

City of Spruce Grove

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TABLE OF CONTENTS

1 IN	TRODUCTION	3	
1.1	Bylaw C-1078-19		3
1.2	Methodology		3
2 O	FF-SITE LEVY DEVELOPMENT LANDS AND STAGING	4	
2.1	Development Staging		6
3 W	ATER OFF-SITE INFRASTRUCTURE	7	
3.1	Water Off-site Infrastructure Costs		7
3.2	Water Off-site Infrastructure Staging		7
3.3	Water Off-site Infrastructure Benefitting Parties		8
3.4	Existing Receipts and Adjusted Levy Cost - Water		9
3.5	Summary of Off-site Levy Cost - Water		9
3.6	Benefitting Areas - Water		10
3.7	Reserve Balance - Water		10
4 S/	ANITARY OFF-SITE INFRASTRUCTURE	12	
4.1	Sanitary Off-site Infrastructure Costs		12
4.2	Sanitary Off-site Infrastructure Staging		12
4.3	Sanitary Off-site Infrastructure Benefitting Parties		13
4.4	Existing Receipts and Adjusted Levy Cost - Sanitary		14
4.5	Summary of Off-site Levy Cost - Sanitary		14
4.6	Benefitting Areas - Sanitary		15
4.7	Reserve Balance - Sanitary		16
5 TF	RANSPORTATION OFF-SITE INFRASTRUCTURE	17	
5.1	Transportation Off-site Infrastructure Costs		17
5.2	Transportation Off-site Infrastructure Staging		18
5.3	Transportation Off-site Infrastructure Benefitting Parties		19
5.4	Existing Receipts and Adjusted Levy Cost - Transportation		21
5.5	Summary of Off-site Levy Cost - Transportation		22
5.6	Benefitting Areas - Transportation		23
5.7	Reserve Balance - Transportation		25
6 SI	JMMARY OF OFF-SITE LEVY RATES	27	

1 INTRODUCTION

1.1 Bylaw C-1078-19

The City of Spruce Grove enacted bylaw C-1078-19 on September 4, 2019 (Off-site Levy Bylaw) establishing Off-site Levy rates for transportation, water, and sanitary sewer Off-site infrastructure.

The Bylaw stipulates that on or before December 31 in each calendar year, a report shall be provided to Council regarding the Off-site Levies imposed under this Bylaw, including:

- Off-site infrastructure constructed during the previous calendar year;
- Construction costs of Off-site Infrastructure constructed in the previous calendar year;
- Estimated costs for Off-site Infrastructure yet to be constructed and an explanation as to any adjustments to the estimates since the previous report;
- Amount collected in Off-site Levies; and
- Specifics of the total of Off-site Levies being held by the City and yet to be expended on Off-site Infrastructure, interest earned and commitments for future expenditures of such monies.

1.2 Methodology

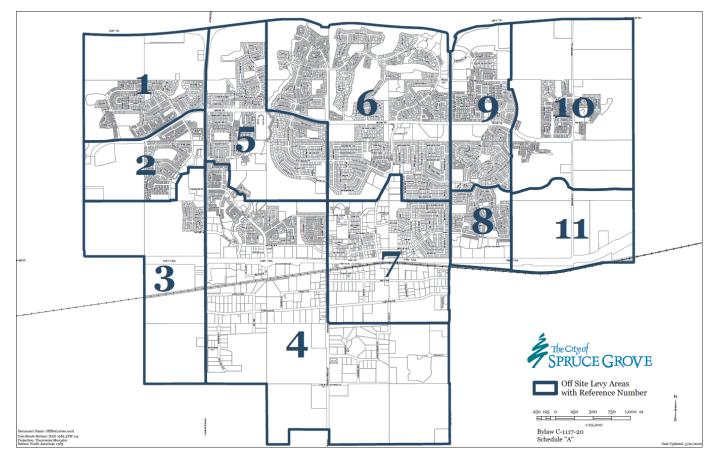
City staff have reviewed and amended the list of Off-site projects and updated cost estimates and actual costs for transportation, water, and sanitary sewer infrastructure including completed projects and future projects to support growth in The City of Spruce Grove. The information contained in the current bylaw was established to December 31, 2018 (the most current completed year-end). In this update, information pertaining to 2019 and prior is treated as an actual. Information pertaining to 2020 and beyond is being treated as an estimate. Upon completion of the 2021 update, 2020 information will be converted from estimates to actuals.

The City of Spruce Grove utilizes the CORVUS Off-site levy model to manage Off-site levy rates. These rates are not intended to stay static - they are based on assumptions and best available data at the time of modelling and are subject to change year over year. Should information used in this report change it will be reflected in future model updates and rates will be adjusted accordingly.

2 OFF-SITE LEVY DEVELOPMENT LANDS AND STAGING

The City of Spruce Grove is divided into 11 Off-site levy areas, as shown in the map below. These areas account for the location of infrastructure basins containing all development lands within the City. The 11 Off-site levy areas take into consideration existing/planned infrastructure basins (transportation, water, sanitary, stormwater basins) as well as natural and manmade barriers (creeks, highways, etc.). All Off-site levy infrastructure costs are allocated to one or more areas.

Off-site Levy Areas



Total net development area, the amount of land available for development across all Off-site levy areas, is approximately **959.8 net Ha**. (2019: ~961Ha) as outlined in the table below. In calculating net development area, only those lands remaining to be developed **that have not previously paid Off-site levies** have been considered. Allowances have been made to net

development area calculations for environmental reserves, municipal reserves, and arterial road right of way.

Area Ref. #	DevelopmentArea Location	Land Use	Net Development Area (ha.)	Area Developed to Date (ha.)	Development Area Next 25 Years (ha.)
1.1	See Map	Commercial	0.48	-	0.48
1.2	See Map	Industrial	-	-	-
1.3	See Map	Residential - Low/Medium Density	84.62	4.75	79.87
1.4	See Map	Residential - High Density	1.10	-	1.10
1.5	See Map	Other	-	-	-
2.1	See Map	Commercial	-	-	-
2.2	See Map	Industrial	-	-	-
2.3	See Map	Residential - Low/Medium Density	39.95	8.85	31.10
2.4	See Map	Residential - High Density	3.47	-	3.47
2.5	See Map	Other	-	-	-
3.1	See Map	Commercial	84.74	-	84.74
3.2	See Map	Industrial	-	-	-
3.3	See Map	Residential - Low/Medium Density	98.73	-	98.73
3.4	See Map	Residential - High Density	6.22	-	6.22
3.5	See Map	Other	10.66	-	10.66
4.1	See Map	Commercial	-	-	-
4.2	See Map	Industrial	220.00	-	220.00
4.3	See Map	Residential - Low/Medium Density	2.64	-	2.64
4.4	See Map	Residential - High Density	-	-	-
4.5	See Map	Other	-	-	-
5.1	See Map	Commercial	-	-	-
5.2	See Map	Industrial	-	-	-
5.3	See Map	Residential - Low/Medium Density	47.58	3.81	43.77
5.4	See Map	Residential - High Density	2.44	-	2.44
5.5	See Map	Other	-	-	-
6.1	See Map	Commercial	-	-	-
6.2	See Map	Industrial	-	-	-
6.3	See Map	Residential - Low/Medium Density	24.03	5.60	18.43
6.4	See Map	Residential - High Density	1.92	-	1.92
6.5	See Map	Other	-	-	-
7.1	See Map	Commercial	-	-	-
7.2	See Map	Industrial	-	-	-
7.3	See Map	Residential - Low/Medium Density	-	-	-
7.4	See Map	Residential - High Density	-	-	-
7.5	See Map	Other	-	-	-
8.1	See Map	Commercial	4.07	-	4.07
8.2	See Map	Industrial	-	-	-
8.3	See Map	Residential - Low/Medium Density	-	-	-
8.4	See Map	Residential - High Density	-	-	-
8.5	See Map	Other	-	-	-
9.1	See Map	Commercial	20.16	8.13	12.03
9.2	See Map	Industrial	-	-	-
9.3	See Map	Residential - Low/Medium Density	10.50	0.36	10.14
9.4	See Map	Residential - High Density	1.41	-	1.41
9.5	See Map	Other	-	-	-
10.1	See Map	Commercial	1.08	1.00	0.08
10.2	See Map	Industrial	-	-	-
10.3	See Map	Residential - Low/Medium Density	219.01	21.13	197.88
10.4	See Map	Residential - High Density	9.59	-	9.59
10.5	See Map	Other	-	-	-
11.1	See Map	Commercial	23.94	-	23.94
11.2	See Map	Industrial	-	-	-
11.3	See Map	Residential - Low/Medium Density	75.52	-	75.52
11.4	See Map	Residential - High Density	-	-	-
11.5	See Map	Other	19.57	-	19.57
		Total	1,013.41	53.63	959.80

Off-site Levy Net Development Area

2.1 Development Staging

A rate planning period of 25 years was used for this review. Of the 959.8 net Ha of development area available, Planning and Infrastructure estimate that 959.8 Ha. will develop during the next 25 years (100%). Anticipated development during the 25 year planning period is summarized in the table below.

