

## Memorandum

То	Lidy Romanuk, Manage Mark Merritt, General N		•
From	Daryl Abbs, Managing	Partner	
Date	October 2024		
Re:	Additional Scenario An Land Feasibility and Se Business Plan	•	
Fax □	Courier	Mail □	Email ⊠

#### 1. Introduction

The Consultant Team of Watson & Associates Economists Ltd. (Watson), WSP Canada Group Limited (WSP) and GM BluePlan Engineering (GM BluePlan) was retained to prepare an Employment Lands Feasibility and Servicing Study to assist Haldimand County (the "County") in being well-positioned to accommodate a diverse range of employment growth over the coming decades.

This study is being prepared in three (3) phases:

- 1. Phase 1: location analysis, market research and analysis, and functional servicing design;
- 2. Phase 2: financial analysis and business plan; and
- 3. Phase 3: property administration and management.

As part of the phase 2 work, Watson undertook a preliminary financial assessment which included a full operating and capital cost analysis based on the anticipated development of the study area. The full report is appended to this memorandum. As part of the analysis, four development scenarios were analyzed to determine the financial feasibility of developing the employment lands:

- 1. The Study Area is privately developed and traditionally designed and operated;
- 2. The County invests in conceptual planning, then sells the plans to a developer;
- 3. The County acts as the land developer in partnership with the private sector; and



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4. The County develops, acquires, services, and sells land parcels.

The financial analysis was undertaken on an annual basis for each of the four (4) scenarios to provide a cashflow which summarized the cumulative and net annual impacts. The following graph provides a comparison of the four (4) scenarios with respect to the cashflow position over a 30-year horizon (assuming development occurs over 20-years) both with and without D.C.-related cashflows (i.e., D.C. expenditures and revenues):

-\$20,000,000 -\$40,000,000 Cumulative Cashflow Position (\$) -\$60,000,000 -\$80.000.000 -\$100,000,000 -\$120,000,000 -\$140,000,000 -\$160,000,000 -\$180,000,000 -\$200,000,000 Scenario 1: Ending Balance (cumulative) - Excluding D.C. Cashflows -Scenario 1: Ending Balance (cumulative) - Including D.C. Cashflows Scenario 2: Ending Balance (cumulative) - Excluding D.C. Cashflows Scenario 2: Ending Balance (cumulative) - Including D.C. Cashflows Scenario 3: Ending Balance (cumulative) - Excluding D.C. Cashflows --- Scenario 3: Ending Balance (cumulative) - Including D.C. Cashflows

Figure 1-1 Haldimand County Comparison of Cashflow Scenarios

As demonstrated in greater detail in the following report, none of the four (4) scenarios provide a net positive annual impact over the 30-year time horizon, both with and without the consideration of D.C. cashflows. This is generally due to the significant capital costs required to service the development, along with the annual lifecycle replacement costs for the infrastructure. Given the required investments in growth-related infrastructure, the cashflow remains in a significant negative position when D.C. cashflows are considered. The County is required to debt finance these works which imposes a negative burden on the County's finances.

Scenario 4: Ending Balance (cumulative) - Excluding D.C. Cashflows
 Scenario 4: Ending Balance (cumulative) - Including D.C. Cashflows

When D.C.-related cashflows (i.e. D.C. revenues and expenditures) are excluded from the analysis, Scenarios 1 and 2 do not provide for positive cashflow by year 30,



however they are close to the breakeven point, given the tax revenues exceed annual lifecycle replacement costs by year 15.

Given these results, the County wished to explore variations on Scenario 1 which may provide a positive cashflow by the end of the forecast period. This memo provides a summary of the additional scenarios that were analyzed, based on utilizing the initial assumptions from Scenario 1 (i.e. traditionally developed, designed and operated lands).

### 2. Additional Scenarios Analyzed

As noted above, the following additional scenarios were analyzed with respect to the development of the Study Area:

- **Scenario 1a:** the Study Area would receive partial municipal servicing (water only) as an interim solution;
- **Scenario 1b:** the Study Area would be developed with one large development (for each of the two phases of development); and
- Scenario 1c: the Study Area would be developed as an industrial condominium.

The results of these additional scenarios are summarized in the following sections.

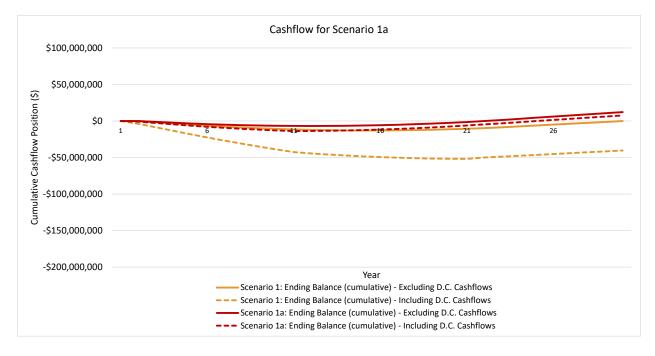
#### 3. Results of Additional Scenario Analysis

#### 3.1 Scenario 1a: Partial Municipal Servicing (Water Only)

For this scenario, it is assumed that the development lands would be serviced by water with private wastewater servicing in the interim. The long-term plan would include servicing this area with wastewater in the future. As a result, this scenario assumes that capital costs related to internal and external wastewater works would be removed from the cashflow. Associated operating costs, lifecycle (replacement) costs and revenues have been removed from the analysis. The graph in Figure 3-1 provides for the cumulative cashflow position over the 30-year period for the scenario including D.C. cashflows (solid) and the scenario excluding D.C. cashflows (dashed). Scenario 1a is compared to the initial analysis for Scenario 1 (i.e. assuming full water and wastewater servicing). Similar to the initial analysis, this scenario assumes development occurs in even increments over 20 years.



Figure 3-1
Haldimand County
Cashflow Comparison of Scenario 1 versus Scenario 1a



Given that the D.C.-related capital investment for water services is not as large as the wastewater investment, the cashflow including D.C. cashflows provides for a net positive impact by year 26. When D.C. cashflows are excluded from the analysis, the development provides for a positive cashflow position at an even earlier stage by year 23. This is a result of lower overall lifecycle and operating expenditures related to wastewater infrastructure.

Note, it is assumed that private wastewater servicing would be an interim solution. The County would install wastewater servicing at a later stage when cashflows from the development area are positive. The costs for wastewater infrastructure can be recovered from landowners at a future date through a capital charge under Part XII of the *Municipal Act*. Alternatively, the initial developer can construct the works and costs can be recovered through a best efforts recovery.

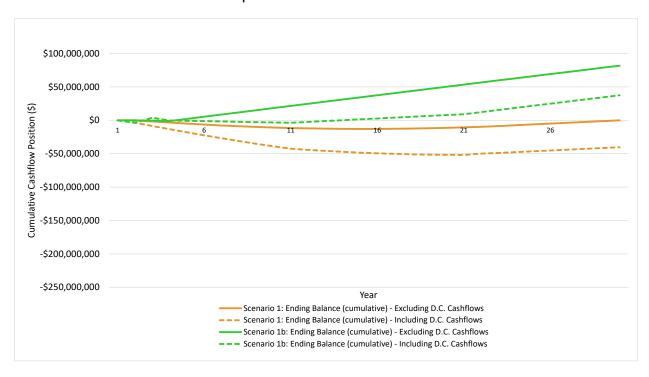
#### 3.2 Scenario 1b: One Large Development for Each of the Two Phases Identified

The next scenario that was reviewed assumed that there would be one large development for each of the two phases of development in the Study Area, as opposed to smaller subdivided lots to be owned by multiple property owners. This scenario assumes that the entire development will be in place by year 3 of the analysis and would be assessed at the industrial tax rate. In addition, given there would only be two lots under this scenario, there are no local/internal works (water, wastewater, stormwater, and roads) assumed as part of this scenario. It is noted that this scenario



provides for full water and wastewater municipal servicing to the development area (i.e. external water and wastewater infrastructure), however, the internal works would be privately owned and operated. As a result, all associated operating and lifecycle costs for internal infrastructure have been deleted from the cashflow analysis. Figure 3-2 provides for the comparison of cumulative positions with and without D.C. cashflows for Scenario 1 and Scenario 1b:

Figure 3-2
Haldimand County
Cashflow Comparison of Scenario 1 and Scenario 1b



Under this scenario, full tax revenues would be received upfront beginning in year 5. Since the operating and lifecycle costs related to internal infrastructure have been removed from the analysis, a positive cashflow position would be provided by year 5 (excluding D.C. cashflows). In addition, given the lower operating and lifecycle costs, the cashflow position when considering D.C. cashflows also reaches a positive position by year 14.

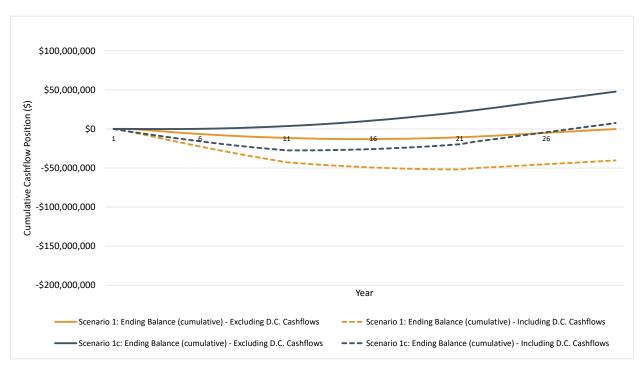
Under the original scenarios identified as part of this analysis, lifecycle and operating costs associated with the internal infrastructure led to a significantly negative cashflow position throughout the forecast period. Given that in the above scenario the County does not assume these costs, a positive cashflow position is provided.



#### 3.3 Scenario 1c: Industrial Condominium Model

Under the industrial condominium model, lifecycle and operating costs related to internal works for water, wastewater, roads, and stormwater would be removed from the analysis, given that this infrastructure would be owned and maintained by the landowner. All other assumptions would remain the same relative to Scenario 1 (e.g. assume study area builds out over 20 years). Based on these assumptions the cashflow graph for this scenario is provided below:

Figure 3-3
Haldimand County
Cashflow Comparison of Scenario 1 versus Scenario 1c



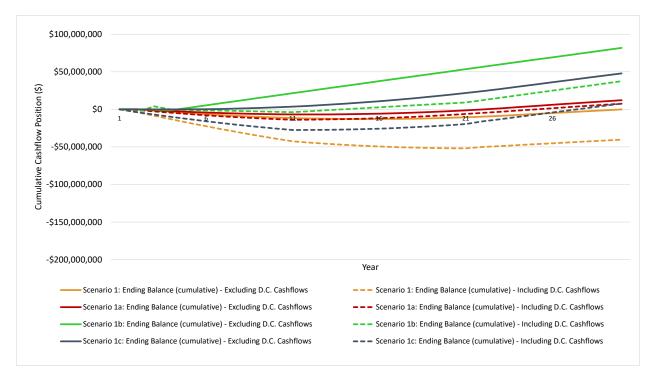
With the exclusion of D.C.-related cashflows, the industrial condominium model provides for positive cashflow by year 6 of the forecast. This is due to the reduction of operating and lifecycle costs that are associated with internal infrastructure. In addition, when D.C. cashflows are factored into the analysis, the cumulative cashflow position reaches the breakeven point by year 28.

#### 3.4 Comparison of Additional Scenarios Analyzed

The following graph provides a comparison of Scenario 1 with the three (3) variations discussed above:



Figure 3-4
Haldimand County
Comparison of Additional Scenarios Analyzed



Based on the above, all three scenarios provide for a positive cashflow position when D.C.s related cashflows are not considered. Scenario 1b (one large development) provides for the earliest breakeven year with the most positive cashflow by Year 30. When D.C.s are factored into the analysis, both Scenarios 1b and 1c provide for a positive cashflow impact by year 14 and year 28, respectively. Scenario 1a does not provide for a positive position by the end of the 30 year forecast period.

The following table provides a summary of the return-on-investment calculations for the four scenarios, excluding D.C. related cashflows (note the net cumulative position column provides for the net present value of the cumulative cash flows for years 10, 20, and 30):



## Figure 3-5 Haldimand County Summary of Return on Investment (Net Cumulative Position for Years 10, 20, and 30) – Excluding D.C. Cashflows

Summary of Return on Investment Excluding D.C. Cashflows	Scenario 1 - F Planned a Develop	and	Scenario 1a - Servicir		Scenario 1b Large Develo		Scenario 1 Industria Condominium	al
Initial Investment		-		-		-		-
Breakeven Year	N/A		Year 2	3	Year 5	,	Year 6	
Year	Net Cumulative Position	R.O.I.	Net Cumulative Position	R.O.I.	Net Cumulative Position	R.O.I.	Net Cumulative Position	R.O.I.
Year 10	(9,041,185)	n/a	(5,468,859)	n/a	15,304,472	n/a	2,220,520	n/a
Year 20	(7,792,237)	n/a	(1,704,078)	n/a	34,521,236	n/a	13,217,166	n/a
Year 30	(51,133)	n/a	6,837,664	n/a	46,051,507	n/a	26,951,101	n/a

Note: although there is no initial investment in non-growth-related capital required by the County, once infrastructure is installed, costs would be incurred related to ongoing lifecycle cost allocations as well as additional operating costs. Given there is no initial investment for these scenarios, the return on investment is not applicable here.

Compared to Scenario 1, all three (3) alternative scenarios provide for a net positive cashflow position by Year 30, with Scenario 1b providing for the earliest breakeven year. Note that with all of the scenarios, there will still be significant debt required to finance the growth-related/D.C.-eligible capital expenditures. In addition, there are also a number of risks associated with these scenarios that should be considered. For example, with respect to the scenario providing for one development for each of the two phases, this would require a developer to acquire lands held as 18 different parcels.

#### 4. Further Considerations

The following is provided for further consideration in the County's business case related to investment in the North Caledonia employment lands.

#### 4.1 Commentary on Infrastructure Grants

Given that the negative financial impact of developing the study area is due to the significant growth-related capital investment required to construct the infrastructure, potential grant funding would result in a more positive financial position for this development.

As noted in the initial analysis, the significant investment in capital infrastructure requires debt financing. The Ministry of Municipal Affairs regulates the level of debt



incurred by municipalities at a level where no more than 25% of the municipality's own purposes revenue may be allotted for servicing the debt (i.e. debt charges). The County has imposed a more conservative debt capacity policy limit at 10% of own purpose revenues.

Through the County's annual budget process, the County anticipates it will exceed the 10% debt capacity limit in 2025, based on debt commitments for capital projects required outside of the Study Area. Given these debt requirements and for the purposes of this analysis, it is assumed that the County would be required to raise this debt policy limit to 20%. The County should determine which grants this development could be eligible for and apply to limit the financial burden of developing this area. The following provides a few examples of grants that are currently available to municipalities in Ontario:

#### <u>Infrastructure Funding Programs</u>

Various infrastructure funding programs are made available to municipalities on an application basis by both the Federal and Provincial Government, including those made available through associations such as the Federation of Canadian Municipalities. These programs include the Investing in Canada Infrastructure Program (I.C.I.P.), the Public Transit Infrastructure Fund (P.T.I.F.), the Green Municipal Fund, etc. Funding applications are often required in order to secure funding through these programs.

#### Canada Community Building Fund (formerly Federal Gas Tax program)

The Canada Community Building Fund (C.C.B.F.) is a permanent source of funding provided up front, twice-a-year, to Provinces and Territories, who in turn flow this funding to their municipalities to support local infrastructure priorities. Municipalities can pool, bank, and borrow against this funding, providing financial flexibility. Every year, the federal C.C.B.F. provides over \$2 billion and supports approximately 4,000 projects in communities across Canada. Each municipality selects how best to direct the funds with the flexibility provided to make strategic investments across the various project categories.

#### **Housing-Enabling Water Systems Fund**

The Housing-Enabling Water Systems Fund (H.E.W.S.) helps municipalities develop, repair, rehabilitate, and expand critical drinking water, wastewater and stormwater infrastructure. The projects funded through this program aim to support housing opportunities, protect communities and enhance economic growth. Although the focus of this funding program is mainly on housing, projects related to industrial development would also be considered under this grant program given that employment growth helps drive economic growth. The first application intake closed on April 19, 2024, with a total investment of \$970 million in 54 water infrastructure projects. The second intake of applications is currently open, with a deadline of November 1, 2024 and with additional funding of \$250 million available to Ontario municipalities.



#### Federal and Provincial Investments in Employment Lands

It is also noted that the Federal and Provincial governments have been actively investing in employment lands across the Province. For example, investments have recently been made in Alliston and St. Thomas by the Provincial and Federal governments for the development of battery manufacturing plants. These investments are aimed at creating economic and job growth within Ontario. The County may seek out similar investments from other levels of government for developments in key sectors such as electric vehicle battery plants, if appliable to these employment lands.

#### 4.2 Other Items for Consideration

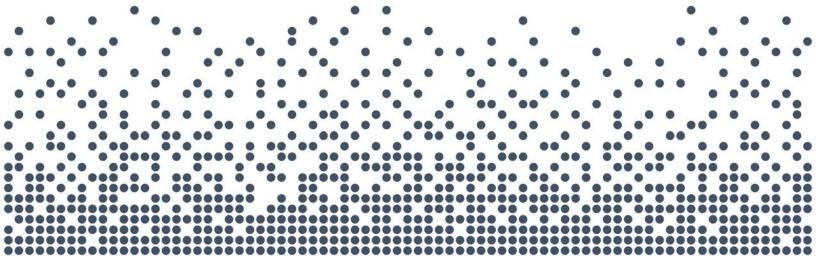
- It must be noted that the above scenarios all assume the development in the Study Area is classified as industrial for D.C. and property tax purposes. If the proposed development is considered commercial, then the assumptions on what infrastructure is D.C. funded versus developer funded would change. In addition, the buildings that are constructed would be assessed at the lower commercial property tax rate, relative to the industrial rate.
- Through the County's D.C. process, the local service policy should be reviewed to ensure that works related to large commercial/industrial developments are D.C. eligible.
- Given that growth-related capital investment to develop these lands is significant, the County would need a strong commitment from the developing landowners that the study area will be built out in the timeframe agreed upon prior to investing in the required infrastructure. Front-end financing may be required to limit the impact on the County's debt capacity and overall financial risk if development does not occur within a timely manner.
- Given the alternative scenarios presented above, the County is still in a negative cashflow position when D.C. cashflows are considered. If the County proceeds with the development of these lands, it is recommended that the D.C. by-law is updated to include the growth-related infrastructure that has been identified as part of this study. However, the anticipated cashflow analysis would provide similar results as the cashflow analysis is negative related to D.C.s as the D.C.s generated from development in this area are not sufficient to pay for the growthrelated infrastructure.

#### 4.3 Key Points and Factors to Success

As the goal of the County is to be well-positioned to accommodate a diverse range of employment growth over the coming decades, development of employment lands is integral to achieving this goal. Based on the financial analysis undertaken, success in developing these employment lands may be achieved based on the following:



- Grant funding: The County should seek grant funding for the required infrastructure to reduce the significant growth-related costs required to service these lands. This will also assist in reducing the debt funding required for the capital infrastructure.
- Flexibility: In determining the potential development yields of these lands, the County should remain flexible to alternative development approaches that minimize the financial burden on County tax and ratepayers. This includes consideration of partial servicing in the interim, development as an industrial condominium, and seeking one large development rather than a number of smaller businesses.
- **Timing of Development**: This is integral to the success of the County's investment. The County should seek to obtain commitments from landowners and businesses who are looking to develop to ensure tax revenues are collected as soon as possible and the County tax and ratepayers are not cashflowing the development of these lands for an extended period of time.



# Appendix A Details for Cashflow Analysis



## APPENDIX A: DETAILS FOR CASHFLOW ANALYSIS

Figure A-1 Haldimand County Scenario 1 Cashflow

Cash Flow Analysis - Employment Lands Privately Developed

Downton Francis	2024 Year	2025 Year	2026 Year	2027 Year	2028 Year	2029 Year	2030 Year	2031 Year	2032 Year	2033 Year	2034 Year	2035 Year	2036 Year	2037 Year	2038 Year	2039 Year	2040 Year	2041 Year	2042 Year	2043 Year	2044 Year	2045 Year	2046 Year	2047 Year	2048 Year	2049 Year	2050 Year	2051 Year	2052 Year	2053 Year
Non-residential Development (GFA)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Light Industrial General Industrial	:	:	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220,946																		
Total Employment (cumulative)	-	-	265,046	530,092	795,138	1,060,184				2,120,368	2,385,414		2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460
Development Forecast	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Non-residential Development (Employees) Light Industrial			44	44	44	44	44	44	44	44	44	45																		
General Industrial	1	- :	133	133	133	133	133	133	133	133	133	134																		
Total Employment (cumulative)	-	-	177	354	531	708	885	1,062	1,239	1,416	1,593	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772
Revenues, Expenditures, and	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year
Impact DC Revenues	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Light Industrial General Industrial	- :	-	186,543 934,602	186,543 934,602	186,543 934,602	186,543 934,602	186,543 934,602	186,543 934,602	186,543 934,602	186,543 934,602	186,543 934,602	186,543 934,602																		
DC Revenue - Non-residential (inflated)  Total DC Revenues	-		1,189,422 1,189,422	1,225,105	1,261,858 1,261,858	1,299,714 1,299,714	1,338,705	1,378,866	1,420,232 1,420,232	1,462,839 1,462,839	1,506,725 1,506,725	1,551,926	-			_	-	_		_	_			_		-				
Capital Expenditures			1,100,422	1,223,103	1,201,030	1,233,714	1,330,703	1,570,000	1,420,232	1,402,033	1,300,723	1,331,320	-	-			-	-	-		-		-	-			-			
Roads																														
DC DC (Debenture)	-																												-	-
Non-DC Non-DC (Debenture)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
Local Service Local Service (Debenture)																													-	-
Lifecycle			421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100
Water DC	6,932,569																													
DC (Debenture) Non-DC	-	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-
Non-DC (Debenture) Local Service		-	-	-	-	-	-	-	-	-	-																			
Local Service (Debenture) Lifecycle			522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500
Wastewater DC	04 400 440																													
DC (Debenture)	31,490,113	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	-	-	-	-	-	-	-	-	-
Non-DC Non-DC (Debenture)	-	-	-	-	-	-	-	-	-	-	-																			
Local Service (Debenture)																														
Lifecycle			539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800
Stormwater DC DC (Debenture)																														
Non-DC																														
Non-DC (Debenture) Local Service																														
Local Service (Debenture) Lifecycle			141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400
Studies DC																														
DC (Debenture)																														
Non-DC Non-DC (Debenture)																														
Local Service (Debenture)																														
Lifecycle  Broader Lifecycle Costs	-	-	39.586	79,172	118,758	158,344	197.930	237,516	277,102	316,688	356,274	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308
Broader Lifecycle Costs  Sub-total Capital Expenditures	38,422,682	-	,	1,703,972			. ,		1,901,902					The second secon						2,021,108			2,021,108				2,021,108		2,021,108	
	,		.,,	.,,	.,,	.,,	.,,. 00	.,,	.,,	.,,	.,,	_,,.00	_,,.00	_,,	-,,	.,	_,,	,,	_,,	_,,	_,,.00	_,,.00	_,,,,,		_,,	_,,	_,,.50	_,,.00	_,,.50	.,,



### Figure A-1 (Cont'd)

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Revenues, Expenditures, and	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year 30
Impact	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Purchase of Land	_			-		_	-	_	_	_	_	_								-	_		_		-		_	_		
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-	-	-	-
Land Purchase	-	-	-	-		-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operating Expenditures Per Employee (inflated) X 740.30	-		136,327	278,107	425,503	578,685	737,823	903,095	1,074,683	1,252,773	1,437,558	1,631,073	1,663,694	1,696,968	1,730,908	1,765,526	1,800,836	1,836,853	1,873,590	1,911,062	1,949,283	1,988,269	2,028,034	2,068,595	2,109,967	2,152,166	2,195,209	2,239,113	2,283,896	2,329,574
Operating Costs Related to New Infrastructure (inflated)					95,433	97,342	99,289	101,274	103,300	105,366	107,473	109,623	111,815	114,051	116,332	118,659	121,032	123,453	125,922	128,440	131,009	133,629	136,302	139,028	141,809	144,645	147,538	150,488	153,498	156,568
Debenture Payments (capital + land)	-	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	-	-		-	-	-	-	-	-
Sub total Operating Expenditures	_	3.712.962	3,849,289	3,991,069	4,233,899	4.388.989	4.550.074	4,717,332	4,890,945	5.071.102	5.257.993	3.649.827	3,684,641	3,720,151	3,756,372	3,793,316	3,831,000	3,869,437	3,908,644	3,948,634	3,989,424	2,121,898	2,164,336	2,207,623	2,251,775	2,296,811	2,342,747	2.389.602	2,437,394	2,486,142
Sub-total Operating Expenditures		3,7 12,902	3,043,209	3,331,009	4,233,099	4,300,309	4,000,074	4,111,332	4,030,343	3,071,102	3,231,393	3,043,027	3,004,041	3,120,131	3,130,312	3,133,310	3,031,000	3,003,437	3,300,044	3,340,034	3,303,424	2,121,090	2,104,330	2,201,023	2,231,775	2,230,611	2,342,141	2,303,002	2,431,334	2,400,142
Operating Revenues Per Employee (inflated) X 653.30	-	-	120,306	245,424	375,498	510,678	651,114	796,963	948,386	1,105,548	1,268,616	1,439,389	1,468,177	1,497,541	1,527,491	1,558,041	1,589,202	1,620,986	1,653,406	1,686,474	1,720,203	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Sub-total Operating Revenues	-	_	120.306	245,424	375.498	510,678	651.114	796,963	948.386	1.105.548	1.268.616	1,439,389	1.468.177	1.497.541	1,527,491	1.558.041	1.589.202	1.620.986	1.653.406	1.686.474	1.720.203	1.754.608	1.789.700	1.825.494	1,862,004	1.899.244	1.937.228	1.975.973	2.015.492	2.055.802
Sub-total Operating Nevertues	-	-	120,300	240,424	373,430	310,070	031,114	730,303	340,300	1,100,040	1,200,010	1,400,000	1,400,177	1,437,341	1,327,431	1,550,041	1,303,202	1,020,300	1,033,400	1,000,414	1,720,203	1,734,000	1,703,700	1,020,404	1,002,004	1,033,244	1,337,220	1,373,373	2,013,432	2,000,002
Taxation Revenues Non-residential (cumulative)	-	-	-	-	374,490	748,929	1,123,368	1,497,807	1,872,246	2,246,685	2,621,125	2,995,564	3,370,003	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443
Sub-total Taxation Revenues	-	-	-	-	374,490	748,929	1,123,368	1,497,807	1,872,246	2,246,685	2,621,125	2,995,564	3,370,003	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443
Sale of Land (inflated)						-		-		-	_	-	-																	
cale of Land (innated)						-	-	-	-	-	-	-	-																	
Beginning Balance			(3.712.962)	(7.916.909)	(12.141.422)	(16, 107, 032)	(19.719.845)	(22,979,461)	(25.885.472)	(28.437.455)	(30.634.973)	(32,477,575)	(32.161.630)	(33.029.199)	(33.528.475)	(34.034.020)	(34.545.959)	(35.064.422)	(35,589,538)	(36.121.441)	(36.660.266)	(37.206.151)	(35.850.106)	(34.501.407)	(33.160.201)	(31.826.638)	(30.500.870)	(29.183.053)	(27.873.347)	(26.571.913)
Non-DC Capital Expenditures (inc. interest cost)	_		(0),002/	(.,,,)	(,,,	(10,101,002)	(10,110,010)	(==,0.0,.0.)	(==,===,)	(=0, 101, 100)	-	(,,,	(, , ,	-	-	(0.,00.,000)	(= 1,= 1=,===)	(00,000,000)	-	-	-	(01,200,101,	(,,	(= 1,001,101)	(,,	-	-	(=0,:00,000)	(=1,010,011)	-
DC Capital Expenditures (inc. interest cost)	(38,422,682)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(1.909.132)	(1,909,132)	(1.909.132)	(1.909.132)	(1.909.132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)		-			-			-	-
Lifecycle Expenditures	- ,	- ,	(1,664,386)	(1,703,972)	(1,743,558)	(1,783,144)	(1,822,730)	(1,862,316)	(1,901,902)	(1,941,488)	(1,981,074)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)
Operating Expenditures	-	-	(136,327)	(278,107)	(520,936)	(676,026)	(837,111)	(1,004,369)	(1,177,983)	(1,358,139)	(1,545,031)	(1,740,695)	(1,775,509)	(1,811,020)	(1,847,240)	(1,884,185)	(1,921,868)	(1,960,306)	(1,999,512)	(2,039,502)	(2,080,292)	(2,121,898)	(2,164,336)	(2,207,623)	(2,251,775)	(2,296,811)	(2,342,747)	(2,389,602)	(2,437,394)	(2,486,142)
Purchase of Land (inc. interest cost)	-	-						- 1	- '	- '	- 1	- 1	- '	- 1	- 1	- 1	-	- 1	- 1	- '	- '	- '	- '		- '	- 1	- '	- '	- 1	- 1
Debenture Issuance	38,422,682																													
Operating Revenues	-	-	120,306	245,424	375,498	510,678	651,114	796,963	948,386	1,105,548	1,268,616	1,439,389	1,468,177	1,497,541	1,527,491	1,558,041	1,589,202	1,620,986	1,653,406	1,686,474	1,720,203	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
DC Revenues	-	-	1,189,422	1,225,105	1,261,858	1,299,714	1,338,705	1,378,866	1,420,232	1,462,839	1,506,725	1,551,926	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Taxation Revenues	-	-	-	-	374,490	748,929	1,123,368	1,497,807	1,872,246	2,246,685	2,621,125	2,995,564	3,370,003	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443
Sale of Land (inflated)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Cashflow (cumulative)	-	(3,712,962)	(7,916,909)	(12,141,422)	(16,107,032)	(19,719,845)	(22,979,461)	(25,885,472)	(28,437,455)		(32,477,575)	(,,,	(33,029,199)	(33,528,475)	(34,034,020)	(34,545,959)	(35,064,422)	(35,589,538)	(36,121,441)	(36,660,266)	(37,206,151)	(35,850,106)	(34,501,407)	(33,160,201)	(31,826,638)	(30,500,870)	(29,183,053)	(27,873,347)		(25,278,917)
Net Annual Position	-	(3,712,962)	(4,203,947)	(4,224,512)	(3,965,610)	(3,612,812)	(3,259,617)	(2,906,011)	(2,551,983)	(2,197,518)	(1,842,602)	315,945	(867,569)	(499,275)	(505,545)	(511,940)	(518,463)	(525,116)	(531,903)	(538,825)	(545,885)	1,356,045	1,348,699	1,341,206	1,333,564	1,325,768	1,317,817	1,309,706	1,301,434	1,292,996
Non DC Related Cashflow																														
Beginning Balance	-	-	-	(1,680,407)	(3,417,062)	(4,931,569)	(6,131,133)	(7,016,492)	(7,588,408)	(7,847,661)	(7,795,056)	(7,431,420)	(6,758,270)	(5,716,707)	(4,306,851)	(2,903,264)	(1,506,073)	(115,404)	1,268,612	2,645,841	4,016,148	5,379,394	6,735,439	8,084,138	9,425,344	10,758,907	12,084,675	13,402,492	14,712,198	16,013,632
Non-DC Capital Expenditures (inc. interest cost)		-																												
	_		(1.664.386)	(1,703,972)	(1,743,558)	(1,783,144)	(1,822,730)	(1,862,316)	(1,901,902)	(1,941,488)	(1,981,074)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)
Lifecycle Expenditures	-	-	( , ,,						(1.177.983)	(1,358,139)	(1.545.031)	(1,740,695)	(1,775,509)	(1,811,020)	(1,847,240)	(1,884,185)	(1,921,868)	(1,960,306)	(1,999,512)	(2,039,502)	(2,080,292)	(2,121,898)	(2,164,336)	(2,207,623)	(2,251,775)	(2,296,811)	(2,342,747)	(2.389.602)	(2.437.394)	(2,486,142)
Lifecycle Expenditures Operating Expenditures		-	(136,327)	(278,107)	(520,936)	(676,026)	(837,111)	(1,004,369)	(1,177,300)	(1,000,100)	( ) /- /																	(=,000,000)	( ) - ) )	
Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost)	-	-	( , ,,		(520,936)	(676,026)	(837,111)	(1,004,369)	(1,177,300)	-	- 1	- 1	-	-	-	-	- 1	- 1	-	-	-	-	-	-	-	-	- 1	-	- 1	- 1
Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance		-	(136,327)	(278,107)	· · ·	- ',	,	- '	- '	- 1			- 400 4==						4 050 405						4 000 55			- '		- 1
Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues	-	-	( , ,,	(278,107) - 245,424	375,498	510,678	651,114	796,963	948,386	1,105,548	1,268,616	1,439,389	1,468,177	1,497,541	1,527,491	1,558,041	1,589,202	1,620,986	1,653,406	1,686,474	1,720,203	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues Taxation Revenues	-	-	(136,327)	(278,107)	· · ·	- ',	,	- '	- '	- 1	1,268,616 2,621,125	1,439,389 2,995,564	1,468,177 3,370,003	- 1,497,541 3,744,443	- 1,527,491 3,744,443	- 1,558,041 3,744,443	1,589,202 3,744,443	1,620,986 3,744,443	1,653,406 3,744,443	- 1,686,474 3,744,443	1,720,203 3,744,443	- 1,754,608 3,744,443	1,789,700 3,744,443	- 1,825,494 3,744,443	- 1,862,004 3,744,443	- 1,899,244 3,744,443	1,937,228 3,744,443	- '	2,015,492 3,744,443	2,055,802 3,744,443
Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues Taxation Revenues Sale of Land (inflated)	-	-	(136,327) - 120,306 - -	(278,107) - 245,424 - -	375,498 374,490	510,678 748,929	651,114 1,123,368	796,963 1,497,807	948,386 1,872,246	1,105,548 2,246,685	2,621,125	2,995,564	3,370,003	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	1,975,973 3,744,443	3,744,443	3,744,443
Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues Taxation Revenues		-	(136,327)	(278,107) - 245,424	375,498	510,678	651,114	796,963	948,386	1,105,548		2,995,564																1,975,973		

Development/construction will occur in 2026
Tax revenues - 2 year lag (i.e. start in 2028)
DC revenues have only been applied to DC-related expenditures.
Operating Revenues and expenditures inflated at 2% per year.
DC Revenues inflated at 3% per year
Operating oppenditures for infrastructure have been assumed four years after anticipated construction.



## Figure A-2 Haldimand County Scenario 1a Cashflow

Cash Flow Analysis - Partial Servicing	g (Water Only)																													
Development Forecast	2024 Year 1	2025 Year 2	2026 Year 3	2027 Year 4	2028 Year 5	2029 Year 6	2030 Year 7	2031 Year 8	2032 Year 9	2033 Year 10	2034 Year 11	2035 Year 12	2036 Year 13	2037 Year 14	2038 Year 15	2039 Year 16	2040 Year 17	2041 Year 18	2042 Year 19	2043 Year 20	2044 Year 21	2045 Year 22	2046 Year 23	2047 Year 24	2048 Year 25	2049 Year 26	2050 Year 27	2051 Year 28	2052 Year 29	2053 Year 30
Non-residential Development (GFA) Light Industrial General Industrial	:	:	22,050 110,473	22,050 110,473	22,050 110,473	22,050 110,473	22,050 110,473	22,050 110,473		22,050 110,473	22,050 110,473	22,050 110,473	22,050 110,473	22,050 110,473	22,050 110,473	22,050 110,473	22,050 110,473		22,050 110,473	22,050 110,473	22,050 110,473	22,050 110,473	0.050.400	0.050.400	0.050.400	0.050.400	0.050.400	0.050.400	0.050.400	2.052.402
Total Employment (cumulative)  Development Forecast	Year	Year	132,523 Year	265,046 Year	397,569 Year	530,092 Year	662,615 Year	795,138 Year	927,661 Year	1,060,184 Year	1,192,707 Year	1,325,230 Year	Year	Year	Year	1,855,322 Year	Year	Year	2,252,891 Year	2,385,414 Year	2,517,937 Year	2,650,460 Year	Year	2,650,460 Year	Year	Year	2,650,460 Year	2,650,460 Year	Year	2,650,460 Year
Non-residential Development (Employees) Light Industrial		-	3 22 67	4 22 67	5 22 67	6 22 67	7 22 67	8 22 67	9 22 67	10 22 67	11 22 67	12 22 67	13 22 67	14 22 67	15 22 67	16 22 67	17 22 67	18 22 67	19 21 66	20 21 66	21 21	22 21 66	23	24	25	26	27	28	29	30
General Industrial	-		89	178	01		445		0.	712	801	890	**			0,		٠. ا	1,511	1,598	1,685	66	4.770	4 770	1,772	4.770	4 770	1,772	4 770	1,772
Total Employment (cumulative)	•	-	89	1/8	267	356	445	534	623	/12	801	890	979	1,068	1,157	1,246	1,335	1,424	1,511	1,598	1,685	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772
Revenues, Expenditures, and Impact DC Revenues	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Light Industrial General Industrial DC Revenue - Non-residential (inflated)	-	-	23,153 115,997 147,623	23,153 115,997 152,052	23,153 115,997 156,614	23,153 115,997 161,312	23,153 115,997 166,151	23,153 115,997 171,136	23,153 115,997 176,270	23, 153 115,997 181,558	23, 153 115,997 187,005	23,153 115,997 192,615	23,153 115,997 198,393	23,153 115,997 204,345	23,153 115,997 210,476	23,153 115,997 216,790	23,153 115,997 223,294	23,153 115,997 229,992	23,153 115,997 236,892	23,153 115,997 243,999	23,153 115,997 251,319	23,153 115,997 258,858	-	-	-	-	-			-
Total DC Revenues	-	-	147,623	152,052	156,614	161,312	166,151	171,136	176,270	181,558	187,005	192,615	198,393	204,345	210,476	216,790	223,294	229,992	236,892	243,999	251,319	258,858	-	-	-	-	-	-	-	-
Capital Expenditures Roads DC DC (Debenture) Non-DC (Non-DC (Debenture) Local Service Local Service (Debenture) Lifecycle			421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	- - 421,100	- - 421,100
Water DC DC (Debenture)	6,932,569	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723																		_	
Non-DC Non-DC (Debenture) Local Service		-	-	-	-	-	-	-	-	-	-																			
Local Service (Debenture) Lifecycle Wastewater DC			522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500
DC (Debenture) Non-DC Non-DC (Debenture) Local Service Local Service (Debenture) Lifecycle Stormwater DC																														
DC (Debenture) Non-DC Non-DC (Debenture) Local Service Local Service (Debenture) Lifecycle Studies			141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400
DC DC (Debenture) Non-DC Non-DC (Debenture) Local Service Local Service (Debenture)																														
Lifecycle  Broader Lifecycle Costs			7,522	- 15,044	22,565	30,087	37,609	- 45,131	- 52,652	60,174	- 67,696	- 75,218	- 82,740	90,261	97,783	105,305	- 112,827	- 120,349	127,701	135,054	- 142,407	149,760	- 149,760	- 149,760	- 149,760	149,760	149,760	- 149,760	- 149,760	- 149,760

1,092,522 1,100,044 1,107,565 1,115,087 1,122,609 1,130,131 1,137,652 1,145,174 1,152,696 1,160,218 1,167,740 1,123,760 1,234,7



### Figure A-2 (Cont'd)

																													2052	
Revenues, Expenditures, and	2024 Year	2025 Year	2026 Year	2027 Year	2028 Year	2029 Year	2030 Year	2031 Year	2032	2033 Year	2034 Year	2035 Year	2036	2037 Year	2038	2039 Year	2040 Year	2041 Year	2042 Year	2043 Year	2044 Year	2045 Year	2046 Year	2047 Year	2048 Year	2049 Year	2050	2051 Year	2052 Year	2053 Year
Impact	rear 4	rear	rear	rear	rear	rear	rear	rear	rear	10	rear 11	rear 12	Year 13	rear	Year 15	16	1ear 17	10	10	20	1ear	22	78 23	rear 24	rear	rear	1ear	20	20	7ear 30
impact			,	•	3	٥	,	0	9	10	- "	12	13	14	13	10	17	10	19	20	21	22	23	24	23	20	ZI	20	29	30
Directions of Lond				-	-							-					-								-					
Purchase of Land Land Purchase	-	•	-	-	-	-	-	-	•	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land Purchase	-			-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-		-	-	-
Operating Expenditures																														
Per Employee (inflated) X 740.30	-		68,549	139,839	213,954	290,977	370,996	454,099	540,377	629,926	722,840	819,218	919,163	1,022,778	1,130,169	1,241,448	1,356,725	1,476,117	1,597,627	1,723,407	1,853,579	1,988,269	2,028,034	2,068,595	2,109,967	2,152,166	2,195,209	2,239,113	2,283,896	2,329,574
Operating Costs Related to New																														
Infrastructure (inflated)					77,879	79,436	81,025	82,646	84,299	85,985	87,704	89,458	91,247	93,072	94,934	96,833	98,769	100,745	102,759	104,815	106,911	109,049	111,230	113,455	115,724	118,038	120,399	122,807	125,263	127,768
Debenture Payments (capital +		854.723	854.723	854.723	854.723	854.723	854.723	854,723	854.723	854,723	854,723																			
land)		034,723	004,723	034,723	034,723	004,723	054,725	654,725	654,723	004,723	004,723	-	-		_		· .				-	-			-				.	
Sub-total Operating Expenditures	-	854.723	923,271	994.562	1.146.555	1.225.136	1.306.744	1,391,467	1.479.399	1.570.633	1.665.267	908.677	1.010.410	1.115.850	1.225.103	1.338.280	1,455,494	1.576.861	1.700.386	1.828.221	1.960.490	2.097.318	2.139.264	2.182.049	2.225.690	2,270,204	2.315.608	2.361.921	2.409.159	2,457,342
Sub-total Operating Expenditures	-	034,723	323,211	334,302	1,140,555	1,223,130	1,500,744	1,551,407	1,473,555	1,570,055	1,000,207	300,077	1,010,410	1,110,000	1,220,100	1,550,200	1,455,454	1,570,001	1,700,300	1,020,221	1,300,430	2,037,310	2,100,204	2,102,043	2,223,030	2,270,204	2,313,000	2,301,321	2,403,133	2,437,342
Operating Revenues																														
Per Employee (inflated) X 487.77	-	-	45,165	92,137	140,970	191,719	244,442	299,197	356,045	415,046	476,266	539,768	605,619	673,889	744,648	817,967	893,921	972,586	1,052,647	1,135,521	1,221,289	1,310,034	1,336,234	1,362,959	1,390,218	1,418,022	1,446,383	1,475,311	1,504,817	1,534,913
Sub-total Operating Revenues			45,165	92,137	140,970	191,719	244,442	299,197	356.045	415.046	476,266	539,768	605,619	673,889	744,648	817.967	893.921	972,586	1.052.647	1,135,521	1,221,289	1,310,034	1,336,234	1.362.959	1,390,218	1,418,022	1,446,383	1.475.311	1,504,817	1,534,913
				,	, ,					.,	,			,	, -	,	,-	, , , , , , , , , , , , , , , , , , , ,	, , .	, ,	, , ,	, , , , , ,	,,	, , , , , , , , , , , , , , , , , , , ,	, ,	, ,,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , ,	, , , ,	, ,
Taxation Revenues					400.000	004 700	547.470	700 570	044.005	4 004 050	4 070 754	4 450 445	4 044 507	4 000 000	0.000.000	0.400.747	0.074.444	0.550.500	0.705.007	0.040.000	0.400.000	0.000.075	0 405 400	0.047.000	0.047.000	0.047.000	0.047.000	0.047.000	0.047.000	0.047.000
Non-residential (cumulative)	-	-	-	-	182,393	364,786	547,179	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862
Sub-total Taxation Revenues	-		-	-	182,393	364,786	547,179	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862
Sale of Land (inflated)						-	-	-																						
The state of the s																														
Beginning Balance			(854,723)	(2.677.728)	(4.528.144)	(6.302.287)	(7.924.694)	(9,396,273)	(10.717.966)	(11.890.738)	(12.915.583)	(13,793,524)	(13.670.891)	(13,403,492)	(12.992.438)	(12.438.878)	(11.743.989)	(10,908,985)	(9.935.113)	(8.822.765)	(7,573,232)	(6.187.838)	(4.667.949)	(3.240.270)	(1.646.258)	(68,628)	1,492,292	3.036.169	4.562.661	6,071,421
Non-DC Capital Expenditures (inc. interest cost)	_	_	(001,720)	(2,077,720)	(1,020,111)	(0,002,201)	(1,021,001)	(0,000,270)	(10,717,000)	(11,000,700)	(12,010,000)	(10,700,021)	(10,070,001)	(10,100,102)	(12,002,100)	(12,100,070)	(11,710,000)	(10,000,000)	(0,000,110)	(0,022,700)	(7,070,202)	(0,107,000)	(1,001,010)	(0,210,270)	(1,010,200)	(00,020)	- 1,102,202	-	-,002,001	0,071,121
DC Capital Expenditures (inc. interest cost)	(6,932,569)	(854,723)	(854,723)	(854,723)	(854,723)	(854,723)	(854,723)	(854,723)	(854,723)	(854,723)	(854,723)	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-
Lifecycle Expenditures	- '		(1,092,522)	(1,100,044)	(1,107,565)	(1,115,087)	(1,122,609)	(1,130,131)	(1,137,652)	(1,145,174)	(1,152,696)	(1,160,218)	(1,167,740)	(1,175,261)	(1,182,783)	(1,190,305)	(1,197,827)	(1,205,349)	(1,212,701)	(1,220,054)	(1,227,407)	(1,234,760)	(1,234,760)	(1,234,760)	(1,234,760)	(1,234,760)	(1,234,760)	(1,234,760)	(1,234,760)	(1,234,760)
Operating Expenditures	-	-	(68,549)	(139,839)	(291,832)	(370,413)	(452,021)	(536,744)	(624,676)	(715,910)	(810,544)	(908,677)	(1,010,410)	(1,115,850)	(1,225,103)	(1,338,280)	(1,455,494)	(1,576,861)	(1,700,386)	(1,828,221)	(1,960,490)	(2,097,318)	(2,139,264)	(2,182,049)	(2,225,690)	(2,270,204)	(2,315,608)	(2,361,921)	(2,409,159)	(2,457,342)
Purchase of Land (inc. interest cost)	-	-	- 1	- 1	- 1	- 1	- 1	- 1	- 1	- 1	- 1	-	-	- 1	- 1	-	- 1	-	- 1	- 1	-	- 1	- 1	- 1	-	- 1	- 1	- 1	- 1	- 1
Debenture Issuance	6,932,569																													
Operating Revenues	-	-	45,165	92,137	140,970	191,719	244,442	299,197	356,045	415,046	476,266	539,768	605,619	673,889	744,648	817,967	893,921	972,586	1,052,647	1,135,521	1,221,289	1,310,034	1,336,234	1,362,959	1,390,218	1,418,022	1,446,383	1,475,311	1,504,817	1,534,913
DC Revenues	-	-	147,623	152,052	156,614	161,312	166,151	171,136	176,270	181,558	187,005	192,615	198,393	204,345	210,476	216,790	223,294	229,992	236,892	243,999	251,319	258,858	-	-	-	-	-	-	-	-
Taxation Revenues	-	-	-	-	182,393	364,786	547,179	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862
Sale of Land (inflated)		(054.700)	(0.077.700)	(4.500.444)	- (0.000.007)	(7.004.004)	(0.000.070)	(40.747.000)	(44 000 700)	(40.045.500)	(40 700 504)	(40.070.004)	(40, 400, 400)	(40.000.400)	(40,400,070)	(44.740.000)	(40.000.005)	(0.005.440)	(0.000.705)	(7 570 000)	(0.407.000)	(4.007.040)	(0.040.070)	- (4.040.050)	(00.000)	- 4 400 000		4 500 004		7.500.005
Net Cashflow (cumulative)	-	(854,723)		(4,528,144)		(7,924,694)		(10,717,966)		(12,915,583)				(12,992,438)		(11,743,989)		(9,935,113)	(8,822,765)	(7,573,232) 1,249,533	(6,187,838) 1,385,394	(4,667,949) 1.519.889	(3,240,270)	(1,646,258)	(68,628) 1,577,630	1,492,292	3,036,169 1,543,877	4,562,661 1,526,492	6,071,421 1,508,760	7,562,095 1,490,673
Net Annual Position  Non DC Related Cashflow	-	(854,723)	(1,823,005)	(1,650,416)	(1,774,144)	(1,622,406)	(1,471,580)	(1,321,693)	(1,172,771)	(1,024,845)	(877,941)	122,633	267,400	411,053	553,560	694,889	835,004	973,872	1,112,348	1,249,533	1,385,394	1,519,889	1,427,679	1,594,012	1,5/7,630	1,560,920	1,543,877	1,526,492	1,508,760	1,490,673
Beginning Balance				(1,115,905)	(2,263,650)	(3.339.684)	(4.268,680)	(5.051.688)	(5.689.794)	(6.184.112)	(6.535,793)	(6,746,016)	(6.815.998)	(6.746.992)	(6,540,283)	(6.197.199)	(5.719.100)	(5.107.389)	(4.363.510)	(3.488.054)	(2,482,519)	(1.348.444)	(87.413)	1,340,265	2,934,277	4,511,907	6,072,827	7.616.704	9,143,196	10,651,957
Non-DC Capital Expenditures (inc. interest cost)				(1,113,303)	(2,200,000)	(3,333,004)	(4,200,000)	(3,031,000)	(3,003,734)	(0,104,112)	(0,555,755)	(0,740,010)	(0,010,000)	(0,740,332)	(0,540,205)	(0,137,133)	(3,713,100)	(3,107,303)	(4,303,310)	(3,400,034)	(2,402,313)	(1,340,414)	(07,413)	1,540,205	2,334,277	4,511,507	0,072,027	7,010,704	3,143,130	10,031,337
Lifecycle Expenditures			(1,092,522)	(1,100,044)	(1.107.565)	(1.115.087)	(1,122,609)	(1,130,131)	(1.137.652)	(1,145,174)	(1,152,696)	(1,160,218)	(1.167.740)	(1,175,261)	(1,182,783)	(1,190,305)	(1,197,827)	(1,205,349)	(1,212,701)	(1,220,054)	(1,227,407)	(1,234,760)	(1,234,760)	(1,234,760)	(1,234,760)	(1,234,760)	(1,234,760)	(1,234,760)	(1,234,760)	(1,234,760)
Operating Expenditures	_	_	(68,549)	(139,839)	(291,832)	(370,413)		(536,744)	(624,676)	(715,910)	(810,544)	(908,677)	(1,010,410)	(1,115,850)	(1,225,103)	(1,338,280)	(1,455,494)	(1,576,861)	(1,700,386)	(1,828,221)	(1,960,490)	(2,097,318)	(2,139,264)	(2,182,049)	(2,225,690)	(2,270,204)	(2,315,608)	(2,361,921)	(2,409,159)	(2,457,342)
Purchase of Land (inc. interest cost)	-		(==,= .=)	- (,)	- (	-	(102,021)	-	(== 1,5.5)	-	(=-=,=,	-	- (.,,	- (.,,)	- (-,===,-==,	(1,000,000)	- (1,122,121,	-	-	(.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	( -,,	(=,001,010)	- (-,,,	- (=, = , )	-	(=,=:0,=0:1)	-	(=,== :,== :,	(=,,,	(=,,)
Debenture Issuance	-											1								I										
Operating Revenues	-	-	45,165	92,137	140,970	191,719	244,442	299,197	356,045	415,046	476,266	539,768	605,619	673,889	744,648	817,967	893,921	972,586	1,052,647	1,135,521	1,221,289	1,310,034	1,336,234	1,362,959	1,390,218	1,418,022	1,446,383	1,475,311	1,504,817	1,534,913
Taxation Revenues	-	-	-		182,393	364,786	547,179	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862
Sale of Land (inflated)	-		-	-	-	-	-		-	-	-	_	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
Net Cashflow (cumulative)	-	-	(1,115,905)	(2,263,650)	(3,339,684)	(4,268,680)	(5,051,688)	(5,689,794)	(6,184,112)	(6,535,793)	(6,746,016)	(6,815,998)	(6,746,992)	(6,540,283)	(6,197,199)	(5,719,100)	(5,107,389)	(4,363,510)	(3,488,054)	(2,482,519)	(1,348,444)	(87,413)	1,340,265	2,934,277	4,511,907	6,072,827	7,616,704	9,143,196	10,651,957	12,142,630
Net Annual Position	-		(1.115,905)	(1.147.745)	(1.076.034)	(928,995)	(783.008)	(638,106)	(494,319)	(351.680)	(210,223)	(69.982)	69.006	206,708	343.084	478.099	611.711	743,879	875,456	1.005.535	1.134.075	1,261,031	1.427.679	1.594.012	1.577.630	1.560.920	1.543.877	1.526.492	1.508.760	1,490,673

Development/construction will occur in 2026
Tax revenues - 2 year lag (i.e. start in 2028)
DC revenues have only been applied to DC-related expenditures.
Operating Revenues and expenditures inflated at 2% per year.
DC Revenues inflated at 3% per year
Operating expenditures for infrastructure have been assumed four years after anticipated construction.



