

Nith Peninsula, Brant County Fiscal Impact Study

Independent Real Estate Intelligence

October 25, 2017



Nith Peninsula, Brant County Fiscal Impact Study

Prepared for:

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October 25, 2017

EXECUTIVE SUMMARY

Altus Group Economic Consulting was retained by Losani Homes to examine the financial impacts of a proposed development on the Nith Peninsula area, in the community of Paris, in Brant County.

The proposed development will contain a total of 539 units, including 277 single family units, 61 townhouses, and 201 apartment units. Based on the Person per Unit (PPU) factors from the 2016 Census by unit type, the development can be expected to generate approximately 1,260 persons.

The proposed development would generate approximately \$10.0 million in development charge revenues for the County (based on current DC rates). Aside from relatively short extensions of external roads, the development generally only requires the construction of new internal infrastructure that will be funded by the developer.

In addition to the one-time expenditures and revenues for infrastructure, the development of the subject lands will generate on-going revenues and costs at build-out:

- Annual property tax revenues for the County of \$1.3 million;
- Non-tax revenues of approximately \$44,100 per year;
- Revenues from water and sewer rates of approximately \$714,900 per year;
- Annual net operating expenditures of \$1.4 million (for all County services excluding road, water, wastewater and stormwater), plus an additional \$213,500 in annual budgeted contributions towards capital works;
- Annual operating and lifecycle costs for:
 - Internal and external roads - \$13,600;
 - On-site storm water management pond - \$68,900;
 - Internal water works - \$94,200;
 - Internal sanitary sewers - \$86,000;

The proposed development is planned to be constructed in six phases. Based on the assumption that the internal works get constructed as phases get built (but one phase ahead of those where the respective units needing those internal works will be built), the development at the end of Phase One yields

an annual fiscal benefit to the County of \$74.16 per capita, or \$31,500 per year.

As each subsequent phase is completed, the amount of revenues increases with the development of additional housing units and accommodation of associated population (generating property tax revenues, non-tax revenues, water and sewer user rate revenues), as does the operating expenditures and water and sewage treatment costs, each of which will increase in pace with population growth. However, the lifecycle costs for roads, watermains, sanitary sewers, and storm water management increase more slowly, and stop increasing after Phase Three, as they will have been built-out by the end of that phase.

Therefore, the annual net fiscal surplus at the build-out of each phase increases with each subsequent phase through to the full build-out of the development, where at the end of Phase Six, the lands will generate an annual fiscal impact of \$185.79 per capita.

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1 INTRODUCTION

Altus Group Economic Consulting was retained by Losani Homes to examine the potential financial impacts of a proposed residential development on the finances of Brant County.

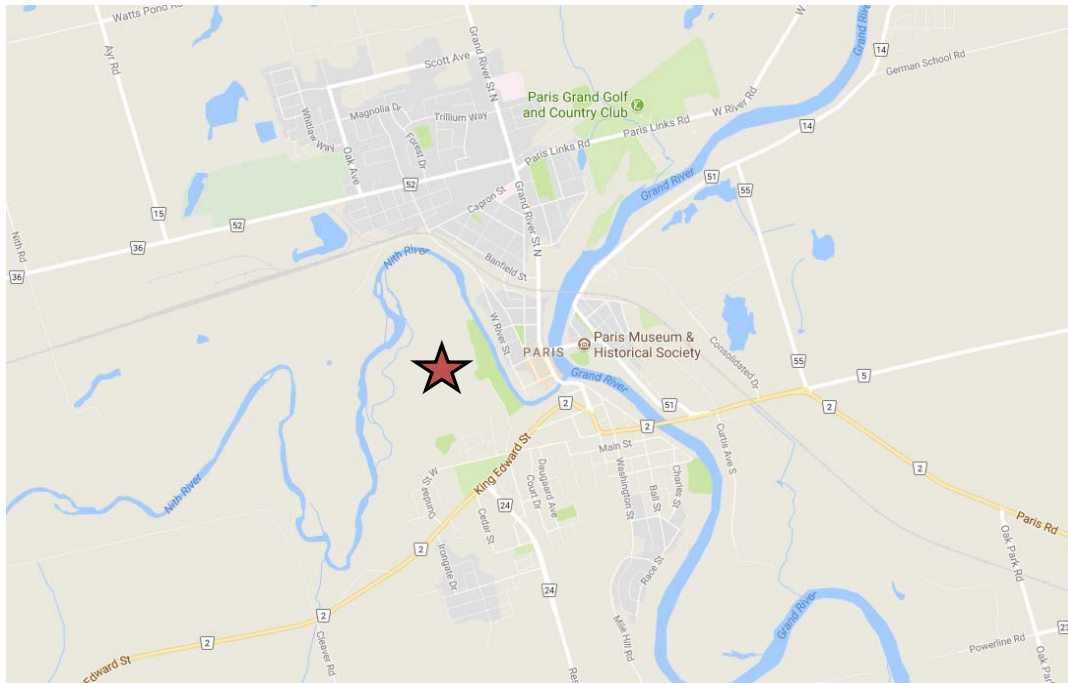
This report represents an update of the September 2009 Fiscal Impact Analysis report done for the same site, by Hemson Consulting.

