a**

**Municipality Of Bluewater  
Persons Per Unit By Age And Type Of Dwelling  
(2011 Census)**

| Age of Dwelling | Singles and Semi-Detached |      |              |              |              |              | Adjusted PPU <sup>1</sup> | 20 Year Average |
|-----------------|---------------------------|------|--------------|--------------|--------------|--------------|---------------------------|-----------------|
|                 | < 1 BR                    | 1 BR | 2 BR         | 3/4 BR       | 5+ BR        | Total        |                           |                 |
| 1-5             | -                         | -    | 1.857        | 3.182        | -            | <b>2.667</b> | 2.67                      |                 |
| 6-10            | -                         | -    | -            | 3.105        | 3.600        | <b>2.893</b> | 2.89                      |                 |
| 11-15           | -                         | -    | 1.400        | 2.929        | -            | <b>2.292</b> | 2.29                      |                 |
| 16-20           | -                         | -    | -            | 1.571        | 3.600        | <b>2.417</b> | 2.42                      | 2.57            |
| 20-25           | -                         | -    | -            | 2.405        | -            | <b>2.413</b> | 2.41                      |                 |
| 25-35           | -                         | -    | -            | 2.700        | -            | <b>2.609</b> | 2.61                      |                 |
| 35+             | -                         | -    | 1.667        | 2.612        | 2.750        | <b>2.435</b> | 2.44                      |                 |
| <b>Total</b>    | -                         | -    | <b>1.659</b> | <b>2.629</b> | <b>3.033</b> | <b>2.470</b> |                           |                 |

1. The Census PPU has been adjusted to account for the downward PPU trend which has been recently experienced in both new and older units, largely due to the aging of the population

*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 7b

Huron County  
Persons Per Unit By Age And Type Of Dwelling  
(2011 Census)

| Age of Dwelling | Singles and Semi-Detached |              |              |              |              |              | Adjusted PPU <sup>1</sup> | 20 Year Average |
|-----------------|---------------------------|--------------|--------------|--------------|--------------|--------------|---------------------------|-----------------|
|                 | < 1 BR                    | 1 BR         | 2 BR         | 3/4 BR       | 5+ BR        | Total        |                           |                 |
| 1-5             | -                         | -            | 1.800        | 2.909        | -            | 2.873        | 2.76                      |                 |
| 6-10            | -                         | -            | 2.286        | 3.055        | -            | 3.059        | 3.00                      |                 |
| 11-15           | -                         | -            | 1.923        | 2.696        | 3.000        | 2.656        | 2.63                      |                 |
| 16-20           | -                         | -            | 2.800        | 3.010        | 3.143        | 3.000        | 2.99                      | 2.84            |
| 20-25           | -                         | -            | 2.029        | 2.933        | 3.444        | 2.815        | 2.81                      |                 |
| 25-35           | -                         | -            | 2.000        | 2.953        | 3.500        | 2.914        | 2.91                      |                 |
| 35+             | -                         | 1.423        | 1.912        | 2.535        | 3.014        | 2.406        | 2.40                      |                 |
| <b>Total</b>    | -                         | <b>1.423</b> | <b>1.931</b> | <b>2.613</b> | <b>3.132</b> | <b>2.491</b> |                           |                 |

| Age of Dwelling | Multiples <sup>2</sup> |              |              |              |              |              | Adjusted PPU <sup>1</sup> | 20 Year Average |
|-----------------|------------------------|--------------|--------------|--------------|--------------|--------------|---------------------------|-----------------|
|                 | < 1 BR                 | 1 BR         | 2 BR         | 3/4 BR       | 5+ BR        | Total        |                           |                 |
| 1-5             | -                      | -            | -            | -            | -            | -            | -                         |                 |
| 6-10            | -                      | -            | -            | -            | -            | -            | -                         |                 |
| 11-15           | -                      | -            | 1.571        | 2.000        | -            | 1.750        | 1.75                      |                 |
| 16-20           | -                      | -            | 1.550        | 3.000        | -            | 2.326        | 2.33                      | 2.04            |
| 20-25           | -                      | -            | -            | 3.400        | -            | 3.400        | 3.40                      |                 |
| 25-35           | -                      | -            | -            | 3.000        | -            | 3.000        | 3.00                      |                 |
| 35+             | -                      | 1.444        | 1.791        | 2.875        | 4.385        | 2.316        | 2.32                      |                 |
| <b>Total</b>    | -                      | <b>1.444</b> | <b>1.746</b> | <b>2.907</b> | <b>4.385</b> | <b>2.348</b> |                           |                 |

| Age of Dwelling | Apartments <sup>3</sup> |              |              |              |       |              | Adjusted PPU <sup>1</sup> | 20 Year Average |
|-----------------|-------------------------|--------------|--------------|--------------|-------|--------------|---------------------------|-----------------|
|                 | < 1 BR                  | 1 BR         | 2 BR         | 3/4 BR       | 5+ BR | Total        |                           |                 |
| 1-5             | -                       | -            | -            | -            | -     | -            | -                         |                 |
| 6-10            | -                       | -            | -            | -            | -     | -            | -                         |                 |
| 11-15           | -                       | -            | 1.500        | -            | -     | 1.800        | 1.84                      |                 |
| 16-20           | -                       | 1.000        | 1.659        | 1.571        | -     | 1.486        | 1.50                      | 1.67            |
| 20-25           | -                       | 1.046        | 1.981        | -            | -     | 1.512        | 1.52                      |                 |
| 25-35           | -                       | 1.084        | 1.653        | 2.300        | -     | 1.443        | 1.45                      |                 |
| 35+             | -                       | 1.181        | 1.720        | 2.085        | -     | 1.491        | 1.49                      |                 |
| <b>Total</b>    | -                       | <b>1.149</b> | <b>1.726</b> | <b>2.068</b> | -     | <b>1.488</b> |                           |                 |

| Age of Dwelling | All Density Types |              |              |              |              |              |
|-----------------|-------------------|--------------|--------------|--------------|--------------|--------------|
|                 | < 1 BR            | 1 BR         | 2 BR         | 3/4 BR       | 5+ BR        | Total        |
| 1-5             | -                 | -            | 2.300        | 2.966        | -            | 2.971        |
| 6-10            | -                 | -            | 3.571        | 3.126        | -            | 3.208        |
| 11-15           | -                 | #DIV/0!      | 2.077        | 2.822        | 3.824        | 2.882        |
| 16-20           | -                 | 1.294        | 1.845        | 2.919        | 3.143        | 2.474        |
| 20-25           | -                 | 1.123        | 2.148        | 2.984        | 4.889        | 2.485        |
| 25-35           | -                 | 1.108        | 1.704        | 3.036        | 3.667        | 2.223        |
| 35+             | -                 | 1.265        | 1.849        | 2.550        | 3.433        | 2.249        |
| <b>Total</b>    | <b>#DIV/0!</b>    | <b>1.250</b> | <b>1.869</b> | <b>2.638</b> | <b>3.576</b> | <b>2.310</b> |

1. The Census PPU has been adjusted to account for the downward PPU trend which has been recently experienced in both new and older units, largely due to the aging of the population

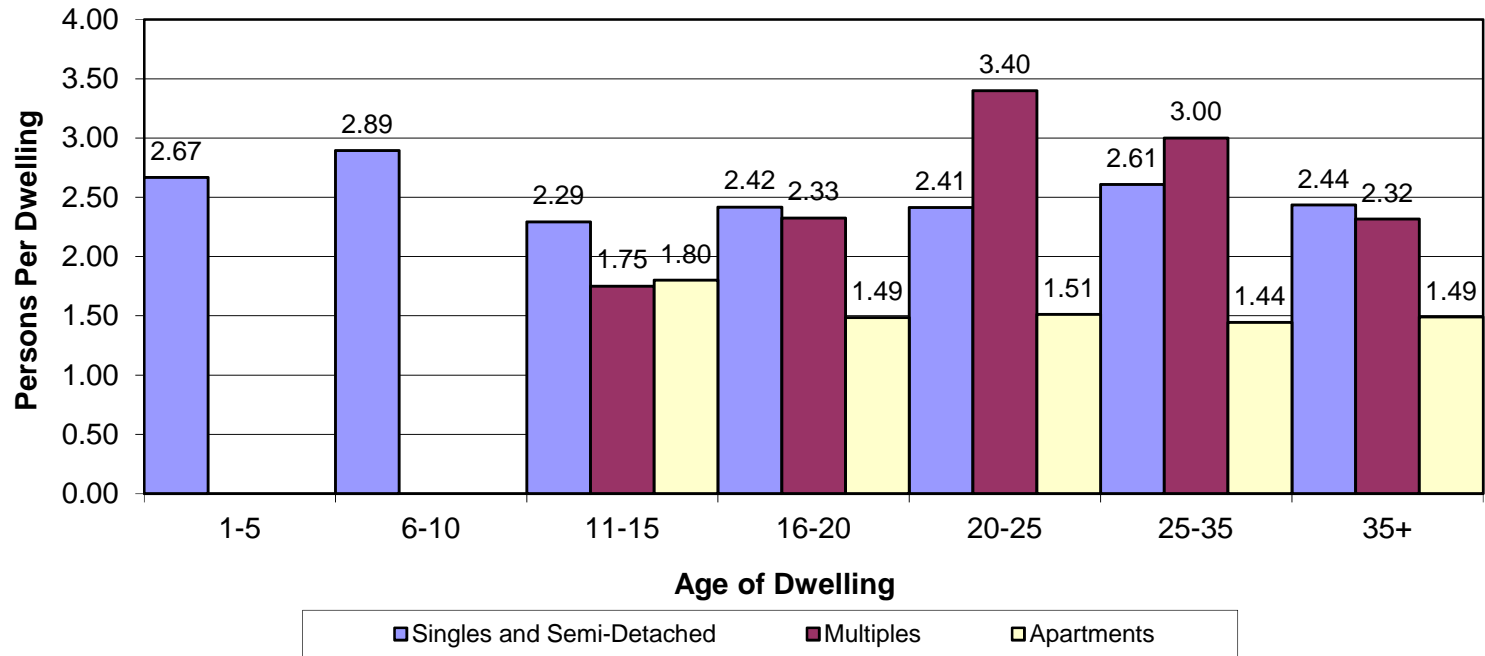
2. Includes townhomes and apartments in duplexes.

3. 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 8  
Municipality Of Bluewater  
Persons Per Unit By Structural Type And Age Of Dwelling  
(2011 Census)**



Multiple and Apartment PPU's are based on Huron County.

**Schedule 9a  
Municipality Of Bluewater  
Employment Forecast, 2016 to 2036**

| Period                         | Population | Activity Rate |              |            |                                   |               |          | Employment |              |            |                                   |               |       |
|--------------------------------|------------|---------------|--------------|------------|-----------------------------------|---------------|----------|------------|--------------|------------|-----------------------------------|---------------|-------|
|                                |            | Primary       | Work at Home | Industrial | Commercial/<br>Population Related | Institutional | Total    | Primary    | Work at Home | Industrial | Commercial/<br>Population Related | Institutional | Total |
| <b>Mid 2001</b>                | 6,919      | 0.029         | 0.097        | 0.097      | 0.104                             | 0.046         | 0.373    | 200        | 669          | 668        | 723                               | 320           | 2,580 |
| <b>Mid 2006</b>                | 7,120      | 0.044         | 0.067        | 0.136      | 0.102                             | 0.058         | 0.406    | 315        | 475          | 965        | 725                               | 410           | 2,890 |
| <b>Mid 2011</b>                | 7,044      | 0.050         | 0.058        | 0.112      | 0.095                             | 0.075         | 0.389    | 350        | 410          | 786        | 671                               | 525           | 2,742 |
| <b>Early 2016</b>              | 7,127      | 0.050         | 0.058        | 0.117      | 0.104                             | 0.076         | 0.405    | 358        | 415          | 831        | 741                               | 542           | 2,888 |
| <b>Early 2026</b>              | 7,904      | 0.050         | 0.058        | 0.109      | 0.104                             | 0.076         | 0.397    | 397        | 460          | 860        | 822                               | 601           | 3,140 |
| <b>Early 2036</b>              | 8,570      | 0.050         | 0.058        | 0.106      | 0.104                             | 0.076         | 0.394    | 430        | 499          | 907        | 891                               | 652           | 3,379 |
| <b>Incremental Change</b>      |            |               |              |            |                                   |               |          |            |              |            |                                   |               |       |
| <b>Mid 2001 - Mid 2006</b>     | 201        | 0.015         | -0.030       | 0.039      | -0.003                            | 0.011         | 0.033    | 115        | -194         | 297        | 2                                 | 90            | 310   |
| <b>Mid 2006 - Mid 2011</b>     | -76        | 0.0054        | -0.0085      | -0.0239    | -0.0066                           | 0.0169        | -0.0166  | 35         | -65          | -179       | -54                               | 115           | -148  |
| <b>Mid 2011 - Early 2016</b>   | 83         | 0.0005        | 0.0000       | 0.0051     | 0.0087                            | 0.0015        | 0.0159   | 8          | 5            | 45         | 70                                | 17            | 146   |
| <b>Early 2016 - Early 2026</b> | 777        | 0.0000        | 0.0000       | -0.0078    | 0.0000                            | 0.0000        | -0.0078  | 39         | 45           | 29         | 81                                | 59            | 252   |
| <b>Early 2016 - Early 2036</b> | 1,443      | 0.0000        | 0.0000       | -0.0108    | 0.0000                            | 0.0000        | -0.0108  | 72         | 84           | 76         | 150                               | 110           | 491   |
| <b>Annual Average</b>          |            |               |              |            |                                   |               |          |            |              |            |                                   |               |       |
| <b>Mid 2001 - Mid 2006</b>     | 40         | 0.00307       | -0.00600     | 0.00780    | -0.00053                          | 0.00227       | 0.00660  | 23         | -39          | 59         | 0                                 | 18            | 62    |
| <b>Mid 2006 - Mid 2011</b>     | -15        | 0.0011        | -0.0017      | -0.0048    | -0.0013                           | 0.0034        | -0.0033  | 7          | -13          | -36        | -11                               | 23            | -30   |
| <b>Mid 2011 - Early 2016</b>   | 18         | 0.0001        | 0.0000       | 0.0011     | 0.0019                            | 0.0003        | 0.0035   | 2          | 1            | 10         | 16                                | 4             | 32    |
| <b>Early 2016 - Early 2026</b> | 78         | 0.00000       | 0.00000      | -0.00078   | 0.00000                           | 0.00000       | -0.00078 | 4          | 5            | 3          | 8                                 | 6             | 25    |
| <b>Early 2016 - Early 2036</b> | 72         | 0.00000       | 0.00000      | -0.00054   | 0.00000                           | 0.00000       | -0.00054 | 4          | 4            | 4          | 7                                 | 6             | 25    |

Source: Watson & Associates Economists Ltd., 2015.

2016 employment base derived based on 2014 EMSI data and assumed employment growth created from 2014 & 2015 non-residential building permit values.

**Schedule 9b**  
**Municipality Of Bluewater**  
**Employment & Gross Floor Area (GFA) Forecast, 2016 to 2036**

| Period                         | Population | Employment |            |                                   |               |       | Gross Floor Area in Square Feet (Estimated) <sup>1</sup> |                                   |               |         |
|--------------------------------|------------|------------|------------|-----------------------------------|---------------|-------|--|-----------------------------------|---------------|---------|
|                                |            | Primary    | Industrial | Commercial/<br>Population Related | Institutional | Total | Industrial   | Commercial/<br>Population Related | Institutional | Total   |
| <b>Mid 2001</b>                | 6,919      | 200        | 668        | 723                               | 320           | 1,911 |  |                                   |               |         |
| <b>Mid 2006</b>                | 7,120      | 315        | 965        | 725                               | 410           | 2,415 |  |                                   |               |         |
| <b>Mid 2011</b>                | 7,044      | 350        | 786        | 671                               | 525           | 2,332 |  |                                   |               |         |
| <b>Early 2016</b>              | 7,127      | 358        | 831        | 741                               | 542           | 2,473 |  |                                   |               |         |
| <b>Early 2026</b>              | 7,904      | 397        | 860        | 822                               | 601           | 2,680 |  |                                   |               |         |
| <b>Early 2036</b>              | 8,570      | 430        | 907        | 891                               | 652           | 2,880 |  |                                   |               |         |
| <b>Incremental Change</b>      |            |            |            |                                   |               |       |  |                                   |               |         |
| <b>Mid 2001 - Mid 2006</b>     | 201        | 115        | 297        | 2                                 | 90            | 504   |  |                                   |               |         |
| <b>Mid 2006 - Mid 2011</b>     | -76        | 35         | -179       | -54                               | 115           | -83   |  |                                   |               |         |
| <b>Mid 2011 - Early 2016</b>   | 83         | 8          | 45         | 70                                | 17            | 141   | 113,400  | 38,600                            | 11,900        | 163,900 |
| <b>Early 2016 - Early 2026</b> | 777        | 39         | 29         | 81                                | 59            | 207   | 71,600   | 44,400                            | 41,300        | 157,300 |
| <b>Early 2016 - Early 2036</b> | 1,443      | 72         | 76         | 150                               | 110           | 407   | 189,100  | 82,400                            | 77,000        | 348,500 |
| <b>Annual Average</b>          |            |            |            |                                   |               |       |  |                                   |               |         |
| <b>Mid 2001 - Mid 2006</b>     | 40         | 23         | 59         | 0                                 | 18            | 101   |  |                                   |               |         |
| <b>Mid 2006 - Mid 2011</b>     | -15        | 7          | -36        | -11                               | 23            | -17   |  |                                   |               |         |
| <b>Mid 2011 - Early 2016</b>   | 18         | 2          | 10         | 16                                | 4             | 31    | 25,200   | 8,578                             | 2,644         | 36,422  |
| <b>Early 2016 - Early 2026</b> | 78         | 4          | 3          | 8                                 | 6             | 21    | 7,160  | 4,440                             | 4,130         | 15,730  |
| <b>Early 2016 - Early 2036</b> | 72         | 4          | 4          | 7                                 | 6             | 20    | 9,455  | 4,120                             | 3,850         | 17,425  |

Source: Watson & Associates Economists Ltd., 2015.