### Figure A-3 Haldimand County Scenario 1b Cashflow

#### Cash Flow Analysis - One Development

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	46	2047	2048	2049	2050	2051	2052	2053
Development Forecast	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23		Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Non-residential Development (GFA) Light Industrial			441,000																												
General Industrial  Total Employment (cumulative)			2,209,460 2,650,460	2.650.460	2.650.460	2.650.460	2,650,460	2.650.460	2.650.460	2,650,460	2.650.460	2.650.460	2.650.460	2.650.460	2,650,460	2.650.460	2.650.460	2,650,460	2.650.460	2.650.460	2,650,460	2.650.460	2.650.460	550.460	2.650.460	2.650.460	2,650,460	2,650,460	2.650.460	2,650,460	2.650.460
Development Forecast	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	ar	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Non-residential Development (Employees) Light Industrial			441																												
General Industrial	-	-	1,331																												
Total Employment (cumulative)	-	-	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772
Revenues, Expenditures, and	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	ar	Year						
Impact DC Revenues	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	3	24	25	26	27	28	29	30
Light Industrial General Industrial	-	-	11,211,446																												
DC Revenue - Non-residential (inflated)  Total DC Revenues			11,894,223 11,894,223								-					-							-	-	-	-	-			-	
Capital Expenditures			11,001,220																												
Roads																															
DC (Debenture)																														-	-
Non-DC Non-DC (Debenture)																															
Local Service Local Service (Debenture)																															-
Lifecycle																															
Water DC	6,932,569																														
DC (Debenture) Non-DC		854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-DC (Debenture) Local Service		-	-	-	-	-	-	-	-	-	-																				
Local Service (Debenture) Lifecycle																															
Wastewater DC	31,490,113																														
DC (Debenture) Non-DC	-	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	-	-	-	-	-	-	-	-	-	-
Non-DC (Debenture)		-	-	-	-	-	-	-	-	-	-																				
Local Service Local Service (Debenture) Lifecycle																															
Stormwater DC																															
DC (Debenture) Non-DC																															
Non-DC (Debenture)																															
Local Service Local Service (Debenture) Lifecycle																															
Studies																															
DC (Debenture)																															
Non-DC Non-DC (Debenture)																															
Local Service Local Service (Debenture)																															
Lifecycle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Broader Lifecycle Costs		-	396,308	396,308	396,308		396,308	396,308	396,308	·	396,308	396,308	396,308		396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308		396,308	396,308	396,308	396,308	396,308	396,308	396,308
Sub-total Capital Expenditures	38,422,682	-	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	96,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308



### Figure A-3 (Cont'd)

B	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Revenues, Expenditures, and	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year 11	Year	Year 13	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year 23	Year	Year	Year	Year	Year	Year	Year 30
Impact	1	2	3	4	5	ь	- /	8	9	10	11	12	13	14	15	16	1/	18	19	20	21	22	23	24	25	26	27	28	29	30
Sandan diam																														
Purchase of Land	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land Purchase		-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-		-
Operating Expenditures																														
Per Employee (inflated) X 740.30	-		1,364,809	1,392,105	1,419,947	1,448,346	1,477,313	1,506,859	1,536,996	1,567,736	1,599,091	1,631,073	1,663,694	1,696,968	1,730,908	1,765,526	1,800,836	1,836,853	1,873,590	1,911,062	1,949,283	1,988,269	2,028,034	2,068,595	2,109,967	2,152,166	2,195,209	2,239,113	2,283,896	2,329,574
Operating Costs Related to New																														
Infrastructure (inflated)					22,451	22,900	23,358	23,825	24,302	24,788	25,283	25,789	26,305	26,831	27,368	27,915	28,473	29,043	29,624	30,216	30,820	31,437	32,066	32,707	33,361	34,028	34,709	35,403	36,111	36,833
Debenture Payments (capital +		0.740.000	0.740.000	0.740.000	0.740.000	0.740.000	0.740.000	3.712.962	0.740.000	0.740.000	0.740.000	4 000 400	4 000 400	4 000 400	4 000 400	4 000 400	4 000 400	4 000 400	4 000 400	4 000 400	4 000 400									
land)		3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	-		-	-	-	-	-	-	-
Sub total Operation France discuss		3.712.962	5.077.771	5.105.067	5.155.360	5.184.208	5.213.633	5,243,647	5,274,260	5.305.486	5.337.337	3.565.994	3,599,131	3.632.931	3.667.407	3,702,572	3.738.441	3,775,027	3.812.345	3.850.410	3.889.235	2.019.706	2.060.100	2.101.302	2.143.328	2.186.194	2.229.918	2.274.516	2.320.007	2.366.407
Sub-total Operating Expenditures	-	3,712,902	5,077,771	5,105,067	5,155,360	5,164,206	5,213,633	5,243,647	5,274,260	5,305,466	5,337,337	3,303,994	3,599,131	3,032,931	3,007,407	3,702,572	3,730,441	3,775,027	3,012,345	3,050,410	3,009,235	2,019,706	2,000,100	2,101,302	2,143,320	2,100,194	2,229,910	2,214,516	2,320,007	2,300,407
Operating Revenues																														
Per Employee (inflated) X 653.30	-	-	1,204,417	1,228,505	1,253,075	1,278,136	1,303,699	1,329,773	1,356,369	1,383,496	1,411,166	1,439,389	1,468,177	1,497,541	1,527,491	1,558,041	1,589,202	1,620,986	1,653,406	1,686,474	1,720,203	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Sub-total Operating Revenues	-		1.204.417	1.228.505	1.253.075	1.278.136	1.303.699	1.329.773	1.356.369	1.383.496	1,411,166	1.439.389	1 468 177	1.497.541	1,527,491	1.558.041	1,589,202	1.620.986	1.653.406	1.686.474	1,720,203	1.754.608	1,789,700	1.825.494	1.862.004	1.899.244	1.937.228	1.975.973	2.015.492	2.055.802
			1,204,417	1,220,000	1,200,070	1,270,100	1,000,000	1,020,110	1,000,000	1,000,100	1,411,100	1,400,000	1,400,177	1,407,041	1,027,401	1,000,041	1,000,202	1,020,000	1,000,400	1,000,474	1,120,200	1,704,000	1,1 00,1 00	1,020,404	1,002,004	1,000,244	1,007,220	1,070,070	2,010,402	2,000,002
Taxation Revenues																														
Non-residential (cumulative)	-	-	-	-	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831	3,829,831
Sub-total Taxation Revenues	-	-	-	-	3.829.831	3.829.831	3.829.831	3,829,831	3.829.831	3.829.831	3.829.831	3,829,831	3.829.831	3.829.831	3.829.831	3,829,831	3,829,831	3.829.831	3.829.831	3.829.831	3,829,831	3,829,831	3.829.831	3.829.831	3.829.831	3.829.831	3.829.831	3.829.831	3.829.831	3.829.831
0-1																														
Sale of Land (inflated)						-	-	-	-	-	-	-	-																	
						/ ·- ·																								
Beginning Balance	-	-	(3,712,962)	3,911,598	(361,272)	(830,034)	(1,302,582)	(1,778,992)	(2,259,342)	(2,743,710)	(3,232,177)	(3,724,824)	(2,417,905)	(1,115,335)	182,798	1,476,406	2,765,399	4,049,683	5,329,166	6,603,750	7,873,338	9,137,830	12,306,255	15,469,379	18,627,094	21,779,294	24,925,867	28,066,700	31,201,681	34,330,690
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost)	(38,422,682)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3.712.962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(1,909,132)	(1,909,132)	(1,909,132)	(1.909.132)	(1,909,132)	(1,909,132)	(1.909.132)	(1.909.132)	(1,909,132)	(1,909,132)	-	-	-	-	-	-	-	-	- 1
Lifecycle Expenditures (Inc. Interest cost)	(30,422,002)	(3,712,902)	(3,712,962)	(3,712,962)	(3,712,962)	(396.308)	(3,712,962)	(396,308)	(3,712,962)	(3,712,962)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396.308)	(396,308)	(396,308)
Operating Expenditures			(1,364,809)	(1,392,105)	(1,442,398)	(1.471.246)	(1,500,671)	(1,530,684)	(1.561.298)	(1,592,524)	(1.624.374)	(1.656.862)	(1,689,999)	(1.723.799)	(1.758.275)	(1.793.441)	(1,829,309)	(1,865,896)	(1,903,214)	(1.941.278)	(1,980,103)	(2.019.706)	(2.060.100)	(2.101.302)	(2.143.328)	(2.186.194)	(2,229,918)	(2.274.516)	(2.320.007)	(2.366.407)
Purchase of Land (inc. interest cost)			(1,304,609)	(1,392,103)	(1,442,396)	(1,471,240)	(1,300,671)	(1,550,664)	(1,301,290)	(1,392,324)	(1,024,374)	(1,000,002)	(1,009,999)	(1,723,799)	(1,730,273)	(1,793,441)	(1,029,309)	(1,000,090)	(1,903,214)	(1,541,276)	(1,900,103)	(2,019,700)	(2,000,100)	(2,101,302)	(2,143,320)	(2,100,194)	(2,229,910)	(2,274,310)	(2,320,007)	(2,300,407)
Debenture Issuance	38,422,682			-	_	-	-			-	-	-	-	-	-	_	_	-	-	-	-	_	_	-	-	-		-	-	
Operating Revenues	00,122,002		1,204,417	1,228,505	1.253.075	1,278,136	1.303.699	1.329.773	1.356.369	1.383.496	1.411.166	1.439.389	1.468.177	1.497.541	1.527.491	1.558.041	1.589.202	1.620.986	1.653.406	1.686.474	1,720,203	1.754.608	1.789.700	1.825.494	1.862.004	1.899.244	1,937,228	1.975.973	2.015.492	2.055.802
DC Revenues			11,894,223	.,,	.,,	.,	-	.,	-	-,,	.,,	.,,	-,,	.,,	-	-,,-	.,,	-	-	.,,	.,,	-,,	.,	.,	-	.,,	,	.,,	-,,	-,,
Taxation Revenues	-	-	-		3.829.831	3.829.831	3.829.831	3.829.831	3.829.831	3,829,831	3.829.831	3.829.831	3,829,831	3.829.831	3.829.831	3.829.831	3.829.831	3.829.831	3.829.831	3.829.831	3.829.831	3.829.831	3.829.831	3.829.831	3,829,831	3,829,831	3.829.831	3.829.831	3.829.831	3,829,831
Sale of Land (inflated)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
Net Cashflow (cumulative)	-	(3,712,962)	3,911,598	(361,272)	(830,034)	(1,302,582)	(1,778,992)	(2,259,342)	(2,743,710)	(3,232,177)	(3,724,824)	(2,417,905)	(1,115,335)	182,798	1,476,406	2,765,399	4,049,683	5,329,166	6,603,750	7,873,338	9,137,830	12,306,255	15,469,379	18,627,094	21,779,294	24,925,867	28,066,700	31,201,681	34,330,690	37,453,609
Net Annual Position	-	(3,712,962)	7,624,561	(4,272,870)	(468,762)	(472,548)	(476,410)	(480,350)	(484,368)	(488,467)	(492,647)	1,306,919	1,302,570	1,298,133	1,293,608	1,288,992	1,284,284	1,279,482	1,274,584	1,269,588	1,264,492	3,168,426	3,163,124	3,157,716	3,152,199	3,146,573	3,140,834	3,134,980	3,129,009	3,122,919
Non DC Related Cashflow																														
Beginning Balance	-	-	-	(556,700)	(1,116,608)	2,127,593	5,368,007	8,604,558	11,837,171	15,065,765	18,290,260	21,510,575	24,726,626	27,938,328	31,145,593	34,348,332	37,546,456	40,739,872	43,928,486	47,112,202	50,290,922	53,464,545	56,632,971	59,796,094	62,953,810	66,106,009	69,252,582	72,393,416	75,528,396	78,657,406
Non-DC Capital Expenditures (inc. interest cost)	-	-																												
Lifecycle Expenditures	-	-	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)
Operating Expenditures		-	(1,364,809)	(1,392,105)	(1,442,398)	(1,471,246)	(1,500,671)	(1,530,684)	(1,561,298)	(1,592,524)	(1,624,374)	(1,656,862)	(1,689,999)	(1,723,799)	(1,758,275)	(1,793,441)	(1,829,309)	(1,865,896)	(1,903,214)	(1,941,278)	(1,980,103)	(2,019,706)	(2,060,100)	(2,101,302)	(2,143,328)	(2,186,194)	(2,229,918)	(2,274,516)	(2,320,007)	(2,366,407)
Purchase of Land (inc. interest cost)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Debenture Issuance	·		4 204 117	4 000 505	4.050.075	4 070 400	1.303.699	1.329.773	1.356.369	4 202 422	4 444 400	4 400 000	1,468,177	4 407 5 **	4 507 404	1.558.041	4 500 000	4 000 000	1.653.406	4 000 471	4 700 000	4.754.000	4 700 700	4 005 404	4 000 004	4 000 044	4 007 000	4 075 070	0.045.400	0.055.000
Operating Revenues Taxation Revenues		-	1,204,417	1,228,505	1,253,075 3,829,831	1,278,136 3,829,831	3.829.831	3.829,773	3,829,831	1,383,496 3.829.831	1,411,166 3.829.831	1,439,389 3.829.831		1,497,541 3,829,831	1,527,491 3.829.831	3,829,831	1,589,202 3,829,831	1,620,986 3,829,831	3.829.831	1,686,474 3,829,831	1,720,203 3.829.831	1,754,608 3,829,831	1,789,700 3.829.831	1,825,494 3.829.831	1,862,004 3,829,831	1,899,244	1,937,228 3.829.831	1,975,973 3.829.831	2,015,492 3.829.831	2,055,802 3,829,831
Sale of Land (inflated)	· .	-	-	-	3,029,631	3,029,031	3,029,031	3,029,031	3,029,631	3,029,631	3,029,631	3,029,031	3,829,831	3,029,031	3,029,631	3,029,631	3,629,631	3,029,031	3,029,031	3,029,031	3,029,631	3,029,631	3,029,631	3,029,031	3,029,031	3,829,831	3,029,031	3,029,031	3,029,031	3,029,031
Net Cashflow (cumulative)	-	-	(556,700)	(1.116.608)	2.127.593	5.368.007	8.604.558	11.837.171	15.065.765	18.290.260	21.510.575	24.726.626	27.938.328	31.145.593	34.348.332	37.546.456	40.739.872	43.928.486	47.112.202	50.290.922	53,464,545	56.632.971	59.796.094	62.953.810	66.106.009	69.252.582	72.393.416	75.528.396	78.657.406	81,780,325
Net Annual Position		-	(556,700)	(1,110,000)	-, :-: , : : :	3,240,414	-,,		3,228,594	,=,=	,,		3,211,701	,,	3.202.740	3,198,124	,,	,,	,,=			,,		3.157.716		3,146,573	. =,===,	,,	,,	3.122.919

Development/construction will occur in 2026
Tax revenues - 2 year lag (i.e. start in 2028)
DC revenues have only been applied to DC-related expenditures.
Operating Revenues and expenditures inflated at 2% per year.
DC Revenues inflated at 3% per year
Operating expenditures for infrastructure have been assumed four years after anticipated construction.



### Figure A-4 Haldimand County Cashflow for Scenario 1c

#### Cash Flow Analysis - Industrial Condominium Model

Oddi Flow Analysis - Industrial Cond																														
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Development Forecast	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Non-residential Development (GFA) Light Industrial		-	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050								
General Industrial Total Employment (cumulative)			110,473 132,523	110,473 <b>265,046</b>	110,473 397,569	110,473 530,092	110,473 662,615	110,473 <b>795,138</b>	110,473 927,661	110,473 1,060,184	110,473 1,192,707	110,473 1,325,230	110,473 1,457,753	110,473 1,590,276	110,473 1,722,799	110,473 1,855,322	110,473 1,987,845	110,473 <b>2,120,368</b>	110,473 2,252,891	110,473 2,385,414	110,473 <b>2,517,937</b>	110,473 2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460
Development Forecast	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Non-residential Development (Employees) Light Industrial General Industrial	-	-	22 67	22 67	22 67	22 67	22 67	22 67	22 67	22 67	22 67	21 66	21 66	21 66	21 66															
Total Employment (cumulative)	-	-	89	178	267	356	445	534	623	712	801	890	979	1,068	1,157	1,246	1,335	1,424	1,511	1,598	1,685	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772
Total Employment (cumulative)  Revenues, Expenditures, and Impact	Year 1	Year 2	Year	178 Year 4	267 Year 5	356 Year 6	445 Year 7	534 Year 8	623 Year 9	712 Year 10	801 Year 11	890 Year 12	979 Year 13	1,068 Year 14	1,157 Year 15	1,246 Year	1,335 Year 17	1,424 Year 18	1,511 Year 19	1,598 Year 20	1,685 Year 21	1,772 Year 22	1,772 Year 23	1,772 Year 24	1,772 Year 25	1,772 Year 26	1,772 Year 27	1,772 Year 28	1,772 Year 29	1,772 Year 30
Revenues, Expenditures, and		Year 2	Year 3 93,272		267   Year 5		445 Year 7 93,272	00.7	623 Year 9	7.2	***	550	979 Year 13	1,068 Year 14	1,157 Year 15	1,246 Year 16	Year	1,424 Year 18	.,•	1,598 Year 20 93,272	.,	1,772 Year 22 93,272				1,772 Year 26	Year		Year	
Revenues, Expenditures, and Impact DC Revenues Light Industrial General Industrial CO Revenue Non-residential (inflated)		Year 2	Year 3 93,272 467,301 594,711	Year 4 93,272 467,301 612,552	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22				1,772	Year		Year	
Revenues, Expenditures, and Impact DC Revenues Light Industrial General Industrial C Revenue - Non-residential (inflated) Total DC Revenues	Year 1	Year 2	467,301	Year 4 93,272 467,301	Year 5 93,272 467,301	Year 6 93,272 467,301	Year 7 93,272 467,301	Year 8 93,272 467,301	Year 9 93,272 467,301	Year 10 93,272 467,301	Year 11 93,272 467,301	Year 12 93,272 467,301	Year 13 93,272 467,301	Year 14 93,272 467,301	Year 15 93,272 467,301	Year 16 93,272 467,301	Year 17 93,272 467,301	Year 18 93,272 467,301	Year 19 93,272 467,301	Year 20 93,272 467,301	Year 21 93,272 467,301	Year 22 93,272 467,301				1,772	Year		Year 29 -	
Revenues, Expenditures, and Impact DC Revenues Light Industrial General Industrial CO Revenue Non-residential (inflated)	Year 1 - -	Year 2	467,301 594,711	Year 4 93,272 467,301 612,552	Year 5 93,272 467,301 630,929	Year 6 93,272 467,301 649,857	Year 7 93,272 467,301 669,353	Year 8 93,272 467,301 689,433	Year 9 93,272 467,301 710,116	Year 10 93,272 467,301 731,420	Year 11 93,272 467,301 753,362	Year 12 93,272 467,301 775,963	Year 13 93,272 467,301 799,242	Year 14 93,272 467,301 823,219	Year 15 93,272 467,301 847,916	Year 16 93,272 467,301 873,353	Year 17 93,272 467,301 899,554	Year 18 93,272 467,301 926,541	Year 19 93,272 467,301 954,337	Year 20 93,272 467,301 982,967	Year 21 93,272 467,301 1,012,456	Year 22 93,272 467,301 1,042,830		Year 24 - -		1,772 Year 26	Year		Year 29 -	

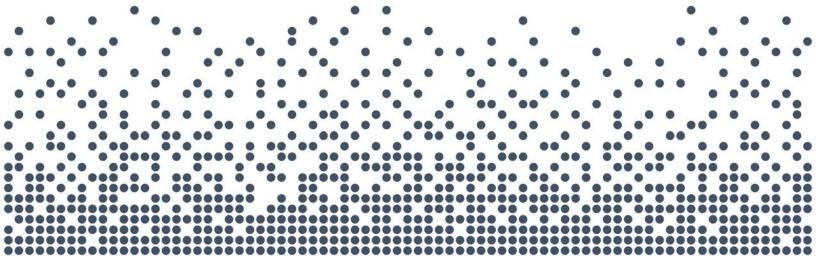
DC Revenue - Non-residential (inflated)			594,711	612,552	630,929	649,857	669,353	689,433	710,116	731,420	753,362	775,963	799,242	823,219	847,916	873,353	899,554	926,541	954,337	982,967	1,012,456	1,042,830					-				
Total DC Revenues	-	-	594,711	612,552	630,929	649,857	669,353	689,433	710,116	731,420	753,362	775,963	799,242	823,219	847,916	873,353	899,554	926,541	954,337	982,967	1,012,456	1,042,830	-	-			-	-	-	-	
Capital Expenditures																															
Roads																															
DC (Debenture)																														-	-
Non-DC																															
Non-DC (Debenture) Local Service																															
Local Service (Debenture) Lifecycle																															
Water DC	6,932,569																														
DC (Debenture)	6,932,569	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	-		-	-	-				-		-			-		-		-		
Non-DC Non-DC (Debenture)	-																														
Local Service		_				-	-	-	-		-																				
Local Service (Debenture) Lifecycle																															
Wastewater																															
DC	31,490,113		0.050.000	0.050.000	0.050.000	0.050.000	0.050.000	0.050.000	0.050.000	0.050.000	0.050.000	4 000 400	4 000 400	4 000 400	4 000 400	4 000 400	4 000 400	4 000 400	4 000 400	4 000 400	4 000 400										
DC (Debenture) Non-DC	-	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	-		1	-	-	-		-	-	
Non-DC (Debenture) Local Service		-	-	-	-	-		-	-	-	-																				
Local Service (Debenture)																															
Lifecycle																															
Stormwater DC																															
DC (Debenture)																															
Non-DC Non-DC (Debenture)																															
Local Service																															
Local Service (Debenture) Lifecycle																															
Studies .																															
DC DC (Debenture)																															
Non-DC																															
Non-DC (Debenture) Local Service																															
Local Service (Debenture)																															
Lifecycle	-	-	-	-	-	-		-	-		-	-	-		-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
Broader Lifecycle Costs	-	•	19,905	39,810	59,715	79,619		119,429	139,334	159,239	179,144	199,049	218,953	238,858		278,668	298,573	318,478			376,850		396,308		396,308	396,308	396,308	396,308	396,308	396,308	396,308
Sub-total Capital Expenditures	38,422,682	-	19,905	39,810	59,715	79,619	99,524	119,429	139,334	159,239	179,144	199,049	218,953	238,858	258,763	278,668	298,573	318,478	337,935	357,393	376,850	396,308	396,308	396.30	396,308	396,308	396,308	396.308	396,308	396,308	396.308



### Figure A-4 (Cont'd)

Revenues, Expenditures, and	2024 Year	2025 Year	2026 Year	2027 Year	2028 Year	2029 Year	2030 Year	2031 Year	2032 Vear	2033 Year	2034 Year	2035 Year	2036 Year	2037 Year	2038 Year	2039 Year	2040 Year	2041 Year	2042 Year	2043 Year	2044 Year	2045 Year	2046 Year	2047 Year	2048 Year	2049 Year	2050 Voor	2051 Year	2052 Year	2053 Year
Impact	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Purchase of Land	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land Purchase	-	-	-	-		-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oneseties Funes ditures																														
Operating Expenditures Per Employee (inflated) X 740.30			68.549	139.839	213.954	290.977	370.996	454.099	540.377	629.926	722,840	819,218	919.163	1,022,778	1,130,169	1.241.448	1.356.725	1.476.117	1.597.627	1,723,407	1.853.579	1.988.269	2.028.034	2.068.595	2.109.967	2.152.166	2.195.209	2,239,113	2.283.896	2,329,574
Operating Costs Related to New			00,349	139,039	213,534	250,511	370,990	454,099	340,377	029,920	722,040	019,210	919,103	1,022,776	1,130,109	1,241,440	1,330,723	1,470,117	1,397,027	1,723,407	1,033,379	1,300,203	2,020,034	2,000,090	2,109,907	2, 132, 100	2,195,209	2,239,113	2,200,090	2,329,374
Infrastructure (inflated)					22,451	22.900	23,358	23,825	24,302	24,788	25,283	25,789	26,305	26.831	27,368	27,915	28,473	29,043	29.624	30,216	30,820	31,437	32.066	32,707	33,361	34,028	34,709	35.403	36.111	36,833
					,	,	,	,			,	,	,	,		,	,	,	,	,	,	,	,		,	,	,	,	,	,
Debenture Payments (capital +																														
land)	-	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	-	-	-	-	-	-	-	-	-
Sub total Occasion Franco discuss		3.712.962	3.781.511	3.852.801	3.949.367	4.026.839	4,107,316	4,190,886	4,277,641	4.367.676	4.461.085	2.754.139	2.854.599	2.958.740	3.066.669	3.178.494	3.294.330	3.414.291	3.536.382	3.662.754	3.793.531	2.019.706	2.060,100	2.101.302	2.143.328	2.186.194	2.229.918	2.274.516	2.320.007	2.366.407
Sub-total Operating Expenditures	-	3,712,902	3,761,511	3,052,001	3,949,367	4,020,039	4,107,316	4,190,000	4,277,041	4,367,676	4,461,065	2,754,139	2,054,599	2,956,740	3,000,009	3,170,494	3,294,330	3,414,291	3,536,362	3,002,754	3,793,531	2,019,706	2,000,100	2,101,302	2,143,320	2,100,194	2,229,910	2,274,516	2,320,007	2,300,407
														ļ																
Operating Revenues																														
Per Employee (inflated) X 653.30	-	-	60,493	123,405	188,810	256,781	327,396	400,733	476,872	555,897	637,892	722,944	811,143	902,581	997,352	1,095,553	1,197,283	1,302,643	1,409,874	1,520,872	1,635,746	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
														ļ																
Sub-total Operating Revenues	-	-	60,493	123,405	188,810	256,781	327,396	400,733	476,872	555,897	637,892	722,944	811,143	902,581	997,352	1,095,553	1,197,283	1,302,643	1,409,874	1,520,872	1,635,746	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Taxation Revenues														ļ																
Non-residential (cumulative)				-	182,393	364,786	547.179	729,572	911.965	1.094.358	1,276,751	1.459.145	1.641.537	1,823,930	2.006.323	2.188.717	2,371,111	2.553.503	2,735,897	2,918,289	3.100.683	3,283,075	3,465,468	3.647.862	3.647.862	3.647.862	3.647.862	3.647.862	3.647.862	3,647,862
, ,					·																									
Sub-total Taxation Revenues	-	-	-	-	182,393	364,786	547,179	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862
Sale of Land (inflated)						-	-	-	-	-	-	-	-																	
														ļ																
Beginning Balance	-	-	(3,712,962)	(6,859,174)	(10,015,827)	(13,022,776)	(15,857,811)	(18,520,723)	(21,011,300)	(23,329,321)	(25,474,562)	(27,446,786)	(27,441,922)	(27,263,553)	(26,911,420)	(26,385,261)	(25,684,800)	(24,809,755)	(23,759,837)	(22,534,047)	(21,132,066)	(19,553,562)	(15,889,063)	(13,090,303)	(10,114,556)	(7,144,327)	(4,179,723)	(1,220,859)	1,732,152	4,679,192
Non-DC Capital Expenditures (inc. interest cost)	(00.400.000)	(0.740.000)	(0.740.000)	(0.740.000)	(0.740.000)	(0.740.000)	(0.740.000)	(0.740.000)	(0.740.000)	(0.740.000)	(0.740.000)	(4.000.400)	(4.000.400)	(4.000.400)	- (4 000 400)	(4.000.400)	(4.000.400)	(4.000.400)	(4.000.400)	(4.000.400)	(4.000.400)	-	-	-	-	-	-	-	-	-
DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures	(38,422,682)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962) (79,619)	(3,712,962)	(3,712,962)	(3,712,962) (139,334)	(3,712,962) (159,239)	(3,712,962)	(1,909,132) (199,049)	(1,909,132) (218,953)	(1,909,132) (238,858)	(1,909,132) (258,763)	(1,909,132) (278,668)	(1,909,132) (298,573)	(1,909,132) (318,478)	(1,909,132)	(1,909,132)	(1,909,132) (376,850)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)
Operating Expenditures			(68,549)	(139,839)	(236.405)	(313.877)	(394,354)	(477,924)	(564,679)	(654,713)	(748,123)	(845.007)	(945,468)	(1.049.609)	(1.157.537)	(1,269,363)	(1,385,198)	(1.505,159)	(1,627,250)	(1.753.623)	(1.884.399)	(2.019.706)	(2.060.100)	(2.101.302)	(2.143.328)	(2.186.194)	(2,229,918)	(2.274.516)	(2.320.007)	(2,366,407)
Purchase of Land (inc. interest cost)		-	(00,010)	(100,000)	(200, 100)	(0.0,0.7)	(001,001)	(-177,02-1)	(001,070)	(001,710)	(1-10,120)	(0.10,007)	(0.10, 100)	(1,010,000)	(1,101,001)	(1,200,000)	(1,000,100)	(1,000,100)	(1,027,200)	(1,700,020)	(1,001,000)	(2,010,700)	(2,000,100)	(2,101,002)	(2,110,020)	(2,100,101)	(2,220,010)	(2,211,010)	(2,020,007)	(2,000,107)
Debenture Issuance	38,422,682													ļ																
Operating Revenues	-	-	60,493	123,405	188,810	256,781	327,396	400,733	476,872	555,897	637,892	722,944	811,143	902,581	997,352	1,095,553	1,197,283	1,302,643	1,409,874	1,520,872	1,635,746	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
DC Revenues	-	-	594,711	612,552	630,929	649,857	669,353	689,433	710,116	731,420	753,362	775,963	799,242	823,219	847,916	873,353	899,554	926,541	954,337	982,967	1,012,456	1,042,830	-	-	-	-	-	-	-	-
Taxation Revenues	-	-	-	-	182,393	364,786	547,179	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862
Sale of Land (inflated)  Net Cashflow (cumulative)	-	(3.712.962)	(6.859.174)	- (40 04E 027)	(13.022.776)	(4E 0E7 044)	(18.520.723)	(21.011.300)	(23,329,321)	(DE 474 ECO)	(27,446,786)	(27.441.922)	(07 000 EE0)	(26.911.420)	(26.385.261)	(25.684.800)	(24 000 755)	(23,759,837)	(22.534.047)	(24 422 000)	(19.553.562)	(15.889.063)	(13.090.303)	(10.114.556)	(7.144.327)	(4.179.723)	(1.220.859)	1.732.152	4.679.192	7.620.141
Net Annual Position		(3,712,962)		(10,010,001)								4.864	178,369	352.132	526.159	700.461	875.045		1.225.790	1.401.981	1.578.504	3.664.499		2.975.746	2.970.230	2.964.603	2.958.864	2.953.011		
Non DC Related Cashflow		(3,712,902)	(3,140,212)	(3, 130,033)	(3,000,949)	(2,033,034)	(2,002,912)	(2,490,377)	(2,310,022)	(2,145,240)	(1,512,224)	4,004	170,309	332,132	320,139	700,401	673,043	1,045,515	1,223,790	1,401,361	1,376,304	3,004,433	2,790,701	2,373,740	2,970,230	2,904,003	2,530,004	2,500,011	2,547,040	2,540,545
Beginning Balance		-		(27,961)	(84,204)	(9,120)	218,951	599,648	1,132,600	1.817.425	2.653.727	3.641.103	4,779,135	6.067.394	7,505,439	9,092,813	10,829,053	12.713.675	14.746.185	16,926,770	19,254,916	21,730,095	24.351.764	27.150.525	30,126,271	33.096.501	36.061.104	39.019.969	41,972,979	44,920,019
Non-DC Capital Expenditures (inc. interest cost)	-	-	-	- '	- '	- '	-	-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-		
Lifecycle Expenditures	-	-	(19,905)	(39,810)	(59,715)	(79,619)	(99,524)	(119,429)	(139,334)	(159,239)	(179,144)	(199,049)	(218,953)	(238,858)	(258,763)	(278,668)	(298,573)	(318,478)	(337,935)	(357,393)	(376,850)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)	(396,308)
Operating Expenditures	-	-	(68,549)	(139,839)	(236,405)	(313,877)	(394,354)	(477,924)	(564,679)	(654,713)	(748,123)	(845,007)	(945,468)	(1,049,609)	(1,157,537)	(1,269,363)	(1,385,198)	(1,505,159)	(1,627,250)	(1,753,623)	(1,884,399)	(2,019,706)	(2,060,100)	(2,101,302)	(2,143,328)	(2,186,194)	(2,229,918)	(2,274,516)	(2,320,007)	(2,366,407)
Purchase of Land (inc. interest cost)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Debenture Issuance	-			400 :	400.0:-	050 7-	007.0	400 7	470.5	FFF 0	007.5	700 0		200 5	007.5	4 005 5	4 407 5	4 000 0 :-	4 400 07:	4 500 0=-	4 005 7 :-		4 700 7	4 005 45 :	4 000 05	4 000 0	4 007 5	4 075 0		0.055.05-
Operating Revenues	-	-	60,493	123,405	188,810	256,781	327,396	400,733	476,872	555,897	637,892	722,944	811,143	902,581	997,352	1,095,553	1,197,283	1,302,643	1,409,874	1,520,872	1,635,746	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Taxation Revenues Sale of Land (inflated)	-			- 1	182,393	364,786	547,179	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862
Jaie Ur Laffü (Iffilateu)	-		1 -	1 -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Net Cashflow (cumulative)	-	_	(27 961)	(84 204)	(9.120)	218 951	599 648	1 132 600	1 817 425	2 653 727	3 641 103	4 779 135	6 067 394	7 505 430	9 092 813	10 829 053	12 713 675	14 746 185	16 926 770	19 254 916	21 730 095	24 351 764	27 150 525	30 126 271	33 096 501	36 061 104	39 019 969	41 972 979	44 920 010 1	47 860 969
Net Cashflow (cumulative) Net Annual Position	-	-	(27,961)	(84,204) (56,244)	(9,120) 75.084	218,951 228,071	599,648 380.698	1,132,600 532,952	1,817,425 684.824	2,653,727 836,302	3,641,103 987,376	4,779,135 1,138,032	6,067,394 1,288,259	7,505,439 1,438,044	9,092,813 1,587,375	10,829,053	12,713,675 1,884,623	14,746,185 2.032,510	16,926,770 2,180,585	19,254,916 2,328,146	21,730,095 2,475,179	24,351,764 2.621.669	27,150,525 2,798,761	, . ,	33,096,501 2,970,230	36,061,104 2,964,603	39,019,969 2,958,864	41,972,979 2,953,011		47,860,969 2,940,949

Development/construction will occur in 2026
Tax revenues - 2 year lag (i.e. start in 2028)
DC revenues have only been applied to DC-related expenditures.
Operating Revenues and expenditures inflated at 2% per year.
DC Revenues inflated at 3% per year
Operating expenditures for infrastructure have been assumed four years after anticipated construction.



## Appendix B

Initial Phase 2 Report – Financial Analysis and Business Plan





## North Caledonia Employment Land Feasibility and Servicing Study

Haldimand County

Phase 2 Report – Financial Analysis and Business Plan

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### **List of Acronyms and Abbreviations**

cu.m Cubic metre

D.C. Development Charges

F.I.R. Financial Information Return

G.F.A. Gross Floor Area

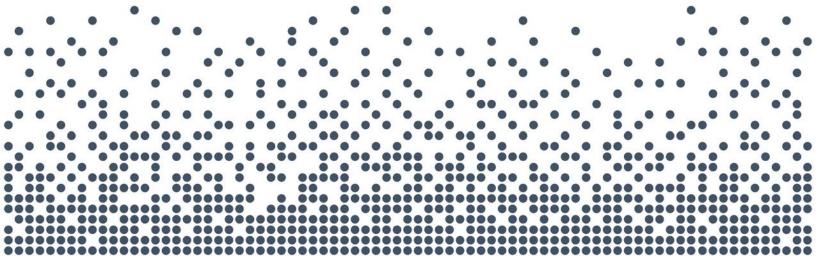
ha Hectare

km kilometre

L.S.P. Local Service Policy

R.O.I. Return on investment

sq.ft. Square foot



## **Executive Summary**



## **Executive Summary**

The Consultant Team of Watson & Associates Economists Ltd. (Watson), WSP Canada Group Limited (WSP) and GM BluePlan Engineering (GM BluePlan) was retained to prepare an Employment Lands Feasibility and Servicing Study to assist Haldimand County (the "County") in being well-positioned to accommodate a diverse range of employment growth over the coming decades.

This study is being prepared in three (3) phases:

- Phase 1: Location Analysis, Market Research and Analysis, and Functional Servicing Design;
- Phase 2: Financial Analysis and Business Plan; and
- 3. Phase 3: Property Administration and Management.

This report presents the analysis undertaken for Phase 2 of this study. Based on the findings of Phase 1, a detailed financial analysis and business plan has been undertaken to quantify the financial impact of developing the North Caledonia Employment Lands on the County. The infrastructure and costing identified in the Servicing Analysis undertaken by GM BluePlan in addition to the potential development in the Study Area was utilized to determine financial impacts.

#### **Growth Forecast**

The Study Area is located in north Caledonia, bounded by Greens Road to the south, Mines Road to the west, and Highway 6 to the east. The following table provides for a summary of the anticipated development of the Study Area, as identified in Phase 1 of this Study:



## Figure ES-1 Haldimand County Summary of Development of Study Area

Employment Type	Land Area (Gross hectares)	Jobs per Gross Hectare	Total Jobs	Floor Space per Worker (sq.ft.)	Gross Floor Area (sq.ft.)
Light Industrial	19	23.4	441	1,000	441,000
General Industrial	102	13.0	1,331	1,660	2,209,460
Total	121	14.6	1,772	1,500	2,650,460

#### **Operating Analysis**

Based on the potential new employment and non-residential growth, an operating expenditure and revenue analysis was undertaken. The existing operating costs and revenues were examined to determine how they are likely to be impacted by development to estimate the growth-related impacts. These forecasted operating impacts were subsequently examined in conjunction with the capital financing forecast to determine net impacts to the County.

As a result of the additional employment growth, the County would receive additional assessment arising from the development of non-residential buildings. The total non-residential assessment is anticipated to increase by \$151.89 million at buildout of the lands, based on the growth forecast presented above. These properties are expected to be taxed at the industrial tax rate, with a small proportion taxed at the commercial rate.

#### Capital Expenditures and Funding Sources

Based on the anticipated development of the Study Area, GM BluePlan has identified recommended site servicing and high-level cost estimates for the infrastructure required to accommodate a conceptual subdivision layout of the area.

There are significant capital costs associated with accommodating growth within the Study Area. Growth-related works which benefit a broader area, or a municipality as a whole, are generally funded by development charges (D.C.s), whereas works which benefit a single landowner/developing area (i.e. local service) are generally considered direct developer responsibility to construct and fund.



The County's local service policy (L.S.P.) sets out the general policy guidelines on D.C. versus local service funding for services related to a highway (roads), stormwater management, parkland development, and underground linear services (i.e. water and wastewater).

Based on the County's L.S.P., and given the Study Area will be a host for future industrial development, all external water and wastewater works required to service the Study Area are considered to be D.C. funded whereas internal water and wastewater works are considered direct developer responsibility and would need to be constructed/funded by the developer. In addition, all roads and stormwater related works are also considered direct developer responsibility.

The following table provides a summary of the total capital costs required to service this area, in addition to the D.C. and non-D.C. (i.e. benefit to existing development) related shares of the work:

Figure ES-2
Haldimand County
Capital Cost Funding Summary

Service	Total Capital Cost (2024 \$)	Total D.C. Related Cost	Total D.C. Share for Study Area	Benefit to Existing Development Cost	Local Service Costs
External Water Infrastructure Projects	\$10,981,500	\$10,981,500	\$6,932,569	\$0	\$0
Internal Water Infrastructure Projects	20,763,000	•	-	-	20,763,000
External Wastewater Infrastructure Projects	91,792,000	91,792,000	31,490,113	-	-
Internal Wastewater Infrastructure Projects	21,455,000	•	-	-	21,455,000
Internal Stormwater Infrastructure Projects	32,220,000	•		-	32,220,000
External Roads Infrastructure Projects	16,114,000		-	-	16,114,000
Internal Roads Infrastructure Projects	14,335,000	•		-	14,335,000
Sub-Total External Infrastructure Project Costs	\$118,887,500	\$102,773,500	\$38,422,682	\$0	\$16,114,000
Sub-Total Internal Infrastructure Project Costs	\$88,773,000	\$0	\$0	\$0	\$88,773,000
Total Infrastructure Project Costs	\$207,660,500	\$102,773,500	\$38,422,682	\$0	\$104,887,000

Further to the initial capital costs identified above, additional costs have been factored into the financial analysis to account for future replacement of the infrastructure. These are annual funds that are allocated to replace the infrastructure put in place at the end of its useful life, consistent with current policy and practice in the County. Given the large investment in infrastructure required to service this area, these annual lifecycle costs have a significant impact on the annual financial position identified herein.



#### **Business Case Scenario Analysis**

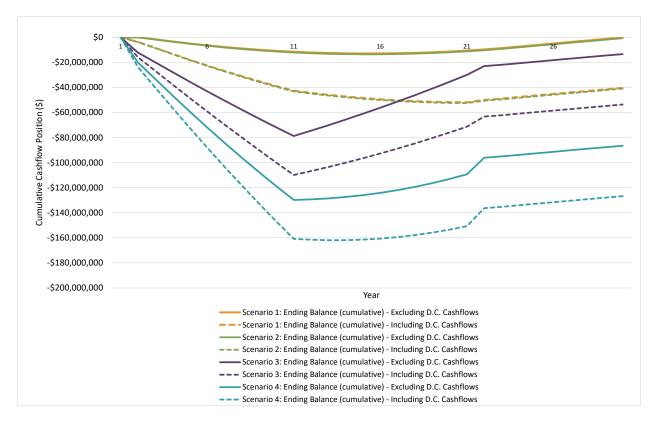
The financial analysis and business case explores four (4) scenarios related to the development of the North Caledonia Employment Lands:

- 1. The Study Area is privately developed and traditionally designed and operated;
- 2. The County invests in conceptual planning, then sells the plans to a developer;
- 3. The County acts as the land developer in partnership with the private sector; and
- 4. The County develops, acquires, services, and sells land parcels.

The financial analysis is provided on an annual basis for each of the four (4) scenarios to provide a cashflow which summarizes the cumulative and net annual impacts. The following graph provides a comparison of the four (4) scenarios with respect to the cashflow position over a 30-year horizon (assuming development occurs over 20-years) both with and without D.C.-related cashflows (i.e., D.C. expenditures and revenues):



Figure ES-3 Haldimand County Comparison of Cashflow Scenarios



When D.C. cashflows are included in the analysis<sup>1</sup>, none of the four (4) scenarios provide a positive net annual impact over the 30-year time horizon. A separate analysis was undertaken to understand the net financial impacts excluding D.C. cashflows, given that this will provide a better understanding of the net impacts to existing taxpayers/ratepayers.

Based on the above graph, all four scenarios provide for a negative cashflow position by the end of the 30 years with the exclusion of D.C. cashflows. Scenarios 1 and 2 do not provide for positive cashflow by year 30, however they are close to the breakeven point given tax revenues exceed annual lifecycle replacement costs by year 15. Scenario 3

<sup>&</sup>lt;sup>1</sup> This study reviewed the analysis both including and excluding D.C. cashflows. D.C. cashflows include the inflows (i.e. D.C. revenues received from the development of new buildings) and outflows (i.e. D.C.-funded capital expenditures). Given that these expenditures do not directly impact taxes/rates, the analysis was undertaken both with and without these cashflows to better understand the impact to the County.



provides for a larger negative cashflow position given the investments required in internal infrastructure. Scenario 4 provide for the largest negative cashflow position over the forecast, given the significant infrastructure and land investments required by the County.

In order to evaluate the profitability of the investment into these employment lands from a business case lens, it is important to look at the return on investment (R.O.I.) from the County's perspective. By year 30, none of the four scenarios provide for a positive R.O.I. given the negative cashflow.

Figure ES-4
Haldimand County
Summary of Return on Investment – Excluding D.C. Cashflows

Summary of Return on Investment Excluding D.C. Cashflows	Scenario 1 - Privately Planned and Developed		Scenario 2 - County Planned with Private Development		Scenario 3 - County Develops with Private Partnership		Scenario 4 - County Plans, Develops, and Sells Land	
Initial Investment	Initial Investment -		500,000		104,887,000		202,559,075	
Breakeven Year	N/A		N/A		N/A		N/A	
Year	Net Cumulative R.O.I. Position		Net Cumulative Position	R.O.I.	Net Cumulative Position	R.O.I.	Net Cumulative Position	R.O.I.
Year 10	(9,041,185) n/a		(9,505,424)	-1901%	(60,162,186)	-57%	(99,466,038)	-49%
Year 20	(7,792,237)	n/a	(8,215,391)	-1643%	(24,387,425)	-23%	(77,607,080)	-38%
Year 30	(51,133)	n/a	(398,266)	-80%	(7,532,511)	-7%	(48,714,034)	-24%

Note: although there is no initial investment in non-growth-related capital required by the County for scenario 1, once infrastructure is installed, costs would be incurred related to ongoing lifecycle cost allocations as well as additional operating costs. Given there is no initial investment for this scenario, the return on investment is not applicable here.

A sensitivity analysis<sup>1</sup> was undertaken to analyze the impacts of a 10-year development timeframe. The R.O.I. table below indicates that with the exclusion of D.C.-related cashflows, scenarios 1, 2, and 3 provide for a positive cashflow by the end of the forecast, with the breakeven point occurring in year 18, whereas scenario 3 reaches the breakeven point by year 27. The positive cashflow is provided due to the acceleration of the buildout of the lands and full tax revenues from development are provided earlier

<sup>&</sup>lt;sup>1</sup> A sensitivity analysis is a financial modeling tool to analyze how an independent variable would affect a specific dependent variable. For this analysis, the development timeframe (i.e. the independent variable), was adjusted from 20 to 10 years to determine the impact on cashflows (i.e. the dependent variable).



in the forecast. Scenario 4 does not reach a positive cashflow position given the investment required for land and internal infrastructure.

## Figure ES-5 Haldimand County Summary of Return on Investment – Excluding D.C. Cashflows 10-year Development Timeframe

Summary of Return on Investment Excluding D.C. Cashflows	Scenario 1 - Privately Planned and Developed		Scenario 2 - County Planned with Private Development		Scenario 3 - County Develops with Private Partnership		Scenario 4 - County Plans, Develops, and Sells Land	
Initial Investment	Initial Investment -		500,000		104,887,000		202,559,075	
Breakeven Year	Year 18		Year 18		Year 27		N/A	
Year	Net Cumulative Position	R.O.I.	Net Cumulative Position	R.O.I.	Net Cumulative Position	R.O.I.	Net Cumulative Position	R.O.I.
Year 10	(6,522,554)	n/a	(6,986,793)	-1397%	(16,746,754)	-16%	(36,170,042)	-18%
Year 20	2,756,807	n/a	2,333,654	467%	(5,450,975)	-5%	(53,741,551)	-27%
Year 30	9,745,575	n/a	9,398,442	1880%	2,264,197	2%	(50,344,451)	-25%

Note: although there is no initial investment in non-growth-related capital required by the County for scenario 1, once infrastructure is installed, costs would be incurred related to ongoing lifecycle cost allocations as well as additional operating costs. Given there is no initial investment for this scenario, the return on investment is not applicable here.