	Development Area Location	Land Use	Area Developed in Next 25 years (Net ha.)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
	See Map	Commercial	0.477	-		-	-	-			-	-	-	-	-	-	-	0.48	-		-	-	-	-	-	-	-	-
1.2	See Map See Map	Industrial Residential - Low/Medium Density	- 79.868		4.00	4.00	4.00	4.00					4.00	4.00	4.00	4.00	4.00	- 8.00	- 8.00	- 8.00	- 8.00	8.62	1.60	1.65				
						4.00	4.00	4.00					4.00			4.00	4.00	8.00			8.00	8.62				-		
	See Map	Residential - High Density	1.098	-	•		-			-					-			-			-			-	-	-		
	See Map	Other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	See Map	Commercial	-	-			-	-		-			-		-					-				-	-	•		
2.2	See Map	Indus trial	-											-	-					1.1								-
2.3	See Map	Residential - Low/Medium Density	31.104	2.20	2.53	2.53	2.53	2.80	2.80	2.80	2.80	0.60	1.90	1.90	1.90	1.90	1.91	-						-		-		-
	See Map	Residential - High Density	3.465		-	-	-	1.00	1.00	1.00	0.47	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-
	See Map	Other	-	-		1.1	-	-		-					-		-	-			-	-		-		-		-
3.1	See Map	Commercial	84.744	5.67	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.60	5.60	5.60	5.60	6.34	4.00	4.00	4.00	4.00	2.33	1.1				1.1	
3.2	See Map	Indus trial	-				-								-													
	See Map	Residential - Low/Medium Density	98.730	-	-		-	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.33		-		-		
	See Map	Residential - High Density	6.219	-			-			-			0.60	0.60	0.60	0.60	0.60	-			-		0.75	0.75	0.75	0.97		-
3.5	See Map	Other	10.656				-											2.10	2.10	2.10	2.10	0.66	1.60					
	See Map	Commercial		1.1				1.1					1.1	1.1									1.1				1.1	
	See Map	Indus trial	220.000	5.72	9.60	11.08	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	9.60	8.00
	See Map	Residential - Low/Medium Density	2.637	-	-	-	2.64	-		-	-			-	-		-	-			-	-		-	-	-		-
	See Map	Residential - High Density	-	-	-		-	-	-	-	-		-	-	-		-	-	-	-	-	-		-	-	-		-
4.5	See Map	Other				1.1	-		1.1		1.1	1.1				1.1			1.1	1.1	1.1	1.1	1.1		1.1		1.1	
	See Map	Commercial		-			-		1.1						-			-		1.1								-
	See Map	Industrial	-	-	-		-	-					-	-	-		-	-			-			-		-		-
5.3	See Map	Residential - Low/Medium Density	43.773	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.58	3.00	1.79		1.1			1	1.1			1.1				1.1	-
5.4	See Map	Residential - High Density	2.439		1.1		-	0.50	0.50	0.50	0.50	0.44	1			1.1				1.1			1.1				1.1	
5.5	See Map	Other					-		1.1		1.1					1.1			1.1	1.1					1.1		1.1	-
6.1	See Map	Commercial	-	-	-	-	-	-				-		-	-		-	-	-		-	-		-	-	-		-
6.2	See Map	Indus trial	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.3	See Map	Residential - Low/Medium Density	18.430	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.43		-	-			-						-		-		-
6.4	See Map	Residential - High Density	1.917		1.00		0.92																1.1				1.1	
6.5	See Map	Other		-	-	-	-	-			-	-		-	-		-	-			-	-	-	-	-	-	-	-
7.1	See Map	Commercial	-	-	-	-	-	-		-	-	-		-	-		-	-	•		-	-	-	-	-	-	-	-
7.2	See Map	Indus trial																										-
7.3	See Map	Residential - Low/Medium Density											1.1										1.1				1.1	
7.4	See Map	Residential - High Density																-										-
7.5	See Map	Other	-				-		•						-			-						-		-		-
	See Map	Commercial	4.068	-			4.07			-											-			-		-		-
8.2	See Map	Indus trial																										
	See Map	Residential - Low/Medium Density																										
	See Map	Residential - High Density	-	-			-	-			-				-		-	-			-	-		-		-		
	See Map	Other																										
	See Map	Commercial	12.030	1.45	2.40	2.20	2.00	2.00	1.98																			
9.2	See Map	Indus trial													-													
	See Map	Residential - Low/Medium Density	10.143		0.91	0.91	0.93	0.93	0.93	0.93	0.93	1.28	1.20	1.19														
	See Map	Residential - High Density	1.413									1.41																
9.5	See Map	Other	1.415									1.40																
	See Map	Commercial	0.080			0.08																						
	See Map	Industrial	-			5.00				-				-														
	See Map	Residential - Low/Medium Density	197.878	5.17	10.00	10.00	10.00	10.00	10.00	10.00	10.00	9.69	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	5.00	5.00	5.00	4.67	5.35
	See Map	Residential - High Density	9.585	3.17	0.50	0.25	0.25	.0.00	.0.00	.0.00	.0.00	0.00	1.60	1.60	1.60	1.60	1.28	0.91	3.00	5.00	3.00	3.00	0.00	0.00	0.00	0.00	1.01	0.00
	See Map	Other	5.060		0.50	0.20	0.20						1.00	1.00	1.00	1.00	1.20	0.51										
	See Map	Commercial	23.940	2.50	2.50	2.50	2.50						2.50	2.50	2.50	2.50										3.94		
	See Map	Industrial	23.540	2.00	2.00	2.00	2.00						2.00	2.00	2.50	2.00										0.04		<u> </u>
	See Map See Map	Residential - Low/Medium Density	75.518	8.00	8.00	8.00	8.00			-	-		4.00	4.00	4.00	4.00	4.00	-					4.00	4.00	4.00	4.00	4.00	3.52
			/5.518	8.00	8.00	8.00	8.00			-	-		4.00	4.00	4.00	4.00	4.00					-	4.00	4.00	4.00	4.00	4.00	3.02
11.4	See Map	Residential - High Density	19.566							-	1.75	4.75	1.75	1.77													6.00	6.55
11.5	See Map	Other										1.75																
			959.78	37.01	51.74	51.85	56.93	48.93	42.91	40.93	42.15	41.58	50.65	48.36	43.60	43.60	41.54	38.88	37.50	37.50	37.50	34.74	24.75	20.20	18.55	22.71	24.27	23.41

Anticipated Development During the 25 Year Rate Planning Period

Though all current lands in Spruce Grove are anticipated to develop within the 25 year review period, annexation of additional municipal lands is very likely during the next 5 years. Accordingly, additional lands will be included in the staging forecast during future model updates.

3 WATER OFF-SITE INFRASTRUCTURE

3.1 Water Off-site Infrastructure Costs

In order to support future growth in the City, water Off-site infrastructure is required. The model contains 4 water Off-site infrastructure projects. The cost of this infrastructure is based upon:

- Actual construction costs to the cut-off date, and
- Debenture interest associated with the financing

The total cost is approximately **\$14.0 million** as outlined in the table below:

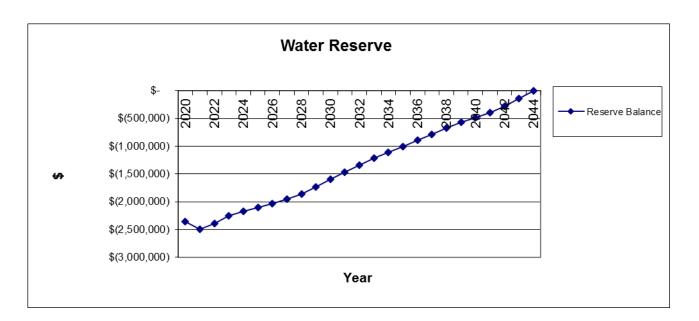
ltem	Project Description	Con	Cost of pleted Work	Debenture Interest	W	imated Cost of ork Yet to be Completed	otal Project timated Cost
1	Campsite Watermain Loop (41-99-17)	\$	328,202	\$ -	\$	-	\$ 328,202
2	Campgrounds Watermain	\$	776,587	\$ -	\$	-	\$ 776,587
3	New Growth Water Reservoir (CP_DP186)	\$	11,634,365	\$ 203,954	\$	-	\$ 11,838,319
4	Water Main 400mm - 1200m from Century Rd to Pioneer Rd (along Hwy 16A)	\$	1,071,905	\$ -	\$	-	\$ 1,071,905
		\$	13,811,060	\$ 203,954	\$	-	\$ 14,015,014

Summary of Water Off-site Infrastructure

3.2 Water Off-site Infrastructure Staging

The timing of construction is used to determine the impact of inflation on cost, the impact of forecast reserve balances, and the estimate of financial oversizing. Construction of the Water off-site infrastructure outlined in this report has been completed. Existing reserve funds were not sufficient to fully pay for the construction of water infrastructure, requiring The City to front-end projects. A front-ender is the party that constructs and pays for infrastructure that benefits other parties.

To compensate parties for capital they provide in front-ending off-site infrastructure construction, a 2.50% interest allowance has been charged to the reserve when it is forecast to be in negative balance. Further, a 2.40% interest credit has been provided to the reserve when it is forecast to be in a positive balance. The graph below outlines the forecast water levy reserve balances over the 25 year development period.



3.3 Water Off-site Infrastructure Benefitting Parties

The water Off-site infrastructure previously outlined will benefit various parties to varying degrees. Four potential benefitting parties were identified:

- City of Spruce Grove a portion of water infrastructure which is required to service existing development.
- Other Stakeholders other parties (such as neighboring municipalities) that benefit from the infrastructure.
- City of Spruce Grove Future Development (Financial Oversizing) that portion of costs which benefits future development beyond the 25 year review period.
- City of Spruce Grove Future Development all growth related infrastructure (i.e. levyable water infrastructure costs).