1. Square Foot Per Employee Assumptions

|                                |       |
|--------------------------------|-------|
| Industrial                     | 2,500 |
| Commercial/ Population Related | 550   |
| Institutional                  | 700   |



**Schedule 9c**  
**Estimate Of The Anticipated Amount, Type And Location Of**  
**Non-Residential Development For Which Development Charges Can Be Imposed**

| Development Location        | Timing      | Industrial | Commercial | Institutional | Total Non-Res | Employment            |
|-----------------------------|-------------|------------|------------|---------------|---------------|-----------------------|
|                             |             | GFA S.F.   | GFA S.F.   | GFA S.F.      | GFA S.F.      | Increase <sup>1</sup> |
| Bayfield (Water/Wastewater) | 2016 - 2026 | -          | 40,000     | 37,200        | 77,200        | 126                   |
|                             | 2016 - 2036 | -          | 74,100     | 69,300        | 143,400       | 234                   |
| Bluewater Lakeshore (Water) | 2016 - 2026 | -          | -          | -             | -             | -                     |
|                             | 2016 - 2036 | -          | -          | -             | -             | -                     |
| Hensall (Water/Wastewater)) | 2016 - 2026 | 71,600     | 4,400      | 4,100         | 80,100        | 43                    |
|                             | 2016 - 2036 | 189,100    | 8,200      | 7,700         | 205,000       | 102                   |
| Zurich (Water/Wastewater))  | 2016 - 2026 | -          | -          | -             | -             | -                     |
|                             | 2016 - 2036 | -          | -          | -             | -             | -                     |
| Rural                       | 2016 - 2026 | -          | -          | -             | -             | 39                    |
|                             | 2016 - 2036 | -          | -          | -             | -             | 72                    |
| Municipality of Bluewater   | 2016 - 2026 | 71,600     | 44,400     | 41,300        | 157,300       | 207                   |
|                             | 2016 - 2036 | 189,100    | 82,400     | 77,000        | 348,500       | 407                   |

Source: Watson & Associates Economists Ltd., 2015

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

2. Square feet per employee assumptions:

|               |       |
|---------------|-------|
| Industrial    | 2,500 |
| Commercial    | 550   |
| Institutional | 700   |

**Schedule 10**  
**Municipality Of Bluewater**  
**Non-Residential Construction Value**  
**Years 2002 - 2014**  
**(000's 2014 \$)**

| YEAR                        | Industrial    |              |            |               | Commercial    |              |               |               | Institutional |              |               |               | Total         |               |               |                |
|-----------------------------|---------------|--------------|------------|---------------|---------------|--------------|---------------|---------------|---------------|--------------|---------------|---------------|---------------|---------------|---------------|----------------|
|                             | New           | Improve      | Additions  | Total         | New           | Improve      | Additions     | Total         | New           | Improve      | Additions     | Total         | New           | Improve       | Additions     | Total          |
| 2002                        | 7,139         | 969          | 0          | 8,108         | 493           | 203          | 641           | 1,337         | 0             | 0            | 0             | 0             | 7,632         | 1,171         | 641           | 9,445          |
| 2003                        | 2,140         | 1,035        | 0          | 3,174         | 6,486         | 917          | 0             | 7,403         | 1,135         | 0            | 5,127         | 6,262         | 9,761         | 1,951         | 5,127         | 16,839         |
| 2004                        | 421           | 0            | 5          | 426           | 447           | 0            | 4,667         | 5,113         | 19            | 0            | 1,597         | 1,616         | 887           | 0             | 6,268         | 7,155          |
| 2005                        | 339           | 367          | 27         | 732           | 623           | 306          | 1,403         | 2,332         | 0             | 0            | 3,977         | 3,977         | 962           | 672           | 5,407         | 7,042          |
| 2006                        | 67            | 0            | 0          | 67            | 215           | 0            | 2,423         | 2,637         | 0             | 0            | 3,253         | 3,253         | 282           | 0             | 5,676         | 5,958          |
| 2007                        | 631           | 0            | 0          | 631           | 10            | 0            | 2,457         | 2,467         | 66            | 0            | 4,440         | 4,506         | 707           | 0             | 6,896         | 7,603          |
| 2008                        | 38            | 520          | 11         | 569           | 242           | 580          | 1,020         | 1,841         | 7,705         | 0            | 2,279         | 9,984         | 7,985         | 1,100         | 3,310         | 12,394         |
| 2009                        | 20            | 0            | 0          | 20            | 427           | 0            | 862           | 1,290         | 0             | 0            | 8,594         | 8,594         | 447           | 0             | 9,456         | 9,903          |
| 2010                        | 8             | 440          | 28         | 476           | 670           | 311          | 1,298         | 2,280         | 730           | 0            | 4,805         | 5,535         | 1,408         | 752           | 6,131         | 8,291          |
| 2011                        | 970           | 0            | 0          | 970           | 649           | 368          | 818           | 1,836         | 1,072         | 0            | 0             | 1,072         | 2,691         | 368           | 818           | 3,877          |
| 2012                        | 8,525         | 312          | 299        | 9,136         | 61            | 260          | 1,249         | 1,571         | 0             | 1,976        | 0             | 1,976         | 8,587         | 2,548         | 1,548         | 12,682         |
| 2013                        | 12,566        | 270          | 0          | 12,836        | 1,250         | 201          | 375           | 1,826         | 0             | 321          | 0             | 321           | 13,816        | 792           | 375           | 14,983         |
| 2014                        | 5,555         | 1,301        | 620        | 7,476         | 6,303         | 785          | 3,737         | 10,825        | 0             | 514          | 0             | 514           | 11,858        | 2,600         | 4,357         | 18,815         |
| <b>Subtotal</b>             | <b>38,417</b> | <b>5,213</b> | <b>990</b> | <b>44,621</b> | <b>17,877</b> | <b>3,930</b> | <b>20,950</b> | <b>42,758</b> | <b>10,728</b> | <b>2,811</b> | <b>34,071</b> | <b>47,609</b> | <b>67,022</b> | <b>11,954</b> | <b>56,011</b> | <b>134,987</b> |
| Percent of Total            | 86%           | 12%          | 2%         | 100%          | 42%           | 9%           | 49%           | 100%          | 23%           | 6%           | 72%           | 100%          | 50%           | 9%            | 41%           | 100%           |
| <b>Average</b>              | <b>2,955</b>  | <b>401</b>   | <b>76</b>  | <b>3,432</b>  | <b>1,375</b>  | <b>302</b>   | <b>1,612</b>  | <b>3,289</b>  | <b>825</b>    | <b>216</b>   | <b>2,621</b>  | <b>3,662</b>  | <b>5,156</b>  | <b>920</b>    | <b>4,309</b>  | <b>10,384</b>  |
| 2002 - 2014<br>Period Total |               |              |            | 44,621        |               |              |               | 42,758        |               |              |               | 47,609        |               |               |               | 134,987        |
| <b>2002-2014 Average</b>    |               |              |            | <b>3,432</b>  |               |              |               | <b>3,289</b>  |               |              |               | <b>3,662</b>  |               |               |               | <b>10,384</b>  |
| % Breakdown                 |               |              |            | 33.1%         |               |              |               | 31.7%         |               |              |               | 35.3%         |               |               |               | 100.0%         |

Source: Statistics Canada Publication, 64-001-XIB

Note: Inflated to year-end 2014 (January, 2015) dollars using Reed Construction Cost Index

Schedule 11

Municipality Of Bluewater

Employment To Population Ratio By Major Employment Sector, 2001 To 2011

| NAICS                                  |  | Year         |              |              | Change       |              | Comments  |
|--|--|--------------|--------------|--------------|--------------|--------------|---|
|  |  | 2001         | 2006         | 2011         | 01-06        | 06-11        |   |
| <b>Employment by industry</b>          |  |              |              |              |              |              |   |
| <b>Primary Industry Employment</b>     |  |              |              |              |              |              |   |
| 11                                     | <i>Agriculture, forestry, fishing and hunting</i>      | 570          | 585          | 500          | 15           | -85          | Categories which relate to local land-based resources.                          |
| 21                                     | <i>Mining and oil and gas extraction</i>               | 0            | 0            | 0            | 0            | 0            |   |
| <b>Sub-total</b>                       |  | <b>570</b>   | <b>585</b>   | <b>500</b>   | <b>15</b>    | <b>-85</b>   |   |
| <b>Industrial and Other Employment</b> |  |              |              |              |              |              |   |
| 22                                     | <i>Utilities</i>                                       | 0            | 0            | 0            | 0            | 0            | Categories which relate primarily to industrial land supply and demand.         |
| 23                                     | <i>Construction</i>                                    | 140          | 170          | 185          | 30           | 15           |   |
| 31-33                                  | <i>Manufacturing</i>                                   | 200          | 405          | 255          | 205          | -150         |   |
| 41                                     | <i>Wholesale trade</i>                                 | 275          | 315          | 150          | 40           | -165         |   |
| 48-49                                  | <i>Transportation and warehousing</i>                  | 60           | 135          | 195          | 75           | 60           |   |
| 56                                     | <i>Waste management and remediation services</i>       | 25           | 20           | 18           | -5           | -2           |   |
| <b>Sub-total</b>                       |  | <b>700</b>   | <b>1,045</b> | <b>803</b>   | <b>345</b>   | <b>-242</b>  |   |
| <b>Population Related Employment</b>   |  |              |              |              |              |              |   |
| 44-45                                  | <i>Retail trade</i>                                    | 215          | 235          | 180          | 20           | -55          | Categories which relate primarily to population growth within the municipality. |
| 51                                     | <i>Information and cultural industries</i>             | 70           | 15           | 50           | -55          | 35           |   |
| 52                                     | <i>Finance and insurance</i>                           | 50           | 20           | 50           | -30          | 30           |   |
| 53                                     | <i>Real estate and rental and leasing</i>              | 55           | 45           | 30           | -10          | -15          |   |
| 54                                     | <i>Professional, scientific and technical services</i> | 70           | 55           | 70           | -15          | 15           |   |
| 55                                     | <i>Management of companies and enterprises</i>         | 0            | 10           | 0            | 10           | -10          |   |
| 56                                     | <i>Administrative and support</i>                      | 25           | 20           | 18           | -5           | -2           |   |
| 71                                     | <i>Arts, entertainment and recreation</i>              | 50           | 55           | 90           | 5            | 35           |   |
| 72                                     | <i>Accommodation and food services</i>                 | 255          | 290          | 290          | 35           | 0            |   |
| 81                                     | <i>Other services (except public administration)</i>   | 165          | 95           | 130          | -70          | 35           |   |
| <b>Sub-total</b>                       |  | <b>955</b>   | <b>840</b>   | <b>908</b>   | <b>-115</b>  | <b>68</b>    |   |
| <b>Institutional</b>                   |  |              |              |              |              |              |   |
| 61                                     | <i>Educational services</i>                            | 120          | 145          | 135          | 25           | -10          |   |
| 62                                     | <i>Health care and social assistance</i>               | 200          | 220          | 300          | 20           | 80           |   |
| 91                                     | <i>Public administration</i>                           | 35           | 55           | 95           | 20           | 40           |   |
| <b>Sub-total</b>                       |  | <b>355</b>   | <b>420</b>   | <b>530</b>   | <b>65</b>    | <b>110</b>   |   |
| <b>Total Employment</b>                |  | <b>2,580</b> | <b>2,890</b> | <b>2,741</b> | <b>310</b>   | <b>-149</b>  |   |
| <b>Population</b>                      |  | <b>6,919</b> | <b>7,120</b> | <b>7,044</b> | <b>201</b>   | <b>-76</b>   |   |
| <b>Employment to Population Ratio</b>  |  |              |              |              |              |              |   |
| <b>Industrial and Other Employment</b> |  | <b>0.10</b>  | <b>0.15</b>  | <b>0.11</b>  | <b>0.05</b>  | <b>-0.03</b> |   |
| <b>Population Related Employment</b>   |  | <b>0.14</b>  | <b>0.12</b>  | <b>0.13</b>  | <b>-0.02</b> | <b>0.01</b>  |   |
| <b>Institutional Employment</b>        |  | <b>0.05</b>  | <b>0.06</b>  | <b>0.08</b>  | <b>0.01</b>  | <b>0.02</b>  |   |
| <b>Primary Industry Employment</b>     |  | <b>0.08</b>  | <b>0.08</b>  | <b>0.07</b>  | <b>0.00</b>  | <b>-0.01</b> |   |
| <b>Total</b>                           |  | <b>0.37</b>  | <b>0.41</b>  | <b>0.39</b>  | <b>0.03</b>  | <b>-0.02</b> |   |

Source: Statistics Canada Employment by Place of Work

Note: 2001-2011 employment figures are classified by North American Industry Classification System (NAICS) Code

## **Appendix B – Level of Service**

**APPENDIX B - LEVEL OF SERVICE CEILING**

**MUNICIPALITY OF BLUEWATER**

**SUMMARY OF SERVICE STANDARDS AS PER DEVELOPMENT CHARGES ACT, 1997**

| Service Category              | Sub-Component                          | 10 Year Average Service Standard |         |  |                         | Maximum Ceiling LOS |
|-------------------------------|--|----------------------------------|---------|--|-------------------------|---------------------|
|                               |  | Cost (per capita)                |         | Quantity (per capita)                      | Quality (per capita)    |                     |
| Services Related to a Highway | Roads                                  | \$4,785.00                       | 0.0400  | km of roadways                             | 119,625 per lane km     | 6,904,755           |
|                               | Bridges, Culverts & Structures         | \$2,037.00                       | 0.0106  | Number of Bridges, Culverts & Structures   | 192,170 per item        | 2,939,391           |
|                               | Sidewalks                              | \$291.60                         | 0.0032  | km of roadways                             | 91,125 per km           | 420,779             |
|                               | Depots and Domes                       | \$442.85                         | 3.1354  | ft <sup>2</sup> of building area           | 141 per ft <sup>2</sup> | 639,033             |
|                               | Roads and Related Vehicles             | \$439.76                         | 0.0032  | No. of vehicles and equipment              | 137,425 per vehicle     | 634,574             |
| Fire                          | Fire Facilities                        | \$447.26                         | 2.2010  | ft <sup>2</sup> of building area           | 203 per ft <sup>2</sup> | 645,396             |
|                               | Fire Vehicles                          | \$357.09                         | 0.0018  | No. of vehicles                            | 198,383 per vehicle     | 515,281             |
|                               | Fire Small Equipment and Gear          | \$85.13                          | 0.0988  | No. of equipment and gear                  | 862 per Firefighter     | 122,843             |
| Outdoor Recreation            | Parkland Development                   | \$405.11                         | 0.0065  | Acres of Parkland                          | 62,325 per acre         | 314,770             |
|                               | Parkland Amenities                     | \$293.32                         | 0.0056  | No. of parkland amenities                  | 52,379 per amenity      | 227,910             |
|                               | Marinas and Docks                      | \$57.70                          | 0.0055  | No. of Items                               | 10,491 per item         | 44,833              |
|                               | Parks & Recreation Vehicles            | \$71.00                          | 0.0014  | No. of vehicles and equipment              | 50,714 per vehicle      | 55,167              |
| Indoor Recreation             | Indoor Recreation Facilities           | \$2,620.27                       | 12.8213 | ft <sup>2</sup> of building area           | 204 per ft <sup>2</sup> | 2,035,950           |
| Library                       | Library Facilities                     | \$312.81                         | 1.5583  | ft <sup>2</sup> of building area           | 201 per ft <sup>2</sup> | 243,053             |
| Waste Diversion               | Waste Diversion - Vehicles & Equipment | \$14.42                          | 0.0001  | No. of Vehicles related to Waste Diversion | 144,200 per vehicle     | 11,204              |

**Municipality of Bluewater  
Service Standard Calculation Sheet**

Service: Roads  
Unit Measure: km of roadways

| Description       | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013         | 2014         | 2015         | 2016 Value (\$/km) |
|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------------|
| Earth             | 3.3          | 3.3          | 3.3          | 3.3          | 3.3          | 3.3          | 3.3          | 3.3          | 3.3          | 3.3          | \$5,000            |
| Semi-urban-paved  | 22.1         | 22.1         | 22.1         | 22.1         | 22.1         | 22.1         | 22.1         | 22.1         | 22.1         | 22.1         | \$320,000          |
| Semi-urban-gravel | 2.4          | 2.4          | 2.4          | 2.4          | 2.4          | 2.4          | 2.4          | 2.4          | 2.4          | 2.4          | \$20,000           |
| Urban             | 5.6          | 5.6          | 5.6          | 5.6          | 5.6          | 5.6          | 5.6          | 5.6          | 5.6          | 5.6          | \$680,000          |
| Rural-2 lifts     | 69.0         | 69.0         | 69.0         | 69.0         | 69.0         | 69.0         | 69.0         | 69.0         | 69.0         | 69.0         | \$270,000          |
| Rural-1 lift      | 5.6          | 5.6          | 5.6          | 5.6          | 5.6          | 5.6          | 5.6          | 5.6          | 5.6          | 5.6          | \$100,000          |
| Rural - gravel    | 175.6        | 175.6        | 175.6        | 175.6        | 175.6        | 175.6        | 175.6        | 175.6        | 175.6        | 175.6        | \$20,000           |
| Unit Paver        | 0.5          | 0.5          | 0.5          | 0.5          | 0.5          | 0.5          | 0.5          | 0.5          | 0.5          | 0.5          | \$680,000          |
| <b>Total</b>      | <b>284.0</b> | <b>284.0</b> | <b>284.0</b> | <b>284.0</b> | <b>284.0</b> | <b>284.0</b> | <b>284.0</b> | <b>284.0</b> | <b>284.0</b> | <b>284.0</b> |                    |

|                     |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Population          | 7,120  | 7,104  | 7,079  | 7,066  | 7,074  | 7,044  | 7,107  | 7,115  | 7,136  | 7,127  |
| Per Capita Standard | 0.0399 | 0.0400 | 0.0401 | 0.0402 | 0.0401 | 0.0403 | 0.0400 | 0.0399 | 0.0398 | 0.0399 |

| 10 Year Average   | 2006-2015 |
|-------------------|-----------|
| Quantity Standard | 0.0400    |
| Quality Standard  | \$119,625 |
| Service Standard  | \$4,785   |

| DC Amount (before deductions) | 20 Year     |
|-------------------------------|-------------|
| Forecast Population           | 1,443       |
| \$ per Capita                 | \$4,785     |
| Eligible Amount               | \$6,904,755 |

