

SUBJECT: DCC Update Report to Council

DATE: December 6, 2021

FILE: 2849.0070.01

## 1. Introduction

This brief report sets out the results of the DCC calculations for discussion with Council. The report sets out some specific decision points for Council. Based on Council direction our next steps will be to meet with stakeholders on the resulting DCCs.

This report includes the following topics:

- Growth assumptions
- Parks project costs and options for discussion
- Roads projects and DCC calculations
- Water projects and DCC calculations
- Sewer projects and DCC calculations
- Storm Drainage projects and DCC calculations
- Summary of calculated DCCs
- Appendix A with DCC projects and calculations

## 2. Growth assumptions

The Growth Assumptions are based on the Colliers report prepared for the Official Community Plan update - Real Estate Inventory and Growth Projections

The population information in the report is as follows:

- 2021 population: 37,046
- 2030 population: 43,252
- 2040 population: 49,419
- The growth over the 20 year period from 2021 to 2040 is 12,373 people

The report projects residential commercial and industrial growth. Based on the information in the report, the growth projection and units used for the 20 year DCC period is set out in the table below.

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| Form of Development           | Units   | Unit type        |
|-------------------------------|---------|------------------|
| Single Family Residential     | 1,080   | lots             |
| Small Lot Single Family       | 884     | lots             |
| Small Residential Building    | 1,171   | dwelling units   |
| Apartment                     | 227,460 | sq.m. floor area |
| Carriage homes                | 21,000  | sq.m. floor area |
| Commercial                    | 44,848  | sq.m. floor area |
| Industrial                    | 114,125 | sq.m. floor area |
| Institutional - care facility | 300     | beds             |
| Institutional                 | 25,000  | sq.m. floor area |

Industrial is based on developing suitable vacant or underutilized Industrial land in Colliers report which is set out as 94 acres or about 38 hectares. For industrial building floor area, a 30 percent parcel coverage is assumed.

Carriage homes were not calculated in the Colliers report. The figures assumed are based on past construction, with a slight increase and are consistent with previous DCC calculations.

Split between larger lots (550 m<sup>2</sup> +) and smaller lots (<550 m<sup>2</sup>) were not set out in Colliers report. The previous DCC had 60% large 40% small. The model assumes 55% large and 45% small to reflect a shift to smaller lots.

Institutional growth is not included in the Colliers report. Institutional growth was increased from 15,300 m<sup>2</sup> in the old DCC calculations to 25,000 m<sup>2</sup> to reflect items such as George Pringle site school, City Hall, Library, and the anticipation of additional Institutional.

### 3. Parks DCCs

Parks DCC costs are divided into two main components:

- Costs for parkland acquisition
- Costs to develop and improve parkland for public use

The details are discussed in the sections below.

### 4. Parkland acquisition

To determine parkland acquisition costs, we analyzed the increase in assessed land values in West Kelowna from 2016 to 2021. The increase in overall assessed values for land only (not including construction of buildings or other improvements) from 2016 to 2021 is approximately 49%. To calculate the updated land values, this analysis uses the parks land values calculated for the 2016 DCC bylaw and applies a 49% increase as set out in the table below.

| Park Type       | Old 2016 Price per ha | percentage increase | New 2021 Price per ha |
|-----------------|-----------------------|---------------------|-----------------------|
| Waterfront park | \$1,746,815           | 49.0%               | \$2,602,754           |
| Athletic park   | \$400,121             | 49.0%               | \$596,180             |
| Community park  | \$400,121             | 49.0%               | \$596,180             |

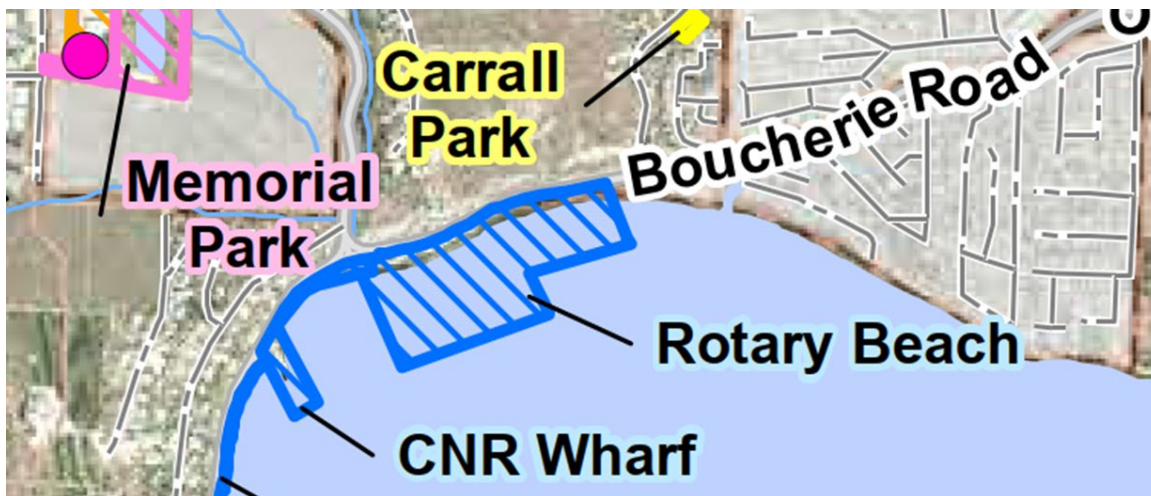
## 5. Amount of parkland required

The amount of parkland required by type is based on maintaining the current level of parkland per capita for the three types of parkland identified for collection through DCCs: waterfront, athletic and community park. Neighbourhood parkland is collected through the 5% parkland dedication, and is not part of the Parks DCC calculations.

The most recent data regarding parkland inventories and amounts of existing parkland per 1000 people in West Kelowna is from the 2016 Parks Master Plan.

The amount for Municipal waterfront parkland set out in the Parks master plan was total of 15.4 hectares. This amount does not include areas provided by the Regional District because the focus of the DCC is to calculate the demand for City owned waterfront parkland. Upon a more detailed review of the data set out in the Parks Master Plan, we identified that some of the areas included in the total were Licences of Occupation that extended out into the water. An example of this is shown in the excerpt from the Parks Master Plan mapping below.

Excerpt from Map A: Existing Parks - Parks Master Plan



While this useful for the Parks Master Plan, we needed actual land area in order to calculate the demand for future lands and the lands cost. We reviewed the data, and by including land only and excluding water surface, we identified 6.24 hectares of waterfront lands owned by the City including many parks located on road ends. The population used in the Parks Master plan was 34,484 and the resulting amount of waterfront parkland is 0.18 ha per 1000 people. The 0.18 ha

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per 1000 people is the figure used for calculating the future amounts of waterfront parkland required.

The other amounts in the Parks Master plan were consistent with the requirements for the DCC calculations. The other amounts and the revised waterfront amounts are set out in the following table.

| Land Type       | Acquisition | Existing ha of park per 1000 people | Population Growth | Land Area Required for Growth in ha | Price per ha | Total Cost   |
|-----------------|-------------|-------------------------------------|-------------------|-------------------------------------|--------------|--------------|
| Waterfront park |             | 0.18                                | 12,373            | 2.23                                | \$2,602,754  | \$5,796,698  |
| Athletic park   |             | 0.80                                | 12,373            | 9.90                                | \$596,180    | \$5,901,231  |
| Community park  |             | 0.43                                | 12,373            | 5.32                                | \$596,180    | \$3,171,912  |
| TOTAL           |             | 1.410                               |                   | 17.45                               |              | \$14,869,841 |

## 6. DCC assist amounts

Based on the Local Government Act, the City must provide some level of assistance to pay costs of off-site infrastructure required by development. The extent of the assist factor is at Council's discretion. The Assist Factor can vary by service (i.e., roads different than water), but it cannot vary by area of community, or land use.

A comparison of Assist factors in the Okanagan Valley is set out below

|              | Roads | Sewage | Drainage | Water | Parks |
|--------------|-------|--------|----------|-------|-------|
| West Kelowna | 1%    | 1%     | 1%       | 1%    | 25%   |
| Kelowna      | 15%   | 1%     | n/a      | 1%    | 8%    |
| Peachland    | 1%    | 1%     | 1%       | 1%    | 1%    |
| Penticton    | 5%    | 15%    | 3%       | 15%   | 5%    |
| Lake Country | 1%    | 1%     | 1%       | 1%    | 1%    |
| Vernon       | 1%    | 1%     | 1%       | 1%    | 1%    |

With an Assist factor, it is important to remember that even though the project (or part of the project) benefits new development, the City and its existing taxpayers pay for the assist amount.

As set out in the table, the current DCC Assist amount for parks is 25%. This 25% amount was set when the City was initially establishing the Parks DCC. For this update, our recommendation is for the City to consider reducing the parks DCC assist to 1% to be consistent with the other services. The 1% parks DCC will allow growth to pay for growth, rather than having existing residents subsidize new development.

**Recommendation:**

Our recommendation is to establish a 1% Assist Factor for the Parks DCC

**7. Parks Improvement Benefit Allocations**

In the 2016 parks DCC, the calculations were based on new growth only paying for 33% of the costs for constructing improvements on the parkland that is 100% growth-related. In this case essentially new growth is only paying 33% of its burden. As shown graphically below, new growth is paying to acquire the parkland required to serve the new growth but they are only paying to develop 33% of the park required for growth. Even though the only reason the City needs to improve this vacant parkland is to serve new residents. This results in the City acquiring parkland to serve new growth, but only obtaining funds to improve a third of that land.



*Development does not pay for developing 67% of parkland needed for growth*

*Development pays for developing 33% of the parkland needed for growth*

**8. Forgone Parks DCC revenues**

To calculate the revenues forgone by collecting 33% of park improvements on parks required only due to growth vs collecting 100%, we took the following steps:

1. Recalculated the previous parks DCCs using 100% instead of 33%
2. Examined the impact this would have on the old DCC rate. It would have gone up by 65%
3. Applied the 65% increase to the amount of Parks DCCs collected from 2016 to 2021 (Oct) inclusive
4. Calculated the difference in revenue

The results are as follows:

- For a Single detached dwelling, the Parks DCC would have gone up from \$4,691 per lot to \$7,740 per lot, or a 65% increase.
- The City collected \$5,583,951 in Parks DCC revenues 2016 to 2021 (Oct). Increasing that by 65% results in \$9,213,803

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- The result is that the City would have collected \$3,629,852 more revenue if there was a DCC that collected 100% instead of 33% of estimated costs to improve parkland required for growth.
- about \$3.6 million in forgone revenue for parks improvements.

**Recommendation:**

Our recommendation is to consider allocating 100% of these costs to growth since these are improvements to parkland required only for growth, and there is significant potential revenue generation to pay for improving parks needed to serve growth.

**9. Equal Rate vs Gradient for Residential Parks DCCs**

Currently the City has a gradient with lower Parks DCC for multi family apartment and townhouse types of developments compared to single detached residential. The City could have the Parks DCCs be exactly the same for single detached and multi family types of development.

While the number of people per unit may be slightly less for apartments than for homes on individual lots, the apartment dwellers have a higher need for parkland since they don't have back yards they can use. Keeping the charge the same for both recognizes that slightly more land per capita is required for multi unit developments.

The equal charge neither disincentivizes nor incentivizes higher density forms of development, since the charge per unit for multi family is exactly the same as for single family. Furthermore, having the multi family charge the same as the single detached charge will allow for more funds from multi family development which can help address the often more expensive land costs in higher density areas where multifamily developments often occur.

The City of Kelowna and the District of Lake Country have both recently shifted to have equal parks DCCs for all forms of residential including single detached homes, townhouses and apartments.

By having an equal rate, the higher density units shoulder an equal burden of the Parks DCC project costs, reducing the Parks DCCs for single detached and other land use categories. In the following information in this report:

- The term 'Equal Rate' refers to the Parks DCC rate being set to be equal for Residential Subdivision, Small Lot Residential Subdivision (less than 550 m2), Small Residential Building (Duplex, Townhouse, Mobile home) and Apartment.
- The term 'Gradient Rate' refers to the Parks DCC rate being set using a gradients resulting in declining Parks DCCs when moving from Residential Subdivision, to Small Lot Residential Subdivision (less than 550 m2), to Small Residential Building (Duplex, Townhouse, Mobile home), to Apartment.