1.1 BACKGROUND

Figure 1 shows the location of the subject site, which is located in the community of Paris, which is within Brant County. The site is surrounded on three sides by the Nith River, and is located just west of Downtown Paris. There is a small residential area to the south of the subject site.

Figure 1

Location of Subject Site



Source: Google Maps

The proposed development will contain a total of 539 units, including 277 single family units, 61 townhouses, and 201 apartment units.

Based on the Person per Unit (PPU) factors from the 2016 Census by unit type, the development can be expected to generate approximately 1,260 persons.

Figure 2

Unit Count and Estimated Population Generated, Nith Peninsula

	Units	Persons per Unit	Population
Single Family - 15m frontage	50	2.74	137
Single Family - 14m frontage	43	2.74	118
Single Family - 13m frontage	53	2.74	145
Single Family - 12m frontage	55	2.74	151
Single Family - 11m frontage	60	2.74	165
Single Family - 9m frontage	16	2.74	44
Tow nhouse	61	2.44	149
Apartment	201	1.74	350
	<u>539</u>		<u>1,259</u>

Source: Plans provided by client

The proposed development is to be phased over a total of six phases, as set out in Figure 3. The anticipated timing of each phase is not yet known at this time.

Figure 3

Phasing of Proposed Development, Nith Peninsula

	Single Family Units	Tow nhouse	Apartment	Total
Phase 1	114	-	64	178
Phase 2	39	22	-	61
Phase 3	36	-	-	36
Phase 4	82	-	-	82
Phase 5	-	39	137	176
Phase 6	6	-	-	6
	<u>277</u>	<u>61</u>	<u>201</u>	<u>539</u>

Source: Altus Group Economic Consulting

1.2 APPROACH

This report will analyse the net annual fiscal impact of the proposed development on the County's finances, both from a capital and net annual operating perspective.

2 CAPITAL REVENUES AND EXPENDITURES

This section outlines the capital expenditures required to service the proposed development, and the sources of funding for the works, and the associated impact on the County's budget.

2.1 DEVELOPMENT CHARGE AND FEE REVENUES

2.1.1 Brant County Development Charges

Figure 4 shows the DC revenues that would be generated by the proposed development for the County. In total, at current DC rates, it would generate over \$10.0 million in DC revenues, including:

- Approximately \$2.9 million for roads and related works;
- \$2.8 million for water services;
- \$2.7 million for wastewater services;
- \$557,200 for indoor recreation services;
- \$508,500 for outdoor recreation services;
- \$144,200 for libraries;
- \$123,200 for administration;
- \$114,700 for fire protection;
- \$101,100 for stormwater services;
- \$52,200 for police services; and
- \$1,300 for ambulance.

The County can use these DC revenues to fund growth-related capital works related to each of the identified development charge services. This can include works required directly by development, or other growth-related capital works elsewhere in the County.

Figure 4

Development Charge Rates and Estimated Revenues, Brant County, Nith Peninsula

	Singles & Semis	2-Bedroom & Larger Apartments	Bachelor and 1- Bedroom Apartments	Other Multiples	
DC Rates by Service					
	<i>Dollars per Unit</i>				
Roads and Related	6,802	3,960	3,110	4,788	
Fire Protection	266	154	121	187	
Police Services	121	70	55	85	
Outdoor Recreation Services	1,177	686	538	828	
Indoor Recreation Services	1,290	751	590	908	
Libraries	334	194	152	235	
Administration	285	166	131	201	
Ambulance	3	2	1	2	
Stormwater Services	234	136	107	165	
Wastewater Services	6,201	3,610	2,835	4,365	
Water Services	6,508	3,790	2,975	4,581	
Total with Full Services	23,221	13,519	10,615	16,345	
	<i>Units</i>				
Units by Type	277	161	40	61	
	Singles & Semis	2-Bedroom & Larger Apartments	Bachelor and 1- Bedroom Apartments	Other Multiples	Total
DC Revenues by Service					
	<i>Dollars</i>				
Roads and Related	1,884,154	636,768	125,022	292,068	2,938,012
Fire Protection	73,682	24,763	4,864	11,407	114,716
Police Services	33,517	11,256	2,211	5,185	52,169
Outdoor Recreation Services	326,029	110,309	21,628	50,508	508,473
Indoor Recreation Services	357,330	120,761	23,718	55,388	557,197
Libraries	92,518	31,195	6,110	14,335	144,159
Administration	78,945	26,693	5,266	12,261	123,165
Ambulance	831	322	40	122	1,315
Stormwater Services	64,818	21,869	4,301	10,065	101,053
Wastewater Services	1,717,677	580,488	113,967	266,265	2,678,397
Water Services	1,802,716	609,432	119,595	279,441	2,811,184
Total with Full Services	6,432,217	2,173,855	426,723	997,045	10,029,840

Source: Altus Group Economic Consulting based on draft plan

2.2 CAPITAL INFRASTRUCTURE REQUIREMENTS

2.2.1 Water & Sewer

According to the plans provided by the client, there are requirements for 2.6 kilometres of new internal watermains, as well as 2.6 kilometres of new internal sanitary sewers.