#### **Debt Capacity Considerations**

The significant investment in capital infrastructure in this area requires debt financing under all four (4) scenarios. The following table provides a summary of the total debt requirements, by scenario:

Figure ES-6
Haldimand County
Summary of Debt Requirements, by Scenario

	Debt Requirements								
Scenario	D.C.	Non-D.C.	Local Service	Land	Total Debt Requirements				
Scenario 1	38,422,682	-	-	-	38,422,682				
Scenario 2	38,422,682	500,000	-	-	38,922,682				
Scenario 3	38,422,682	-	104,887,000	1	143,309,682				
Scenario 4	38,422,682	500,000	104,887,000	97,172,075	240,981,757				



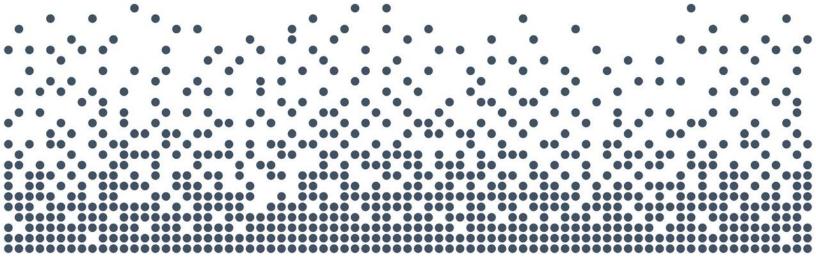
The Ministry of Municipal Affairs regulates the level of debt incurred by Ontario municipalities, through its powers established under the *Municipal Act*. Ontario Regulation 403/02 provides the current rules respecting municipal debt and financial obligations. Through the rules established under these regulations, a municipality's debt capacity is capped at a level where no more than 25% of the municipality's own purpose revenue may be allotted for servicing the debt (i.e. debt charges). However, the County has a more conservative debt capacity policy limit set at 10% of own purpose revenue. It is also important to consider the debt requirements/commitments for other projects required across the County. Through the County's annual budget process, it is anticipated that the County will exceed the 10% debt capacity limit in 2025, based on debt commitments for capital projects required outside of this Study Area. If the County were to proceed with investing in the development of these lands, the debt payments may exceed the provincially imposed 25% cap.

#### Conclusions

- Investing in industrial lands provides numerous benefits to municipalities including generating employment opportunities, supporting lower property taxes and lower overall operating costs, relative to residential development types.
- There are significant capital costs associated with servicing this Study Area. This
  will impose a financial burden on the County, given the requirement to cashflow
  any debt payments and the annual lifecycle costs of the internal infrastructure.
- Based on the 20-year development forecast, all four scenarios provide negative cashflows by the end of the 30-year time horizon. This is largely due to the lifecycle replacement costs exceeding tax revenues until year 15 of the forecast period. These negative cashflow positions will impose a financial burden on existing taxpayers/ratepayers as funding will be required to support growth in the Study Area.
- Based on the sensitivity analysis which assumes growth occurs over a 10-year timeframe, the development provides for positive cashflow (excluding D.C. cashflows) under Scenarios 1 and 2, by year 18 and by year 27 for Scenario 3.
   Due to the accelerated growth, the tax revenues exceed the lifecycle costs earlier in the forecast period.
- The debt requirements would impose a financial risk on the County and limit future financial flexibility, given that a large portion of the County's debt capacity would be allocated to the development of this Study Area. These debt needs



- would also require the County to revise its existing debt policies. Given other debt requirements, funding the development of this Study Area with debt may put the County over the Provincially mandated debt capacity.
- The analysis has assumed even annual development over 10- and 20-year time horizons. There is a further risk to the County if the Study Area is not built out over the assumed timeframes. The County would be responsible for cashflowing the works over a longer than anticipated timeframe which would impose a negative burden on the County's financial position.
- It is noted that many of the costs identified in the Servicing Plan for the Study Area are not included in the current D.C. background study. Further, the costs that are identified in the D.C. study are significantly lower than current cost estimates. It is important for the County to update its current by-law to incorporate these projects/cost updates to ensure a higher proportion of cost recovery from the development of this area.



## Report



## Chapter 1 Introduction



#### 1. Introduction

#### 1.1 Terms of Reference

The Consultant Team of Watson & Associates Economists Ltd. (Watson), WSP Canada Group Limited (WSP) and GM BluePlan Engineering (GM BluePlan) was retained to prepare an Employment Lands Feasibility and Servicing Study to assist Haldimand County (the "County") in being well-positioned to accommodate a diverse range of employment growth over the coming decades.

The County has identified a need for designated and serviced employment land to remain competitive in growing and changing markets and to accommodate forecasted employment growth within the County. The County has identified approximately 184 hectares of lands in North Caledonia (the "Study Area") as a location for future employment land uses.

To ensure continued growth and diversity of the County's Employment Areas, planning and marketing efforts must be geared toward both the broader strengths of its Employment Areas, as well as specific target sector investment attraction efforts. The County is forecast to experience significant population and employment growth to the year 2051. According to Watson's 2020 Growth Study Update, the County's reported 2021 population of 50,400 is expected to increase to 77,000 in 2051 with employment increasing from 19,205 to 29,000 during that same time horizon. The Growth Study also demonstrates that 50% of employment growth in the area is forecast to occur in Caledonia.

The key objectives of the North Caledonia Employment Lands Feasibility and Servicing Study are to continue to promote economic development within the County by ensuring there is an adequate supply of serviced and developable employment land to attract target employment sectors and businesses. This study has been undertaken to provide direction on the type of employment which should be attracted to the North Caledonia employment lands, the competitiveness of employment lands in the County compared to the surrounding regional area, as well as a plan for how these lands should be serviced and financed.



In accordance with this review, the study process is being undertaken in three phases as follows:

### Phase 1: Location Analysis, Market Research and Analysis, and Functional Servicing Design

This report was completed in May 2023 and provides the following components:

- A location analysis to determine the constraints on developable limits, specifically those related to physical limitations, in the North Caledonia employment lands Study Area;
- An economic base and labour force analysis to identify current gaps and opportunities within Haldimand County's current employment market;
- A target sector analysis to determine key future employment sectors which have potential for growth, particularly those which have synergies with existing employment clusters;
- A competitive analysis which examines Haldimand County's competitive position compared to the surrounding regional area, regarding diversity of existing developable employment lands and the financial competitiveness of these lands; and
- A functional servicing design which:
  - Provides recommendations on potential changes to O.P. designations and/or zoning bylaws, in accordance with the future vision for the North Caledonia employment lands; and
  - Based on the above recommendations, provides further expertise regarding planning controls, type and cost of servicing, and a conceptual design of the North Caledonia employment lands.

#### **Phase 2: Financial Analysis and Business Plan**

Based on the findings of Phase 1, a detailed financial analysis and business plan has been undertaken to quantify the financial impact on the County. The infrastructure and costing identified in the Servicing Analysis undertaken by GM BluePlan in addition to the potential development in the Study Area was utilized to determine financial impacts. The findings of this analysis are provided in this report.



#### **Phase 3: Property Administration and Management**

Following Council's direction on Phases 1 and 2, the Consultant Team will commence Phase 3 which involves recommendations regarding property administration and management marketing as well as an implementation plan.

#### 1.2 Benefits of Investing in Industrial Lands

Development typically accommodated on employment/industrial lands generates relatively strong economic multipliers (i.e. spin-off effects) that benefit the County and surrounding area directly and indirectly. In addition, industrial land development typically generates high-quality employment opportunities which can improve local socioeconomic conditions (i.e. live/work opportunities). Furthermore, achieving non-residential growth adds to the County's tax assessment base, which can help support lower property taxes and stronger municipal service levels. Industrial land development also tends to produce more favourable net fiscal benefits when compared to other types of development (e.g. residential and retail). Thus, a healthy balance between residential and non-residential development is considered an important policy objective for the County as a whole.

#### 1.3 Overview of Financial Evaluation

Figure 1-1 below provides a schematic overview of the financial analysis undertaken for this report. The following provides further description of the steps undertaken.

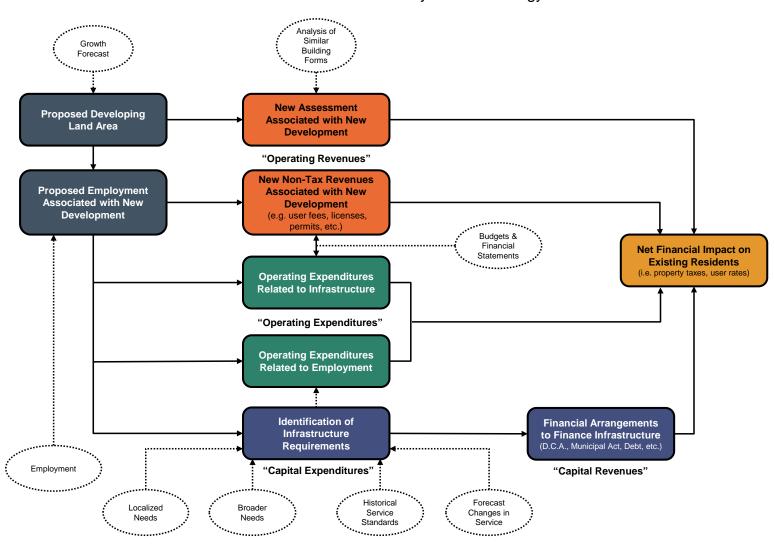
- Dark Blue Boxes denote the anticipated development within the Study Area.
   The lower box denotes the employment growth forecast for the Study Area that is detailed in Chapter 2.
- **Green Boxes** denote the additional operating expenditures anticipated over time. These costs have been assessed on two different bases: operating costs related to infrastructure and operating costs related to employment. The former identifies the specific operating costs anticipated to be incurred as additional infrastructure (e.g., roads, water distribution infrastructure, wastewater collection infrastructure etc.) is constructed. The latter identifies program expenditures which are linked to employment growth. These impacts are discussed in Chapter 3.



- Dark Orange Boxes denote anticipated operating revenues commensurate with growth. The upper box identifies the additional assessment anticipated as nonresidential building activity occurs over the forecast period. This new assessment gives rise to additional property tax revenue. The lower box identifies non-tax revenues such as user fees, permits, licenses, etc., which are anticipated to grow in concert with employment growth. The non-tax revenues and assessment growth are discussed in Chapter 3.
- Purple Boxes denote the capital infrastructure needs and associated financing
  to service the anticipated development. The capital requirements to support the
  servicing needs (water, wastewater, stormwater, and roads) were developed by
  GM BluePlan through the Site Servicing Analysis included in the Phase 1 report.
  The resultant capital needs and financing methods for funding the infrastructure
  are detailed in Chapter 4.
- **Light Orange/Yellow Box** denotes the overall financial impact on property taxes and rates over the forecast period. This impact is discussed further in Chapter 5 as part of the business case analysis.



Figure 1-1
Haldimand County
Overview of Financial Analysis Methodology





#### 1.4 Report Outline

The report is structured to discuss each component of the financial analysis methodology noted above.

The remaining chapters of the report are provided as follows:

- Chapter 2 provides a summary of the anticipated growth in employment, nonresidential floor area, and assessment over the buildout of the Study Area.
- Chapter 3 provides an analysis of operating impacts resulting from the anticipated growth.
- Chapter 4 discusses the capital needs and anticipated funding methods.
- Chapter 5 combines the assessment growth, operating, and capital impacts to provide an overall financial impact from a cashflow perspective. This analysis has been undertaken to review the financial feasibility of four different development scenarios. These scenarios have been reviewed utilizing a tenand twenty-year development timeframe.
- Chapter 6 concludes the analysis and provides observations.

The report chapters are supported by appendices which provide additional detail to support the calculations and analysis.



# Chapter 2 Summary of Potential Development



#### Summary of Potential Development

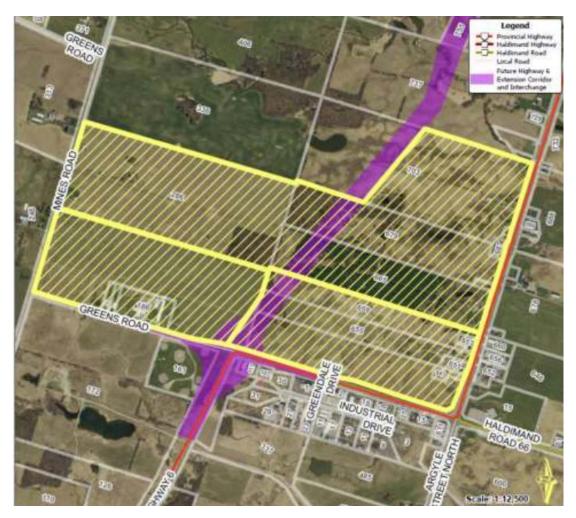
#### 2.1 Overview of Subject Lands

The subject lands are located in north Caledonia, bounded by Greens Road to the south, Mines Road to the west, and Highway 6 to the east (see Figure 2-1). The site has a net developable area of 99.3 ha (245 acres). The predominant use of the Subject Lands is agriculture, with some light industrial and agriculture-related employment uses to the south and east fronting onto, and with access from, Greens Road and Highway 6. South of Greens Road is an existing unserviced industrial area that is designated by the County's Official Plan as Urban Business Park with businesses that appear targeted to logistics and construction. The Ministry of Transportation Ontario has identified a protected corridor to facilitate a long-term plan to construct a Highway 6 bypass that transects the Subject Lands, as shown on Figure 2-1.

The Subject Lands are strategically located, being in proximity to major transportation corridors including Highway 6, Highway 403, and the John C. Munro Hamilton International Airport. The Hamilton International Airport is the third largest cargo airport in Canada and the largest overnight express cargo airport, giving any future employment uses within the Subject Lands direct access to a much broader market. This strategic location gives it access to the regional markets of Hamilton, Brantford, Toronto, and Niagara, and international markets via the John C. Munro Airport and the land border with the United States of America via Niagara Region.



Figure 2-1 Haldimand County North Caledonia Subject Lands



#### 2.2 Future Growth in Study Area

The total area of the lands is approximately 184 hectares. GM BluePlan undertook an analysis to establish the total serviceable land (i.e. net developable area). Various undevelopable areas such as natural features, stormwater ponds, roads, woodlots, etc. were identified, which provides for a net developable area of 99.3 hectares.

An employment density was defined for the Study Area, based on the employment land needs identified in the Phase 1 report. Based on the table below and assumed



employment densities for light industrial and general industrial<sup>1</sup>, the Study Area can accommodate 441 light industrial jobs (e.g., packaging, distribution facilities, certain types of manufacturing, etc.) and 1,331 general industrial jobs (e.g., machinery, chemicals, etc.) for a total estimated 1,772 jobs. Based on an assumed floor space per worker assumption of 1,500 sq.ft. per employee, the development of these lands would generate approximately 2,650,460 sq.ft. in non-residential gross floor area (G.F.A.).

Figure 2-2
Haldimand County
Summary of Development of Study Area

Employment Type	Land Area (Gross hectares)	Jobs per Gross Hectare	Total Jobs	Floor Space per Worker (sq.ft.)	Gross Floor Area (sq.ft.)
Light Industrial	19	23.4	441	1,000	441,000
General Industrial	102	13.0	1,331	1,660	2,209,460
Total	121	14.6	1,772	1,500	2,650,460

#### 2.3 Assessment Assumptions

Assessment (normally referred to as Current Value Assessment) is the basis on which property taxes are calculated and paid to municipal government. As the Study Area develops, the County would receive additional assessment arising from the completion of the non-residential building construction, which will in turn increase the municipality's ability to raise tax revenue. Figure 2-3 provides for the estimated new assessment to be generated from the development of the Study Area, based on the development forecast provided in Figure 2-2.

The assessment assumptions for non-residential development was based on a survey of business parks in other communities, believed to be of comparable type to the anticipated development in the North Caledonia Study Area. Industrial areas/properties within Caledonia, Cainsville (Brant County) and the City of Guelph were surveyed. Based on an analysis of these industrial areas, the average assessment was estimated

<sup>&</sup>lt;sup>1</sup> Note: this employment density was applied to a gross available area of 121 hectares, which includes the net developable area, stormwater management ponds, and roads. This would exclude areas such as natural features and natural environment setbacks.



at approximately \$57/sq.ft. of gross floor area of buildings. This average assessment value has been used to estimate the anticipated assessment in for the Study Area.

## Figure 2-3 Haldimand County Basis of Assessment Estimates

Type Description	Average Assessment per Sq.ft.	Est. GFA	Assessed Value
Light Industrial	\$57	441,000	\$25,289,287
General Industrial	\$57	2,209,460	\$126,702,194
Total		2,650,460	\$151,991,481



## Chapter 3 Operating Analysis



#### 3. Operating Analysis

#### 3.1 Introduction

This chapter examines the operating impacts with respect to property tax revenues, operating expenditures, and non-tax revenues generated from the development of the Study Area. The detailed calculations are provided in Appendix A, however the overall methodology is described below.

#### 3.2 Operating Expenditure Implications

Figure A-1 summarizes the County's "Revenue Fund" or "Operating Fund" transactions for 2021 (based on the County's Financial Information Return (F.I.R.)). This represents a simple "model" of the County's financial position for the operating fund and provides the structure of the financial impact analysis contained in this chapter.

Figure A-2 modifies the operating expenditures shown in Figure A-1 by netting "Interest on Long Term Debt", "External Transfers", and "Amortization" from the total. The debt charges are for "sunk" investments, unaffected by growth. The external transfers can vary significantly from year to year and relate largely to capital expenditures and general reserves, which are addressed separately in this analysis. Further, amortization is an accounting allocation which seeks to capture annual replacement costs. As this is based on historical costs, a separate analysis of lifecycle expenditures (based on future replacement cost) is conducted later in this report. It is therefore appropriate to remove these three classes of expenditures from the spending base, before determining incremental loss and/or average operating fund spending levels per employee.

Figure A-3a allocates the County's existing operating expenditure components between the needs of residential development and non-residential development (i.e. industrial, commercial, and institutional), based on differences in the amount of such development and the need for particular types of services in each case. The expenditure allocation is then presented on a per capita/per employee basis. The expenditures are divided between residential and non-residential development based on varying proportions for each service. Most expenditures have been shared on a population-to-employment basis. As the 2021 total population is 48,224 and the 2021 employment is 13,839, these costs are allocated 78% to population and 22% to employment. For solid waste



collection, waste diversion, public health, cemeteries, child care, parks and recreation, libraries, museums and cultural services, a minor allocation has been provided to non-residential development which acknowledges some usage by the non-residential sector. Services such as general assistance, assistance to aged persons and social housing are entirely allocated to the residential sector. Roads, water, and wastewater services expenditures (Figure A-3b) have been allocated based on the existing infrastructure; Linear infrastructure (roads, watermains and sanitary sewers) operating expenditures are based on a per km operating cost related to the existing linear infrastructure in the County, whereas water and wastewater treatment operating costs are based on a per cu.m. cost.

Figure A-4a assesses each of the County's key service components in relation to the proposed development to determine how the operating costs are likely to be impacted, based on the characteristics and location of the subject development. Roads, water, and wastewater services expenditures have been calculated based on the new infrastructure built as a result of the development of the Study Area. Linear infrastructure (roads, watermains and sanitary sewers) operating expenditures are based on a per km operating cost related to the new linear infrastructure and water and wastewater treatment operating costs are based on the incremental cubic metres of water and wastewater to be treated as a result of development. These expenditures are provided in Figure A-4b

The "Growth Share %" column denotes a particular percentage factor in each case. This factor reflects any variation from the current overall average expenditure level, which is called for in dealing with a development increment. For instance, if the average existing expenditure for a service is \$100 per employee, economies of scale or other efficiencies, may indicate that service costs for the growth increment alone are likely to be lower than average, say 90% (or \$90 per capita), while being unaltered for the base population. This determination has been based on analysis of the County's budget, measurement of current levels of service, other relevant studies prepared as part of this process, facility configuration, practice elsewhere, and the consultant's experience. The provisions made are considered to be adequate with respect to the proposed development and maintain the existing level of service capacity in the County.

These percentage attributions are used to compute average incremental operating costs on a per employee basis for non-residential (a per capita cost is not shown as the



proposed development only relates to non-residential growth), which is reflected in the "Net Expenditure" column. The per employee expenditure averages are utilized, subsequently, to estimate the incremental expenditure requirement generated by growth.

Based on the analysis provided in Figures A-4a and A-4b, the forecast of annual expenditures has been undertaken. Figures A-5a and A-5b provide for the per capita amount multiplied by the assumed growth take-up/infrastructure constructed. The total line provides for the product of this calculation.

It is noted that this analysis was undertaken utilizing the 2021 F.I.R., and as such, all numbers in this analysis have been provided in 2021 dollars. For consistency in the cashflow analysis discussed in later sections of this report, the results of the operating expenditure and non-tax revenue analysis have been inflated from 2021 dollars to current dollars.

In summary, the total operating cost per capita (for non water, wastewater, and roads services) is \$740.30 per capita (\$583.05 per capita in 2021 dollars). For water, wastewater, and roads services, the cost per km and per cubic metre are as follows:

- Roadways and Winter Control \$9,031.45 per km (\$7,113.06 per km in 2021 dollars)
- Water Distribution/Transmission \$5,237.88 per km (\$4,125.29 per km in 2021 dollars)
- Wastewater Collection/Conveyance- \$3,773.38 per km (\$2,971 per km in 2021 dollars)
- Water Treatment \$1.73 per cu.m (\$1.36 per cu.m in 2021 dollars)
- Wastewater Treatment & Disposal \$0.96 per cu.m (\$0.75 per cu.m in 2021 dollars)

When applied to the anticipated employment and infrastructure required, the incremental expenditure anticipated at buildout of the Study Area is \$1.40 million (2024 dollars), as provided in the following table:



## Figure 3-1 Haldimand County Summary of Operating Expenditures (at Buildout) – 2024\$

Operating Expenditure Category	Increment Measure	Cost per Increment	Incremental Employment/ Infrastructure	Incremental Expenditures (2024 \$)
Employment-Driven Operating Costs	Employees	740	1,772	1,311,812
Roads Operating Costs	Kilometres of roads	9,031	4.32	39,016
Water Distribution/Transmission Operating Costs	Kilometres of watermains	5,238	5.12	26,792
Wastewater Collection/Conveyance Operating Costs	Kilometres of sanitary sewers	3,773	5.31	20,018
Water Treatment Operating Costs	Cu.m of water treated	1.73	1,020	1,767
Wastewater Treatment Operating Costs	Cu.m of wastewater treated	0.96	600	573
Total				1,399,977

#### 3.3 Operating Revenue Implications

Figure A-6 sets out the 2021 non-tax revenues for the County as outlined in Figure A-1. The figure distinguishes the revenues by service specific revenues and those being of a general nature. The user fees, service charges and conditional grant revenue from this table (summarized in the second last column) is pulled forward to Table A-7 to further assess non-tax revenues that future growth may affect.

Figures A-7a and A-7b assess the 2021 non-tax revenues as to those which may be directly affected by growth. Generally, any grants and subsidies have been eliminated and the residual amounts are assessed as to their applicability to growth. The costs are then allocated between the residential population and employees to provide a per capita/per employee revenue.

Figures A-8a and A-8b assesses the estimated proportionate share of growth in a similar manner as provided in Figure A-5. Figure A-9a and A-9b then determine the forecast non-tax revenue to be generated annually based on the growth to buildout provided in Figure 2-1.

In summary, the total operating revenue per capita (for non water and wastewater services) is \$280.43 per capita (\$220.86 per capita in 2021 dollars). For water and wastewater the revenue per capita is \$372.87 per capita (\$293.67 in 2021 dollars)

When applied to the anticipated employment, the incremental revenues anticipated at buildout of the Study Area is \$1.16 million (2024 dollars), as provided in the following table:



## Figure 3-1 Haldimand County Summary of Operating Revenues (at Buildout) – 2024\$

Operating Revenue Category	Increment Measure	Revenue per Employee	Incremental Employment	Incremental Revenues (2024 \$)
Tax-Supported Services	Employees	280.43	1,772	496,915
Water and Wastewater Services	Employees	372.87	1,772.00	660,730
Total				1,157,645

#### 3.4 Taxation Revenue

Based on the estimated assessment value of the proposed development provided in Figure 2-2, a forecast of the taxation revenue to be generated at buildout was undertaken using the 2023 tax rates. Figure 3-1 provides for this calculation to buildout. In undertaking this calculation, it is recognized that the study area does currently pay property taxes to the County estimated at \$96,000. This amount has been netted from the estimated taxation revenue estimate to establish the additional taxation revenue increment. Note: based on a review of similar industrial parks, it is assumed that 17% of the assessment generated in the Study Area would be assessed at a commercial tax rate.



#### Figure 3-1 Haldimand County Property Tax Revenue – at Buildout (Based on 2023 Tax Rates)

Property Tax Classes		Municipal Property Tax Revenue
1. Property Tax		
Non-residential Growth		
Commercial Assessment (CT)		25,838,552
Property Tax Revenue	1.8790%	485,512
Total Commercial Property Tax Revenue		485,512
Non-residential Growth		
Industrial Assessment (IT)		126, 152, 929
Property Tax Revenue	2.5833%	3,258,881
Total Industrial Property Tax Revenue		3,258,881
Less Existing Property Tax Revenue		96,531
TOTAL PROPERTY TAX REVENUE		3,647,862



# Chapter 4 Capital Expenditures and Funding Sources



#### 4. Capital Expenditures and Funding Sources

It is noted that the Study Area is currently primarily agricultural with some commercial and residential uses along the boundary roads of Highway 6, Greens Road, and Mines Road. The Study Area does not have access to municipal servicing and the existing properties are serviced by private (on-site) systems.

Based on the anticipated development of the Study Area, GM BluePlan has identified recommended site servicing and high-level cost estimates for the infrastructure required for the conceptual subdivision layout of the area.

#### 4.1 Summary of Infrastructure Costs

Infrastructure needs have been identified for roads, water, wastewater, and stormwater services. Figure 4-1 provides a summary of the capital costing based on the servicing needs and infrastructure costs identified by GM BluePlan in the Phase 1 report. Note: costs identified by GM BluePlan were provided in 2020 dollars, however, for the purposes of the financial analysis herein, costs have been inflated to 2024 dollars using a factor of 39% (based on Statistics Canada Non-Residential Building Construction Price Index).

Figure 4-1 Haldimand County Capital Needs Summary

Service	Total Replacement Cost (2020 \$)	Total Capital Cost (2024 \$)
External Water Infrastructure Projects	\$7,900,000	\$10,981,500
Internal Water Infrastructure Projects	14,925,000	20,763,000
External Wastewater Infrastructure Projects	65,970,000	91,792,000
Internal Wastewater Infrastructure Projects	15,420,000	21,455,000
Internal Stormwater Infrastructure Projects	23,155,000	32,220,000
External Roads Infrastructure Projects	11,580,000	16,114,000
Internal Roads Infrastructure Projects	10,300,000	14,335,000
Sub-Total External Infrastructure Project Costs	\$85,450,000	\$118,887,500
Sub-Total Internal Infrastructure Project Costs	\$63,800,000	\$88,773,000
Total Infrastructure Project Costs	\$149,250,000	\$207,660,500



Based on the above, the capital costs associated with servicing the Study Area are approximately \$207.66 million in 2024 dollars. A detailed listing of the capital projects for each service is provided in Appendix B.

#### 4.2 Growth-Related Capital Funding Sources

Based on the above, there are significant capital costs associated with accommodating growth within the Study Area. Growth-related works which benefit a broader area, or a municipality as a whole are generally funded by development charges (D.C.s), whereas works which benefit a single landowner/developing area (i.e. local service) are generally considered direct developer responsibility to construct and fund.

The County's local service policy (L.S.P.) sets out the general policy guidelines on D.C. versus local service funding for services related to a highway (roads), stormwater management, parkland development, and underground linear services (i.e. water and wastewater).

The following sections provide a summary of whether the capital works identified would be funded through D.C.s or would be a direct developer responsibility under the L.S.P.

#### 4.2.1 Water and Wastewater Services

The County's L.S.P. (see Appendix E of County of Haldimand 2018 Development Charges Background Study, dated May 2, 2019) states the following with respect to water infrastructure:

"Water treatment, storage facilities, re-chlorination/sampling stations and upstream capacity improvements associated with one or more basin areas servicing primarily industrial lands shall be included in the D.C."

"external underground services involving trunk infrastructure and pipes shall be paid through development charges"

"providing all underground services internal to the development shall be direct developer responsibilities as a local service"

The following provides the wording in the L.S.P. related to wastewater infrastructure:



"wastewater treatment plants, biosolids, sanitary pumping stations, and downstream capacity improvements servicing one or more basin areas servicing primarily industrial lands shall be included in the D.C."

"external underground services involving trunk infrastructure and pipes shall be paid through development charges"

"providing all underground services internal to the development shall be direct developer responsibilities as a local service"

Based on the above, all external works related to water and wastewater that are required to service the Study Area are anticipated to be funded through D.C.s. whereas the internal works are to be constructed and funded by the developing landowner.

#### 4.2.2 Roads

Under the County's L.S.P., all roads and related infrastructure (e.g. intersection improvements, streetlights, sidewalks, etc.), that are needed to support a specific development area or to link the area to the existing network are considered to be direct developer responsibility. In other words, works that are unrelated to a specific development would be funded through D.C.s, whereas if the works are required to support a specific development area, these would be direct developer responsibility.

Since the works identified in GM BluePlan's report (both internal and external) are all required to support this development area, the projects are considered developer responsibility and would not be funded through D.C.s.

#### 4.2.3 Stormwater

All stormwater works, whether internal to the development or external, that are required for a specific development area are considered to be a direct developer responsibility.

Based on the County's L.S.P. and given that the stormwater projects are all considered internal works, this infrastructure would be considered a direct developer responsibility and would need to be installed and funded by the developing landowner.



#### 4.3 Summary of Capital Funding

Based on the discussion above, a summary of the works and the associated funding source is provided in Figure 4-2 below. Of the water and wastewater projects that are to be D.C. funded, the following should be noted:

Certain external works that benefit the study area, also benefit other areas
across the County (e.g. new wastewater treatment plant). Only the costs of
these projects related to the study area have been incorporated into the cashflow
analysis identified in later sections of this report. These amounts are identified in
the table below under the "Total D.C. Share for Study Area" column.

Figure 4-2
Haldimand County
Capital Cost Funding Summary

Service	Total Capital Cost (2024 \$)	Total D.C. Related Cost	Total D.C. Share for Study Area	Benefit to Existing Development Cost	Local Service Costs
External Water Infrastructure Projects	\$10,981,500	\$10,981,500	\$6,932,569	\$0	\$0
Internal Water Infrastructure Projects	20,763,000	-	-	-	20,763,000
External Wastewater Infrastructure Projects	91,792,000	91,792,000	31,490,113	-	•
Internal Wastewater Infrastructure Projects	21,455,000	-	-	-	21,455,000
Internal Stormwater Infrastructure Projects	32,220,000	-	-	-	32,220,000
External Roads Infrastructure Projects	16,114,000	-	-	-	16,114,000
Internal Roads Infrastructure Projects	14,335,000		-	-	14,335,000
Sub-Total External Infrastructure Project Costs	\$118,887,500	\$102,773,500	\$38,422,682	\$0	\$16,114,000
Sub-Total Internal Infrastructure Project Costs	\$88,773,000	\$0	\$0	\$0	\$88,773,000
Total Infrastructure Project Costs	\$207,660,500	\$102,773,500	\$38,422,682	\$0	\$104,887,000

The details for the above table are provided in Appendix B.

#### 4.4 Lifecycle Replacement Costs

As per County policy, when new infrastructure is constructed/installed, the County begins to allocate funds, on an annual basis, to replace the infrastructure at the end of its useful life. These annual contributions may be referred to as lifecycle costs. Given the level of investment in infrastructure required to service this Study Area, the County will need to ensure that lifecycle costs for new assets are addressed and incorporated into the budget process.

This analysis identifies a need to increase transfers to capital replacement reserves for new assets once they are constructed and assumed by the County. Lifecycle needs for growth-related assets have been calculated based on average useful lives of similar



existing assets. Transfers to reserves are then anticipated to be a tax levy/rate requirement in the years after the new assets are in service.

There are two types of lifecycle costs that have been considered as part of this analysis:

- Direct Lifecycle Costs: this relates to capital infrastructure, both D.C.-related and local service related, that is in place to directly service this development.
   Given that these costs are a direct result of the development of the Study Area, the full annual lifecycle replacement cost for this infrastructure has been factored into the analysis.
- Indirect Lifecycle Costs: this relates to works that have been identified in the County's D.C. study. This also includes broader works that have been identified in this analysis as required for this development, however, this infrastructure also benefit areas outside of the Study Area, and are not included in the County's current D.C. study. The indirect lifecycle costs included in this analysis are based on the proportionate share of growth within the Study Area, relative to the growth identified in the County's D.C. Background Study.

Figure 4-3 provides a summary of the annual lifecycle costs, by service once all of the infrastructure has been installed and assumed by the County. These costs have been factored into the analysis in considering the financial feasibility of developing the Study Area.



Figure 4-3
Haldimand County
Summary of Annual Direct Lifecycle Costs

Service	Annualized Direct Lifecycle Cost (2024 \$)
Roads	\$421,100
Stormwater	141,400
Wastewater	539,800
Water	522,500
Total Annual Lifecycle Costs	\$1,624,800

The total annual indirect lifecycle costs at buildout are \$396,300. Note, since these costs are based on a per-employee value, the full annual costs related to this infrastructure have been identified at buildout of the Study Area.

Figure 4-4 provides for the annual total lifecycle costs at buildout. These costs have been factored into the financial analysis presented in the next chapter.

Figure 4-4
Haldimand County
Summary of Annual Total Lifecycle Costs at Buildout

Lifecycle Cost	Annualized Cost
Direct Lifecycle Costs	\$1,624,800
Indirect Lifecycle Costs	\$396,300
Total	\$2,021,100



## Chapter 5 Business Case Analysis



#### 5. Business Case Analysis

Based on the capital and operating budget implications analyzed in earlier chapters of this report, Watson undertook a review of four (4) potential development scenarios of the Study Area as follows:

- 1. The Study Area is privately developed and traditionally designed and operated;
- 2. The County invests in conceptual planning, then sells the plans to a developer;
- 3. The County acts as the land developer in partnership with the private sector; and
- The County develops, acquires, services, and sells land parcels.

Utilizing the operating and capital analysis discussed in Sections 3 and 4, these four (4) scenarios were analyzed on an annual basis. A cashflow analysis was undertaken to estimate the cumulative and net annual impacts.

Detailed assumptions for this business case were developed by Watson and reviewed with staff prior to finalizing the various scenarios. These assumptions are outlined in Appendix D. The scenarios presented below assume buildout of the Study Area will occur equally over a 20-year period. A sensitivity analysis was undertaken to analyse the cashflow with the assumption that the lands will buildout over 10-years. This is provided at the end of this section.

The cashflow analysis is calculated as follows:

Beginning balance in each year

- Less: Expenditures
  - Capital (D.C., non-D.C., and local service works)
  - Annual lifecycle expenditures
  - Purchase of land (if applicable)
  - Operating related (F.I.R. operating expenditures and debenture payments)
- Plus: Revenues
  - D.C. revenues
  - Non-tax operating revenues
  - Property taxes



Sale of land (if applicable)

#### Equals the net cashflow

As part of this analysis, a separate cashflow analysis was undertaken to understand the financial impacts with the exclusion of D.C.-related cashflows. Given that the costs to be funded by D.C.s (i.e. growth-related capital costs) are not borne by existing taxpayers/ratepayers, this separate analysis was undertaken to exclude these costs to understand whether the net financial impacts on the County are positive or negative.

The cashflow analysis excluding D.C. cashflows is calculated as follows:

Beginning balance in each year

- Less: Expenditures
  - Capital (non-D.C. and local service works)
  - Annual lifecycle expenditures
  - Purchase of land (if applicable)
  - Operating related (F.I.R. operating expenditures and non-D.C.related debenture payments)
- o Plus: Revenues
  - Non-tax operating revenues
  - Property taxes
  - Sale of land

Equals the net cashflow

Although D.C.-related works are not directly funded by the County, deficits in D.C. funding would need to be cash-flowed by the County either through other internal sources or through debt financing, which may have impacts on debt capacity. The impacts of debt financing are discussed later in this section.

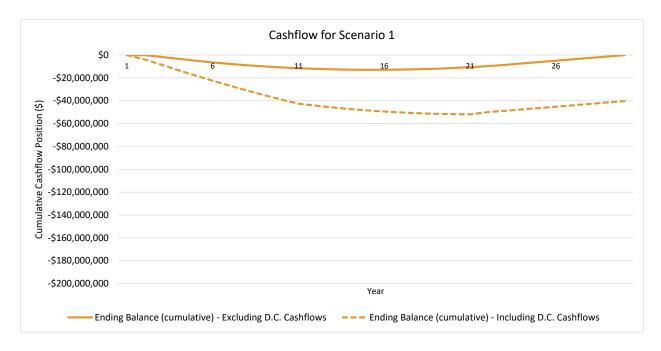
## 5.1 Scenario 1: Employment Lands are Privately Developed and Traditionally Designed and Operated

Scenario 1 assumes that the Study Area is privately developed and traditionally designed and operated. This scenario assumes developers will pay D.C.s applicable to their development and install local infrastructure, based on the requirements of the local service policy. Based on the assumptions outlined in Appendix D, a cashflow analysis



was undertaken to determine the net fiscal impacts of the development. The detailed cashflow analysis is provided in Appendix C and summarized in the graph below. The graph provides for the cumulative cashflow position over the 30-year period for the scenario including D.C. cashflows (dashed) and the scenario excluding D.C. cashflows (solid). Given the significant D.C.-related capital investment in this area, the County would not realize a net positive impact over the 30-year horizon analyzed. This is due to the significant costs related to the growth-related infrastructure as the D.C. revenues generated from this area are not sufficient to recover the full costs. When considering only the cashflows excluding D.C.s, the development of the Study Area still provides a negative impact to the County, however, the cashflow position is approaching the breakeven point at the end of the 30-year time horizon. Although there is no initial investment by the County in Scenario 1, given that the infrastructure is either paid for through D.C.s or installed by a private developer, the annual lifecycle replacement costs of the internal infrastructure are higher than the anticipated annual tax revenue until year 15. This is resulting in a negative cashflow position over the forecast period.

Figure 5-1
Haldimand County
Cashflow for Scenario 1

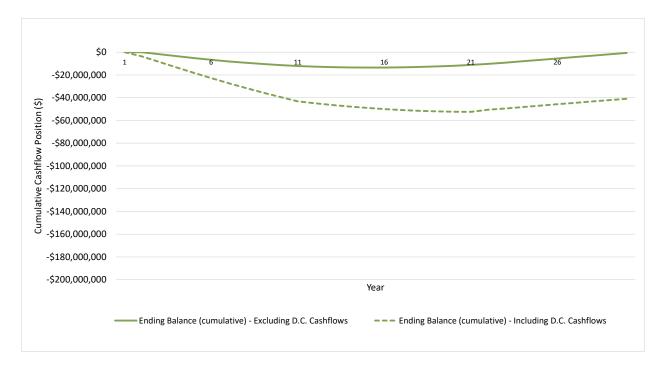




## 5.2 Scenario 2: County Invests in Conceptual Planning and Sells to Developer

Under Scenario 2, it is assumed that the County would invest in the conceptual planning of the study area and subsequently sell these plans to a developer. Based on discussions with staff, it is assumed that these planning studies would cost approximately \$500,000. This additional cost has been factored into the cashflow scenario graphs presented below. Similar to the discussion provided above for Scenario 1, the graph below provides for the net cashflow position including D.C. cashflows (i.e. D.C. revenues and D.C.-related expenditures required to service the Study Area) and excluding D.C. cashflows:

Figure 5-2
Haldimand County
Cashflow for Scenario 2



Similar to Scenario 1, the development of the Study Area does not provide for a positive financial impact over the 30-year forecast period. It is noted that with the exclusion of D.C. cashflows, the cashflow position is close to the breakeven point at the end of the forecast period given that tax revenues exceed the lifecycle expenditures by year 15.



The cashflow impacts are similar to Scenario 1, as the only difference is the assumption of additional costs related to planning studies.

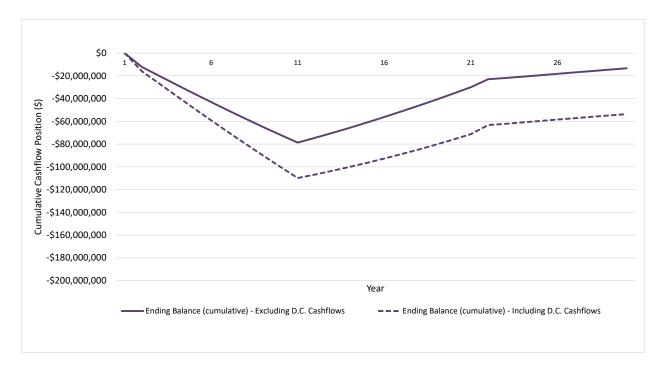
#### 5.3 Scenario 3: County Acts as the Land Developer in Partnership with the Private Sector

Under Scenario 3, it is assumed that the County will act as the land developer in partnership with the private sector. It is assumed that a private entity will purchase the lands and through agreement with the County, the County would service these lands. As a result, no land purchase is assumed in this scenario, however, the County would be responsible for the costs and installation of local service infrastructure. It is assumed that the County will recover these costs when the private developer sells the lands (through partnership agreement the land purchaser would pay back the County for development of the lands when the lands are sold).

Through an analysis of the capital works required, all water and wastewater works are considered to be D.C. funded, however, there are significant local service-related works for stormwater and roads. Under this scenario, these works are assumed to be debt financed by the County. When the private developer sells the land, the cost of the works, in addition to interest costs would be recouped by the County. Figure 5-3 below provides for the cashflow position, including and excluding D.C. cashflows. Similar to Scenarios 1 and 2, Scenario 3 does not provide for a positive cashflow position at the end of thirty years.



Figure 5-3
Haldimand County
Cashflow for Scenario 3



This scenario provides for a larger initial negative cashflow position given that the County is responsible for investing in the local service works. These costs get recouped from the private developer over the forecast period as development occurs so that by the end of the 30 years, the cashflow position is closer to the breakeven point. Similarly, the lifecycle expenditures exceed the tax revenues received from development until year 15 of the development timeframe.

### 5.4 Scenario 4: County Develops, Acquires, Services, Markets, and Sells the Employment Lands

Under this final development scenario, it is assumed that the County would act as the land developer and would purchase the land, develop, service, market, and subsequently sell the land parcels. This scenario requires the County to assume all development-related costs, including the D.C. component of the works.

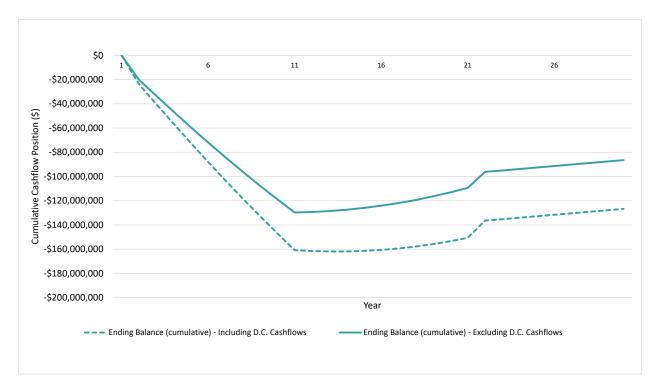
It is assumed that the County would purchase the unserviced land at an approximate value of \$325,000. Per acre. Once the County develops and services these lands, it is



assumed that the land would sell for \$650,000 per acre, based on market analysis of the North Caledonia Employment Area.

Figure 5-4 below provides for the cashflow position over 30 years. Similar to the prior scenarios, the cashflow remains in a negative position throughout the full forecast period, however, this scenario provides for the largest negative position, given the significant investment required in purchasing the land and installing the required infrastructure (both local services and D.C.-related).

Figure 5-4
Haldimand County
Cashflow for Scenario 4



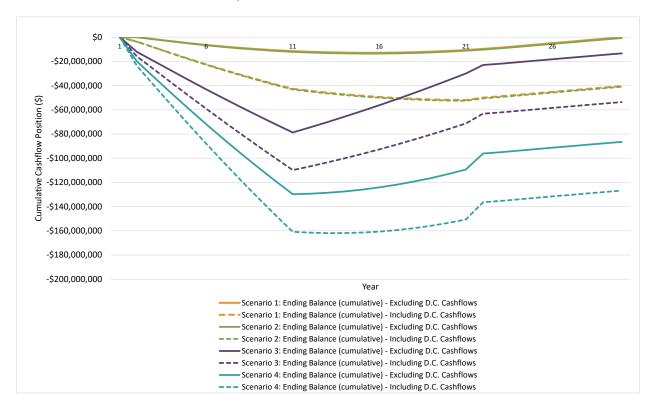
Given the costs to purchase the land and service it, this scenario does not provide the County with a positive cashflow position over the thirty years. There are significant debenture payments related to local services and land for the first twenty years of the forecast. In addition, similar to the other scenarios, lifecycle costs are greater than tax revenues until year 15 of the forecast period. As debt is retired, the cashflow position moves in a positive direction, however, the position is still well below breakeven by year 30.



#### 5.5 Comparison of Scenarios

Figure 5-5 below provides a comparison of the cashflow for all four (4) scenarios, excluding the D.C. cashflows. All four scenarios are in a negative cashflow position by the end of the thirty years, both including and excluding D.C.-related cashflows.

Figure 5-5
Haldimand County
Comparison of Cashflow Scenarios



In order to evaluate the profitability of the investment into these employment lands from a business case lens, the analysis includes an estimated return on investment (R.O.I.) for the County. By year 30, none of the four scenarios provide for a positive R.O.I. given the negative cashflow.



## Figure 5-6 Haldimand County Summary of Return on Investment – Excluding D.C. Cashflows

Summary of Return on Investment Excluding D.C. Cashflows	Scenario 1 - F Planned a Develop	and	Scenario 2 - County Planned with Private Development		Scenario 3 - County Develops with Private Partnership		Scenario 4 - County Plans, Develops, and Sells Land	
Initial Investment		-	500,000		104,887,000		202,559,075	
Breakeven Year	N/A		N/A		N/A		N/A	
Year	Net Cumulative Position	R.O.I.	Net Cumulative Position	R.O.I.	Net Cumulative Position	R.O.I.	Net Cumulative Position	R.O.I.
Year 10	(9,041,185)	n/a	(9,505,424)	-1901%	(60,162,186)	-57%	(99,466,038)	-49%
Year 20	(7,792,237)	n/a	(8,215,391)	-1643%	(24,387,425)	-23%	(77,607,080)	-38%
Year 30	(51,133)	n/a	(398,266)	-80%	(7,532,511)	-7%	(48,714,034)	-24%

#### 5.5.1 Debt Capacity Considerations

The significant investment in capital infrastructure in this area requires debt financing under all four (4) scenarios. The following table provides a summary of the total debt requirements, by scenario:

Figure 5-7
Haldimand County
Summary of Debt Requirements, by Scenario

	Debt Requirements								
Scenario	D.C.	Non-D.C.	Non-D.C. Local Service Land						
Scenario 1	38,422,682	-	-	-	38,422,682				
Scenario 2	38,422,682	500,000	-	-	38,922,682				
Scenario 3	38,422,682	-	104,887,000	-	143,309,682				
Scenario 4	38,422,682	500,000	104,887,000	97,172,075	240,981,757				

The Ministry of Municipal Affairs regulates the level of debt incurred by Ontario municipalities, through its powers established under the *Municipal Act*. Ontario Regulation 403/02 provides the current rules respecting municipal debt and financial obligations. Through the rules established under these regulations, a municipality's debt capacity is capped at a level where no more than 25% of the municipality's own purpose revenue may be allotted for servicing the debt (i.e. debt charges). However, the County has a more conservative debt capacity policy limit set at 10% of own

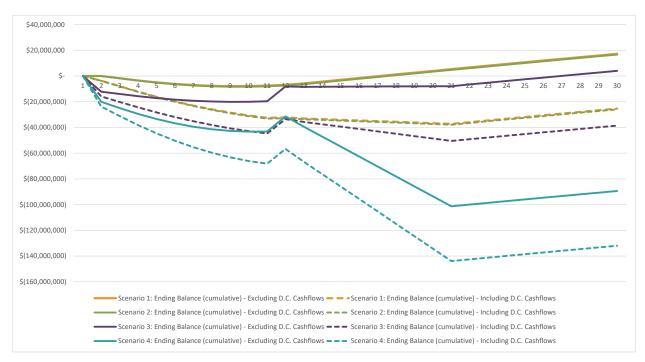


purpose revenue. It is also important to consider the debt requirements/commitments for other projects required across the County. Through the County's annual budget process, it is anticipated that the County will exceed the 10% debt capacity limit in 2025, based on debt commitments for capital projects required outside of this Study Area. If the County were to proceed with investing in the development of these lands, the debt payments may exceed the provincially imposed 25% cap.

#### 5.6 Analysis of 10-Year Development Timeframe

The four (4) scenarios presented above were also analyzed with the assumption that development would proceed in equal annual increments over a 10-year time horizon. The following graph provides a comparison of the cashflow positions over a 30-year time period.

Figure 5-8
Haldimand County
Comparison of Cashflow Scenarios
10-year Development Timeframe





Note, the fluctuations in Scenario 4 are a result of the timing mismatch between the debt payments associated with purchasing the unserviced land over 20 years and the sale of the serviced land parcels over the 10-year development time frame.

Figure 5-9 provides a summary of the return on investment for the four (4) scenarios:

Figure 5-9
Haldimand County
Summary of Return on Investment – Excluding D.C. Cashflows
10-year Development Timeframe

Summary of Return on Investment Excluding D.C. Cashflows	Scenario 1 - F Planned a Develop	and	Scenario 2 - County Planned with Private Development		Scenario 3 - County Develops with Private Partnership		Scenario 4 - County Plans, Develops, and Sells Land		
Initial Investment	-		500,000		104,887,000		202,559,075		
Breakeven Year	Year 1	8	Year 18		Year 27		N/A		
Year	Net Cumulative Position	R.O.I.	Net Cumulative Position	R.O.I.	Net Cumulative Position	R.O.I.	Net Cumulative Position	R.O.I.	
Year 10	(6,522,554)	n/a	(6,986,793)	-1397%	(16,746,754)	-16%	(36,170,042)	-18%	
Year 20	2,756,807	n/a	2,333,654	467%	(5,450,975)	-5%	(53,741,551)	-27%	
Year 30	9,745,575	n/a	9,398,442	1880%	2,264,197	2%	(50,344,451)	-25%	

Although the 10-year development scenario provides for an earlier breakeven year for scenarios 1 through 3 (i.e. within the 30-year forecast period), the overall financial impacts are similar compared to the 20-year timeframe and the County will be limited by debt capacity constraints.