Note: The above table includes a 25% deduction (estimate) to km of roads to account for local roads

**Municipality of Bluewater  
Service Standard Calculation Sheet**

Service:  
Contact :  
Unit Measure:

Bridges, Culverts & Structures  
Jennette Walker  
Number of Bridges, Culverts & Structures

| Description  | Structure Type | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 Value (\$/item) |
|--|----------------|------|------|------|------|------|------|------|------|------|------|----------------------|
| B01-Airport Ln. (.6 km N of Mill Rd.)              | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$151,000            |
| B02-Airport Ln. (.3 km S of Roman Rd.)             | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$200,000            |
| B03-Roman Rd. (.03 km W of Airport Ln.)            | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$235,000            |
| B04-Airport Ln. (.01 km N of Roman Rd.)            | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$151,000            |
| B05-Airport Ln. (.6 km S of Vanastra Rd.)          | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$177,000            |
| B06-Vanastra Rd. (.6 km E of Airport Ln.)          | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$202,000            |
| B07-Bannockburn Ln. (.7 km S of Vanastra Rd.)      | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$214,000            |
| B08-Short Horn Rd. (.8 km E of Bannockburn Ln.)    | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$181,000            |
| B09-Bannockburn Ln. (.4 km S of Short Horn Rd.)    | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$342,000            |
| B10-Bannockburn Ln. (.4 km N of Roman Rd.)         | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$284,000            |
| B11-Bannockburn Ln. (.2 km S of Roman Rd.)         | Beam/Girder    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$812,000            |
| B12-Bannockburn Ln. (.2 km S of Pavillion Rd.)     | Frame          | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$287,000            |
| B13-Centennial Rd. (.6 km E of Babylon Ln.)        | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$144,000            |
| B14-Centennial Rd. (.8 km E of Babylon Ln.)        | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$146,000            |
| B15-Centennial Rd. (.2 km E of Bannockburn Ln.)    | Frame          | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$515,000            |
| B16-Airport Ln. (1 km N of Centennial Rd.)         | Frame          | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$287,000            |
| B17-Staffa Rd. (1 km W of Airport Ln.)             | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$171,000            |
| B18-Staffa Rd. (1.1 km W of Gulley Ln.)            | Frame          | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$440,000            |
| B19-Staffa Rd. (.5 km W of Gulley Ln.)             | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$140,000            |
| B20-Airport Ln. (.5 km N of Kippen Rd.)            | Frame          | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$319,000            |
| B21-Bell's Ln. (1.2 km S of Kippen Rd.)            | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$86,000             |
| B22-Airport Line (1.9 km S of Walnut Rd.)          | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$97,000             |
| B23-Airport Line (.4 km S of Hensall - Zurich Rd.) | Frame          | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$331,000            |
| B24-Bell's Ln. (.4 km S of Hensall - Zurich Rd.)   | Frame          | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$273,000            |
| B25-Ausable Line (.2 km S of Hensall - Zurich Rd.) | Beam/Girder    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$193,000            |
| B26-Ausable Line (1.6 km N of Rodgerville Rd.)     | Slab           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$50,000             |
| B27-Rodgerville Rd. (.5 km W of Ausable Ln.)       | Beam/Girder    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$215,000            |
| B28-Rodgerville Rd. (1.5 km W of Parr Ln.)         | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$223,000            |
| B29-Hurondale Rd. (.1 km E of Airport Ln.)         | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$177,000            |
| B30-Hurondale Rd. (1.2 km E of Airport Ln.)        | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$105,000            |
| B31-Airport Line (.2 km S of Hurondale Rd.)        | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$145,000            |
| B32-Airport Line (1.9 km S of Hurondale Rd.)       | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$106,000            |
| B33-MacDonald Rd. (1.2 km E of Airport Ln.)        | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$100,000            |
| B34-Airport Ln. (1.2 km S of MacDonald Rd.)        | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$106,000            |
| B35-Airport Line (.3 km N of Huron County Rd. 83)  | Frame          | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$594,000            |
| B36-Bell's Ln. (1.5 km S of Hurondale Rd.)         | Slab           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$82,000             |
| B37-Bell's Ln. (.5 km S of Hurondale Rd.)          | Slab           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$62,000             |
| B38-Ausable Ln. (.4 km S of Hurondale Rd.)         | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$86,000             |
| B39-Ausable Ln. (1.2 km S of Hurondale Rd.)        | Beam/Girder    | 1    | -    | -    | -    | -    | -    | -    | -    | -    | -    | \$73,000             |
| B40-MacDonald Rd. (.5 km E of Parr Ln.)            | Truss          | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$372,000            |
| B41-Blackbush Ln. (.2 km N of County Rd. 83)       | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$92,000             |
| B42-Blackbush Ln. (.4 km S of MacDonald Rd.)       | Culvert        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$90,000             |

|   |          |    |    |    |    |    |    |    |    |    |    |           |
|---|----------|----|----|----|----|----|----|----|----|----|----|-----------|
| B43-Blackbush Ln. (.4 km N of MacDonald Rd.)                  | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$102,000 |
| B44 Shipka Ln. (Intersection of MacDonald Rd.)                | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$160,000 |
| B45-Turnbull's Rd. (.4 km N of County Rd. 83)                 | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$123,000 |
| B46-Bronson Ln. (.5 km S of Rodgerville Rd.)                  | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$69,000  |
| B47-Bronson Ln. (.5 km S of Sararas Rd.)                      | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$238,000 |
| B48-Sararas Rd. (.9 km W of Bronson Ln.)                      | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$152,000 |
| B49-Blackbush Ln. (.3 km N of Sararas Rd.)                    | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$158,000 |
| B50-Blackbush Ln. (.99 km N of Sararas Rd.)                   | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$170,000 |
| B51-Blackbush Ln. (Intersection of Danceland Rd.)             | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$82,000  |
| B52-Kippen Rd. (.7 km E of Goshen Ln.)                        | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$132,000 |
| B53-Lidderdale St. (Bayfield - .8 km S of Cameron St.)        | Slab     | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$63,000  |
| B54-Sjipka Ln. (.7 km N of County Rd. 83)                     | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$111,000 |
| B55-Airport Ln. (.5 km N of Short Horn Rd.)                   | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$127,000 |
| B56-Gulley Ln. (.04 km N of Staffa Rd.)                       | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$155,000 |
| B57-Babylon Ln. (Intersection of Babylon Ln. & Staffa Rd.)    | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$222,000 |
| B58-Babylon Ln. (.2 km S of Centennial Rd.)                   | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$142,000 |
| B59-Bronson Ln. (.15 km N of Centennial Rd.)                  | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$284,000 |
| B60-Bronson Ln. (.3 km N of Pavillion Rd.)                    | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$216,000 |
| B61-Woodland Rd. (.5 km N of Driftwood Dr.)                   | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$160,000 |
| B62-Parr Ln. (2.2 Km S of Rodgerville Rd.)                    | Slab     | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$336,000 |
| B63-Staffa Rd. (.8 km W of Airport Ln.)                       | Slab     | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$63,000  |
| B64-Bronson Ln. (1.4 km N of Rodgerville Rd.)                 | Culvert  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$178,000 |
| B65 -Blackbush Line(1.2km South of Kippen Road )              | Culverts | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$198,000 |
| B66 -Pepper Road/ Shipka Line (0.1km North of Hendrick Road ) | Culverts | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$208,000 |
| B67-Rodgerville Road (0.6km East of Goshen Line)              | Culverts | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$217,000 |
| B68-Airport Line (0.7km South of Staffa )                     | Culverts | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$198,000 |
| B69-Ausuable Line (North of Rodgerville Road)                 | Culverts | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$178,000 |
| B70 -Rodgerville Road (0.7km West of Parr Line )              | Culverts | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$183,000 |
| B71 -Rodgerville Road (0.9km West of Goshen Line )            | Culverts | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$228,000 |
| B72 -Blackbush Line(0.4km South of Pepper Road)               | Culverts | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$122,000 |
| B73-Shipka Line (0.8km North of MacDonald Road)               | Culverts | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$148,000 |
| B74 -Bronson Line (0.25km South of Pepper Road)               | Culverts | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$231,000 |
| B75 -Hurondale Road(0.2km East o Ausuable Line )              | Culverts | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$49,000  |
| B76 -Ausuable Line (1.4km North of Hurondale Road)            | Culverts | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | \$63,000  |
|   |          |    |    |    |    |    |    |    |    |    |    |           |
|   |          |    |    |    |    |    |    |    |    |    |    |           |
| Total   |          | 76 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |           |

|                     |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Population          | 7,120  | 7,104  | 7,079  | 7,066  | 7,074  | 7,044  | 7,107  | 7,115  | 7,136  | 7,127  |
| Per Capita Standard | 0.0107 | 0.0106 | 0.0106 | 0.0106 | 0.0106 | 0.0106 | 0.0106 | 0.0105 | 0.0105 | 0.0105 |

|                   |  |           |
|-------------------|--|-----------|
| 10 Year Average   |  | 2006-2015 |
| Quantity Standard |  | 0.0106    |
| Quality Standard  |  | \$192,170 |
| Service Standard  |  | \$2,037   |

|                               |  |             |
|-------------------------------|--|-------------|
| DC Amount (before deductions) |  | 20 Year     |
| Forecast Population           |  | 1,443       |
| \$ per Capita                 |  | \$2,037     |
| Eligible Amount               |  | \$2,939,391 |



**Municipality of Bluewater  
Service Standard Calculation Sheet**

Service: Sidewalks  
Unit Measure: km of roadways

| Description  | 2006      | 2007      | 2008      | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      | 2016 Value (\$/km) |
|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------------------|
| Brucefield   | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | 2         | \$90,000           |
| Dashwood     | 4         | 4         | 4         | 4         | 4         | 4         | 4         | 4         | 4         | 4         | \$90,000           |
| Hensall      | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 8         | 8         | \$90,000           |
| Kippen       | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$90,000           |
| Varna        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$90,000           |
| Zurich       | 7         | 7         | 7         | 7         | 7         | 7         | 7         | 7         | 7         | 7         | \$90,000           |
|              |           |           |           |           |           |           |           |           |           |           |                    |
|              |           |           |           |           |           |           |           |           |           |           |                    |
|              |           |           |           |           |           |           |           |           |           |           |                    |
|              |           |           |           |           |           |           |           |           |           |           |                    |
| <b>Total</b> | <b>23</b> | <b>23</b> | <b>23</b> | <b>23</b> | <b>23</b> | <b>23</b> | <b>23</b> | <b>23</b> | <b>23</b> | <b>23</b> |                    |

|                     |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Population          | 7,120  | 7,104  | 7,079  | 7,066  | 7,074  | 7,044  | 7,107  | 7,115  | 7,136  | 7,127  |
| Per Capita Standard | 0.0032 | 0.0032 | 0.0032 | 0.0033 | 0.0033 | 0.0033 | 0.0032 | 0.0032 | 0.0032 | 0.0032 |

| 10 Year Average   | 2006-2015 |
|-------------------|-----------|
| Quantity Standard | 0.0032    |
| Quality Standard  | \$91,125  |
| Service Standard  | \$292     |

| DC Amount (before deductions) | 20 Year   |
|-------------------------------|-----------|
| Forecast Population           | 1,443     |
| \$ per Capita                 | \$292     |
| Eligible Amount               | \$420,779 |

**Municipality of Bluewater  
Service Standard Calculation Sheet**

Service: Depots and Domes  
 Contact : Jennette Walker  
 Unit Measure: ft<sup>2</sup> of building area

| Description                         | 2006          | 2007          | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          | 2015          | 2016 Bld'g Value (\$/ft <sup>2</sup> ) | Value/ft <sup>2</sup> with land, site works, etc. |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--|---|
| Hay Equipment Depot                 | 3,312         | 3,312         | 3,312         | 3,312         | 3,312         | 3,312         | 3,312         | 3,312         | 3,312         | 3,312         | \$155                                  | \$174   |
| Sand/Salt Storage Building (Zurich) | 6,000         | 6,000         | 6,000         | 6,000         | 6,000         | 6,000         | 6,000         | 6,000         | 6,000         | 6,000         | \$44                                   | \$52  |
| Stanley Equipment Depot/Complex     | 6,160         | 6,160         | 6,160         | 6,160         | 6,160         | 6,160         | 6,160         | 6,160         | 6,160         | 6,160         | \$148                                  | \$166   |
| Hensall Equipment Depot             | 1,186         | 1,186         | 1,186         | 1,186         | 1,186         | 1,186         | 1,186         | 1,186         | 1,186         | 1,186         | \$176                                  | \$197   |
| Zurich Equipment Depot              | 2,950         | 2,950         | 2,950         | 2,950         | 2,950         | 2,950         | 2,950         | 2,950         | 2,950         | 2,950         | \$155                                  | \$174   |
| Bayfield Equipment Depot            | 1,944         | 1,944         | 1,944         | 1,944         | 1,944         | 1,944         | 1,944         | 1,944         | 1,944         | 1,944         | \$176                                  | \$197   |
| Zurich Library/ Rented Offices      | 700           | 700           | 700           | 700           | 700           | 700           | 700           | 700           | 700           | 700           | \$129                                  | \$146   |
|                                     |               |               |               |               |               |               |               |               |               |               |  |   |
|                                     |               |               |               |               |               |               |               |               |               |               |  |   |
|                                     |               |               |               |               |               |               |               |               |               |               |  |   |
|                                     |               |               |               |               |               |               |               |               |               |               |  |   |
|                                     |               |               |               |               |               |               |               |               |               |               |  |   |
| <b>Total</b>                        | <b>22,252</b> | <b>22,252</b> | <b>22,252</b> | <b>22,252</b> | <b>22,252</b> | <b>22,252</b> | <b>22,252</b> | <b>22,252</b> | <b>22,252</b> | <b>22,252</b> |  |   |

|                     |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Population          | 7,120  | 7,104  | 7,079  | 7,066  | 7,074  | 7,044  | 7,107  | 7,115  | 7,136  | 7,127  |
| Per Capita Standard | 3.1253 | 3.1323 | 3.1434 | 3.1492 | 3.1456 | 3.1590 | 3.1310 | 3.1275 | 3.1183 | 3.1222 |

| 10 Year Average   |  | 2006-2015 |
|-------------------|--|-----------|
| Quantity Standard |  | 3.1354    |
| Quality Standard  |  | \$141     |
| Service Standard  |  | \$443     |

| DC Amount (before deductions) |  | 20 Year   |
|-------------------------------|--|-----------|
| Forecast Population           |  | 1,443     |
| \$ per Capita                 |  | \$443     |
| Eligible Amount               |  | \$639,033 |

**Municipality of Bluewater  
Service Standard Calculation Sheet**

Service: Roads and Related Vehicles  
Unit Measure: No. of vehicles and equipment

| Description                   | 2006      | 2007      | 2008      | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      | 2016 Value (\$/Vehicle) |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------------------|
| Case 570 loader               | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$74,000                |
| Case 570 loader               | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$74,000                |
| Case 580 backhoe              | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$84,000                |
| John Deere backhoe            | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$142,000               |
| Volvo 740 grader              | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$373,000               |
| John Beere grader             | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$373,000               |
| Vermee Chipper                | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$11,000                |
| Ford 545 C tractor            | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$27,000                |
| Massey 245 tractor            | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$27,000                |
| Holder sidewalk plow          | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$146,000               |
| Kubota lawn mower/blower      | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$22,000                |
| International generator 75 KV | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$27,000                |
| Flatbed - Silverado           | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$74,000                |
| Flatbed - F550                | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$74,000                |
| Flatbed - 3500                | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$74,000                |
| Tandem Truck                  | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$219,000               |
| Tandem Truck                  | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$219,000               |
| Single Axle                   | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$205,000               |
| Tandem Truck                  | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$219,000               |
| Single Axle                   | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$205,000               |
| Single Axle                   | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$205,000               |
| Tandem                        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$219,000               |
| SUV-Escape                    | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$28,000                |
| <b>Total</b>                  | <b>23</b> | <b>23</b> | <b>23</b> | <b>23</b> | <b>23</b> | <b>23</b> | <b>23</b> | <b>23</b> | <b>23</b> | <b>23</b> |                         |

|                     |       |       |       |       |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Population          | 7,120 | 7,104 | 7,079 | 7,066 | 7,074 | 7,044 | 7,107 | 7,115 | 7,136 | 7,127 |
| Per Capita Standard | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |

| 10 Year Average   | 2006-2015 |
|-------------------|-----------|
| Quantity Standard | 0.0032    |
| Quality Standard  | \$137,425 |
| Service Standard  | \$440     |

| DC Amount (before deductions) | 20 Year   |
|-------------------------------|-----------|
| Forecast Population           | 1,443     |
| \$ per Capita                 | \$440     |
| Eligible Amount               | \$634,574 |