According to Appendix E of the County's 2014 Development Charges Background Study, the following are the local service policies for water and sewer works:

Water and Sewer

The County requires the developer to install all internal underground works at the sole expense of the developer to serve his land holdings. If the County identifies the need to oversize either sewers or water mains

for the benefit of adjoining lands not owned by the developer then the County will pay for such oversizing by rebating collected development charges from the developer's site. ...

Based on a July 31, 2017 report by GM BluePlan's, there is also a requirement for upgrades to existing watermains and installation of pressure reducing valves. The range of capital costs for this work is \$1.51 to \$1.56 million. These works may be eligible for funding through the County's development charge (or by rebating the development charges imposed on the developer). The cost of the works will be less than the amount generated through the County's development charge for water services (\$2.8 million).

The capital costs associated with internal watermains and sanitary sewers will be entirely funded by the developer. The upgraded external watermain and associated works may be eligible for funding through the County's development charge. The long-term operating, maintenance and replacement costs for both the internal watermains and the external upgraded water works will be the responsibility of the County.

2.2.2 Storm Water Management

According to plans provided by the client, there will be a 1.07-hectare storm water management pond built on the site. There will be 2.6 kilometres of storm sewers built in connection with the internal road system.

The local service policies for storm water management, as outlined in Appendix E of the County's 2014 DC Study are as follows:

Storm Water Management

Subdivision-specific storm water management requirements will continue to be the direct responsibility of the subdividers, pursuant to individual subdivision agreements; however, a selected number of broader stormwater facility costs have been incorporated into the DC calculation, as these are beyond such local responsibilities.

Therefore, as all storm sewers will be internal works, all associated capital costs will be the responsibility of the developer. The works will be turned over to the County, who will be responsible for the long-term operating and maintenance costs.

2.2.3 Roads

According to plans provided by the client, there will be 5.3 lane kilometres of internal local roads (roughly 2.6 km of 2-lane roads), which will be constructed by the developer and assumed by the County.

According to the engineering consultants retained by Losani Homes (S. Llewellyn & Associates Ltd.), there are also two external road improvements required as a result of development, as identified in the Functional Servicing Report:

- An extension of Gort Avenue (with a 20-metre right-of-way) to act as an entrance to the subdivision – approximately 36 metres in length;
- A future extension of Street C across lands owned by Brant County at the southwest quadrant of the subject site. This road extension would have a 20-metre right-of-way, and would be 215 metres in length.

According to Appendix E to the County's 2014 DC Study, the relevant local service policies for roads are as follows:

Services Related to a Highway

The developer is responsible for the cost of all roads internal to subdivisions and for the local road component of connecting/abutting roads. This includes any signalization, road widening or turning lanes required to facilitate traffic into or out of the development site onto existing roads. In addition, where the developer has to disturb existing roads in any way to provide services to his site, then the developer is fully responsible to rehabilitate the road to County standards. If as part of the reconstruction the County decides to improve the level of services existing on the road or on below ground services, then the County shall pay for the cost of such upgrades beyond the estimated restoration costs and installation cost of the services that would have been installed by the developer.

Based on the local service guidelines, all internal roads in the development will be the responsibility of the developer. All roads, once constructed, would be assumed by the County, who would be responsible for all ongoing operating, maintenance and replacement costs.

The two external road improvements may be eligible for funding through development charges (if they do not meet the test for 'connecting/abutting' roads from the County's local service guidelines). However, even if these roads are DC eligible, given the relatively short length of these roads (251 metres in total), the associated capital costs are likely to be far less than the

amount of DC revenues generated by the development (\$2.9 million) for road projects.

3 ONGOING REVENUES AND COSTS

This section provides an overview of the methodology for determining the net annual fiscal impact of development.

3.1 REVENUES

3.1.1 Assessment and Property Tax Revenues

The 2009 Hemson Report used assessment values of \$275,000 for single-detached units, \$170,000 for semi-detached and \$150,000 for each of the townhouse and apartment dwellings. The values are based on 2008 assessment values.

According to MPAC, property values in Brant County have increased 4.5% per year, on average, between 2012 and 2016.¹ There was also a similar four-year period between 2008 and 2012, for which values increased by on average, 1.7% per year.² These values equate to an overall change in property values of 27.6% over the 2008-2016 period.

This estimated change in property values of 27.6% is consistent with the changes between 2008 and 2016 tax years for various individual properties we reviewed MPAC assessment values for.