As an example, the resulting DCCs under an equal rate or a gradient (if the City collects DCCs from Commercial uses and not Industrial uses) are set out in the table below.

| Parks DCCs by Type  |           | Existing      | Proposed Gradient |            | Proposed Equal |            |
|---|-----------|---------------|-------------------|------------|----------------|------------|
|   |           | Gradient Rate | Gradient Rate     | % Increase | Equal Rate     | % Increase |
| Residential Subdivision   | per lot   | \$4,691       | \$8,679           | 85%        | \$6,867        | 46%        |
| Small Lot Residential Subdivision (less than 550 m <sup>2</sup> ) | per lot   | \$3,909       | \$7,233           | 85%        | \$6,867        | 76%        |
| Small Residential Building (Duplex, Townhouse, Mobile home)       | per unit  | \$3,518       | \$6,509           | 85%        | \$6,867        | 95%        |
| Apartment   | per sq.m. | \$30.66       | \$56.73           | 85%        | \$67.33        | 120%       |

The resulting parks DCC rates under an equal rate or a gradient will be set out in more detail in sections that follow.

## Recommendations

After reviewing the results of the analysis for the Equal vs Gradient approach to Residential Parks DCCs the staff and consultant recommendation is to proceed with the Equal approach. The reasons are as follows:

- Higher density developments such as townhouses and apartments will place higher demands on parkland so they should pay their fair share.
- With more units sharing the burden, the increases in Parks DCCs for other uses are somewhat less.
- This approach is consistent with regional trends that have seen Kelowna and Lake Country switch to the equal approach.
- Although one impact of concern is that the percentage DCC increase for apartments and townhouses will be higher than for single detached homes, the absolute amount of overall DCCs for apartments and townhouses are still lower than the amount for single detached lots.

## 10. Industrial and Commercial Parks DCCs

Currently the City of West Kelowna does not charge Parks DCCs for Commercial, Industrial or Institutional uses. Many communities are shifting towards charging Parks DCCs for Commercial and Industrial uses. For example: the City of Kelowna charges these uses a parks improvement DCC and is considering charging them a parks acquisition DCC. The District of Lake Country charges both a parks improvement and acquisition DCC to Commercial and Industrial uses.

Commercial and Industrial uses can place demands on parks as employees, tourists, and business visitors use parks. Parks also provide a benefit by providing a more attractive community to do business.

In reviewing this option, we examined the types of uses defined and commercial and industrial in the existing DCC bylaw and the demand for parks generated by industrial floor area compared to commercial. Commercial uses in the zoning bylaw include uses that generate more visitors

and parks demand than industrial including: accommodation, recreation, entertainment, auto services, food and beverage, and retail.

The industrial definition in DCC Bylaw is quite narrowly focussed:

*"industrial" means extracting, processing, manufacturing, fabricating, transportation, distribution and service uses not provided directly to consumers or the public, and includes the portions of winery premises such as fermentation and barrel rooms and wine storage areas that are not ordinarily accessible to the general public.*

To reflect the narrow focus of the industrial definition and specifically "uses not provided directly to consumers or the public" we calculated equivalency factors to reflect that Industrial uses will generate significantly less demand for parks than commercial uses.

## 11. Parks DCC calculation results

The parks DCCs are set out under various options:

- Option 1: Equal Rate Residential with:
  - o 1a - Commercial and Industrial parks DCCs
  - o 1b - Commercial parks DCCs only (no industrial parks DCCs)
  - o 1c - No Commercial or Industrial parks DCCs
- Option 2: Gradient Rate Residential with:
  - o 2a - Commercial and Industrial parks DCCs
  - o 2b - Commercial parks DCCs only (no industrial parks DCCs)
  - o 2c - No Commercial or Industrial parks DCCs

The parks DCC results under various options are set out below. The results using the Equal rate residential approach are set out in the table below.

| Equal Residential   |           | Option 1a                            | Option 1b                  | Option 1c                              |
|---|-----------|--------------------------------------|----------------------------|--|
|   |           | Commercial and Industrial Parks DCCs | Commercial Parks DCCs only | No Commercial or Industrial Parks DCCs |
| Residential Subdivision   | per lot   | \$6,623                              | \$6,867                    | \$7,006                                |
| Small Lot Residential Subdivision (less than 550 m <sup>2</sup> ) | per lot   | \$6,623                              | \$6,867                    | \$7,006                                |
| Small Residential Building (Duplex, Townhouse, Mobile home)       | per unit  | \$6,623                              | \$6,867                    | \$7,006                                |
| Apartment   | per sq.m. | \$64.93                              | \$67.33                    | \$68.69                                |
| Commercial  | per sq.m. | \$16.56                              | \$17.17                    | \$0.00                                 |
| Industrial  | per sq.m. | \$12.14                              | \$0.00                     | \$0.00                                 |

The Parks DCCs in Option 1b, without the Industrial development paying, are 3.7% higher than in Option 1a

The Parks DCCs in Option 1c, without either Industrial or commercial development paying, are 5.8% higher than in Option 1a.

The results using the Gradient rate residential approach are set out in the table below.

| Gradient Residential  |           | Option 2a                            | Option 2b                  | Option 2c                              |
|---|-----------|--------------------------------------|----------------------------|--|
|   |           | Commercial and Industrial Parks DCCs | Commercial Parks DCCs only | No Commercial or Industrial Parks DCCs |
| Residential Subdivision   | per lot   | \$8,292                              | \$8,679                    | \$8,902                                |
| Small Lot Residential Subdivision (less than 550 m <sup>2</sup> ) | per lot   | \$6,910                              | \$7,233                    | \$7,418                                |
| Small Residential Building (Duplex, Townhouse, Mobile home)       | per unit  | \$6,219                              | \$6,509                    | \$6,676                                |
| Apartment   | per sq.m. | \$54.20                              | \$56.73                    | \$58.18                                |
| Commercial  | per sq.m. | \$20.73                              | \$21.70                    | \$0.00                                 |
| Industrial  | per sq.m. | \$15.20                              | \$0.00                     | \$0.00                                 |

The Parks DCCs in Option 2b, without the Industrial development paying, are 4.7% higher than in Option 2a

The Parks DCCs in Option 2c, without either Industrial or commercial development paying, are 7.3% higher than in Option 2a.

## 12. Industrial and Commercial DCC revenues

To get an idea of the magnitude of Industrial and Commercial Parks DCC revenues, we calculated the amount of Commercial and Industrial parks DCCs that would have been collected if the proposed Commercial and Industrial Parks DCCs had been imposed from 2016 to 2021 (Oct). For the analysis we chose option 1a with the equal residential DCCs.

|            | New Parks DCC | Units of charge      | Estimate of floor area built 2016 - 2021 | Revenue if Parks DCC at proposed rate |
|------------|---------------|----------------------|--|---------------------------------------|
| Commercial | \$16.56       | Per sq.m. Floor Area | 16,856                                   | \$279,089                             |
| Industrial | \$12.14       | Per sq.m. Floor Area | 11,204                                   | \$136,046                             |
|            |               |                      |  | \$415,135                             |

- If we apply the Commercial Parks DCC proposed to the amount of development from 2016 to 2021, then we would have collected \$279,089

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- For comparison, the total DCC collected from Commercial from 2016 to 2021 (which doesn't include Parks since there was no parks DCC on commercial) was \$649,000
- If we apply the Industrial Parks DCC proposed to the amount of development from 2016 to 2021, converted to building floor area, then we would have collected \$136,046.
- For comparison, the total DCC collected from Industrial from 2016 to 2021 (which doesn't include Parks since there was no parks DCC on industrial) was \$1,023,000

## Recommendations

After reviewing the analysis of Commercial and Industrial DCCs, the Staff and consultant recommendation is to proceed with the Commercial Parks DCCs and not the Industrial Parks DCC revenues. The reasons are as follows:

- Commercial uses have an impact on parks through various uses such as accommodation, recreation, entertainment, auto services, food and beverage, and retail. All of these uses bring visitors to the City which will use the parks, along with the employees in all commercial enterprises.
- Industrial uses will have a limited impact on parks since by the definition in the DCC bylaw the Industrial uses are "uses not provided directly to consumers or the public". While industrial employees may use parks their impact would be limited compared to the tourism use generated by commercial activities.
- The amount of potential revenue generated by Industrial would only be about \$136,000. The potential concern generated by a Parks DCC for Industrial uses might not be worth the revenue generated.
- The City could reconsider the Industrial Parks DCC once an Industrial Strategy has been prepared that might refine the types of industrial uses and may eventually result in uses that attract more visitors or employees from outside the City.

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### 13. Roads DCCs

The projects identified for the Roads DCC project list are set out in Appendix A. These projects have been identified as required to serve growth needs over the next 20 years. The benefit allocations (the portion of each project that is required due to growth) range from 33% to 80%.

As noted in earlier discussions the costs of roads construction have increased significantly since the cost estimates for the previous DCC were completed in 2015.

The details of the DCC calculations are also set out in Appendix A.

The resulting roads DCCs are set out in the table below.

| New DCC Rates                        |           | Existing        | Proposed        | % +         |
|--------------------------------------|-----------|-----------------|-----------------|-------------|
|                                      |           |                 | <b>Roads</b>    |             |
| <b>Assist Factor</b>                 |           |                 | <b>1%</b>       |             |
| <b>Single Family Residential</b>     | per lot   | <b>\$10,518</b> | <b>\$14,861</b> | <b>41%</b>  |
| <b>Small Lot Single Family</b>       | per lot   | <b>\$8,761</b>  | <b>\$12,379</b> | <b>41%</b>  |
| <b>Small Residential</b>             | per unit  | <b>\$6,419</b>  | <b>\$9,070</b>  | <b>41%</b>  |
| <b>Apartment</b>                     | per sq.m. | <b>\$45.49</b>  | <b>\$64.28</b>  | <b>41%</b>  |
| <b>Carriage Home</b>                 | per sq.m. | <b>\$22.10</b>  | <b>\$31.22</b>  | <b>41%</b>  |
| <b>Commercial</b>                    | per sq.m. | <b>\$34.83</b>  | <b>\$49.21</b>  | <b>41%</b>  |
| <b>Industrial*</b>                   | per sq.m. | <b>\$28.87</b>  | <b>\$12.24</b>  | <b>-58%</b> |
| <b>Institutional - care facility</b> | per bed   | <b>\$3,020</b>  | <b>\$4,267</b>  | <b>41%</b>  |
| <b>Institutional - other</b>         | per sq.m. | <b>\$34.83</b>  | <b>\$49.21</b>  | <b>41%</b>  |
| <b>Campground</b>                    | per site  | <b>\$740</b>    | <b>\$1,046</b>  | <b>41%</b>  |
| <b>Golf course</b>                   | per ha    | <b>\$4,541</b>  | <b>\$6,416</b>  | <b>41%</b>  |

\* the existing Industrial rates are shown as the equivalent to the charge per m2 of floor area assuming a 30% parcel coverage at one storey

## 14. Water Projects

The projects identified for the Water DCC project list are set out in Appendix A. These projects have been identified as required to serve growth needs over the next 20 years. The benefit allocations (the portion of each project that is required due to growth) range from 5% to 65%.

As noted in earlier discussions, the costs of water construction have increased significantly since the cost estimates for the previous DCC were completed in 2015. The cost increases relate to increases in the costs for concrete for reservoir construction and piping costs.

The details of the DCC calculations are also set out in Appendix A.