The table below outlines the allocation of water off-site levy infrastructure costs to benefitting parties.

ltem	Project Description	Reduced Project Estimated Cost	Muni Share %	Other Stakeholder Share	Developer Share Beyond 25 Yrs (Financial Oversizing %)	OSL / Developer Share %
1	Campsite Watermain Loop (41-99-17)	\$ 328,202			0.0%	100.0%
2	Campgrounds Watermain	\$ 776,587			0.0%	100.0%
3	New Growth Water Reservoir (CP_DP186)	\$ 11,838,319			0.0%	100.0%
4	Water Main 400mm - 1200m from Century Rd to Pioneer Rd (along Hwy 16A)	\$ 1,071,905			0.0%	100.0%
		\$ 14,015,014				

Allocation of Water Off-site Infrastructure to Benefitting Parties

The allocation shown in the Financial Oversizing share column represents that portion of the cost that benefits development beyond the 25 year repayment period. Using the anticipated year of construction, costs beyond the 25 year allocation period are determined. For

example, a project scheduled to be built in year 10 of the model will have 15 years' worth of its costs included in the current rates and the final 10 years of costs would be deferred. During each model update, this will be adjusted and additional costs will be included in the new rates.

3.4 Existing Receipts and Adjusted Levy Cost - Water

Prior to allocating costs to benefitting areas, existing off-site levy receipts collected from developers need to be considered in determining the residual/net costs to developers. The City collected **\$10.87 million** in off-site levies prior to December 31, 2016 (the cut-off date established for bylaw C-1044-18). These levies have been allocated to the projects for which they were collected.

For the period of January 1, 2017 to December 31, 2019, the City collected approximately **\$844 thousand**, summarized in the table below. This results in a residual developer cost of roughly **\$2.3 million**.

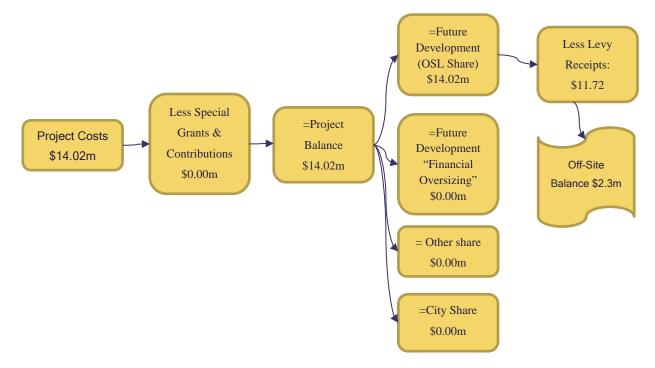
Water Off-site Levy Funds Collected to Date

Item	1	Project Description	OSL	/ Developer Cost	Fu	Offsite Levy Inds Collected Dec 31, 2016	Fu	Offsite Levy unds Collected starting Jan 1, 2017	Dev	Adjusted /eloper (Levy) Cost
	1	Campsite Watermain Loop (41-99-17)	\$	328,202	\$	328,202	\$	-	\$	-
1	2	Campgrounds Watermain	\$	776,587	\$	776,587	\$	-	\$	-
;	3	New Growth Water Reservoir (CP_DP186)	\$	11,838,319	\$	9,766,932	\$	560,755	\$	1,510,631
4	4	Water Main 400mm - 1200m from Century Rd to Pioneer Rd (along Hwy 16A)	\$	1,071,905	\$	-	\$	282, 826	\$	789,079
			\$	14,015,014	\$	10,871,722	\$	843,581	\$	2,299,711

3.5 Summary of Off-site Levy Cost – Water

As shown in the figure below, the total cost for water infrastructure that forms the basis of the rate is approximately **\$2.3 million**. The cost allocations to each benefitting party are based on the benefitting percentages shown in section 3.3. The off-site levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).

Total Water Off-site Levy Costs



3.6 Benefitting Areas – Water

Net developer costs for each development have been allocated to multiple benefitting off-site levy areas (see table below). Allocations are denoted with a "1" below applicable areas numbers. Benefitting areas were determined by City staff and advisors.

Benefittinc	Areast	for Water	Off-site	Infrastructure

ltem	Project Description	0	Developer Cost	1.1	1.2	1.3	3 1	.4	1.5	2.1	2.2	2.3	3 2.	.4	2.5	3.1	3.2	3.3	3.4	3.5	i 4.	1 4	4.2	4.3	4.4	4.5	5.1	5	.2	5.3	5.4	5.5						
1	Campsite Watermain Loop (41-99-17)	\$	-	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
2	Campgrounds Watermain	\$	-																		1		1	1	1	1												
3	New Growth Water Reservoir (CP_DP186)	\$	1,510,631	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
4	Water Main 400mm - 1200m from Century Rd to Pionee	\$	789,079																																			
		\$	2,299,711																												·							
		\$	2,299,711																			_											_					
ltem	Project Description		Doveloper	6.1	6.2	6.3	3 6	i.4	6.5	7.1	7.2	7.3	3 7.	.4	7.5	8.1	8.2	8.3	8.4	8.5	i 9.	1 9	9.2	9.3	9.4	9.5	10.	1 10).2 1	10.3	10.4	10.8	5 11	1.1	11.2	11.3	11.4	4 1
	Project Description Campsite Watermain Loop (41-99-17)		Developer	6.1	6.2	6.3	3 6	i.4	6.5	7.1	7.2	. 7.:	3 7.	.4	7.5	8.1	8.2	8.3	8.4	8.5	i 9.	1 9	9.2	9.3	9.4	9.5	i 10.	1 10).2 1	10.3	10.4	10.5	5 11	1.1	11.2	11.3	11.4	4 1 [.]
1	•		Developer Cost	6.1	6.2	6.3	3 6	i.4	6.5	7.1 1	7.2	: 7.: 1	3 7.	.4	7.5	8.1 1	8.2	8.3 1	8.4 1	8.5	j 9.	1 9	9.2	9.3	9.4	9.5	i 10.	1 10).2 1	10.3	10.4	10.5	5 11	1.1 1	11.2 1	11.3 1	11.4 1	4 1
1	Campsite Watermain Loop (41-99-17)		Developer Cost	6.1 1	6.2 1	6.: 1	3 6	5.4 1	6.5 1	7.1 1 1	7.2 1 1	: 7.: 1	3 7.	.4 : 1 1	7.5 1 1	8.1 1 1	8.2 1 1	8.3 1 1	8.4 1 1	8.5 1	i 9. 1	1 9	9.2	9.3 1	9.4	9.5 1	i 10.	1 10).2 1 1	10.3	10.4	10.8 1	5 11	1.1 1 1	11.2 1 1	11.3 1 1	11.4 1 1	.4 1
2	Campsite Watermain Loop (41-99-17) Campgrounds Watermain	5 \$ \$	Developer Cost -	1	6.2	6.3	3 6	i.4 1	6.5 1	7.1 1 1	7.2 1 1	7.: 1	3 7.	.4 : 1 1	7.5 1 1	8.1 1 1	8.2 1 1	8.3 1 1	8.4 1 1	8.5 1 1	5 9. 1	1 9	9.2	9.3 1	9.4	9.5	i 10. 1	1 10).2 1 1 1	10.3 1 1	10.4 1 1	10.8 1 1	5 11	1.1 1 1 1	11.2 1 1 1	11.3 1 1 1	11.4 1 1 1	.4 1

3.7 Reserve Balance – Water

On December 31, 2019, the balance of the City's Water reserve was **\$(2,414,396.59)** as shown in the table below. The amount takes into consideration expenditures up to the end of 2019.

2019 interest impacts on the reserve were captured in alignment with the interest earning and charging rates in effect at that time:

CIBC Borrowing Rate = 2.50%

HISA interest = 2.40%

Water Off-site Levy Reserve Balance

Description	Dr	Cr	Balance
Offsite Levy Expenditures to December 31, 2016		\$ 8,344,423.23	\$(8,344,423.23)
Offsite Levy Receipt Allocations to December 31, 2016	\$ 8,344,423.23		\$-
Unused Receipts & Interest to December 31, 2016	\$ 2,527,298.67		\$ 2,527,298.67
Adjustments made during 2019 update - see updated continuity		\$ 465,926.72	\$ 2,061,371.95
Opening Balance			\$ 2,061,371.95
Interest on Debenture Interest		\$-	\$ (964,003.24)
2019			\$ (964,003.24)
Interest on Opening Balance		\$-	\$ (964,003.24)
Project Expenditures (OSL Share)		\$ 1,465,139.78	\$(2,429,143.02)
Offsite Levy Receipts	\$ 23,615.59		\$(2,405,527.43)
Offsite Levy Receipts Collected Under Old Agreement or Old			
Bylaw (if any)			\$(2,405,527.43)
Debenture Interest Accrued This Year		\$-	\$(2,405,527.43)
Interest on Project Expenditure		\$ 9,152.55	\$(2,414,679.98)
Interest on Offsite Levy Receipts	\$ 283.39		\$(2,414,396.59)
Interest on Offsite Levy Receipts Collected Under Old Agreement			
or Old Bylaw (if any)	\$ -		\$(2,414,396.59)
Interest on Debenture Interest		\$ -	\$(2,414,396.59)

Notes:

- 1/4 year rule expenditures are deemed to have been made in September of each year
- 1/2 year rule receipts are deemed to have been made in June of each year

4 SANITARY OFF-SITE INFRASTRUCTURE

4.1 Sanitary Off-site Infrastructure Costs

In order to support future growth in the City, sanitary off-site infrastructure in required. The model contains 7 sanitary off-site infrastructure projects. The estimated cost of this infrastructure is based upon:

- Actual construction costs to the cut-off date.
- Debenture interest associated with the financing, and
- Future cost estimates

The total cost is approximately **\$21.15 million** as outlined in the table below:

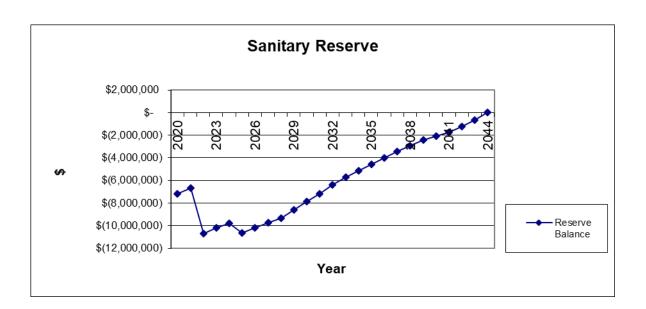
ltem	Project Description	Cost of pleted Work	Debenture Interest	W	mated Cost of ork Yet to be Completed	Т	otal Project imated Cost
1	West Trunk Sanitary Sewer (42-99-12-06) - W of	\$ 4,229,130	\$ -	\$	-	\$	4,229,130
	Campsite Rd to S Industrial Lands*						
2	Pioneer Road Trunk Sewer (42-99-16-09)	\$ 2,964,966	\$ -	\$	-	\$	2,964,966
3	Pioneer Road Sanitary Sewer Extension (41-01-01-14)	\$ 1,553,981	\$ -	\$	-	\$	1,553,981
4	Pioneer Trunk Sewer Extension DP138	\$ 3,983,988	\$ -	\$	-	\$	3,983,988
5	Campsite West Trunk Sanitary Sewer (42-99-09)	\$ 1,358,031	\$ -	\$	-	\$	1,358,031
6	Boundary Trunk Sewer	\$ 157,818	\$ -	\$	5,104,800	\$	5,262,618
7	Pioneer Trunk Sewer Extension (McLeod to CNR)	\$ -	\$ -	\$	1,800,000	\$	1,800,000
		\$ 14,247,913	\$ -	\$	6,904,800	\$	21,152,713

Summary of Sanitary Off-site Infrastructure

4.2 Sanitary Off-site Infrastructure Staging

The timing of construction is used to determine the impact of inflation on cost, the impact of forecast reserve balances, and the estimate of financial oversizing. Sanitary off-site infrastructure will be constructed in a staged fashion over the 25 year development period. Existing reserve funds will not be sufficient to pay for construction of sanitary infrastructure from time to time. Front ending of the infrastructure will be required. A front-ender is the party that constructs and pays for infrastructure that benefits other parties.

To compensate parties for capital they provide in front-ending off-site infrastructure construction, a 2.50% interest allowance has been charged to the reserve when it is forecast to be in negative balance. Further, a 2.40% interest credit has been provided to the reserve when it is forecast to be in a positive balance. The graph below outlines the forecast sanitary levy reserve balances over the 25 year development period.



4.3 Sanitary Off-site Infrastructure Benefitting Parties

The sanitary off-site infrastructure previously outlined will benefit various parties to varying degrees. Four potential benefitting parties were identified:

- City of Spruce Grove a portion of sanitary infrastructure which is required to service existing development.
- Other Stakeholders other parties (such as neighboring municipalities) that benefit from the infrastructure.
- City of Spruce Grove Future Development (Financial Oversizing) that portion of costs which benefits future development beyond the 25 year review period.
- City of Spruce Grove Future Development all growth related infrastructure (i.e. levyable sanitary infrastructure costs).

The table below outlines the allocation of sanitary off-site levy infrastructure costs to benefitting parties.

Item	Project Description	Reduced Project Estimated Cost	Muni Share %	Other Stakeholder Share	Developer Share Beyond 25 Yrs (Financial Oversizing %)	OSL / Developer Share %
1	West Trunk Sanitary Sewer (42-99-12-06) - W of	\$ 4,220,650			0.0%	100.0%
	Campsite Rd to S Industrial Lands*					
2	Pioneer Road Trunk Sewer (42-99-16-09)	\$ 1,793,448		22.8%	0.0%	77.2%
3	Pioneer Road Sanitary Sewer Extension (41-01-01-14)	\$ 1,545,501		22.8%	0.0%	77.2%
4	Pioneer Trunk Sewer Extension DP138	\$ 3,975,508		22.8%	0.0%	77.2%
5	Campsite West Trunk Sanitary Sewer (42-99-09)	\$ 1,349,551			0.0%	100.0%
6	Boundary Trunk Sewer	\$ 5,254,138			16.0%	84.0%
7	Pioneer Trunk Sewer Extension (McLeod to CNR)	\$ 1,791,520		22.8%	16.0%	61.2%

Allocation of Sanitary Off-site Infrastructure to Benefitting Parties

The allocation shown in the Financial Oversizing share column represents that portion of the cost that benefits development beyond the 25 year repayment period. Using the anticipated

year of construction, costs beyond the 25 year allocation period are determined. For example, project 7, scheduled to be built in 2024, or year 4 of this model, will have 21 years' worth of its costs included in the current rates (84 %) and the final 4 years of costs (16 %) would be deferred. During each model update, this will be adjusted and additional costs will be included in the new rates.

The Pioneer Trunk Sewer was oversized to accommodate future development south of Highway 16A (currently within Parkland County). Based on the Spruce Grove Annexation Lands Sanitary Basin Report, 22.8% of the costs associated to the Pioneer Trunk sewer has been removed from these rates and assigned to "Other Stakeholders". These costs will be allocated to annexation lands in the future which benefit from the oversizing.

4.4 Existing Receipts and Adjusted Levy Cost - Sanitary

Prior to allocating costs to benefitting areas, existing off-site levy receipts collected from developers need to be considered in determining the residual/net costs to developers. The City collected **\$4.76 million** in off-site levies prior to December 31, 2016 (the cut-off date established for bylaw C-1044-18). These levies have been allocated to the projects for which they were collected.

For the period of January 1, 2017 to December 31, 2019, the City collected approximately **\$314 thousand**, summarized in the table below. This results in a residual developer cost of **\$11.65 million**.

ltem	Project Description	OSL	/ Developer Cost	Fun	offsite Levy Ids Collected Dec 31, 2016	Fu	Offsite Levy nds Collected arting Jan 1, 2017	Dev	Adjusted veloper (Levy) Cost
1	West Trunk Sanitary Sewer (42-99-12-06) - W of	\$	4,220,650	\$	3,246,918	\$	38,161	\$	935,571
	Campsite Rd to S Industrial Lands*								
2	Pioneer Road Trunk Sewer (42-99-16-09)	\$	1,384,542			\$	35,596	\$	1,348,945
3	Pioneer Road Sanitary Sewer Extension (41-01-01-14)	\$	1,193,126			\$	30,698	\$	1,162,428
4	Pioneer Trunk Sewer Extension DP138	\$	3,069,092			\$	75,659	\$	2,993,433
5	Campsite West Trunk Sanitary Sewer (42-99-09)	\$	1,349,551	\$	1,358,031	\$	-	\$	(8,480)
6	Boundary Trunk Sewer	\$	4,413,476	\$	157,818	\$	105,825	\$	4,149,833
7	Pioneer Trunk Sewer Extension (McLeod to CNR)	\$	1,096,410	\$	-	\$	28,447	\$	1,067,964
		\$	16,726,847	\$	4,762,766	\$	314,386	\$	11,649,695

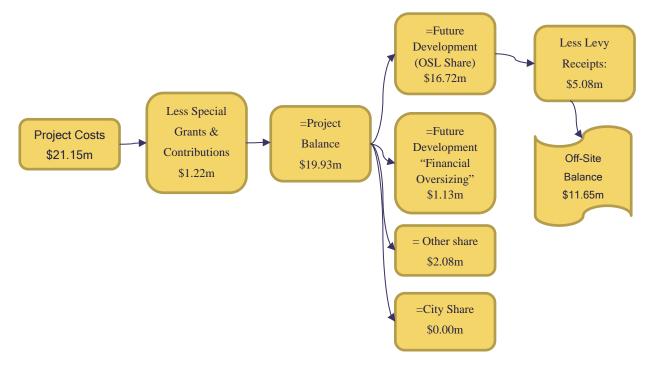
Sanitary Off-site Levy Funds Collected to Date

4.5 Summary of Off-site Levy Cost – Sanitary

As shown in the figure below, the total cost for sanitary infrastructure that forms the basis of the rate is approximately **\$11.65 million**. The cost allocations to each benefitting party are

based on the benefitting percentages shown in section 4.3. The off-site levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).





4.6 Benefitting Areas – Sanitary

Net developer costs for each development have been allocated to multiple benefitting off-site levy areas (see table below). Allocations are denoted with a "1" below applicable areas numbers. Benefitting areas were determined by City staff and advisors.