Figure 5

Comparison of Assessment Values, 2009 and 2017 Fiscal Impact Studies, Nith Peninsula

	2009 Hemson Report	2017 Altus Report	% Change
	<i>Dollars per Unit</i>		<i>Percent</i>
Single Family	275,000	350,800	28%
Townhouse	150,000	191,400	28%
Apartment	150,000	191,400	28%

Source: Altus Group Economic Consulting based on Hemson Consulting, Fiscal Impact Analysis, Kulmatycky/Zavarella Development, Town of Paris, County of Brant, (September 2009)

Applying this change to the assessment values in the 2009 Hemson report, results in assessment values for the 2016 tax year of \$350,800 for single family units, and \$191,400 for townhouse and apartment units (see Figure 5).

¹ MPAC, County of Brant Residential Property Values on Average Have Increased 4.5 Per Cent Per Year Since 2012, (July 5, 2016)

² Brant News, October 1, 2012

According to MPAC, the “typical residential property” in Brant is \$351,000. The weighted average assessment value of units in the Nith Peninsula plan, based on the 2016 assessment value estimates is \$269,500.³

As Figure 6 shows, the total amount of assessment generated by the plan would be \$147.3 million, which at 2016 tax rates, would generate \$1.31 million per year, at full build-out for the County.

Figure 6

Estimated Annual Property Tax Revenues, Nith Peninsula								
Unit by Type	Units	Assessment Value / Unit \$/ Unit	Total Assessment Value Dollars	2016 Tax Rate		Total Annual Tax Revenue		
				County	Education	County	Education	Total
				Percent		Dollars		
Single Family	277	350,800	97,171,600	0.889586%	0.188000%	864,425	182,683	1,047,108
Townhouse	61	191,400	11,675,400	0.889586%	0.188000%	103,863	21,950	125,812
Apartment	201	191,400	38,471,400	0.889586%	0.188000%	342,236	72,326	414,562
	539		147,318,400			1,310,524	276,959	1,587,482

Source: Altus Group Economic Consulting based on MPAC data, Brant County 2016 property tax rates

3.1.2 Non-Tax Revenues

In addition to the property tax revenues generated annually by the proposed development, the units and residents will also generate a variety of annual non-tax revenues for the County. These non-tax revenues include County fees for items such as licenses, permits (excluding building permits), fines and donations, etc.

After making provisions for non-tax revenues that would increase along with residential growth, and the proportion to which residential development would contribute to an increase in those revenues, we have estimated that the proposed development would add approximately \$35.04 per capita to the County’s annual non-tax revenues.

The 2009 Hemson report does not appear to have taken these revenues into account.

3.1.3 Water and Wastewater Revenues

In estimating water and wastewater user rate revenues, it is assumed that water and sewer usage will 250 litres per capita, per day (l/c/d). Based on the average household sizes of each unit type in the proposed plan, this results in

³ This average is likely lower than the County-wide average due to the relatively high proportion of townhouse and apartment units (261 of 540 units, or 48.3%, compared to 1,320 out of 13,315, or 9.9% across the County as a whole, as of the 2016 Census.

a weighted average usage per unit of 212 cubic metres per year for each of water and sewer.

The County's fixed and variable rates for water and wastewater are as follows:

- Water Fixed Rate: \$45.01 per unit, per month;
- Water Variable Rate: \$1.220 per cubic metre;
- Wastewater Fixed Rate: \$20.61 per unit, per month;
- Wastewater Variable Rate: \$1.400 per cubic metre.

The assumed usage and rates charged by the County result in average household costs of roughly \$791 per year on water, and \$535 per year on wastewater, for a total of \$1,326 per year. In total, the 539 units would generate \$714,900 in water and wastewater revenues each year for the County.

The 2009 Hemson report does not appear to have taken these revenues into account.

3.2 EXPENDITURES

3.2.1 Operating Expenditures

We have estimated the additional annual operating costs that will result from the proposed development. The calculation can be broken down into four steps:

1. We take the operating expenditures of the County, as taken from Schedule 40 of the Financial Information Return municipalities submit to the Ministry of Municipal Affairs and Housing.
2. Expenditures for each service relating to long-term debt interest, and any users fees and service charge revenues associated with each service are deducted to reach net operating expenditures.
3. We estimate the degree to which the net operating expenditures will change with additional growth by applying a "growth-related" factor to the net operating expenditures, to reach net growth-related operating expenditures. In most cases, the need for services by new residents will require a nearly proportionate increase in operating costs to the amount expended on existing residents, with a small allowance made for efficiencies and economies of scale. Other

services such as government and planning departments will grow at a much slower pace than population growth, not having to expand significantly when the County grows.

4. We then attribute a share of the net growth-related operating expenditures to residential and non-residential development, by applying residential/non-residential factors to each service based on typical usage, or where based on per capita usage, used the split between population and jobs in the County. This results in the net residential growth-related operating expenditures.