## Chapter 6 Conclusions



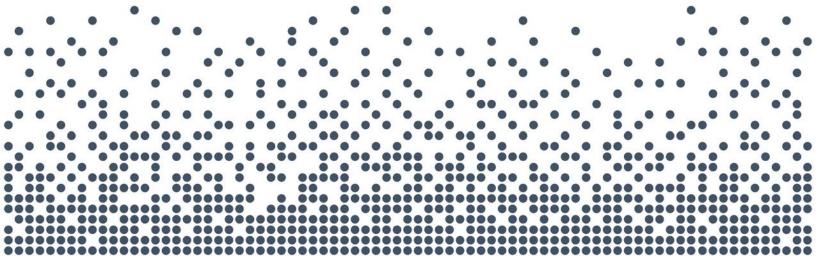
#### 6. Conclusions

This report has provided a financial analysis of the potential development of the North Caledonia Employment Lands. The following conclusionary statements are provided for consideration:

- Investing in industrial lands provides numerous benefits to municipalities including generating employment opportunities, supporting lower property taxes and lower overall operating costs, relative to residential development types.
   Given these benefits, the County has identified the need to provide for additional employment lands for development. Given relatively low market price of serviced industrial land, there can be limited private-sector development of these lands. As a result, the County is interested in developing and servicing additional employment lands to increase overall supply.
- There are significant capital costs associated with servicing this Study Area. This
  will impose a financial burden on the County, given the requirement to cashflow
  any debt payments and the annual lifecycle costs of the internal infrastructure.
- Based on the 20-year development forecast, all four scenarios provide negative cashflows by the end of the 30-year time horizon. This is largely due to the lifecycle replacement costs exceeding tax revenues until year 15 of the forecast period. These negative cashflow positions will impose a financial burden on existing taxpayers/ratepayers as funding will be required to support growth in the Study Area.
- Based on the sensitivity analysis which assumes growth occurs over a 10-year timeframe, the development provides for positive cashflow (excluding D.C. cashflows) under Scenarios 1 and 2, by year 18 and under Scenario 3 by year 27. Due to the accelerated growth, the tax revenues exceed the lifecycle costs earlier in the forecast period.
- The debt requirements would impose a financial risk on the County and limit future financial flexibility, given that a large portion of the County's debt capacity would be allocated to the development of this Study Area. These debt needs would also require the County to revise its existing debt policies. Given other debt requirements, funding the development of this Study Area with debt may put the County over the Provincially mandated debt capacity.



- The analysis has assumed even annual development over 10- and 20-year time horizons. There is a further risk to the County if the Study Area is not built out over the assumed timeframes. The County would be responsible for cashflowing the works over a longer than anticipated timeframe which would impose a negative burden on the County's financial position.
- It is noted that many of the costs identified in the Servicing Plan for the Study
  Area are not included in the current D.C. background study. Further, the costs
  that are identified in the D.C. study are significantly lower than current cost
  estimates. It is important for the County to update its current by-law to
  incorporate these projects/cost updates to ensure a higher proportion of cost
  recovery from the development of this area.



## Appendices



# Appendix A Operating Budget Analysis – Detailed Calculations



## Appendix A: Operating Budget Analysis – Detailed Calculations

## Figure A-1 Haldimand County Summary of Consolidated Expenditures and Revenues 2021 F.I.R. Data ('000's \$)

Summary of Consolidated Expenditures and Revenues	General Levy
1. GROSS EXPENDITURES	
1.1 General Government	10,341.6
1.2 Fire	5,167.5
1.3 Police	7,878.7
1.4 Conservation Authority	605.3
1.5 Protective Inspection and Control	1,174.1
1.6 Building Permit and Inspection Services	1,769.7
1.7 Emergency Measures	682.9
1.8 Provincial Offences Act (POA)	357.6
1.9 Roadways & Winter Control	35,084.0
1.10 Street Lighting	845.8
1.11 Other: admin	94.2
1.12 Wastewater Collection/Conveyance	847.3
1.13 Wastewater Treatment & Disposal	5,662.3
1.14 Urban Storm Sewer System	92.4
1.15 Rural Storm Sewer System	655.8
1.16 Water Treatment	5,832.3
1.17 Water Distribution/Transmission	1,464.3
1.18 Solid Waste Collection	1,194.2
1.19 Solid Waste Disposal	3,390.9
1.20 Waste Diversion	1,840.9
1.21 Other: admin	4,681.9
1.22 Public Health Services	1,124.6
1.23 Ambulance Services	7,606.7
1.24 Cemeteries	325.4
1.25 General Assistance	635.3
1.26 Assistance to Aged Persons	12,751.3
1.27 Child Care	143.2
1.28 Public Housing	912.8
1.29 Parks	2,307.7
1.30 Recreation Programs	536.3
1.31 Recreation Facilities	3,450.7
1.32 Libraries	2,255.8
1.33 Museums and Cultural Services	1,236.6
1.34 Other: admin	665.7
1.35 Planning and Zoning	2,098.7
1.36 Commercial and Industrial	1,033.0
1.37 Agricultural and Reforestation	36.3
1.38 Other: admin	0.2
Total Gross Expenditures	126,783.8



#### Figure A-1 (Cont'd)

Summary of Consolidated Expenditures and Revenues	General Levy
2. REVENUES	
2.1 Payment in Lieu of Taxes	1,214.8
2.2 Unconditional Grants	5,064.4
2.3 Specific Grants	18,535.6
2.4 Revenue from Other Municipalities	2,517.2
2.5 Total User Fees and Service Charges	28,261.8
2.6 Licenses, Permits, Rents etc.	4,057.4
2.7 Fines and Penalties	1,827.0
2.8 Investment Income	6,733.1
2.9 Interest Earned on Reserves and Reserve Funds	(613.1)
2.10 Gain/Loss on sale of land & Capital Assets	(554.7)
2.11 Deferred Revenue Earned	4,697.2
2.12 Donations & Donated Tangible Capital Assets	9,963.6
2.13 Sale of Publications, Equipment, etc.	229.6
2.14 Contributions from Non-consolidated Entities	9.7
2.15 Other: capital recoveries	291.1
2.16 Adjustments for properties, shared as if Payment-In-Lieu (Hydro properties RTQ = H, J, K)	117.2
2.17 Total of all supplementary taxes (Supps, Omits, Section 359)	1,892.4
2.18 Business improvement area	88.9
2.19 Railway rights-of-way (RTC = W)	35.0
2.20 Utility transmission and utility corridors (RTC = U)	578.4
2.21 (Surplus) / Deficit	(31,110.4)
Total Revenues	53,836.2
NET EXPENDITURES	72,947.6
3. PROPERTY TAXATION	72,947.6



#### Figure A-2 Haldimand County Summary of Net Operating Expenditures for 2021

Category		Total Gross Expenditures	Interest on Long Term Debt	External Transfers	Amortization	Net Operating Expenditures
1.1	General Government	10,341,614	494,206	-	1,164,588	8,682,820
1.2	Fire	5,167,470	61,698	-	1,061,442	4,044,330
1.3	Police	7,878,653	-	400	2,142	7,876,111
1.4	Conservation Authority	605,317	-	605,317	_	_
1.5	Protective Inspection and Control	1,174,103	-	-	38,049	1,136,054
1.6	Building Permit and Inspection Serv	1,769,677	-	_	_	1,769,677
1.7	Emergency Measures	682,880	-	-	6,283	676,597
1.8	Provincial Offences Act (POA)	357,601	-	34,665	-	322,936
1.9	Roadways & Winter Control	35,084,004	-	-	13,787,514	21,296,490
1.10	Street Lighting	845,779	-	-	287,092	558,687
1.11	Other: admin	94,168	-	-	94,168	-
1.12	Wastewater Collection/Conveyance	847,277	-	-	365,834	481,443
1.13	Wastewater Treatment & Disposal	5,662,277	-	-	2,037,453	3,624,824
1.14	Urban Storm Sewer System	92,438	-	-	-	92,438
1.15	Rural Storm Sewer System	655,813	-	-	229,103	426,710
1.16	Water Treatment	5,832,260	-	=	996,738	4,835,522
1.17	Water Distribution/Transmission	1,464,307	-	-	1,249,792	214,515
1.18	Solid Waste Collection	1,194,229	-	_	_	1,194,229
1.19	Solid Waste Disposal	3,390,933	-	-	280,882	3,110,051
1.20	Waste Diversion	1,840,922	-	-	60,675	1,780,247
1.21	Other: admin	4,681,895	409,139	-	-	4,272,756
1.22	Public Health Services	1,124,642	-	-	-	1,124,642
1.23	Ambulance Services	7,606,671	14,559	_	381,486	7,210,626
1.24	Cemeteries	325,353	_	_	11,041	314,312
1.25	General Assistance	635,340	-	_	_	635,340
1.26	Assistance to Aged Persons	12,751,337	335,747	-	656,488	11,759,102
1.27	Child Care	143,155	-	-	-	143,155
1.28	Public Housing	912,793	-	-	-	912,793
1.29	Parks	2,307,652	24,366	225,180	695,279	1,362,827
1.30	Recreation Programs	536,283	-	-	2,024	534,259
1.31	Recreation Facilities	3,450,661	427,527	-	1,143,515	1,879,619
1.32	Libraries	2,255,848	60,722	-	375,553	1,819,573
1.33	Museums and Cultural Services	1,236,556	-	76,450	56,192	1,103,914
1.34	Other: admin	665,742	-	-	40,740	625,002
1.35	Planning and Zoning	2,098,734	-	-	_	2,098,734
1.36	Commercial and Industrial	1,032,996	-	226,744	811	805,441
1.37	Agricultural and Reforestation	36,286	-	-	36,286	-
1.38	Other: admin	160	-	-	160	-
	TOTAL	126,783,826	1,827,964	1,168,756	25,061,330	98,725,776

Source: Haldimand County 2021 Financial Information Return



#### Figure A-3a Haldimand County

#### Operating Expenditure Summary – Services other than Roads, Water, and Wastewater Average Cost per Capita and Employee

		Total Net	Resi	dential	Cost	Non-Re	sidential	Cost
Category		Operating	SI	nare	Per	Sh	nare	Per
		Expenditure	%	\$	Capita	%	\$	Employee
1. Expen	<u>ditures</u>							
1.1	General Government	8,682,820	78%	6,746,664	139.90	22%	1,936,156	139.90
1.2	Fire	4,044,330	78%	3,142,497	65.17	22%	901,833	65.17
1.3	Police	7,876,111	78%	6,119,840	126.91	22%	1,756,271	126.91
1.4	Conservation Authority	0	78%	0	0.00	22%	0	0.00
1.5	Protective Inspection and Control	1,136,054	78%	882,729	18.30	22%	253,325	18.30
1.6	Building Permit and Inspection Service	1,769,677	78%	1,375,062	28.51	22%	394,615	28.51
1.7	Emergency Measures	676,597	78%	525,725	10.90	22%	150,872	10.90
1.80	Provincial Offences Act (POA)	322,936	78%	250,926	5.20	22%	72,011	5.20
1.10	Street Lighting	558,687	78%	434,107	9.00	22%	124,580	9.00
1.11	Other: admin	0	78%	0	0.00	22%	0	0.00
1.14	Urban Storm Sewer System	92,438	78%	71,826	1.49	22%	20,613	1.49
1.15	Rural Storm Sewer System	426,710	78%	331,559	6.88	22%	95,151	6.88
1.18	Solid Waste Collection	1,194,229	90%	1,074,806	22.29	10%	119,423	8.63
1.19	Solid Waste Disposal	3,110,051	78%	2,416,550	50.11	22%	693,501	50.11
1.20	Waste Diversion	1,780,247	90%	1,602,222	33.22	10%	178,025	12.86
1.21	Other: admin	4,272,756	78%	3,319,987	68.85	22%	952,769	68.85
1.22	Public Health Services	1,124,642	90%	1,012,178	20.99	10%	112,464	8.13
1.23	Ambulance Services	7,210,626	78%	5,602,750	116.18	22%	1,607,876	116.18
1.24	Cemeteries	314,312	95%	298,596	6.19	5%	15,716	1.14
1.25	General Assistance	635,340	100%	635,340	13.17	0%	0	0.00
1.26	Assistance to Aged Persons	11,759,102	100%	11,759,102	243.85	0%	0	0.00
1.27	Child Care	143,155	95%	135,997	2.82	5%	7,158	0.52
1.28	Public Housing	912,793	100%	912,793	18.93	0%	0	0.00
1.29	Parks	1,362,827	95%	1,294,686	26.85	5%	68,141	4.92
1.30	Recreation Programs	534,259	95%	507,546	10.52	5%	26,713	1.93
1.31	Recreation Facilities	1,879,619	95%	1,785,638	37.03	5%	93,981	6.79
1.32	Libraries	1,819,573	95%	1,728,594	35.85	5%	90,979	6.57
1.33	Museums and Cultural Services	1,103,914	95%	1,048,718	21.75	5%	55,196	3.99
1.34	Other: admin	625,002	78%	485,635	10.07	22%	139,367	10.07
1.35	Planning and Zoning	2,098,734	78%	1,630,744	33.82	22%	467,991	33.82
1.36	Commercial and Industrial	805,441	0%	0	0.00	100%	805,441	58.20
1.37	Agricultural and Reforestation	0	78%	0	0.00	22%	0	0.00
1.38	Other: admin	0	78%	0	0.00	22%	0	0.00
TOTAL		68,272,982		57,132,816	1,184.75		11,140,166	804.97



#### Figure A-3b Haldimand County Operating Expenditure Summary – Water, Wastewater, and Roads Average Cost per km of Infrastructure/cu.m of Water/Wastewater Treated

Category		Total Net Operating Expenditure	Km of Infrastructure	Cu.m of Capacity	Cost Per km of Infrastructur e	Cost per Cu.m of Water/ Wastewater Treated
1. Expend	<u>ditures</u>					
1.90	Roadways & Winter Control	21,296,490	2,994		7,113.06	
1.12	Wastewater Collection/Conveyance	481,443	162		2,971.87	
1.13	Wastewater Treatment & Disposal	3,624,824		4,815,400		0.75
1.16	Water Treatment	4,835,522		3,545,000		1.36
1.17	Water Distribution/Transmission	214,515	52		4,125.29	
TOTAL		30,452,794			14,210.21	2.12



#### Figure A-4a Haldimand County Operating Expenditures – Growth Sensitivity Analysis – Services other than Roads, Water, and Wastewater

	NON-RESIDENTIAL					
Expenditure Category	Net Expenditure	Growth	Net Expenditure			
Experiorure Category	per Employee	Share %	Recast			
1.1 General Government	139.90	25%	34.98			
1.2 Protection to Person and Property						
1.2.1 Fire	65.17	100%	65.17			
1.2.2 Police	126.91	75%	95.18			
1.2.6 Protective Inspection and Control	18.30	100%	18.30			
1.2.7 Building Permit and Inspection Service	28.51	100%	28.51			
1.2.8 Emergency Measures	10.90	100%	10.90			
1.2.9 Provincial Offences Act (POA)	5.20	100%	5.20			
1.3 Transportation Services						
1.3.4 Street Lighting	9.00	100%	9.00			
1.4 Environmental Services						
1.4.3 Urban Storm Sewer System	1.49	100%	1.49			
1.4.4 Rural Storm Sewer System	6.88	100%	6.88			
1.4.7 Solid Waste Collection	8.63	100%	8.63			
1.4.8 Solid Waste Disposal	50.11	100%	50.11			
1.4.9 Waste Diversion	12.86	0%	-			
1.4.10 Other: admin	68.85	25%	17.21			
1.5 Health Services						
1.5.1 Public Health Services	8.13	100%	8.13			
1.5.3 Ambulance Services	116.18	100%	116.18			
1.5.5 Cemeteries	1.14	0%	-			
1.6 Social and Family Services						
1.6.3 Child Care	0.52	100%	0.52			
1.7 Recreation and Cultural Services						
1.7.1 Parks	4.92	50%	2.46			
1.7.2 Recreation Programs	1.93	50%	0.97			
1.7.3 Recreation Facilities	6.79	50%	3.40			
1.7.4 Libraries	6.57	50%	3.29			
1.7.5 Museums and Cultural Services	3.99	50%	2.00			
1.7.6 Other: admin	10.07	25%	2.52			
1.8 Planning and Development						
1.8.1 Planning and Zoning	33.82	100%	33.82			
1.8.2 Commercial and Industrial	58.20	100%	58.20			
TOTAL	804.97		583.05			

Source: Haldimand County 2021 Financial Information Return



### Figure A-4b Haldimand County Operating Expenditures – Growth Sensitivity Analysis – Water, Wastewater, and Roads

		NON-RESIDENTIAL								
Expenditure Category	Net Expenditure per Km	Net Expenditure per Cu.m	Growth Share %	Net Expenditure Recast per Km	Net Expenditure Recast per Cu.m					
1.9 Roads, Water and Wastewater Services										
1.3.1 Roadways & Winter Control	7,113.06		100%	7,113.06						
1.9.1 Wastewater Collection/Conveyance	2,971.87		100%	2,971.87						
1.9.2 Wastewater Treatment & Disposal		0.75	100%		0.75					
1.9.3 Water Treatment		1.36	100%		1.36					
1.9.4 Water Distribution/Transmission	4,125.29		100%	4,125.29						
TOTAL	14,210.21	2.12		14,210.22	2.12					

Source: Haldimand County 2021 Financial Information Return

### Figure A-5a Haldimand County Operating Expenditures Summary – Services other than Roads, Water, and Wastewater

CATEGORY	Cost Per Employee	Incremental Expenditures (2021\$)	Incremental Expenditures (2024\$)
1. Expenditures			
1.1 General Government	34.98	61,985	78,702
1.2 Fire	65.17	115,481	146,626
1.3 Police	95.18	168,659	214,146
1.5 Protective Inspection and Control	18.30	32,428	41,173
1.6 Building Permit and Inspection Services	28.51	50,520	64,145
1.7 Emergency Measures	10.90	19,315	24,524
1.8 Provincial Offences Act (POA)	5.20	9,214	11,700
1.10 Street Lighting	9.00	15,948	20,249
1.14 Urban Storm Sewer System	1.49	2,640	3,352
1.15 Rural Storm Sewer System	6.88	12,191	15,479
1.18 Solid Waste Collection	8.63	15,292	19,417
1.19 Solid Waste Disposal	50.11	88,795	112,743
1.21 Other: admin	17.21	30,496	38,721
1.22 Public Health Services	8.13	14,406	18,292
1.23 Ambulance Services	116.18	205,871	261,394
1.27 Child Care	0.52	921	1,170
1.29 Parks	2.46	4,359	5,535
1.30 Recreation Programs	0.97	1,719	2,182
1.31 Recreation Facilities	3.40	6,025	7,650
1.32 Libraries	3.29	5,830	7,402
1.33 Museums and Cultural Services	2.00	3,544	4,500
1.34 Other: admin	2.52	4,465	5,670
1.35 Planning and Zoning	33.82	59,929	76,092
1.36 Commercial and Industrial	58.20	103,130	130,945
TOTAL	583.05	1,033,165	1,311,809



#### Figure A-5b Haldimand County Operating Expenditures Summary – Roads, Water, and Wastewater

	CATEGORY	Cost Per Km	Km/Cu.m Required	Incremental Expenditures (2021\$)	Incremental Expenditures (2024\$)
1.	<u>Expenditures</u>				
	1.9 Roadways & Winter Control	7,113.06	4.32	30,728	39,016
	1.12 Wastewater Collection/Conveyance	2,971.87	5.31	15,766	20,018
	1.13 Wastewater Treatment & Disposal	-	600	452	573
	1.16 Water Treatment	-	1,020	1,391	1,767
	1.17 Water Distribution/Transmission	4,125.29	5.12	21,101	26,792
TOT	AL	14,210.22	1,635	69,438	88,165



#### Figure A-6 Haldimand County Operating Revenue Summary (2021 \$)

	NON-TAX OPERATING REVENUES (2021\$)									
CATEGORY	Ontario Conditional Grants	Canada Conditional Grants	Other Municipalities	User Fees and Service Charges	Ontario Grants - Tangible Capital Assets	Canada Grants - Tangible Capital Assets	Other Municipalities Tangible Capital Assets	User Fees, Service Charges, and Grants	Total Revenue - FIR	
2. Revenues										
2.1 <u>Service Specific Non-Tax Revenues</u>										
General Government	185,247	-	47,598	2,161,648	3,247,569	-	-	2,346,895	5,642,062	
Fire	-	-	90,682	60,127	3,980	-	-	60,127	154,789	
Police	202,221	-	-	4,669	-	-	-	206,890	206,890	
Protective Inspection and Control	6,145	-	-	25,237	-	-	-	31,382	31,382	
Building Permit and Inspection Services	-	-	-	54,649	-	-	-	54,649	54,649	
Roadways & Winter Control	329,982	-	-	156,748	1,005,068	-	-	486,730	1,491,798	
Wastewater Collection/Conveyance	-	-	-	8,090,847	-	-	-	8,090,847	8,090,847	
Wastewater Treatment & Disposal	-	-	65,754	-	-	-	-	-	65,754	
Urban Storm Sewer System	-	-	-	97,967	-	-	-	97,967	97,967	
Water Distribution/Transmission	-	-	-	10,134,852	-	38,160	-	10,134,852	10,173,012	
Solid Waste Disposal	-	-	1,194,809	-	-	-	180,779	-	1,375,588	
Waste Diversion	703,586	-	-	488,915	-	-	-	1,192,501	1,192,501	
Other: admin	-	-	592,323	2,063,650	-	-	215,344	2,063,650	2,871,317	
Public Health Services	-	-	-	(30)	-	-	-	(30)	(30	
Ambulance Services	3,322,405	-	108,468	462,133	-	-	-	3,784,538	3,893,006	
Cemeteries		-	-	85,202	_	-	_	85,202	85,202	
Assistance to Aged Persons	7,596,955			2,782,300	620.641			10,379,255	10,999,896	
Recreation Programs	7,590,955	-	-	214,072	020,041	-		214,072	214,072	
Recreation Facilities	ļ		21,400	563,187				563,187	584,587	
				<b></b>	-		-			
Libraries	79,162	5,132	-	10,665	-	-	_	94,959	94,959	
Museums and Cultural Services	47,057	89,289	-	4,856	-	-	-	141,202	141,202	
Planning and Zoning	-	-	-	798,810	-	-	-	798,810	798,810	
Commercial and Industrial	148,123	103,899	-	1,344	-	-	-	253,366	253,366	
Other: admin	-	-	-	-	10,000	-	-	-	10,000	
2.2 Other Non-Tax Revenues										
Payment in Lieu of Taxes									1,214,843	
Unconditional Grants									5,064,448	
Specific Grants									18,535,621	
Revenue from Other Municipalities									2,517,157	
Total User Fees and Service Charges									28,261,848	
Licenses, Permits, Rents etc.									4,057,359	
Fines and Penalties									1,827,013	
Investment Income									6,733,063	
Interest Earned on Reserves and Reserve Funds									(613,073	
Gain/Loss on sale of land & Capital Assets									(554,721	
Deferred Revenue Earned									4,697,198	
Donations & Donated Tangible Capital Assets									9,963,629	
Sale of Publications, Equipment, etc.	<b>†</b>								229,559	
Contributions from Non-consolidated Entities									9,693	
Other: capital recoveries	t		<b> </b>	<b> </b>			<b>†</b>	<b> </b>	291,135	
Adjustments for properties, shared as if Payment-										
In-Lieu (Hydro properties RTQ = H, J, K)									117,228	
Total of all supplementary taxes (Supps, Omits, Section 359)									1,892,355	
Business improvement area									88,900	
Railway rights-of-way (RTC = W)									34,964	
Utility transmission and utility corridors (RTC = U)	1		1				1		578,421	
(Surplus) / Deficit	1		T				1		(31,110,419	
TOTAL	12.620.883	198.320	2.121.034	28.261.848	4.887.258	38.160	396.123	41.081.051	102,359,847	



#### Figure A-7a Haldimand County Non-Tax Operating Revenue Summary – Tax Supported Average Revenue Per Employee

2	Total Net Operating	Non-Resid	dential Share	Revenue Per
CATEGORY	Revenue and Grants	%	s	Employee
2. Revenues	S. a.i.io			
2 Service Specific Non-Tax Revenues				
General Government	2,346,895	22%	523,327	37.81
Fire	60,127	22%	13,408	0.97
Police	206,890	22%	46,134	3.33
Protective Inspection and Control	31,382	22%	6,998	0.51
Building Permit and Inspection Services	54,649	22%	12,186	0.88
Roadways & Winter Control	486,730	22%	108,534	7.84
Urban Storm Sewer System	97,967	22%	21,845	1.58
Waste Diversion	1,192,501	10%	119,250	8.62
Other: admin	2,063,650	22%	460,167	33.25
Public Health Services	(30)	10%	(3)	-
Ambulance Services	3,784,538	22%	843,903	60.98
Cemeteries	85,202	5%	4,260	0.31
Assistance to Aged Persons	10,379,255	0%	-	-
Recreation Programs	214,072	5%	10,704	0.77
Recreation Facilities	563,187	5%	28,159	2.03
Libraries	94,959	5%	4,748	0.34
Museums and Cultural Services	141,202	5%	7,060	0.51
Planning and Zoning	798,810	22%	178,124	12.87
Commercial and Industrial	253,366	100%	253,366	18.31
2 Other Non-Tax Revenues				
Payment in Lieu of Taxes	1,214,843	22%	270,894	19.57
Unconditional Grants	5,064,448	22%	1,129,306	81.60
Specific Grants <sup>1</sup>	18,535,621	n/a	-	-
Revenue from Other Municipalities	2,517,157	22%	561,293	40.56
Total User Fees and Service Charges <sup>1</sup>	28,261,848	n/a	-	-
Licenses, Permits, Rents etc.	4,057,359	22%	904,738	65.38
Fines and Penalties	1,827,013	22%	407,400	29.44
Investment Income	6,733,063	22%	1,501,386	108.49
Interest Earned on Reserves and Reserve Funds	(613,073)	22%	(136,707)	(9.88)
Gain/Loss on sale of land & Capital Assets	(554,721)	22%	(123,696)	(8.94)
Deferred Revenue Earned	4,697,198	22%	1,047,414	75.68
Donations & Donated Tangible Capital Assets	9,963,629	22%	2,221,760	160.54
Sale of Publications, Equipment, etc.	229,559	22%	51,189	3.70
Contributions from Non-consolidated Entities	9,693	22%	2,161	0.16
Other: capital recoveries	291,135	22%	64,919	4.69
Adjustments for properties, shared as if Payment-In-Lieu (Hydro properties RTQ = H, J, K)	117,228	22%	26,140	1.89
Total of all supplementary taxes (Supps, Omits, Section 359)	1,892,355	22%	421,971	30.49
Business improvement area	88,900	22%	19,824	1.43
Railway rights-of-way (RTC = W)	34,964	22%	7,797	0.56
Utility transmission and utility corridors (RTC = U)	578,421	22%	128,980	9.32
(Surplus) / Deficit	(31,110,419)	22%	(6,937,220)	(501.27)
TOTAL	76,691,573	-	4,211,721	304.32



#### Figure A-7b Haldimand County Non-Tax Operating Revenue Summary – Rate Supported Average Revenue Per Employee

CATEGORY	Total Net Operating Revenue and	Non-Resid	lential Share	Revenue Per
CATEGORI	Grants	%	\$	Employee
2. Revenues				
2 Service Specific Non-Tax Revenues				
Wastewater Collection/Conveyance	8,090,847	22%	1,804,154	130.37
Water Distribution/Transmission	10,134,852	22%	2,259,941	163.30
TOTAL	18,225,699			293.67



#### Figure A-8a Haldimand County Non-Tax Operating Revenue – Growth Sensitivity Analysis – Tax Supported (2021 \$)

		N	ON-RESIDENTIA	<b>VL</b>
	REVENUE CATEGORY	Net Revenue per Employee	Growth Share %	Net Revenue Recast
2.1	Service Specific Non-Tax Revenues			
	General Government	37.81	25%	9.45
	Fire	0.97	100%	0.97
	Police	3.33	75%	2.50
	Protective Inspection and Control	0.51	100%	0.51
	Building Permit and Inspection Services	0.88	100%	0.88
	Roadways & Winter Control	7.84	100%	7.84
	Urban Storm Sewer System	1.58	100%	1.58
	Waste Diversion	8.62	0%	-
	Other: admin	33.25	25%	8.31
	Ambulance Services	60.98	100%	60.98
	Cemeteries	0.31	0%	-
	Recreation Programs	0.77	50%	0.39
	Recreation Facilities	2.03	50%	1.02
••••••	Libraries	0.34	50%	0.17
	Museums and Cultural Services	0.51	50%	0.26
	Planning and Zoning	12.87	100%	12.87
	Commercial and Industrial	18.31	100%	18.31
	Sub-total	190.91		126.04
2.2	Other Non-Tax Revenues			
	Payment in Lieu of Taxes	19.57	n/a	-
	Unconditional Grants	81.60	n/a	-
	Revenue from Other Municipalities	40.56	0%	_
	Licenses, Permits, Rents etc.	65.38	100%	65.38
	Fines and Penalties	29.44	100%	29.44
	Investment Income	108.49	0%	_
	Interest Earned on Reserves and Reserve Funds	(9.88)	0%	-
	Gain/Loss on sale of land & Capital Assets	(8.94)	0%	-
	Deferred Revenue Earned	75.68	0%	-
	Donations & Donated Tangible Capital Assets	160.54	0%	-
***************************************	Sale of Publications, Equipment, etc.	3.70	0%	-
	Contributions from Non-consolidated Entities	0.16	0%	-
***************************************	Other: capital recoveries	4.69	0%	-
	Adjustments for properties, shared as if Payment-In-Lieu	1.89	n/a	
	(Hydro properties RTQ = H, J, K)	1.09	II/a	-
	Total of all supplementary taxes (Supps, Omits, Section 359)	30.49	n/a	-
	Business improvement area	1.43	n/a	_
	Railway rights-of-way (RTC = W)	0.56	n/a	_
	Utility transmission and utility corridors (RTC = U)	9.32	n/a	
	(Surplus) / Deficit Sub-total	(501.27) <b>113.41</b>	n/a	94.82
	Jub-total	304.32		220.86



## Figure A-8b Haldimand County Non-Tax Operating Revenue – Growth Sensitivity Analysis – Rate Supported (2021 \$)

		N	ON-RESIDENTIA	<b>AL</b>
	REVENUE CATEGORY	Net Revenue per Employee	Growth Share %	Net Revenue Recast
2.1	Service Specific Non-Tax Revenues			
	Wastewater Collection/Conveyance	130.37	100%	130.37
	Water Distribution/Transmission	163.30	100%	163.30
TOTA	L .	293.67		293.67

#### Figure A-9a Haldimand County Non-Tax Operating Revenue Summary – Tax Supported

CATEGORY	Revenue Per Employee	Incremental Revenues (2021\$)	Incremental Revenues (2024\$)
2. Revenues			
2.1 Service Specific Non-Tax Revenues			
General Government	9.45	16,745	21,262
Fire	0.97	1,719	2,182
Police	2.50	4,430	5,625
Protective Inspection and Control	0.51	904	1,147
Building Permit and Inspection Services	0.88	1,559	1,980
Roadways & Winter Control	7.84	13,892	17,639
Urban Storm Sewer System	1.58	2,800	3,555
Waste Diversion	-	-	-
Other: admin	8.31	14,725	18,697
Ambulance Services	60.98	108,057	137,199
Cemeteries	-	-	-
Recreation Programs	0.39	691	877
Recreation Facilities	1.02	1,807	2,295
Libraries	0.17	301	382
Museums and Cultural Services	0.26	461	585
Planning and Zoning	12.87	22,806	28,956
Commercial and Industrial	18.31	32,445	41,196
2.2 Other Non-Tax Revenues		-	-
Licenses, Permits, Rents etc.	65.38	115,853	147,099
Fines and Penalties	29.44	52,168	66,237
Investment Income	-	-	· -
Interest Earned on Reserves and Reserve Funds	-	-	-
Gain/Loss on sale of land & Capital Assets	-	-	-
Sale of Publications, Equipment, etc.	-	-	-
Contributions from Non-consolidated Entities	_	-	_
TOTAL	220.86	391,364	496,915



#### Figure A-9b Haldimand County Non-Tax Operating Revenue Summary - Rate Supported

CATEGORY	Revenue Per Employee	Incremental Revenues (2021\$)	Incremental Revenues (2024\$)
2. Revenues			
2.1 <u>Service Specific Non-Tax Revenues</u>			-
Wastewater Collection/Conveyance	130.37	231,016	293,320
Wastewater Treatment & Disposal	-	-	-
Water Treatment	-	-	-
Water Distribution/Transmission	163.30	289,368	367,410
TOTAL	293.67	520,383	660,730

Note: all revenues are captured under water distribution/transmission and wastewater collection/conveyance.



# Appendix B Capital Costs and Associated Funding Details



#### Appendix B: Capital Costs and Associated Funding Details

#### Figure B-1 Haldimand County Capital Works Related to Water Services

Project ID	Capital Works	Total Capital Cost	Total Capital Cost	Total D.C. Related Cost	Total D.C. Share for Study Area	Benefit to Existing Development Cost	Local Service Costs
			Water				
	External Water Infrastructure Projects						
W-WM-1	Expand existing watermain to 600mm along Highway 6	\$2,900,000	\$1,945,500	1,945,500	413,419	-	-
W-WM-3	Extension of 350 mm Watermain along Greens Rd	2,000,000	2,780,000	2,780,000	2,780,000	•	-
	Increase In-Ground Reservoir by 6,502 cu.m (Additional						
W-S-2	1,502 cu.m)	7,600,000	3,196,000	3,196,000	679,150	-	-
	Upgrade Booster Pumping Station to Supply Peak Hour						
W-P-1	Demand	2,200,000	3,060,000	3,060,000	3,060,000	-	-
	Internal Water Infrastructure Projects:					-	-
	300mm PVC Watermain Class 150 DR18 (Greenfield						
W-1	installation within Phases 1 & 2)	5,180,000	7,210,000	-	-	-	7,210,000
	300mm PVC Watermain Class 150 DR18 (Tunnelled						
	crossing of retained environmental area adjacent to and						
	within the future Hwy 6 extension, approx. 345 metres						
W-2	north of Haldimand Road 66)	470,000	654,000	-	-	-	654,000
	600mm steel casing for crossing of future Hwy 6						
W-3	extension	155,000	216,000	-	-	-	216,000
	300mm PVC Watermain Class 150 DR18 (Tunnelled						
W-4	crossing of Hwy 6 & Haldimand Road 66 intersection)	180,000	250,000	-	-	-	250,000
	300mm PVC Watermain Class 150 DR18 (Within						
W-5	existing right-of-way of Mines Road)	1,040,000	1,450,000	-	-	-	1,450,000
W-6	1500mm valve chambers	450,000	626,000	-	-	-	626,000
W-7	1800mm x 2400mm rectangular valve chambers	850,000	1,180,000	-	-	-	1,180,000
W-8	1800mm x 2400mm rectangular valve chambers	285,000	397,000	-	-	-	397,000
W-9	Air release or drain valve chambers	995,000	1,380,000	-	-	-	1,380,000
	Booster Pumping Station for Study Area (~107 L/s firm						
W-10	capacity)	5,320,000	7,400,000	-	-	-	7,400,000
		<b>***</b> ***	<b>A.</b> . <b>.</b>				
	Total Water	\$29,625,000	\$31,744,500	10,981,500	6,932,569	-	20,763,000



## Figure B-2 Haldimand County Capital Works Related to Wastewater Services

Project ID	Capital Works	Total Capital Cost	Total Capital Cost	Total D.C. Related Cost	Total D.C. Share for Study Area	Benefit to Existing Development Cost	Local Service Costs
		W	astewater				
	External Wastewater Infrastructure Projects:						
	North Industrial Lands Collector Sewers (Greens Rd and Highway 66)						
NC1.3	Reduce pipe diameter to 375mm and revise alignment	17,100,000	23,792,000	23,792,000	23,792,000	-	-
	Schedule C Class EA for New or Expanded Wastewater Treatment Plant New North WWTP (including land acquisition) Build-out design flows increase from existing 3.7 MLD to						
CT-1.1	13.1 MLD)	91,071,000	68,000,000	68,000,000	7,698,113	_	_
01-1.1	Internal Wastewater Infrastructure Projects:	31,071,000	00,000,000	00,000,000	7,030,113		
	375mmø PVC sewer (Deep greenfield installation within						
WM-1	Phases 1 & 2)	11,900,000	16,557,000	-	_	-	16,557,000
	375mmø PVC sewer (Tunnelled crossing of retained environmental area adjacent to and within the future Hwy 6 extension, approx. 345 metres north of Haldimand	, ,	-7 7				2,22 ,222
WM-2	Road 66)	1,945,000	2,706,000	-	-	-	2,706,000
	600mmø steel casing for crossing of future Hwy 6		·				
WM-3	extension	155,000	216,000	-	-	-	216,000
WM-4	1200mmø deep manhole structures	1,420,000	1,976,000	-	-	-	1,976,000
	Total Wastewater	123,591,000.00	113,247,000	91,792,000	31,490,113	_	21,455,000



## Figure B-3 Haldimand County Capital Works Related to Stormwater Services

Duning (ID)	Control Works	Total Capital Cost	Total Capital Cost	Total D.C.	Total D.C. Share	Benefit to Existing	Local Service
Project ID	Capital Works	(2020 \$)	(2024 \$)	Related Cost	for Study Area	Development Cost	Costs
		St	ormwater				
	Internal Stormwater Projects						
SWM-1	SWM block size of 3.8 ha	5,000,000	6,960,000	-	-	-	6,960,000
SWM-2	SWM block size of 1.5 ha	2,300,000	3,200,000	-	-	-	3,200,000
SWM-3	SWM block size of 1.1 ha	1,600,000	2,230,000	-	-	-	2,230,000
SWM-4	SWM block size of 1.1 ha	1,600,000	2,226,000	-	-	-	2,226,000
SWM-5	SWM block size of 1.0 ha	1,400,000	1,950,000	-	-	-	1,950,000
SWM-6	SWM block size of 1.1 ha	1,800,000	2,504,000	-	-	-	2,504,000
SWM-7	SWM block size of 0.9 ha	1,100,000	1,530,000	-	-	-	1,530,000
SWM-8	SWM block size of 1.2 ha	1,900,000	2,640,000	-	-	-	2,640,000
SWM-9	SWM block size of 1.2 ha	2,100,000	2,920,000	-	-	-	2,920,000
SWM-10	Re-aligned municipal drain c/w landscaping	315,000	440,000	-	-	-	440,000
SWM-11	Storm sewers (various sizes)	2,200,000	3,060,000	-	-	-	3,060,000
SWM-12	Manholes (various sizes)	440,000	610,000	-	-	-	610,000
SWM-13	Catch basins	400,000	560,000	-	-	-	560,000
	Allowance for conveyance and source controls in Phase						
SWM-14	2 local road	1,000,000	1,390,000	-	-	-	1,390,000
	Sub-Total Stormwater	23,155,000	32,220,000	-	-	-	32,220,000



## Figure B-4 Haldimand County Capital Works Related to Roads Services

Project ID	Capital Works	Total Capital Cost	Total Capital Cost	Total D.C.	Total D.C. Share	Benefit to Existing	Local Service
1 TOJECT ID	Capital Works	(2020 \$)	(2024 \$)	Related Cost	for Study Area	Development Cost	Costs
			Roads				
	External Road Infrastructure Projects						
	New 3-leg signalized intersection (local road						
T-1	connections to boundary roads)	2,300,000	3,200,000	-	-	-	3,200,000
	Re-construction of 3-leg stop-control intersection (Mines						
T-2	Road & Greens Road) to 3-leg signalized intersection	680,000	950,000	-	-	-	950,000
	Re-construction of existing 2-lane Mines Road to 4-lane						
T-3	urban cross-section	3,300,000	4,590,000	-	-	-	4,590,000
	Re-constructoin of existing 2-lane Greens Road to 4-						
T-4	lane urban cross-section	5,300,000	7,374,000	-	-	-	7,374,000
	Internal Road Infrastructure Projects						
	Local 20m width road extension in Phase 1 c/w surface						
	works (granular base, asphalt, curb & gutter, sidewalk,						
T-5	utilities, landscaping, street lighting)	6,300,000	8,770,000	-	-	-	8,770,000
	Local 20m width road extension in Phase 2 c/w surface	·					
	works (granular base, asphalt, curb & gutter, sidewalk,						
T-6	utilities, landscaping, street lighting)	4,000,000	5,565,000	-	-	-	5,565,000
	Sub-Total Roads	21,880,000	30,449,000	•	-	-	30,449,000



## Appendix C Details for Cashflow Analysis



#### Appendix C: Details for Cashflow Analysis

#### Figure C-1 Haldimand County Scenario 1: 20-Year Development Timeframe

Cash Flow Analysis - Employment Lar	nds Privately De	eveloped																												
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Development Forecast	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Non-residential Development (GFA)																· ·	- '	T T												
Light Industrial	-	-	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050	22,050								
General Industrial	-	-	110,473	110,473	110,473	110,473	110,473	110,473	110,473	110,473	110,473	110,473	110,473	110,473	110,473	110,473	110,473	110,473	110,473	110,473	110,473	110,473								
Total Employment (cumulative)	-	-	132,523	265,046	397,569	530,092	662,615	795,138	927,661	1,060,184	1,192,707	1,325,230	1,457,753	1,590,276	1,722,799	1,855,322	1,987,845	2,120,368	2,252,891	2,385,414	2,517,937	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460
Development Forecast	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year 14	Year 15	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year 30
Non-residential Development (Employees)		- 2	3	*	J	v	,	0	9	10	- ''	12	13	14	13	10	17	10	19	20	21	22	23	24	23	20	ZI	20	29	30
Light Industrial			22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	21	21								
General Industrial	-	-	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	66	66	66	66								
																-	-													
Total Employment (cumulative)	-	-	89	178	267	356	445	534	623	712	801	890	979	1,068	1,157	1,246	1,335	1,424	1,511	1,598	1,685	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772
Revenues, Expenditures, and	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year 30
Impact	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
DC Revenues																														
Light Industrial	-	-	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	-	-	-	-	-	-	-	-
General Industrial	-	-	467,301 594.711	467,301 612.552	467,301 630,929	467,301	467,301 669,353	467,301 689,433	467,301	467,301 731,420	467,301 753,362	467,301 775,963	467,301 799,242	467,301	467,301 847,916	467,301 873,353	467,301 899,554	467,301 926.541	467,301 954.337	467,301 982,967	467,301 1.012.456	467,301	-	-	-	-	-	-	-	-
DC Revenue - Non-residential (inflated) Total DC Revenues	-	-	594,711 <b>594.711</b>	612,552	630,929	649,857 649.857	669,353	689,433	710,116 <b>710.116</b>	731,420 731.420	753,362 753.362	775,963	799,242 <b>799.242</b>	823,219 823,219	847,916 847.916	873,353 873.353	899,554 899.554	926,541	954,337 954.337	982,967	1,012,456	1,042,830 1.042.830	-	-	-	-	-	-	-	-
	-	-	594,711	612,552	630,929	049,057	009,353	669,433	710,116	731,420	753,362	115,963	799,242	623,219	047,910	673,353	699,554	920,541	954,337	962,967	1,012,456	1,042,630	-	-	-	-	-	-	-	-
Capital Expenditures																														
Roads DC																														
																													-	-
DC (Debenture)	1																													
Non-DC																														
11011 50																														
Non-DC (Debenture) Local Service																														



#### Figure C-1 (Cont'd)

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Revenues, Expenditures, and Impact	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Purchase of Land	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land Purchase	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-		-	-	-	•	-	-	-		-	-	<del></del>	<del></del>	-
Operating Expenditures																												1	,	
Per Employee (inflated) X 740.30	-		68,549	139,839	213,954	290,977	370,996	454,099	540,377	629,926	722,840	819,218	919,163	1,022,778	1,130,169	1,241,448	1,356,725	1,476,117	1,597,627	1,723,407	1,853,579	1,988,269	2,028,034	2,068,595	2,109,967	2,152,166	2,195,209	2,239,113	3 2,283,896	2,329,57
Operating Costs Related to New																													'	
Infrastructure (inflated)					95,433	97,342	99,289	101,274	103,300	105,366	107,473	109,623	111,815	114,051	116,332	118,659	121,032	123,453	125,922	128,440	131,009	133,629	136,302	139,028	141,809	144,645	147,538	150,488	153,498	156,56
Debenture Payments (capital +																												1	,	
land)	-	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	-	-	-	-	-	-	-	- '	-
Sub-total Operating Expenditures		3.712.962	3,781,511	3.852.801	4.022.349	4,101,281	4,183,246	4,268,335	4.356.639	4,448,254	4,543,275	2,837,973	2,940,110	3,045,961	3,155,633	3,269,238	3,386,889	3,508,701	3,632,680	3,760,979	3,893,720	2,121,898	2,164,336	2,207,623	2,251,775	2.296.811	2,342,747	2,389,602	2 2,437,394	2,486,14
ous total operating Experience		0,1 12,002	0,701,011	0,002,001	4,022,040	4,101,201	4,100,240	4,200,000	4,000,000	-1, 1 10,201	4,040,270	2,001,010	2,0-10,110	0,010,001	0,100,000	0,200,200	0,000,000	0,000,101	0,002,000	0,100,010	0,000,720	2,121,000	2,10-1,000	2,207,020	2,201,110	2,200,011	2,012,111	2,000,002	2,401,004	2,400,14
Operating Revenues																												1	,	
Per Employee (inflated) X 653.30	-	-	60,493	123.405	188.810	256,781	327,396	400.733	476.872	555,897	637.892	722,944	811.143	902,581	997.352	1.095.553	1,197,283	1.302.643	1,409,874	1.520.872	1.635.746	1.754.608	1.789.700	1,825,494	1.862.004	1.899.244	1.937.228	1,975,973	2,015,492	2.055.80
. , , ,							•		·	-																			' ' '	
Sub-total Operating Revenues	-	-	60,493	123,405	188,810	256,781	327,396	400,733	476,872	555,897	637,892	722,944	811,143	902,581	997,352	1,095,553	1,197,283	1,302,643	1,409,874	1,520,872	1,635,746	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,80
Taxation Revenues				,		-		•	•			•	•	•															T	
Non-residential (cumulative)	-	-	-	-	182,393	364,786	547,179	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,86
Sub-total Taxation Revenues	-	-	-	-	182,393	364,786	547,179	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,86
Sale of Land (inflated)						-	-	-	-	-	-	-	-																	
																													,	
Beginning Balance	-	-	(3,712,962)	(8,483,974)	(13,265,427)	(17,970,159)	(22,504,435)	(26,868,077)	(31,060,904)	(35,082,723)	(38,933,342)	(42,612,555)	(44,316,325)	(45,848,266)	(47,208,154)	(48,395,760)	(49,410,843)	(50,253,157)	(50,922,448)	(51,417,756)	(51,738,800)	(51,885,285)	(49,947,779)	(48,878,054)	(47,633,429)	(46,396,447)	(45,167,260)	(43,946,025)	(42,732,899)	(41,528,04
Non-DC Capital Expenditures (inc. interest cost)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- '	-
DC Capital Expenditures (inc. interest cost)	(38,422,682)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)		(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)		(1,909,132)		-	-			-				-
Lifecycle Expenditures	-	-	(1,644,705)	(1,664,610)	(1,684,515)	(1,704,419)	(1,724,324)	(1,744,229)	(1,764,134)	(1,784,039)	(1,803,944)	(1,823,849)	(1,843,753)	(1,863,658)	(1,883,563)	(1,903,468)	(1,923,373)	(1,943,278)		(1,982,193)			(2,021,108)				(2,021,108)			
Operating Expenditures Purchase of Land (inc. interest cost)	-	-	(68,549)	(139,839)	(309,387)	(388,319)	(470,284)	(555,373)	(643,677)	(735,291)	(830,313)	(928,841)	(1,030,978)	(1,136,829)	(1,246,502)	(1,360,107)	(1,4/7,/5/)	(1,599,569)	(1,723,549)	(1,851,847)	(1,984,588)	(2,121,898)	(2,164,336)	(2,207,623)	(2,251,775)	(2,296,811)	(2,342,747)	(2,389,602)	(2,437,394)	(2,486,14
Debenture Issuance	38,422,682		-	-	- 1	- 1		-	-	-		-		-		-	-	-	· ·	-	-	-			_	-	_	1	1 ,	-
Operating Revenues	-	-	60,493	123.405	188.810	256,781	327.396	400.733	476.872	555.897	637.892	722.944	811.143	902.581	997.352	1.095.553	1.197.283	1.302.643	1.409.874	1.520.872	1.635.746	1.754.608	1.789.700	1.825,494	1.862.004	1.899.244	1.937.228	1,975,973	2,015,492	2.055.80
DC Revenues	-	-	594,711	612,552	630,929	649,857	669,353	689,433	710,116	731,420	753,362	775,963	799,242	823,219	847,916	873,353	899,554	926,541	954,337	982,967	1,012,456	1,042,830	-		-	-	-	-		-,000,00
Taxation Revenues	-	-	-	-	182,393	364,786	547,179	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,86
Sale of Land (inflated)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		'	-
Net Cashflow (cumulative)		(3,712,962)		(13,265,427)															(51,417,756)						(46,396,447)				(41,528,047)	
Net Annual Position  Non DC Related Cashflow	-	(3,712,962)	(4,771,012)	(4,781,453)	(4,704,731)	(4,534,276)	(4,363,642)	(4,192,826)	(4,021,820)	(3,850,618)	(3,679,214)	(1,703,770)	(1,531,941)	(1,359,888)	(1,187,606)	(1,015,083)	(842,314)	(669,291)	(495,308)	(321,043)	(146,485)	1,937,506	1,069,724	1,244,625	1,236,982	1,229,187	1,221,236	1,213,125	1,204,853	1,196,41
		1		(4.050.704)	(2.222.004)	(4.956.502)	(6.427.673)	(7.747.700)	(8.917.003)	(9.935.977)	(10.805.053)	(11.524.667)	(12.095.268)	(12.517.319)	(40.704.005)	(12.917.685)	(42 000 000)	(12,729,726)	(40,446,406)	(44.056.040)	(44.254.040)	(40 004 000)	(0.700.054)	(0.627.227	(7 202 602)	(C 155 C20)	(4.926.433)	/2 705 407	(2.492.072)	(4.007.04
Beginning Balance Non-DC Capital Expenditures (inc. interest cost)	[ ]			(1,652,761)	(3,333,804)	(4,906,502)	(0,427,673)	(7,747,706)	(0,917,003)	(9,935,977)	(10,005,053)	(11,524,667)	(12,095,268)	(12,517,319)	(12,791,295)	(12,917,685)	(12,896,989)	(12,729,726)	(12,416,426)	(11,956,940)	(11,351,818)	(10,601,628)	(9,706,951)	(8,637,227)	(7,392,602)	(6,155,620)	(4,926,433)	(3,705,197)	(2,492,072)]	(1,287,21
Lifecycle Expenditures	: 1		(1.644.705)	(1.664.610)	(1,684,515)	(1,704,419)	(1,724,324)	(1,744,229)	(1,764,134)	(1,784,039)	(1,803,944)	(1,823,849)	(1,843,753)	(1.863.658)	(1.883.563)	(1.903.468)	(1,923,373)	(1,943,278)	(1,962,735)	(1,982,193)	(2.001.650)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2.021.108)	(2,021,108)	(2,021,108)	3) (2,021,108)	(2,021,10
Operating Expenditures	_	_	(68,549)	(139,839)	(309,387)	(388,319)	(470,284)	(555,373)	(643,677)	(735,291)	(830,313)	(928,841)	(1,030,978)	(1,136,829)	(1,246,502)	(1,360,107)	(1,477,757)	(1,599,569)		(1,851,847)	(1,984,588)		(2,164,336)	(2,207,623)			(2,342,747)			(2,486,14
Purchase of Land (inc. interest cost)	-	-	-	-	(,-51)	(===,==0)		-	(= :=,5,7,7	-	(222,210)	-	- ( .,, )	(.,,520)	(1,212,302)	,		- (.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(.,,,)	(.,,)	(.,,,500)	(=, .= ., 500)	(=, :: :,000)	- (2,223,020)	[ -	(=,===,5.1)	(=,=,=,,)	(2,222,502)	(2, 131, 301)	(=, :==, : :
Debenture Issuance	-				l																							1	1 '	
Operating Revenues	-	-	60,493	123,405	188,810	256,781	327,396	400,733	476,872	555,897	637,892	722,944	811,143	902,581	997,352	1,095,553	1,197,283	1,302,643	1,409,874	1,520,872	1,635,746	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228			2,055,80
Taxation Revenues	-	-	-	-	182,393	364,786	547,179	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,86
Sale of Land (inflated)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<del>-</del>	'	-
Net Cashflow (cumulative)	-	-	(1,652,761)	(3,333,804)	(4,956,502)	(6,427,673)		(8,917,003)	(9,935,977)	(10,805,053)	(11,524,667)		(12,517,319)	(12,791,295)		(12,896,989)	(12,729,726)			(11,351,818)			(8,637,227)	(7,392,602)			(3,705,197)			(90,80
Net Annual Position	-	-	(1,652,761)	(1,681,044)	(1,622,698)	(1,471,171)	(1,320,033)	(1,169,297)	(1,018,974)	(869,076)	(719,614)	(570,601)	(422,051)	(273,976)	(126,390)	20,696	167,264	313,300	459,487	605,121	750,191	894,677	1,069,724	1,244,625	1,236,982	1,229,187	1,221,236	1,213,125	1,204,853	1,196,41

Development/construction will occur in 2026
Tax revenues - 2 year lag (i.e. start in 2028)
DC revenues have only been applied to DC-related expenditures.
Operating Revenues and expenditures inflated at 2% per year.
DC Revenues inflated at 3% per year
Operating expenditures for infrastructure have been assumed four years after anticipated construction.