The resulting Water DCCs are set out in the table below.

| New DCC Rates                        |           | Existing        | Proposed        | % +         |
|--------------------------------------|-----------|-----------------|-----------------|-------------|
|                                      |           |                 | <b>Water</b>    |             |
| <b>Assist Factor</b>                 |           |                 | <b>1%</b>       |             |
| <b>Single Family Residential</b>     | per lot   | <b>\$2,938</b>  | <b>\$3,577</b>  | <b>22%</b>  |
| <b>Small Lot Single Family</b>       | per lot   | <b>\$2,448</b>  | <b>\$2,981</b>  | <b>22%</b>  |
| <b>Small Residential</b>             | per unit  | <b>\$2,204</b>  | <b>\$2,683</b>  | <b>22%</b>  |
| <b>Apartment</b>                     | per sq.m. | <b>\$19.20</b>  | <b>\$23.38</b>  | <b>22%</b>  |
| <b>Carriage Home</b>                 | per sq.m. | <b>\$9.33</b>   | <b>\$11.36</b>  | <b>22%</b>  |
| <b>Commercial</b>                    | per sq.m. | <b>\$7.35</b>   | <b>\$8.94</b>   | <b>22%</b>  |
| <b>Industrial*</b>                   | per sq.m. | <b>\$54.40</b>  | <b>\$19.87</b>  | <b>-63%</b> |
| <b>Institutional - care facility</b> | per bed   | <b>\$1,224</b>  | <b>\$1,490</b>  | <b>22%</b>  |
| <b>Institutional - other</b>         | per sq.m. | <b>\$9.79</b>   | <b>\$11.92</b>  | <b>22%</b>  |
| <b>Campground</b>                    | per site  | <b>\$727</b>    | <b>\$885</b>    | <b>22%</b>  |
| <b>Golf course</b>                   | per ha    | <b>\$16,160</b> | <b>\$19,673</b> | <b>22%</b>  |

\* the existing Industrial rates are shown as the equivalent to the charge per m2 of floor area assuming a 30% parcel coverage at one storey

Water DCCs do not increase as much as the other DCCs for the following reasons:

- The DCCs subtract the Grant for the Water treatment plant. The previous DCC did not have a grant for the plant.
- The water DCCs have a healthy reserve fund of about \$7 million.
- Only small percentages of some projects are allocated to growth - some expensive reservoirs only have 5% to 10% allocated to growth.

## 15. Sewer Projects

The projects identified for the Sewer DCC project list are set out in Appendix A. These projects have been identified as required to serve growth needs over the next 20 years. The benefit allocations (the portion of each project that is required due to growth) range from 17% to 100%.

As noted in earlier discussions, the costs of sewer construction have increased significantly since the cost estimates for the previous DCC were completed in 2015. The cost increase relate to increases in the costs for piping, lift stations and generator sets, as well as the addition of more projects required for growth.

The details of the DCC calculations are also set out in Appendix A.

The resulting Sewer DCCs are set out in the table below.

| New DCC Rates                        |           | Existing      | Proposed      | % +         |
|--------------------------------------|-----------|---------------|---------------|-------------|
|                                      |           |               | <b>Sewer</b>  |             |
| <b>Assist Factor</b>                 |           |               | <b>1%</b>     |             |
| <b>Single Family Residential</b>     | per lot   | <b>\$85</b>   | <b>\$256</b>  | <b>200%</b> |
| <b>Small Lot Single Family</b>       | per lot   | <b>\$71</b>   | <b>\$213</b>  | <b>200%</b> |
| <b>Small Residential</b>             | per unit  | <b>\$64</b>   | <b>\$192</b>  | <b>200%</b> |
| <b>Apartment</b>                     | per sq.m. | <b>\$0.56</b> | <b>\$1.67</b> | <b>198%</b> |
| <b>Carriage Home</b>                 | per sq.m. | <b>\$0.27</b> | <b>\$0.81</b> | <b>201%</b> |
| <b>Commercial</b>                    | per sq.m. | <b>\$0.21</b> | <b>\$0.64</b> | <b>204%</b> |
| <b>Industrial*</b>                   | per sq.m. | <b>\$1.57</b> | <b>\$1.42</b> | <b>-9%</b>  |
| <b>Institutional - care facility</b> | per bed   | <b>\$36</b>   | <b>\$107</b>  | <b>200%</b> |
| <b>Institutional - other</b>         | per sq.m. | <b>\$0.28</b> | <b>\$0.85</b> | <b>204%</b> |
| <b>Campground</b>                    | per site  | <b>\$0.00</b> | <b>\$0.00</b> |             |
| <b>Golf course</b>                   | per ha    | <b>\$0.00</b> | <b>\$0.00</b> |             |

\* the existing Industrial rates are shown as the equivalent to the charge per m2 of floor area assuming a 30% parcel coverage at one storey

While the percentage increases in the sewer DCCs are high, the absolute dollar value is quite modest. For example, single family residential sewer DCCs increase from \$85 to \$256, which is a 200% increase, but only an increase of \$171 per lot.

## 16. Storm Drainage Projects

The projects identified for the Storm Drainage DCC project list are set out in Appendix A. These projects have been identified as required to serve growth needs over the next 20 years. The benefit allocations (the portion of each project that is required due to growth) range from 5% to 75% with most having allocations of 25% or 40%.

As noted in earlier discussions, the costs of storm drainage construction have increased significantly since the cost estimates for the previous DCC were completed before 2015. In addition, the previous costs were quite low. In comparing master plan costs to actual project costs, we saw an aggregate of about 90% increase in costs, and we have applied this increase to the remaining projects.

The details of the DCC calculations are also set out in Appendix A.

The resulting Storm Drainage DCCs are set out in the table below.

| New DCC Rates                        |           | Existing      | Proposed      | % +         |
|--------------------------------------|-----------|---------------|---------------|-------------|
|                                      |           |               | <b>Storm</b>  |             |
| <b>Assist Factor</b>                 |           |               | <b>1%</b>     |             |
| <b>Single Family Residential</b>     | per lot   | <b>\$250</b>  | <b>\$653</b>  | <b>162%</b> |
| <b>Small Lot Single Family</b>       | per lot   | <b>\$187</b>  | <b>\$490</b>  | <b>162%</b> |
| <b>Small Residential</b>             | per unit  | <b>\$143</b>  | <b>\$373</b>  | <b>162%</b> |
| <b>Apartment</b>                     | per sq.m. | <b>\$1.14</b> | <b>\$2.99</b> | <b>162%</b> |
| <b>Carriage Home</b>                 | per sq.m. | <b>\$0.95</b> | <b>\$2.49</b> | <b>162%</b> |
| <b>Commercial</b>                    | per sq.m. | <b>\$0.44</b> | <b>\$1.16</b> | <b>164%</b> |
| <b>Industrial*</b>                   | per sq.m. | <b>\$5.53</b> | <b>\$4.35</b> | <b>-21%</b> |
| <b>Institutional - care facility</b> | per bed   | <b>\$58</b>   | <b>\$152</b>  | <b>162%</b> |
| <b>Institutional - other</b>         | per sq.m. | <b>\$0.37</b> | <b>\$0.98</b> | <b>165%</b> |
| <b>Campground</b>                    | per site  | <b>\$0.00</b> | <b>\$0.00</b> |             |
| <b>Golf course</b>                   | per ha    | <b>\$0.00</b> | <b>\$0.00</b> |             |

\* the existing Industrial rates are shown as the equivalent to the charge per m2 of floor area assuming a 30% parcel coverage at one storey

Similar to the sewer DCCs, while the percentage increases in the Storm Drainage DCCs are high, the absolute dollar value is quite modest. For example, single family residential sewer DCCs increase from \$250 to \$653, which is a 162% increase, but only an increase of \$403 per lot.

## 17. Summary Table with Parks Options

The following tables summarize the existing DCCs, the proposed DCCs, and the percentage increase for Roads, Sewer, Storm Drainage and Parks, using the various Parks Options:

- Option 1: Equal Residential with:
  - o 1a - Commercial and Industrial parks DCCs
  - o 1b - Commercial parks DCCs only (no industrial parks DCCs)
  - o 1c - No Commercial or Industrial parks DCCs
- Option 2: Gradient Residential with:
  - o 2a - Commercial and Industrial parks DCCs
  - o 2b - Commercial parks DCCs only (no industrial parks DCCs)
  - o 2c - No Commercial or Industrial parks DCCs

### 1a : Equal Residential with: Commercial and Industrial parks DCCs

| New DCC Rates                 |           | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  |
|-------------------------------|-----------|----------|----------|------|----------|----------|------|----------|----------|------|----------|----------|------|----------|----------|------|----------|----------|------|
|                               |           |          | Roads    |      |          | Sewer    |      |          | Storm    |      |          | Water    |      |          | Parks    |      |          | Total    |      |
| Assist Factor                 |           |          | 1%       |      |          | 1%       |      |          | 1%       |      |          | 1%       |      |          | 1%       |      |          |          |      |
| Single Family Residential     | per lot   | \$10,518 | \$14,861 | 41%  | \$85     | \$256    | 200% | \$250    | \$653    | 162% | \$2,938  | \$3,577  | 22%  | \$4,691  | \$6,623  | 41%  | \$18,481 | \$25,970 | 41%  |
| Small Lot Single Family       | per lot   | \$8,761  | \$12,379 | 41%  | \$71     | \$213    | 200% | \$187    | \$490    | 162% | \$2,448  | \$2,981  | 22%  | \$3,909  | \$6,623  | 69%  | \$15,377 | \$22,686 | 48%  |
| Small Residential             | per unit  | \$6,419  | \$9,070  | 41%  | \$64     | \$192    | 200% | \$143    | \$373    | 162% | \$2,204  | \$2,683  | 22%  | \$3,518  | \$6,623  | 88%  | \$12,347 | \$18,940 | 53%  |
| Apartment                     | per sq.m. | \$45.49  | \$64.28  | 41%  | \$0.56   | \$1.67   | 198% | \$1.14   | \$2.99   | 162% | \$19.20  | \$23.38  | 22%  | \$30.66  | \$64.93  | 112% | \$97.05  | \$157.25 | 62%  |
| Carriage Home                 | per sq.m. | \$22.10  | \$31.22  | 41%  | \$0.27   | \$0.81   | 201% | \$0.95   | \$2.49   | 162% | \$9.33   | \$11.36  | 22%  | \$14.89  | \$21.03  | 41%  | \$47.54  | \$66.90  | 41%  |
| Commercial                    | per sq.m. | \$34.83  | \$49.21  | 41%  | \$0.21   | \$0.64   | 204% | \$0.44   | \$1.16   | 164% | \$7.35   | \$8.94   | 22%  | \$0.00   | \$16.56  |      | \$42.83  | \$76.51  | 79%  |
| Industrial*                   | per sq.m. | \$28.87  | \$12.24  | -58% | \$1.57   | \$1.42   | -9%  | \$5.53   | \$4.35   | -21% | \$54.40  | \$19.87  | -63% | \$0.00   | \$12.14  |      | \$90.37  | \$50.03  | -45% |
| Institutional - care facility | per bed   | \$3,020  | \$4,267  | 41%  | \$36     | \$107    | 200% | \$58     | \$152    | 162% | \$1,224  | \$1,490  | 22%  | \$1,954  | \$2,760  | 41%  | \$6,292  | \$8,776  | 39%  |
| Institutional - other         | per sq.m. | \$34.83  | \$49.21  | 41%  | \$0.28   | \$0.85   | 204% | \$0.37   | \$0.98   | 165% | \$9.79   | \$11.92  | 22%  | \$0.00   | \$0.00   |      | \$45.27  | \$62.96  | 39%  |
| Campground                    | per site  | \$740    | \$1,046  | 41%  | \$0.00   |          |      | \$0.00   |          |      | \$727    | \$885    | 22%  | \$0.00   |          |      | \$1,467  | \$1,931  | 32%  |
| Golf course                   | per ha    | \$4,541  | \$6,416  | 41%  | \$0.00   |          |      | \$0.00   |          |      | \$16,160 | \$19,673 | 22%  | \$0.00   |          |      | \$20,700 | \$26,089 | 26%  |