We have estimated that the freehold development would generate additional annual operating costs to the County of \$1,080.07 per capita.

The County's average operating costs relating to roads, water, wastewater, and storm sewer infrastructure are excluded from this part of the analysis. Instead, the impacts on the County's finances for these hard services will be calculated separately, based on actual incremental infrastructure to be constructed, and average operating, lifecycle and maintenance costs for those works.

The 2009 Hemson report included the costs associated with the 10% statutory reduction in growth-related costs required under the *Development Charges Act*, estimated at \$78,000, and included this amount as an additional expenditure in the calculation of net fiscal impact. We have not included this expenditure, as it is assumed to be incorporated into the annual operating expenditure amounts made by the County each year – therefore, to include this cost separately would be to double count the expenditure.

Detailed estimates regarding net operating expenditures are included in the Appendix to this report.

3.2.2 Operating Contribution to Capital

Consistent with the 2009 Hemson report, we have assumed that an annual contribution will be made from the County's annual operating budget to the capital budget. Similar to the 2009 Hemson report, where this cost was based on the ratio of capital expenditures to non-capital expenditures in the County's 2008 budget, we have based this contribution on the same amounts as the County's 2016 budget. In the County's 2016 budget, the capital contribution identified amounted to 15.7% of the non-capital operating expenditures (\$6.56 million out of \$41.8 million in non-capital expenditures).

Based on the operating expenditures, this equates to \$169.57 per capita, or approximately \$213,700 per year.

3.2.3 Lifecycle Funding Requirements

In reviewing the costs associated with roads, water, sanitary sewer and storm water works, which will ultimately be the responsibility of the County, not only do the additional operating and maintenance costs associated with the infrastructure need to be considered, but the “lifecycle” funding requirements should also be included in the analysis. Incorporating these lifecycle costs ensures that funding will be available to the County to replace the works at the end of the useful life of the works to be constructed. These cost estimates are based on the actual internal and external works required for development.

3.2.3.1 Roads

To estimate the annual operating and lifecycle replacement costs for the roads required for the development, we have taken the cost per lane kilometre of roads from the County’s 2012 *Financial Information Return (FIR)*⁴ of \$2,349.32 per lane kilometre, which incorporates both operating costs and amortization costs for the County’s existing inventory of paved roads.

Based on the estimated 2.89 km (or 5.78 lane km) of new roads in the development, or required externally, the roads will add approximately \$13,600 in annual operating and lifecycle costs for the County. This amount will be funded through general revenues and is incorporated into the calculation of the net annual fiscal impact.

3.2.3.2 Storm Water Management

There are plans for a 1.07-hectare stormwater management pond, as well as 2.6-km of storm sewers.

The County’s 2012 FIR did not report on lifecycle costs associated with stormwater management. However, we have looked at average stormwater management lifecycle costs in municipalities across Ontario that did report such costs, and found that operating costs associated with storm sewers averaged to be \$7,443 per kilometre of storm sewers.

⁴ The data tables in the County’s 2012 Financial Information Return were used, since the information was not available in the 2016 Financial Information Return.

The *Financial Information Return* reports submitted to the Ministry of Municipal Affairs and Housing have not historically reported on lifecycle costs associated with storm water management ponds. However, a report by Aquafor Beech Limited for the City of Hamilton⁵ estimated the annual estimated monitoring and maintenance costs for stormwater facilities, which amounted to fixed costs of \$62,900 per year per pond (for grass cutting, weed control, inspection, etc.), plus additional variable costs including:

- Vegetation Maintenance (\$5,000 per hectare of pond area, every 5 years);
- Sediment Removal and Disposal (\$600 per m³ of sediment, removed every 10 years) – based on sediment accumulation rate of 1.185 m³ per hectare of drainage area (which is assumed to be the entirety of the subject site for the purposes of this analysis) per year;

Therefore, the storm water management pond and storm sewers will have an annual operating, maintenance and lifecycle cost of \$68,900 per year.

3.2.3.3 Water

The County's 2012 FIR shows an average cost for watermains of \$2,022.28 per km, and costs for water treatment of \$801.93 per megalitre. Based on the 2.6 km of new internal watermains to be constructed, and assumed 115 megalitres of water to be treated⁶ annually from households in the development, the annual operating and lifecycle costs associated with water infrastructure are approximately \$94,200.

As the external watermains are upgrades of existing watermains, there is assumed to be no incremental operating, maintenance or replacement cost associated with this work, as these costs would be incurred with or without the upgrades. Instead, the work to be done renews the watermain earlier than if the upgrades were not required – the upgrades will delay any such costs that the County may have otherwise had to fund in the coming years.

⁵ Aquafor Beech Limited, City of Hamilton Operation and Maintenance Report for Stormwater Management Facilities, (May 2009)

⁶ Based on estimated water demand of 250 litres per capita per day, which, based on 2.33 persons per unit, equates to 213 cubic metres per unit per year. We have assumed that sanitary sewer flows are equivalent to water demand.