**Municipality of Bluewater  
Service Standard Calculation Sheet**

Service: Fire Facilities  
Unit Measure: ft² of building area

| Description           | 2006          | 2007          | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          | 2015          | 2016 Bld'g Value (\$/ft²) | Value/ft² with land, site works, etc. |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------------------|---------------------------------------|
| Bayfield Fire Dept.   | 5,400         | 5,400         | 5,400         | 5,400         | 5,400         | 5,400         | 5,400         | 5,400         | 5,400         | 5,400         | \$194                     | \$217                                 |
| Brucefield Fire Dept. | 4,000         | 4,000         | 4,000         | 4,000         | 4,000         | 4,000         | 4,000         | 4,000         | 4,000         | 4,000         | \$205                     | \$230                                 |
| Hensall Fire Dept.    | 3,496         | 3,496         | 3,496         | 3,496         | 3,496         | 3,496         | 3,496         | 3,496         | 3,496         | 3,496         | \$155                     | \$174                                 |
| Zurich Fire Dept.     | 2,725         | 2,725         | 2,725         | 2,725         | 2,725         | 2,725         | 2,725         | 2,725         | 2,725         | 2,725         | \$155                     | \$174                                 |
|                       |               |               |               |               |               |               |               |               |               |               |                           |                                       |
|                       |               |               |               |               |               |               |               |               |               |               |                           |                                       |
|                       |               |               |               |               |               |               |               |               |               |               |                           |                                       |
|                       |               |               |               |               |               |               |               |               |               |               |                           |                                       |
|                       |               |               |               |               |               |               |               |               |               |               |                           |                                       |
|                       |               |               |               |               |               |               |               |               |               |               |                           |                                       |
| <b>Total</b>          | <b>15,621</b> | <b>15,621</b> | <b>15,621</b> | <b>15,621</b> | <b>15,621</b> | <b>15,621</b> | <b>15,621</b> | <b>15,621</b> | <b>15,621</b> | <b>15,621</b> |                           |                                       |

|                     |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Population          | 7,120  | 7,104  | 7,079  | 7,066  | 7,074  | 7,044  | 7,107  | 7,115  | 7,136  | 7,127  |
| Per Capita Standard | 2.1940 | 2.1989 | 2.2067 | 2.2107 | 2.2082 | 2.2176 | 2.1980 | 2.1955 | 2.1890 | 2.1918 |

| 10 Year Average   | 2006-2015 |
|-------------------|-----------|
| Quantity Standard | 2.2010    |
| Quality Standard  | \$203     |
| Service Standard  | \$447     |

| DC Amount (before deductions) | 20 Year   |
|-------------------------------|-----------|
| Forecast Population           | 1,443     |
| \$ per Capita                 | \$447     |
| Eligible Amount               | \$645,396 |

**Municipality of Bluewater  
Service Standard Calculation Sheet**

Service: Fire Vehicles  
Unit Measure: No. of vehicles

| Description                        | 2006      | 2007      | 2008      | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      | 2016 Value (\$/Vehicle) |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------------------|
| Freightliner - pumper (Bayfield)   | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$310,000               |
| Freightliner - pumper (Brucefield) | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$310,000               |
| Freightliner - pumper (Zurich)     | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$310,000               |
| Hub - pumper (Hensall)             | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$310,000               |
| Freightliner - pumper (Hensall)    | -         | -         | -         | -         | -         | 1         | 1         | 1         | 1         | 1         | \$285,000               |
| Freightliner - tanker (Bayfield)   | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$234,000               |
| Tanker (Brucefield)                | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$234,000               |
| Freightliner - tanker (Hensall)    | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$234,000               |
| International - tanker (Zurich)    | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$234,000               |
| Rescue (Bayfield)                  | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$54,000                |
| Chev Rescue (Brucefield)           | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$54,000                |
| Rescue (Hensall)                   | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$54,000                |
| International Rescue (Zurich)      | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$54,000                |
|                                    |           |           |           |           |           |           |           |           |           |           |                         |
|                                    |           |           |           |           |           |           |           |           |           |           |                         |
|                                    |           |           |           |           |           |           |           |           |           |           |                         |
| <b>Total</b>                       | <b>12</b> | <b>12</b> | <b>12</b> | <b>12</b> | <b>12</b> | <b>13</b> | <b>13</b> | <b>13</b> | <b>13</b> | <b>13</b> |                         |

|                     |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Population          | 7,120  | 7,104  | 7,079  | 7,066  | 7,074  | 7,044  | 7,107  | 7,115  | 7,136  | 7,127  |
| Per Capita Standard | 0.0017 | 0.0017 | 0.0017 | 0.0017 | 0.0017 | 0.0018 | 0.0018 | 0.0018 | 0.0018 | 0.0018 |

| 10 Year Average   | 2006-2015 |
|-------------------|-----------|
| Quantity Standard | 0.0018    |
| Quality Standard  | \$198,383 |
| Service Standard  | \$357     |

| DC Amount (before deductions) | 20 Year   |
|-------------------------------|-----------|
| Forecast Population           | 1,443     |
| \$ per Capita                 | \$357     |
| Eligible Amount               | \$515,281 |

**Municipality of Bluewater  
Service Standard Calculation Sheet**

Service: Fire Small Equipment and Gear  
Unit Measure: No. of equipment and gear

| Description                   | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 Value (\$/item) |
|-------------------------------|------|------|------|------|------|------|------|------|------|------|----------------------|
| Thermal Imaging Camera        | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | 3    | \$950                |
| Air Compressor                | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$29,103             |
| Portable Generator            | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | \$700                |
| Portable Pumps                | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | \$2,516              |
| MSA SCBA Packs                | 40   | 40   | 40   | 40   | 40   | 40   | 40   | 40   | 40   | 40   | \$3,933              |
| MSA SCBA Aluminum Cylinders   | 112  | 112  | 112  | 112  | 112  | 112  | 112  | 112  | 112  | 112  | \$333                |
| Scott SCBA Aluminum Cylinders | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | \$333                |
| Extrication Jaws              | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | \$4,867              |
| Extrication Cutters           | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | \$2,435              |
| Extrication Rams              | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | \$3,379              |
| Extrication Pump              | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | \$5,964              |
| Air Bag System                | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | \$5,623              |
| Manual Extrication Kit        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | \$767                |
| Ventilation Saw               | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | \$2,084              |
| Defibrillator                 | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | \$1,200              |
| Multi- Gas Monitor            | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | \$666                |
| Multi-Gas Test System         | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$4,200              |
| 38 mm Nozzle                  | 26   | 26   | 26   | 26   | 26   | 26   | 26   | 26   | 26   | 26   | \$725                |
| 65mm Nozzle                   | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | 8    | \$725                |
| Master Stream Nozzle          | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | \$1,657              |
| Gated Wye                     | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | 14   | \$310                |
| Foam Eductor                  | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | \$432                |
| 4" Supply/Intake Gated Valve  | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$1,280              |
| 6" Supply/Intake Gated Valve  | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | 5    | \$1,187              |
| 4" Hard Suction               | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   | 18   | \$265                |
| 6" Hard Suction               | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 4    | \$872                |
| Couplers                      | 27   | 27   | 27   | 27   | 27   | 27   | 27   | 27   | 27   | 27   | \$135                |
| Reducers                      | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | 13   | \$140                |
| Floating Strainer             | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$385                |
| Low Level Strainer            | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | \$332                |
| Flashlights-Battery           | 31   | 31   | 31   | 31   | 31   | 31   | 31   | 31   | 31   | 31   | \$39                 |
| Flashlights-Rechargeable      | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | \$116                |
| Portable Radios               | 45   | 45   | 45   | 45   | 45   | 45   | 45   | 45   | 45   | 45   | \$1,023              |
| Mobile radios                 | 15   | 15   | 15   | 15   | 15   | 15   | 15   | 15   | 15   | 15   | \$1,582              |
| 38mm Hose X 15m               | 99   | 99   | 99   | 99   | 99   | 99   | 99   | 99   | 99   | 99   | \$275                |
| 65mm Hose X 15m               | 98   | 98   | 98   | 98   | 98   | 98   | 98   | 98   | 98   | 98   | \$425                |
| 100mm Hose x                  | 23   | 23   | 23   | 23   | 23   | 23   | 23   | 23   | 23   | 23   | \$729                |
| Sawzall/Hand Tools            | 11   | 11   | 11   | 11   | 11   | 11   | 11   | 11   | 11   | 11   | \$135                |
| 65mm Gates                    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | 6    | \$375                |

|             |     |     |     |     |     |     |     |     |     |     |         |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|
| GPS         | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | \$89    |
| Port-a-tank | 6   | 6   | 6   | 6   | 6   | 6   | 6   | 6   | 6   | 6   | \$2,300 |
| Total       | 701 | 701 | 701 | 701 | 701 | 701 | 701 | 701 | 701 | 701 |         |

|                     |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Population          | 7,120  | 7,104  | 7,079  | 7,066  | 7,074  | 7,044  | 7,107  | 7,115  | 7,136  | 7,127  |
| Per Capita Standard | 0.0985 | 0.0987 | 0.0990 | 0.0992 | 0.0991 | 0.0995 | 0.0986 | 0.0985 | 0.0982 | 0.0984 |

|                   |           |
|-------------------|-----------|
| 10 Year Average   | 2006-2015 |
| Quantity Standard | 0.0988    |
| Quality Standard  | \$862     |
| Service Standard  | \$85      |

|                               |           |
|-------------------------------|-----------|
| DC Amount (before deductions) | 20 Year   |
| Forecast Population           | 1,443     |
| \$ per Capita                 | \$85      |
| Eligible Amount               | \$122,843 |

**Municipality of Bluewater  
Service Standard Calculation Sheet**

Service: Parkland Development  
Unit Measure: Acres of Parkland

| Description  | 2006        | 2007        | 2008        | 2009        | 2010        | 2011        | 2012        | 2013        | 2014        | 2015        | 2016 Value (\$/Acre) |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------------|
| Bayfield Arena and Agricultural Park (Jane St, Bayfield) | 8.8         | 8.8         | 8.8         | 8.8         | 8.8         | 8.8         | 8.8         | 8.8         | 8.8         | 8.8         | \$63,000             |
| Clan Gregor Square (Bayfield)                            | 4.4         | 4.4         | 4.4         | 4.4         | 4.4         | 4.4         | 4.4         | 4.4         | 4.4         | 4.4         | \$63,000             |
| Hensall Arena Park (Oxford Street W, Hensall)            | 8.1         | 8.1         | 8.1         | 8.1         | 8.1         | 8.1         | 8.1         | 8.1         | 8.1         | 8.1         | \$63,000             |
| Hensall Parkette   | 1.0         | 1.0         | 1.0         | 1.0         | 1.0         | 1.0         | 1.0         | 1.0         | 1.0         | 1.0         | \$50,200             |
| Houston Heights Beach (Pavillion Road)                   | 6.2         | 6.2         | 6.2         | 6.2         | 6.2         | 6.2         | 6.2         | 6.2         | 6.2         | 6.2         | \$63,000             |
| Moore Court-tennis court                                 | 0.8         | 0.8         | 0.8         | 0.8         | 0.8         | 0.8         | 0.8         | 0.8         | 0.8         | 0.8         | \$63,000             |
| Stanley Community Centre Park (Mill Rd. Bluewater)       | 4.9         | 4.9         | 4.9         | 4.9         | 4.9         | 4.9         | 4.9         | 4.9         | 4.9         | 4.9         | \$63,000             |
| Varna Cenotaph   | 1.0         | 1.0         | 1.0         | 1.0         | 1.0         | 1.0         | 1.0         | 1.0         | 1.0         | 1.0         | \$63,000             |
| Zurich Park (Main St., Zurich)                           | 2.2         | 2.2         | 2.2         | 2.2         | 2.2         | 2.2         | 2.2         | 2.2         | 2.2         | 2.2         | \$63,000             |
| St. Joseph's Memorial Park                               | 4.8         | 4.8         | 4.8         | 4.8         | 4.8         | 4.8         | 4.8         | 4.8         | 4.8         | 4.8         | \$63,000             |
| Carriage Lane  | 2.2         | 2.2         | 2.2         | 2.2         | 2.2         | 2.2         | 2.2         | 2.2         | 2.2         | 2.2         | \$63,000             |
| Hay Township Park Lookout (Sararas Road, Bluewater)      | 1.4         | 1.4         | 1.4         | 1.4         | 1.4         | 1.4         | 1.4         | 1.4         | 1.4         | 1.4         | \$63,000             |
|  |             |             |             |             |             |             |             |             |             |             |                      |
| <b>Total</b>   | <b>45.8</b> | <b>45.8</b> | <b>45.8</b> | <b>45.8</b> | <b>45.8</b> | <b>45.8</b> | <b>45.8</b> | <b>45.8</b> | <b>45.8</b> | <b>45.8</b> |                      |

|                     |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Population          | 7,120  | 7,104  | 7,079  | 7,066  | 7,074  | 7,044  | 7,107  | 7,115  | 7,136  | 7,127  |
| Per Capita Standard | 0.0064 | 0.0065 | 0.0065 | 0.0065 | 0.0065 | 0.0065 | 0.0064 | 0.0064 | 0.0064 | 0.0064 |

| 10 Year Average   | 2006-2015 |
|-------------------|-----------|
| Quantity Standard | 0.0065    |
| Quality Standard  | \$62,325  |
| Service Standard  | \$405     |

| DC Amount (before deductions) | 10 Year   |
|-------------------------------|-----------|
| Forecast Population           | 777       |
| \$ per Capita                 | \$405     |
| Eligible Amount               | \$314,770 |



**Municipality of Bluewater  
Service Standard Calculation Sheet**

Service: Parkland Amenities  
Unit Measure: No. of parkland amenities

| Description                                  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 Value (\$/item) |
|--|------|------|------|------|------|------|------|------|------|------|----------------------|
| <u>Bayfield Arena and Agricultural Park:</u> |      |      |      |      |      |      |      |      |      |      |                      |
| Ball Diamond                                 | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$38,700             |
| Pavillion                                    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$29,100             |
| Soccer Field                                 | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$61,900             |
| Washroom Facilities                          | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$89,700             |
| Bayfield Playground - Large Memorial         | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$34,300             |
| <u>Clan Gregor Square:</u>                   |      |      |      |      |      |      |      |      |      |      |                      |
| Playground                                   | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$69,800             |
| Washroom Facility                            | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$89,700             |
| Splash Pad                                   | -    | -    | -    | -    | -    | -    | -    | 1    | 1    | 1    | \$84,000             |
| Paved Walkway                                | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$5,300              |
| <u>Houston Heights Beach:</u>                |      |      |      |      |      |      |      |      |      |      |                      |
| Playground                                   | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$56,700             |
| Gazebo                                       | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$11,700             |
| Washroom Facilities                          | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$89,700             |
| Walking Trails/ Paths                        | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$5,300              |
| Beach Access                                 | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$50,000             |
| <u>Pioneer Park:</u>                         |      |      |      |      |      |      |      |      |      |      |                      |
| Beach Access                                 | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$50,000             |
| <u>Hensall Arena Park:</u>                   |      |      |      |      |      |      |      |      |      |      |                      |
| Ball Diamond #1                              | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$38,700             |
| Ball Diamond #2                              | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$9,700              |
| Pavillion                                    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$110,400            |
| Playground                                   | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$54,200             |
| Splash Pad                                   | -    | -    | -    | -    | -    | -    | -    | -    | 1    | 1    | \$84,000             |
| Washroom Facilities                          | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$89,700             |
| Soccer Field                                 | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$61,900             |
| <u>St. Joseph's Beach:</u>                   |      |      |      |      |      |      |      |      |      |      |                      |
| Beach Access                                 | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$50,000             |
| <u>Hay Township Park Lookout:</u>            |      |      |      |      |      |      |      |      |      |      |                      |
| Sararas Stairs                               | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$50,000             |
| <u>Stanley Community Centre:</u>             |      |      |      |      |      |      |      |      |      |      |                      |
| Pavillion                                    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | \$55,200             |

**Municipality of Bluewater  
Service Standard Calculation Sheet**

Service: Parkland Amenities  
Unit Measure: No. of parkland amenities

| Description                                 | 2006      | 2007      | 2008      | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      | 2016 Value (\$/item) |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------------|
| Playground                                  | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$69,800             |
| Ball Diamond #1                             | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$38,700             |
| Ball Diamond #2                             | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$33,800             |
| Pavillion/Washrooms                         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$89,700             |
| Soccer Field                                | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$61,900             |
| Walking Trail/Paths                         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$5,300              |
| Stairwell                                   | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$50,000             |
| Stanley Pavillion - Playground Equipment    | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$5,700              |
| <b>Zurich Arena and Park (East Street):</b> |           |           |           |           |           |           |           |           |           |           |                      |
| Washroom Facilities                         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$89,700             |
| <b>Zurich Park (Main Street):</b>           |           |           |           |           |           |           |           |           |           |           |                      |
| Ball Diamond #1                             | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$38,700             |
| Picnic Building                             | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$46,000             |
| Playground                                  | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$57,300             |
| Washrooms                                   | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$89,700             |
| Soccer Field                                | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$61,900             |
| <b>Other Beach Access:</b>                  |           |           |           |           |           |           |           |           |           |           |                      |
| Howard Street Stairs                        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$50,000             |
| Glass Street Stairs                         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$50,000             |
| <b>Total</b>                                | <b>39</b> | <b>39</b> | <b>39</b> | <b>39</b> | <b>39</b> | <b>39</b> | <b>39</b> | <b>40</b> | <b>41</b> | <b>41</b> |                      |

|                     |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Population          | 7,120  | 7,104  | 7,079  | 7,066  | 7,074  | 7,044  | 7,107  | 7,115  | 7,136  | 7,127  |
| Per Capita Standard | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0056 | 0.0057 | 0.0058 |

| 10 Year Average   | 2006-2015 |
|-------------------|-----------|
| Quantity Standard | 0.0056    |
| Quality Standard  | \$52,379  |
| Service Standard  | \$293     |

| DC Amount (before deductions) | 10 Year   |
|-------------------------------|-----------|
| Forecast Population           | 777       |
| \$ per Capita                 | \$293     |
| Eligible Amount               | \$227,910 |