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## 1b Equal Residential with: Commercial parks DCCs only (no industrial parks DCCs)

| New DCC Rates                 |           | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  |
|-------------------------------|-----------|----------|----------|------|----------|----------|------|----------|----------|------|----------|----------|------|----------|----------|------|----------|----------|------|
|                               |           |          | Roads    |      |          | Sewer    |      |          | Storm    |      |          | Water    |      |          | Parks    |      |          | Total    |      |
| Assist Factor                 |           |          | 1%       |      |          | 1%       |      |          | 1%       |      |          | 1%       |      |          | 1%       |      |          |          |      |
| Single Family Residential     | per lot   | \$10,518 | \$14,861 | 41%  | \$85     | \$256    | 200% | \$250    | \$653    | 162% | \$2,938  | \$3,577  | 22%  | \$4,691  | \$6,867  | 46%  | \$18,481 | \$26,215 | 42%  |
| Small Lot Single Family       | per lot   | \$8,761  | \$12,379 | 41%  | \$71     | \$213    | 200% | \$187    | \$490    | 162% | \$2,448  | \$2,981  | 22%  | \$3,909  | \$6,867  | 76%  | \$15,377 | \$22,931 | 49%  |
| Small Residential             | per unit  | \$6,419  | \$9,070  | 41%  | \$64     | \$192    | 200% | \$143    | \$373    | 162% | \$2,204  | \$2,683  | 22%  | \$3,518  | \$6,867  | 95%  | \$12,347 | \$19,185 | 55%  |
| Apartment                     | per sq.m. | \$45.49  | \$64.28  | 41%  | \$0.56   | \$1.67   | 198% | \$1.14   | \$2.99   | 162% | \$19.20  | \$23.38  | 22%  | \$30.66  | \$67.33  | 120% | \$97.05  | \$159.65 | 64%  |
| Carriage Home                 | per sq.m. | \$22.10  | \$31.22  | 41%  | \$0.27   | \$0.81   | 201% | \$0.95   | \$2.49   | 162% | \$9.33   | \$11.36  | 22%  | \$14.89  | \$21.80  | 46%  | \$47.54  | \$67.68  | 42%  |
| Commercial                    | per sq.m. | \$34.83  | \$49.21  | 41%  | \$0.21   | \$0.64   | 204% | \$0.44   | \$1.16   | 164% | \$7.35   | \$8.94   | 22%  | \$0.00   | \$17.17  |      | \$42.83  | \$77.12  | 80%  |
| Industrial*                   | per sq.m. | \$28.87  | \$12.24  | -58% | \$1.57   | \$1.42   | -9%  | \$5.53   | \$4.35   | -21% | \$54.40  | \$19.87  | -63% | \$0.00   | \$0.00   |      | \$90.37  | \$37.89  | -58% |
| Institutional - care facility | per bed   | \$3,020  | \$4,267  | 41%  | \$36     | \$107    | 200% | \$58     | \$152    | 162% | \$1,224  | \$1,490  | 22%  | \$1,954  | \$2,861  | 46%  | \$6,292  | \$8,878  | 41%  |
| Institutional - other         | per sq.m. | \$34.83  | \$49.21  | 41%  | \$0.28   | \$0.85   | 204% | \$0.37   | \$0.98   | 165% | \$9.79   | \$11.92  | 22%  | \$0.00   | \$0.00   |      | \$45.27  | \$62.96  | 39%  |
| Campground                    | per site  | \$740    | \$1,046  | 41%  | \$0.00   |          |      | \$0.00   |          |      | \$727    | \$885    | 22%  | \$0.00   |          |      | \$1,467  | \$1,931  | 32%  |
| Golf course                   | per ha    | \$4,541  | \$6,416  | 41%  | \$0.00   |          |      | \$0.00   |          |      | \$16,160 | \$19,673 | 22%  | \$0.00   |          |      | \$20,700 | \$26,089 | 26%  |

## 1c Equal Residential with: No Commercial or Industrial parks DCCs

| New DCC Rates                 |           | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  |
|-------------------------------|-----------|----------|----------|------|----------|----------|------|----------|----------|------|----------|----------|------|----------|----------|------|----------|----------|------|
|                               |           |          | Roads    |      |          | Sewer    |      |          | Storm    |      |          | Water    |      |          | Parks    |      |          | Total    |      |
| Assist Factor                 |           |          | 1%       |      |          | 1%       |      |          | 1%       |      |          | 1%       |      |          | 1%       |      |          |          |      |
| Single Family Residential     | per lot   | \$10,518 | \$14,861 | 41%  | \$85     | \$256    | 200% | \$250    | \$653    | 162% | \$2,938  | \$3,577  | 22%  | \$4,691  | \$7,006  | 49%  | \$18,481 | \$26,353 | 43%  |
| Small Lot Single Family       | per lot   | \$8,761  | \$12,379 | 41%  | \$71     | \$213    | 200% | \$187    | \$490    | 162% | \$2,448  | \$2,981  | 22%  | \$3,909  | \$7,006  | 79%  | \$15,377 | \$23,069 | 50%  |
| Small Residential             | per unit  | \$6,419  | \$9,070  | 41%  | \$64     | \$192    | 200% | \$143    | \$373    | 162% | \$2,204  | \$2,683  | 22%  | \$3,518  | \$7,006  | 99%  | \$12,347 | \$19,323 | 57%  |
| Apartment                     | per sq.m. | \$45.49  | \$64.28  | 41%  | \$0.56   | \$1.67   | 198% | \$1.14   | \$2.99   | 162% | \$19.20  | \$23.38  | 22%  | \$30.66  | \$68.69  | 124% | \$97.05  | \$161.00 | 66%  |
| Carriage Home                 | per sq.m. | \$22.10  | \$31.22  | 41%  | \$0.27   | \$0.81   | 201% | \$0.95   | \$2.49   | 162% | \$9.33   | \$11.36  | 22%  | \$14.89  | \$22.24  | 49%  | \$47.54  | \$68.12  | 43%  |
| Commercial                    | per sq.m. | \$34.83  | \$49.21  | 41%  | \$0.21   | \$0.64   | 204% | \$0.44   | \$1.16   | 164% | \$7.35   | \$8.94   | 22%  | \$0.00   | \$0.00   |      | \$42.83  | \$59.95  | 40%  |
| Industrial*                   | per sq.m. | \$28.87  | \$12.24  | -58% | \$1.57   | \$1.42   | -9%  | \$5.53   | \$4.35   | -21% | \$54.40  | \$19.87  | -63% | \$0.00   | \$0.00   |      | \$90.37  | \$37.89  | -58% |
| Institutional - care facility | per bed   | \$3,020  | \$4,267  | 41%  | \$36     | \$107    | 200% | \$58     | \$152    | 162% | \$1,224  | \$1,490  | 22%  | \$1,954  | \$2,919  | 49%  | \$6,292  | \$8,935  | 42%  |
| Institutional - other         | per sq.m. | \$34.83  | \$49.21  | 41%  | \$0.28   | \$0.85   | 204% | \$0.37   | \$0.98   | 165% | \$9.79   | \$11.92  | 22%  | \$0.00   | \$0.00   |      | \$45.27  | \$62.96  | 39%  |
| Campground                    | per site  | \$740    | \$1,046  | 41%  | \$0.00   |          |      | \$0.00   |          |      | \$727    | \$885    | 22%  | \$0.00   |          |      | \$1,467  | \$1,931  | 32%  |
| Golf course                   | per ha    | \$4,541  | \$6,416  | 41%  | \$0.00   |          |      | \$0.00   |          |      | \$16,160 | \$19,673 | 22%  | \$0.00   |          |      | \$20,700 | \$26,089 | 26%  |

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## 2a Gradient Residential with: Commercial and Industrial parks DCCs

| New DCC Rates                 |           | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % + | Existing | Proposed | % +  |
|-------------------------------|-----------|----------|----------|------|----------|----------|------|----------|----------|------|----------|----------|------|----------|----------|-----|----------|----------|------|
|                               |           |          | Roads    |      |          | Sewer    |      |          | Storm    |      |          | Water    |      |          | Parks    |     |          | Total    |      |
| Assist Factor                 |           |          | 1%       |      |          | 1%       |      |          | 1%       |      |          | 1%       |      |          | 1%       |     |          |          |      |
| Single Family Residential     | per lot   | \$10,518 | \$14,861 | 41%  | \$85     | \$256    | 200% | \$250    | \$653    | 162% | \$2,938  | \$3,577  | 22%  | \$4,691  | \$8,292  | 77% | \$18,481 | \$27,640 | 50%  |
| Small Lot Single Family       | per lot   | \$8,761  | \$12,379 | 41%  | \$71     | \$213    | 200% | \$187    | \$490    | 162% | \$2,448  | \$2,981  | 22%  | \$3,909  | \$6,910  | 77% | \$15,377 | \$22,974 | 49%  |
| Small Residential             | per unit  | \$6,419  | \$9,070  | 41%  | \$64     | \$192    | 200% | \$143    | \$373    | 162% | \$2,204  | \$2,683  | 22%  | \$3,518  | \$6,219  | 77% | \$12,347 | \$18,537 | 50%  |
| Apartment                     | per sq.m. | \$45.49  | \$64.28  | 41%  | \$0.56   | \$1.67   | 198% | \$1.14   | \$2.99   | 162% | \$19.20  | \$23.38  | 22%  | \$30.66  | \$54.20  | 77% | \$97.05  | \$146.52 | 51%  |
| Carriage Home                 | per sq.m. | \$22.10  | \$31.22  | 41%  | \$0.27   | \$0.81   | 201% | \$0.95   | \$2.49   | 162% | \$9.33   | \$11.36  | 22%  | \$14.89  | \$26.33  | 77% | \$47.54  | \$72.20  | 52%  |
| Commercial                    | per sq.m. | \$34.83  | \$49.21  | 41%  | \$0.21   | \$0.64   | 204% | \$0.44   | \$1.16   | 164% | \$7.35   | \$8.94   | 22%  | \$0.00   | \$20.73  |     | \$42.83  | \$80.68  | 88%  |
| Industrial*                   | per sq.m. | \$28.87  | \$12.24  | -58% | \$1.57   | \$1.42   | -9%  | \$5.53   | \$4.35   | -21% | \$54.40  | \$19.87  | -63% | \$0.00   | \$15.20  |     | \$90.37  | \$53.09  | -41% |
| Institutional - care facility | per bed   | \$3,020  | \$4,267  | 41%  | \$36     | \$107    | 200% | \$58     | \$152    | 162% | \$1,224  | \$1,490  | 22%  | \$1,954  | \$3,455  | 77% | \$6,292  | \$9,471  | 51%  |
| Institutional - other         | per sq.m. | \$34.83  | \$49.21  | 41%  | \$0.28   | \$0.85   | 204% | \$0.37   | \$0.98   | 165% | \$9.79   | \$11.92  | 22%  | \$0.00   | \$0.00   |     | \$45.27  | \$62.96  | 39%  |
| Campground                    | per site  | \$740    | \$1,046  | 41%  | \$0.00   |          |      | \$0.00   |          |      | \$727    | \$885    | 22%  | \$0.00   |          |     | \$1,467  | \$1,931  | 32%  |
| Golf course                   | per ha    | \$4,541  | \$6,416  | 41%  | \$0.00   |          |      | \$0.00   |          |      | \$16,160 | \$19,673 | 22%  | \$0.00   |          |     | \$20,700 | \$26,089 | 26%  |