3.2.3.4 Sanitary Sewer

The County's 2012 FIR shows average cost for sanitary sewers of \$16,543.30 per km, plus costs for wastewater treatment of \$381.88 per megalitre. Based on the 2.6 km of sanitary sewers to be constructed, and assumed 115 megalitres of sewerage flows to be treated annually from households in the development, the annual operating and lifecycle costs associated with water infrastructure are approximately \$86,000.

4 CONCLUSION

Figure 7 shows the net annual fiscal impact of the proposed development on Brant County's finances. The plan would generate a net annual surplus of approximately \$233,900, or \$185.79 per capita.

Figure 7

Estimate of Net Annual Fiscal Surplus, Nith Peninsu

	Units	Dollars per	
	Persons	Dollars	Capita
	539		
	1,259		
Property Taxes		1,310,524	1,041.13
Non-Tax Revenues		44,102	35.04
Water and Wastewater Revenues		714,874	567.92
Total Revenues		2,069,500	1,644.09
Net Operating Expenditures		1,359,544	1,080.07
Contribution to Capital (13.6%)		213,447	169.57
Road Lifecycle Costs		13,574	10.78
Stormwater Lifecycle Costs		68,871	54.71
Water Lifecycle Costs		94,234	74.86
Wastewater Lifecycle Costs		85,972	68.30
Total Expenditures		1,835,642	1,458.30
Net Fiscal Surplus / (Deficit)		233,858	185.79

Source: Altus Group Economic Consulting

In determining the fiscal impact to the County over time, we have assumed the following:

- That the internal roads, watermains, and sanitary sewers get built as the development is phased out - one phase ahead of construction of homes associated with each stage of work. This means the a large share of the operating, maintenance and replacement costs will be incurred by the County starting in Phase One, and that all of these works will be constructed in full by the end of Phase Three; and
- The external roads (Street C and Gort Avenue), the stormwater management pond and storm sewers are built during Phase One.

At the end of Phase One, only 178 of the 539 housing units will be completed, but the majority of the development's infrastructure will be installed (66.2%

of the length of required internal roads, watermains and sanitary sewers), resulting in an annual net annual fiscal surplus of \$74.16 per capita, or approximately \$31,500 per year.

As each subsequent phase is completed, the amount of revenues increases with the development of additional housing units and accommodation of associated population (generating property tax revenues, non-tax revenues, water and sewer user rate revenues), as does the operating expenditures and water and sewage treatment costs, each of which will increase in pace with population growth. However, the lifecycle costs for roads, watermains, sanitary sewers, and storm water management increase more slowly, and stop increasing after Phase Three, as they will have been built-out by the end of that phase.

Therefore, the annual net fiscal surplus at the build-out of each phase increases with each subsequent phase through to the full build-out of the development, where at the end of Phase Six, the lands will generate an annual fiscal impact of \$185.79 per capita.

Figure 8

Annual Fiscal Impact by Phase, Proposed Development, Nith Peninsula, Brant County

	Phase One	Phase Two	Phase Three	Phase Four	Phase Five	Phase Six Onwards
Annual Revenues						
	<i>Dollars</i>					
Property Tax Revenue	464,727	623,892	736,236	992,130	1,291,800	1,310,524
Non-Tax Revenue	14,861	20,491	23,950	31,831	43,526	44,102
Water Revenues	141,351	191,497	221,299	289,183	421,403	426,370
Wastewater Revenues	95,902	130,725	151,515	198,870	285,040	288,505
Total Revenues	716,841	966,605	1,133,001	1,512,014	2,041,768	2,069,500
Annual Expenditures						
Operating Expenditures	458,127	631,665	738,320	981,255	1,341,769	1,359,544
Contribution to Capital (13.6%)	71,926	99,171	115,916	154,056	210,657	213,447
Roads - Lifecycle	10,174	10,174	13,574	13,574	13,574	13,574
Watermains - Lifecycle	3,531	3,871	5,334	5,334	5,334	5,334
Water Treatment - Lifecycle	29,717	41,022	47,831	63,339	87,764	88,899
Stormwater - Lifecycle	68,871	68,871	68,871	68,871	68,871	68,871
Sewers - Lifecycle	28,889	31,668	43,639	43,639	43,639	43,639
Sewage Treatment Lifecycle	14,151	19,535	22,777	30,162	41,793	42,334
Total Expenditures	685,386	905,977	1,056,260	1,360,230	1,813,400	1,835,642
Net Annual Fiscal Impact	31,455	60,628	76,740	151,784	228,367	233,858
Completed Units	178	239	275	357	533	539
Persons Residing in Completed Units	424	585	684	909	1,242	1,259
Total Revenues per Capita	1,690.01	1,652.78	1,657.44	1,664.28	1,643.54	1,644.09
Total Expenditures per Capita	1,615.85	1,549.11	1,545.18	1,497.21	1,459.72	1,458.30
Net Fiscal Impact per Capita	74.16	103.67	112.26	167.07	183.83	185.79