#### Figure C-2 Haldimand County Scenario 2: 20-Year Development Timeframe

Cash Flow Analysis - County Invests in Conceptual Planning and Sells to Developer

Signatural Registration of the second state of																															
The content of the			2025 Year	2026 Year	LULI	LOLO							2000		2001							2011		2010	2011			2000	2001	LUCL	2053 Year
Control   Cont		1	2	3	4	5	6	7	8	9					14		16		18			21				25		27		29	
Mary	Light Industrial	-	-																												
The content of the	Total Employment (cumulative)	-	-																					2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460
Companion of the comp	Development Forecast	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9			Year 12									Year 21				Year 25	Year 26				
Constitution   Part	Non-residential Development (Employees)			22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	21	24								
The column	General Industrial	-								67	67	67		67					67	66	66		66			-		-	-	-	-
The column   The	Total Employment (cumulative)	-	-	89	178	267	356	445	534	623	712	801	890	979	1,068	1,157	1,246	1,335	1,424	1,511	1,598	1,685	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772
State   Stat			Year	Year			Year	Year		Year				Year	Year			Year	Year									Year		Year	Year
Control Methods   Control Me	DC Revenues		2	3	·	Ť	0													.0				23	24	25	20	21	20	29	30
Transfer Street	General Industrial	-	-	467,301	467,301	467,301	467,301	467,301	467,301	467,301	467,301	467,301	467,301	467,301	467,301	467,301	467,301	467,301	467,301	467,301	467,301	467,301	467,301	-	-	-	-	-	-	-	-
2005 CONCINION 10 10 10 10 10 10 10 10 10 10 10 10 10	DC Revenue - Non-residential (inflated)  Total DC Revenues	-	-	00 1,1 11			0 10,001	000,000		7.10,110	101,120	700,002				011,010	0,000	000,001		001,001	002,001			-	-	-	-	-	-	-	-
Composition	Capital Expenditures																														
Characteris (Characteris) (Cha	Roads DC																														
TROME CONCINCING STATE OF THE PROPERTY OF THE	DC (Debenture)	-																												-	-
Conference   Con	Non-DC (Debenture)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Marco   Component   Componen	Local Service Local Service (Debenture)																													-	-
Control   Cont	Lifecycle			421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100
Non-Cic Contents   1.000 Services   1.00	Water DC	6,932,569																													
Local Sarcies (Local	DC (Debenture) Non-DC	-	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Decided resident control product of the product o	Non-DC (Debenture)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Windows   Wind	Local Service (Debenture)			E33 E00	E22 E00	E22 E00	E33 E00	E22 E00	E33 E00	E22 E00	E22 E00	E22 E00	E22 E00	E33 E00	E22 E00	E22 E00	E22 E00	E22 E00	E22 E00	E22 E00	E22 E00	E22 E00	E22 E00	E22 E00	E22 E00	E33 E00					
DC (Debramer)   31,493,113   2,888,239   2	Wastewater			322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300	322,300
Non-DC (Debendum) Local Service (Debendum) Local Service (Debendum) Lifescycle Lifescycl	DC	31,490,113	2.858.239	2.858.239	2.858.239	2.858.239	2.858.239	2.858.239	2.858.239	2.858.239	2.858.239	2.858.239	1.909.132	1.909.132	1.909.132	1.909.132	1.909.132	1.909.132	1.909.132	1.909.132	1.909.132	1.909.132	-	_	_	_		_	_	_	_
Local Service (Debrum's) Lifesycke    S39,800   S39,800	Non-DC	-	_,	_,		_,,	_,,	_,		_,,			.,,		.,,	.,,,,,,,	.,,		.,,	.,,,,,,,,	.,,	.,,,,,,,,	_	_	_			_	_		
Liferycyce   S99,800   S	Local Service		•	-		·	-	.	•				-	-	·		-		-		1		·	•	· 1			·	•	- 1	-
DC (Clebenture) Non-DC (Debenture) Local Service (Debenture) Local Service (Debenture) Coci Serv	Lifecycle			539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800
DC (Debenture) Non-DC (Source) Non-DC (Debenture) N	Stormwater DC																														
Non-DC (Debenture) Local Service (Debenture) Local Service (Debenture) Lifecycle  Local Service (Debenture) Local Service (Debenture) Lifecycle  141,400 141,4	DC (Debenture)																														
Local Service (Debenture) Lifecycle  Lifecyc	Non-DC (Debenture)																														
Studies DC DC (Debenture) Non-DC 500,000 Non-DC 500,000 Collecture Collective	Local Service (Debenture)																														
DC (Debenture)	Lifecycle			141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400
Non-DC	Studies DC																														
Local Service (Debenture) Lifecycle	Non-DC	500,000																													
Local Service (Debenture) Lifecycle	Non-DC (Debenture) Local Service	-	61,645	61,645	61,645	61,645	61,645	61,645	61,645	61,645	61,645	61,645	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Local Service (Debenture)				_																				_						
	Broader Lifecycle Costs	-	-			59,715				139,334	159,239	179,144	199,049		238,858		278,668		318,478	337,935	357,393	376,850		396,308		396,308		396,308	396,308	396,308	396,308
Sub-total Capital Expenditures 38,922,682 - 1,644,705 1,664,610 1,684,515 1,704,419 1,724,324 1,744,229 1,764,134 1,784,039 1,803,658 1,903,488 1,923,73 1,943,278 1,962,735 1,982,193 2,001,650 2,021,108 2,0	-	38,922,682	-	1,644,705	1,664,610	1,684,515	1,704,419	1,724,324	1,744,229	1,764,134		1,803,944	1,823,849		1,863,658	1,883,563	1,903,468	1,923,373	1,943,278	1,962,735	1,982,193	2,001,650	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108



#### Figure C-2 (Cont'd)

Revenues, Expenditures, and	2024 Year	2025 Year	2026 Year	2027 Year	2028 Year	2029 Year	2030 Year	2031 Year	2032 Year	2033 Year	2034 Year	2035 Year	2036 Year	2037 Year	2038 Year	2039 Year	2040 Year	2041 Year	2042 Year	2043 Year	2044 Year	2045 Year	2046 Year	2047 Year	2048 Year	2049 Year	2050 Year	2051 Year	2052 Year	2053 Year
Impact	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Purchase of Land	_	-	-	-	-	-	-	-	-	_	-	-	_	-	-	_	-	-	-	-	-	-	-	-		-	-	_	-	-
Land Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operating Expenditures																														
Per Employee (inflated) X 740.30	-		68,549	139,839	213,954	290,977	370,996	454,099	540,377	629,926	722,840	819,218	919,163	1,022,778	1,130,169	1,241,448	1,356,725	1,476,117	1,597,627	1,723,407	1,853,579	1,988,269	2,028,034	2,068,595	2,109,967	2,152,166	2,195,209	2,239,113	2,283,896	2,329,574
Operating Costs Related to New Infrastructure (inflated)					95.433	97.342	99.289	101,274	103.300	105.366	107.473	109.623	111,815	114,051	116,332	118.659	121.032	123.453	125,922	128.440	131.009	133.629	136.302	139.028	141.809	144.645	147.538	150.488	153.498	156,568
mirastructure (mirateu)					95,433	91,342	99,269	101,274	103,300	105,300	107,473	109,023	111,615	114,051	110,332	110,009	121,032	123,453	125,922	120,440	131,009	133,029	130,302	139,026	141,009	144,045	147,536	150,400	155,496	150,500
Debenture Payments (capital +																														
land)	-	3,774,608	3,774,608	3,774,608	3,774,608	3,774,608	3,774,608	3,774,608	3,774,608	3,774,608	3,774,608	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	-	-	-	-	-	-	-	-	-
Sub-total Operating Expenditures	-	3,774,608	3.843.156	3,914,447	4.083.994	4.162.926	4,244,892	4.329.981	4.418.285	4.509.899	4.604.921	2.837.973	2.940.110	3.045.961	3,155,633	3.269.238	3.386.889	3,508,701	3.632.680	3.760.979	3.893.720	2,121,898	2,164,336	2,207,623	2.251.775	2.296.811	2.342.747	2.389.602	2.437.394	2.486.142
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Operating Revenues Per Employee (inflated) X 653.30			60.493	123,405	188.810	256.781	327.396	400.733	476.872	555.897	637.892	722,944	811.143	902.581	997.352	1.095.553	1.197.283	1,302,643	1,409,874	1.520.872	1.635.746	1.754.608	1.789.700	1.825.494	1.862.004	1,899,244	1.937.228	1.975.973	2,015,492	2,055,802
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Sub-total Operating Revenues	-	-	60,493	123,405	188,810	256,781	327,396	400,733	476,872	555,897	637,892	722,944	811,143	902,581	997,352	1,095,553	1,197,283	1,302,643	1,409,874	1,520,872	1,635,746	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Taxation Revenues																														
Non-residential (cumulative)	-	-		-	182,393	364,786	547,179	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862
Sub-total Taxation Revenues	-				182,393	364.786	547,179	700 570	911.965	1.094.358	1,276,751	1,459,145	1.641.537	1.823.930	2.006.323	2.188.717	2.371.111	2.553.503	2.735.897	2.918.289	3.100.683	3.283.075	3,465,468	3,647,862	3.647.862	3.647.862	3.647.862	3.647.862	3.647.862	0.047.000
Sub-total Taxation Revenues	-	_	-	-	102,393	304,700	547,179	729,572	911,965	1,094,356	1,270,751	1,459,145	1,041,537	1,023,930	2,000,323	2,100,717	2,3/1,111	2,555,505	2,735,697	2,910,209	3,100,063	3,263,075	3,403,400	3,047,002	3,047,002	3,047,002	3,047,002	3,047,002	3,047,002	3,647,862
Sale of Land (inflated)						-	-	-	-	-	-	-	-																	
Beginning Balance																														
	-	-	(3,774,608)	(8,607,265)	(13,450,364)	(18,216,740)	(22,812,662)		(31,492,422)		(39,488,151)	(43,229,010)	(44,932,780)	(46,464,721)	(47,824,609)	(49,012,215)	(50,027,297)	(50,869,611)	(51,538,903)	(52,034,211)	(52,355,254)	(52,501,740)	(50,564,233)	(49,494,509)	(48,249,884)	(47,012,902)	(45,783,715)	(44,562,479)	(43,349,354)	(42,144,501)
Non-DC Capital Expenditures (inc. interest cost)	(500,000)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	- '	-	- /	-	- '	- 1	-	-	- '	-	(52,501,740)	(50,564,233)	(49,494,509)	(48,249,884)	(47,012,902)	(45,783,715)	(44,562,479)	(43,349,354)	(42,144,501)
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost)	(500,000) (38,422,682)		(61,645) (3,712,962)	(61,645) (3,712,962)	(61,645) (3,712,962)	(61,645) (3,712,962)	(61,645) (3,712,962)	(61,645) (3,712,962)	(61,645) (3,712,962)	(61,645) (3,712,962)	(61,645) (3,712,962)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)		-	-	-	-	-	-	-	-
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures	(000,000)		(61,645) (3,712,962) (1,644,705)	(61,645) (3,712,962) (1,664,610)	(61,645) (3,712,962) (1,684,515)	(61,645) (3,712,962) (1,704,419)	(61,645) (3,712,962) (1,724,324)	(61,645) (3,712,962) (1,744,229)	(61,645) (3,712,962) (1,764,134)	(61,645) (3,712,962) (1,784,039)	(61,645) (3,712,962) (1,803,944)	(1,909,132) (1,823,849)	- (1,909,132) (1,843,753)	(1,909,132) (1,863,658)	(1,909,132) (1,883,563)	(1,909,132) (1,903,468)	(1,909,132) (1,923,373)	(1,909,132) (1,943,278)	(1,909,132) (1,962,735)	(1,909,132) (1,982,193)	(1,909,132) (2,001,650)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	- (2,021,108)	(2,021,108)	(2,021,108)
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures	(000,000)		(61,645) (3,712,962)	(61,645) (3,712,962) (1,664,610) (139,839)	(61,645) (3,712,962)	(61,645) (3,712,962)	(61,645) (3,712,962)	(61,645) (3,712,962)	(61,645) (3,712,962)	(61,645) (3,712,962)	(61,645) (3,712,962)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)		-	-	-	-	-	-	-	-
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost)	(38,422,682)		(61,645) (3,712,962) (1,644,705)	(61,645) (3,712,962) (1,664,610)	(61,645) (3,712,962) (1,684,515)	(61,645) (3,712,962) (1,704,419)	(61,645) (3,712,962) (1,724,324)	(61,645) (3,712,962) (1,744,229)	(61,645) (3,712,962) (1,764,134)	(61,645) (3,712,962) (1,784,039)	(61,645) (3,712,962) (1,803,944)	(1,909,132) (1,823,849)	- (1,909,132) (1,843,753)	(1,909,132) (1,863,658)	(1,909,132) (1,883,563)	(1,909,132) (1,903,468)	(1,909,132) (1,923,373)	(1,909,132) (1,943,278)	(1,909,132) (1,962,735)	(1,909,132) (1,982,193)	(1,909,132) (2,001,650)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	- (2,021,108)	(2,021,108)	(2,021,108)
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance	(000,000)		(61,645) (3,712,962) (1,644,705) (68,549)	(61,645) (3,712,962) (1,664,610) (139,839)	(61,645) (3,712,962) (1,684,515) (309,387)	(61,645) (3,712,962) (1,704,419) (388,319)	(61,645) (3,712,962) (1,724,324) (470,284)	(61,645) (3,712,962) (1,744,229) (555,373)	(61,645) (3,712,962) (1,764,134) (643,677)	(61,645) (3,712,962) (1,784,039) (735,291)	(61,645) (3,712,962) (1,803,944) (830,313)	(1,909,132) (1,823,849) (928,841)	(1,909,132) (1,843,753) (1,030,978)	(1,909,132) (1,863,658) (1,136,829)	(1,909,132) (1,883,563) (1,246,502)	(1,909,132) (1,903,468) (1,360,107)	(1,909,132) (1,923,373) (1,477,757)	(1,909,132) (1,943,278) (1,599,569)	(1,909,132) (1,962,735) (1,723,549)	(1,909,132) (1,982,193) (1,851,847)	(1,909,132) (2,001,650) (1,984,588)	(2,021,108) (2,021,898)	(2,021,108) (2,164,336)	(2,021,108) (2,207,623)	(2,021,108) (2,251,775)	(2,021,108) (2,296,811)	(2,021,108) (2,342,747)	(2,021,108) (2,389,602)	(2,021,108) (2,437,394)	(2,021,108) (2,486,142)
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues	(38,422,682)		(61,645) (3,712,962) (1,644,705) (68,549) -	(61,645) (3,712,962) (1,664,610) (139,839) -	(61,645) (3,712,962) (1,684,515) (309,387)	(61,645) (3,712,962) (1,704,419) (388,319) -	(61,645) (3,712,962) (1,724,324) (470,284) - 327,396	(61,645) (3,712,962) (1,744,229) (555,373) - 400,733	(61,645) (3,712,962) (1,764,134) (643,677) - 476,872	(61,645) (3,712,962) (1,784,039) (735,291) - 555,897	(61,645) (3,712,962) (1,803,944) (830,313) -	(1,909,132) (1,823,849) (928,841) -	(1,909,132) (1,843,753) (1,030,978) -	(1,909,132) (1,863,658) (1,136,829) - 902,581	(1,909,132) (1,883,563) (1,246,502) - 997,352	(1,909,132) (1,903,468) (1,360,107) -	(1,909,132) (1,923,373) (1,477,757) -	(1,909,132) (1,943,278) (1,599,569) - 1,302,643	(1,909,132) (1,962,735) (1,723,549) - 1,409,874	(1,909,132) (1,982,193) (1,851,847) -	(1,909,132) (2,001,650) (1,984,588) - 1,635,746	(2,021,108) (2,121,898) - 1,754,608	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	- (2,021,108)	(2,021,108)	(2,021,108)
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance	(38,422,682)		(61,645) (3,712,962) (1,644,705) (68,549)	(61,645) (3,712,962) (1,664,610) (139,839)	(61,645) (3,712,962) (1,684,515) (309,387)	(61,645) (3,712,962) (1,704,419) (388,319)	(61,645) (3,712,962) (1,724,324) (470,284)	(61,645) (3,712,962) (1,744,229) (555,373)	(61,645) (3,712,962) (1,764,134) (643,677)	(61,645) (3,712,962) (1,784,039) (735,291)	(61,645) (3,712,962) (1,803,944) (830,313)	(1,909,132) (1,823,849) (928,841)	(1,909,132) (1,843,753) (1,030,978)	(1,909,132) (1,863,658) (1,136,829)	(1,909,132) (1,883,563) (1,246,502)	(1,909,132) (1,903,468) (1,360,107)	(1,909,132) (1,923,373) (1,477,757)	(1,909,132) (1,943,278) (1,599,569)	(1,909,132) (1,962,735) (1,723,549)	(1,909,132) (1,982,193) (1,851,847)	(1,909,132) (2,001,650) (1,984,588)	(2,021,108) (2,021,898)	(2,021,108) (2,164,336)	(2,021,108) (2,207,623)	(2,021,108) (2,251,775)	(2,021,108) (2,296,811)	(2,021,108) (2,342,747)	(2,021,108) (2,389,602)	(2,021,108) (2,437,394)	(2,021,108) (2,486,142)
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues DC Revenues	(38,422,682)		(61,645) (3,712,962) (1,644,705) (68,549) -	(61,645) (3,712,962) (1,664,610) (139,839) -	(61,645) (3,712,962) (1,684,515) (309,387) - 188,810 630,929	(61,645) (3,712,962) (1,704,419) (388,319) - 256,781 649,857	(61,645) (3,712,962) (1,724,324) (470,284) - 327,396 669,353	(61,645) (3,712,962) (1,744,229) (555,373) - 400,733 689,433	(61,645) (3,712,962) (1,764,134) (643,677) - 476,872 710,116	(61,645) (3,712,962) (1,784,039) (735,291) - 555,897 731,420	(61,645) (3,712,962) (1,803,944) (830,313) - 637,892 753,362	(1,909,132) (1,823,849) (928,841) - 722,944 775,963	(1,909,132) (1,843,753) (1,030,978) - 811,143 799,242	(1,909,132) (1,863,658) (1,136,829) - 902,581 823,219	(1,909,132) (1,883,563) (1,246,502) - 997,352 847,916	(1,909,132) (1,903,468) (1,360,107) - 1,095,553 873,353	(1,909,132) (1,923,373) (1,477,757) - 1,197,283 899,554	(1,909,132) (1,943,278) (1,599,569) - 1,302,643 926,541	- (1,909,132) (1,962,735) (1,723,549) - 1,409,874 954,337	(1,909,132) (1,982,193) (1,851,847) - 1,520,872 982,967	(1,909,132) (2,001,650) (1,984,588) - 1,635,746 1,012,456	(2,021,108) (2,021,108) (2,121,898) - 1,754,608 1,042,830	(2,021,108) (2,164,336) - 1,789,700	(2,021,108) (2,207,623) - 1,825,494	(2,021,108) (2,251,775) - 1,862,004	(2,021,108) (2,296,811) - 1,899,244	(2,021,108) (2,342,747) - 1,937,228	(2,021,108) (2,389,602) - 1,975,973	(2,021,108) (2,437,394) - 2,015,492	(2,021,108) (2,486,142) - 2,055,802
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures (page 2014) Expenditures (page 2014) Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues DC Revenues Taxation Revenues Taxation Revenues	(38,422,682)	(3,712,962)    	(61,645) (3,712,962) (1,644,705) (68,549) - 60,493 594,711	(61,645) (3,712,962) (1,664,610) (139,839) -	(61,645) (3,712,962) (1,684,515) (309,387) - 188,810 630,929 182,393	(61,645) (3,712,962) (1,704,419) (388,319) - 256,781 649,857 364,786	(61,645) (3,712,962) (1,724,324) (470,284) - 327,396 669,353 547,179 - (27,237,950)	(61,645) (3,712,962) (1,744,229) (555,373) - 400,733 689,433 729,572 - (31,492,422)	(61,645) (3,712,962) (1,764,134) (643,677) - 476,872 710,116 911,965 - (35,575,887)	(61,645) (3,712,962) (1,784,039) (735,291) - 555,897 731,420 1,094,358 - (39,488,151)	(61,645) (3,712,962) (1,803,944) (830,313) - 637,892 753,362 1,276,751	(1,909,132) (1,823,849) (928,841) - 722,944 775,963 1,459,145	(1,909,132) (1,843,753) (1,030,978) - 811,143 799,242 1,641,537 - (46,464,721)	(1,909,132) (1,863,658) (1,136,829) - 902,581 823,219 1,823,930 - (47,824,609)	(1,909,132) (1,883,563) (1,246,502) - 997,352 847,916 2,006,323 - (49,012,215)	(1,909,132) (1,903,468) (1,360,107) - - 1,095,553 873,353 2,188,717 - (50,027,297)	(1,909,132) (1,923,373) (1,477,757) - 1,197,283 899,554 2,371,111 - (50,869,611)	(1,909,132) (1,943,278) (1,599,569) - 1,302,643 926,541 2,553,503 (51,538,903)	1,909,132) (1,962,735) (1,723,549) - 1,409,874 954,337 2,735,897 - (52,034,211)	(1,909,132) (1,982,193) (1,982,193) (1,851,847) - 1,520,872 982,967 2,918,289	(1,909,132) (2,001,650) (1,984,588) - - 1,635,746 1,012,456 3,100,683 - (52,501,740)	(2,021,108) (2,121,898) - 1,754,608 1,042,830 3,283,075 - (50,564,233)	(2,021,108) (2,164,336) - 1,789,700 - 3,465,468	(2,021,108) (2,207,623) - - 1,825,494 - 3,647,862 - (48,249,884)	(2,021,108) (2,251,775) - 1,862,004 - 3,647,862	(2,021,108) (2,296,811) - 1,899,244	(2,021,108) (2,342,747) - 1,937,228	(2,021,108) (2,389,602) - 1,975,973 - 3,647,862	(2,021,108) (2,437,394) - 2,015,492	(2,021,108) (2,486,142) - 2,055,802
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues DC Revenues Taxation Revenues Sale of Land (inflated)	(38,422,682) - - - - - - - - - - - - - - - - - - -	(3,712,962)    	(61,645) (3,712,962) (1,644,705) (68,549) - 60,493 594,711 - - (8,607,265)	(61,645) (3,712,962) (1,664,610) (139,839) - 123,405 612,552 - (13,450,364)	(61,645) (3,712,962) (1,684,515) (309,387) - 188,810 630,929 182,393 - (18,216,740)	(61,645) (3,712,962) (1,704,419) (388,319) - 256,781 649,857 364,786	(61,645) (3,712,962) (1,724,324) (470,284) - 327,396 669,353 547,179 - (27,237,950)	(61,645) (3,712,962) (1,744,229) (555,373) - - 400,733 689,433 729,572	(61,645) (3,712,962) (1,764,134) (643,677) - 476,872 710,116 911,965 - (35,575,887)	(61,645) (3,712,962) (1,784,039) (735,291) - 555,897 731,420 1,094,358 - (39,488,151)	(61,645) (3,712,962) (1,803,944) (830,313) - 637,892 753,362 1,276,751	(1,909,132) (1,823,849) (928,841) - 722,944 775,963 1,459,145	(1,909,132) (1,843,753) (1,030,978) - 811,143 799,242 1,641,537 - (46,464,721)	(1,909,132) (1,863,658) (1,136,829) - 902,581 823,219 1,823,930	(1,909,132) (1,883,563) (1,246,502) - 997,352 847,916 2,006,323 - (49,012,215)	(1,909,132) (1,903,468) (1,360,107) - 1,095,553 873,353 2,188,717	(1,909,132) (1,923,373) (1,477,757) - 1,197,283 899,554 2,371,111	(1,909,132) (1,943,278) (1,599,569) - - 1,302,643 926,541 2,553,503	(1,909,132) (1,962,735) (1,723,549) - 1,409,874 954,337 2,735,897	(1,909,132) (1,982,193) (1,982,193) (1,851,847) - 1,520,872 982,967 2,918,289	(1,909,132) (2,001,650) (1,984,588) - 1,635,746 1,012,456 3,100,683	(2,021,108) (2,121,898) - 1,754,608 1,042,830 3,283,075 - (50,564,233)	(2,021,108) (2,164,336) - 1,789,700 - 3,465,468	(2,021,108) (2,207,623) - 1,825,494 - 3,647,862	(2,021,108) (2,251,775) - 1,862,004 - 3,647,862	(2,021,108) (2,296,811) - 1,899,244 - 3,647,862	(2,021,108) (2,342,747) - 1,937,228 - 3,647,862	(2,021,108) (2,389,602) - 1,975,973 - 3,647,862	(2,021,108) (2,437,394) - 2,015,492 - 3,647,862 - (42,144,501)	(2,021,108) (2,486,142) - 2,055,802 - 3,647,862
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues DC Revenues Taxation Revenues Sale of Land (inflated) Net Cashflow (cumulative)	(38,422,682) - - - - - - - - - - - - - - - - - - -	(3,712,962) - - - - - - - - - - - - - - - - - - -	(61,645) (3,712,962) (1,644,705) (68,549) - 60,493 594,711 - - (8,607,265)	(61,645) (3,712,962) (1,664,610) (139,839) - 123,405 612,552 - - (13,450,364) (4,843,099)	(61,645) (3,712,962) (1,684,515) (309,387) - 188,810 630,929 182,393 - (18,216,740) (4,766,377)	(61,645) (3,712,962) (1,704,419) (388,319) 256,781 649,857 364,786 - (22,812,662) (4,595,922)	(61,645) (3,712,962) (1,724,324) (470,284) - 327,396 669,353 547,179 - (27,237,950) (4,425,288)	(61,645) (3,712,962) (1,744,229) (555,373) - 400,733 689,433 729,572 (31,492,422) (4,254,472)	(61,645) (3,712,962) (1,764,134) (643,677) 476,872 710,116 911,965 (35,575,887) (4,083,465)	(61,645) (3,712,962) (1,784,039) (735,291) - 555,897 731,420 1,094,358 (39,488,151) (3,912,264)	(81,645) (3,712,962) (1,803,944) (830,313) - 637,892 753,362 1,276,751 - (43,229,010) (3,740,859)	(1,909,132) (1,823,849) (928,841) - - 722,944 775,963 1,459,145 - (44,932,780) (1,703,770)	(1,909,132) (1,843,753) (1,030,978) - 811,143 799,242 1,641,537 - (46,464,721) (1,531,941)	(1,909,132) (1,863,658) (1,136,829) - 902,581 823,219 1,823,930 - (47,824,609) (1,359,888)	(1,909,132) (1,883,563) (1,246,502) - 997,352 847,916 2,006,323 - (49,012,215) (1,187,606)	(1,909,132) (1,903,468) (1,360,107) - - - - - - - (50,027,297) (1,015,083)	(1,909,132) (1,923,373) (1,477,757) - 1,197,283 899,554 2,371,111 - (50,869,611) (842,314)	(1,909,132) (1,943,278) (1,599,569) - 1,302,643 926,541 2,553,503 (51,538,903) (669,291)	(1,909,132) (1,962,735) (1,723,549) - 1,409,874 954,337 2,735,897 - (52,034,211) (495,308)	(1,909,132) (1,982,193) (1,851,847) - 1,520,872 982,967 2,918,289 - (52,355,254) (321,043)	(1,909,132) (2,001,650) (1,984,588) - - 1,635,746 1,012,456 3,100,683 - (52,501,740)	(2,021,108) (2,121,898) - 1,754,608 1,042,830 3,283,075 - (50,564,233) 1,937,506	(2,021,108) (2,164,336) - 1,789,700 - 3,465,468 - (49,494,509) 1,069,724	1,825,494 3,647,862 (48,249,884)	(2,021,108) (2,251,775) - 1,862,004 - 3,647,862 - (47,012,902) 1,236,982	1,899,244 3,647,862 1,229,187	(2,021,108) (2,342,747) 1,937,228 3,647,862 (44,562,479) 1,221,236	(2,021,108) (2,389,602) 1,975,973 3,647,862 (43,349,354) 1,213,125	(2,021,108) (2,437,394) - 2,015,492 - 3,647,862 - (42,144,501) 1,204,853	(2,021,108) (2,486,142) - 2,055,802 - 3,647,862 (40,948,087) 1,196,415
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues DC Revenues Taxation Revenues Sale of Land (inflated) Net Cashflow (cumulative) Net Annual Position Non-DC Related Expenditures and Revenues Beginning Balance	(38,422,682) - - - - - - - - - - - - - - - - - - -	(3,712,962)	(61,645) (3,712,962) (1,644,705) (68,549) 60,493 594,711 - (8,607,265) (4,832,657)	(61,645) (3,712,962) (1,664,610) (139,839) 123,405 612,552 - (13,450,364) (4,843,099)	(61,645) (3,712,962) (1,684,515) (309,387) 188,810 630,929 182,393 (18,216,740) (4,766,377)	(61,645) (3,712,962) (1,704,419) (388,319) 256,781 649,857 364,786 (22,812,662) (4,595,922)	(61,645) (3,712,962) (1,724,324) (470,284) 327,396 669,353 547,179 (27,237,950) (4,425,288)	(61,645) (3,712,962) (1,744,229) (555,373) 400,733 689,433 729,572 (31,492,422) (4,254,472)	(61,645) (3,712,962) (1,764,134) (643,677) 476,872 710,116 911,965 (35,575,887) (4,083,465)	(61,645) (3,712,962) (1,784,039) (735,291) 555,897 731,420 1,094,358 (39,488,151) (3,912,264)	(61,645) (3,712,962) (1,803,944) (830,313) - 637,892 753,362 1,276,751 - (43,229,010) (3,740,859)	(1,909,132) (1,823,849) (928,841) - - - - - - - - - - - - - - - - - - -	(1,909,132) (1,843,753) (1,030,978) - 811,143 799,242 1,641,537 - (46,464,721)	(1,909,132) (1,863,658) (1,136,829) - 902,581 823,219 1,823,930 - (47,824,609)	(1,909,132) (1,883,563) (1,246,502) - 997,352 847,916 2,006,323 - (49,012,215)	(1,909,132) (1,903,468) (1,360,107) - - 1,095,553 873,353 2,188,717 - (50,027,297)	(1,909,132) (1,923,373) (1,477,757) - 1,197,283 899,554 2,371,111 - (50,869,611)	(1,909,132) (1,943,278) (1,599,569) - 1,302,643 926,541 2,553,503 (51,538,903) (669,291)	1,909,132) (1,962,735) (1,723,549) - 1,409,874 954,337 2,735,897 - (52,034,211)	(1,909,132) (1,982,193) (1,982,193) (1,851,847) - 1,520,872 982,967 2,918,289 - (52,355,254)	(1,909,132) (2,001,650) (1,984,588) - - 1,635,746 1,012,456 3,100,683 - (52,501,740)	(2,021,108) (2,121,898) - 1,754,608 1,042,830 3,283,075 (50,564,233) 1,937,506	(2,021,108) (2,164,336) - 1,789,700 - 3,465,468 - (49,494,509)	(2,021,108) (2,207,623) - - 1,825,494 - 3,647,862 - (48,249,884)	(2,021,108) (2,251,775) - 1,862,004 - 3,647,862 - (47,012,902)	(2,021,108) (2,296,811) - - 1,899,244 - 3,647,862 - (45,783,715)	(2,021,108) (2,342,747) - 1,937,228 - 3,647,862 - (44,562,479)	(2,021,108) (2,389,602) - - 1,975,973 - 3,647,862 - (43,349,354)	(2,021,108) (2,437,394) - 2,015,492 - 3,647,862 - (42,144,501)	(2,021,108) (2,486,142) 2,055,802 3,647,862
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues DC Revenues Taxation Revenues Sale of Land (inflated) Net Cashflow (cumulative) Net Annual Position Non-DC Related Expenditures and Revenues Beginning Balance Non-DC Capital Expenditures (inc. interest cost)	(38,422,682) - - - - - - - - - - - - - - - - - - -	(3,712,962)	(61,645) (3,712,962) (1,644,705) (68,549) 60,493 594,711 - - (8,607,265) (4,832,657) (61,645)	(61,645) (3,712,962) (1,664,610) (139,839) - 123,405 612,552 (13,450,364) (4,843,099) (1,776,052) (61,645)	(61,645) (3,712,962) (1,684,51) (309,387) - 188,810 630,929 182,393 - (18,216,740) (4,766,377) (3,518,741) (61,645)	(61,645) (3,712,962) (1,704,419) (388,319) 256,781 649,857 364,786 (22,812,662) (4,595,922) (5,203,084) (61,645)	(61,645) (3,712,962) (1,724,362) (470,284) -27,396 669,353 547,179 -(27,237,950) (4,425,288) (6,735,900) (61,645)	(61,645) (3,712,962) (1,744,229) (555,373) 400,733 689,433 729,572 (31,492,422) (4,254,472) (8,117,579) (61,645)	(61,645) (3,712,962) (1,764,134) (643,677) 476,872 710,116 911,965 (35,575,887) (4,083,465) (9,348,522) (61,645)	(61,645) (3,712,962) (1,784,039) (735,291) 555,897 731,420 1,094,358 (39,488,151) (3,912,264) (10,429,141) (61,645)	(61,645) (3,712,962) (1,803,941) (830,313) - 637,892 753,362 1,276,751 - (43,229,010) (3,740,859) (11,359,862) (61,645)	(1,909,132) (1,823,849) (928,841) - 722,944 775,963 1,459,145 - (44,932,780) (1,703,770)	(1,909,132) (1,843,753) (1,030,978) - 811,143 799,242 1,641,537 - (46,464,721) (1,531,941) (12,711,722)	(1,909,132) (1,863,658) (1,136,829) 902,581 823,219 1,823,930 (47,824,609) (1,359,888) (13,133,774)	(1,909,132) (1,883,563) (1,246,502) - 997,352 847,916 2,006,323 - (49,012,215) (1,187,606) (13,407,750)	(1,909,132) (1,903,468) (1,360,107) - 1,095,553 873,353 2,188,717 (1,015,083) (13,534,140) (13,534,140)	(1,909,132) (1,923,373) (1,477,757) - 1,197,283 899,554 2,371,111 (842,314) (13,513,444) (13,513,444)	(1,909,132) (1,943,278) (1,599,569) - - 1,302,643 926,541 2,563,503 (51,538,903) (669,291) (13,346,181)	(1,909,132) (1,962,735) (1,723,549) - 1,409,874 954,337 2,735,897 - (52,034,211) (495,308)	(1,909,132) (1,982,193) (1,851,847) - 1,520,872 982,967 2,918,289 (52,355,254) (321,043) (12,573,394)	(1,909,132) (2,001,650) (1,984,588) 1,635,746 1,012,456 3,100,683 (52,501,740) (146,485)	(2,021,108) (2,121,898) 1,754,608 1,042,830 3,283,075 (50,564,233) 1,937,506 (11,218,082)	(2,021,108) (2,164,336) (2,164,336) -1,789,700 3,465,468 -(49,494,509) 1,069,724 (10,323,406)	(2,021,108) (2,207,623) - 1,825,494 3,647,862 - (48,249,884) 1,244,625 (9,253,682)	(2,021,108) (2,251,775) -1,862,004 3,647,862 -(47,012,902) 1,236,982 (8,009,057)	(2,021,108) (2,296,811) - 1,899,244 3,647,862 (45,783,715) 1,229,187	(2,021,108) (2,342,747) 1,937,228 3,647,862 (44,562,479) 1,221,236 (5,542,887)	(2,021,108) (2,389,602) 1,975,973 3,647,862 (43,349,354) 1,213,125 (4,321,652)	(2,021,108) (2,437,394) (2,437,394) 2,015,492 3,647,862 (42,144,501) 1,204,853	(2,021,108) (2,486,142) 2,055,802 3,647,862 (40,948,087) 1,196,415 (1,903,674)
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues DC Revenues Taxation Revenues Sale of Land (inflated) Net Cashflow (cumulative) Net Annual Position Non-DC Related Expenditures and Revenues Done-DC Rependitures Non-DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures	(38,422,682) - - - - - - - - - - - - - - - - - - -	(3,712,962)	(61,645) (3,712,962) (1,1644,705) (68,549) 60,493 594,711 - (8,607,265) (4,832,657) (61,645) (1,644,705)	(61,645) (3,712,962) (1,664,610) (139,839) 	(61,645) (3,712,962) (1,684,515) (309,387) 188,810 630,929 182,393 (18,216,740) (4,766,377) (3,518,741) (61,645) (1,684,515)	(61,645) (3,712,962) (1,704,419) (388,319) - 256,781 649,857 364,786 (22,812,662) (4,595,922) (5,203,084) (61,645) (1,704,419)	(61,645) (3,712,962) (1,724,324) (470,284) - 327,396 669,353 547,179 (27,237,950) (4,425,288) (6,735,900) (1,724,324)	(61,645) (3,712,962) (1,744,229) (555,373) 400,733 689,433 729,572 (31,492,422) (4,254,472) (8,117,579) (61,645) (1,744,229)	(61,645) (3,712,962) (1,764,134) (643,677) 476,872 710,116 911,965 (35,575,887) (4,083,465) (9,348,522) (61,645) (1,764,134)	(61,645) (3,712,962) (1,784,039) (735,291) 555,897 731,420 1,094,358 (39,488,151) (3,912,264) (10,429,141) (61,645) (1,784,039)	(61,645) (3,712,962) (1,803,944) (830,313) 637,892 753,362 1,276,751 (43,229,010) (3,740,859) (11,359,862) (61,645) (1,803,944)	(1,909,132) (1,823,849) (928,841) 	(1,909,132) (1,843,753) (1,030,978) - 811,143 799,242 1,641,537 (46,464,721) (1,531,941) (12,711,722) (1,843,753)	(1,909,132) (1,863,658) (1,136,829) - 902,581 823,219 1,823,930 (47,824,609) (1,359,888) (13,133,774) (1,863,658)	(1,909,132) (1,883,563) (1,246,502) 997,352 847,916 2,006,323 (49,012,215) (1,187,606) (13,407,750) (1,883,563)	(1,909,132) (1,903,468) (1,360,107) - - 1,095,553 873,353 2,188,717 (50,027,297) (1,015,083) (13,534,140) (1,903,468)	(1,909,132) (1,923,373) (1,477,757) - 1,197,283 899,554 2,371,111 (50,869,611) (842,314) (13,513,444) - (1,923,373)	(1,909,132) (1,943,278) (1,599,569) 1,302,643 926,541 2,553,503 (51,538,903) (669,291) (13,346,181) (1,943,278)	(1,909,132) (1,962,735) (1,723,549) - 1,409,874 954,337 2,735,897 (52,034,211) (495,308) (13,032,881) - (1,962,735)	(1,909,132) (1,982,193) (1,851,847) 	(1,909,132) (2,001,650) (1,984,588) -1,635,746 1,012,456 3,100,683 (52,501,740) (146,485) (11,968,273) -(2,001,650)	(2,021,108) (2,121,898) 1,754,608 1,042,830 3,283,075 (50,564,233) 1,937,506 (11,218,082) (2,021,108)	(2,021,108) (2,164,336) 1,789,700 - 3,465,468 (49,494,509) 1,069,724 (10,323,406) (2,021,108)	(2,021,108) (2,207,623) - 1,825,494 - 3,647,862 (48,249,884) 1,244,625 (9,253,682) (2,021,108)	(2,021,108) (2,251,775) 1,862,004 - 3,647,862 - (47,012,902) 1,236,982 (8,009,057) (2,021,108)	(2,021,108) (2,296,811) - 1,899,244 - 3,647,862 (45,783,715) 1,229,187 (6,772,074) (2,021,108)	(2,021,108) (2,342,747) 1,937,228 3,647,862 (44,562,479) 1,221,236 (5,542,887) (2,021,108)	(2,021,108) (2,389,602) - 1,975,973 - 3,647,862 (43,349,354) 1,213,125 (4,321,652) - (2,021,108)	(2,021,108) (2,437,394) - 2,015,492 - 3,647,862 (42,144,501) 1,204,853 (3,108,527) (2,021,108)	(2,021,108) (2,486,142) 2,055,802 3,647,862 (40,948,087) 1,196,415 (1,903,674) (2,021,108)
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues DC Revenues Taxation Revenues Sale of Land (inflated) Net Cashflow (cumulative) Net Annual Position Non-DC Related Expenditures and Revenues Beginning Balance Non-DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures	(38,422,682) - - - - - - - - - - - - - - - - - - -	(3,712,962)	(61,645) (3,712,962) (1,644,705) (68,549) 60,493 594,711 - - (8,607,265) (4,832,657) (61,645)	(61,645) (3,712,962) (1,664,610) (139,839) - 123,405 612,552 (13,450,364) (4,843,099) (1,776,052) (61,645)	(61,645) (3,712,962) (1,684,51) (309,387) - 188,810 630,929 182,393 - (18,216,740) (4,766,377) (3,518,741) (61,645)	(61,645) (3,712,962) (1,704,419) (388,319) 256,781 649,857 364,786 (22,812,662) (4,595,922) (5,203,084) (61,645)	(61,645) (3,712,962) (1,724,362) (470,284) - 27,396 669,353 547,179 - (27,237,950) (4,425,288) (6,735,900) (61,645)	(61,645) (3,712,962) (1,744,229) (555,373) 400,733 689,433 729,572 (31,492,422) (4,254,472) (8,117,579) (61,645)	(61,645) (3,712,962) (1,764,134) (643,677) 476,872 710,116 911,965 (35,575,887) (4,083,465) (9,348,522) (61,645)	(61,645) (3,712,962) (1,784,039) (735,291) 555,897 731,420 1,094,358 (39,488,151) (3,912,264) (10,429,141) (61,645)	(61,645) (3,712,962) (1,803,941) (830,313) - 637,892 753,362 1,276,751 - (43,229,010) (3,740,859) (11,359,862) (61,645)	(1,909,132) (1,823,849) (928,841) - 722,944 775,963 1,459,145 - (44,932,780) (1,703,770)	(1,909,132) (1,843,753) (1,030,978) - 811,143 799,242 1,641,537 - (46,464,721) (1,531,941) (12,711,722)	(1,909,132) (1,863,658) (1,136,829) 902,581 823,219 1,823,930 (47,824,609) (1,359,888) (13,133,774)	(1,909,132) (1,883,563) (1,246,502) - 997,352 847,916 2,006,323 - (49,012,215) (1,187,606) (13,407,750)	(1,909,132) (1,903,468) (1,360,107) - 1,095,553 873,353 2,188,717 (1,015,083) (13,534,140) (13,534,140)	(1,909,132) (1,923,373) (1,477,757) - 1,197,283 899,554 2,371,111 (842,314) (13,513,444) (13,513,444)	(1,909,132) (1,943,278) (1,599,569) - - 1,302,643 926,541 2,563,503 (51,538,903) (669,291) (13,346,181)	(1,909,132) (1,962,735) (1,723,549) - 1,409,874 954,337 2,735,897 - (52,034,211) (495,308)	(1,909,132) (1,982,193) (1,851,847) - 1,520,872 982,967 2,918,289 (52,355,254) (321,043) (12,573,394)	(1,909,132) (2,001,650) (1,984,588) 1,635,746 1,012,456 3,100,683 (52,501,740) (146,485)	(2,021,108) (2,121,898) 1,754,608 1,042,830 3,283,075 (50,564,233) 1,937,506 (11,218,082)	(2,021,108) (2,164,336) (2,164,336) -1,789,700 3,465,468 -(49,494,509) 1,069,724 (10,323,406)	(2,021,108) (2,207,623) - 1,825,494 3,647,862 - (48,249,884) 1,244,625 (9,253,682)	(2,021,108) (2,251,775) -1,862,004 3,647,862 -(47,012,902) 1,236,982 (8,009,057)	(2,021,108) (2,296,811) - 1,899,244 3,647,862 (45,783,715) 1,229,187	(2,021,108) (2,342,747) 1,937,228 3,647,862 (44,562,479) 1,221,236 (5,542,887)	(2,021,108) (2,389,602) 1,975,973 3,647,862 (43,349,354) 1,213,125 (4,321,652)	(2,021,108) (2,437,394) (2,437,394) 2,015,492 3,647,862 (42,144,501) 1,204,853	(2,021,108) (2,486,142) 2,055,802 3,647,862 (40,948,087) 1,196,415 (1,903,674)
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues DC Revenues Taxation Revenues Sale of Land (inflated) Net Cashflow (cumulative) Net Annual Position Non-DC Related Expenditures and Revenues Beginning Balance Non-DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Operating Expenditures Operating Expenditures (inc. interest cost)	(38,422,682) - - - - - - - - - - - - - - - - - - -	(3,712,962)	(61,645) (3,712,962) (1,1644,705) (68,549) 60,493 594,711 - (8,607,265) (4,832,657) (61,645) (1,644,705)	(61,645) (3,712,962) (1,664,610) (139,839) 123,405 612,552 	(61,645) (3,712,962) (1,684,515) (309,387) 188,810 630,929 182,393 (18,216,740) (4,766,377) (3,518,741) (61,645) (1,684,515)	(61,645) (3,712,962) (1,704,419) (388,319) - 256,781 649,857 364,786 (22,812,662) (4,595,922) (5,203,084) (61,645) (1,704,419) (388,319)	(61,645) (3,712,962) (1,724,324) (470,284) 327,396 669,353 547,179 (27,237,950) (4,425,288) (6,735,900) (61,645) (1,724,324) (470,284)	(61,645) (3,712,962) (1,744,229) (555,373) 400,733 689,433 729,572 (31,492,422) (4,254,472) (61,645) (1,744,229) (555,373)	(61,645) (3,712,962) (1,764,134) (643,677) 476,872 710,116 911,965 (35,575,887) (4,083,465) (9,348,522) (61,645) (1,764,134)	(61,645) (3,712,962) (1,784,039) (735,291) 555,897 731,420 1,094,358 (39,488,151) (3,912,264) (10,429,141) (61,645) (1,784,039)	(61,645) (3,712,962) (1,803,944) (830,313) 637,892 753,362 1,276,751 (43,229,010) (3,740,859) (11,359,862) (61,645) (1,803,944)	(1,909,132) (1,823,849) (928,841) 	(1,909,132) (1,843,753) (1,030,978) - 811,143 799,242 1,641,537 (46,464,721) (1,531,941) (12,711,722) (1,843,753)	(1,909,132) (1,863,658) (1,136,829) - 902,581 823,219 1,823,930 (47,824,609) (1,359,888) (13,133,774) (1,863,658)	(1,909,132) (1,883,563) (1,246,502) 997,352 847,916 2,006,323 (49,012,215) (1,187,606) (13,407,750) (1,883,563)	(1,909,132) (1,903,468) (1,360,107) - - 1,095,553 873,353 2,188,717 (50,027,297) (1,015,083) (13,534,140) (1,903,468)	(1,909,132) (1,923,373) (1,477,757) - - - - - - - - - - - - - - - - - - -	(1,909,132) (1,943,278) (1,599,569) 1,302,643 926,541 2,553,503 (51,538,903) (669,291) (13,346,181) (1,943,278)	(1,909,132) (1,962,735) (1,723,549) 1,409,874 954,337 2,735,897 (52,034,211) (495,308) (13,032,881) (1,962,735) (1,723,549)	(1,909,132) (1,982,193) (1,851,847) 	(1,909,132) (2,001,650) (1,984,588) - 1,635,746 1,012,456 3,100,683 - (52,501,740) (146,485) (11,968,273) (2,001,650) (1,984,588)	(2,021,108) (2,121,898) 1,754,608 1,042,830 3,283,075 (50,564,233) 1,937,506 (11,218,082) (2,021,108)	(2,021,108) (2,164,336) 1,789,700 - 3,465,468 (49,494,509) 1,069,724 (10,323,406) (2,021,108)	(2,021,108) (2,207,623) - 1,825,494 - 3,647,862 (48,249,884) 1,244,625 (9,253,682) (2,021,108)	(2,021,108) (2,251,775) 1,862,004 - 3,647,862 - (47,012,902) 1,236,982 (8,009,057) (2,021,108)	(2,021,108) (2,296,811) - 1,899,244 - 3,647,862 (45,783,715) 1,229,187 (6,772,074) (2,021,108)	(2,021,108) (2,342,747) 1,937,228 3,647,862 (44,562,479) 1,221,236 (5,542,887) (2,021,108)	(2,021,108) (2,389,602) - 1,975,973 - 3,647,862 (43,349,354) 1,213,125 (4,321,652) - (2,021,108)	(2,021,108) (2,437,394) - 2,015,492 - 3,647,862 (42,144,501) 1,204,853 (3,108,527) (2,021,108)	(2,021,108) (2,486,142) 2,055,802 3,647,862 (40,948,087) 1,196,415 (1,903,674) (2,021,108) (2,486,142)
Non-DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Operating Expenditures Operating Expenditures Debenture Issuance Operating Revenues DC Revenues Taxation Revenues Sale of Land (inflated) Net Cashrifow (cumulative) Net Annual Position Non-DC Related Expenditures and Revenues Eaginning Balance Non-DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inflated) Sale of Land (inflated)	(38,422,682) 	(3,712,962)	(61,645) (3,712,962) (1,1644,705) (68,549) 60,493 594,711 - (8,607,265) (4,832,657) (61,645) (1,644,705)	(61,645) (3,712,962) (1,664,610) (139,839) 	(61,645) (3,712,962) (1,684,515) (309,387) 188,810 630,929 182,393 (18,216,740) (4,766,377) (3,518,741) (61,645) (1,684,515)	(61,645) (3,712,962) (1,704,419) (388,319) - 256,781 649,857 364,786 (22,812,662) (4,595,922) (5,203,084) (61,645) (1,704,419)	(61,645) (3,712,962) (1,724,324) (470,284) - 327,396 669,353 547,179 (27,237,950) (4,425,288) (6,735,900) (1,724,324)	(61,645) (3,712,962) (1,744,229) (555,373) 400,733 689,433 729,572 (31,492,422) (4,254,472) (8,117,579) (61,645) (1,744,229)	(61,645) (3,712,962) (1,764,134) (643,677) 476,872 710,116 911,965 (35,575,887) (4,083,465) (9,348,522) (61,645) (1,764,134)	(61,645) (3,712,962) (1,784,039) (735,291) 555,897 731,420 1,094,358 (39,488,151) (3,912,264) (10,429,141) (61,645) (1,784,039)	(61,645) (3,712,962) (1,803,944) (830,313) 637,892 753,362 1,276,751 (43,229,010) (3,740,859) (11,359,862) (61,645) (1,803,944)	(1,909,132) (1,823,849) (928,841) 	(1,909,132) (1,843,753) (1,030,978) - 811,143 799,242 1,641,537 (46,464,721) (1,531,941) (12,711,722) (1,843,753)	(1,909,132) (1,863,658) (1,136,829) - 902,581 823,219 1,823,930 (47,824,609) (1,359,888) (13,133,774) (1,863,658)	(1,909,132) (1,883,563) (1,246,502) 997,352 847,916 2,006,323 (49,012,215) (1,187,606) (13,407,750) (1,883,563)	(1,909,132) (1,903,468) (1,360,107) - - 1,095,553 873,353 2,188,717 (50,027,297) (1,015,083) (13,534,140) (1,903,468)	(1,909,132) (1,923,373) (1,477,757) - 1,197,283 899,554 2,371,111 (50,869,611) (842,314) (13,513,444) - (1,923,373)	(1,909,132) (1,943,278) (1,599,569) 1,302,643 926,541 2,553,503 (51,538,903) (669,291) (13,346,181) (1,943,278)	(1,909,132) (1,962,735) (1,723,549) - 1,409,874 954,337 2,735,897 (52,034,211) (495,308) (13,032,881) - (1,962,735)	(1,909,132) (1,982,193) (1,851,847) 	(1,909,132) (2,001,650) (1,984,588) -1,635,746 1,012,456 3,100,683 (52,501,740) (146,485) (11,968,273) -(2,001,650)	(2,021,108) (2,121,898) 1,754,608 1,042,830 3,283,075 (50,564,233) 1,937,506 (11,218,082) (2,021,108)	(2,021,108) (2,164,336) 1,789,700 - 3,465,468 (49,494,509) 1,069,724 (10,323,406) (2,021,108)	(2,021,108) (2,207,623) - 1,825,494 - 3,647,862 (48,249,884) 1,244,625 (9,253,682) (2,021,108)	(2,021,108) (2,251,775) 1,862,004 - 3,647,862 - (47,012,902) 1,236,982 (8,009,057) (2,021,108)	(2,021,108) (2,296,811) - 1,899,244 - 3,647,862 (45,783,715) 1,229,187 (6,772,074) (2,021,108)	(2,021,108) (2,342,747) 1,937,228 3,647,862 (44,562,479) 1,221,236 (5,542,887) (2,021,108)	(2,021,108) (2,389,602) - 1,975,973 - 3,647,862 (43,349,354) 1,213,125 (4,321,652) - (2,021,108)	(2,021,108) (2,437,394) - 2,015,492 - 3,647,862 (42,144,501) 1,204,853 (3,108,527) (2,021,108)	(2,021,108) (2,486,142) 2,055,802 3,647,862 (40,948,087) 1,196,415 (1,903,674) (2,021,108)
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues DC Revenues Taxation Revenues Sale of Land (inflated) Net Cashflow (cumulative) Net Annual Position Non-DC Related Expenditures and Revenues Beginning Balance Non-DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Oper	(38,422,682) - - - - - - - - - - - - - - - - - - -	(3,712,962)	(61,645) (3,712,96) (3,712,96) (1,644,705) (68,549) 60,493 594,711 (8,607,265) (4,832,657) (61,645) (61,646) (1,644,705) (63,549)	(61,645) (3.712,962) (1.664,610) (199,839) 123,405 612,552 (13,450,364) (4,843,099) (1,776,052) (61,645) (164,610) (139,839)	(61,645) (3,712,962) (1,684,515) (309,387) - - 188,810 630,929 182,393 - (18,216,740) (4,766,377) (3,518,741) (61,645) (1,684,515) (309,387) -	(61,645) (3,712,962) (1,704,419) (388,319) - 256,781 649,857 364,786 - (22,812,662) (4,595,922) (5,203,084) (61,645) (1,704,419) (388,319) -	(61,645) (3,712,962) (1,724,324) (470,284) - 327,396 669,353 547,179 (27,237,950) (4,425,288) (6,735,900) (61,645) (1,724,324) (470,284)	(61,645) (3,712,962) (1,744,229) (555,373) 400,733 689,433 729,572 (31,492,422) (4,254,472) (61,645) (1,744,229) (555,373)	(61,645) (3,712,962) (1,764,134) (643,677) 476,872 710,116 911,965 (35,575,887) (4,083,465) (9,348,522) (61,645) (1,764,134) (643,677)	(61,645) (3,712,962) (1,784,039) (735,291) 555,897 731,420 1,094,358 (39,488,151) (3,912,264) (10,429,141) (61,645) (1,784,039) (735,291)	(61,645) (3,712,962) (1,803,944) (830,313) - - 637,892 753,362 1,276,751 (43,229,010) (3,740,859) (11,359,862) (61,645) (1,803,944) (830,313) -	(1,909,132) (1,823,849) (928,841) - - 722,944 775,963 1,459,145 - (44,932,760) (1,703,770) (12,141,121) (1,823,849) (928,841)	(1,909,132) (1,843,753) (1,030,978) - - 811,143 799,242 1,641,537 (46,464,721) (1,531,941) (12,711,722) - (1,843,753) (1,030,978) -	(1,909,132) (1,863,658) (1,136,829) - 902,581 823,219 1,823,930 (47,824,609) (1,359,888) (13,133,774) (1,863,658) (1,136,829)	(1,909,132) (1,883,563) (1,246,502) 	(1,909,132) (1,903,468) (1,360,107) - - - - (1,095,553 873,353 2,188,717 (50,027,297) (1,015,083) (13,534,140) - (1,903,468) (1,360,107)	(1,909,132) (1,923,373) (1,477,757) - - - (1,197,283 899,554 2,371,111 (50,869,611) (842,314) (13,513,444) - (1,923,373) (1,477,757)	(1,909,132) (1,943,278) (1,599,569) 1,302,643 926,541 2,553,503 (51,539,903) (669,291) (13,346,181) (1,943,278) (1,599,569)	(1,909,132) (1,962,735) (1,723,549) 1,409,874 954,337 2,735,897 (52,034,211) (495,308) (13,032,881) (1,962,735) (1,723,549)	(1,909,132) (1,932,193) (1,851,847) - 1,520,872 982,967 2,918,289 (52,355,254) (321,043) (12,573,394) - (1,982,193) (1,851,847)	(1,909,132) (2,001,650) (1,984,588) 1,635,746 1,012,456 3,100,683 (52,501,740) (146,485) (11,968,273) (2,001,650) (1,984,588)	(2,021,108) (2,121,898) 1,754,608 1,042,830 3,283,075 (50,564,233) 1,937,506 (11,218,082) (2,021,108) (2,121,898)	(2,021,108) (2,164,336) - 1,789,700 3,465,468 (49,494,509) 1,069,724 (10,323,406) - (2,021,108) (2,164,336)	(2,021,108) (2,207,623) - 1,825,494 3,647,862 - (48,249,884) 1,244,625 (9,253,682) - (2,021,108) (2,207,623)	(2,021,108) (2,251,775) - 1,862,004 3,647,662 - (47,012,902) 1,236,982 (8,009,057) - (2,021,108) (2,251,775)	(2,021,108) (2,296,811) - - 1,899,244 3,647,862 - (45,783,715) 1,229,187 (6,772,074) - (2,021,108) (2,296,811)	(2,021,108) (2,342,747) 1,937,228 3,647,862 (44,562,479) 1,221,236 (5,542,887) (2,021,108) (2,342,747)	(2,021,108) (2,389,602) 1,975,973 3,647,862 (43,349,354) 1,213,125 (4,321,652) (2,021,108) (2,389,602)	(2,021,108) (2,437,394) 2,015,492 3,647,862 (42,144,501) 1,204,853 (3,108,527) (2,021,108) (2,437,394)	(2,021,108) (2,486,142) 2,055,802 3,647,862 (40,948,087) 1,196,415 (1,903,674) (2,021,108) (2,486,142)
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues DC Revenues Taxation Revenues Sale of Land (inflated) Net Cashflow (cumulative) Net Annual Position Non-DC Related Expenditures and Revenues Beginning Balance Non-DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Sale of Land (inc. interest cost) Debenture Issuance Operating Revenues	(38,422,682) 	(3,712,962)	(61,645) (3,712,962) (1,1644,705) (68,549) 60,493 594,711 - (8,607,265) (4,832,657) (61,645) (1,644,705)	(61,645) (3,712,962) (1,664,610) (139,839) 123,405 612,552 	(61,645) (3,712,962) (1,684,515) (309,387) 188,810 630,929 182,393 (18,216,740) (4,766,377) (3,518,741) (61,645) (1,684,515)	(61,645) (3,712,962) (1,704,419) (388,319) - 256,781 649,857 364,756 (22,812,662) (4,595,922) (5,203,084) (61,645) (1,704,419) (388,319) - - 256,781	(61,645) (3,712,962) (1,724,324) (470,284) 327,396 669,353 547,179 (27,237,950) (4,425,288) (6,735,900) (61,645) (1,724,324) (470,284)	(61,645) (3,712,962) (1,744,229) (555,373) 400,733 689,433 729,572 (31,492,422) (4,254,472) (61,645) (1,744,22) (555,373) 	(61,645) (3,712,962) (1,764,134) (643,677) 476,872 710,116 911,965 (35,575,887) (4,083,465) (9,348,522) (61,645) (1,764,134)	(61,645) (3,712,962) (1,784,039) (735,291) 555,897 731,420 1,094,358 (39,488,151) (3,912,264) (10,429,141) (61,645) (1,784,039)	(61,645) (3,712,962) (1,803,944) (830,313) - 637,892 753,362 1,276,751 (43,229,010) (3,740,859) (11,359,862) (61,645) (1,803,944) (830,313) - -	(1,909,132) (1,823,849) (928,841) 	(1,909,132) (1,843,753) (1,030,978) - 811,143 799,242 1,641,537 (46,464,721) (1,531,941) (12,711,722) (1,843,753)	(1,909,132) (1,863,658) (1,136,829) 902,581 823,219 1,823,930 (1,359,888) (13,133,774) (1,863,658) (1,136,829)	(1,909,132) (1,883,563) (1,246,502) 997,352 847,916 2,006,232 (49,012,215) (1,187,606) (13,407,750) (1,883,563) (1,246,502) 997,352	(1,909,132) (1,903,468) (1,360,107) - - 1,095,553 873,353 2,188,717 (50,027,297) (1,015,083) (13,534,140) (1,903,468)	(1,909,132) (1,923,373) (1,477,757) - - - - - - - - - - - - - - - - - - -	(1,909,132) (1,943,278) (1,599,569) 1,302,643 926,541 2,553,503 (51,538,903) (669,291) (13,346,181) (1,943,278)	(1,909,132) (1,962,735) (1,723,549) 1,409,874 954,337 2,735,897 (52,034,211) (495,308) (13,032,881) (1,962,735) (1,723,549)	(1,909,132) (1,982,193) (1,851,847) 	(1,909,132) (2,001,650) (1,984,588) - 1,635,746 1,012,456 3,100,683 - (52,501,740) (146,485) (11,968,273) (2,001,650) (1,984,588)	(2,021,108) (2,121,898) 1,754,608 1,042,830 3,283,075 (50,564,233) 1,937,506 (11,218,082) (2,021,108)	(2,021,108) (2,164,336) (2,164,336) 1,789,700 3,465,468 (49,494,509) 1,069,724 (10,323,406) (2,021,108) (2,164,336) - 1,789,700	(2,021,108) (2,207,623) 1,825,494 3,647,862 (48,249,884) 1,244,625 (9,253,682) (2,207,623) - 1,825,494	(2,021,108) (2,251,775) 1,862,004 - 3,647,862 - (47,012,902) 1,236,982 (8,009,057) (2,021,108)	(2,021,108) (2,296,811) - 1,899,244 - 3,647,862 (45,783,715) 1,229,187 (6,772,074) (2,021,108)	(2,021,108) (2,342,747) 1,937,228 3,647,862 (44,562,479) 1,221,236 (5,542,887) (2,021,108)	(2,021,108) (2,389,602) - 1,975,973 - 3,647,862 (43,349,354) 1,213,125 (4,321,652) - (2,021,108)	(2,021,108) (2,437,394) - 2,015,492 - 3,647,862 (42,144,501) 1,204,853 (3,108,527) (2,021,108)	(2,021,108) (2,486,142) 2,055,802 3,647,862 (40,948,087) 1,196,415 (1,903,674) (2,021,108) (2,486,142)
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues DC Revenues Taxation Revenues Sale of Land (inflated) Net Cashflow (cumulative) Net Annual Position Non-DC Related Expenditures and Revenues Beginning Balance Non-DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures	(38,422,682) 	(3,772,962)	(61,645) (3,712,962) (1,644,705) (68,549) 60,493 594,711 (61,645) (61,645) (61,645) (61,644,705) (68,549) (61,644,705) (68,549)	(61,645) (3,712,962) (1,664,610) (139,839) - 123,405 612,552 - (13,450,364) (4,843,099) (1,776,052) (61,645) (1,664,610) (139,839) - - - - - - - - - - - - - - - - - - -	(61,645) (3,712,962) (1,684,515) (309,387) - - 188,810 (630,929 182,393 (18,216,740) (4,766,377) (3,518,741) (61,645) (1,684,515) (309,377) - - - - - - - - - - - - - - - - - -	(61,645) (3,712,962) (1,704,419) (388,319) - - 256,781 (649,857 364,786 (22,812,662) (4,595,922) (5,203,084) (61,645) (1,704,419) (388,319) - - - - - - - - - - - - - - - - - - -	(61,645) (3,712,962) (1,724,324) (470,284) - 327,396 (69,353 547,179 (27,237,950) (4,425,288) (6,735,900) (61,645) (1,724,325) (470,284) - - - - - - - - - - - - - - - - - - -	(61,645) (3,712,962) (1,744,229) (555,373) 400,733 689,433 729,572 (31,492,422) (4,254,472) (61,645) (1,744,229) (555,373) 400,733 729,572	(61,645) (3,712,962) (1,764,134) (643,677) 476,872 710,116 911,965 (35,575,887) (4,083,465) (9,384,522) (61,645) (1,764,134) (643,677) 476,872 911,965	(61,645) (3,712,962) (1,784,039) (735,291) - 555,897 731,420 1,094,358 (39,488,151) (3,912,264) (10,429,141) (61,645) (1,784,039) (735,291) - 555,897 1,094,358	(61,645) (3,712,962) (1,803,944) (830,313) - - 637,892 753,362 1,276,751 (43,229,010) (3,740,859) (11,359,862) (61,645) (1,803,944) (830,313 - - -	(1,909,132) (1,823,849) (928,841)	(1,909,132) (1,843,753) (1,030,978) - - 811,143 799,242 1,641,537 (46,464,721) (12,711,722) - (1,843,753) (1,030,978) - - 811,143 1,641,537	(1,909,132) (1,863,658) (1,136,829) - - - - - - - - - - - - - - - - - - -	(1,909,132) (1,883,563) (1,246,502) - 997,352 847,916 2,006,323 (49,012,215) (1,187,606) (13,407,750) (1,883,563) (1,246,502) - - 997,352 2,006,323	(1,909,132) (1,909,468) (1,360,107) 1,095,653 873,353 2,188,717 (50,027,297) (1,015,083) (1,354,140) (1,903,468) (1,360,107)	(1,909,132) (1,923,373) (1,477,757) 1,197,283 899,554 2,371,111 (50,869,611) (842,314) (13,513,444) (1,923,373) (1,477,757) 1,197,283 2,371,111	(1,909,132) (1,943,278) (1,599,569) 1,302,643 926,541 2,553,503 (669,291) (13,346,181) (1,943,278) (1,599,569) 1,302,643 2,553,503	(1,909,132) (1,962,735) (1,723,549) 1,409,874 954,337 2,735,897 (52,034,211) (495,308) (13,032,881) (1,962,735) (1,723,549)	(1,909,132) (1,982,193) (1,851,847) - - 1,520,872 982,967 2,918,289 (52,355,254) (321,043) (12,573,394) - - - 1,520,872 2,918,289	(1,994,588) 1,635,746 1,012,456 3,100,683 (1,964,685) (1,964,685) (1,964,685) (1,964,685) 1,635,746 3,100,683	(2,021,108) (2,121,898) 1,754,608 1,042,830 3,283,075 (50,564,233) 1,937,506 (11,218,082) (2,021,108) (2,121,898) 1,754,608 3,283,075	(2,021,108) (2,164,336) - 1,789,700 3,465,468 (49,494,509) 1,069,724 (10,323,406) (2,021,108) (2,164,336) - 1,789,700 3,465,468	(2,021,108) (2,207,623) - 1,825,494 3,647,862 - (48,249,884) 1,244,625 (9,253,682) (2,021,108) (2,207,623) - 1,825,494 3,647,862	(2,021,108) (2,251,775) - 1,862,004 3,647,862 (47,012,902) 1,236,982 (8,009,057) (2,021,108) (2,251,775) - 1,862,004 3,647,862	(2,021,108) (2,296,811) - - 1,899,244 3,647,862 (45,783,715) 1,229,187 (6,772,074) (2,021,108) (2,296,811) - - 1,899,244 3,647,862	(2,021,108) (2,342,747) 1,937,228 3,647,862 (44,562,479) 1,221,236 (5,542,887) (2,021,108) (2,342,747) 1,937,228 3,647,862	(2,021,108) (2,389,602) 1,975,973 3,647,862 (43,349,354) 1,213,125 (4,321,652) (2,021,108) (2,389,602) 1,975,973 3,647,862	(2,021,108) (2,437,394) 2,015,492 3,647,862 (42,144,501) 1,204,853 (3,108,527) (2,021,108) (2,437,394) 2,015,492 3,647,862	(2,021,108) (2,486,142) 2,055,802 3,647,862 (40,948,087) 1,196,415 (1,903,674) (2,021,108) (2,486,142) 2,055,802 3,647,862
Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Debenture Issuance Operating Revenues DC Revenues Taxation Revenues Sale of Land (inflated) Net Cashflow (cumulative) Net Annual Position Non-DC Related Expenditures and Revenues Beginning Balance Non-DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost) Sale of Land (inc. interest cost) Debenture Issuance Operating Revenues	(38,422,682) 	(3,712,962)	(61,645) (3,712,962) (1,644,705) (68,549) 60,493 594,711 (61,645) (4,832,657) (61,645) (61,645) (61,645) (63,549) (63,549)	(61,645) (3,712,962) (1,664,610) (139,839) - 123,405 612,552 - (13,450,364) (4,843,099) (1,776,052) (61,645) (1,664,610) (139,839) - 123,405 - (3,518,741)	(61,645) (3,712,622) (1,684,515) (309,387) - 188,810 630,929 182,393 (18,216,740) (4,766,377) (3,518,741) (61,645) (1,684,515) (1,684,515) (309,387) - - - -	(61,645) (3,712,962) (1,704,419) (398,319) (398,319) (256,781 (649,857 (364,786 (4,595,922) (5,203,084) (61,645) (1,704,419) (1,704,419) (388,319) (256,781 (364,786 (6,735,900)	(61,645) (3,712,952) (1,724,324) (470,284) - 327,396 (69,353 547,179 (4,425,288) (6,735,900) (61,645) (1,724,324) (1,724,324) (1,724,325) (4,70,284) - 327,396 (4,70,284) - 1,724,325 (4,70,284) - 1,724 (4,70,284) - 1,725 (4,70,284	(61,645) (3,712,962) (1,744,229) (555,373) - 400,733 689,433 729,572 (4,254,475,792) (61,645) (1,744,229) (555,373) - 400,733 729,572	(61,645) (3,712,962) (1,764,134) (643,677) 476,872 710,116 911,965 (35,575,887) (4,083,465) (9,348,522) (61,645) (1,764,134) (1,764,134) (643,677) 476,872 911,965 (10,429,141)	(61,645) (3,712,962) (1,764,039) (735,291) 555,897 731,420 1,094,358 (39,488,151) (3,912,264) (10,429,141) (61,645) (1,784,039) (735,291) 555,897 1,094,358 (11,359,862)	(61,645) (3,712,962) (1,803,944) (830,313) - 637,892 753,362 1,276,751 (43,229,010) (3,740,859) (11,359,862) (61,645) (1,803,944) (830,313) - 637,892 1,276,751 1,276,751	(1,909,132) (1,823,849) (928,841)  722,944 775,963 1,459,145 (44,932,780) (1,703,770) (12,141,121)  (1,823,849) (928,841)  722,944	(1,909,132) (1,843,753) (1,030,978) - - 811,143 799,242 1,641,537 (46,464,721) (12,711,722) - (1,843,753) (1,030,978) - - 811,143 1,641,537	(1,909,132) (1,863,658) (1,136,829) - - - - - - - - - - - - - - - - - - -	(1,909,132) (1,883,563) (1,246,502) 997,352 847,916 (2,006,323 (1,187,606) (13,407,750) (1,883,563) (1,246,502) 997,352 2,006,323 (13,534,140)	(1,909,132) (1,903,468) (1,360,107) 	(1,909,132) (1,923,373) (1,477,757) 1,197,283 899,554 2,377,111 (50,869,611) (842,314) (1,3513,444) (1,923,373) (1,477,757) - 1,197,283	(1,909,132) (1,943,278) (1,599,569) 1,302,643 926,541 2,553,503 (669,291) (13,346,181) (1,943,278) (1,599,569) 1,302,643 2,553,503	(1,909,132) (1,902,735) (1,723,549) 1,409,874 954,337 2,735,897 (52,034,211) (495,308) (13,032,81) (1,962,735) (1,723,549)	(1,909,132) (1,982,193) (1,851,847) - - 1,520,872 982,967 2,918,289 (52,355,254) (321,043) (12,573,394) - - - 1,520,872 2,918,289	(1,909,132) (2,001,650) (1,984,588) 1,635,746 1,012,456 3,100,683 (52,501,740) (146,485) (11,968,273) (2,001,650) (1,984,588)	(2,021,108) (2,121,898) 1,754,608 1,042,830 3,283,075 (50,564,233) 1,937,506 (11,218,082) (2,021,108) (2,121,898) 1,754,608 3,283,075	(2,021,108) (2,164,336) - 1,789,700 3,465,468 (49,494,509) 1,069,724 (10,323,406) (2,021,108) (2,164,336) - 1,789,700 3,465,468	(2,021,108) (2,207,623) - 1,825,494 3,647,862 - (48,249,884) 1,244,625 (9,253,682) (2,021,108) (2,207,623) - 1,825,494 3,647,862	(2,021,108) (2,251,775) - 1,862,004 - 3,647,862 (47,012,902) 1,236,982 (8,009,057) - (2,021,108) (2,251,775) - 1,862,004	(2,021,108) (2,296,811) 1,899,244 3,647,862 (45,783,715) 1,229,187 (6,772,074) (2,021,108) (2,296,811) 1,899,244	(2,021,108) (2,342,747) 1,937,228 3,647,862 (44,562,479) 1,221,236 (5,542,887) (2,021,108) (2,342,747) 1,937,228 3,647,862	(2,021,108) (2,389,602) 1,975,973 3,647,862 (43,349,354) 1,213,125 (4,321,652) (2,021,108) (2,389,602)	(2,021,108) (2,437,394) 2,015,492 3,647,862 (42,144,501) 1,204,853 (3,108,527) (2,021,108) (2,437,394) 2,015,492 3,647,862 (1,903,674)	(2,021,108) (2,486,142) 2,055,802 3,647,862 (40,948,087) 1,196,415 (1,903,674) (2,021,108) (2,486,142)