**Municipality of Bluewater  
Service Standard Calculation Sheet**

Service: Marinas and Docks  
Unit Measure: No. of Items

| Description       | 2006      | 2007      | 2008      | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      | 2016 Value (\$/Item) |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------------|
| Washrooms         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$125,000            |
| Stairs / Walkways | 5         | 5         | 5         | 5         | 5         | 5         | 5         | 5         | 5         | 5         | \$6,000              |
| Lightposts        | 25        | 25        | 25        | 25        | 25        | 25        | 25        | 25        | 25        | 25        | \$700                |
| Docks - Rigid     | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$33,000             |
| Docks - Floating  | 5         | 5         | 5         | 5         | 5         | 5         | 5         | 5         | 5         | 5         | \$25,000             |
| Picnic Tables     | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$13,000             |
| Waterwell         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$66,000             |
|                   |           |           |           |           |           |           |           |           |           |           |                      |
|                   |           |           |           |           |           |           |           |           |           |           |                      |
|                   |           |           |           |           |           |           |           |           |           |           |                      |
| <b>Total</b>      | <b>39</b> | <b>39</b> | <b>39</b> | <b>39</b> | <b>39</b> | <b>39</b> | <b>39</b> | <b>39</b> | <b>39</b> | <b>39</b> |                      |

|                     |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Population          | 7,120  | 7,104  | 7,079  | 7,066  | 7,074  | 7,044  | 7,107  | 7,115  | 7,136  | 7,127  |
| Per Capita Standard | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 | 0.0055 |

| 10 Year Average   | 2006-2015 |
|-------------------|-----------|
| Quantity Standard | 0.0055    |
| Quality Standard  | \$10,491  |
| Service Standard  | \$58      |

| DC Amount (before deductions) | 10 Year  |
|-------------------------------|----------|
| Forecast Population           | 777      |
| \$ per Capita                 | \$58     |
| Eligible Amount               | \$44,833 |

**Municipality of Bluewater  
Service Standard Calculation Sheet**

Service: Parks & Recreation Vehicles  
Unit Measure: No. of vehicles and equipment

| Description               | 2006     | 2007     | 2008     | 2009      | 2010      | 2011      | 2012      | 2013      | 2014      | 2015      | 2016 Value (\$/Vehicle) |
|---------------------------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------------------|
| Agco 6065 tractor         | 1        | 1        | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$28,200                |
| Utility trailer, enclosed | -        | 1        | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$4,100                 |
| Utility trailer           | 1        | 1        | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$2,700                 |
| Ago Utility trailer       | -        | -        | -        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$2,700                 |
| Turfco Top Dresser        | 1        | 1        | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$5,400                 |
| Loader - 380B             | 1        | 1        | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$27,100                |
| Tilt                      |          |          |          |           | 1         | 1         | 1         | 1         | 1         | 1         | \$11,500                |
| Olympia Zamboni           | 1        | 1        | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$92,000                |
| Olympia Zamboni           | 1        | 1        | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$92,000                |
| Olympia Resurfacer        | 1        | 1        | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$219,000               |
| John Deere 4700 tractor   | 1        | 1        | 1        | 1         | 1         | 1         | 1         | 1         | 1         | 1         | \$25,000                |
|                           |          |          |          |           |           |           |           |           |           |           |                         |
|                           |          |          |          |           |           |           |           |           |           |           |                         |
|                           |          |          |          |           |           |           |           |           |           |           |                         |
| <b>Total</b>              | <b>8</b> | <b>9</b> | <b>9</b> | <b>10</b> | <b>11</b> | <b>11</b> | <b>11</b> | <b>11</b> | <b>11</b> | <b>11</b> |                         |

|                     |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Population          | 7,120  | 7,104  | 7,079  | 7,066  | 7,074  | 7,044  | 7,107  | 7,115  | 7,136  | 7,127  |
| Per Capita Standard | 0.0011 | 0.0013 | 0.0013 | 0.0014 | 0.0016 | 0.0016 | 0.0015 | 0.0015 | 0.0015 | 0.0015 |

| 10 Year Average   | 2006-2015 |
|-------------------|-----------|
| Quantity Standard | 0.0014    |
| Quality Standard  | \$50,714  |
| Service Standard  | \$71      |

| DC Amount (before deductions) | 10 Year  |
|-------------------------------|----------|
| Forecast Population           | 777      |
| \$ per Capita                 | \$71     |
| Eligible Amount               | \$55,167 |

**Municipality of Bluewater  
Service Standard Calculation Sheet**

Service: Indoor Recreation Facilities  
Unit Measure: ft² of building area

| Description                      | 2006          | 2007          | 2008          | 2009          | 2010          | 2011          | 2012          | 2013          | 2014          | 2015          | 2016 Bld'g Value (\$/ft²) | Value/ft² with land, site works, etc. |
|----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------------------|---------------------------------------|
| Bayfield Arena/ Community Centre | 19,000        | 19,000        | 19,000        | 19,000        | 19,000        | 19,000        | 19,000        | 19,000        | 19,000        | 19,000        | \$191                     | \$215                                 |
| Hensall Arena/ Community Centre  | 33,176        | 33,176        | 33,176        | 33,176        | 33,176        | 33,176        | 33,176        | 33,176        | 33,176        | 33,176        | \$180                     | \$203                                 |
| Zurich Arena/ Community Centre   | 32,350        | 32,350        | 32,350        | 32,350        | 32,350        | 32,350        | 32,350        | 32,350        | 32,350        | 32,350        | \$180                     | \$203                                 |
| Stanley Complex                  | 6,468         | 6,468         | 6,468         | 6,468         | 6,468         | 6,468         | 6,468         | 6,468         | 6,468         | 6,468         | \$166                     | \$187                                 |
|                                  |               |               |               |               |               |               |               |               |               |               |                           |                                       |
|                                  |               |               |               |               |               |               |               |               |               |               |                           |                                       |
|                                  |               |               |               |               |               |               |               |               |               |               |                           |                                       |
|                                  |               |               |               |               |               |               |               |               |               |               |                           |                                       |
|                                  |               |               |               |               |               |               |               |               |               |               |                           |                                       |
| <b>Total</b>                     | <b>90,994</b> | <b>90,994</b> | <b>90,994</b> | <b>90,994</b> | <b>90,994</b> | <b>90,994</b> | <b>90,994</b> | <b>90,994</b> | <b>90,994</b> | <b>90,994</b> |                           |                                       |

|                     |         |         |         |         |         |         |         |         |         |         |
|---------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Population          | 7,120   | 7,104   | 7,079   | 7,066   | 7,074   | 7,044   | 7,107   | 7,115   | 7,136   | 7,127   |
| Per Capita Standard | 12.7801 | 12.8088 | 12.8541 | 12.8777 | 12.8632 | 12.9179 | 12.8034 | 12.7890 | 12.7514 | 12.7675 |

| 10 Year Average   | 2006-2015 |
|-------------------|-----------|
| Quantity Standard | 12.8213   |
| Quality Standard  | \$204     |
| Service Standard  | \$2,620   |

| DC Amount (before deductions) | 10 Year     |
|-------------------------------|-------------|
| Forecast Population           | 777         |
| \$ per Capita                 | \$2,620     |
| Eligible Amount               | \$2,035,950 |

**Municipality of Bluewater  
Service Standard Calculation Sheet**

Service: Library Facilities  
 Contact :  
 Unit Measure: ft² of building area

| Description                       | 2006         | 2007         | 2008         | 2009         | 2010         | 2011         | 2012         | 2013          | 2014          | 2015          | 2016 Bld'g Value (\$/ft²) | Value/ft² with land, site works, etc. |
|-----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------------------|---------------------------------------|
| Bayfield Library                  | -            | -            | -            | -            | -            | -            | -            | 5,220         | 5,220         | 5,220         | \$182                     | \$204                                 |
| Hensall Library                   | 6,930        | 6,930        | 6,930        | 6,930        | 6,930        | 6,930        | 6,930        | 6,930         | 6,930         | 6,930         | \$211                     | \$236                                 |
| Zurich Library                    | -            | -            | -            | -            | -            | -            | -            | -             | -             | 3,595         | \$129                     | \$146                                 |
| Bayfield Archives                 | 1,512        | 1,512        | 1,512        | 1,512        | 1,512        | 1,512        | 1,512        | 1,512         | 1,512         | 1,512         | \$64                      | \$74                                  |
| Zurich old Library/rented offices | 700          | 700          | 700          | 700          | 700          | 700          | 700          | 700           | 700           | 700           | \$129                     | \$146                                 |
|                                   |              |              |              |              |              |              |              |               |               |               |                           |                                       |
|                                   |              |              |              |              |              |              |              |               |               |               |                           |                                       |
| <b>Total</b>                      | <b>9,142</b> | <b>9,142</b> | <b>9,142</b> | <b>9,142</b> | <b>9,142</b> | <b>9,142</b> | <b>9,142</b> | <b>14,362</b> | <b>14,362</b> | <b>17,957</b> |                           |                                       |

|                     |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Population          | 7,120  | 7,104  | 7,079  | 7,066  | 7,074  | 7,044  | 7,107  | 7,115  | 7,136  | 7,127  |
| Per Capita Standard | 1,2840 | 1,2869 | 1,2914 | 1,2938 | 1,2923 | 1,2978 | 1,2863 | 2,0186 | 2,0126 | 2,5196 |

| 10 Year Average   | 2006-2015 |
|-------------------|-----------|
| Quantity Standard | 1,5583    |
| Quality Standard  | \$201     |
| Service Standard  | \$313     |

| DC Amount (before deductions) | 10 Year   |
|-------------------------------|-----------|
| Forecast Population           | 777       |
| \$ per Capita                 | \$313     |
| Eligible Amount               | \$243,053 |

**Municipality of Bluewater  
Service Standard Calculation Sheet**

Service: Waste Diversion - Vehicles & Equipment

Contact :

Unit Measure: No. of Vehicles related to Waste Diversion

| Description              | 2006        | 2007        | 2008        | 2009        | 2010        | 2011        | 2012        | 2013        | 2014        | 2015        | 2016 Value (\$/Vehicle) |
|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------------------|
| Waste Diversion Contract | 0.38        | 0.38        | 0.38        | 0.38        | 0.38        | 0.38        | 0.38        | 0.38        | 0.39        | 0.39        | \$266,700               |
|                          |             |             |             |             |             |             |             |             |             |             |                         |
|                          |             |             |             |             |             |             |             |             |             |             |                         |
|                          |             |             |             |             |             |             |             |             |             |             |                         |
|                          |             |             |             |             |             |             |             |             |             |             |                         |
|                          |             |             |             |             |             |             |             |             |             |             |                         |
|                          |             |             |             |             |             |             |             |             |             |             |                         |
|                          |             |             |             |             |             |             |             |             |             |             |                         |
|                          |             |             |             |             |             |             |             |             |             |             |                         |
| <b>Total</b>             | <b>0.38</b> | <b>0.38</b> | <b>0.38</b> | <b>0.38</b> | <b>0.38</b> | <b>0.38</b> | <b>0.38</b> | <b>0.38</b> | <b>0.39</b> | <b>0.39</b> |                         |

|                     |        |        |        |        |        |        |        |        |        |        |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Population          | 7,120  | 7,104  | 7,079  | 7,066  | 7,074  | 7,044  | 7,107  | 7,115  | 7,136  | 7,127  |
| Per Capita Standard | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 | 0.0001 |

| 10 Year Average   | 2006-2015 |
|-------------------|-----------|
| Quantity Standard | 0.0001    |
| Quality Standard  | \$144,200 |
| Service Standard  | \$14      |

| DC Amount (before deductions) | 10 Year  |
|-------------------------------|----------|
| Forecast Population           | 777      |
| \$ per Capita                 | \$14     |
| Eligible Amount               | \$11,204 |

# **Appendix C – Long Term Capital and Operating Cost Examination**



# Appendix C – Long Term Capital and Operating Cost Examination

## Municipality of Bluewater Annual Capital and Operating Cost Impact

As a requirement of the Development Charges Act, 1997 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 development charge. 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 Municipality’s approved 2014 Financial Information Return (FIR).

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    | Factor  |
| Bridges ad Culverts                                  | 80                     | 0.00516 |
| Hensall Water Services                               | 75                     | 0.00586 |
| Bayfield Wastewater Services                         | 60                     | 0.00877 |
| Depots and Domes                                     | 40                     | 0.01656 |
| Waste Diversion Vehicles and Equipment               | 15                     | 0.01656 |
| Parkland Development, Amendities, Vehicles, & Trails | 30                     | 0.02465 |
| PW Rolling Stock                                     | 10                     | 0.09133 |

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 municipal

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**  
**MUNICIPALITY OF BLUEWATER**  
**OPERATING AND CAPITAL EXPENDITURE IMPACTS**  
**FOR FUTURE CAPITAL EXPENDITURES**

| SERVICE   | GROSS COST LESS<br>BENEFIT TO<br>EXISTING | ANNUAL LIFECYCLE<br>EXPENDITURES | ANNUAL<br>OPERATING<br>EXPENDITURES | TOTAL ANNUAL<br>EXPENDITURES |
|---|---|----------------------------------|-------------------------------------|------------------------------|
| <b>1. <u>Services Related to a Highway</u></b>          |   |                                  |                                     |                              |
| 1.1 Bridges and Culverts                                | 59,400                                    | 3,262                            | 12,850                              | 16,112                       |
| 1.2 Depots and Domes                                    | 355,600                                   | 18,139                           | 313,390                             | 331,529                      |
| 1.3 PW Rolling Stock                                    | 344,000                                   | 39,396                           | 303,167                             | 342,563                      |
| <b>2. <u>Outdoor Recreation Services</u></b>            |   |                                  |                                     |                              |
| 2.1 Parkland development, amenities, vehicles, & trails | 300,000                                   | 17,946                           | 21,634                              | 39,580                       |
| <b>3. <u>Administration</u></b>                         |   |                                  |                                     |                              |
| 3.1 Studies   | 193,650                                   | 0                                | 0                                   | 0                            |
| <b>4. <u>Waste Diversion</u></b>                        |   |                                  |                                     |                              |
| 4.1 Waste diversion vehicles and equipment              | 11,200                                    | 1,008                            | 24,939                              | 25,947                       |
| <b>5. <u>Wastewater</u></b>                             |   |                                  |                                     |                              |
| 5.1 Bayfield Wastewater Services                        | 5,300,000                                 | 275,724                          | 335,261                             | 610,985                      |
| <b>6. <u>Wastewater</u></b>                             |   |                                  |                                     |                              |
| 6.1 Zurich Wastewater Services                          | 917,620                                   | 47,736                           | 58,046                              | 105,782                      |
| <b>7. <u>Wastewater</u></b>                             |   |                                  |                                     |                              |
| 7.1 Hensall Wastewater Services                         | 1,803,019                                 | 93,798                           | 114,053                             | 207,851                      |
| <b>8. <u>Water</u></b>                                  |   |                                  |                                     |                              |
| 8.1 Hensall Water Storage                               | 2,600,000                                 | 132,372                          | 253,903                             | 386,275                      |
| <b>Total</b>  | <b>0</b>                                  | <b>1,263,850</b>                 | <b>675,980</b>                      | <b>755,731</b>               |

**Appendix D – Development Charge Reserve  
Fund Policy**

# Appendix D – Development Charge Reserve Fund Policy

## D.1 Legislative Requirements

The D.C.A., 1997 requires development charge 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 Municipality 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 Municipality shall pay each development charge 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 municipal reserve funds for investment purposes (s.37).

Annually, the Treasurer of the Municipality 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 Municipality to repay municipal obligations to the fund;
- schedule identifying the value of credits recognized by the Municipality, 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.

**Figure D-1**  
**Municipality of Bluewater**  
**Annual Treasurer's Statement of Development Charge Reserve Funds**

| Description   | Services to which the Development Charge Relates (examples) |                     |                    |                   |               |                             |                |                 | Total |
|---|---|---------------------|--------------------|-------------------|---------------|-----------------------------|----------------|-----------------|-------|
|   | Non-Discounted Services                                     |                     |                    |                   |               | Discounted Services         |                |                 |       |
|   | Services Related to a Highway                               | Bayfield Wastewater | Hensall Wastewater | Zurich Wastewater | Hensall Water | Outdoor Recreation Services | Administration | Waste Diversion |       |
| Opening Balance, January 1, _____   |   |                     |                    |                   |               |                             |                |                 | 0     |
| <u>Plus:</u>  |   |                     |                    |                   |               |                             |                |                 |       |
| Development Charge Collections  |   |                     |                    |                   |               |                             |                |                 | 0     |
| Accrued Interest  |   |                     |                    |                   |               |                             |                |                 | 0     |
| Repayment of Monies Borrowed from Fund and Associated Interest <sup>1</sup> |   |                     |                    |                   |               |                             |                |                 | 0     |
| Sub-Total   | 0   | 0                   | 0                  | 0                 | 0             | 0                           | 0              | 0               | 0     |
| <u>Less:</u>  |   |                     |                    |                   |               |                             |                |                 |       |
| Amount Transferred to Capital (or Other) Funds <sup>2</sup>                 |   |                     |                    |                   |               |                             |                |                 | 0     |
| Amounts Refunded  |   |                     |                    |                   |               |                             |                |                 | 0     |
| Amounts Loaned to Other DC Service Category for Interim Financing           |   |                     |                    |                   |               |                             |                |                 | 0     |
| Credits <sup>3</sup>  |   |                     |                    |                   |               |                             |                |                 | 0     |
| Sub-Total   | 0   | 0                   | 0                  | 0                 | 0             | 0                           | 0              | 0               | 0     |
| Closing Balance, December 31, _____   | 0   | 0                   | 0                  | 0                 | 0             | 0                           | 0              | 0               | 0     |

<sup>1</sup> Source of funds used to repay the DC reserve fund

<sup>2</sup> See Attachment 1 for details

<sup>3</sup> See Attachment 2 for details

The Municipality is compliant with s.s. 59.1 (1) of the *Development Charges Act*, whereby charges are not directly or indirectly imposed on development nor has a requirement to construct a service related to development been imposed, except as permitted by the *Development Charges Act* or another Act.