## 2b Gradient Residential with: Commercial parks DCCs only (no industrial parks DCCs)

| New DCC Rates                 |           | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % + | Existing | Proposed | % +  |
|-------------------------------|-----------|----------|----------|------|----------|----------|------|----------|----------|------|----------|----------|------|----------|----------|-----|----------|----------|------|
|                               |           |          | Roads    |      |          | Sewer    |      |          | Storm    |      |          | Water    |      |          | Parks    |     |          | Total    |      |
| Assist Factor                 |           |          | 1%       |      |          | 1%       |      |          | 1%       |      |          | 1%       |      |          | 1%       |     |          |          |      |
| Single Family Residential     | per lot   | \$10,518 | \$14,861 | 41%  | \$85     | \$256    | 200% | \$250    | \$653    | 162% | \$2,938  | \$3,577  | 22%  | \$4,691  | \$8,679  | 85% | \$18,481 | \$28,026 | 52%  |
| Small Lot Single Family       | per lot   | \$8,761  | \$12,379 | 41%  | \$71     | \$213    | 200% | \$187    | \$490    | 162% | \$2,448  | \$2,981  | 22%  | \$3,909  | \$7,233  | 85% | \$15,377 | \$23,296 | 52%  |
| Small Residential             | per unit  | \$6,419  | \$9,070  | 41%  | \$64     | \$192    | 200% | \$143    | \$373    | 162% | \$2,204  | \$2,683  | 22%  | \$3,518  | \$6,509  | 85% | \$12,347 | \$18,827 | 52%  |
| Apartment                     | per sq.m. | \$45.49  | \$64.28  | 41%  | \$0.56   | \$1.67   | 198% | \$1.14   | \$2.99   | 162% | \$19.20  | \$23.38  | 22%  | \$30.66  | \$56.73  | 85% | \$97.05  | \$149.04 | 54%  |
| Carriage Home                 | per sq.m. | \$22.10  | \$31.22  | 41%  | \$0.27   | \$0.81   | 201% | \$0.95   | \$2.49   | 162% | \$9.33   | \$11.36  | 22%  | \$14.89  | \$27.55  | 85% | \$47.54  | \$73.43  | 54%  |
| Commercial                    | per sq.m. | \$34.83  | \$49.21  | 41%  | \$0.21   | \$0.64   | 204% | \$0.44   | \$1.16   | 164% | \$7.35   | \$8.94   | 22%  | \$0.00   | \$21.70  |     | \$42.83  | \$81.65  | 91%  |
| Industrial*                   | per sq.m. | \$28.87  | \$12.24  | -58% | \$1.57   | \$1.42   | -9%  | \$5.53   | \$4.35   | -21% | \$54.40  | \$19.87  | -63% | \$0.00   | \$0.00   |     | \$90.37  | \$37.89  | -58% |
| Institutional - care facility | per bed   | \$3,020  | \$4,267  | 41%  | \$36     | \$107    | 200% | \$58     | \$152    | 162% | \$1,224  | \$1,490  | 22%  | \$1,954  | \$3,616  | 85% | \$6,292  | \$9,633  | 53%  |
| Institutional - other         | per sq.m. | \$34.83  | \$49.21  | 41%  | \$0.28   | \$0.85   | 204% | \$0.37   | \$0.98   | 165% | \$9.79   | \$11.92  | 22%  | \$0.00   | \$0.00   |     | \$45.27  | \$62.96  | 39%  |
| Campground                    | per site  | \$740    | \$1,046  | 41%  | \$0.00   |          |      | \$0.00   |          |      | \$727    | \$885    | 22%  | \$0.00   |          |     | \$1,467  | \$1,931  | 32%  |
| Golf course                   | per ha    | \$4,541  | \$6,416  | 41%  | \$0.00   |          |      | \$0.00   |          |      | \$16,160 | \$19,673 | 22%  | \$0.00   |          |     | \$20,700 | \$26,089 | 26%  |

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## 2c Gradient Residential with: No Commercial or Industrial parks DCCs

| New DCC Rates                 |           | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % +  | Existing | Proposed | % + | Existing | Proposed | % +  |
|-------------------------------|-----------|----------|----------|------|----------|----------|------|----------|----------|------|----------|----------|------|----------|----------|-----|----------|----------|------|
|                               |           |          | Roads    |      |          | Sewer    |      |          | Storm    |      |          | Water    |      |          | Parks    |     |          | Total    |      |
| Assist Factor                 |           |          | 1%       |      |          | 1%       |      |          | 1%       |      |          | 1%       |      |          | 1%       |     |          |          |      |
| Single Family Residential     | per lot   | \$10,518 | \$14,861 | 41%  | \$85     | \$256    | 200% | \$250    | \$653    | 162% | \$2,938  | \$3,577  | 22%  | \$4,691  | \$8,902  | 90% | \$18,481 | \$28,249 | 53%  |
| Small Lot Single Family       | per lot   | \$8,761  | \$12,379 | 41%  | \$71     | \$213    | 200% | \$187    | \$490    | 162% | \$2,448  | \$2,981  | 22%  | \$3,909  | \$7,418  | 90% | \$15,377 | \$23,481 | 53%  |
| Small Residential             | per unit  | \$6,419  | \$9,070  | 41%  | \$64     | \$192    | 200% | \$143    | \$373    | 162% | \$2,204  | \$2,683  | 22%  | \$3,518  | \$6,676  | 90% | \$12,347 | \$18,994 | 54%  |
| Apartment                     | per sq.m. | \$45.49  | \$64.28  | 41%  | \$0.56   | \$1.67   | 198% | \$1.14   | \$2.99   | 162% | \$19.20  | \$23.38  | 22%  | \$30.66  | \$58.18  | 90% | \$97.05  | \$150.50 | 55%  |
| Carriage Home                 | per sq.m. | \$22.10  | \$31.22  | 41%  | \$0.27   | \$0.81   | 201% | \$0.95   | \$2.49   | 162% | \$9.33   | \$11.36  | 22%  | \$14.89  | \$28.26  | 90% | \$47.54  | \$74.14  | 56%  |
| Commercial                    | per sq.m. | \$34.83  | \$49.21  | 41%  | \$0.21   | \$0.64   | 204% | \$0.44   | \$1.16   | 164% | \$7.35   | \$8.94   | 22%  | \$0.00   | \$0.00   |     | \$42.83  | \$59.95  | 40%  |
| Industrial*                   | per sq.m. | \$28.87  | \$12.24  | -58% | \$1.57   | \$1.42   | -9%  | \$5.53   | \$4.35   | -21% | \$54.40  | \$19.87  | -63% | \$0.00   | \$0.00   |     | \$90.37  | \$37.89  | -58% |
| Institutional - care facility | per bed   | \$3,020  | \$4,267  | 41%  | \$36     | \$107    | 200% | \$58     | \$152    | 162% | \$1,224  | \$1,490  | 22%  | \$1,954  | \$3,709  | 90% | \$6,292  | \$9,725  | 55%  |
| Institutional - other         | per sq.m. | \$34.83  | \$49.21  | 41%  | \$0.28   | \$0.85   | 204% | \$0.37   | \$0.98   | 165% | \$9.79   | \$11.92  | 22%  | \$0.00   | \$0.00   |     | \$45.27  | \$62.96  | 39%  |
| Campground                    | per site  | \$740    | \$1,046  | 41%  | \$0.00   |          |      | \$0.00   |          |      | \$727    | \$885    | 22%  | \$0.00   |          |     | \$1,467  | \$1,931  | 32%  |
| Golf course                   | per ha    | \$4,541  | \$6,416  | 41%  | \$0.00   |          |      | \$0.00   |          |      | \$16,160 | \$19,673 | 22%  | \$0.00   |          |     | \$20,700 | \$26,089 | 26%  |

## **Appendix A**

# **DCC Projects and Calculations**

U:\Projects\_KEL\2849\0070\01\R-Reports-Studies-Documents\R1-Reports\Report to Council for Dec 14 2021\2021-12-06-DCC Update Report to Council.docx

| ROADS & TRANSPORTATION CAPITAL COSTS |   |   | Benefit Allocation |               | Net Capital Cost<br>( for DCC calculations ) | Benefit to New Development | 1% Municipal Assist | Total Recoverable From DCC | Total Municipal Responsibility |
|--------------------------------------|---|---|--------------------|---------------|--|----------------------------|---------------------|----------------------------|--------------------------------|
| #                                    | Project Name  | Description   | % to New Dev.      | % to Existing |  |                            |                     |                            |                                |
| 1b.1                                 | Boucherie Rd from Ogden to Sunnyside (added a roundabout)     | Wine Route Cross-Section- Wine Route Cross-Section - Arterial         | 74%                | 26%           | \$ 10,115,320                                | \$ 7,475,221               | \$ 74,752.21        | \$ 7,400,469               | \$ 2,714,851                   |
| 1b.2                                 | Boucherie Rd from Sunnyside to Green Bay (added a roundabout) | Wine Route Cross-Section- Wine Route Cross-Section - Arterial         | 74%                | 26%           | \$ 11,341,010                                | \$ 8,392,347               | \$ 83,923.47        | \$ 8,308,424               | \$ 3,032,586                   |
| 1c                                   | Boucherie Rd from Green Bay to WFN IR#9                       | Wine Route Cross-Section- Wine Route Cross-Section - Arterial         | 74%                | 26%           | \$ 4,953,000                                 | \$ 3,660,267               | \$ 36,602.67        | \$ 3,623,664               | \$ 1,329,336                   |
| 2                                    | Boucherie Rd from Gellatly Rd to WFN IR#9                     | Wine Route Cross-Section- Wine Route Cross-Section - Arterial         | 74%                | 26%           | \$ 3,525,000                                 | \$ 2,604,975               | \$ 26,049.75        | \$ 2,578,925               | \$ 946,075                     |
| 3a.1                                 | Gellatly Rd and Carrington Roundabout                         | roundabout  | 72%                | 28%           | \$ 1,756,000                                 | \$ 1,267,832               | \$ 12,678.32        | \$ 1,255,154               | \$ 500,846                     |
| 3a.2                                 | Gellatly Rd from Witt to Boucherie                            | Urban Arterial Cross-Section- Urban Arterial Cross-Section - Arterial | 72%                | 28%           | \$ 1,845,760                                 | \$ 1,328,947               | \$ 13,289.47        | \$ 1,315,658               | \$ 530,102                     |
| 3b                                   | Gellatly Rd South from Whitworth to 4251                      | Wine Route Cross-Section- Wine Route Cross-Section - Arterial         | 74%                | 26%           | \$ 2,950,000                                 | \$ 2,180,050               | \$ 21,800.50        | \$ 2,158,250               | \$ 791,751                     |
| 3d                                   | Gellatly Rd South from 4035 to Glen Canyon                    | Wine Route Cross-Section- Wine Route Cross-Section - Arterial         | 74%                | 26%           | \$ 4,250,000                                 | \$ 3,145,000               | \$ 31,450.00        | \$ 3,113,550               | \$ 1,136,450                   |
| 3f                                   | Gellatly Rd South from Glen Canyon to Hwy 97                  | Wine Route Cross-Section- Wine Route Cross-Section - Arterial         | 74%                | 26%           | \$ 6,146,000                                 | \$ 4,541,894               | \$ 45,418.94        | \$ 4,496,475               | \$ 1,649,525                   |
| 4b                                   | Glenrosa Rd from Webber to Glen Abbey                         | Urban Arterial Cross-Section- Urban Arterial Cross-Section - Arterial | 72%                | 28%           | \$ 1,365,000                                 | \$ 985,530                 | \$ 9,855.30         | \$ 975,675                 | \$ 389,325                     |
| 4c                                   | Glenrosa Rd from Glen Abbey to McGinnis                       | Urban Arterial Cross-Section- Urban Arterial Cross-Section - Arterial | 72%                | 28%           | \$ 5,885,570                                 | \$ 4,249,382               | \$ 42,493.82        | \$ 4,206,888               | \$ 1,678,682                   |
| 5b                                   | Elliott from Solar to Butt                                    | Urban Arterial Cross-Section- Urban Arterial Cross-Section - Arterial | 72%                | 28%           | \$ 3,155,000                                 | \$ 2,277,910               | \$ 22,779.10        | \$ 2,255,131               | \$ 899,869                     |
| 5c                                   | Elliott from Butt to Reece                                    | Rural Arterial Cross-Section- Rural Arterial Cross-Section - Arterial | 61%                | 39%           | \$ 5,141,000                                 | \$ 3,115,446               | \$ 31,154.46        | \$ 3,084,292               | \$ 2,056,708                   |
| 5d                                   | Elliott from Reece to Smith Creek                             | Rural Arterial Cross-Section- Rural Arterial Cross-Section - Arterial | 61%                | 39%           | \$ 3,855,000                                 | \$ 2,336,130               | \$ 23,361.30        | \$ 2,312,769               | \$ 1,542,231                   |