Developer 1.1 1.2 1.3 1.4 1.5 2.1 2.2 2.3 2.4 2.5 3.1 3.2 3.3 3.4 3.5 4.1 4.2 4.3 4.4 4.5 5.1 5.2 5.3 5.4 5.5

		Cost																	÷									-							
1	West Trunk Sanitary Sewer (42-99-12-06) - W of Campsite Rd to S Industrial Lands*	\$ 935,571																		1	1	1	1	1	1	1	1	1	1						
2	Pioneer Road Trunk Sewer (42-99-16-09)	\$ 1,757,852																																	
3	Pioneer Road Sanitary Sewer Extension (41-01-01-14)	\$ 1,514,802																																	
4	Pioneer Trunk Sewer Extension DP138	\$ 3,899,849																																	
5	Campsite West Trunk Sanitary Sewer (42-99-09)	\$ (8,480)																		1	1	1	1	1											
6	Boundary Trunk Sewer	\$ 4,990,495						1	1	1	1	1	1	1	1	1		1																	
7	Pioneer Trunk Sewer Extension (McLeod to CNR)	\$ 1,476,430																																	
		\$ 14,566,519																																	
Item	Project Description	Developer	6.1	6.2	6.3	3 6.4	4 6	5 7	1	7.2	7.3	7.4	4 7	5 8	3.1	8.2	8.3	8.4	8.5	9	1 9	12	9.3	9.4	9.5	10.1	10.2	10.3	10.4	10.5	11.1	11.2	11.3	11.4	1
Iten		Developer Cost	6.1	6.2	6.3	6.4	4 6.	.5 7	'.1	7.2	7.3	7.4	4 7.	.5 8	3.1	8.2	8.3	8.4	8.5	9.	1 9	.2	9.3	9.4	9.5	10.1	10.2	10.3	10.4	10.5	11.1	11.2	11.3	11.4	1
lten 1	Project Description West Trunk Sanitary Sewer (42-99-12-06) - W of Campsite Rd to S Industrial Lands*		6.1	6.2	6.3	3 6.4	4 6.	.5 7	'.1 ⁻	7.2	7.3	7.4	4 7.	.5 8	3.1	8.2	8.3	8.4	8.5	9.	19	9.2	9.3	9.4	9.5	10.1	10.2	10.3	10.4	10.5	11.1	11.2	11.3	11.4	1
1	West Trunk Sanitary Sewer (42-99-12-06) - W of	Cost	6.1	6.2	6.3	3 6.4	4 6.	.5 7	'.1 ^{''}	7.2	7.3	7.4	4 7.	5 8	3.1	8.2	8.3	8.4	8.5	9.	19	1.2	9.3	9.4	9.5			10.3 1		10.5 1		11.2 1	11.3	11.4	1
1	West Trunk Sanitary Sewer (42-99-12-06) - W of Campsite Rd to S Industrial Lands*	Cost \$ 935,571	6.1	6.2	6.3	3 6.4	4 6.	.5 7	<u>.1</u>	7.2	7.3	7.4	4 7.	5 8	3.1	8.2	8.3	8.4	8.5	9.	1 9	9.2	9.3	9.4	9.5								11.3 1 1	11.4 1	1
1 2 3	West Trunk Sanitary Sewer (42-99-12-06) - W of Campsite Rd to S Industrial Lands* Pioneer Road Trunk Sewer (42-99-16-09)	Cost \$ 935,571 \$ 1,757,852	6.1	6.2	: 6.3	3 6.4	4 6.	.5 7	'.1 	7.2	7.3	7.4	4 7.	5 8	3.1	8.2	8.3	8.4	8.5	9.	19	9.2 !	9.3	9.4	9.5								11.3 1 1 1	11.4 1 1 1	1
1 2 3 4	West Trunk Sanitary Sewer (42-99-12-06) - W of Campsite Rd to S Industrial Lands* Pioneer Road Trunk Sewer (42-99-16-09) Pioneer Road Sanitary Sewer Extension (41-01-01-14)	Cost \$ 935,571 \$ 1,757,852 \$ 1,514,802		6.2	: 6.3	3 6.4	4 6.	.5 7	.1	7.2	7.3	7.4	4 7.	5 8	3.1	8.2	8.3	8.4	8.5	9.	1 9	0.2 9	9.3	9.4	9.5								11.3 1 1 1	11.4 1 1 1	1
1 2 3 4 5	West Trunk Sanitary Sewer (42-99-12-06) - W of Campsite Rd to S Industrial Lands* Pioneer Road Trunk Sewer (42-99-16-09) Pioneer Road Sanitary Sewer Extension (41-01-01-14) Pioneer Trunk Sewer Extension DP138	Cost \$ 935,571 \$ 1,757,852 \$ 1,514,802 \$ 3,899,849		6.2	6.3	3 6.4	4 6.	.5 7	<u>.1</u>	7.2	7.3	7.4	4 7.	5 8	3.1	8.2	8.3	8.4	8.5	9.	19	9.2 9	9.3	9.4	9.5								11.3 1 1 1	11.4 1 1 1	1
1 2 3 4 5	West Trunk Sanitary Sewer (42-99-12-06) - W of Campsite Rd to S Industrial Lands* Pioneer Road Trunk Sewer (42-99-16-09) Pioneer Road Sanitary Sewer Extension (41-01-01-14) Pioneer Trunk Sewer Extension DP138 Campsite West Trunk Sanitary Sewer (42-99-09)	Cost \$ 935,571 \$ 1,757,852 \$ 1,514,802 \$ 3,899,849 \$ (8,480)		6.2	6.3	3 6.4	4 6.	.5 7	<u>.1</u>	7.2	7.3	7.4	4 7.	5 8	3.1	8.2	8.3	8.4	8.5	9.	1 S	0.2 !	9.3	9.4	9.5								11.3 1 1 1 1 1 1 1	11.4 1 1 1 1 1	1

Benefitting Areas for Sanitary Off-site Infrastructure

Project Description

Item

1
1

1

4.7 Reserve Balance – Sanitary

On December 31, 2019, the balance of the City's sanitary reserve was **\$(8,084,811.67)**, as shown in the table below. The amount takes into consideration expenditures up to the end of 2019.

2019 interest impacts on the reserve were captured in alignment with the interest earning and charging rates in effect at that time:

CIBC Borrowing Rate = 2.50%

HISA interest = 2.40%

Sanitary Off-site Levy Reserve Balance

Description	Dr	Cr	Balance
Offsite Levy Expenditures to December 31, 2016		\$11,522,334.96	\$ (11,522,334.96)
Offsite Levy Receipt Allocations to December 31, 2016	\$ 4,762,766.14		\$ (6,759,568.82)
Adjustments made during 2019 update - see updated continuity	\$ 465,926.72	\$-	\$ (6,293,642.10)
			\$ (6,293,642.10)
Opening Balance			\$ (6,293,642.10)
Interest on Debenture Interest		\$-	\$ (7,438,266.64)
2019			\$ (7,438,266.64)
Interest on Opening Balance		\$ 187,515.25	\$ (7,625,781.89)
Project Expenditures (OSL Share)		\$ 456,180.08	\$ (8,081,961.97)
Offsite Levy Receipts	\$ -		\$ (8,081,961.97)
Offsite Levy Receipts Collected Under Old Agreement or Old			
Bylaw (if any)			\$ (8,081,961.97)
Debenture Interest Accrued This Year		\$ -	\$ (8,081,961.97)
Interest on Project Expenditure		\$ 2,849.70	\$ (8,084,811.67)
Interest on Offsite Levy Receipts	\$ -		\$ (8,084,811.67)
Interest on Offsite Levy Receipts Collected Under Old			
Agreement or Old Bylaw (if any)	\$-		\$ (8,084,811.67)
Interest on Debenture Interest		\$ -	\$ (8,084,811.67)

Notes:

- 1/4 year rule expenditures are deemed to have been made in September of each year
- 1/2 year rule receipts are deemed to have been made in June of each year

5 TRANSPORTATION OFF-SITE INFRASTRUCTURE

5.1 Transportation Off-site Infrastructure Costs

In order to support future growth in the City, transportation off-site infrastructure in required. The model contains 51 transportation off-site infrastructure projects. The estimated cost of this infrastructure is based upon:

- Actual construction costs to the cut-off date.
- Debenture interest associated with the financing, and
- Future cost estimates

The total cost is approximately **\$125,176,857 million** as outlined in the table below:

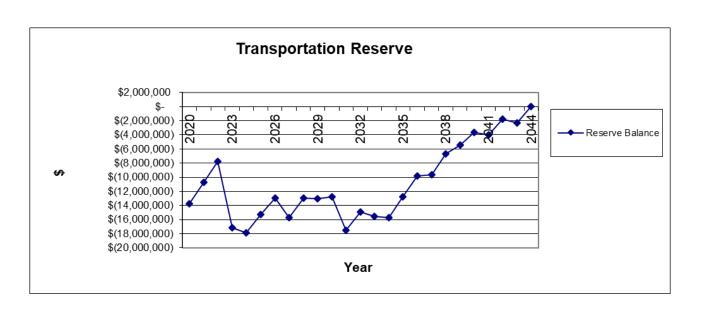
Summary of Transportation Off-site Infrastructure

ltem	Project Description	Cost of Completed Work		Debenture Interest	Estimated Cost of Work Yet to be Completed	I T	otal Project timated Cost
1	Campsite Road Twinning	\$ 137,529	S	-	s -	s	137,529
2	Grove Drive - Century Road to Greys tone	\$ 58,771	S	-	s -	s	56,771
3	Traffic Signals - Campsite Road and McLeod Ave	\$ 203,441	S	-	s -	s	203,441
4	Traffic Signals - Campsite Road and Grove Drive	\$ 104,864	S	-	s -	s	104,884
5	Grove Drive Twinning/Widening - Campsite to Century	\$ 5,828,599	S	-	s -	s	5,828,599
6	TLC Signalization	\$ 262,197	S	-	s -	s	262,197
7	Century Road Widening/Landscaping	\$ 1,872,898	S	-	s -	s	1,872,896
8	Grove Drive East/West	\$ 3,130,734	S	-	\$ -	s	3,130,734
9	Traffic Signals - Jennifer Heil Way and Hawthorne Gate Intersection	\$ 200,970	S	-	s -	s	200,970
10	Century Road South of Diamond Ave.	\$ 1,474,213	S	-	s -	s	1,474,213
11	Traffic Signals - Highway 16A/Century Crossing	\$ 376,862	S	-	s -	s	376,862
12	Century Road/ Grove Drive Intersection	\$ 1,546,798	S	-	\$ -	s	1,548,798
13	Grove Drive East Extension	\$ 1,650,188	S	-	s -	s	1,650,186
14	Traffic Signals - (1) Grove Dr and Greystone, and (2) Grove Dr and Harvest Ridge	\$ 370,210	s	-	s -	s	370,210
15	Pioneer Rd - Grove Dr to Highway 16A with roundabout at McLeod Ave and Grove Dr	\$ 10,768,718	s	1,539,252	s -	s	12,305,970
16	South Industrial Arterial - Tamarack Drive	\$ 760,710	S	-	s -	s	760,710
17	Traffic Signals - Grove Drive and Deer Park	\$ 261,978			S -	s	261,976
18	Widening Jennifer Heil Road/Campsite Rd from McLeod Ave to south of the CN rail	\$ 2,401,347	s	343,084	\$-	s	2,744,431
19	Tamarack Drive 2LAUD - 200 m from Golden Spike Rd east	s -	S	-	\$ 732,000	s	732,000
20	Tamarack Drive 2LAUD - 1400m from existing to Century Rd	s -	s	-	\$ 5,124,000	s	5,124,000
21	Tamarack Drive 4LAUD - 1600m from Golden Spike Rd to Century Rd	\$ 1,079,755	S	158,479	\$ 4,560,294	s	5,798,529
22	Tamarack Drive 2LAUD - 90m from Golden Spike Rd west	S -	S	-	\$ 329,400	s	329,400
23	Tamarack Drive 2LAUD - 1500m from existing to Campsite Rd	s -	s	-	\$ 5,490,000	s	5,490,000
24	Tamarack Drive 4LAUD - 1600 m from Golden Spike Rd to Campsite Rd	s -	s		\$ 5,856,000	s	5,858,000
25	Pioneer Road 2LAUD - 400m south of Hwy 16A	s -	\$	-	\$ 1,464,000	s	1,464,000