Development/construction will occur in 2026
Tax revenues - 2 year lag (i.e. start in 2028)
DC revenues have only been applied to DC-related expenditures.
Operating Revenues and expenditures inflated at 2% per year.
DC Revenues inflated at 3% per year
Operating expenditures for infrastructure have been assumed four years after anticipated construction.



## Figure C-3 Haldimand County Scenario 3: 20-Year Development Timeframe

Cash Flow Analysis - County Acts as	the I and Develo	oner in Partne	ershin with th	e Private Sect	tor																									
Development Forecast	2024 Year	2025 Year	2026 Year	2027 Year	2028 Year	2029 Year	2030 Year	2031 Year	2032 Year	2033 Year	2034 Year	2035 Year	2036 Year	2037 Year	2038 Year	2039 Year	2040 Year 17	2041 Year	2042 Year	2043 Year	2044 Year	2045 Year	2046 Year	2047 Year	2048 Year	2049 Year	2050 Year	2051 Year	2052 Year	2053 Year
Non-residential Development (GFA)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		18	19	20	21	22	23	24	25	26	27	28	29	30
Light Industrial General Industrial	-	-	22,050 110,473																											
Total Employment (cumulative)	Year	Year	132,523 Year	265,046 Year	397,569 Year	530,092 Year	662,615 Year	795,138 Year	927,661 Year	1,060,184 Year	1,192,707 Year	1,325,230 Year	1,457,753 Year	1,590,276 Year	1,722,799 Year	1,855,322 Year	1,987,845 Year	2,120,368 Year	2,252,891 Year	2,385,414 Year	2,517,937 Year	2,650,460 Year	2,650,460 Year	2,650,460 Year	2,650,460 Year	2,650,460 Year	2,650,460 Year	2,650,460 Year	2,650,460 Year	2,650,460 Year
Non-residential Development (Employees)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Light Industrial General Industrial	-	-	22 67	21 66	21 66	21 66	21 66	-	-	-	-	-	-	-	-															
Total Employment (cumulative)	-	-	89	178	267	356	445	534	623	712	801	890	979	1,068	1,157	1,246	1,335	1,424	1,511	1,598	1,685	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772
Revenues, Expenditures, and Impact	Year 1	Year	Year	Year 4	Year 5	Year 6	Year	Year	Year	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year	Year 23	Year	Year 25	Year 26	Year 27	Year	Year 29	Year 30
DC Revenues Light Industrial	<u> </u>		93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	23	24	23	20	21	20	23	30
General Industrial  DC Revenue - Non-residential (inflated)		-	467,301 594,711	467,301 612.552	467,301 630,929	467,301 649.857	467,301 669.353	467,301 689,433	467,301 710,116	467,301 731,420	467,301 753,362	467,301 775,963	467,301 799,242	467,301 823,219	467,301 847,916	467,301 873,353	467,301 899.554	467,301 926.541	467,301 954,337	467,301 982,967	467,301 1.012.456	467,301 1.042.830								
Total DC Revenues	-	-	594,711	612,552			669,353	689,433	710,116	731,420		775,963	799,242		847,916	873,353	899,554	926,541		982,967	1,012,456	1,042,830	-	-	-	-	-	-	-	-
Capital Expenditures  Roads																														.
DC DC (Debenture)	_																												-	-
Non-DC Non-DC (Debenture)	_		-	_	-	-	-	-	-	-	_		-	_	_	-	_	-	_	-	-	_	-	_	-	-		-	_	
Local Service Local Service (Debenture)	30,449,000	3,754,086	3,754,086	3,754,086	3,754,086	3,754,086	3,754,086	3,754,086	3,754,086	3,754,086	3,754,086	-	-	-	-	-	-	-	-	-	-	-	-		-	-		-	-	
Lifecycle			421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100
Water DC DC (Debenture)	6,932,569	854.723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723				_	_	_				_		_			_				.
Non-DC Non-DC (Debenture)	-	054,723	654,725	654,723	654,725	654,725	654,723	654,723	654,723	654,723	654,723		-		-	-		-	-	-	-	-	-			-	-	-	-	
Local Service Local Service (Debenture)	20,763,000	2,559,890	2.559.890	2.559.890	2.559.890	2.559.890	2.559.890	2.559.890	2.559.890	2.559.890	2.559.890											[ ]								. []
Lifecycle		2,303,030	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500
Wastewater DC	31,490,113																													.
DC (Debenture) Non-DC	-	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	-	-	-	-	-	-	-	-	
Non-DC (Debenture) Local Service	21,455,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Local Service (Debenture) Lifecycle		1,932,456	1,932,456 539,800	1,328,577 539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800																	
Stormwater DC																														.
DC (Debenture) Non-DC																														.
Non-DC (Debenture) Local Service	32,220,000																													.
Local Service (Debenture) Lifecycle		3,972,434	3,972,434 141,400	141,400	- 141,400	141,400	- 141,400	- 141,400	141,400	141,400	141,400	141,400	141,400	141,400	- 141,400	141,400	- 141,400	- 141,400	- 141,400	- 141,400	141,400	- 141,400								
Studies DC																														
DC (Debenture) Non-DC	-																													
Non-DC (Debenture) Local Service	-																													
Local Service (Debenture) Lifecycle		_	_	_	-	_	_	-	_	_	_	_		_	_	_	-	_	_	_	-	_	_	_	_	-	_	_	_	_
Broader Lifecycle Costs	.		19,905	39,810	59,715	79,619	99,524	119,429	139,334	159,239	179,144	199,049	218,953	238,858	258,763	278,668	298,573	318,478	337,935	357,393	376,850	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308
Sub-total Capital Expenditures	143,309,682	-	1,644,705	1,664,610	1,684,515	1,704,419	1,724,324	1,744,229	1,764,134	1,784,039	1,803,944	1,823,849	1,843,753	1,863,658	1,883,563	1,903,468	1,923,373	1,943,278	1,962,735	1,982,193	2,001,650	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108



#### Figure C-3 (Cont'd)

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Revenues, Expenditures, and	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year
Impact	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Power and and																														
Purchase of Land Land Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land Furchase	-	-	· ·	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operating Expenditures																														
Per Employee (inflated) X 740.30	-		68,549	139,839	213,954	290,977	370,996	454,099	540,377	629,926	722,840	819,218	919,163	1,022,778	1,130,169	1,241,448	1,356,725	1,476,117	1,597,627	1,723,407	1,853,579	1,988,269	2,028,034	2,068,595	2,109,967	2,152,166	2,195,209	2,239,113	2,283,896	2,329,574
Operating Costs Related to New																														
Infrastructure (inflated)					95,433	97,342	99,289	101,274	103,300	105,366	107,473	109,623	111,815	114,051	116,332	118,659	121,032	123,453	125,922	128,440	131,009	133,629	136,302	139,028	141,809	144,645	147,538	150,488	153,498	156,568
Debenture Payments (capital +																														
land)	0	15,931,828	15,931,828	15,931,828	15,931,828	15,931,828	15,931,828	15,931,828	15,931,828	15,931,828	15,931,828	3,237,708	3,237,708	3,237,708	3,237,708	3,237,708	3,237,708	3,237,708	3,237,708	3,237,708	3,237,708	-	-	-	-	-	-	-	-	-
Sub-total Operating Expenditures	0	15,931,828	16,000,376	16,071,667	16,241,215	16,320,147	16,402,112	16,487,201	16,575,505	16,667,119	16,762,141	4,166,549	4,268,686	4,374,537	4,484,210	4,597,815	4,715,465	4,837,278	4,961,257	5,089,555	5,222,296	2,121,898	2,164,336	2,207,623	2,251,775	2,296,811	2,342,747	2,389,602	2,437,394	2,486,142
Operating Revenues																														
Per Employee (inflated) X 653.30	-	-	60,493	123,405	188,810	256,781	327,396	400,733	476,872	555,897	637,892	722,944	811,143	902,581	997,352	1,095,553	1,197,283	1,302,643	1,409,874	1,520,872	1,635,746	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Sub-total Operating Revenues	-	-	60,493	123,405	188,810	256,781	327,396	400,733	476,872	555,897	637,892	722,944	811,143	902,581	997,352	1,095,553	1,197,283	1,302,643	1,409,874	1,520,872	1,635,746	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
			,	.,	,		,		.,.	,	,	,-	,	,	, , , , , , , , , , , , , , , , , , , ,	,,	, , , ,	,,	,,	, , , , ,	,	, . ,	, ,	, , , ,	, ,	,,	, ,	,,.	,,	,,
Taxation Revenues																														
Non-residential (cumulative)	-	-	-	-	182,393	364,786	547,179	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862
Sub-total Taxation Revenues	-	-	-	-	182,393	364,786	547,179	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862
Sale of Land (inflated) - Recoup Local Service	d -	_	6,109,433	6,109,433	6,109,433	6,109,433	6,109,433	6,109,433	6,109,433	6,109,433	6,109,433	6,109,433	6,109,433	6,109,433	6,109,433	6,109,433	6,109,433	6,109,433	6,109,433	6,109,433	6,109,433	6,109,433	-	-	_	_	_	_	_	_
Sale of Earla (Illiated) - Necoup Escal Service	1	_	0,100,400	0,100,400	0,103,433	0,103,433	0,103,433	0,103,433	0,100,400	0,103,433	0,103,433	0,103,433	0,103,433	0,103,433	0,103,433	0,103,433	0,100,400	0,103,433	0,100,400	0,103,433	0,103,433	0,103,433								_
Beginning Balance	_	_	(15.931.828)	(26,812,272)	(37.703.159)	(48.517.323)	(59.161.032)	(69.634.107)	(79.936.366)	(90.067.619)	(100.027.670)	(109.816.316)	(106.739.230)	(103.490.314)	(100.069.346)	(96.476.096)	(92.710.322)	(88,771,780)	(84.660.215)	(80.374.667)	(75.914.854)	(71,280,483)	(63,233,544)	(62,163,820)	(60.919.195)	(59.682.212)	(58.453.025)	(57.231.790)	(56.018.665)	(54.813.812)
Non-DC Capital Expenditures (inc. interest cost)			(10,301,020)	(20,012,212)	(57,705,155)	(40,517,525)	(55, 101,052)	(00,004,107)	(73,330,300)	(30,007,013)	(100,027,070)	(103,010,310)	(100,733,230)	(100,430,514)	(100,003,340)	(30,470,030)	(32,710,322)	(00,771,700)	(04,000,213)	(00,374,007)	(73,314,034)	(71,200,400)	(00,200,011)	(02,103,020)	(00,515,155)	(33,002,212)	(50,450,025)	(57,251,750)	(30,010,003)	(34,013,012)
DC Capital Expenditures (inc. interest cost)	(38,422,682)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	-	-	-		-	-	-		
Local Service Capital Cost (inc. interest cost)	(104,887,000)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	-	-	-	-	-	-	-	-	-
Lifecycle Costs			(1,644,705)	(1,664,610)	(1,684,515)	(1,704,419)	(1,724,324)	(1,744,229)	(1,764,134)	(1,784,039)	(1,803,944)	(1,823,849)	(1,843,753)	(1,863,658)	(1,883,563)	(1,903,468)	(1,923,373)	(1,943,278)	(1,962,735)	(1,982,193)	(2,001,650)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)
Operating Expenditures	-	-	(68,549)	(139,839)	(309,387)	(388,319)	(470,284)	(555,373)	(643,677)	(735,291)	(830,313)	(928,841)	(1,030,978)	(1,136,829)	(1,246,502)	(1,360,107)	(1,477,757)	(1,599,569)	(1,723,549)	(1,851,847)	(1,984,588)	(2,121,898)	(2,164,336)	(2,207,623)	(2,251,775)	(2,296,811)	(2,342,747)	(2,389,602)	(2,437,394)	(2,486,142)
Purchase of Land (inc. interest cost)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Debenture Issuance	143,309,682																													
Operating Revenues	-	-	60,493	123,405	188,810	256,781	327,396	400,733	476,872	555,897	637,892	722,944	811,143	902,581	997,352	1,095,553	1,197,283	1,302,643	1,409,874	1,520,872	1,635,746	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
DC Revenues	-	-	594,711	612,552	630,929	649,857	669,353	689,433	710,116	731,420	753,362	775,963	799,242	823,219	847,916	873,353	899,554	926,541	954,337	982,967	1,012,456	1,042,830	-	-	-	-	-	-	-	-
Taxation Revenues	-	-	6 100 433	6 109 433	182,393 6 109 433	364,786 6 109 433	547,179 6 109 433	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897 6 109 433	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862
Sale of Land (inflated) - Recoup Local Service Co.  Net Cashflow (cumulative)	s -	(4E 024 020)	6,109,433	0,100,100	6,109,433 (48.517.323)	0,100,100	0,100,100	6,109,433	(90.067.619)	0,100,100	0,100,100	0,100,100	6,109,433	0,100,100	(96,476,096)	6,109,433 (92,710,322)	6,109,433 (88,771,780)	6,109,433 (84,660,215)	0,100,100	0,100,100	6,109,433 (71,280,483)	6,109,433	(62.462.020)	(CO 040 40E)	(59.682.212)	(EQ 4E2 02E)	- (E7 224 700)	/EC 040 CCE\	(54.813.812)	(F2 C47 207)
Net Annual Position			(10,880,445)		(10,814,164)	(, . ,,	(10,473,075)	, .,,,	(10,131,253)	( , . , ,	(9,788,647)	3,077,087	3,248,915	3,420,968	3,593,251	3,765,774	( , , , , , , , , , , , , , , , , , , ,	4,111,565	( , . , ,	4.459.813	4,634,371	8,046,939	1,069,724	( , , ,	1,236,982	1,229,187	1,221,236	1,213,125	( , , , , , , ,	( , . , ,
Non-DC Related Expenditures and Revenues		(13,331,020	/  (10,000,445)	(10,030,000)	(10,014,104)	(10,043,709)	(10,473,073)	(10,302,259)	(10,131,233)	(3,300,031)	(3,700,047)	3,011,001	3,240,313	3,420,300	3,333,231	3,103,114	3,330,342	4,111,303	4,200,040	4,403,013	4,034,371	0,040,539	1,009,724	1,244,025	1,230,302	1,223,107	1,221,230	1,213,123	1,204,000	1,130,413
·																										1				
Beginning Balance	-	-	(12,218,866)	(19,981,059)	(27,771,535)	(35,503,666)	(43,084,270)	(50,513,736)	(57,792,466)	(64,920,872)	(71,899,381)	(78,728,428)	(74,518,172)	(70,159,367)	(65,652,487)	(60,998,021)	(56, 196, 469)	(51,248,349)	(46,154,193)	(40,913,850)	(35,527,873)	(29,996,826)	(22,992,716)	(21,922,992)	(20,678,367)	(19,441,385)	(18,212,198)	(16,990,962)	(15,777,837)	(14,572,984)
Non-DC Capital Expenditures (inc. interest cost)				<del>-</del>			<del>.</del>						-	· · · · · · ·	-			-	· ·	-	-	-	-	-	-	-	-	-	-	-
Local Service Capital Cost (inc. interest cost)	(104,887,000)	(12,218,866)		(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	-	-	-	-	-	-	-	-	-
Lifecycle Costs	-	· ·	(1,644,705) (68,549)	(1,664,610) (139,839)	(1,684,515) (309,387)	(1,704,419) (388,319)	(1,724,324) (470,284)	(1,744,229) (555,373)	(1,764,134) (643,677)	(1,784,039)	(1,803,944) (830,313)	(1,823,849) (928,841)	(1,843,753)	(1,863,658)	(1,883,563) (1,246,502)	(1,903,468) (1,360,107)	(1,923,373) (1,477,757)	(1,943,278)	(1,962,735)	(1,982,193)	(2,001,650) (1,984,588)	(2,021,108)	(2,021,108) (2,164,336)	(2,021,108)	(2,021,108) (2,251,775)	(2,021,108)	(2,021,108)	(2,021,108) (2,389,602)	(2,021,108) (2,437,394)	(2,021,108) (2,486,142)
Operating Expenditures Purchase of Land (inc. interest cost)	1		(00,049)	(139,839)	(309,387)	(300,319)	(470,284)	(555,373)	(043,077)	(735,291)	(030,313)	(920,041)	(1,030,978)	(1,130,629)	(1,240,502)	(1,300,107)	(1,4//,/5/)	(1,599,569)	(1,723,549)	(1,001,047)	(1,964,068)	(2,121,898)	(2,104,336)	(2,207,023)	(2,251,775)	(2,296,811)	(2,342,141)	(2,309,002)	(2,437,394)	(2,400,142)
Sale of Land (inflated) - Recoup Local Service Co.	1	1	6.109.433	6,109,433	6,109,433	6,109,433	6.109.433	6,109,433	6,109,433	6,109,433	6.109.433	6,109,433	6,109,433	6.109.433	6.109.433	6,109,433	6,109,433	6,109,433	6,109,433	6.109.433	6,109,433	6,109,433	-	-	-	-	-	-	-	· .
Debenture Issuance	104.887.000	_	0,109,433	0,109,433	0,109,433	0,109,433	0,109,433	0,109,433	0, 109,433	0,109,433	0,109,433	0,109,433	0,109,433	0,109,433	0,109,433	0,109,433	0, 109,433	0, 109,433	0,109,433	0,109,433	0, 109,433	0,109,433	-	-	-	-	-	-	-	
Operating Revenues	104,007,000		60,493	123,405	188,810	256,781	327,396	400,733	476,872	555,897	637,892	722,944	811,143	902,581	997,352	1,095,553	1,197,283	1,302,643	1,409,874	1,520,872	1,635,746	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Taxation Revenues			00,400	120,400	182 393	364 786	547 179	729.572	911.965	1 094 358	1.276.751	1.459.145	1.641.537	1.823.930	2.006.323	2.188.717	2.371.111	2.553.503	2.735.897	2.918.289	3.100.683	3.283.075	3.465.468	3.647.862	3.647.862	3.647.862	3.647.862	3 647 862	3,647,862	3,647,862
Net Cashflow (cumulative)		(40.040.000)			102,000	JUT, 100	571,175		0,000	1,007,000	1,210,131	1,700,170	1,071,337		2,000,023		2,011,111	2,000,000	2,700,007	2,310,203	3,100,003	3,203,073	J,70J,700	0,077,002	0,077,002	3,077,002	0,077,002	3,077,002	0,011,00=	
		(12.218.866)	)  (19.981.059)	(27.771.535)	(35.503.666)	(43.084.270)	(50.513.736)	(57,792,466)	(64.920.872)	(71.899.381)	(78,728,428)	(74.518.172)	(70.159.367)	(65,652,487)	(60.998.021)	(56.196.469)	(51.248.349)	(46.154.193)	(40.913.850)	(35.527.873)	(29.996.826)	(22.992.716)	(21.922.992)	(20.678.367)	(19.441.385)	(18.212.198)	(16.990.962)	(15.777.837)	(14.572.984)	(13,376,570)

Development/construction will occur in 2026
Tax revenues - 2 year lag (i.e. start in 2028)
DC revenues have only been applied to DC-related expenditures.
Operating Revenues and expenditures inflated at 2% per year.
DC Revenues inflated at 3% per year
Operating expenditures for infrastructure have been assumed four years after anticipated construction.