**Attachment 1  
Municipality of Bluewater  
Amount Transferred to Capital (or Other) Funds - Capital Fund Transactions**

| Capital Fund Transactions                | Gross Capital Cost | DC Recoverable Cost Share |                   |                                       |  |                                       | Non-DC Recoverable Cost Share    |  |   |                |                                       |
|--|--------------------|---------------------------|-------------------|---------------------------------------|--|---------------------------------------|----------------------------------|--|---|----------------|---------------------------------------|
|  |                    | DC Forecast Period        |                   |                                       | Post DC Forecast Period                        |                                       | Other Reserve/Reserve Fund Draws | Tax Supported Operating Fund Contributions | Rate Supported Operating Fund Contributions | Debt Financing | Grants, Subsidies Other Contributions |
|  |                    | DC Reserve Fund Draw      | DC Debt Financing | Grants, Subsidies Other Contributions | Post-Period Benefit/Capacity Interim Financing | Grants, Subsidies Other Contributions |                                  |  |   |                |                                       |
| <u>Services Related to a Highway</u>     |                    |                           |                   |                                       |  |                                       |                                  |  |   |                |                                       |
| Capital Cost A                           |                    |                           |                   |                                       |  |                                       |                                  |  |   |                |                                       |
| Capital Cost B                           |                    |                           |                   |                                       |  |                                       |                                  |  |   |                |                                       |
| Capital Cost C                           |                    |                           |                   |                                       |  |                                       |                                  |  |   |                |                                       |
| Sub-Total - Services Related to Highways | \$0                | \$0                       | \$0               | \$0                                   | \$0  | \$0                                   | \$0                              | \$0  | \$0   | \$0            | \$0                                   |
| <u>Bayfield Wastewater</u>               |                    |                           |                   |                                       |  |                                       |                                  |  |   |                |                                       |
| Capital Cost D                           |                    |                           |                   |                                       |  |                                       |                                  |  |   |                |                                       |
| Capital Cost E                           |                    |                           |                   |                                       |  |                                       |                                  |  |   |                |                                       |
| Capital Cost F                           |                    |                           |                   |                                       |  |                                       |                                  |  |   |                |                                       |
| Sub-Total - Water                        | \$0                | \$0                       | \$0               | \$0                                   | \$0  | \$0                                   | \$0                              | \$0  | \$0   | \$0            | \$0                                   |
| <u>Hensall Wastewater</u>                |                    |                           |                   |                                       |  |                                       |                                  |  |   |                |                                       |
| Capital Cost G                           |                    |                           |                   |                                       |  |                                       |                                  |  |   |                |                                       |
| Capital Cost H                           |                    |                           |                   |                                       |  |                                       |                                  |  |   |                |                                       |
| Capital Cost I                           |                    |                           |                   |                                       |  |                                       |                                  |  |   |                |                                       |
| Sub-Total - Wastewater                   | \$0                | \$0                       | \$0               | \$0                                   | \$0  | \$0                                   | \$0                              | \$0  | \$0   | \$0            | \$0                                   |

**Amount Transferred to Operating (or Other) Funds - Operating Fund Transactions**

| Operating Fund Transactions              | Annual Debt Repayment Amount | DC Reserve Fund Draw |          | Post DC Forecast Period |          |        | Non-DC Recoverable Cost Share |          |        |
|--|------------------------------|----------------------|----------|-------------------------|----------|--------|-------------------------------|----------|--------|
|  |                              | Principal            | Interest | Principal               | Interest | Source | Principal                     | Interest | Source |
| <u>Services Related to a Highway</u>     |                              |                      |          |                         |          |        |                               |          |        |
| Capital Cost J                           |                              |                      |          |                         |          |        |                               |          |        |
| Capital Cost K                           |                              |                      |          |                         |          |        |                               |          |        |
| Capital Cost L                           |                              |                      |          |                         |          |        |                               |          |        |
| Sub-Total - Services Related to Highways | \$0                          | \$0                  | \$0      | \$0                     | \$0      |        | \$0                           | \$0      |        |
| <u>Bayfield Wastewater</u>               |                              |                      |          |                         |          |        |                               |          |        |
| Capital Cost M                           |                              |                      |          |                         |          |        |                               |          |        |
| Capital Cost N                           |                              |                      |          |                         |          |        |                               |          |        |
| Capital Cost O                           |                              |                      |          |                         |          |        |                               |          |        |
| Sub-Total - Water                        | \$0                          | \$0                  | \$0      | \$0                     | \$0      |        | \$0                           | \$0      |        |
| <u>Hensall Wastewater</u>                |                              |                      |          |                         |          |        |                               |          |        |
| Capital Cost P                           |                              |                      |          |                         |          |        |                               |          |        |
| Capital Cost Q                           |                              |                      |          |                         |          |        |                               |          |        |
| Capital Cost R                           |                              |                      |          |                         |          |        |                               |          |        |
| Sub-Total - Wastewater                   | \$0                          | \$0                  | \$0      | \$0                     | \$0      |        | \$0                           | \$0      |        |



**Attachment 2**  
**Municipality of Bluewater**  
**Statement of Credit Holder Transactions**

| Credit Holder   | Applicable DC Reserve Fund | Credit Balance Outstanding Beginning of Year _____ | Additional Credits Granted During Year | Credits Used by Holder During Year | Credit Balance Outstanding End of Year _____ |
|-----------------|----------------------------|--|--|------------------------------------|--|
| Credit Holder A |                            |  |  |                                    |  |
| Credit Holder B |                            |  |  |                                    |  |
| Credit Holder C |                            |  |  |                                    |  |
| Credit Holder D |                            |  |  |                                    |  |
| Credit Holder E |                            |  |  |                                    |  |
| Credit Holder F |                            |  |  |                                    |  |

## **Appendix E – Local Service Policy**

# Appendix E – Local Service Policy

## General Policy Guidelines on Development Charge and Local Service Funding for Municipal Works

### 1. Collector Roads

- 1.1. Collector roads Internal to development - Direct developer responsibility under s.59 of the Development Charges Act (D.C.A.) as a local service
- 1.2. Roads (collector and arterial) external to development - Include in DC calculation to the extent permitted under s.5(1) of the D.C.A (dependent on local circumstances)
- 1.3. Bridges, Culverts, Stream crossing and rail crossing road works, excluding underground utilities but including all other works within lands to be dedicated to the Municipality or rail corridors - include in DC calculation to the extent permitted under s.5(1) of the DCA (dependent on local circumstances).

### 2. Traffic Signals

- 2.1. Traffic signalization internal to development – Direct developer responsibility under s.59 of the D.C.A (as a local service)
- 2.2. Traffic signalization external to development – Direct developer responsibility if supported by traffic study

### 3. Intersection Improvements

- 3.1. New roads (collector and arterial) and road improvements (collector and arterial) – Include as part of road costing noted in item 1, to limits of Right Of Way (ROW).
- 3.2. Intersections improvements within specific developments and all works necessary to connect to entrances (private and specific subdivision site (plan)) to the roadway - Direct developer responsibility under s.59 of D.C.A (as a local service).

- 3.3. Intersections with county roads and provincial highways – Include in DC calculation to the extent that they are municipal responsibility.
- 3.4. Intersection improvements on other roads due to development growth increasing traffic – Include in DC calculation.

#### **4. Streetlights**

- 4.1. Streetlights on external roads – Include in area municipal DC (linked to collector road funding source in item 1).
- 4.2. Streetlights within specific developments – Direct developer responsibility under s.59 of D.C.A (as a local service)

#### **5. Sidewalks**

- 5.1. Sidewalks on MTO and county roads – Include in area municipal DC or, in exceptional circumstances, may be local improvement or direct developer responsibility through local service provisions (s.59 of D.C.A).
- 5.2. Sidewalks on area municipal roads - Linked to collector road funding source in item 1.
- 5.3. Other sidewalks external to development (which are a local service within the area to which the plan relates) - Direct developer responsibility as a local service provision (under s.59 of D.C.A).

#### **6. Bike Routes/Bike Lanes/Bike Paths/Multi-Use Trails/Naturalized**

- 6.1. Bike routes and bike lanes, external to development – Developer responsibility for connection to adjacent routes.
- 6.2. Bike paths/multi-use trails/naturalized walkways external to development – Developer responsibility for connection to adjacent paths and walkways.
- 6.3. Bike lanes, within road allowance, internal to development – Direct developer responsibility under s.59 of the DCA (as a local service).

- 6.4. Bike paths/multi-use trails/naturalized walkways internal to development – Direct developer responsibility under s.59 of the DCA (as a local service).

## **7. Noise Abatement Measures**

- 7.1. Internal and adjacent to Development - Direct developer responsibility through local service provisions (s.59 of DCA)
- 7.2. External to Development – include in area municipal D.C.

## **8. Traffic Control Systems**

- 8.1. Include in DC calculation.

## **9. Land Acquisition for Road Allowances**

- 9.1. Land Acquisition for arterial roads – Dedication under the Planning Act subdivision provisions (s.51) through development lands; in areas with limited or no development, include in county or area municipal DC (to the extent eligible).
- 9.2. Land Acquisition for collector roads – Dedication under the Planning Act subdivision provision (s.51) through development lands (up to 27 metre right-of- way); in areas with limited or no development, include in area municipal DC (to the extent eligible).
- 9.3. Land Acquisition for grade separations (beyond normal dedication requirements) – Include in the DC to the extent eligible.

## **10. Land Acquisition for Easements**

- 10.1. Easements internal or adjacent to subdivisions – Direct developer responsibility through local service provisions (s.59 of DCA)
- 10.2. Easement costs external to subdivisions shall be included in DC calculation.

## **11. Stormwater Management**

- 11.1. Quality and Quantity Works, direct developer responsibility through local service provisions (s. 59 of DCA).
- 11.2. Oversizing of stormwater management works for development external to developments will be subject to best efforts clauses by area municipality.

## **12. Water**

- 12.1. Pumping stations and works associated with Zone boundaries to be included within the area municipal or County DC's (to the extent eligible).
- 12.2. Watermains external to subdivisions included in the DC.
- 12.3. Marginal costs of waterworks within the subdivision included in DC above 300 mm nominal diameter
- 12.4. Connections to trunk mains and pumping stations to service specific areas to be direct developer responsibility.
- 12.5. Any engineering evaluation to determine capacity of local supply to be borne directly by the developer.
- 12.6. Treatment Facilities – Construction or expansion to service growth included in the DC

## **13. Sanitary Sewer**

- 13.1. Pumping stations shall be included in the DC
- 13.2. Sanitary sewers external to subdivisions included in the DC.
- 13.3. Connections to trunk mains and pumping stations to service specific areas, to be direct developer responsibility.

- 13.4. Marginal costs of sanitary sewer works within the subdivision, which benefits upstream developers, included in DC above 375mm nominal diameter
- 13.5. Any engineering evaluation to determine capacity of local collection system to be borne directly by the developer.
- 13.6 Treatment Facilities - Construction or expansion to service growth included in the DC

## **Appendix F – Asset Management Plan**



# Appendix F – Asset Management Plan

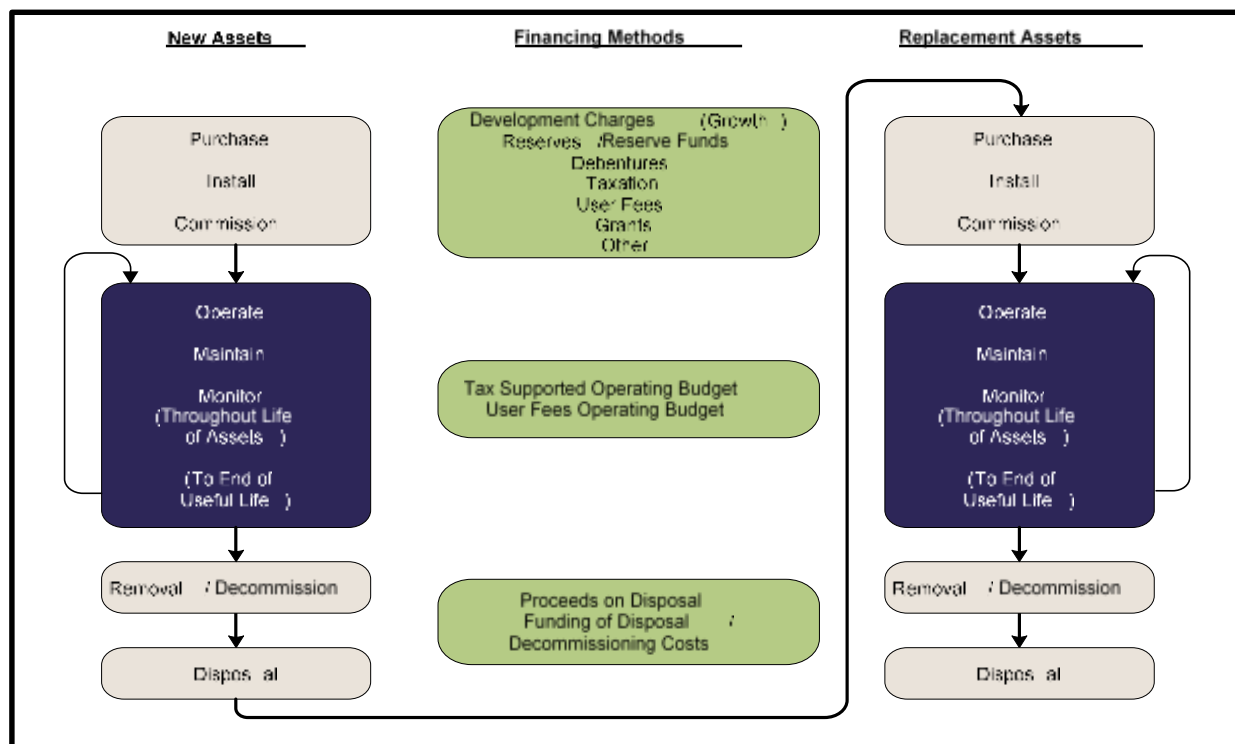
The recent changes to the D.C.A. (new section 10(2)(c.2)) require that the Background Study must include an asset management plan related to new infrastructure. Section 10 (3) of the D.C.A. provides:

**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 Municipality prepared an Asset Management Plan in 2014 for its existing assets. The plan identifies the capital needs required as follows:

- Structures - 10 year forecast need \$640,000/yr
  - current funding - \$218,000
  - shortfall - \$422,000
  - impact to tax base – ongoing 7.2% tax increase dedicated to this asset
- Roads - 10 year forecast need \$1,353,480
  - current funding - \$1,000,000
  - shortfall - \$353,480
  - impact to tax base – ongoing 6% increase dedicated to this asset
- Water - full replacement funding \$3,786,858/year reserve contribution
  - current funding - \$275,700/year
  - shortfall - \$3,511,158
  - impact to rates – represents a 14 times increase to current reserve contribution
- Sanitary Sewage - full replacement funding \$1,227,933/year reserve contribution
  - current funding \$84,000/year
  - shortfall \$1,143,933/year
  - impact to rates – represents a 14.6 times increase to current reserve contributions

Based upon the capital projects provided in chapter 5, the following observations are provided:

- 1) State of local infrastructure – all assets will be new so the condition will be high.
- 2) Desired level of service – Works were identified by staff and generally seek to maintain services at existing levels.
- 3) Asset Management Strategy – the lifecycle costs associated with the new assets were presented in Appendix C. The annual lifecycle reserve contribution for all assets is \$629,400 annually (at end of the forecast period). In addition, there is \$4.72 million in non-growth related costs which needs to be funded. This amount, based on a 20-year debenture, would impact the operating budget by an additional \$347,000 by the end of the forecast period. The annual operating cost is approximately \$629,400 however, this amount includes both programming costs as well as operating costs for the capital program (anticipated to be a minor portion of the whole).
- 4) Financing Strategy – The Municipality’s A.M.P. provides for increases to the current reserve contributions to achieve full replacement funding. Given the addition of approximately \$629,400 for the growth-related lifecycle and

additional operating costs, it is anticipated that the municipality will be able to include the growth-related works identified in the D.C. in their A.M.P. as the infrastructure is completed.

Based on the above, the capital plan is deemed financially sustainable.