ltem	Project Description		Costof pleted Work		Debenture Interest	w	mated Cost of ork Yet to be Completed	IΤ	otal Project timated Cost
28	Pioneer Road 4LAUD - 400m south of Hwy 16A			•		s	1,484.000	s	1,464,000
20	Pioneer Road 4LAUD - 400m south of Hwy 10A Pioneer Road 4LAUD - 1400m Hwy 16A to Grove Dr	S S	-	S S		э S	5,124,000	ə S	5,124,000
27	Century Road 2LAUD - 1400m Hwy 16A to south boundary	э S	-	ə S	-	ə S	4,485,000	ə S	4,485,000
20	Century Road 2LAOD - 2400m Hwy ToA to south boundary	3	-	2		2	4,480,000	3	4,480,000
29	Century Road 4LAUD - 2400m Hwy 16A to south boundary	s	-	s	-	s	8,784,000	s	8,784,000
30	Grove Drive East 4LAUD - 1000m to Pioneer Rd	S	-	s	-	\$	3,120,000	s	3,120,000
31	Grove Drive West 2LAUD - 600 m to Boundary Rd	S	2,078,348	S	297,177	s	-	s	2,375,526
32	Grove Drive West 4LAUD - 1400m to Boundary Rd	s	-	S	-	\$	2,210,000	s	2,210,000
33	Campsite Road 2LAUD - 1300m from CN to south boundary	s	-	s	-	s	4,758,000	s	4,758,000
34	Campsite Road 4LAUD - 1300m from CN to south boundary	s	-	s	-	s	3,900,000	s	3,900,000
35	Golden Spike Road 2LAUD - 1400 m to south boundary	s	-	S	-	\$	4,400,000	s	4,400,000
38	Golden Spike Road 4LAUD - 1400m tosouth boundary	s	-	S	-	S	5,124,000	s	5,124,000
37	Boundary Road 2LAUD - 1200m to Hwy 16A	s	18,576	S	2,726	S	10,895,570	s	10,916,872
38	Traffic Signals - Boundary @ McLeod	s	-	s	-	\$	360,000	s	360,000
39	Traffic Signals - Hwy 16A - between Boundary & Campsite	s	-	s	-	S	360,000	s	360,000
40	Traffic Signals - Campsite - between Grove Dr & Hwy 16	s	232,366	s	34,105	s	-	s	266,472
41	Traffic Signals - Campsite @ Diamond	s	-	S	-	S	360,000	s	360,000
42	Traffic Signals - Campsite @ Tamarack	s	-	S	-	\$	360,000	s	360,000
43	Traffic Signals - Golden Spik e @ Diamond	s	-	s	-	S	360,000	s	360,000
44	Traffic Signals - Golden Spik e @ Tamarack	s	-	S	-	S	360,000	s	360,000
45	Traffic Signals - Century @ Diamond	s	-	S	-	S	360,000	s	360,000
48	Traffic Signals - Century @ Tamarack	s	-	S	-	\$	360,000	s	360,000
47	Traffic Signals - Grove Dr @ Greenbury Blvd	s	-	S	-	s	380,000	s	360,000
48	Arterial Toplift Asphalt	s	684,270	s	100,433	s	-	s	784,703
49	Pioneer Road Top Lift As phalt	s	-	S	-	s	1,602,000	s	1,602,000
50	Campsite Road Functional Plan	s	-	s	-	s	240,000	s	240,000
51	Century Road 2LAUD - Century Close to south boundary	s	-	s	-	s	4,299,000	s	4,299,000
		\$	35,500,336	\$	2,475,257	\$	87,201,264	\$	125,176,857

5.2 Transportation Off-site Infrastructure Staging

The timing of construction is used to determine the impact of inflation on cost, the impact of forecast reserve balances, and the estimate of financial oversizing. Transportation off-site infrastructure will be constructed in a staged fashion over the 25 year development period. Existing reserve funds will not be sufficient to pay for construction of transportation infrastructure from time to time. Front ending of the infrastructure will be required. A front-ender is the party that constructs and pays for infrastructure that benefits other parties. To compensate parties for capital they provide in front-ending off-site infrastructure construction, a 2.50% interest allowance has been charged to the reserve when it is forecast to be in negative balance. Further, a 2.40% interest credit has been provided to the reserve when it is forecast to be in a positive balance. The graph below outlines the forecast transportation levy reserve balances over the 25 year development period.



5.3 Transportation Off-site Infrastructure Benefitting Parties

The transportation off-site infrastructure previously outlined will benefit various parties to varying degrees. Four potential benefitting parties were identified:

- City of Spruce Grove a portion of transportation infrastructure which is required to service existing development.
- Other Stakeholders other parties (such as neighboring municipalities) that benefit from the infrastructure.
- City of Spruce Grove Future Development (Financial Oversizing) that portion of costs which benefits future development beyond the 25 year review period.
- City of Spruce Grove Future Development all growth related infrastructure (i.e. levyable transportation infrastructure costs).

The following table outlines the allocation of transportation off-site levy infrastructure costs to benefitting parties.

Allocation of Transportation Off-site Infrastructure to Benefitting Parties

Item	Project Description	Reduced Project Estimated Cost	Muni Share %	Other Stakeholder Share	Developer Share Beyond 25 Yrs (Financial Oversizing %)	OSL / Developer Share %
1	Campsite Road Twinning	\$ 137,529			0.0%	100.0%
2	Grove Drive - Century Road to Greystone	\$ 56,771			0.0%	100.0%
3	Traffic Signals - Campsite Road and McLeod Ave	\$ 203,441			0.0%	100.0%
4	Traffic Signals - Campsite Road and Grove Drive	\$ 104,864			0.0%	100.0%
5	Grove Drive Twinning/Widening - Campsite to Century	\$ 5,828,599			0.0%	100.0%
6	TLC Signalization	\$ 262,197			0.0%	100.0%
7	Century Road Widening/Landscaping	\$ 1,872,896			0.0%	100.0%
8	Grove Drive East/West	\$ 3,130,734			0.0%	100.0%
9	Traffic Signals - Jennifer Heil Way and Hawthorne Gate Intersection	\$ 200,970			0.0%	100.0%
10	Century Road South of Diamond Ave.	\$ 1,322,252			0.0%	100.0%
11	Traffic Signals - Highway 16A/Century Crossing	\$ 376,862			0.0%	100.0%
12	Century Road/ Grove Drive Intersection	\$ 1,546,798			0.0%	100.0%
13	Grove Drive East Extension	\$ 1,650,186			0.0%	100.0%
14	Traffic Signals - (1) Grove Dr and Greystone, and (2) Grove Dr and Harvest Ridge	\$ 370,210			0.0%	100.0%
15	Pioneer Rd - Grove Dr to Highway 16A with roundabout at McLeod Ave and Grove Dr	\$ 12,305,970			0.0%	100.0%
16	South Industrial Arterial - Tamarack Drive	\$ 760,710			0.0%	100.0%
17	Traffic Signals - Grove Drive and Deer Park	\$ 261,976			0.0%	100.0%
18	Widening Jennifer Heil Road/Campsite Rd from McLeod Ave to south of the CN rail	\$ 2,744,431			0.0%	100.0%
19	Tamarack Drive 2LAUD - 200m from Golden Spike Rd east	\$ 732,000			40.0%	60.0%
20	Tamarack Drive 2LAUD - 1400m from existing to Century Rd	\$ 5,124,000			40.0%	60.0%
21	Tamarack Drive 4LAUD - 1600m from Golden Spike Rd to Century Rd	\$ 5,798,529			88.0%	12.0%
22	Tamarack Drive 2LAUD - 90m from Golden Spike Rd west	\$ 329,400			24.0%	76.0%
23	Tamarack Drive 2LAUD - 1500m from existing to Campsite Rd	\$ 5,490,000			24.0%	76.0%
24	Tamarack Drive 4LAUD - 1600m from Golden Spike Rd to Campsite Rd	\$ 5,856,000			64.0%	36.0%
25	Pioneer Road 2LAUD - 400m south of Hwy 16A	\$ 1,464,000			80.0%	20.0%
26	Pioneer Road 4LAUD - 400m south of Hwy 16A	\$ 1,464,000			96.0%	4.0%
27	Pioneer Road 4LAUD - 1400m Hwy 16A to Grove Dr	\$ 5,124,000			48.0%	52.0%
28	Century Road 2LAUD - 2400m Hwy 16A to south boundary	\$ 4,485,000			40.0%	60.0%
29	Century Road 4LAUD - 2400m Hwy 16A to south boundary	\$ 8,784,000			88.0%	12.0%
30	Grove Drive East 4LAUD - 1000m to Pioneer Rd	\$ 3,120,000			12.0%	88.0%
31	Grove Drive West 2LAUD - 600m to Boundary Rd	\$ 2,375,526			0.0%	100.0%
32 33	Grove Drive West 4LAUD - 1400m to Boundary Rd Campsite Road 2LAUD - 1300m from CN to south boundary	\$ 2,210,000 \$ 4,758,000			72.0% 52.0%	28.0% 48.0%
34	Campsite Road 4LAUD - 1300m from CN to south boundary	\$ 3,900,000			96.0%	4.0%
35	Golden Spike Road 2LAUD - 1400m to south boundary	\$ 4,400,000			32.0%	68.0%
36	Golden Spike Road 4LAUD - 1400m to south boundary	\$ 5,124,000			80.0%	20.0%
30	Boundary Road 2LAUD - 1200m to Hwy16A	\$ 10,916,872			8.0%	92.0%
38	Traffic Signals - Boundary @ McLeod	\$ 360,000			88.0%	12.0%
39	Traffic Signals - Hwy 16A - between Boundary & Campsite	\$ 360,000			8.0%	92.0%
40	Traffic Signals - Campsite - between Grove Dr & Hwy 16	\$ 266,472			12.0%	88.0%
41	Traffic Signals - Campsite @ Diamond	\$ 360,000			44.0%	56.0%
42	Traffic Signals - Campsite @ Tamarack	\$ 360,000			48.0%	52.0%
43	Traffic Signals - Golden Spike @ Diamond	\$ 360,000			20.0%	80.0%
44	Traffic Signals - Golden Spike @ Tamarack	\$ 360,000			44.0%	56.0%
45	Traffic Signals - Century @ Diamond	\$ 360,000			24.0%	76.0%
46	Traffic Signals - Century @ Tamarack	\$ 360,000			92.0%	8.0%
47	Traffic Signals - Grove Dr @ Greenbury Blvd	\$ 360,000			12.0%	88.0%
48	Arterial Toplift Asphalt	\$ 784,703			0.0%	100.0%
49	Pioneer Road Top Lift Asphalt	\$ 1,602,000			12.0%	88.0%
50	Campsite Road Functional Plan	\$ 240,000			12.0%	88.0%
51	Century Road 2LAUD - Century Close to south boundary	\$ 4,299,000			40.0%	60.0%
		\$ 125,024,896				