## Figure C-4 Haldimand County Scenario 4: 20-Year Development Timeframe

Cash Flow Analysis - County to De	evelop. Acquire. S	Service. and Se	ell Land Parce	els																											
Development Forecast	2024 Year	2025 Year	2026 Year	2027 Year	2028 Year	2029 Year	2030 Year	2031 Year	2032 Year	2033 Year	2034 Year	2035 Year	2036 Year	2037 Year	2038 Year	2039 Year	2040 Year	2041 Year	2042 Year	2043 Year	2044 Year	2045 Year	2046 Year	ar	2047 Year	2048 Year	2049 Year	2050 Year	2051 Year	2052 Year	2053 Year
Non-residential Development (GFA)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	3	24	25	26	27	28	29	30
Light Industrial General Industrial Total Employment (cumulative)		-	22,050 110,473 <b>132,523</b>	22,050 110,473 <b>265,046</b>	22,050 110,473 <b>397,569</b>	22,050 110,473 <b>530,092</b>	22,050 110,473 <b>662,615</b>	22,050 110,473 <b>795,138</b>	22,050 110,473 <b>927,661</b>	22,050 110,473 <b>1,060,184</b>	22,050 110,473 <b>1,192,707</b>	22,050 110,473 <b>1,325,230</b>	22,050 110,473 <b>1,457,753</b>	22,050 110,473 <b>1,590,276</b>	22,050 110,473 <b>1,722,799</b>	22,050 110,473 <b>1,855,322</b>	22,050 110,473 <b>1,987,845</b>	22,050 110,473 <b>2,120,368</b>	22,050 110,473 <b>2,252,891</b>	22,050 110,473 <b>2,385,414</b>	22,050 110,473 <b>2,517,937</b>	22,050 110,473 <b>2,650,460</b>	2,650,460	E0 460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460
Development Forecast	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	ar	Year						
Non-residential Development (Employees)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	3	24	25	26	27	28	29	30
Light Industrial General Industrial	-	-	22 67	22 67	22 67	22 67	22 67	22 67	22 67	22 67	22 67	21 66	21 66	21 66	21 66				-	-	-	-	-	-							
Total Employment (cumulative)	-	-	89	178	267	356	445	534	623	712	801	890	979	1,068	1,157	1,246	1,335	1,424	1,511	1,598	1,685	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772
Revenues, Expenditures, and Impact	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23		Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
DC Revenues Light Industrial	_	_	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	93,272	_	_	_	_	_	-	_	_	-
General Industrial DC Revenue - Non-residential (inflated)	-	-	467,301 594,711	467,301 612,552	467,301 630,929	467,301 649,857	467,301 669,353	467,301 689,433	467,301 710,116	467,301 731,420	467,301 753,362	467,301 775,963	467,301 799,242	467,301 823,219	467,301 847,916	467,301 873,353	467,301 899,554	467,301 926,541	467,301 954,337	467,301 982,967	467,301 1,012,456	467,301 1,042,830	-	-	-	-	-	-	-	-	-
Total DC Revenues	-	-	594,711	612,552	630,929	649,857	669,353	689,433	710,116	731,420	753,362	775,963	799,242	823,219	847,916	873,353	899,554	926,541	954,337	982,967	1,012,456	1,042,830	-	-	-	-	-	-	-	-	-
Capital Expenditures Roads																															
DC DC (Debenture)																															
Non-DC Non-DC (Debenture)																															
Local Service	30,449,000	0.754.000	0.754.000	0.754.000	0.754.000	0.754.000	0.754.000	0.754.000	0.754.000	0.754.000	0.754.000																			-	-
Local Service (Debenture) Lifecycle	-	3,754,086	3,754,086 421,100	3,754,086 421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	21,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100							
Water DC	6,932,569																														
DC (Debenture) Non-DC	0,932,309	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-DC (Debenture)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local Service (Debenture)	20,763,000	2,559,890	2,559,890	2,559,890	2,559,890	2,559,890	2,559,890	2,559,890	2,559,890	2,559,890	2,559,890	- 522,500	- 522,500	-	-	- 522,500	-	-	-	-	- 522,500	-	-	-	522.500	522,500	-	-	-	- 522,500	-
Lifecycle Wastewater			522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	22,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500
DC DC (Debenture)	31,490,113	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132										
Non-DC	-	2,000,239	2,000,239		2,000,239	2,000,239	2,000,239	2,000,209	2,000,239	2,000,239	2,000,239	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132			-	-	-	-	-		-	
Non-DC (Debenture) Local Service	21,455,000	-		-	-								-							-		-	-	-	-	-	-	-	-	-	
Local Service (Debenture) Lifecycle		1,932,456	1,932,456 539,800	1,932,456 539,800	1,328,577 539,800	539,800	539,800	39,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800																
Stormwater DC																															
DC (Debenture)																															
Non-DC Non-DC (Debenture)																															
Local Service Local Service (Debenture)	32,220,000	3,972,434	3,972,434	3,972,434	3,972,434	3,972,434	3,972,434	3,972,434	3,972,434	3,972,434	3,972,434	-			-			-		-			-	-	-	-	_			-	
Lifecycle			141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	41,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400
Studies DC																															
DC (Debenture) Non-DC	500,000																														
Non-DC (Debenture) Local Service	-	61,645	61,645	61,645	61,645	61,645	61,645	61,645	61,645	61,645	61,645	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local Service (Debenture) Lifecycle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
Broader Lifecycle Costs	-	-	19,905	39,810	59,715	79,619	99,524	119,429	139,334	159,239	179,144	199,049	218,953	238,858	258,763	278,668	298,573	318,478	337,935	357,393	376,850	396,308	396,308	96,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308
Sub-total Capital Expenditures	143,809,682	-	1,644,705	1,664,610	1,684,515	1,704,419	1,724,324	1,744,229	1,764,134	1,784,039	1,803,944	1,823,849	1,843,753	1,863,658	1,883,563	1,903,468	1,923,373	1,943,278	1,962,735	1,982,193	2,001,650	2,021,108	2,021,108	21.108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108



#### Figure C-4 (Cont'd)

	2024	2025	2000	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	0000	20.40	2041	0040	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2050
Revenues, Expenditures, and	2024 Year	2025	2026	2027	2028	2029	2030 Year	2031 Year	2032 Year	2033	2034 Year	2035 Year	2036 Year	2037	2038	2039	2040 Year	2041	2042	2043	2044 Year	2045	2046 Year	2047	2048 Year	2049	2050 Year	2051	2052 Year	2053 Year
Impact	1	2	3	4	5 Tear	теаг 6	7	1ear 8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	7ear 24	25	26	27	28	29	30
·																														
Purchase of Land	97,172,075	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land Purchase (Debt Debenture)	-	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	-	-	-	-	-	-	-	-	-
Operating Expenditures																														
Per Employee (inflated) X 740.30		_	68,549	139.839	213.954	290.977	370.996	454.099	540.377	629,926	722,840	819,218	919.163	1,022,778	1.130.169	1.241.448	1.356.725	1,476,117	1,597,627	1,723,407	1,853,579	1.988.269	2.028.034	2.068.595	2.109.967	2,152,166	2,195,209	2,239,113	2,283,896	2,329,574
Operating Costs Related to New			00,010	100,000	210,001	200,011	0,000	10 1,000	0.10,01.1	020,020	722,010	010,210	0.10,100	1,022,110	1,100,100	1,211,110	1,000,120	1, 110, 111	1,007,027	1,720,101	1,000,010	1,000,200	2,020,001	2,000,000	2,100,007	2,102,100	2,100,200	2,200,110	2,200,000	2,020,011
Infrastructure (inflated)					95,433	97,342	99,289	101,274	103,300	105,366	107,473	109,623	111,815	114,051	116,332	118,659	121,032	123,453	125,922	128,440	131,009	133,629	136,302	139,028	141.809	144,645	147,538	150.488	153,498	156,568
,						- /-	,	- /	,	,			,	,	-,	-,	,	.,	-,-		. ,		,	,-	,	,	,	,	,	
Debenture Payments (capital +																														
land)	0	23,790,812	23,790,812	23,790,812	23,790,812	23,790,812	23,790,812	23,790,812	23,790,812	23,790,812	23,790,812	11,035,047	11,035,047	11,035,047	11,035,047	11,035,047	11,035,047	11,035,047	11,035,047	11,035,047	11,035,047	-	-	-	-	-	-	-	-	-
Sub-total Operating Expenditures	0	23,790,812	23,859,361	23,930,651	24,100,199	24,179,131	24,261,096	24,346,185	24,434,489	24,526,104	24,621,125	11,963,888	12,066,025	12,171,876	12,281,549	12,395,153	12,512,804	12,634,616	12,758,595	12,886,894	13,019,635	2,121,898	2,164,336	2,207,623	2,251,775	2,296,811	2,342,747	2,389,602	2,437,394	2,486,142
Operating Revenues																														
Per Employee (inflated) X 653.30	-	-	60,493	123,405	188,810	256,781	327,396	400,733	476,872	555,897	637,892	722,944	811,143	902,581	997,352	1,095,553	1,197,283	1,302,643	1,409,874	1,520,872	1,635,746	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Sub-total Operating Revenues	-	-	60,493	123,405	188,810	256,781	327,396	400,733	476,872	555,897	637,892	722,944	811,143	902,581	997,352	1,095,553	1,197,283	1,302,643	1,409,874	1,520,872	1,635,746	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Tti B																														
Taxation Revenues Non-residential (cumulative)					182.393	364,786	547,179	729,572	911.965	1.094.358	1,276,751	1.459.145	1.641.537	1,823,930	2.006.323	2.188.717	2,371,111	2.553.503	2,735,897	2,918,289	3,100,683	3,283,075	3.465.468	3.647.862	3.647.862	3.647.862	3.647.862	3.647.862	3.647.862	3,647,862
Norriesidentiai (curidiative)	_	•	-		102,393	304,700	347,179	129,312	911,900	1,054,330	1,270,751	1,409,140	1,041,557	1,023,930	2,000,323	2,100,717	2,3/1,111	2,303,303	2,730,097	2,910,209	3,100,003	3,263,073	3,403,406	3,047,002	3,047,002	3,047,002	3,047,002	3,047,002	3,047,002	3,047,002
Sub-total Taxation Revenues	-	-	-	-	182,393	364,786	547,179	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862
Sale of Land (inflated)			8,462,640	8,631,893	8,804,531	8,980,621	9,160,234	9,343,438	9,530,307	9,720,913	9,915,332	10,113,638	10,315,911	10,522,229	10,732,674	10,947,327	11,166,274	11,389,599	11,617,391	11,849,739	12,086,734	12,328,469								
Beginning Balance	-	-	(23,790,812)	(40,177,034)	(56,404,444)	(72,382,494)	(88,013,999)	(103,295,257)	(118,222,495)	(132,791,857)	(146,999,412)	(160,841,144)	(161,557,190)	(161,899,136)	(161,862,710)	(161,443,557)	(160,637,228)	(159,439,183)	(157,844,790)	(155,848,623)	(153,445,842)	(150,631,508)	(136,365,534)	(135,295,809)	(134,051,184)	(132,814,202)	(131,585,015)	(130,363,779)	(129, 150, 654)	(127,945,802)
Non-DC Capital Expenditures (inc. interest cost)	(500,000)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DC Capital Expenditures (inc. interest cost)	(38,422,682)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)				(3,712,962)	(3,712,962)	(3,712,962)		(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	-	-	-	-	-	-	-	-	-
Local Service Capital Cost (inc. interest cost)	(104,887,000)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	-	-	-	-	-	-	-	-	-
Lifecycle Costs	-	-	(1,644,705)	(1,664,610)	(1,684,515)	(1,704,419)	(1,724,324)	(1,744,229)	(1,764,134)	(1,784,039)	(1,803,944)	(1,823,849)	(1,843,753)	(1,863,658)	(1,883,563)	(1,903,468)	(1,923,373)	(1,943,278)	(1,962,735)	(1,982,193)	(2,001,650)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)
Operating Expenditures	(07.470.075)	(7.707.000)	(68,549)	(139,839)	(309,387)	(388,319)	(470,284)	(555,373)	(643,677)	(735,291)	(830,313)	(928,841)	(1,030,978)	(1,136,829)	(1,246,502)	(1,360,107)	(1,477,757)	(1,599,569)	(1,723,549)	(1,851,847)	(1,984,588)	(2,121,898)	(2,164,336)	(2,207,623)	(2,251,775)	(2,296,811)	(2,342,747)	(2,389,602)	(2,437,394)	(2,486,142)
Purchase of Land (inc. interest cost)  Debenture Issuance	(97,172,075) 240,981,757	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	-	-	-	-	-	-	-	-	-
Operating Revenues	240,961,757		60.493	123,405	188.810	256,781	327.396	400,733	476,872	555,897	637.892	722,944	811.143	902,581	997.352	1,095,553	1,197,283	1,302,643	1,409,874	1,520,872	1.635.746	1.754.608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
DC Revenues			594,711	612,552	630,929	649.857	669.353	689,433	710,116	731,420	753.362	775,963	799,242	823,219	847.916	873.353	899,554	926.541	954.337	982.967	1,033,746	1,734,008	1,765,700	1,023,454	1,002,004	1,055,244	1,937,220	1,973,973	2,013,492	2,000,002
Taxation Revenues				0.2,002	182,393	364,786	547,179	729,572	911.965	1.094.358	1,276,751	1,459,145	1.641.537	1,823,930	2,006,323	2.188.717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3.647.862	3,647,862	3,647,862	3,647,862	3.647.862	3,647,862	3,647,862
Sale of Land (inflated)	-	-	8,462,640	8.631.893	8.804.531	8.980.621	9.160.234	9.343.438	9.530.307	9.720.913	9.915.332	10.113.638	10.315.911	10,522,229	10.732.674	10.947.327	11.166.274	11.389.599	11,617,391	11.849.739	12.086.734	12,328,469	-,,	-				-		
Net Cashflow (cumulative)	-	(23,790,812)	(40,177,034)	(56,404,444)	(72,382,494)	(88,013,999)	(103,295,257)	(118,222,495)	(132,791,857)	(146,999,412)	(160,841,144)	(161,557,190)	(161,899,136)		(161,443,557)	(160,637,228)	(159,439,183)	(157,844,790)	(155,848,623)	(153,445,842)	(150,631,508)	(136,365,534)	(135,295,809)	(134,051,184)	(132,814,202)	(131,585,015)	(130,363,779)	(129,150,654)	(127,945,802)	(126,749,387)
Net Annual Position	-	(23,790,812)	(16,386,221)	(16,227,410)	(15,978,050)	(15,631,505)	(15,281,259)	(14,927,238)	(14,569,362)	(14,207,555)	(13,841,732)	(716,046)	(341,945)	36,426	419,153	806,329	1,198,045	1,594,393	1,996,168	2,402,781	2,814,334	14,265,975	1,069,724	1,244,625	1,236,982	1,229,187	1,221,236	1,213,125	1,204,853	1,196,415
Non-DC Related Expenditures and Revenues	, ,																											,		
Beginning Balance	.	_	(20,077,850)	(33.345.820)	(46,472,821)	(59.368.838)	(71.937.237)	(84.174.886)	(96.078.595)	(107.645.111)	(118.871.123)	(129,753,255)	(129,336,133)	(128,568,189)	(127,445,851)	(125,965,482)	(124,123,374)	(121,915,752)	(119.338.769)	(116,387,806)	(113.058.861)	(109.347.851)	(96.124.706)	(95,054,982)	(93.810.357)	(92,573,374)	(91.344.188)	(90,122,952)	(88,909,827)	(87.704.974)
Non-DC Capital Expenditures (inc. interest cost)	(500,000)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)		-	-		-	, ,,,,	, ,,	-	,,	-	-	-	-	-	- ,,	-	-	-	. ,,,
Local Service Capital Cost (inc. interest cost)	(104,887,000)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	-	-	-	-	-	-	-	-	-
Lifecycle Costs	- 1	- 1	(1,644,705)	(1,664,610)	(1,684,515)	(1,704,419)	(1,724,324)	(1,744,229)	(1,764,134)	(1,784,039)	(1,803,944)	(1,823,849)	(1,843,753)	(1,863,658)	(1,883,563)	(1,903,468)	(1,923,373)	(1,943,278)	(1,962,735)	(1,982,193)	(2,001,650)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)
Operating Expenditures	-	-	(68,549)	(139,839)	(309,387)	(388,319)	(470,284)	(555,373)	(643,677)	(735,291)	(830,313)	(928,841)	(1,030,978)	(1,136,829)	(1,246,502)	(1,360,107)	(1,477,757)	(1,599,569)	(1,723,549)	(1,851,847)	(1,984,588)	(2,121,898)	(2,164,336)	(2,207,623)	(2,251,775)	(2,296,811)	(2,342,747)	(2,389,602)	(2,437,394)	(2,486,142)
Purchase of Land (inc. interest cost)	(97,172,075)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	-	-	-	-	-	-	-	-	-
Sale of Land (inflated)		-	8,462,640	8,631,893	8,804,531	8,980,621	9,160,234	9,343,438	9,530,307	9,720,913	9,915,332	10,113,638	10,315,911	10,522,229	10,732,674	10,947,327	11,166,274	11,389,599	11,617,391	11,849,739	12,086,734	12,328,469	-	-	-	-	-	-	-	-
Debenture Issuance	202,559,075	I																												
Operating Revenues	-	-	60,493	123,405	188,810	256,781	327,396	400,733	476,872	555,897	637,892	722,944	811,143	902,581	997,352	1,095,553	1,197,283	1,302,643	1,409,874	1,520,872	1,635,746	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Taxation Revenues	-	-	-	-	182,393	364,786	547,179	729,572	911,965	1,094,358	1,276,751	1,459,145	1,641,537	1,823,930	2,006,323	2,188,717	2,371,111	2,553,503	2,735,897	2,918,289	3,100,683	3,283,075	3,465,468	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862	3,647,862
Not Cookflow (ormulative)		(20 077 050)	(22 24E 000)	/AC 470 0041		(74 027 027)	(04 474 000)	(00 070 E05)	(407 CAE 444)	(440 074 400)	(420 7E2 2EE)	(420 226 422)	(400 ECO 400)	(407 44E 054)	(40E DEE 400)	(404 400 074)	(424 04E 750)	(440 220 700)	(446 207 000)	(442 DEC 004)	(400.247.054)	(00 404 700)	(DE DE4 000)	(02.040.257)	(00 E70 074)	(04 244 400)	(00 400 050)	(00,000,007)	(07 704 074)	
Net Cashflow (cumulative) Net Annual Position	-	(20,077,850) (20,077,850)	(33,345,820)		(59,368,838) (12,896,017)			(96,078,595) (11,903,709)		(118,871,123)		(129,336,133) 417,122	(128,568,189) 767,944	(127,445,851) 1,122,338	(125,965,482)	(124,123,374) 1.842,108	(121,915,752) 2,207,622	(119,338,769) 2.576,984	(116,387,806) 2,950,963	(113,058,861) 3,328,945	(109,347,851)	(96,124,706) 13,223,145	(95,054,982) 1,069,724	(93,810,357) 1,244,625	(92,573,374) 1,236,982	(91,344,188) 1,229,187	(90,122,952) 1,221,236		(87,704,974) 1,204,853	(86,508,559) 1,196,415

Development/construction will occur in 2026
Tax revenues - 2 year lag (i.e. start in 2028)
DC revenues have only been applied to DC-related expenditures.
Operating Revenues and expenditures inflated at 2% per year.
DC Revenues inflated at 3% per year
Operating expenditures for infrastructure have been assumed four years after anticipated construction.



## Figure C-5 Haldimand County Scenario 1: 10-Year Development Timeframe

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year
Development Forecast		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
esidential Development (GFA)																														1
Industrial	-	-	44,100	44,100	44,100	44,100	44,100	44,100	44,100	44,100	44,100	44,100																		1
eral Industrial	-	-	220,946	220,946	220,946	220,946	220,946	220,946	220,946	220,946	220,946	220,946																		L
I Employment (cumulative)	-	-	265,046	530,092	795,138	1,060,184	1,325,230	1,590,276	1,855,322	2,120,368	2,385,414	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650
Development Forecast	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year
Development Forecast		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
residential Development (Employees)																														1
Industrial	-	-	44	44	44	44	44	44	44	44	44	45																		1
eral Industrial	-	-	133	133	133	133	133	133	133	133	133	134																		1
Employment (cumulative)			177		524		885	1 062	1 239	1 416	1 503	1 772	1 772	1 772	1 772	1.772	1 772	1 772	1 772	1 772	1 772	1 772	1.772	1 772	1 772	1 772	1 772	1.772	1.772	1,

Revenues, Expenditures, and Impact	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
DC Revenues																														
Light Industrial	-	-	186,543	186,543	186,543	186,543	186,543	186,543	186,543	186,543	186,543	186,543																		
General Industrial DC Revenue - Non-residential (inflated)			934,602 1.189.422	934,602 1.225.105	934,602 1.261.858	934,602 1,299,714	934,602 1.338.705	934,602 1.378.866	934,602 1,420,232	934,602 1.462,839	934,602 1.506,725	934,602 1.551.926																		
Total DC Revenues		-	1,189,422	1,225,105	1,261,858			1,378,866	1,420,232	1,462,839	1,506,725	1,551,926	-		-		-	-	-	-		-	-	-	-	-	-	-	-	-
Capital Expenditures			, ,	, , , , , ,	, , , , , , , , , , , , , , , , , , , ,		,,,,,	, , , , , ,	, , ,	, , , , , ,	,,	, , , , ,																		
Capital Experiolitures																														
Roads DC																														
DC (Debenture)	-																													-
Non-DC	-																													
Non-DC (Debenture)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local Service																													-	-
Local Service (Debenture) Lifecycle			421,100	421,100	421,100	421.100	421,100	421.100	421,100	421,100	421,100	421,100	421,100	421,100	421.100	421.100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421.100	421.100	421.100	421,100	421,100	421,100	421,100
,			421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100
Water																														
DC (Debenture)	6,932,569	854.723	854,723	854,723	854,723	854,723	854,723	854.723	854,723	854,723	854,723		_	_	_	_		_	-	_	_	-	_	_	_	_	_	_		
Non-DC	-	004,723	004,720	004,723	004,723	004,720	004,725	004,725	004,720	054,725	004,725		_							_	_						_	_		_
Non-DC (Debenture)		-	-	-	-	-	-	-	-	-	-																			
Local Service																														
Local Service (Debenture) Lifecycle			522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500
Lifecycle			522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500
Wastewater																														
DC (Debenture)	31,490,113	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	1,909,132	1,909,132	1,909,132	1,909,132	1.909.132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132				_					
Non-DC	_	2,000,200	2,000,200	2,000,200	2,000,200	2,000,200	2,030,233	2,000,200	2,000,200	2,030,233	2,000,200	1,303,132	1,303,132	1,303,132	1,303,132	1,303,132	1,303,132	1,505,152	1,303,132	1,303,132	1,303,132		-			_	-			
Non-DC (Debenture)		-	-	-	-	-	-	-	-	-	-																			
Local Service																														
Local Service (Debenture) Lifecycle			539.800	539,800	539.800	539.800	539.800	539.800	539,800	539.800	539.800	539.800	539,800	539.800	539,800	539,800	539,800	539.800	539.800	539.800	539,800	539,800	539.800	539.800	539.800	539.800	539.800	539.800	539,800	539,800
,			353,000	333,000	300,000	303,000	333,000	333,000	333,000	333,000	333,000	353,000	333,000	333,000	303,000	333,000	333,000	303,000	333,000	333,000	333,000	333,000	333,000	333,000	333,000	333,000	333,000	333,000	333,000	333,000
Stormwater DC																														
DC (Debenture)																														
Non-DC				l																							l			
Non-DC (Debenture)																														
Local Service																														
Local Service (Debenture) Lifecycle			141.400	141,400	141.400	141,400	141.400	141.400	141,400	141,400	141.400	141.400	141.400	141.400	141,400	141.400	141.400	141.400	141,400	141,400	141,400	141,400	141,400	141.400	141,400	141,400	141,400	141,400	141.400	141.400
			141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400
Studies DC				l																							l			
DC (Debenture)																														
Non-DC																		l									l			
Non-DC (Debenture)																														
Local Service																		l									l			
Local Service (Debenture) Lifecycle					_					_					_		_	_ [	_			_		_		_		_		
,	1 1																													
Broader Lifecycle Costs	-	-	39,586	79,172	118,758	158,344	197,930	237,516	277,102	316,688	356,274	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	
Sub-total Capital Expenditures	38,422,682	-	1,664,386	1,703,972	1,743,558	1,783,144	1,822,730	1,862,316	1,901,902	1,941,488	1,981,074	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2.021.108	2.021.108	2.021.108	2.021.108	2.021.108



#### Figure C-5 (Cont'd)

Revenues, Expenditures, and	2024 Year	2025 Year	2026 Year	2027 Year	2028 Year	2029 Year	2030 Year	2031 Year	2032 Year	2033 Year	2034 Year	2035 Year	2036 Year	2037 Year	2038 Year	2039 Year	2040 Year	2041 Year	2042 Year	2043 Year	2044 Year	2045 Year	2046 Year	2047 Year	2048 Year	2049 Year	2050 Year	2051 Year	2052 Year	2053 Year
Impact	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
·																														
Purchase of Land	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-	-		-	-		-		-	-	-	-	-	-
Land Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operating Expenditures Per Employee (inflated) X 740.30	-		136,327	278,107	425,503	578,685	737,823	903,095	1,074,683	1,252,773	1,437,558	1,631,073	1,663,694	1,696,968	1,730,908	1,765,526	1,800,836	1,836,853	1,873,590	1,911,062	1,949,283	1,988,269	2,028,034	2,068,595	2,109,967	2,152,166	2,195,209	2,239,113	2,283,896	2,329,574
Operating Costs Related to New Infrastructure (inflated)					95,433	97,342	99,289	101,274	103,300	105,366	107,473	109,623	111,815	114,051	116,332	118,659	121,032	123,453	125,922	128,440	131,009	133,629	136,302	139,028	141,809	144,645	147,538	150,488	153,498	156,568
Debenture Payments (capital + land)	-	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	3,712,962	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	-	-	-	-	-	-	-	-	-
Sub-total Operating Expenditures	-	3,712,962	3,849,289	3,991,069	4,233,899	4,388,989	4,550,074	4,717,332	4,890,945	5,071,102	5,257,993	3,649,827	3,684,641	3,720,151	3,756,372	3,793,316	3,831,000	3,869,437	3,908,644	3,948,634	3,989,424	2,121,898	2,164,336	2,207,623	2,251,775	2,296,811	2,342,747	2,389,602	2,437,394	2,486,142
Operating Revenues Per Employee (inflated) X 653.30	-	-	120,306	-7	375,498	510,678	651,114	796,963	948,386	1,105,548	1,268,616	1,439,389	1,468,177	1,497,541	1,527,491	1,558,041	1,589,202	1,620,986	1,653,406	1,686,474	1,720,203	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Sub-total Operating Revenues	-	-	120,306	245,424	375,498	510,678	651,114	796,963	948,386	1,105,548	1,268,616	1,439,389	1,468,177	1,497,541	1,527,491	1,558,041	1,589,202	1,620,986	1,653,406	1,686,474	1,720,203	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Taxation Revenues Non-residential (cumulative)	-	-	-	-	374,490	748,929	1,123,368	1,497,807	1,872,246	2,246,685	2,621,125	2,995,564	3,370,003	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443
Sub-total Taxation Revenues	-	-	-	-	374,490	748,929	1,123,368	1,497,807	1,872,246	2,246,685	2,621,125	2,995,564	3,370,003	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443
Sala of Land (inflated)																														
Sale of Land (inflated)						-	-	-		-		-	-																	
Beginning Balance Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost)	(38,422,682)	- - (3,712,962	(3,712,962)	-	- '	-	(19,719,845) - (3,712,962)	(22,979,461) - (3,712,962)	(25,885,472) - (3,712,962)	(28,437,455) - (3,712,962)	(30,634,973) - (3,712,962)	(32,477,575) - (1,909,132)	(32,161,630) - (1.909,132)	(33,029,199)	(33,528,475)	(34,034,020) - (1,909,132)	(34,545,959) - (1,909,132)	(35,064,422)	(35,589,538) - (1,909,132)	(36,121,441)	(36,660,266) - (1,909,132)	(37,206,151)	(35,850,106)	(34,501,407)	(33,160,201)	(31,826,638)	(30,500,870)	(29,183,053)	(27,873,347)	(26,571,913)
Lifecycle Expenditures Operating Expenditures Purchase of Land (inc. interest cost)			(1,664,386) (136,327)	(1,703,972)	(1,743,558) (520,936)	(1,783,144)	(1,822,730) (837,111)		(1,901,902) (1,177,983)	(1,941,488) (1,358,139)	(1,981,074) (1,545,031)	(2,021,108) (1,740,695)	(2,021,108) (1,775,509)	(2,021,108) (1,811,020)	(2,021,108) (1,847,240)	(2,021,108) (1,884,185)	(2,021,108) (1,921,868)	(2,021,108) (1,960,306)	(2,021,108) (1,999,512)	(2,021,108) (2,039,502)	(2,021,108) (2,080,292)	(2,021,108) (2,121,898)	(2,021,108) (2,164,336) -	(2,021,108) (2,207,623)	(2,021,108) (2,251,775)	(2,021,108) (2,296,811) -	(2,021,108) (2,342,747)	(2,021,108) (2,389,602)	(2,021,108) (2,437,394) -	(2,021,108) (2,486,142) -
Debenture Issuance Operating Revenues	38,422,682	-	120,306	245,424	375,498	510,678	651,114	796,963	948,386	1,105,548	1,268,616	1,439,389	1,468,177	1,497,541	1,527,491	1,558,041	1,589,202	1,620,986	1,653,406	1,686,474	1,720,203	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
DC Revenues	-	-	1,189,422	1,225,105	1,261,858	1,299,714	1,338,705	1,378,866	1,420,232	1,462,839	1,506,725	1,551,926																		
Taxation Revenues	-	-	-	-	374,490	748,929	1,123,368	1,497,807	1,872,246	2,246,685	2,621,125	2,995,564	3,370,003	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443
Sale of Land (inflated)  Net Cashflow (cumulative)	-	(3.712.962	(7.916.909)	(12 1/1 /22)	(16.107.032)	(10 710 8/5)	(22 979 461)	(25.885.472)	(28,437,455)	(30 634 973)	(32,477,575)	(32.161.630)	(33.029.199)	(33 528 475)	(34.034.020)	(34.545.959)	(35.064.422)	(35.589.538)	(36,121,441)	(36.660.266)	(37.206.151)	(35,850,106)	(34.501.407)	(33,160,201)	(31.826.638)	(30.500.870)	(29.183.053)	(27.873.347)	(26.571.913)	(25,278,917)
Net Annual Position		(3,712,962		(4.224.512)		(3.612.812)							(867.569)				(518.463)	(525,116)			(545.885)		1.348.699	1.341.206	1.333.564				1.301.434	1.292.996
Non DC Related Cashflow		(=,112,002	(.,200,047)	( ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(=,500,010)	(-,512,012)	(1,200,011)	(=,500,011)	(=,=01,000)	(=,:01,010)	(.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	210,040	(201,000)	(100,210)	(300,010)	(311,040)	(510,100)	(320,110)	(301,000)	(300,020)	(240,000)	.,500,010	.,=-10,000	.,541,200	.,500,001	.,520,700	.,511,011	.,200,700	.,201,404	.,_52,000
Beginning Balance	-	-	-	(1,680,407)	(3,417,062)	(4,931,569)	(6,131,133)	(7,016,492)	(7,588,408)	(7,847,661)	(7,795,056)	(7,431,420)	(6,758,270)	(5,716,707)	(4,306,851)	(2,903,264)	(1,506,073)	(115,404)	1,268,612	2,645,841	4,016,148	5,379,394	6,735,439	8,084,138	9,425,344	10,758,907	12,084,675	13,402,492	14,712,198	16,013,632
Non-DC Capital Expenditures (inc. interest cost)	-	-	-	- 1	-	- 1	- ^	- 1	- 1	- 1	- 1	- 1	- 1	- 1	- 1	- 1	- 1	- 1	-	-	-	-	-	-	-	-	-	-	-	-
Lifecycle Expenditures	-	-	(1,664,386)				(1,822,730)		(1,901,902)	(1,941,488)	(1,981,074)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)
Operating Expenditures	-	-	(136,327)	(278, 107)	(520,936)	(676,026)	(837,111)	(1,004,369)	(1,177,983)	(1,358,139)	(1,545,031)	(1,740,695)	(1,775,509)	(1,811,020)	(1,847,240)	(1,884,185)	(1,921,868)	(1,960,306)	(1,999,512)	(2,039,502)	(2,080,292)	(2,121,898)	(2,164,336)	(2,207,623)	(2,251,775)	(2,296,811)	(2,342,747)	(2,389,602)	(2,437,394)	(2,486,142)
Purchase of Land (inc. interest cost)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Debenture Issuance Operating Revenues	-		120.306	245,424	375,498	510,678	651.114	796.963	948.386	1.105.548	1,268,616	1,439,389	1,468,177	1,497,541	1.527.491	1.558.041	1.589.202	1.620.986	1.653.406	1.686.474	1,720,203	1.754.608	1.789.700	1.825.494	1.862.004	1.899.244	1.937.228	1.975.973	2.015.492	2.055.802
Taxation Revenues		:	120,300	240,424	375,490	748,929	1,123,368	1.497.807	1,872,246	2,246,685	2,621,125	2,995,564	3,370,003	3,744,443	3,744,443	3.744.443	3,744,443	3.744.443	3,744,443	3.744.443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443
Sale of Land (inflated)	-	-	-	-	-	- 10,020	-,,,20,000	-, 101,001	.,5/2,210	-,_ 10,000	-,521,120	-,300,001	-,270,000	-,. 11,110	-,,						-,,						-	-,,		-,. 11,110
Net Cashflow (cumulative)	-	-	(1,680,407)	(3,417,062)	(4,931,569)	(6,131,133)	(7,016,492)	(7,588,408)	(7,847,661)	(7,795,056)	(7,431,420)	(6,758,270)	(5,716,707)	(4,306,851)	(2,903,264)	(1,506,073)	(115,404)	1,268,612	2,645,841	4,016,148	5,379,394	6,735,439	8,084,138	9,425,344	10,758,907	12,084,675	13,402,492	14,712,198	16,013,632	17,306,628
Net Annual Position			(1,680,407)		(1.514.506)	(1.199.564)		(571,915)	(259,253)		363,636	673,150	1.041.563	1 409 856	1 403 587	1 397 192	1.390.669	1.384.015	1,377,229	1.370.307	1.363.246	1.356.045	1 348 699	1 341 206	1.333.564	1,325,768	1 317 817	1 300 706	1 301 434	1,292,996



## Figure C-6 Haldimand County Scenario 2: 10-Year Development Timeframe

Cash Flow Analysis - County Invests	in Conceptual	Planning and S	Sells to Devel	loper 2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Development Forecast	Year 1	Year	Year	Year 4	Year 5	Year 6	Year 7	Year 8	Year q	Year	Year	Year	Year	Year 14	Year	Year	Year 17	Year	Year 28	Year	Year 30									
Non-residential Development (GFA)	1	2	3	-		·	·		Ů	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Light Industrial General Industrial	-	-	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220,946																		
Total Employment (cumulative)	-	-	265,046	530,092	795,138	1,060,184	1,325,230	1,590,276	1,855,322	2,120,368	2,385,414	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	,,
Development Forecast	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Non-residential Development (Employees) Light Industrial		-	44	44	44	44	44	44	44	44	44	45													-	-	-	-		
General Industrial	-	-	133	133	133	133	133	133	133	133	133	134												-	-	-	-	-	-	-
Total Employment (cumulative)	-	-	177	354	531	708	885	1,062	1,239	1,416	1,593	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772
Revenues, Expenditures, and Impact	Year	Year	Year	Year	Year	Year	Year	Year	Year q	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year	Year 26	Year 27	Year 28	Year 29	Year 30
DC Revenues	'	2	3	4	5			0					13	14	15	10	17	10	19	20	21	22	23	24	25	20	21	20	29	30
Light Industrial General Industrial		-	186,543 934,602	186,543 934,602		934,602	186,543 934,602	186,543 934,602	186,543 934,602	186,543 934,602	186,543 934,602	934,602											-	-	-	-	-	-	-	-
DC Revenue - Non-residential (inflated)  Total DC Revenues	-	-	1,189,422 1,189,422	1,225,105 1,225,105	1,261,858 1,261,858	1,299,714 1,299,714	1,338,705 1,338,705	1,378,866 1,378,866	1,420,232 1,420,232	1,462,839 1,462,839	1,506,725 <b>1,506,725</b>	1,551,926 1,551,926	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Expenditures																														
Roads DC																														
DC (Debenture) Non-DC																														
Non-DC (Debenture)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local Service Local Service (Debenture)																													-	-
Lifecycle			421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100
Water DC	6,932,569	054.700	054.700	054.700	054700	054.700	054.700	054.700	054 700	054 700	054.700																			
DC (Debenture) Non-DC	-	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-DC (Debenture) Local Service		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local Service (Debenture) Lifecycle			522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500	522,500
Wastewater DC	31,490,113																													
DC (Debenture)	31,490,113	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	-	-	-	-	-	-	-	-	-
Non-DC Non-DC (Debenture)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local Service Local Service (Debenture)																														
Lifecycle Stormwater			539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800
DC DC (Debenture)																														
Non-DC																														
Non-DC (Debenture) Local Service																														
Local Service (Debenture) Lifecycle			141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400
Studies DC																														
DC (Debenture)																														
Non-DC Non-DC (Debenture)	500,000	61,645	61,645	61,645	61,645	61,645	61,645	61,645	61,645	61,645	61,645	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local Service Local Service (Debenture)																														
Lifecycle	-	-	-	- 70.470	- 440.750	450 244	-	- 227.540	- 077 400	-	-	- 200 200	-	- 206 206	- 200 200	-	- 200 200	-	- 200 200	-	-	-	-	- 200 200	- 206 262	-	-	-	-	- 206 202
Broader Lifecycle Costs  Sub-total Capital Expenditures	38,922,682		39,586 <b>1,664,386</b>	79,172 1,703,972	118,758 <b>1,743,558</b>	158,344 1,783,144	197,930	237,516 1,862,316	277,102 1,901,902	316,688 <b>1,941,488</b>	356,274 1,981,074	396,308 <b>2,021,108</b>																		
Sub-total Capital Expenditures	30,322,002	•	1,004,300	1,700,972	1,140,000	1,703,144	1,822,730	1,002,310	1,301,302	1,341,400	1,301,074	2,021,100	2,021,100	2,021,100	2,021,100	2,021,100	2,021,100	2,021,100	2,021,100	2,021,100	2,021,100	2,021,100	2,021,100	2,021,100	2,021,100	2,021,100	2,021,100	2,021,100	2,021,100	2,021,100



#### Figure C-6 (Cont'd)

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Revenues, Expenditures, and	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year
Impact	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Purchase of Land	-	-	-	-			-		-		-	-	-			-	-	-		-		-			-		-			
Land Purchase	-	-	-	-	-		-		-	-	-	-	-	-	-		-	-	-	-	-	-				-	-	-	-	-
Operating Expenditures Per Employee (inflated) X 740.30	-		136,327	278,107	425,503	578,685	737,823	903,095	1,074,683	1,252,773	1,437,558	1,631,073	1,663,694	1,696,968	1,730,908	1,765,526	1,800,836	1,836,853	1,873,590	1,911,062	1,949,283	1,988,269	2,028,034	2,068,595	2,109,967	2,152,166	2,195,209	2,239,113	2,283,896	2,329,574
Operating Costs Related to New Infrastructure (inflated)					95,433	97,342	99,289	101,274	103,300	105,366	107,473	109,623	111,815	114,051	116,332	118,659	121,032	123,453	125,922	128,440	131,009	133,629	136,302	139,028	141,809	144,645	147,538	150,488	153,498	156,568
Debenture Payments (capital + land)	-	3,774,608	3,774,608	3,774,608	3,774,608	3,774,608	3,774,608	3,774,608	3,774,608	3,774,608	3,774,608	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	-	-	-	-	-	-	-	-	-
Sub total Operating Funanditures	-	3.774.608	3.910.935	4.052.714	4.295.544	4.450.634	4.611.719	4.778.977	4.952.591	E 420 747	5.319.638	3.649.827	3.684.641	2 720 454	3.756.372	3.793.316	3.831.000	3.869.437	3.908.644	3.948.634	3.989.424	2 424 000	2.164.336	2.207.623	2.251.775	2 200 044	2.342.747	2.389.602	2.437.394	2,486,142
Sub-total Operating Expenditures  Operating Revenues Per Employee (inflated) X 653.30		3,774,000	.,,	, ,	375.498	3,100,001				5,132,747	1,268,616	5,515,525	1,468,177	3,720,151 1,497,541	1.527.491		1,589,202	1.620.986	.,,	5,5 15,525 1		, , ,		, , , , ,	1.862.004	2,296,811			, . ,	2,055,802
Per Employee (inflated) X 653.30	-	-	120,306	245,424	3/5,496	510,678	651,114	796,963	948,386	1,105,548	1,200,010	1,439,389	1,400,177	1,497,541	1,527,491	1,558,041	1,569,202	1,020,960	1,653,406	1,686,474	1,720,203	1,754,608	1,789,700	1,825,494	1,002,004	1,899,244	1,937,228	1,975,973	2,015,492	,,
Sub-total Operating Revenues	-	-	120,306	245,424	375,498	510,678	651,114	796,963	948,386	1,105,548	1,268,616	1,439,389	1,468,177	1,497,541	1,527,491	1,558,041	1,589,202	1,620,986	1,653,406	1,686,474	1,720,203	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Taxation Revenues Non-residential (cumulative)	-	-	-	-	374,490	748,929	1,123,368	1,497,807	1,872,246	2,246,685	2,621,125	2,995,564	3,370,003	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443
Sub-total Taxation Revenues	-	-	-	-	374,490	748,929	1,123,368	1,497,807	1,872,246	2,246,685	2,621,125	2,995,564	3,370,003	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443
Only of Land Coffee D							-	_					-																	
Sale of Land (inflated)						-		-	-	-	-	-	-																	
Beginning Balance Non-DC Capital Expenditures (inc. interest cost) DC Capital Expenditures (inc. interest cost) Lifecycle Expenditures Operating Expenditures Operating Expenditures	(500,000) (38,422,682) - - -	(61,645) (3,712,962) - - -	(3,774,608) (61,645) (3,712,962) (1,664,386) (136,327)	(8,040,200) (61,645) (3,712,962) (1,703,972) (278,107)	(12,326,358) (61,645) (3,712,962) (1,743,558) (520,936)	(16,353,614) (61,645) (3,712,962) (1,783,144) (676,026)	(20,028,072) (61,645) (3,712,962) (1,822,730) (837,111)	(23,349,334) (61,645) (3,712,962) (1,862,316) (1,004,369)	(26,316,991) (61,645) (3,712,962) (1,901,902) (1,177,983)	(28,930,619) (61,645) (3,712,962) (1,941,488) (1,358,139)	(31,189,782) (61,645) (3,712,962) (1,981,074) (1,545,031)	(33,094,030) - (1,909,132) (2,021,108) (1,740,695) -	(32,778,085) - (1,909,132) (2,021,108) (1,775,509)	(33,645,654) - (1,909,132) (2,021,108) (1,811,020)	(34,144,929) - (1,909,132) (2,021,108) (1,847,240) -	(34,650,474) - (1,909,132) (2,021,108) (1,884,185)	(35,162,414) - (1,909,132) (2,021,108) (1,921,868) -	(35,680,877) - (1,909,132) (2,021,108) (1,960,306) -	(36,205,993) - (1,909,132) (2,021,108) (1,999,512) -	(36,737,896) - (1,909,132) (2,021,108) (2,039,502) -	(37,276,720) - (1,909,132) (2,021,108) (2,080,292)	-	(36,466,561) - (2,021,108) (2,164,336)	(35,117,862) - - (2,021,108) (2,207,623)	(33,776,656) - - (2,021,108) (2,251,775)	(32,443,093) - - (2,021,108) (2,296,811)	-	(29,799,508) - - (2,021,108) (2,389,602)	-	(27,188,368 - - (2,021,108 (2,486,142
Debenture Issuance	38,922,682																													
Operating Revenues DC Revenues Taxation Revenues	-	-	120,306 1,189,422	245,424 1,225,105	375,498 1,261,858 374,490	510,678 1,299,714 748,929	651,114 1,338,705 1,123,368	796,963 1,378,866 1,497,807	948,386 1,420,232 1,872,246	1,105,548 1,462,839 2,246,685	1,268,616 1,506,725 2,621,125	1,439,389 1,551,926 2,995,564	1,468,177 - 3.370.003	1,497,541 - 3,744,443	1,527,491 - 3,744,443	1,558,041 - 3,744,443	1,589,202 - 3,744,443	1,620,986 - 3,744,443	1,653,406 - 3,744,443	1,686,474 - 3,744,443	1,720,203 - 3,744,443	1,754,608 - 3,744,443	1,789,700 - 3,744,443	1,825,494 - 3,744,443	1,862,004 - 3,744,443	1,899,244 - 3,744,443	1,937,228 - 3,744,443	1,975,973 - 3,744,443	2,015,492 - 3,744,443	2,055,802 - 3,744,443
Sale of Land (inflated)		: 1			374,490	140,529	1,123,300	1,407,007	1,012,240	2,240,000	2,021,125	2,330,004	3,310,003	3,1 <del>44</del> ,443	3,144,443	3,144,443	3,144,443	3,144,443	3,144,443	3,144,443	3,144,443	3,144,443	3,144,443	3,744,443	3,144,443	3,144,443	3,144,443	3,144,443	3,144,443	3,144,443
Net Cashflow (cumulative)	-	(3.774.608)	(8.040,200)	(12.326.358)	(16.353.614)	(20.028.072)	(23,349,334)	(26.316.991)	(28.930.619)	(31,189,782)	(33.094.030)	(32,778,085)	(33.645.654)	(34,144,929)	(34.650.474)	(35,162,414)	(35,680,877)	(36,205,993)	(36.737.896)	(37.276.720)	(37.822.606)	(36,466,561)	(35.117.862)	(33.776.656)	(32,443,093)	(31,117,324)	(29,799,508)	(28,489,801)	(27.188.368)	(25.895.372
Net Annual Position		(3,774,608)	(4.265.593)	(4.286.158)	(10,000,011,	(==,===,===,	(==,= :=,== :,	(2.967.657)	(2,613,628)	(2,259,163)	(,,	315,945	(867.569)	(= 1, 1 1 1, 2 2 2)	(= 1,000, 11 1,	(==, :==, :: :,	(518,463)	(525,116)	(531.903)	(538.825)	( , , , , , , , , , , , , , , , , , , ,	(,,,	1.348.699	1.341.206	1,333,564	1.325.768	(==,:==,===,	(==,:==,==:,	1.301.434	1,292,996
Non-DC Related Expenditures and Revenues		(2,1.14,000)	( .,0,000)	( .,_50,100)	(1,127,1200)	(2,274,400)	(-,-11,202)	(=,=31,001)	(=,:10,020)	(=,=30,100)	(.,,2/)	2 10,0-10	(501,000)	(100,270)	(300,010)	(211,040)	(5.10,400)	(120,110)	(201,000)	(200,020)	(5-10,000)	.,500,010	.,510,000	.,541,200	.,500,004	.,020,700	.,511,011	.,500,700	.,501,404	.,202,000
Beginning Balance	-	- 1	(61,645)	(1,803,698)	(3.601.999)	(5.178.151)	(6,439,360)	(7,386,365)	(8,019,926)	(8,340,824)	(8.349.865)	(8.047.875)	(7,374,725)	(6,333,162)	(4,923,306)	(3,519,719)	(2,122,527)	(731,858)	652,157	2,029,386	3,399,693	4,762,940	6,118,984	7,467,683	8,808,889	10,142,453	11,468,221	12,786,037	14,095,744	15,397,178
Non-DC Capital Expenditures (inc. interest cost)	(500,000)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	(61,645)	-		-	-	-		,,		-	-			,,	-				-	-
Lifecycle Expenditures			(1,664,386)	(1,703,972)	(1,743,558)	(1,783,144)	(1,822,730)	(1,862,316)	(1,901,902)	(1,941,488)	(1,981,074)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108
Operating Expenditures	-	-	(136,327)	(278,107)	(520,936)	(676,026)	(837,111)	(1,004,369)	(1,177,983)	(1,358,139)	(1,545,031)	(1,740,695)	(1,775,509)	(1,811,020)	(1,847,240)	(1,884,185)	(1,921,868)	(1,960,306)	(1,999,512)	(2,039,502)	(2,080,292)	(2,121,898)	(2,164,336)	(2,207,623)	(2,251,775)	(2,296,811)	(2,342,747)	(2,389,602)	(2,437,394)	(2,486,142
Purchase of Land (inc. interest cost)	-	-	- 1	-	-	- 1	- 1	- 1	- 1	- 1	- 1	-	- 1	- '	- 1	-	- 1	- 1	- 1	- 1	- 1	-	- 1	- 1	- 1	- 1	- 1	- 1	- 1	-
Sale of Land (inflated)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Debenture Issuance	500,000																													-
Operating Revenues	-	-	120,306	245,424	375,498	510,678	651,114	796,963	948,386	1,105,548	1,268,616	1,439,389	1,468,177	1,497,541	1,527,491	1,558,041	1,589,202	1,620,986	1,653,406	1,686,474	1,720,203	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Taxation Revenues	-		-	-	374,490	748,929	1,123,368	1,497,807	1,872,246	2,246,685	2,621,125	2,995,564	3,370,003	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443
Net Cashflow (cumulative)	-	(61,645)	(1,803,698)	(-,,	(5,178,151)	(=, ===,===,	(7,386,365)	(8,019,926)	(8,340,824)	(8,349,865)	(8,047,875)	(7,374,725)	(6,333,162)	(1,020,000)	(-,, -,	(2,122,527)	(731,858)	652,157	2,029,386	3,399,693	4,762,940	6,118,984	7,467,683	8,808,889	10,142,453	11,468,221	12,786,037	14,095,744	15,397,178	16,690,173
Net Annual Position	_	(61.645)	(1.742.053)	(1.798.301)	(1.576.152)	(1.261.209)	(947 005)	(633.561)	(320.898)	(9.041)	301.990	673.150	1.041.563	1.409.856	1.403.587	1.397.192	1.390.669	1.384.015	1.377.229	1.370.307	1.363.246	1.356.045	1.348.699	1.341.206	1.333.564	1.325.768	1.317.817	1.309.706	1.301.434	1.292.99



# Figure C-7 Haldimand County Scenario 3: 10-Year Development Timeframe

Cash Flow Analysis - County Acts a	2024	oper in Partn 2025	ership with th	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Development Forecast	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Non-residential Development (GFA) Light Industrial	-	-	44,100	44,100	44,100	44,100	44,100	44,100	44,100	44,100	44,100	44,100																		
General Industrial Total Employment (cumulative)		-	220,946 <b>265,046</b>	220,946 <b>530,092</b>	220,946 <b>795,138</b>	220,946 1,060,184	220,946 <b>1,325,230</b>	220,946 <b>1,590,276</b>	220,946 <b>1,855,322</b>	220,946 <b>2,120,368</b>	220,946 <b>2,385,414</b>	220,946 <b>2,650,460</b>	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460
Development Forecast	Year	Year	Year	Year	Year 5	Year 6	Year	Year	Year	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year	Year 30
Non-residential Development (Employees)	1	2	3	4	5		,	8	9		11		13	14	15	16	1/	18	19	20	21	22	23	24	25		21		29	30
Light Industrial General Industrial	-	-	44 133	44 133	133	44 133	133	44 133	133	44 133	133	45 134											-	-	-	-	-	-	-	
Total Employment (cumulative)	-	-	177	354	531	708	885	1,062	1,239	1,416	1,593	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772
Revenues, Expenditures, and	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year	Year	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year	Year 29	Year 30
DC Revenues	'	2	,,,,,,,						,,,,,,,	.0			13	14	13	10		10	19	20	21	22	23	24	23	20	Zi	20	25	30
Light Industrial General Industrial	-	-	186,543 934,602	186,543 934,602		186,543 934,602	186,543 934,602	186,543 934,602	186,543 934,602	186,543 934,602	186,543 934,602	186,543 934,602	-	-	-		-	-	-	-	-	-		-	-	-	-	-	-	
DC Revenue - Non-residential (inflated)  Total DC Revenues	-	-	1,189,422 1,189,422	1,225,105 1,225,105	1,261,858 1,261,858	1,299,714 1,299,714	1,338,705 1,338,705	1,378,866 1,378,866	1,420,232 1,420,232	1,462,839 1,462,839	1,506,725 1,506,725	1,551,926 1,551,926	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
Capital Expenditures																														1
Roads DC																														
DC (Debenture) Non-DC	-																													
Non-DC (Debenture)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local Service Local Service (Debenture)	30,449,000	3,754,086	3,754,086	3,754,086	3,754,086	3,754,086	3,754,086	3,754,086	3,754,086	3,754,086	3,754,086	-		-	-	-	-	-	-		-	-		-	-	-	-	-	-	
Lifecycle			421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100
Water DC	6,932,569																													
DC (Debenture) Non-DC	-	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		- 1
Non-DC (Debenture) Local Service	20,763,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- '
Local Service (Debenture) Lifecycle		2,559,890	2,559,890 522,500	2,559,890 522,500	2,559,890 522,500	2,559,890 522,500	2,559,890 522,500	2,559,890 522,500	2,559,890 522,500	2,559,890 522,500	2,559,890 522,500	- 522,500	522,500	- 522,500	- 522,500	- 522,500	- 522,500	- 522,500	- 522,500	522,500	- 522,500	- 522,500	- 522,500	- 522,500	- 522,500	522,500	- 522,500	- 522,500	- 522,500	- 522,500
Wastewater																														
DC (Debenture)	31,490,113	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	-			-	-	-	-		-
Non-DC Non-DC (Debenture)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Local Service (Debenture)	21,455,000	1,932,456	1,932,456	1,932,456	1,932,456	1,932,456	1,932,456	1,932,456	1,932,456	1,932,456	1,932,456	1,328,577	1,328,577	1,328,577	1,328,577	1,328,577	1,328,577	1,328,577	1,328,577	1,328,577	1,328,577			-		-			-	
Lifecycle			539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800
Stormwater DC																														
DC (Debenture) Non-DC																														
Non-DC (Debenture) Local Service	32,220,000																													i
Local Service (Debenture)	32,220,000	3,972,434	3,972,434	3,972,434	3,972,434	3,972,434	3,972,434 141,400	3,972,434	3,972,434	3,972,434	3,972,434	-	-		-		-		-		-				-	-		-		-
Lifecycle Studies			141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400
DC																														
DC (Debenture) Non-DC	-																													1
Non-DC (Debenture) Local Service	-																													1
Local Service (Debenture) Lifecycle		_		-	_	-	-		_	-	-	-		_	-	-	-	_	-		-	_		_	.	-	.	-		
Broader Lifecycle Costs	-	-	39,586	79,172	118,758	158,344	197,930	237,516	277,102	316,688	356,274	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308
Sub-total Capital Expenditures	143,309,682	-	1,664,386	1,703,972	1,743,558	1,783,144	1,822,730	1,862,316	1,901,902	1,941,488	1,981,074	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108	2,021,108