Source: Altus Group Economic Consulting

Appendix A
Detailed Financial Impact Tables

Figure A- 1

Estimate of Non-Tax Revenues, Nith Peninsula

	Non-Tax Revenues	Less: Building Permit Revenues	Net Non-Tax Revenues	Growth Related	Growth Related Non- Tax Revenues	Residential Share	Residential Growth Related Non-Tax Revenues
		<i>Dollars</i>		<i>Percent</i>	<i>Dollars</i>	<i>Percent</i>	<i>Dollars</i>
Licenses, Permits, Rents, etc.							
Licenses and Permits	1,269,051	470,574 ¹	798,477	95%	758,553	74%	561,329
Rents, Concessions and Franchises	372,957	-	372,957	0%	-	74%	-
Subtotal	1,642,008	470,574	1,171,434		758,553		561,329
Fines and Penalties							
Other Fines	30,615	-	30,615	95%	29,084	74%	21,522
Penalties and Interest on Taxes	501,973	-	501,973	95%	476,874	74%	352,887
Subtotal	532,588	-	532,588		505,959		374,409
Other Revenue							
Investment Income	642,200	-	642,200	0%	-	74%	-
Donations	164,361	-	164,361	95%	156,143	74%	115,546
Sale of Publications, Equipment, etc.	334,000	-	334,000	95%	317,300	74%	234,802
Contribution from Non-Consolidated Entities	-	-	-	0%	-	74%	-
Other Revenues from Government Business Enterprises	-	-	-	0%	-	74%	-
Subtotal	1,140,561	-	1,140,561		473,443		350,348
Total	3,315,157	470,574	2,844,583		1,737,955		1,286,087
						2016 Population	36,707
						\$ / Capita - Growth Related Non Tax Revenues	35.04

¹ Based on user fees and service charges received by planning and development sector for 2016 (FIR)
Source: Altus Group Economic Consulting, based on Brant County Financial Information Return 2016

Figure A- 2

Estimate of Annual Revenues from Water and Wastewater Rates, Nith Peninsula

	Fixed / Usage Rate	Annual Usage	Annual Costs per Homeowner	Units	Revenues
	<i>\$/ Unit</i>	<i>m3 per Year</i>	<i>Dollars</i>		<i>Dollars</i>
Residential Water					
Monthly Fixed Rate	45.01		540		
	<i>\$/ m3</i>				
Consumption Rate	1.220	206	251		
Total Residential Water			791	539	426,370
Residential Sewer	<i>\$/ Unit</i>				
Monthly Fixed Rate	20.61		247		
	<i>\$/ m3</i>				
Consumption Rate	1.400	206	288		
Total Residential Sewer			535	539	288,505
Total			1,326	539	714,874

Assumed Water & Sewer Usage 250 litres per capita per day

	Units	Population	Litres per Day	m3 per day/unit	m3 per year / unit
Single Family	277	716	178,980	0.65	236
Townhouses	61	149	37,221	0.61	223
Apartments	201	350	87,515	0.44	159
	539	1,215	303,716	0.56	206