**Municipality of Bluewater  
Asset Management - Future Expenditures and Associated Revenues  
2015\$**

|  | <b>Sub-Total</b> | <b>2035 (Total)</b> |
|--|------------------|---------------------|
| <b>Expenditures (Annualized)</b>                                       |                  |                     |
| Annual Debt Payment on Non-Growth Related Capital <sup>1</sup>         |                  | 347,274             |
| <b>Lifecycle:</b>  |                  |                     |
| Annual Lifecycle   |                  | \$629,381           |
| <b>Sub-Total - Annual Lifecycle</b>                                    | \$629,381        | \$629,381           |
|  |                  |                     |
| <b>Incremental Operating Costs (for D.C. Services)</b>                 |                  | \$675,980           |
|  |                  |                     |
| <b>Total Expenditures</b>  |                  | <b>\$1,652,635</b>  |
|  |                  |                     |
| <b>Revenue (Annualized)</b>  |                  |                     |
| Total Existing Revenue <sup>2</sup>                                    |                  | \$15,700,964        |
| Incremental Tax and Non-Tax Revenue (User Fees, Fines, Licences, etc.) |                  | \$1,835,791         |
| <b>Total Revenues</b>  |                  | <b>\$17,536,755</b> |

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

<sup>2</sup> As per Sch. 10 of FIR

**Appendix G – Proposed Development  
Charge By-law**

# The Corporation of the Municipality of Bluewater

## By-law Number 2017-\_\_\_\_

A by-law to establish development charges for the Corporation of the Municipality of Bluewater

**WHEREAS** the Municipality of Bluewater will experience growth through development and re-development;

**AND WHEREAS** development and re-development requires the provision of physical and social services by the Municipality of Bluewater;

**AND WHEREAS** Council desires to ensure that the capital cost of meeting growth-related demands for or burden on municipal services does not place an excessive financial burden on the Municipality of Bluewater or its existing taxpayers while at the same time ensuring new taxpayers contribute no more than the net capital cost attributable to providing the current level of municipal services;

**AND WHEREAS** the *Development Charges Act, 1997* (the "Act") provides that the council of a municipality may by by-law impose development charges against land to pay for increased capital costs required because of increased needs for services;

**AND WHEREAS** a development charge background study has been completed in accordance with the Act;

**AND WHEREAS** the Council of The Corporation of the Municipality of Bluewater has given notice of and held a public meeting on the -- day of\_\_\_\_, 2017 in accordance with the Act and the regulations thereto;

**NOW THEREFORE THE COUNCIL OF THE CORPORATION OF THE MUNICIPALITY OF BLUEWATER ENACTS AS FOLLOWS:**

**1. INTERPRETATION**

1.1 In this By-law the following items shall have the corresponding meanings:

“Act” means the *Development Charges Act*, as amended, or any successor thereof;

“apartment unit” means any residential unit within a building containing more than four dwelling units where the units are connected by an interior corridor, but does not include a special care/special need dwelling unit;

“bedroom” means a habitable room which can be used as sleeping quarters, but does not include a bathroom, living room, dining room or kitchen;

“board of education” has the same meaning as set out in the *Education Act*, R.S.O. 1990, Chap. E.2, as amended, or any successor thereof;

“bona fide farm uses” means the proposed development will qualify as a farm business operating with a valid Farm Business Registration Number issued by the Ontario Ministry of Agriculture, Food and Rural Affairs and be assessed in the Farmland Realty Tax Class by the Ontario Property Assessment Corporation;

“Building Code Act” means the *Building Code Act*, S.O. 1992, as amended, or any successor thereof;

“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, construct or improve facilities including,
  - (i) furniture and equipment other than computer equipment, and
  - (ii) material acquired for circulation, reference or information purposes by a library board as defined in the *Public Libraries Act*, R.S.O. 1990, Chap. P.44, as amended, or any successor thereof; and
  - (iii) rolling stock with an estimated useful life of seven years or more, and
- (e) to undertake studies in connection with any matter under the Act and any of the matters in clauses (a) to (d) above, including the development charge background study required for the provision of services designated in this By-law within or outside the municipality, including interest on borrowing for those expenditures under clauses (a) to (e) above that are growth-related;

“commercial” means any use of land, structures or buildings for the purposes of buying or selling commodities and services, but does not include industrial or agricultural uses, but does include hotels, motels, motor inns and boarding, lodging and rooming houses;

“Council” means the Council of the municipality;

“development” means the construction, erection or placing of one or more buildings or structures on land or the making of an addition or alteration to a building or structure that the effect of increasing the size of usability thereof, and includes redevelopment;

“development charge” means a charge imposed with respect to this By-law;

“dwelling unit” means any part of a building or structure used, designed or intended to be used as a domestic establishment in which one or more persons may sleep and are provided with culinary and sanitary facilities for their exclusive use;



“Existing” means the number, use and size that existed as of the date this by-law was passed;

“Existing Industrial Building” means a building 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,
- d. office or administrative purposes, if they are,
  - (i) carried out with respect to manufacturing, producing, processing, storage or distributing of something, and
  - (ii) in or attached to the building or structure used for that manufacturing, producing, processing, storage or distribution;

“farm building” means that part of a bona fide farming operation encompassing barns, silos and other ancillary development to an agricultural use, but excluding a residential use;

“gross floor area” means:

- (a) in the case of a residential building or structure, the total area of all floors above grade of a dwelling unit measured between the outside surfaces of exterior walls or between the outside surfaces of exterior walls and the centre line of party walls dividing the dwelling unit from any other dwelling unit or other portion of a building; and
- (b) in the case of a non-residential building or structure, or in the case of a mixed-use building or structure 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, except for:

- (i) a room or enclosed area within the building or structure above or below that is used exclusively for the accommodation of heating, cooling, ventilating, electrical, mechanical or telecommunications equipment that service the building;
- (ii) loading facilities above or below grade; and
- (iii) a part of the building or structure below grade that is used for the parking of motor vehicles or for storage or other accessory use;

“Institutional” means land, buildings, structures or any part thereof used by any organization, group or association for promotion of charitable, educational or benevolent objectives and not for profit or gain;

“Local Board” means a school board, public utility, commission, transportation commission, public library board, board of park management, local board of health, board of commissioners of police, planning board, or any other board, commission, committee, body or local authority established or exercising any power or authority under any general or special Act with respect to any of the affairs or purposes, including school purposes, of the Municipality of Bluewater or any part or parts thereof;

“local services” means those services, facilities or things 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 in respect of the lands under Sections 41, 51 or 53 of the *Planning Act*, R.S.O. 1990, Chap. P.13, as amended, or any successor thereof;

“mobile home” means a prefabricated dwelling unit designed and intended to be transported or portable for movement from site to site, and includes enclosed additions thereto not exceeding 9.2 sq. metres (100 sq. feet);

“multiple dwelling” means all dwellings other than single-detached, semi-detached, apartment unit dwellings and special care/special dwelling units;

“municipality” means the Corporation of the Municipality of Bluewater;

“non-residential use” means a building or structure of any kind whatsoever used, designed or intended to be used for other than a residential use;

“nursing home” means a residential building or the residential portion of a mixed-use building licensed as a nursing home by the Province of Ontario;

“Official Plan” means the Official Plan adopted for the Municipality, as amended and approved;

“Owner” means the owner of land or a person who has made application for an approval for the development of land upon which a development charge is imposed’

“place of worship” means that part of a building or structure that is exempt from taxation as a place of worship under the *Assessment Act*, R.S.O. 1990, Chap. A.31, as amended, or any successor thereof;

“Rate” means the interest rate established weekly by the Bank of Canada based on Treasury Bills having a term of 91 days;

“regulation” means any regulation made pursuant to the Act;

“Residential Dwelling” means a building, occupied or capable of being occupied as a home, residence or sleeping place by one or more persons, containing one or more Dwelling Units but not including motels, hotels, tents, truck campers, tourist trailers, mobile camper trailers or boarding, lodging or rooming houses;

“residential use” means the use of a building or structure or portion thereof for one or more Dwelling Units. This also includes a Dwelling Unit on land that is used for an Agricultural Use;

“retirement home or lodge” means a residential building or the residential portion of a mixed-use building which provides accommodation primarily for retired persons or couples where each private bedroom or living accommodation has a separate private bathroom and separate entrance from a common hall but where common facilities for the preparation and consumption of food are provided, and common lounges, recreation rooms and medical care facilities may also be provided;

“row dwelling” means a building containing three or more attached dwelling units in a single row, each of which dwelling units has an independent entrance from the outside and is vertically separated from any abutting dwelling unit;

“special care/special need dwelling” means:

- a) a building containing two or more dwelling units, which units have a common entrance from street level:
  - (i) where the occupants have the right to use in common, halls, stairs, yards, common rooms and accessory buildings;
  - (ii) which may or may not have exclusive sanitary and/or culinary facilities;
  - (iii) that is designed to accommodate persons with specific needs, including, but not limited to, independent permanent living arrangements; and
  - (iv) where support services such as meal preparation, grocery shopping, laundry, housekeeping, nursing, respite care and attendant services are provided at various levels;

and includes, but is not limited to, retirement homes or lodges, nursing homes, and hospices;

“semi-detached dwelling” means a building divided vertically into two dwelling units each of which has a separate entrance and access to grade;

“service” means a service designed in Schedule “A” to this By-law, and “services” shall have a corresponding meaning;

“servicing agreement” means an agreement between a landowner and the municipality relative to the provision of municipal services to specified land within the municipality;

“single detached dwelling unit” means a residential building consisting of one dwelling unit and not attached to another structure;

“supplementary farm dwelling unit” means an additional farm residence in the form of a non-permanent dwelling unit that can be easily removed once the need for the additional farm residence has been fulfilled. This type of unit accommodates the farm family, farm retirees, or farm labourers working on the farm operation;

“Wind Turbine” means any wind energy system, comprising one or more turbines, that converts energy into electricity, with a combined nameplate generating capacity greater than 500 kilowatts and a height greater than 100 metres, that converts energy into electricity, and consists of a wind turbine, a tower, and associated control or conversion electronics. A wind turbine and energy system may be connected to the electricity grid in circuits at a substation to provide electricity off-site for sale to an electrical utility or other intermediary; and

“Zoning By-Law” means the Zoning By-Law of the Municipality of Bluewater, or any successor thereof passed pursuant to Section 34 of the Planning Act, S.O. 1990.

## **2. DESIGNATION OF SERVICES**

2.1 The categories of services for which development charges are imposed under this By-law are as follows:

- (a) Services related to a Highway;
- (b) Outdoor Recreation Services;
- (c) Administration;
- (d) Waste Diversion
- (e) Wastewater Services; and
- (f) Water Services.

2.2 The components of the services designated in section 2.1 are described in Schedule A.

## **3. APPLICATION OF BY-LAW RULES**

3.1 Development charges shall be payable in the amounts set out in this By-law where:

- (a) the lands are located in the areas described in section 3.2; and
- (b) the development of the lands requires any of the approvals set out in subsection 3.4(a).

### Area to Which By-law Applies

3.2 Subject to section 3.3, this By-law applies to all lands in the Municipality of Bluewater whether or not the land or use thereof is exempt from taxation under s. 13 or the Assessment Act.

3.3. Notwithstanding clause 3.2 above, this by-law shall not apply to lands that are owned by and used for the purposes of:

- (a) the municipality or a local board thereof;
- (b) a board of education; or

- (c) the Corporation of the County of Perth or a local board thereof.

### Approvals for Development

- 3.4 (a) Development charges shall be imposed on all lands, buildings or structures that are developed for residential or non-residential uses if the development requires:
  - (i) the passing of a zoning by-law or of an amendment to a zoning by-law under section 34 of the *Planning Act*;
  - (ii) the approval of a minor variance under section 45 of the *Planning Act*;
  - (iii) a conveyance of land to which a by-law passed under subsection 50(7) of the *Planning Act* applies;
  - (iv) the approval of a plan of subdivision under section 51 of the *Planning Act*;
  - (v) a consent under section 53 of the *Planning Act*;
  - (vi) the approval of a description under section 9 of the *Condominium Act*, R.S.O. 1998, Chap. C.19, as amended, or any successor thereof; or
  - (vii) the issuing of a permit under the *Building Code Act* in relation to a building or structure.
- (b) No more than one development charge for each service designated in subsection 2.1 shall be imposed upon any lands, buildings or structures to which this By-law applies even though two or more of the actions described in subsection 3.4(a) are required before the lands, buildings or structures can be developed.
- (c) Despite subsection 3.4(b), if two or more of the actions described in subsection 3.4(a) occur at different times, additional development charges shall be imposed if the subsequent action has the effect of increasing the need for services.

## RULES WITH RESPECT TO EXEMPTIONS FOR INTENSIFICATION OF EXISTING HOUSING

- 3.5 (a) Notwithstanding Section 3.1 to 3.4 above, no development charge shall be imposed with respect to developments or portions of developments as follows:
- (i) the enlargement of an existing residential dwelling unit;
  - (ii) 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;
  - (iii) 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.
- (b) Notwithstanding subsection 3.5(a)(ii), development charges shall be calculated and collected in accordance with Schedule “B” 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.
- (c) Notwithstanding subsection 3.5(a)(iii), development charges shall be calculated and collected in accordance with Schedule “B” 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

3.6 (a) Notwithstanding Section 3.1 to 3.4, if a development includes the enlargement of the gross floor area of an existing industrial building, the amount of the development charge that is payable in respect of the enlargement is determined in accordance with the following:

(i) Subject to subsection 3.6(a)(iii), if the gross floor area is enlarged by 50 percent or less of the lesser of:

(1) the gross floor area of the existing industrial building, or

(2) the gross floor area of the existing industrial building before the first enlargement for which:

(A) an exemption from the payment of development charges was granted; or

(B) a lesser development charge than would otherwise be payable under this By-law, or predecessor thereof, was paid,

the amount of the development charge in respect of the enlargement is zero;

(ii) Subject to subsection 3.6(a)(iii), if the gross floor area is enlarged by more than 50 per cent of the lesser of:

(1) the gross floor area of the existing industrial building, or

(2) the gross floor area of the existing industrial building before the first enlargement for which:

(A) an exemption from the payment of development charges was granted, or

(B) a lesser development charge than would otherwise be payable under this By-law, or predecessor thereof, was paid,

pursuant to Section 4 of the Act and this subsection,

the amount of the development charge in respect of the enlargement is the amount of the development charge that would otherwise be payable multiplied by the fraction determined as follows:

- (3) determine the amount by which the enlargement exceeds 50 per cent of the gross floor area before the first enlargement, and
- (4) divide the amount determined under subsection (a) by the amount of the enlargement.

(iii) For the purposes of calculating the extent to which the gross floor area of an existing industrial building is enlarged in subsections 3.6(a)(i) and 3.6(a)(ii), the cumulative gross floor area of any previous enlargements for which:

- (1) an exemption from the payment of development charges was granted, or
  - (2) a lesser development charge than would otherwise be payable under this By-law, or predecessor thereof, was paid,
- shall be added to the calculation of the gross floor area of the proposed enlargement

(iv) For the purposes of this subsection (a), the enlargement must not be attached to the existing industrial building by means only of a tunnel, bridge, passageway, canopy, shared below grade connection, such as a service tunnel, foundation, footing or parking facility.

### 3.7 Other Exemptions:

Notwithstanding the provision of this by-law, development charges shall not be imposed with respect to:

- a) lands, buildings or structures used or to be used for a place of worship or for the purposes of a cemetery or burial ground exempt from taxation under the *Assessment Act*; and
- b) the development of non-residential farm buildings constructed for bona fide farm uses, being that which operates with a valid Farm Business Registration Number and is assessed in the Farmland Realty Tax Class.

### 3.8 Discounts:

- a) the development of non-residential farm buildings constructed for bona fide farm uses, which qualify as a farm business, being that which operates with a valid Farm Business Registration Number and is assessed in the Farmland Realty Tax Class will only be imposed the development charges related to Services Related to a Highway based on the charges as per Schedule "B".

### Amount of Charges

### 3.9 Residential

The development charges set out in Schedule B shall be imposed on residential uses of lands, buildings or structures, including a dwelling unit accessory to a non-residential use and, in the case of a mixed use building or structure, on the residential uses in the mixed use building or structure, according to the type of residential unit, and calculated with respect to each of the services according to the type of residential use.

### 3.10 Non-Residential

The development charges described in Schedule B to this by-law shall be imposed on non-residential uses of lands, buildings or structures, and, in the case of a mixed use building or structure, on the non-residential uses in the mixed use building or structure, and calculated with respect to each of the services according to the total floor area of the non-residential use.

### Wind Turbines

3.11 The development charges described in Schedule B to this by-law shall be imposed on wind turbines with respect to Services related to a Highway and Administration Services on a per unit basis.

### Reduction of Development Charges for Redevelopment

3.12 Despite any other provisions of this By-law, where, as a result of the redevelopment of land, a building or structure existing on the same land within 4 years prior to the date of payment of development charges 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 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 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 development charge under subsection 3.9 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 development charges under subsection 3.10, by the

gross floor area that has been or will be demolished or converted to another principal use;  
provided that such amounts shall not exceed, in total, the amount of the development charges otherwise payable with respect to the redevelopment.

#### Time of Payment of Development Charges

- 3.13 Development charges imposed under this By-law are calculated, payable, and collected upon issuance of the first building permit for the development.
- 3.14 Despite section 3.13, Council from time to time, and at any time, may enter into agreements providing for all or any part of a development charge to be paid before or after it would otherwise be payable, in accordance with section 27 of the Act.
- 3.15 Notwithstanding section 3.13, any development which requires more than one building permit or for which more than one building permit will be or has been issued, the development charge, shall be calculated, payable and collected as of the date the first building permit is issued in respect of the building for the use to which the development charge applies and if the gross floor area of such building is increased before final or completion building permit, the development charges shall be calculated, payable and collected on the additional area as of the date the final or completion building permit is issued.

#### **4. PAYMENT BY SERVICES**

- 4.1 Despite the payment required under subsections 3.9, 3.10 and 3.11, Council may, by agreement, give a credit towards a development charge in exchange for work that relates to a service to which a development charge relates under this By-law.

#### **5. INDEXING**

- 5.1 Development charges imposed pursuant to this By-law may be adjusted annually, without amendment to this By-law, commencing on the 1<sup>st</sup> of January, 2018 and each year thereafter, in accordance with the prescribed index in the Act.

## **6. SCHEDULES**

6.1 The following schedules shall form part of this By-law:

Schedule A - Components of Services Designated in subsection 2.1

Schedule B - Residential and Non-Residential Development Charges

Schedule C-1 - Map of Urban Service Area for Bayfield

Schedule C-2 - Map of Urban Service Area for Hensall Water

Schedule C-3 - Map of Urban Service Area for Hensall Wastewater

Schedule C-4 - Map of Urban Service Area for Zurich

## **CONFLICTS**

7.1 Where the Municipality and an owner or former owner have entered into an agreement with respect to land within the area to which this By-law applies, and a conflict exists between the provisions of this By-law and such agreement, the provisions of the agreement shall prevail to the extent that there is a conflict.