#### Figure C-7 (Cont'd)

- "	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Revenues, Expenditures, and	Year 1	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year 11	Year	Year 13	Year	Year	Year	Year 17	Year	Year 19	Year	Year 21	Year 22	Year 23	Year 24	Year 25	Year	Year 27	Year	Year 29	Year 30
inipact		Z	3	4	3	٥	,	۰	9	10	- "	12	13	14	13	10	17	10	19	20	21	22	23	24	23	20	21	20	29	30
Purchase of Land				_	-	-	-	-	_		-	-	-	-	-	-					-	-	-	-				-	-	-
Land Purchase	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
Outside Francisco																														
Operating Expenditures Per Employee (inflated) X 740.30	-		136,327	278,107	425,503	578,685	737,823	903,095	1,074,683	1,252,773	1,437,558	1,631,073	1,663,694	1,696,968	1,730,908	1,765,526	1,800,836	1,836,853	1,873,590	1,911,062	1,949,283	1,988,269	2,028,034	2,068,595	2,109,967	2,152,166	2,195,209	2,239,113	2,283,896	2,329,574
Operating Costs Related to New Infrastructure (inflated)					95,433	97,342	99,289	101,274	103,300	105,366	107,473	109,623	111,815	114,051	116,332	118,659	121,032	123,453	125,922	128,440	131,009	133,629	136,302	139,028	141,809	144,645	147,538	150,488	153,498	156,568
Debenture Payments (capital +																														
land)	0	15,931,828	15,931,828	15,931,828	15,931,828	15,931,828	15,931,828	15,931,828	15,931,828	15,931,828	15,931,828	3,237,708	3,237,708	3,237,708	3,237,708	3,237,708	3,237,708	3,237,708	3,237,708	3,237,708	3,237,708	-	-	-	-	-	-	-	-	-
Sub-total Operating Funerality and	•	15.931.828	16.068.155	16,209,935	16.452.764	16.607.854	16.768.939	16.936.197	17.109.811	17.289.967	17.476.859	4.978.404	5.013.218	5,048,728	5.084.948	5.121.893	5.159.577	5.198.014	5.237.220	5.277.210	5.318.000	2,121,898	2.164.336	2.207.623	2,251,775	2,296,811	2.342.747	2.389.602	2,437,394	2.486.142
Sub-total Operating Expenditures	U	15,931,626	16,066,155	16,209,935	10,452,764	10,007,034	10,700,939	10,930,197	17,109,611	17,209,907	17,470,039	4,976,404	5,013,216	5,046,726	5,064,946	5,121,693	5,159,577	5, 196,014	5,237,220	5,277,210	5,316,000	2,121,090	2,104,336	2,201,623	2,251,775	2,296,611	2,342,141	2,369,602	2,437,394	2,400,142
Out and the December																														
Operating Revenues Per Employee (inflated) X 653.30			120.306	245,424	375.498	510,678	651.114	796,963	948.386	1,105,548	1.268.616	1,439,389	1,468,177	1,497,541	1.527.491	1.558.041	1,589,202	1,620,986	1.653.406	1.686.474	1,720,203	1,754,608	1,789,700	1.825.494	1,862,004	1,899,244	1.937.228	1.975.973	2,015,492	2,055,802
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Sub-total Operating Revenues	-	-	120,306	245,424	375,498	510,678	651,114	796,963	948,386	1,105,548	1,268,616	1,439,389	1,468,177	1,497,541	1,527,491	1,558,041	1,589,202	1,620,986	1,653,406	1,686,474	1,720,203	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Taxation Revenues																														
Light Industrial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
General Industrial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-residential (cumulative)	-	-	-	-	374,490	748,929	1,123,368	1,497,807	1,872,246	2,246,685	2,621,125	2,995,564	3,370,003	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443
Sub-total Taxation Revenues		-	-	-	374,490	748,929	1,123,368	1,497,807	1,872,246	2,246,685	2,621,125	2,995,564	3,370,003	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443
Sale of Land (inflated) - Recoup Local Service	е -		12.218.866	12.218.866	12.218.866	12.218.866	12.218.866	12.218.866	12.218.866	12.218.866	12.218.866	12.218.866	-	-	-	-	-	-	-	-	-	-		-	-		-	-	-	-
			12,210,000	12,210,000	12,210,000	12,210,000	12,210,000	12,210,000	,,	12,210,000	12,210,000	12,210,000																		
Beginning Balance	-	-	(15,931,828)	(20,135,775)	(24,360,287)	(28,325,898)	(31,938,710)	(35, 198, 327)	(38,104,338)	(40,656,321)	(42,853,839)	(44,696,441)	(33,490,207)	(35,686,352)	(37,514,204)	(39,348,326)	(41,188,842)	(43,035,881)	(44,889,574)	(46,750,053)	(48,617,454)	(50,491,916)	(49,135,871)	(47,787,173)	(46,445,967	(45,112,403)	(43,786,635)	(42,468,818)	(41,159,112)	(39,857,678)
Non-DC Capital Expenditures (inc. interest cost)	-	-	- 1	- 1	-	-	- 1	- 1	- 1	-	-	-	-	-	-	- 1	-	-	-	-	- 1	- 1	-	- '	-	-	-	-	- 1	- 1
DC Capital Expenditures (inc. interest cost)	(38,422,682)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)		(3,712,962)	(3,712,962)	(3,712,962)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	-	-	-	-	-	-	-	-	-
Local Service Capital Cost (inc. interest cost)	(104,887,000)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)			<del>-</del>						
Lifecycle Costs	-	-	(1,664,386)	(1,703,972) (278,107)	(1,743,558)	(1,783,144)	(1,822,730)		(1,901,902) (1,177,983)	(1,941,488)	(1,981,074)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)		(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)
Operating Expenditures Purchase of Land (inc. interest cost)		-	(136,327)	(276,107)	(520,936)	(676,026)	(837,111)	(1,004,369)	(1,177,963)	(1,358,139)	(1,545,031)	(1,740,095)	(1,775,509)	(1,811,020)	(1,847,240)	(1,884,185)	(1,921,000)	(1,960,306)	(1,999,512)	(2,039,502)	(2,000,292)	(2,121,898)	(2,164,336)	(2,207,623)	(2,251,775	(2,296,811)	(2,342,747)	(2,389,602)	(2,437,394)	(2,486,142)
Debenture Issuance	143,309,682		_	_		_	_	-	-	-	-		-	-		-	-	-	_	-		_	-			_	-			_
Operating Revenues	-		120,306	245,424	375,498	510,678	651,114	796,963	948,386	1,105,548	1,268,616	1,439,389	1,468,177	1,497,541	1,527,491	1,558,041	1,589,202	1,620,986	1,653,406	1,686,474	1,720,203	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
DC Revenues	-	-	1,189,422	1,225,105	1,261,858	1,299,714	1,338,705	1,378,866	1,420,232	1,462,839	1,506,725	1,551,926	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Taxation Revenues	-	-	-	-	374,490	748,929	1,123,368	1,497,807	1,872,246	2,246,685	2,621,125	2,995,564	3,370,003	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443
Sale of Land (inflated) - Recoup Local Service C	Cd -	-	12,218,866	12,218,866	12,218,866	12,218,866	12,218,866	12,218,866	12,218,866	12,218,866	12,218,866	12,218,866	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Cashflow (cumulative) Net Annual Position	-	(15,931,828)	(20,135,775)	(24,360,287)	(28,325,898)	(31,938,710)	(35,198,327)			(42,853,839)		(33,490,207)			(39,348,326)	(41,188,842)	(43,035,881)	(44,889,574)	(46,750,053)	(48,617,454)	(50,491,916)	(49,135,871) 1,356,045	(47,787,173) 1.348.699	(46,445,967) 1,341,206		(43,786,635) 1,325,768		(41,159,112) 1,309,706	(39,857,678)	(38,564,682)
Non-DC Related Expenditures and Revenues		(15,931,020)	(4,203,947)	(4,224,512)	(3,965,610)	(3,612,612)	(3,259,617)	(2,906,011)	(2,551,963)	(2, 197, 516)	(1,042,002)	11,200,234	(2,196,145)	(1,027,002)	(1,034,121)	(1,040,516)	(1,047,039)	(1,053,093)]	(1,000,479)	(1,007,401)	(1,874,462)	1,356,045	1,340,099	1,341,200	1,333,364	1,323,766	1,317,017	1,309,700	1,301,434	1,292,996
,				I					I	I	I		I		I	I		I		I		I								
	1 -	-	(12,218,866)	(13,899,273)	(15,635,928)	(17,150,434)	(18,349,998)	(19,235,358)	(19,807,273)	(20,066,526)	(20,013,921)	(19,650,286)	(8,086,846)	(8,373,860)	(8,292,580)	(8,217,570)	(8,148,955)	(8,086,863)	(8,031,424)	(7,982,771)	(7,941,041)	(7,906,371)	(6,550,326)	(5,201,627)	(3,860,421	(2,526,858)	(1,201,090)	116,727	1,426,433	2,727,867
Beginning Balance				-	-	-	(12,218,866)	(12,218,866)	(12,218,866)	(40.040.000)	(40.040.000)	(4 000 577)	(4 000 577)	(1.328.577)	(1.328.577)	(1.328.577)	(1,328,577)	(1.328.577)	(1,328,577)	- (4 000 577)	(1,328,577)	-	-	-	-	-	-	-	-	-
Non-DC Capital Expenditures (inc. interest cost)		- (40.040.000)	(40.040.000)	(40.040.000)	(40.040.000)					(12,218,866)	(12,218,866)	(1,328,577)	(1,328,577)	( ) /	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(1,328,577) (2,021,108)	(2,021,108)	(0.004.400)	-	-		(0.004.400)		-	-	
Non-DC Capital Expenditures (inc. interest cost) Local Service Capital Cost (inc. interest cost)	(104,887,000)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)				(1 0/1 /00)	(1 081 074)	(2 021 100)	(2 021 100)															(2.021.109)	(2 021 100)	
Non-DC Capital Expenditures (inc. interest cost) Local Service Capital Cost (inc. interest cost) Lifecycle Costs		(12,218,866) - -	(1,664,386)	(1,703,972)	(1,743,558)	(1,783,144)	(1,822,730)	(1,862,316)	(1,901,902)	(1,941,488)	(1,981,074)	(2,021,108)	(2,021,108)	(2,021,108)								(2,021,108)	(2,021,108)	(2,021,108)		(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)
Non-DC Capital Expenditures (inc. interest cost) Local Service Capital Cost (inc. interest cost)		(12,218,866) - - -								(1,941,488) (1,358,139) -	(1,981,074) (1,545,031) -	(2,021,108) (1,740,695)	(2,021,108) (1,775,509)	(2,021,108) (1,811,020) -	(1,847,240)	(1,884,185)	(1,921,868)	(1,960,306)	(1,999,512)	(2,039,502)	(2,080,292)	(2,121,898)	(2,164,336)	(2,021,108)		(2,021,108) (2,296,811)	(2,021,108) (2,342,747)	(2,021,108) (2,389,602)	(2,021,108) (2,437,394)	(2,021,108) (2,486,142) -
Non-DC Capital Expenditures (inc. interest cost) Local Service Capital Cost (inc. interest cost) Lifecycle Costs Operating Expenditures	(104,887,000) - - -	(12,218,866) - - - - -	(1,664,386)	(1,703,972)	(1,743,558)	(1,783,144)	(1,822,730)	(1,862,316)	(1,901,902)																					
Non-DC Capital Expenditures (inc. interest cost) Local Service Capital Cost (inc. interest cost) Lifecycle Costs Operating Expenditures Purchase of Land (inc. interest cost)	(104,887,000) - - -	(12,218,866) - - - - -	(1,664,386) (136,327)	(1,703,972) (278,107)	(1,743,558) (520,936)	(1,783,144) (676,026)	(1,822,730) (837,111)	(1,862,316) (1,004,369)	(1,901,902) (1,177,983)	(1,358,139) - 12,218,866	(1,545,031)	(1,740,695)	(1,775,509)	(1,811,020) - -	(1,847,240) - -	(1,884,185) - -	(1,921,868)	(1,960,306) - -			(2,080,292)	(2,121,898)							(2,437,394)	
Non-DC Capital Expenditures (inc. interest cost) Local Service Capital Cost (inc. interest cost) Lifecycle Costs Operating Expenditures Purchase of Land (inc. interest cost) Sale of Land (inflated) - Recoup Local Service C Debenture Issuance Operating Revenues	(104,887,000) - - - - -	(12,218,866) - - - - -	(1,664,386) (136,327)	(1,703,972) (278,107)	(1,743,558) (520,936) - 12,218,866 375,498	(1,783,144) (676,026) - 12,218,866 510,678	(1,822,730) (837,111) - 12,218,866 651,114	(1,862,316) (1,004,369) - 12,218,866 796,963	(1,901,902) (1,177,983) - 12,218,866 948,386	(1,358,139) - 12,218,866 1,105,548	(1,545,031) - 12,218,866 1,268,616	(1,740,695) - 12,218,866 1,439,389	(1,775,509) - - 1,468,177	(1,811,020) - - - 1,497,541	(1,847,240) - - - 1,527,491	(1,884,185) - - - 1,558,041	(1,921,868) - - - 1,589,202	(1,960,306) - - 1,620,986	(1,999,512) - - 1,653,406	(2,039,502) - - 1,686,474	(2,080,292) - - 1,720,203	(2,121,898) - - - 1,754,608	(2,164,336) - - 1,789,700	(2,207,623) - - 1,825,494	(2,251,775 - - - 1,862,004	(2,296,811) - - - 1,899,244	(2,342,747) - - 1,937,228	(2,389,602) - - 1,975,973	(2,437,394) - - 2,015,492	(2,486,142) - - 2,055,802
Non-DC Čapital Expenditures (inc. interest cost) Local Service Capital Cost (inc. interest cost) Lifecycle Costs Operating Expenditures Purchase of Land (inc. interest cost) Sale of Land (inflated) - Recoup Local Service C Debenture Issuance Operating Revenues Taxation Revenues	(104,887,000) - - - - - - 104,887,000 - -	- - - -	(1,664,386) (136,327) - 12,218,866 120,306	(1,703,972) (278,107) - 12,218,866 245,424	(1,743,558) (520,936) - 12,218,866 375,498 374,490	(1,783,144) (676,026) - 12,218,866 510,678 748,929	(1,822,730) (837,111) - 12,218,866 651,114 1,123,368	(1,862,316) (1,004,369) - 12,218,866 796,963 1,497,807	(1,901,902) (1,177,983) - 12,218,866 948,386 1,872,246	(1,358,139) - 12,218,866 1,105,548 2,246,685	(1,545,031) - 12,218,866 1,268,616 2,621,125	(1,740,695) - 12,218,866 1,439,389 2,995,564	(1,775,509) - - 1,468,177 3,370,003	(1,811,020) - - 1,497,541 3,744,443	(1,847,240) - - 1,527,491 3,744,443	(1,884,185) - - 1,558,041 3,744,443	(1,921,868) - - 1,589,202 3,744,443	(1,960,306) - - 1,620,986 3,744,443	(1,999,512) - - 1,653,406 3,744,443	(2,039,502) - - 1,686,474 3,744,443	(2,080,292) - - 1,720,203 3,744,443	(2,121,898) - - - 1,754,608 3,744,443	(2,164,336) - - 1,789,700 3,744,443	(2,207,623) - - - 1,825,494 3,744,443	1,862,004 3,744,443	(2,296,811) - - 1,899,244 3,744,443	(2,342,747) - - 1,937,228 3,744,443	(2,389,602) - - 1,975,973 3,744,443	(2,437,394) - - 2,015,492 3,744,443	(2,486,142) - - 2,055,802 3,744,443
Non-DC Capital Expenditures (inc. interest cost) Local Service Capital Cost (inc. interest cost) Lifecycle Costs Operating Expenditures Purchase of Land (inc. interest cost) Sale of Land (inflated) - Recoup Local Service C Debenture Issuance Operating Revenues	(104,887,000) - - - - - 104,887,000 - -	(12,218,866) - - - - - (12,218,866) (12,218,866)	(1,664,386) (136,327) - 12,218,866 120,306 - (13,899,273)	(1,703,972) (278,107) - 12,218,866 245,424 - (15,635,928)	(1,743,558) (520,936) - 12,218,866 375,498 374,490	(1,783,144) (676,026) - 12,218,866 510,678 748,929 (18,349,998)	(1,822,730) (837,111) - 12,218,866 651,114 1,123,368 (19,235,358)	(1,862,316) (1,004,369) - 12,218,866 796,963 1,497,807 (19,807,273)	(1,901,902) (1,177,983) - 12,218,866 948,386 1,872,246 (20,066,526)	(1,358,139) - 12,218,866 1,105,548 2,246,685 (20,013,921)	(1,545,031) - 12,218,866 1,268,616 2,621,125	(1,740,695) - 12,218,866 1,439,389 2,995,564	(1,775,509) - - 1,468,177	(1,811,020) - - - 1,497,541	(1,847,240) - - 1,527,491 3,744,443	(1,884,185) - - - 1,558,041	(1,921,868) - - - 1,589,202	(1,960,306) - - 1,620,986	(1,999,512) - - 1,653,406	(2,039,502) - - 1,686,474	(2,080,292) - - 1,720,203	(2,121,898) - - - 1,754,608	(2,164,336) - - 1,789,700	(2,207,623) - - 1,825,494	1,862,004 3,744,443 (2,526,858	(2,296,811) - - 1,899,244 3,744,443 (1,201,090)	(2,342,747) - - 1,937,228	1,975,973 3,744,443 1,426,433	(2,437,394) - - 2,015,492	(2,486,142) - - 2,055,802



# Figure C-8 Haldimand County Scenario 4: 10-Year Development Timeframe

Cash Flow Analysis - County to D	evelon Acquire S	ervice and S	ell I and Parc	als																										
-	2024 Year	2025 Year	2026 Year	2027 Year	2028 Year	2029 Year	2030 Year	2031 Year	2032 Year	2033 Year	2034 Year	2035 Year	2036 Year	2037 Year	2038 Year	2039 Year	2040 Year	2041 Year	2042 Year	2043 Year	2044 Year	2045 Year	2046 Year	2047 Year	2048 Year	2049 Year	2050 Year	2051 Year	2052 Year	2053 Year
Non-residential Development (GFA)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Light Industrial General Industrial	-	-	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220,946	44,100 220.946	44,100 220,946	44,100 220,946	44,100 220.946	44,100 220,946	-																	
Total Employment (cumulative)	-	-	265,046	530,092	795,138	1,060,184	1,325,230	==0,0.0	,	2,120,368	2,385,414	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460	2,650,460
Development Forecast	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Non-residential Development (Employees) Light Industrial	_	-	44	44	44	44	44	44	44	44	44	45														-	_	_	_	-
General Industrial	-	-	133	133	133	133	133	133	133	133	133	134														-	-	-	-	-
Total Employment (cumulative)	-	-	177	354	531	708	885	1,062	1,239	1,416	1,593	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772	1,772
Revenues, Expenditures, and Impact	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
DC Revenues Light Industrial	_	-	186,543	186,543	186,543	186,543	186,543	186,543	186,543	186,543	186,543	186,543											-	_	-	_	-	_	_	-
General Industrial DC Revenue - Non-residential (inflated)	-	-	934,602 1,189,422	934,602 1,225,105	934,602 1,261,858	934,602 1,299,714	934,602 1,338,705	934,602 1,378,866	934,602 1,420,232	934,602 1,462,839	934,602 1,506,725	934,602 1,551,926		_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total DC Revenues	-	-	1,189,422	1,225,105	1,261,858	1,299,714	1,338,705	1,378,866	1,420,232	1,462,839	1,506,725	1,551,926	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capital Expenditures																														
Roads DC																													-	-
DC (Debenture) Non-DC	-																													
Non-DC (Debenture) Local Service	30,449,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local Service (Debenture) Lifecycle	-	3,754,086	3,754,086 421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100	421,100								
Water DC	6,932,569																													
DC (Debenture) Non-DC	_	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	854,723	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-DC (Debenture) Local Service	20,763,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local Service (Debenture) Lifecycle	20,100,000	2,559,890	2,559,890 522,500	- 522,500	- 522,500	- 522,500	- 522,500	- 522,500	- 522,500	- 522,500	- 522,500	- 522,500	- 522,500	- 522,500	- 522,500	522,500	- 522,500	- 522,500	- 522,500	- 522,500	- 522,500	- 522,500								
Wastewater																														
DC (Debenture)	31,490,113	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	2,858,239	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	1,909,132	-	-	-	-	-	-	-	-	-
Non-DC Non-DC (Debenture)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local Service Local Service (Debenture)	21,455,000	1,932,456	1,932,456	1,932,456	1,932,456	1,932,456	1,932,456	1,932,456	1,932,456	1,932,456	1,932,456	1,328,577	1,328,577	1,328,577	1,328,577	1,328,577	1,328,577	1,328,577	1,328,577	1,328,577	1,328,577			-						
Lifecycle Stormwater			539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800	539,800
DC (Debenture)																														
Non-DC Non-DC (Debenture)																														
Local Service Local Service (Debenture)	32,220,000	3,972,434	3,972,434	3,972,434	3,972,434	3,972,434	3,972,434	3,972,434	3,972,434	3,972,434	3,972,434																			
Lifecycle		3,972,434	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400	141,400
Studies DC																														
DC (Debenture) Non-DC	500,000																													
Non-DC (Debenture) Local Service	-	61,645	61,645	61,645	61,645	61,645	61,645	61,645	61,645	61,645	61,645	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local Service (Debenture) Lifecycle				_	_		_	-	_			_	_		_	_	-	_						_		_				
Broader Lifecycle Costs	-	-	39,586	79,172	118,758	158,344	197,930	237,516	277,102	316,688	356,274	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308	396,308
· ·	143,809,682		1,664,386	1,703,972		1,783,144	1,822,730		1,901,902		1,981,074					2,021,108	2,021,108			2,021,108	2,021,108			2,021,108	2,021,108		2,021,108		2,021,108	



#### Figure C-8 (Cont'd)

	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Revenues, Expenditures, and	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	2038 Year	Year	Year	Year	Year	2043 Year	Year	Year	Year	Year	Year	Year	Year	Year	Year	Year
Impact	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Purchase of Land	97,172,075												-					-					-							-
Land Purchase (Debt Debenture)	-	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	7,797,339	-	-	-	-	-	-	-	-	-
Operating Expenditures																														
Per Employee (inflated) X 740.30	-	-	136,327	278,107	425,503	578,685	737,823	903,095	1,074,683	1,252,773	1,437,558	1,631,073	1,663,694	1,696,968	1,730,908	1,765,526	1,800,836	1,836,853	1,873,590	1,911,062	1,949,283	1,988,269	2,028,034	2,068,595	2,109,967	2,152,166	2,195,209	2,239,113	2,283,896	2,329,574
Operating Costs Related to New																														
Infrastructure (inflated)					95,433	97,342	99,289	101,274	103,300	105,366	107,473	109,623	111,815	114,051	116,332	118,659	121,032	123,453	125,922	128,440	131,009	133,629	136,302	139,028	141,809	144,645	147,538	150,488	153,498	156,568
Debenture Payments (capital +																														
land)	0	23,790,812	23,790,812	23,790,812	23,790,812	23,790,812	23,790,812	23,790,812	23,790,812	23,790,812	23,790,812	11,035,047	11,035,047	11,035,047	11,035,047	11,035,047	11,035,047	11,035,047	11,035,047	11,035,047	11,035,047	-	-	-	-	-	-	-	-	-
Sub-total Operating Expenditures	0	23,790,812	23.927.139	24.068.919	24.311.748	24,466,838	24,627,923	24,795,181	24,968,795	25,148,951	25.335.843	12,775,742	12,810,556	12,846,066	12.882.287	12.919.232	12,956,915	12.995.353	13,034,559	13,074,549	13.115.339	2,121,898	2,164,336	2.207.623	2,251,775	2,296,811	2.342.747	2.389.602	2.437.394	2.486.142
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Operating Revenues																														
Per Employee (inflated) X 653.30	-	-	120,306	245,424	375,498	510,678	651,114	796,963	948,386	1,105,548	1,268,616	1,439,389	1,468,177	1,497,541	1,527,491	1,558,041	1,589,202	1,620,986	1,653,406	1,686,474	1,720,203	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Sub-total Operating Revenues	-	-	120,306	245,424	375,498	510,678	651,114	796,963	948,386	1,105,548	1,268,616	1,439,389	1,468,177	1,497,541	1,527,491	1,558,041	1,589,202	1,620,986	1,653,406	1,686,474	1,720,203	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Taxation Revenues																														
Light Industrial General Industrial	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-residential (cumulative)		-		-	374,490	748,929	1,123,368	1,497,807	1,872,246	2,246,685	2,621,125	2,995,564	3,370,003	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443
Sub-total Taxation Revenues	-	-	-	-	374,490	748,929	1,123,368	1,497,807	1,872,246	2,246,685	2,621,125	2,995,564	3,370,003	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443
Sale of Land (inflated)			16,925,280	17,263,786	17,609,061	17,961,243	18,320,468	18,686,877	19,060,614	19,441,827	19,830,663	20,227,277	-																	
Beginning Balance Non-DC Capital Expenditures (inc. interest cost)	(500,000)	(61,645)	(23,790,812)	(31,147,329)	(38,185,905)	(44,620,304) (61,645)	(50,349,724) (61,645)	(55,366,723) (61,645)	(59,663,707) (61,645)	(63,232,925) (61,645)	(66,066,466) (61,645)	(68,156,254)	(56,738,948)	(66,732,432)	(76,357,623)	(85,989,083)	(95,626,938)	(105,271,316)	(114,922,348)	(124,580,165)	(134,244,905)	(143,916,706)	(142,560,661)	(141,211,962)	(139,870,756)	(138,537,193)	(137,211,425)	(135,893,608)	(134,583,901)	(133,282,468)
DC Capital Expenditures (inc. interest cost)	(38,422,682)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(3,712,962)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	(1,909,132)	-	-	-	-	-	-	-	-	-
Local Service Capital Cost (inc. interest cost)	(104,887,000)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	-	-	-	-		-	-	-	-
Lifecycle Costs Operating Expenditures		-	(1,664,386)	(1,703,972) (278,107)	(1,743,558) (520,936)	(1,783,144)	(1,822,730) (837,111)	(1,862,316)	(1,901,902)	(1,941,488)	(1,981,074) (1,545,031)	(2,021,108)	(2,021,108) (1,775,509)	(2,021,108) (1,811,020)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108) (1,999,512)	(2,021,108) (2,039,502)	(2,021,108)	(2,021,108) (2,121,898)	(2,021,108) (2,164,336)	(2,021,108) (2,207,623)	(2,021,108) (2,251,775)	(2,021,108) (2,296,811)	(2,021,108)	(2,021,108) (2,389,602)	(2,021,108)	(2,021,108) (2,486,142)
Purchase of Land (inc. interest cost)	(97,172,075)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)		(7,797,339)		(7,797,339)	(7,797,339)	(7,797,339)	(7,797,339)	(2,121,000)	(2,104,550)	(2,207,023)	(2,231,773)	(2,230,011)	(2,542,747)	(2,303,002)	(2,407,304)	(2,400,142)
Debenture Issuance	240,981,757																													
Operating Revenues	-	-	120,306	245,424	375,498	510,678	651,114	796,963	948,386	1,105,548	1,268,616	1,439,389	1,468,177	1,497,541	1,527,491	1,558,041	1,589,202	1,620,986	1,653,406	1,686,474	1,720,203	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
DC Revenues Taxation Revenues	[ ]		1,189,422	1,225,105	1,261,858 374,490	1,299,714 748,929	1,338,705 1,123,368	1,378,866 1,497,807	1,420,232 1,872,246	1,462,839 2,246,685	1,506,725 2,621,125	1,551,926 2,995,564	3,370,003	3,744,443	3,744,443	3.744.443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443	3,744,443
Sale of Land (inflated)	-	-	16,925,280	17,263,786	17,609,061	17,961,243	18,320,468	18,686,877	19,060,614	19,441,827	19,830,663	20,227,277	-	_	-		-	-	-		-	· · ·		-	-	-		· · · · -	-	-
Net Cashflow (cumulative)  Net Annual Position		(23,790,812)		(38,185,905)	(6,434,399)	(50,349,724)			(63,232,925)	(66,066,466)		(56,738,948)			(85,989,083) (9,631,460)		(9.644.378)		(124,580,165)	(134,244,905)					(138,537,193)	(137,211,425)	(135,893,608)	(134,583,901)	1.301.434	
Non-DC Related Expenditures and Revenues		(23,790,812)	(7,356,517)	(7,038,577)	(6,434,399)	(5,729,419)	(5,016,999)	(4,296,984)	(3,569,218)	(2,833,541)	(2,089,788)	11,417,306	(9,993,484)	(9,625,191)	(9,631,460)	(9,637,855)	(9,644,378)	(9,651,031)	(9,657,818)	(9,664,740)	(9,671,800)	1,356,045	1,348,699	1,341,206	1,333,564	1,325,768	1,317,817	1,309,706	1,301,434	1,292,996
Beginning Balance			(20,077,850)	(24,910,827)	(29,461,546)	(33.444.841)	(36,761,012)	(39,403,754)	(41.366.642)	(42,643,130)	(43,226,548)	(43,110,099)	(31.335.588)	(39.419.940)	(47.135.999)	(54.858.328)	(62.587.051)	(70,322,298)	(78,064,197)	(85,812,883)	(93,568,492)	(101.331.161)	(99,975,116)	(98.626.417)	(97,285,211)	(95.951.647)	(94,625,879)	(93.308.063)	(91,998,356)	(90.696.923)
Non-DC Capital Expenditures (inc. interest cost)	(500,000)	(61,645)	(61.645)	(61.645)	(61.645)	(61.645)	(61,645)	(61,645)	(61,645)	(61.645)	(61,645)	(43,110,033)	(31,333,300)	(39,419,940)	(47,133,999)	(34,636,326)	(02,367,031)	(70,322,290)	(70,004,197)	(65,612,665)	(93,300,492)	(101,331,101)	(99,975,110)	(90,020,417)	(97,203,211)	(90,901,047)	(94,023,079)	(93,300,003)	(91,990,330)	(90,090,923)
Local Service Capital Cost (inc. interest cost)	(104,887,000)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(12,218,866)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	(1,328,577)	-	-	-	-	-	-	-	-	-
Lifecycle Costs	-	-	(1,664,386)	(1,703,972)	(1,743,558)	(1,783,144)	(1,822,730)	(1,862,316)	(1,901,902)	(1,941,488)	(1,981,074)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)	(2,021,108)
Operating Expenditures Purchase of Land (inc. interest cost)	(97,172,075)	(7,797,339)	(136,327)	(278,107) (7,797,339)	(520,936) (7,797,339)	(676,026) (7,797,339)	(837,111) (7,797,339)	(1,004,369)	(1,177,983) (7,797,339)	(1,358,139)	(1,545,031)	(1,740,695)	(1,775,509) (7,797,339)	(1,811,020) (7,797,339)	(1,847,240) (7,797,339)	(1,884,185) (7,797,339)	(1,921,868)	(1,960,306) (7,797,339)	(1,999,512) (7,797,339)	(2,039,502) (7,797,339)	(2,080,292)	(2,121,898)	(2,164,336)	(2,207,623)	(2,251,775)	(2,296,811)	(2,342,747)	(2,389,602)	(2,437,394)	(2,486,142)
Sale of Land (inflated)	(97,172,073)	(7,797,339)	16,925,280	17,263,786	17,609,061	17,961,243	18,320,468	18,686,877	19,060,614	19,441,827	19,830,663	20,227,277	(1,191,339)	(1,191,339)	(7,797,339)	(1,191,339)	(7,797,339)	(1,191,339)	(7,797,339)	(7,797,339)	(1,191,339)					-			] ]	-
Debenture Issuance	202,559,075		, ,	,,	.,,	,,	,	,,.	,,.	-,,	-,,	-,,								l		l					l			
Operating Revenues	-	-	120,306	245,424	375,498	510,678	651,114	796,963	948,386	1,105,548	1,268,616	1,439,389	1,468,177	1,497,541	1,527,491	1,558,041	1,589,202	1,620,986	1,653,406	1,686,474	1,720,203	1,754,608	1,789,700	1,825,494	1,862,004	1,899,244	1,937,228	1,975,973	2,015,492	2,055,802
Taxation Revenues  Net Cashflow (cumulative)	-	(20.077.950)	(24,910,827)	(20.464.546)	374,490 (33,444,841)	748,929	1,123,368	1,497,807 (41,366,642)	1,872,246	2,246,685	2,621,125	2,995,564	3,370,003 (39,419,940)	3,744,443	3,744,443	3,744,443 (62,587,051)	3,744,443	3,744,443 (78,064,197)	3,744,443 (85,812,883)	3,744,443	3,744,443 (101,331,161)	3,744,443 (99,975,116)	3,744,443	3,744,443 (97,285,211)	3,744,443 (95,951,647)	3,744,443 (94.625.879)	3,744,443	3,744,443 (91,998,356)	3,744,443	3,744,443 (89,403,927)
Net Annual Position		(20,077,850)		(4,550,719)	(3,983,295)			(1,962,888)		(583,418)	(10,110,000)	11,774,511				(7,728,724)			(7,748,686)			1,356,045	1,348,699		1,333,564	1,325,768	1,317,817		1,301,434	1.292.996
		,20,011,000)	(-1,002,011)	(-1,000,110)	,0,000,200)	(0,0.0,.71)	(=,0-1=,1-12)	(1,002,000)	(1,270,100)	(000, 170)	,	,,	(0,001,002)	(1,110,000)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(*,,*20,*27)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(.,. 02,000)	1,000,040	.,0.0,000	.,0,200	.,000,004	.,020,.00	.,0,017	.,000,.00	1,001,104	.,202,000



# Appendix D Assumptions for Business Case Analysis



# Appendix D: Assumptions for Business Case Analysis

#### Scope of the Assignment

To assist the County in their goals of developing and servicing employment lands, Watson & Associates Economists Ltd. (Watson) is preparing a detailed financial analysis and business case that incorporates the findings from Phase 1 of the study (Location analysis, market research and analysis, and functional servicing design) so as to quantify the impact to the County. As part of this work, the development of a financial model that incorporates the necessary components of a financial analysis is being prepared. Essentially, the methodology involves an operating and capital cost analysis. The operating cost analysis includes revenues and expenditures attributable to the proposed development which are estimated on a proportionate basis. That is, operating revenue and expenditure dollars are assigned by distributing the operating cost and revenues on a per capita and per employee basis. Tax revenue is calculated based on the total tax rate applicable to the subject area and development types. The assessment assumptions are based on a survey of assessment of similar industrial parks within surrounding market areas.

#### The analysis examines:

- Operating expenditures and revenues;
- Direct and indirect capital expenditures (including an annual lifecycle cost analysis and debt requirements);
- Anticipated assessment and associated tax revenues; and
- Over net financial impact (on an annual cashflow basis) and the net present value.

The financial model and business case will analyze four (4) different scenarios, as listed below:

- 1. Lands are privately developed;
- 2. County invests in conceptual planning then sells plans to developer;
- 3. County acts as the land developer in partnership with private sector; and



4. County develops, acquires, services, and sells land parcels.

Within each scenario, two (2) development absorption scenarios will be utilized:

- 1. The buildout of the development land occurs equally over a 10-year period; and
- 2. The buildout of the development land occurs equally over a 20-year period.

The model has been created to identify the County's cashflow and reserve requirements for these four (4) scenarios.

The following provides a summary of the assumptions utilized for each of the four (4) scenarios discussed above.

#### **Scenarios**

#### **Scenario 1: Privately Developed**

#### **Assumptions:**

- Anticipated Development will begin in year 3 and equal gross floor area (G.F.A.) development and employment will be assumed from years 3 to 12 or years 3 to 22 based on the absorption scenarios noted in the previous section.
- 2. Development Charges (D.C.) Revenue based on the development timing, the associated D.C. revenues will be estimated. The D.C. revenues are based on the County's published 2023/2024 rates, indexed at 3% per year for the forecast period. Although the County is currently undertaking a D.C. study process, the estimated rates will not be available prior to completion of this financial analysis and business case.
- 3. Capital Expenditures (non-local service) if the lands are privately developed then the County will only pay for growth-related works through D.C.s. Should there be a non-growth portion of upgrades, the County would fund this through tax-supported or rate-supported debt. It is anticipated that capital expenditures will be incurred in year 1, with annual debt payment assumptions as follows:
  - Projects less than \$10 million: 10-year payment term at 4% interest; and
  - Projects greater than \$10 million: 20-year payment term at 5% interest.



- 4. **Capital Expenditures (local service)** these needs will be paid for by the developer and construction would be anticipated in year 1. Annual lifecycle costs will be identified beginning in year 3 onwards.
- 5. **Direct Lifecycle Costs** lifecycle costs for all capital expenditures directly required for this development and not identified in the D.C. background study (including local service works) will be assessed an annual lifecycle cost to incorporate into the calculations. This will be included in year 3.
- 6. **Broader Lifecycle Costs** which relate to the capital needs identified in the D.C. study, will be identified with actual building activity, which is assumed to begin in year 3, after the local service capital infrastructure has been constructed.
- Land Purchases since this scenario examines lands being privately developed, the County will not incur land purchase costs.
- 8. **Land Sales** since the County would not purchase the lands, no assumptions on land sales are applicable.
- 9. Operating Expenditures/Costs based on the financial model/analysis, the operating expenditures are based on the incremental employees added. The additional operating costs per employee are added as the employees are identified. Operating expenditures are assumed to begin in year 3.
- 10. Operating Revenues are based on user fees collected by the County for services it provides (e.g. water, wastewater, etc.). For the purposes of the analysis, operating revenues will follow the anticipated development, therefore revenues will be assumed to begin in year 3.
- 11. Taxation Revenues in addition to the operating revenues, the County would receive property tax revenue from each property developed. The collection of tax revenues is assumed to lag 2 years after development for non-residential development. Therefore incremental tax revenue will be assumed to begin in year 5. The anticipated assessment is based on a review of similar business parks in Brant and Guelph.
- 12. **Inflation** Revenues and expenditures are assumed to inflate at a rate of 2% annually.



13. Additional Operating Costs for Studies – These costs are not applicable in this scenario.

## Scenario 2: County Invests in Conceptual Planning and Sells to Developer

- 1. **Anticipated Development** will begin in year 3 and equal G.F.A. development and employment will be assumed from years 3 to 12 or years 3 to 22 based on the absorption.
- 2. Development Charges (D.C.) revenue based on the development timing, the associated D.C. revenues will be estimated. The D.C. revenues are based on the County's published 2023/2024 rates, indexed at 3% per year for the forecast period. Although the County is currently undertaking a D.C. study process, the estimated rates will not be available prior to completion of this financial analysis and business case.
- 3. Capital Expenditures (non-local service) if the lands are privately developed then the County will only pay for growth-related works through D.C.s. Should there be a non-growth portion of upgrades, the County would fund this through tax-supported or rate-supported debt. It is anticipated that capital expenditures will be incurred in year 1, with annual debt payment assumptions as follows:
  - Projects less than \$10 million: 10-year payment term at 4% interest; and
  - Projects greater than \$10 million: 20-year payment term at 5% interest.
- 4. **Capital Expenditures (local service)** these needs will be paid for by the developer and constructed would be anticipated in year 2. Annual lifecycle costs will be identified beginning in year 3 onwards.
- 5. **Direct Lifecycle Costs** lifecycle costs for all capital expenditures directly required for this development and not identified in the D.C. background study (including local service works) will be assessed an annual lifecycle cost to incorporate into the calculations. This will be included in the year 3.
- 6. **Broader Lifecycle Costs** which relate to the capital needs identified in the D.C. study, will be identified with actual building activity, which is assumed to begin in year 3, after the local service capital infrastructure has been constructed.



- 7. **Land Purchases** since this scenario examines lands being privately developed, the County will not incur land purchase costs.
- 8. **Land Sales** since the County would not purchase the lands, no assumptions on land sales are applicable.
- 9. **Operating Expenditures/Costs** based on the financial model/analysis, the operating expenditures are based on the incremental employees added. The additional operating costs per employee are added as the employees are identified. Operating expenditures are assumed to begin in year 3.
- 10. **Operating Revenues** are based on user fees collected by the County for services it provides (e.g. water, wastewater, etc.). For the purposes of the analysis, operating revenues will follow the anticipated development, therefore revenues will be assumed to begin in year 3.
- 11. **Taxation Revenues** in addition to the operating revenues, the County would receive property tax revenue from each property developed. The collection of tax revenues is assumed to lag 2 years after development for non-residential development. Therefore incremental tax revenue will be assumed to begin in year 5. The anticipated assessment is based on a review of similar business parks in Brant and Guelph.
- 12. **Inflation** Revenues and expenditures are assumed to inflate at a rate of 2% annually.
- 13. Additional Operating Cost for Studies since the County will be responsible for the planning, there will be an additional cost of \$500,000 assumed to occur in year 1 to complete the required planning studies.

## Scenario 3: County Acts as the Land Developer in Partnership with the Private Sector

1. **Anticipated Development** – will begin in year 3 and equal G.F.A. development and employment will be assumed from years 3 to 12 or years 3 to 22 based on the absorption.



- 2. Development Charges (D.C.) Revenue based on the development timing, the associated D.C. revenues will be estimated. The D.C. revenues are based on the County's published 2023/2024 rates, indexed at 3% per year for the forecast period. Although the County is currently undertaking a D.C. study process, the estimated rates will not be available prior to completion of this financial analysis and business case.
- 3. Capital Expenditures (non-local service) For growth-related capital needs, the County would fund the works using D.C.s. Should there be a non-growth portion of upgrades, the County would fund this through tax-supported or rate-supported debt. It is anticipated that capital expenditures will be incurred in year 1, with annual debt payment assumptions as follows:
  - Projects less than \$10 million: 10-year payment term at 4% interest; and
  - Projects greater than \$10 million: 20-year payment term at 5% interest.
- 4. Capital Expenditures (local service) since the County is the land developer, they will be responsible for paying for the local service works/infrastructure. As such, it is assumed there will be debt associated with these infrastructure works, which will be calculated utilizing the same debt assumptions noted above. It will be assumed that the County will recover these costs when the private developer sells the lands (through partnership agreement, the land purchaser would pay back the County for development of the lands when the lands are sold).
- 5. **Direct Lifecycle Costs** lifecycle costs for all capital expenditures directly required for this development and not identified in the D.C. background study (including local service works) will be assessed an annual lifecycle cost to incorporate into the calculations. This will be included in the year 3.
- 6. **Broader Lifecycle Costs** which relate to the capital needs identified in the D.C. study, will be identified with actual building activity, which is assumed to begin in year 3, after the local service capital infrastructure has been constructed.
- 7. **Land Purchases** It is assumed that a private entity will purchase the lands and through agreement with the County, the County would service the lands, hence no purchase assumptions have been identified.
- 8. **Land Sales** Through a partnership agreement with the private landowner, it is assumed the County would recoup the costs of constructing the local service



- capital needs when the lands are sold. The value of the lands will be based on a review of market values of similar business parks (based on available sales data). Land sales will be prorated to align with the development forecast and would be assumed to occur in the year in which development occurs.
- 9. **Operating Expenditures/Costs** based on the financial model/analysis, the operating expenditures are based on the incremental employees added. The additional operating costs per employee are added as the employees are identified. Operating expenditures are assumed to begin in year 3.
- 10. **Operating Revenues** are based on user fees collected by the County for services it provides (e.g. water, wastewater, etc.). For the purposes of the analysis, operating revenues will follow the anticipated development, therefore revenues will be assumed to begin in year 3.
- 11. **Taxation Revenues** in addition to the operating revenues, the County would receive property tax revenue from each property developed. The collection of tax revenues is assumed to lag 2 years after development for non-residential development. Therefore incremental tax revenue will be assumed to begin in year 5. The anticipated assessment is based on a review of similar business parks in Brant and Guelph.
- 12. **Inflation** Revenues and expenditures are assumed to inflate at a rate of 2% annually.
- 13. Additional Operating Costs for Studies These costs are not applicable in this scenario.

## Scenario 4: County to Develop, Acquire, Service, and Sell Land Parcels

- Anticipated Development will begin in year 3 and equal gross floor area (G.F.A.) development and employment will be assumed from years 3 to 12 or years 3 to 22 based on the absorption scenarios noted in the previous section.
- 2. **Development Charges (D.C.) Revenue** based on the development timing, the associated D.C. revenues will be estimated. The D.C. revenues are based on the County's published 2023/2024 rates, indexed at 3% per year for the forecast



period. Although the County is currently undertaking a D.C. study process, the estimated rates will not be available prior to completion of this financial analysis and business case.

- 3. Capital Expenditures (non-local service) For growth-related capital needs, the County would fund the works using D.C.s. Should there be a non-growth portion of upgrades, the County would fund this through tax-supported or rate-supported debt. It is anticipated that capital expenditures will be incurred in year 1, with annual debt payment assumptions as follows:
  - Projects less than \$10 million: 10-year payment term at 4% interest; and
  - Projects greater than \$10 million: 20-year payment term at 5% interest.
- 4. Capital Expenditures (local service) since the County is the land developer, they will be responsible for paying for the local service works/infrastructure. As such, it is assumed there will be debt associated with these infrastructure works, which will be calculated utilizing the same debt assumptions noted above. It will be assumed that the County will recover these costs when the lands are sold.
- 5. **Direct Lifecycle Costs** lifecycle costs for all capital expenditures directly required for this development and not identified in the D.C. background study (including local service works) will be assessed an annual lifecycle cost to incorporate into the calculations. This will be included in the year 3.
- 6. **Broader Lifecycle Costs** which relate to the capital needs identified in the D.C. study, will begin occurring with actual building activity, which is assumed to occur in year 3, after the local service capital infrastructure/needs have been identified and constructed.
- 7. Land Purchases in this scenario it is assumed that the County would purchase the unserviced land, develop the infrastructure, and sell the serviced land. The unserviced land value will be estimated based on a review of available purchase price information in similar municipalities. Land purchase would be assumed to occur in year 1.
- 8. Land Sales The value of the lands will be based on a review of market values of similar business parks (based on available sales data). Land sales will be prorated to align with the development forecast and would be assumed to occur in the year in which development occurs.



- 9. **Operating Expenditures/Costs** based on the financial model/analysis, the operating expenditures are based on the incremental employees added. The additional operating costs per employee are added as the employees are identified. Operating expenditures are assumed to begin in year 3.
- 10. **Operating Revenues** are based on user fees collected by the County for services it provides (e.g. water, wastewater, etc.). For the purposes of the analysis, operating revenues will follow the anticipated development, therefore revenues will be assumed to begin in year 3.
- 11. **Taxation Revenues** in addition to the operating revenues, the County would receive property tax revenue from each property developed. The collection of tax revenues is assumed to lag 2 years after development for non-residential development. Therefore incremental tax revenue will be assumed to begin in year 5. The anticipated assessment is based on a review of similar business parks in Brant and Guelph.
- 12. **Inflation** Revenues and expenditures are assumed to inflate at a rate of 2% annually.
- 13. Additional Operating Cost for Studies since the County will be responsible for the planning, there will be an additional cost of \$500,000 assumed to occur in year 1 to complete the required planning studies.



### Summary

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Assumption	Private Developer	County Undertakes Planning	County acts as Land Developer in Partnership	County Acts as Developer
Anticipated Development	begin in year 3 with equal G.F.A. and employment over forecast	begin in year 3 with equal G.F.A. and employment over forecast	begin in year 3 with equal G.F.A. and employment over forecast	begin in year 3 with equal G.F.A. and employment over forecast
D.C. Revenue	Based on current rates (2024) and indexed at 3% annually over forecast	Based on current rates (2024) and indexed at 3% annually over forecast	Based on current rates (2024) and indexed at 3% annually over forecast	Based on current rates (2024) and indexed at 3% annually over forecast
Capital Expenditures (non-local service)	Incurred in year 1, with annual debt payments calculated for projects less than \$10 million: 10-year payment term at 4% interest; and projects greater than \$10 million: 20-year payment term at 5% interest.	Incurred in year 1, with annual debt payments calculated for projects less than \$10 million: 10-year payment term at 4% interest; and projects greater than \$10 million: 20-year payment term at 5% interest.	Incurred in year 1, with annual debt payments calculated for projects less than \$10 million: 10-year payment term at 4% interest; and projects greater than \$10 million: 20-year payment term at 5% interest.	Incurred in year 1, with annual debt payments calculated for projects less than \$10 million: 10-year payment term at 4% interest; and projects greater than \$10 million: 20-year payment term at 5% interest.
Capital Expenditures (local service)	Paid by developer with construction in year 2	Paid by developer with construction in year 2	County pays for infrastructure with debt calculated using same assumptions noted above. Costs recouped through sale of lands (agreement)	County pays for infrastructure with debt calculated using same assumptions noted above.
Direct Lifecycle Costs	Annual amount to begin in year after construction (year 3)	Annual amount to begin in year after construction (year 3)	Annual amount to begin in year after construction (year 3)	Annual amount to begin in year after construction (year 3)
Broader Lifecycle Costs	Annual amount to begin in year after construction (year 3)	Annual amount to begin in year after construction (year 3)	Annual amount to begin in year after construction (year 3)	Annual amount to begin in year after construction (year 3)
Land Purchases	N/A	N/A	N/A	Occur in year 1
Land Sales	N/A	N/A	County to recoup local service cost at time lands are sold. Prorated to align with development forecast and occur in year of development	Prorated to align with development forecast and occur in year of development
Operating Expenditures/Costs	Begin in year 3, based on incremental employees added	Begin in year 3, based on incremental employees added	Begin in year 3, based on incremental employees added	Begin in year 3, based on incremental employees added
Operating Revenues	Begin in year 3 and based on employees added	Begin in year 3 and based on employees added	Begin in year 3 and based on employees added	Begin in year 3 and based on employees added
Taxation Revenues	2-year lag after development. Begin in year 5	2-year lag after development. Begin in year 5	2-year lag after development. Begin in year 5	2-year lag after development. Begin in year 5
Inflation	2% annually	2% annually	2% annually	2% annually
Additional Operating Costs for Studies	N/A	\$500,000 in year 1	N/A	\$500,000 in year 1