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| ROADS & TRANSPORTATION CAPITAL COSTS |   |   | Benefit Allocation |               | Net Capital Cost<br>( for DCC calculations ) | Benefit to New Development | 1% Municipal Assist | Total Recoverable From DCC | Total Municipal Responsibility |
|--------------------------------------|---|---|--------------------|---------------|--|----------------------------|---------------------|----------------------------|--------------------------------|
| #                                    | Project Name  | Description   | % to New Dev.      | % to Existing |  |                            |                     |                            |                                |
|                                      |   |   |                    |               |  |                            |                     |                            |                                |
| 6a                                   | Smith Creek from Elliott to Wild Horse  | Rural Arterial Cross-Section- Rural Arterial Cross-Section - Arterial | 61%                | 39%           | \$ 3,367,000                                 | \$ 2,040,402               | \$ 20,404.02        | \$ 2,019,998               | \$ 1,347,002                   |
| 7a                                   | Old Okanagan Hwy from Dobbin to Butt  | Urban Arterial Cross-Section- Urban Arterial Cross-Section - Arterial | 72%                | 28%           | \$ 4,382,000                                 | \$ 3,163,804               | \$ 31,638.04        | \$ 3,132,166               | \$ 1,249,834                   |
| 7b                                   | Old Okanagan Hwy from Butt to Reece   | Urban Arterial Cross-Section- Urban Arterial Cross-Section - Arterial | 72%                | 28%           | \$ 4,103,000                                 | \$ 2,962,366               | \$ 29,623.66        | \$ 2,932,742               | \$ 1,170,258                   |
| 8a                                   | Shannonn Lake Road from IR #9 to Asquith  | Urban Arterial Cross-Section- Urban Arterial Cross-Section - Arterial | 72%                | 28%           | \$ 2,108,000                                 | \$ 1,521,976               | \$ 15,219.76        | \$ 1,506,756               | \$ 601,244                     |
| 8b                                   | Shannonn Lake Road from Asquith to 2835   | Urban Arterial Cross-Section- Urban Arterial Cross-Section - Arterial | 72%                | 28%           | \$ 3,169,000                                 | \$ 2,288,018               | \$ 22,880.18        | \$ 2,265,138               | \$ 903,862                     |
| 8f                                   | Shannonn Lake Road from 1850 to Bartley   | Urban Arterial Cross-Section- Urban Arterial Cross-Section - Arterial | 72%                | 28%           | \$ 3,017,000                                 | \$ 2,178,274               | \$ 21,782.74        | \$ 2,156,491               | \$ 860,509                     |
| 9a                                   | Being Constructed as a single project: Stevens Road from Bartley to Ross, Stevens Road from Ross to Westlake, Shannon Lake Rd / Bartley Rd Intersection Improvements (roundabout), *Bartley Road from Stevens to Hwy 97 (incomplete). Replaces projects 10a, 10b, 20, and part of 9 |   | 72%                | 28%           | \$ 4,902,537                                 | \$ 3,529,827               | \$ 35,298.27        | \$ 3,494,528               | \$ 1,408,009                   |
| 12                                   | Tallus Ridge Rd / Shannon Lake Rd Intersection Improvements   | Intersection Improvements   | 80%                | 20%           | \$ 3,640,000                                 | \$ 2,912,000               | \$ 29,120.00        | \$ 2,882,880               | \$ 757,120                     |
| 14                                   | Gossett Rd / Old Okanagan Highway Intersection Improvements   | Roundabout  | 80%                | 20%           | \$ 1,600,000                                 | \$ 1,280,000               | \$ 12,800.00        | \$ 1,267,200               | \$ 332,800                     |
| 17                                   | Glenrosa Access: - Second Access Route Study  | Corridor Study  | 33%                | 67%           | \$ 447,000                                   | \$ 147,510                 | \$ 1,475.10         | \$ 146,035                 | \$ 300,965                     |
| 23                                   | Butt Rd / Old Okanagan Highway Intersection Improvements  | Intersection Improvements   | 80%                | 20%           | \$ 224,000                                   | \$ 179,200                 | \$ 1,792.00         | \$ 177,408                 | \$ 46,592                      |
|                                      |   |   |                    |               |  |                            |                     |                            |                                |
| TOTAL                                |   |   |                    |               | \$ 97,243,197                                | \$ 69,764,308              | \$ 697,643          | \$ 69,066,665              | \$ 28,176,532                  |

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| ROADS & TRANSPORTATION DCC CALCULATION |                           |                           |                               |               |                  |
|--|---------------------------|---------------------------|-------------------------------|---------------|------------------|
| Land Use                               | Estimated New Development | Unit                      | Trip Generation Rates         | Impact Factor | Equivalent Units |
| Single Family Residential              | 1,080                     | lot                       | 9.52                          | 1             | 1080             |
| Small Lot Single Family                | 884                       | lot                       | 7.93016                       | 0.833         | 736              |
| Small Residential                      | 1,171                     | dwelling units            | 5.81                          | 0.61          | 715              |
| Apartment                              | 227,460                   | sq.m.                     | 0.04118                       | 0.00433       | 984              |
| Carriage homes                         | 21,000                    | sq.m.                     | 0.02                          | 0.00210       | 44               |
| Commercial                             | 44,848                    | sq.m.                     | 0.03152                       | 0.00331       | 149              |
| Industrial                             | 114,125                   | sq.m.                     | 0.00784                       | 0.00082       | 94               |
| Institutional - care facility          | 300                       | beds                      | 2.73333                       | 0.28711       | 86               |
| Institutional                          | 25,000                    | sq.m.                     | 0.03152                       | 0.00331       | 83               |
| Campground                             | -                         | site                      | 0.66989                       | 0.07037       | 0                |
| Golf course                            | -                         | hectare                   | 4.10977                       | 0.43170       | 0                |
| TOTAL                                  |                           |                           |                               |               | 3970             |
| Unit Road DCC Calculation              |                           |                           |                               |               |                  |
|  |                           |                           | Net Road DCC Program Recovera |               | \$69,066,665     |
|  |                           |                           | Existing DCC Reserve Monies   |               | -10,061,343      |
|  |                           |                           | Net Amount to be Paid by DCCs |               | \$59,005,322     |
|  |                           |                           | DCC per Equivalent Unit       |               | \$14,861.19      |
| Resulting Road DCCs                    |                           |                           |                               |               |                  |
|  |                           | Single Family Residential | \$14,861.19 per lot           |               |                  |
|  |                           | Small Lot Single Family   | \$12,379.38 per lot           |               |                  |
|  |                           | Small Residential         | \$9,069.70 per unit           |               |                  |
|  |                           | Apartment                 | \$64.28 per sq.m.             |               |                  |
|  |                           | Carriage home             | \$31.22 per sq.m.             |               |                  |
|  |                           | Commercial                | \$49.21 per sq.m.             |               |                  |
|  |                           | Industrial                | \$12.24 per sq.m.             |               |                  |
|  |                           | Institutional - care      | \$4,266.87 per bed            |               |                  |
|  |                           | Institutional - other     | \$49.21 per sq.m.             |               |                  |
|  |                           | Campground                | \$1,045.73 per site           |               |                  |
|  |                           | Golf course               | \$6,415.55 per ha             |               |                  |

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| 2021 DCC CALCULATION<br>WATER CAPITAL COSTS |   | a b                |                  | d  | e                                | f                         | g                                | h                                    |
|---|---|--------------------|------------------|--|----------------------------------|---------------------------|----------------------------------|--------------------------------------|
| #   | Project Name  | Benefit Allocation |                  | Net<br>Capital Cost<br>( for DCC<br>calculations ) | Benefit<br>to New<br>Development | 1%<br>Municipal<br>Assist | Total<br>Recoverable<br>From DCC | Total<br>Municipal<br>Responsibility |
|   |   | % to<br>New Dev.   | % to<br>Existing |  |                                  |                           |                                  |                                      |
| TD-2  | Sunnyside Transmission Main   | 25%                | 75%              | \$ 2,900,000                                       | \$ 725,000                       | \$ 7,250                  | \$ 717,750                       | \$ 2,182,250                         |
| TD-3  | Pritchard Water Supply Modifications and Decommissioning of Lake Intake | 25%                | 75%              | \$ 5,300   | \$ 1,325                         | \$ 13                     | \$ 1,312                         | \$ 3,988                             |
| TD-4  | West Kelowna Estates Transmission Main                                  | 65%                | 35%              | \$ 5,650,000                                       | \$ 3,672,500                     | \$ 36,725                 | \$ 3,635,775                     | \$ 2,014,225                         |
| T-2   | Rose Valley Water Treatment Plant                                       | 25%                | 75%              | \$ 21,598,000                                      | \$ 5,399,500                     | \$ 53,995                 | \$ 5,345,505                     | \$ 57,254,495                        |
| S-1   | Connect Sunnyside & Pritchard & Build Storage                           | 5%                 | 95%              | \$ 4,734,000                                       | \$ 236,700                       | \$ 2,367                  | \$ 234,333                       | \$ 4,499,667                         |
| S-2   | Sunnyside Reservoir Storage Improvements                                | 5%                 | 95%              | \$ 1,191,000                                       | \$ 59,550                        | \$ 596                    | \$ 58,955                        | \$ 1,132,046                         |
| S-3   | Sunnyside Reservoir Storage Improvements                                | 5%                 | 95%              | \$ 3,969,000                                       | \$ 198,450                       | \$ 1,985                  | \$ 196,466                       | \$ 3,772,535                         |
| S-4   | WKE Rose Valley Storage Improvements - PZ 657                           | 25%                | 75%              | \$ 439,000   | \$ 109,750                       | \$ 1,098                  | \$ 108,653                       | \$ 330,348                           |
| S-5   | WKE Rose Valley Storage Improvements - PZ 710                           | 5%                 | 95%              | \$ 838,000   | \$ 41,900                        | \$ 419                    | \$ 41,481                        | \$ 796,519                           |
| S-7   | WKE Storage Improvements - PZ 504                                       | 5%                 | 95%              | \$ 1,720,000                                       | \$ 86,000                        | \$ 860                    | \$ 85,140                        | \$ 1,634,860                         |
| S-8   | Rose Valley Storage Improvements - PZ 539                               | 5%                 | 95%              | \$ 4,190,000                                       | \$ 209,500                       | \$ 2,095                  | \$ 207,405                       | \$ 3,982,595                         |
| S-9   | Rose Valley Storage Improvements - PZ 597                               | 10%                | 90%              | \$ 17,934,000                                      | \$ 1,793,400                     | \$ 17,934                 | \$ 1,775,466                     | \$ 16,158,534                        |
| S-10  | Powers Creek Storage Improvements - PZ 630                              | 50%                | 50%              | \$ 5,087,000                                       | \$ 2,543,500                     | \$ 25,435                 | \$ 2,518,065                     | \$ 2,568,935                         |
| S-11  | Powers Creek Storage Improvements - PZ 673                              | 20%                | 80%              | \$ 3,200,000                                       | \$ 640,000                       | \$ 6,400                  | \$ 633,600                       | \$ 2,566,400                         |
| S-12  | Powers Creek Storage Improvements - PZ 583                              | 15%                | 85%              | \$ 2,797,000                                       | \$ 419,550                       | \$ 4,196                  | \$ 415,355                       | \$ 2,381,646                         |
| S-13  | Powers Creek Storage Improvements - PZ 503                              | 25%                | 75%              | \$ 17,787,000                                      | \$ 4,446,750                     | \$ 44,468                 | \$ 4,402,283                     | \$ 13,384,718                        |
| S-14  | Goat's Peak Storage Improvements - PZ 449                               | 51%                | 49%              | \$ 9,740,000                                       | \$ 4,967,400                     | \$ 49,674                 | \$ 4,917,726                     | \$ 4,822,274                         |
| H-1   | Fire Hydrant Coverage   | 10%                | 90%              | \$ 2,436,000                                       | \$ 243,600                       | \$ 2,436                  | \$ 241,164                       | \$ 2,194,836                         |
| P-1   | Harold Road Water pump station  | 58%                | 42%              | \$ 1,686,555                                       | \$ 975,663                       | \$ 9,757                  | \$ 965,906                       | \$ 720,649                           |
| TOTAL                                       |   |                    |                  | \$ 106,215,300                                     | \$ 25,794,375                    | \$ 257,944                | \$ 25,536,431                    | \$ 121,680,869                       |