The allocation shown in the Financial Oversizing share column represents that portion of the cost that benefits development beyond the 25 year repayment period. Using the anticipated year of construction, costs beyond the 25 year allocation period are determined. For example, project 39, scheduled to be built in 2022, or year 2 of this model, will have 23 years'

worth of its costs included in the current rates (92 %) and the final 3 years of costs (8 %) would be deferred. During each model update, this will be adjusted and additional costs will be included in the new rates.

5.4 Existing Receipts and Adjusted Levy Cost - Transportation

Prior to allocating costs to benefitting areas, existing off-site levy receipts collected from developers need to be considered in determining the residual/net costs to developers. The City collected **\$18.90 million** in off-site levies prior to December 31, 2016 (the cut-off date established for bylaw C-1044-18). These levies have been allocated to the projects for which they were collected.

For the period of January 1, 2017 to December 31, 2019, the City collected approximately **\$2.46 million**, summarized in the table below. This results in a residual developer cost of **\$63.76 million**.

ltem	Project Description	OSI	_ / Developer Cost	Fur	Offsite Levy nds Collected Dec 31, 2016	Fu	Dffsite Levy nds Collected arting Jan 1, 2017	Adjusted eloper (Levy) Cost
1	Campsite Road Twinning	\$	137,529	\$	137,529	\$	-	\$ -
2	Grove Drive - Century Road to Greystone	\$	56,771	\$	56,771	\$	-	\$ -
3	Traffic Signals - Campsite Road and McLeod Ave	\$	203,441	\$	203,441	\$	-	\$ -
4	Traffic Signals - Campsite Road and Grove Drive	\$	104,864	\$	104,864	\$	-	\$ -
5	Grove Drive Twinning/Widening - Campsite to Century	\$	5,828,599	\$	5,828,599	\$	-	\$ -
6	TLC Signalization	\$	262,197	\$	262,197	\$	-	\$ -
7	Century Road Widening/Landscaping	\$	1,872,896	\$	1,872,896	\$	-	\$ -
8	Grove Drive East/West	\$	3,130,734	\$	3,130,734	\$	-	\$ -
9	Traffic Signals - Jennifer Heil Way and Hawthorne Gate Intersection	\$	200,970	\$	200,970	\$	-	\$ -
10	Century Road South of Diamond Ave.	\$	1,322,252	\$	1,322,252	\$	-	\$ -
11	Traffic Signals - Highway 16A/Century Crossing	\$	376,862	\$	376,862	\$	-	\$ -
12	Century Road/ Grove Drive Intersection	\$	1,546,798	\$	1,546,798	\$	-	\$ -
13	Grove Drive East Extension	\$	1,650,186	\$	1,650,186	\$	-	\$ -
14	Traffic Signals - (1) Grove Dr and Greystone, and (2) Grove Dr and Harvest Ridge	\$	370,210	\$	370,210	\$	-	\$ -
15	Pioneer Rd - Grove Dr to Highway 16A with roundabout at McLeod Ave and Grove Dr	\$	12,305,970	\$	-	\$	556,292	\$ 11,749,677
16	South Industrial Arterial - Tamarack Drive	\$	760,710	\$	-	\$	37,625	\$ 723,085
17	Traffic Signals - Grove Drive and Deer Park	\$	261,976	\$	137,529	\$	6,155	\$ 118,292
18	Widening Jennifer Heil Road/Campsite Rd from McLeod Ave to south of the CN rail	\$	2,744,431	\$	1,696,507	\$	42,432	\$ 1,005,491
19	Tamarack Drive 2LAUD - 200m from Golden Spike Rd east	\$	439,200	\$	-	\$	20,275	\$ 418,925
20	Tamarack Drive 2LAUD - 1400m from existing to Century Rd	\$	3,074,400	\$	-	\$	141,923	\$ 2,932,477
21	Tamarack Drive 4LAUD - 1600m from Golden Spike Rd to Century Rd	\$	5,798,529	\$	-	\$	23,171	\$ 5,775,357
22	Tamarack Drive 2LAUD - 90m from Golden Spike Rd west	\$	250,344	\$	-	\$	11,730	\$ 238,614
23	Tamarack Drive 2LAUD - 1500m from existing to Campsite Rd	\$	4,172,400	\$	-	\$	195,506	\$ 3,976,894

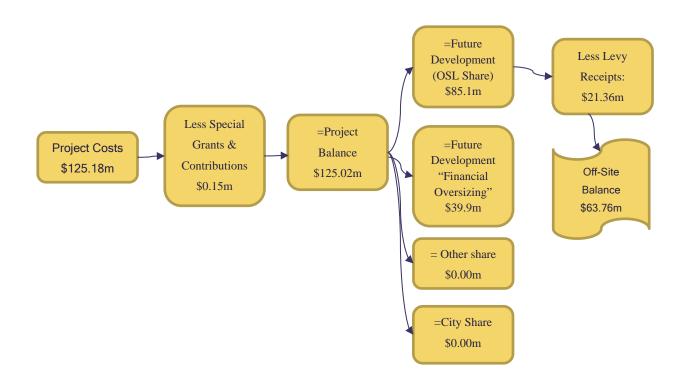
Transportation Off-site Levy Funds Collected to Date