7.2 Notwithstanding section 7.1, where a development which is the subject of an agreement to which section 7.1 applies, is subsequently the subject of one or more of the actions described in subsection 3.4(a), an additional development charge in respect of the development permitted by the action shall be calculated, payable and collected in accordance with the provisions of this By-law if the development has the effect of increasing the need for services, unless such agreement provides otherwise.

## **8. SEVERABILITY**

8.1 If, for any reason, any provision of this By-law is held to be invalid, it is hereby declared to be the intention of Council that all the remainder of this By-law shall continue in full force and effect until repealed, re-enacted, amended or modified.

**9. DATE BY-LAW IN FORCE**

9.1 This By-law shall come into effect at 12:01 AM on \_\_\_\_\_, 2017.

**10. DATE BY-LAW EXPIRES**

10.1 This By-law will expire at 12:01 AM on \_\_\_\_\_, 2022 unless it is repealed by Council at an earlier date.

PASSED THIS \_\_\_ day of \_\_\_\_\_, 2017.

\_\_\_\_\_  
Tyler Hessel, Mayor

\_\_\_\_\_  
Kyle Pratt, Chief Administrative Officer/Clerk

**SCHEDULE "A" TO BY-LAW**

**COMPONENTS OF SERVICES DESIGNATED IN SUBSECTION 2.1**

100% Eligible Services

Services Related to a Highway

Bridges, Culverts & Structures

Depots and Domes

Services Related to a Highway Related Vehicles

Water Services

Storage

Wastewater Services

Treatment

90% Eligible Services

Outdoor Recreation

Parkland Development

Administration

Growth Related Studies

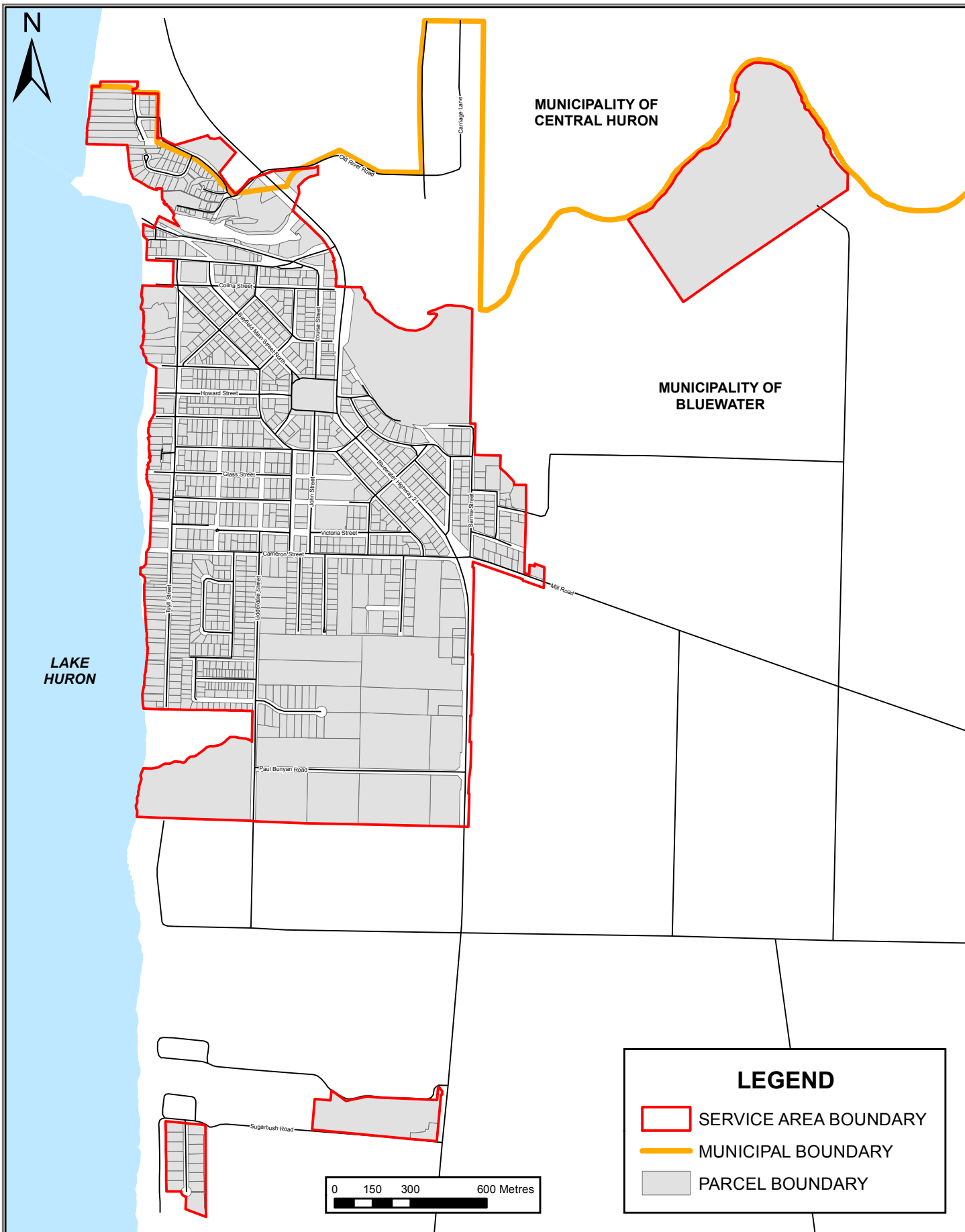
Waste Diversion

Capital Component of Collection



**SCHEDULE "B"**  
**BY-LAW NO. 2017 - \_\_\_\_\_**  
**SCHEDULE OF DEVELOPMENT CHARGES**

| Service                              | RESIDENTIAL                       |                           |                                     |                 | NON-RESIDENTIAL                           |               |
|--------------------------------------|-----------------------------------|---------------------------|-------------------------------------|-----------------|---|---------------|
|                                      | Single and Semi-Detached Dwelling | Apartments - 2 Bedrooms + | Apartments - Bachelor and 1 Bedroom | Other Multiples | (per ft <sup>2</sup> of Gross Floor Area) | Wind Turbines |
| <b>Municipal Wide Services:</b>      |                                   |                           |                                     |                 |   |               |
| Services Related to a Highway        | 838                               | 617                       | 401                                 | 666             | 0.48                                      | 838           |
| Outdoor Recreation Services          | 672                               | 494                       | 322                                 | 533             | 0.09                                      | -             |
| Administration                       | 387                               | 285                       | 185                                 | 307             | 0.25                                      | 387           |
| Waste Diversion                      | 21                                | 15                        | 10                                  | 17              | 0.01                                      | -             |
| <b>Total Municipal Wide Services</b> | <b>1,918</b>                      | <b>1,411</b>              | <b>918</b>                          | <b>1,523</b>    | <b>0.83</b>                               | <b>1,225</b>  |
| <b>Urban Services</b>                |                                   |                           |                                     |                 |   |               |
| Wastewater                           |                                   |                           |                                     |                 |   |               |
| Bayfield                             | 7,320                             | 5,398                     | 3,510                               | 5,811           | 1.26                                      | -             |
| Hensall                              | 3,034                             | 2,237                     | 1,455                               | 2,409           | 0.16                                      | -             |
| Zurich                               | 6,481                             | 4,779                     | 3,108                               | 5,145           | 0.00                                      | -             |
| Water                                |                                   |                           |                                     |                 |   |               |
| Hensall                              | 2,495                             | 1,840                     | 1,196                               | 1,981           | 0.13                                      | -             |
| GRAND TOTAL RURAL AREA               | 1,918                             | 1,411                     | 918                                 | 1,523           | 0.83                                      | 1,225         |
| GRAND TOTAL BAYFIELD AREA            | 9,239                             | 6,794                     | 4,422                               | 7,334           | 2.09                                      | 1,225         |
| GRAND TOTAL HENSALL AREA             | 7,447                             | 5,477                     | 3,564                               | 5,912           | 1.12                                      | 1,225         |
| GRAND TOTAL ZURICH AREA              | 8,400                             | 6,177                     | 4,020                               | 6,668           | 0.83                                      | 1,225         |



Filename: Z:\16148-Bluewater-Development\_Charges\_Capital\Projects\GIS\Bayfield\_Sanitary\_Service\_Area\_Map.mxd 2016-12-23



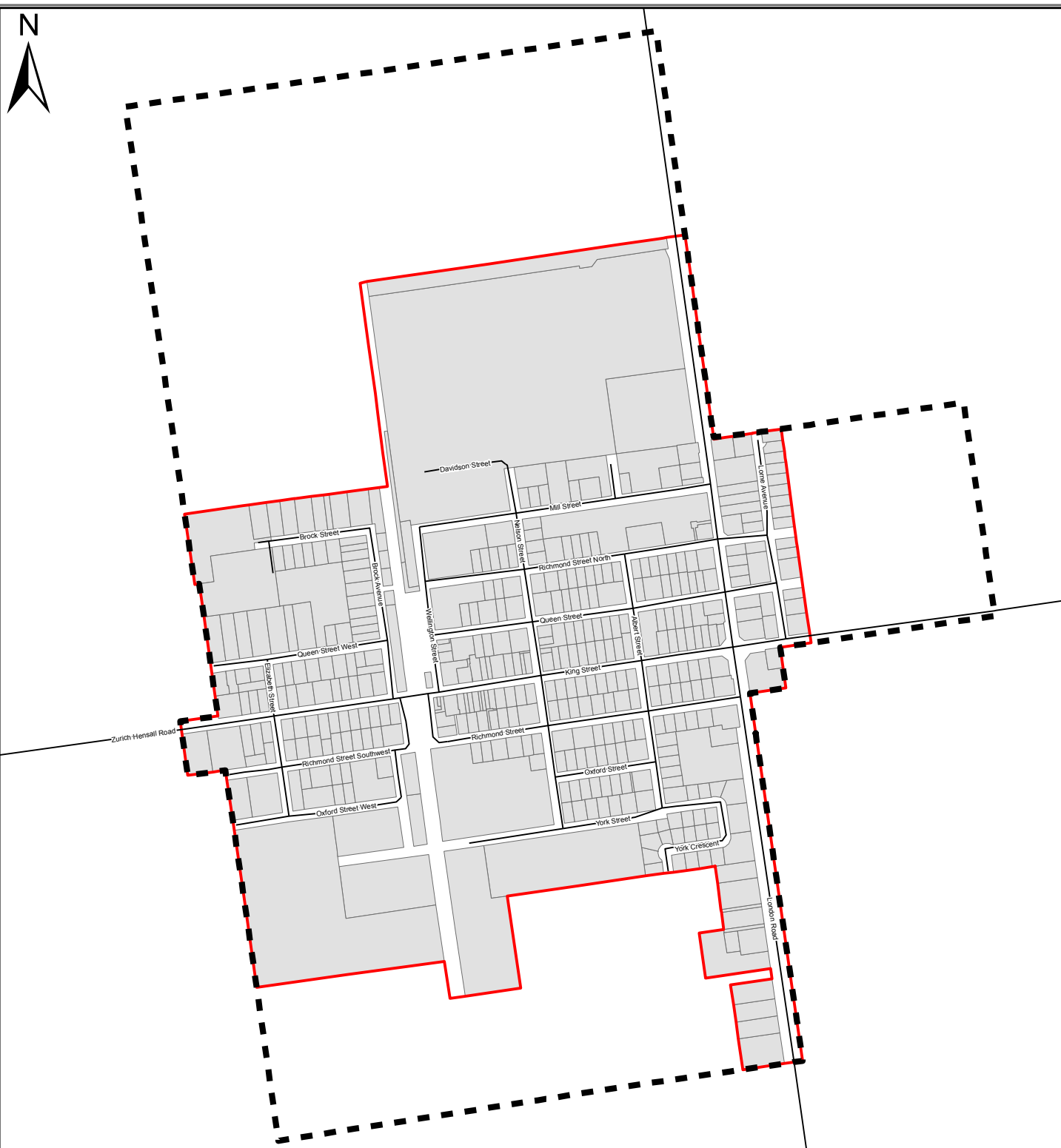
**Schedule C- 1**  
**MUNICIPALITY OF BLUEWATER**  
 BAYFIELD SANITARY SERVICE AREA

DATE  
Dec. 22, 2016




PROJECT No.  
16148

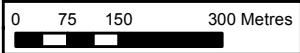
SCALE  
As Shown

FIGURE No.  
1



**LEGEND**

-  2036 SERVICE AREA BOUNDARY
-  SERVICE AREA BOUNDARY
-  PARCEL BOUNDARY

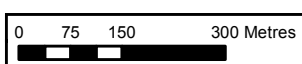
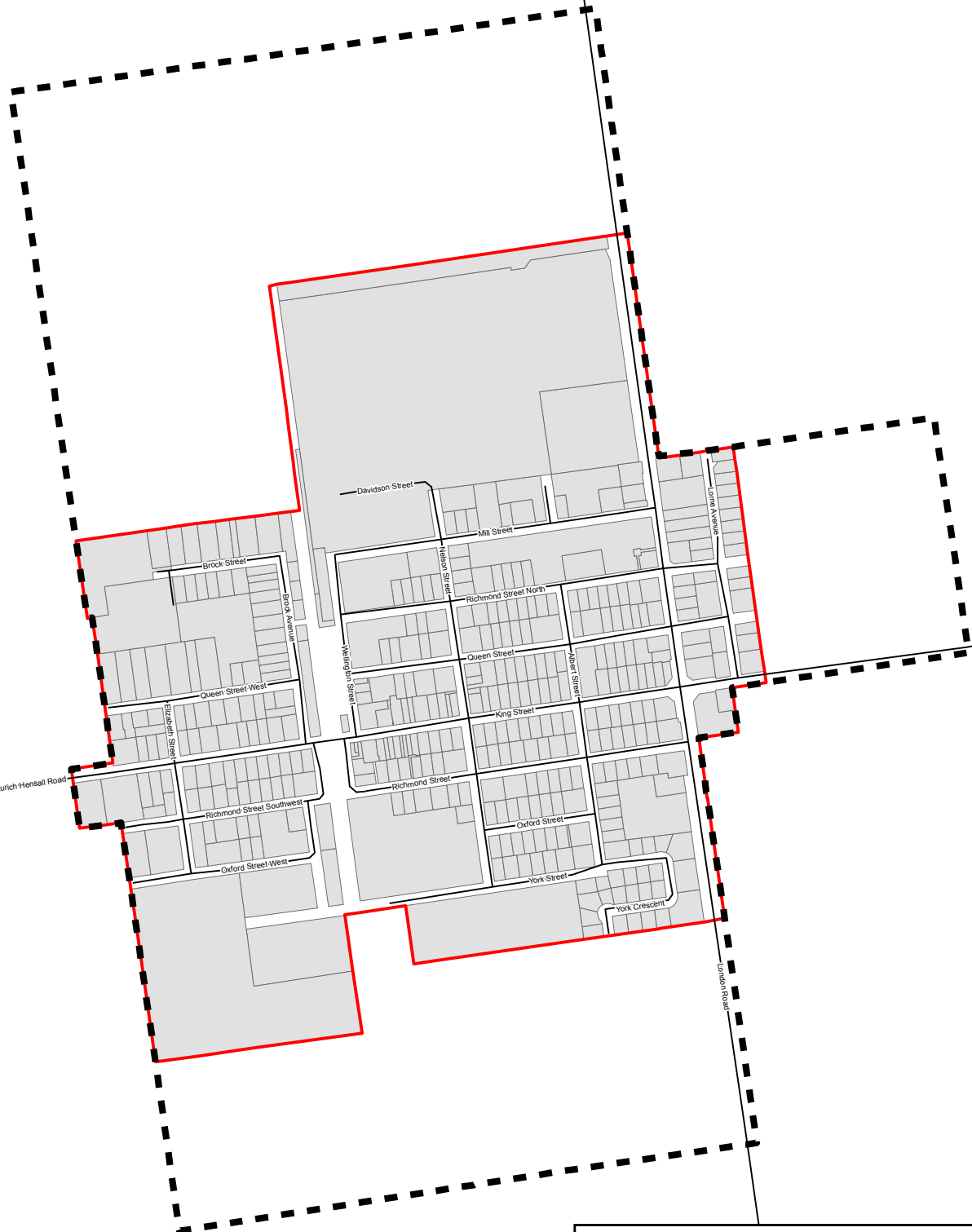


Filename: Z:\16148-Bluewater-Development\_Charges\_Capital\Projects\GIS\Hensall\_Water\_Service\_Area\_Map.mxd 2016-12-23



**Schedule C-2  
MUNICIPALITY OF BLUEWATER  
HENSALL WATER SERVICE AREA**

|                       |                      |
|-----------------------|----------------------|
| DATE<br>Dec. 22, 2016 | PROJECT No.<br>16148 |
| SCALE<br>As Shown     | FIGURE No.<br>3      |



**LEGEND**

- 2036 SERVICE AREA BOUNDARY
- SERVICE AREA BOUNDARY
- PARCEL BOUNDARY

Filename: Z:\16148-Bluewater-Development\_Charges\_Capital\Projects\GIS\Hensall\_Sanitary\_Service\_Area\_Map.mxd 2016-12-23



**Schedule C-3  
MUNICIPALITY OF BLUEWATER  
HENSTALL SANITARY SERVICE AREA**

|                       |                      |
|-----------------------|----------------------|
| DATE<br>Dec. 22, 2016 | PROJECT No.<br>16148 |
| SCALE<br>As Shown     | FIGURE No.<br>2      |

### Schedule C-4 Map of Urban Service Area for Zurich