Source: Altus Group Economic Consulting based on Brant County 2016 User Rates

Figure A- 3

Estimate of Growth Related Net Operating Expenditures, Nith Peninsula

	Operating Expenditures	Less: Interest on Long Term Debt	Less: User Fees and Service Charges	Net Operating Expenditures	Growth Related		Residential Net Growth-Related Operating Expenditures	
					%	Net Operating Expenditures		Res. Share
					Dollars	Percent	Dollars	
General Government								
Governance ¹	957,678	-	-	957,678	75%	718,258	74%	531,511
Corporate Management	2,306,187	-	-	2,306,187	75%	1,729,640	74%	1,279,934
Program Support	465,613	-	-	465,613	75%	349,210	74%	258,415
Subtotal	3,729,478	-	79,112	3,650,366		2,797,108		2,069,860
Protection Services								
Fire	3,465,677	30,946	72,371	3,362,360	95%	3,194,242	74%	2,363,739
Police	7,126,814	-	51,150	7,075,664	95%	6,721,881	74%	4,974,192
Conservation Authority	438,514	-	-	438,514	100%	438,514	74%	324,500
Protective Inspection and Control	872,158	-	9,340	862,818	95%	819,677	74%	606,561
Building Permit and Inspection Services	1,235,476	-	-	1,235,476	95%	1,173,702	74%	868,539
Emergency Measures	-	-	-	-	95%	-	74%	-
Provincial Offences Act (POA)	-	-	-	-	95%	-	74%	-
Subtotal	13,138,639	30,946	132,861	12,974,832		12,348,016		9,137,532
Transportation Services								
Roads - Bridges and Culverts	1,376,994	-	-	1,376,994	95%	1,308,144	74%	968,027
Roads - Traffic Ops & Roadside	2,945,987	-	-	2,945,987	95%	2,798,688	74%	2,071,029
Winter Control	2,648,472	-	-	2,648,472	95%	2,516,048	74%	1,861,875
Transit - Disabled & Special Needs	252,419	-	-	252,419	95%	239,798	74%	177,451
Street lighting	883,816	-	-	883,816	95%	839,625	74%	621,323
Subtotal	8,107,688	-	-	8,107,688		7,702,304		5,699,705
Environmental Services								
Solid Waste - Collection/Disposal	2,248,337	-	338,297	1,910,040	95%	1,814,538	74%	1,342,758
Waste Diversion	1,262,722	-	-	1,262,722	95%	1,199,586	74%	887,693
Subtotal	3,511,059	-	338,297	3,172,762		3,014,124		2,230,452
Health Services								
Public Health Services	836,100	-	-	836,100	95%	794,295	100%	794,295
Ambulance Services	10,505,588	-	697	10,504,891	95%	9,979,646	74%	7,384,938
Cemeteries	830,228	-	181,259	648,968	95%	616,520	100%	616,520
Subtotal	12,171,916	-	181,956	11,989,959		11,390,461		8,795,753
Social and Family Services								
General Assistance	329,574	-	-	329,574	95%	313,095	100%	313,095
Assistance to Aged Persons	1,302,871	187,242	-	1,115,629	95%	1,059,848	100%	1,059,848
Child Care	379,743	-	-	379,743	95%	360,756	100%	360,756
Subtotal	2,012,188	187,242	-	1,824,946		1,733,698		1,733,698
Social Housing								
Non-Profit/Cooperative Housing	1,783,028	-	-	1,783,028	95%	1,693,877	100%	1,693,877
Subtotal	1,783,028	-	-	1,783,028		1,693,877		1,693,877
Recreation and Cultural Services								
Parks	1,060,907	-	-	1,060,907	95%	1,007,862	100%	1,007,862
Recreation Programs	1,039,690	-	350,291	689,399	95%	654,929	100%	654,929
Rec Fac - All Other	5,626,658	205,241	1,410,617	4,010,800	95%	3,810,260	100%	3,810,260
Libraries	1,992,616	-	28,405	1,964,211	95%	1,866,000	100%	1,866,000
Cultural Services	154,732	6,396	-	148,336	95%	140,919	100%	140,919
Subtotal	9,874,602	211,637	1,789,313	7,873,652		7,479,969		7,479,969
Planning and Development								
Planning and Zoning	1,624,703	-	376,540	1,248,163	75%	936,122	74%	692,730
Commercial and Industrial	3,474,906	389,741	31,345	3,053,820	75%	2,290,365	0%	-
Residential Development	212,850	-	62,689	150,161	75%	112,621	100%	112,621
Agriculture and Reforestation	52,324	-	-	52,324	0%	-	95%	-
Other	16,896	-	24,975	(8,079)	0%	-	95%	-
Subtotal	5,381,680	389,741	495,549	4,496,389		3,339,108		805,351
Total	59,710,277	819,566	3,017,088	55,873,622		51,498,666		39,646,197
							2016 Population	36,707
							\$ / Capita - Growth Related Net Operating Expenditures	1,080.07

Source: Altus Group Economic Consulting, based on Brant County Financial Information Return 2016

Figure A- 4

Estimate of Operating and Lifecycle Replacement Costs, Water, Wastewater and Roads, Nith Peninsula

	Unit	Operating and Amortization Costs Per Unit	Annual Operating and Amortization
Water	<i>Kilometres</i>	<i>\$ / Km</i>	<i>Dollars</i>
Internal New Watermains	2.6	2,022.28	5,334
	<i>Megalitres</i>	<i>\$ / Megalitre</i>	<i>Dollars</i>
Water Treatment	110.9	801.93	88,899
Wastewater	<i>Kilometres</i>	<i>\$ / Km</i>	<i>Dollars</i>
Internal New Wastewater Mains	2.6	16,543.30	43,639
	<i>Megalitres</i>	<i>\$ / Megalitre</i>	<i>Dollars</i>
Wastewater Treatment	110.9	381.88	42,334
Storm Water	<i>Kilometres</i>	<i>\$ / Km</i>	
Internal Storm Sewers	2.6	7,443.00	19,633
Storm Water Management Facility	<i>Hectares</i>	<i>\$ / Hectare / 5 Yr</i>	<i>Dollars / Year</i>
Vegetation Maintenance	1.07	5,000	1,070
	<i>m3 / 10 Yr</i>	<i>\$ / m3</i>	
Sediment Removal & Disposal	81.7	600	4,901
Annual Fixed Costs - Maintenance			62,900
Roads	<i>Lane Km</i>	<i>\$ / Lane Km</i>	<i>Dollars</i>
Internal Roads	5.28	2,349.32	12,394
External Roads	0.50	2,349.32	1,179

Source: Altus Group Economic Consulting based on Brant County 2016 Financial Information Return