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| WATER DCC CALCULATION        |                           |                               |                                |               |                  |
|------------------------------|---------------------------|-------------------------------|--------------------------------|---------------|------------------|
| Land Use                     | Estimated New Development | Unit                          | Density or Pop. Equivalent     | Impact Factor | Equivalent Units |
| Single Family Resident       | 1,080                     | lot                           | 3                              | 1             | 3,241            |
| Small Lot Single Family      | 884                       | lot                           | 2.5                            | 0.83333       | 2,210            |
| Small Residential            | 1,171                     | dwelling units                | 2.25                           | 0.75          | 2,635            |
| Apartment                    | 227,460                   | sq.m.                         | 0.0196                         | 0.00654       | 4,460            |
| Carriage homes               | 21,000                    | sq.m.                         | 0.0095                         | 0.00317       | 67               |
| Commercial                   | 44,848                    | sq.m.                         | 0.0075                         | 0.0025        | 336              |
| Industrial                   | 114,125                   | sq.m.                         | 0.0167                         | 0.00556       | 1,902            |
| Institutional - care facilit | 300                       | beds                          | 1.25                           | 0.41667       | 375              |
| Institutional                | 25,000                    | sq.m.                         | 0.01                           | 0.00333       | 250              |
| Campground                   | -                         | site                          | 0.7425                         | 0.2475        | -                |
| Golf course                  | -                         | hectare                       | 16.5                           | 5.5           | -                |
| TOTAL                        |                           |                               |                                |               | 15,475           |
| Unit Water DCC Calculation   |                           |                               |                                |               |                  |
|                              |                           |                               | Net Water DCC Program Recovera |               | \$25,536,431     |
|                              |                           |                               | Existing DCC Reserve Monies    |               | -7,085,198       |
|                              |                           |                               | Net Amount to be Paid by DCCs  |               | \$18,451,233     |
|                              |                           |                               | DCC per Unit                   |               | \$1,192.33       |
| Resulting Water DCCs         |                           |                               |                                |               |                  |
|                              |                           | Single Family Residential     | \$3,576.98 per lot             |               |                  |
|                              |                           | Small Lot Single Family       | \$2,980.82 per lot             |               |                  |
|                              |                           | Small Residential             | \$2,682.74 per unit            |               |                  |
|                              |                           | Apartment                     | \$23.38 per sq.m.              |               |                  |
|                              |                           | Carriage Homes                | \$11.36 per sq.m.              |               |                  |
|                              |                           | Commercial                    | \$8.94 per sq.m.               |               |                  |
|                              |                           | Industrial                    | \$19.87 per sq.m.              |               |                  |
|                              |                           | Institutional - care facility | \$1,490.41 per bed             |               |                  |
|                              |                           | Institutional - other         | \$11.92 per sq.m.              |               |                  |
|                              |                           | Campground                    | \$885.30 per site              |               |                  |
|                              |                           | Golf course                   | \$19,673.41 per ha             |               |                  |

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| 2021 DCC CALCULATION<br>SEWAGE SYSTEM CAPITAL COSTS |   |  |                    |               |  |                            |                     |                            |                                |
|---|---|--|--------------------|---------------|--|----------------------------|---------------------|----------------------------|--------------------------------|
| #   | Project Name                                | Description                                    | Benefit Allocation |               | Net Capital Cost<br>( for DCC calculations ) | Benefit to New Development | 1% Municipal Assist | Total Recoverable From DCC | Total Municipal Responsibility |
|   |   |  | % to New Dev.      | % to Existing |  |                            |                     |                            |                                |
| 1   | Horizon Drive pipe size increase to 250mm   | Upsize Existing 200mm Main to 250mm            | 100%               | 0%            | \$ 54,000                                    | \$ 54,000                  | \$ 540              | \$ 53,460                  | \$ 540                         |
| 2   | Gorman Road main size increase              | Upsize Existing 250mm Main to 300mm            | 100%               | 0%            | \$ 70,000                                    | \$ 70,000                  | \$ 700              | \$ 69,300                  | \$ 700                         |
| 3   | West Kelowna Estates SRW pipe size increase | Upsize Existing 200mm Main to 250mm            | 100%               | 0%            | \$ 210,000                                   | \$ 210,000                 | \$ 2,100            | \$ 207,900                 | \$ 2,100                       |
| 4   | West Kelowna trunk upsize                   | Upsize Existing 200mm Main to 450mm            | 100%               | 0%            | \$ 448,000                                   | \$ 448,000                 | \$ 4,480            | \$ 443,520                 | \$ 4,480                       |
| 5   | Upgrade Green Bay LS #8                     | New Lift station - 20 hp, 600 V                | 15%                | 85%           | \$ 840,000                                   | \$ 126,000                 | \$ 1,260            | \$ 124,740                 | \$ 715,260                     |
| 6   | Inverness Lift Station                      | Telemetry upgrade                              | 17%                | 83%           | \$ 10,430                                    | \$ 1,773                   | \$ 18               | \$ 1,755                   | \$ 8,675                       |
| 7   | Whitworth Lift Station                      | New Kiosk and flowmeter                        | 25%                | 75%           | \$ 62,580                                    | \$ 15,645                  | \$ 156              | \$ 15,489                  | \$ 47,091                      |
| 8   | Hitchner Jennings Lift Station              | New Kiosk and flowmeter                        | 25%                | 75%           | \$ 62,580                                    | \$ 15,645                  | \$ 156              | \$ 15,489                  | \$ 47,091                      |
| 9   | King Lift Station                           | complete station with Flow meter - 5.4 hp 240V | 25%                | 75%           | \$ 427,630                                   | \$ 106,908                 | \$ 1,069            | \$ 105,838                 | \$ 321,792                     |
| 10  | Stevens Lift Station                        | New left station                               | 25%                | 75%           | \$ 1,150,000                                 | \$ 287,500                 | \$ 2,875            | \$ 284,625                 | \$ 865,375                     |
| 11  | Ross Road Lift Station                      | Genset for backup power                        | 25%                | 75%           | \$ 146,020                                   | \$ 36,505                  | \$ 365              | \$ 36,140                  | \$ 109,880                     |
| 12  | Hayman Lift Station                         | Telemetry upgrade                              | 25%                | 75%           | \$ 10,430                                    | \$ 2,608                   | \$ 26               | \$ 2,581                   | \$ 7,849                       |
| 13  | Bridgeview Lift Station                     | Genset for backup power                        | 20%                | 80%           | \$ 156,450                                   | \$ 31,290                  | \$ 313              | \$ 30,977                  | \$ 125,473                     |
| TOTAL   |   |  |                    |               | \$ 3,648,120                                 | \$ 1,405,873               | \$ 14,059           | \$ 1,391,814               | \$ 2,256,306                   |

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| SANITARY SEWER DCC CALCULATION               |                           |                |                                  |               |                  |
|--|---------------------------|----------------|----------------------------------|---------------|------------------|
| Land Use                                     | Estimated New Development | Unit           | Density or Pop. Equivalent       | Impact Factor | Equivalent Units |
| Residential Subdivision                      | 1,080                     | lot            | 3                                | 1             | 3,241            |
| Small Lot Residential Subdivision            | 884                       | lot            | 2.5                              | 0.83333       | 2,210            |
| Small Residential Building (duplex, triplex) | 1,171                     | dwelling units | 2.25                             | 0.75          | 2,635            |
| Apartment                                    | 227,460                   | sq.m.          | 0.0196                           | 0.00654       | 4,460            |
| Carriage House                               | 21,000                    | sq.m.          | 0.0095                           | 0.00317       | 67               |
| Commercial                                   | 44,848                    | sq.m.          | 0.0075                           | 0.00250       | 336              |
| Industrial                                   | 114,125                   | sq.m.          | 0.0167                           | 0.00556       | 1,902            |
| Institutional - care facility                | 300                       | beds           | 1.25                             | 0.41667       | 375              |
| Institutional                                | 25,000                    | sq.m.          | 0.01                             | 0.00333       | 250              |
| TOTAL  | 435,869                   |                |                                  |               | 15,475           |
| Unit Sanitary DCC Calculation                |                           |                |                                  |               |                  |
|  |                           |                | Net Sanitary DCC Program Recover |               | \$1,391,814      |
|  |                           |                | Existing DCC Reserve Monies      |               | -72,713          |
|  |                           |                | Net Amount to be Paid by DCCs    |               | \$1,319,101      |
|  |                           |                | DCC per Unit                     |               | \$85.24          |
| Resulting Sanitary DCCs                      |                           |                |                                  |               |                  |
|  |                           |                | Residential Subdivision          | \$255.72      | per lot          |
|  |                           |                | Small Lot Residential Subdivis   | \$213.10      | per lot          |
|  |                           |                | Small Residential Building       | \$191.79      | per unit         |
|  |                           |                | Apartment                        | \$1.67        | per sq.m.        |
|  |                           |                | Carriage House                   | \$0.81        | per sq.m.        |
|  |                           |                | Commercial                       | \$0.64        | per sq.m.        |
|  |                           |                | Industrial                       | \$1.42        | per sq.m.        |
|  |                           |                | Institutional - care facility    | \$106.55      | per bed          |
|  |                           |                | institutional - other            | \$0.85        | per sq.m.        |

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| 2021 DCC CALCULATION<br>STORM DRAINAGE CAPITAL COSTS |   |                    |                  |  |                                  |                           |                                  |                                      |
|--|---|--------------------|------------------|--|----------------------------------|---------------------------|----------------------------------|--------------------------------------|
| #  | Project Name  | Benefit Allocation |                  | Net<br>Capital Cost<br>(for DCC<br>calculations) | Benefit<br>to New<br>Development | 1%<br>Municipal<br>Assist | Total<br>Recoverable<br>From DCC | Total<br>Municipal<br>Responsibility |
|  |   | % to<br>New Dev.   | % to<br>Existing |  |                                  |                           |                                  |                                      |
|  |   |                    |                  |  |                                  |                           |                                  |                                      |
| 3.7  | Erosion Protection – Webber Road to Inverness Road  | 25%                | 75%              | \$ 134,000                                       | \$ 33,500                        | \$ 335                    | \$ 33,165                        | \$ 100,835                           |
| 5.3  | Stream Stabilization – Smith Creek  | 40%                | 60%              | \$ 1,867,000                                     | \$ 746,800                       | \$ 7,468                  | \$ 739,332                       | \$ 1,127,668                         |
| 5.4  | Storm water detention pond and Drainage Easement – Bridlehill Road to Rubicon Road  | 40%                | 60%              | \$ 1,606,000                                     | \$ 642,400                       | \$ 6,424                  | \$ 635,976                       | \$ 970,024                           |
| 5.5  | Storm Pipe Installation – Copper Ridge Drive to Wild Horse Drive  | 75%                | 25%              | \$ 187,000                                       | \$ 140,250                       | \$ 1,403                  | \$ 138,848                       | \$ 48,153                            |
| 6.2  | Obtain Drainage Easement – Shannon Lake Golf Course   | 25%                | 75%              | \$ 107,000                                       | \$ 26,750                        | \$ 268                    | \$ 26,483                        | \$ 80,518                            |
| 6.3  | Obtain Drainage Easement – Ridge Place to Shannon Lake  | 50%                | 50%              | \$ 107,000                                       | \$ 53,500                        | \$ 535                    | \$ 52,965                        | \$ 54,035                            |
| 7.1  | Bank Stabilization – Shannon Lake Road to Pike Road   | 25%                | 75%              | \$ 534,000                                       | \$ 133,500                       | \$ 1,335                  | \$ 132,165                       | \$ 401,835                           |
| 8.2  | Erosion Protection – Menu Road to Gregory Road  | 40%                | 60%              | \$ 268,000                                       | \$ 107,200                       | \$ 1,072                  | \$ 106,128                       | \$ 161,872                           |
| 8.3  | Erosion Protection/ Drainage Easement – Gregory Road to Mission Hill Road   | 25%                | 75%              | \$ 272,000                                       | \$ 68,000                        | \$ 680                    | \$ 67,320                        | \$ 204,680                           |
| 8.5  | Storm Sewer Upgrades – Sunnyview Road   | 25%                | 75%              | \$ 669,000                                       | \$ 167,250                       | \$ 1,673                  | \$ 165,578                       | \$ 503,423                           |
| 9.10   | Creek Improvements – Keefe Creek between Horizon Dr and Spyglass Way  | 25%                | 75%              | \$ 937,000                                       | \$ 234,250                       | \$ 2,343                  | \$ 231,908                       | \$ 705,093                           |
| 9.11   | Erosion Protection/ Drainage Easement – Horizon Drive to Spyglass Way   | 5%                 | 95%              | \$ 107,000                                       | \$ 5,350                         | \$ 54                     | \$ 5,297                         | \$ 101,704                           |
| 9.13   | Erosion Protection – Spyglass Way to Keefe Creek  | 25%                | 75%              | \$ 96,000  | \$ 24,000                        | \$ 240                    | \$ 23,760                        | \$ 72,240                            |
| 9.14   | Erosion Protection - Horizon Drive west of I.R. boundary near Hwy 97  | 25%                | 75%              | \$ 32,000  | \$ 8,000                         | \$ 80                     | \$ 7,920                         | \$ 24,080                            |
| 9.15   | Erosion Protection/ Drainage Easement – Horizon Drive to Covington Court  | 25%                | 75%              | \$ 80,000  | \$ 20,000                        | \$ 200                    | \$ 19,800                        | \$ 60,200                            |
| 9.2  | Channel Improvements/Drainage Easement – Rosewood Drive to Westlake Road  | 50%                | 50%              | \$ 455,000                                       | \$ 227,500                       | \$ 2,275                  | \$ 225,225                       | \$ 229,775                           |
| 9.4  | Erosion Protection – Bear Creek Rd from Vancouver Road to I.R. boundary   | 25%                | 75%              | \$ 234,000                                       | \$ 58,500                        | \$ 585                    | \$ 57,915                        | \$ 176,085                           |
| 9.5  | Erosion Protection/ Drainage Easement – Parkinson Road to Bear Creek Road   | 25%                | 75%              | \$ 187,000                                       | \$ 46,750                        | \$ 468                    | \$ 46,283                        | \$ 140,718                           |
| 9.6  | Drainage Improvements – Horizon Drive   | 25%                | 75%              | \$ 20,000  | \$ 5,000                         | \$ 50                     | \$ 4,950                         | \$ 15,050                            |
|  | <p>pipng the drainage beyond edge of development from Gorman to Webber Road The piped storm routing option would connect the Gorman Road system down to Webber Road and into the existing City storm pipe just south of Scotstown Road intersection</p> | 25%                | 75%              | \$ 1,100,000                                     | \$ 275,000                       | \$ 2,750                  | \$ 272,250                       | \$ 827,750                           |
| <b>TOTAL</b>   |   |                    |                  | \$ 8,999,000                                     | \$ 3,023,500                     | \$ 30,235                 | \$ 2,993,265                     | \$ 6,005,735                         |

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| STORM DRAINAGE DCC CALCULATION |                           |                |                             |   |                                |               |                  |
|--------------------------------|---------------------------|----------------|-----------------------------|---|--------------------------------|---------------|------------------|
| Land Use                       | Estimated New Development | Units          | Density (units per ha, FAR) | Runoff Coefficient                          | Per Unit                       | Impact Factor | Equivalent Units |
| Large lot single family        | 1,080                     | lots           | 10.00                       | 0.30  | 300                            | 1             | 1,080            |
| Small Lot Single Family        | 884                       | lots           | 20.00                       | 0.45  | 225                            | 0.75          | 663              |
| Small Residential              | 1,171                     | dwelling units | 35.00                       | 0.60  | 171.4286                       | 0.57143       | 669              |
| Apartment                      | 227,460                   | sq.m.          | 50.00                       | 0.70  | 1.3725                         | 0.00458       | 1,041            |
| Carriage                       | 21,000                    | sq.m.          | 25.00                       | 0.30  | 1.1429                         | 0.00381       | 80               |
| Commercial                     | 44,848                    | sq.m.          | 1.50                        | 0.80  | 0.5333                         | 0.00178       | 80               |
| Industrial                     | 114,125                   | sq.m.          | 0.30                        | 0.60  | 2                              | 0.00667       | 761              |
| Institutional - care facility  | 300                       | beds           | 100.00                      | 0.70  | 70                             | 0.23333       | 70               |
| Institutional                  | 25,000                    | sq.m.          | 1.00                        | 0.45  | 0.45                           | 0.00150       | 38               |
|                                |                           |                |                             |   |                                |               |                  |
| TOTAL                          |                           |                |                             |   |                                |               | 4481             |
|                                |                           |                |                             |   |                                |               |                  |
|                                |                           |                |                             |   | Unit Storm DCC Calculation     |               |                  |
|                                |                           |                |                             |   |                                |               |                  |
|                                |                           |                |                             |   | Net Storm DCC Program Recovera |               | \$2,993,265      |
|                                |                           |                |                             |   | Existing DCC Reserve Monies    |               | -66,142          |
|                                |                           |                |                             |   | Net Amount to be Paid by DCCs  |               | \$2,927,123      |
|                                |                           |                |                             |   | DCC per Unit                   |               | \$653            |
|                                |                           |                |                             |   |                                |               |                  |
|                                |                           |                |                             | Resulting Storm DCCs                        |                                |               |                  |
|                                |                           |                |                             | Single Family Residential \$653 per lot     |                                |               |                  |
|                                |                           |                |                             | Small Lot Single Family \$490 per lot       |                                |               |                  |
|                                |                           |                |                             | Small Residential \$373 per unit            |                                |               |                  |
|                                |                           |                |                             | Apartment \$2.99 per sq.m.                  |                                |               |                  |
|                                |                           |                |                             | Carriage Homes \$2.49 per sq.m.             |                                |               |                  |
|                                |                           |                |                             | Commercial \$1.16 per sq.m.                 |                                |               |                  |
|                                |                           |                |                             | Industrial \$4.35 per sq.m.                 |                                |               |                  |
|                                |                           |                |                             | Institutional - care facility \$152 per bed |                                |               |                  |
|                                |                           |                |                             | Institutional - other \$0.98 per sq.m.      |                                |               |                  |

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| 2021 DCC CALCULATION<br>PARKS CAPITAL COSTS    |                |                   |                               |                                    | b                  | c                  | d  | e                     |
|--|----------------|-------------------|-------------------------------|------------------------------------|--------------------|--------------------|----|-----------------------|
| Project Name                                   | Existing Ratio | Population Growth | Land Area Required for Growth | Price per ha or per m <sup>2</sup> | Total Capital Cost | Benefit Allocation |    | Amount to Development |
| <b>Land acquisition</b>                        |                |                   |                               |                                    |                    |                    |    |                       |
| waterfront park                                | 0.18           | 12,373            | 2.23                          | \$2,602,754                        | \$5,796,698        | 100%               |    | \$5,796,698           |
| athletic park                                  | 0.80           | 12,373            | 9.90                          | \$596,180                          | \$5,901,231        | 100%               |    | \$5,901,231           |
| community park                                 | 0.43           | 12,373            | 5.32                          | \$596,180                          | \$3,171,912        | 100%               |    | \$3,171,912           |
| SUB TOTAL                                      | 1.410          |                   | 17.45                         |                                    | \$14,869,841       |                    |    | \$14,869,841          |
| <b>Parkland Improvements<sup>1</sup></b>       |                |                   |                               |                                    | Total Cost         |                    |    |                       |
| Memorial park DCC eligible components          |                |                   |                               |                                    | \$491,500          | 33%                |    | \$162,195             |
| CNR Wharf DCC eligible components              |                |                   |                               |                                    | \$1,832,439        | 33%                |    | \$604,705             |
| Multi-use grass field                          |                |                   |                               |                                    | \$1,445,300        | 33%                |    | \$476,949             |
| waterfront park                                | 0.18           |                   | 2.227                         | \$207.44                           | \$4,619,930        | 100%               |    | \$4,619,930           |
| athletic park                                  | 0.80           |                   | 9.898                         | \$136.35                           | \$13,496,459       | 100%               |    | \$13,496,459          |
| community park                                 | 0.43           |                   | 5.320                         | \$136.35                           | \$7,254,346        | 100%               |    | \$7,254,346           |
| SUB TOTAL                                      |                |                   |                               |                                    | \$29,139,974       |                    |    | \$26,614,584          |
| <b>TOTAL (LAND &amp; IMPROVEMENT)</b>          |                |                   |                               |                                    |                    |                    |    | <b>\$41,484,425</b>   |
| Assist Factor                                  |                |                   |                               |                                    |                    |                    | 1% | \$ (414,844)          |
| <b>DCC Eligible</b>                            |                |                   |                               |                                    |                    |                    |    | <b>\$41,069,581</b>   |
| 1 DCC Eligible parkland improvement costs only |                |                   |                               |                                    |                    |                    |    |                       |

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Showing option 1b from report with Equal DCCs for residential, and commercial parks DCC, No Industrial parks DCC

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| PARKLAND ACQUISITION AND IMPROVEMENT DCC CALCULATION |                                |                               |               |                  |
|--|--------------------------------|-------------------------------|---------------|------------------|
| Land Use   | Estimated New Development      | Unit                          | Impact Factor | Equivalent Units |
| Residential Subdivision                              | 1,080                          | lots                          | 3             | 3,241            |
| Small Lot Residential Subdivision                    | 884                            | lots                          | 3             | 2,651            |
| Small Residential Building (duplex,tov               | 1,171                          | dwelling units                | 3             | 3,513            |
| Apartment  | 227,460                        | sq.m.                         | 0.0294        | 6,690            |
| Carriage House                                       | 21,000                         | sq.m.                         | 0.0095        | 200              |
| Commercial   | 44,848                         | sq.m.                         | 0.0075        | 336              |
| Industrial   | -                              | sq.m.                         | 0.0055        | -                |
| Institutional - Care Facility                        | 300                            | beds                          | 1.25          | 375              |
| Institutional  | 25,000                         | sq.m.                         | 0             | -                |
| TOTAL  | 321,743                        |                               |               | 17,006           |
| Unit Park DCC Calculation                            |                                |                               |               |                  |
|  |                                | Net Park DCC Program Recovera |               | \$41,069,581     |
|  |                                | Existing DCC Reserve Monies   |               | -2,139,662       |
|  |                                | Net Amount to be Paid by DCCs |               | \$38,929,919     |
|  |                                | DCC per equivalent unit       |               | \$2,289.14       |
| Resulting Park DCCs                                  |                                |                               |               |                  |
|  | Residential Subdivision        | \$6,867 per lot               |               |                  |
|  | Small Lot Residential Subdivis | \$6,867 per lot               |               |                  |
|  | Small Residential Building     | \$6,867 per unit              |               |                  |
|  | Apartment                      | \$67.33 per sq.m.             |               |                  |
|  | Carriage House                 | \$21.80 per sq.m.             |               |                  |
|  | Commercial                     | \$17.17 per sq.m.             |               |                  |
|  | Industrial                     | \$0.00 per sq.m.              |               |                  |
|  | Institutional - Care Facility  | \$2,861.42 per bed            |               |                  |
|  | institutional - Other          | \$0.00 per sq.m.              |               |                  |

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