ltem	Project Description	OSL	/ Developer Cost	Fur	Offsite Levy nds Collected Dec 31, 2016	Fur	Offsite Levy nds Collected arting Jan 1, 2017	Dev	Adjusted veloper (Levy) Cost
								1	
	Tamarack Drive 4LAUD - 1600m from Golden Spike Rd to Campsite Rd	\$	2,108,160	\$	-	\$	92,684	\$	2,015,476
25	Pioneer Road 2LAUD - 400m south of Hwy 16A	\$	292,800	\$	-	\$	11,586	\$	281,214
26	Pioneer Road 4LAUD - 400m south of Hwy 16A	\$	58,560	\$	-	\$	-	\$	58,560
27	Pioneer Road 4LAUD - 1400m Hwy 16A to Grove Dr	\$	2,664,480	\$	-	\$	121,648	\$	2,542,832
28	Century Road 2LAUD - 2400m Hwy 16A to south boundary	\$	2,691,000	\$	-	\$	243,296	\$	2,447,704
29	Century Road 4LAUD - 2400m Hwy 16A to south boundary	\$	1,054,080	\$	-	\$	34,757	\$	1,019,323
30	Grove Drive East 4LAUD - 1000m to Pioneer Rd	\$	2,745,600	\$	-	\$	152,060	\$	2,593,540
31	Grove Drive West 2LAUD - 600m to Boundary Rd	\$	2,375,526	\$	-	\$	98,803	\$	2,276,723
32	Grove Drive West 4LAUD - 1400m to Boundary Rd	\$	618,800	\$	-	\$	60,824	\$	557,976
33	Campsite Road 2LAUD - 1300m from CN to south boundary	\$	2,283,840	\$	-	\$	103,546	\$	2,180,294
34	Campsite Road 4LAUD - 1300m from CN to south boundary	\$	156,000	\$	-	\$	-	\$	156,000
35	Golden Spike Road 2LAUD - 1400m to south boundary	\$	2,992,000	\$	-	\$	162,197	\$	2,829,803
36	Golden Spike Road 4LAUD - 1400m to south boundary	\$	1,024,800	\$	-	\$	40,549	\$	984,251
37	Boundary Road 2LAUD - 1200m to Hwy16A	\$	10,043,522	\$	-	\$	197,698	\$	9,845,824
38	Traffic Signals - Boundary @ McLeod	\$	43,200	\$	-	\$	1,424	\$	41,776
39	Traffic Signals - Hwy 16A - between Boundary & Campsite	\$	331,200	\$	-	\$	15,669	\$	315,531
40	Traffic Signals - Campsite - between Grove Dr & Hwy 16	\$	266,472	\$	-	\$	15,185	\$	251,287
41	Traffic Signals - Campsite @ Diamond	\$	201,600	\$	-	\$	9,259	\$	192,341
42	Traffic Signals - Campsite @ Tamarack	\$	187,200	\$	-	\$	8,547	\$	178,653
43	Traffic Signals - Golden Spike @ Diamond	\$	288,000	\$	-	\$	13,532	\$	274,468
44	Traffic Signals - Golden Spike @ Tamarack	\$	201,600	\$	-	\$	9,259	\$	192,341
45	Traffic Signals - Century @ Diamond	\$	273,600	\$	-	\$	12,820	\$	260,780
46	Traffic Signals - Century @ Tamarack	\$	28,800	\$	-	\$	712	\$	28,088
47	Traffic Signals - Grove Dr @ Greenbury Blvd	\$	316,800	\$	-	\$	14,957	\$	301,843
48	Arterial Toplift Asphalt	\$	784,703	\$	-	\$	1,560	\$	783,143
49	Pioneer Road Top Lift Asphalt	\$	1,409,760	\$	-	\$	-	\$	1,409,760
50	Campsite Road Functional Plan	\$	220,800	\$	-	\$	-	\$	220,800
51	Century Road 2LAUD - Century Close to south boundary	\$	2,579,400	\$	-	\$	-	\$	2,579,400
		\$	85,114,570	\$	18,898,345	\$	2,457,681	\$	63,758,544

5.5 Summary of Off-site Levy Cost – Transportation

As shown in the figure below, the total cost for transportation infrastructure that forms the basis of the rate is approximately **\$63.76 million**. The cost allocations to each benefitting party are based on the benefitting percentages shown in section 5.3. The off-site levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).

Total Transportation Off-site Levy Costs



5.6 Benefitting Areas – Transportation

Net developer costs for each development have been allocated to multiple benefitting off-site levy areas (see table below). Allocations are denoted with a "1" below applicable areas numbers. Benefitting areas were determined by City staff and advisors.

Benefitting Areas for Transportation Off-site Infrastructure

		_																										
Item	Project Description	Dev	eloper Cost	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	3.4	3.5	4.1	4.2	4.3	4.4	4.5	5.1	5.2	5.3	5.4	5.5
1	Campsite Road Twinning	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Grove Drive - Century Road to Greystone	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Traffic Signals - Campsite Road and McLeod Ave	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Traffic Signals - Campsite Road and Grove Drive Grove Drive Twinning/Widening - Campsite to Century	\$ \$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	TLC Signalization	ֆ Տ		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Century Road Widening/Landscaping	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Grove Drive East/West	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Traffic Signals - Jennifer Heil Way and Hawthorne Gate	\$	-				1																					
	Intersection	·		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	Century Road South of Diamond Ave.	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Traffic Signals - Highway 16A/Century Crossing	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Century Road/ Grove Drive Intersection	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Grove Drive East Extension	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14	Traffic Signals - (1) Grove Dr and Greystone, and (2)	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Grove Dr and Harvest Ridge																											
15	Pioneer Rd - Grove Dr to Highway 16A with roundabout	\$	11,749,677	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16	at McLeod Ave and Grove Dr South Industrial Arterial - Tamarack Drive	\$	723,085	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4	1	1	1	1	1	4	1	1	1
-	Traffic Signals - Grove Drive and Deer Park	э \$	118,292	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
_	Widening Jennifer Heil Road/Campsite Rd from McLeod		1,005,491																									-
.0	Ave to south of the CN rail	Ű	1,000,401	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19	Tamarack Drive 2LAUD - 200m from Golden Spike Rd	\$	418,925																									
	east	Ľ	2,220	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	Tamarack Drive 2LAUD - 1400m from existing to	\$	2,932,477	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Century Rd			1	'	Ľ				'	'			Ľ	1	1	1	1	1	1	'	Ľ		1	1	'	1	
21	Tamarack Drive 4LAUD - 1600m from Golden Spike Rd	\$	672,652	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	to Century Rd				· ·		· ·	<u> </u>		•	•	·	Ŀ	· ·	•	•	· ·	•	·	•	•	· ·	·	•	•	· ·	•	•
22	Tamarack Drive 2LAUD - 90m from Golden Spike Rd	\$	238,614	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	west	<u> </u>			<u> </u>		Ŀ	<u> </u>	<u> </u>	·	<u> </u>	· ·	Ŀ	<u> </u>	-				•	· ·	·	<u> </u>	· ·		-		· .	
23	Tamarack Drive 2LAUD - 1500m from existing to	\$	3,976,894	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Campsite Rd																											
24	Tamarack Drive 4LAUD - 1600m from Golden Spike Rd	\$	2,015,476	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25	to Campsite Rd Pioneer Road 2LAUD - 400m south of Hwy 16A	¢	201 214	1	1	4	1	1	4	1	4	1	1	4	1	4	1	1	4	1	1	1	1	1	4	1	1	1
	Pioneer Road 2LAOD - 400m south of Hwy 16A Pioneer Road 4LAUD - 400m south of Hwy 16A	\$ \$	281,214 58,560	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Pioneer Road 4LAUD - 400m South of Hwy ToA Pioneer Road 4LAUD - 1400m Hwy 16A to Grove Dr	э \$	2,542,832	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Century Road 2LAUD - 2400m Hwy 16A to South	э \$	2,447,704	-	<u> </u>		1										-										-	
20	boundary	Ŷ	2,447,704	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29	Century Road 4LAUD - 2400m Hwy 16A to south	\$	1,019,323																								_	
	boundary	Ť	.,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30	Grove Drive East 4LAUD - 1000m to Pioneer Rd	\$	2,593,540	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31	Grove Drive West 2LAUD - 600m to Boundary Rd	\$	2,276,723	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32	Grove Drive West 4LAUD - 1400m to Boundary Rd	\$	557,976	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33	Campsite Road 2LAUD - 1300m from CN to south	\$	2,180,294	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	boundary			•	<u> </u>	·	· ·	Ľ	•	•	•	•	· ·	·	•	·		·	•	•	•	·	•	•	•	·	•	•
34	Campsite Road 4LAUD - 1300m from CN to south	\$	156,000	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	boundary																											_
35	Golden Spike Road 2LAUD - 1400m to south boundary	\$	2,829,803	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	Calden Calles Dead 41 AUD 4400m to cauth hourday.	¢	004.054																									
36	Golden Spike Road 4LAUD - 1400m to south boundary	\$	984,251	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27	Boundary Road 2LAUD - 1200m to Hwy16A	\$	9,845,824	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Traffic Signals - Boundary @ McLeod	\$	41,776	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Traffic Signals - Hwy 16A - between Boundary &	\$	315,531				1																					
00	Campsite	Ŷ	010,001	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40	Traffic Signals - Campsite - between Grove Dr & Hwy	\$	219,310																									
	16			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Traffic Signals - Campsite @ Diamond	\$	192,341	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Traffic Signals - Campsite @ Tamarack	\$	178,653		1	1	1		_	1	_	1	1		1	1	1		1	1	1		1	1		1		1
	Traffic Signals - Golden Spike @ Diamond	\$	274,468		1	1	1		1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Traffic Signals - Golden Spike @ Tamarack	\$	192,341			1				1		1	1		1	1	1	1	1	1	1		1	1		1	1	1
	Traffic Signals - Century @ Diamond	\$	260,780		1	1	1			1		1	1		1	1	1	1	1	1		1	1	1		1	_	1
	Traffic Signals - Century @ Tamarack	\$	28,088	1	1	1	1		1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	_	1
	Traffic Signals - Grove Dr @ Greenbury Blvd Arterial Toplift Asphalt	\$	301,843	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Pioneer Road Top Lift Asphalt	\$ \$	783,143	1 1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1	1	1	1 1	1	1 1	1	1
	Campsite Road Functional Plan	э \$	211,200		1		1		1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Century Road 2LAUD - Century Close to south	э \$	2,579,400																									
	boundary	Ľ	2,0.0,400	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	,	\$	58,614,262																									
		_			-					-						_		_			-	-	_	_			_	

		_																															
ltem	Project Description		loper Cost	6.1	6.2	6.3	6.4	6.5	7.1	7.2	2 7.3	7.4	7.5	8.1	8.2	8.3	8.4	8.5	9.1	9.2	9.3	9.4	9.5	###	###	###	###	###	###	###	###	### #	;##
	Campsite Road Twinning	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Grove Drive - Century Road to Greystone	\$ \$	-	1	1	1	1	1				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Traffic Signals - Campsite Road and McLeod Ave Traffic Signals - Campsite Road and Grove Drive	ծ \$		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Grove Drive Twinning/Widening - Campsite to Century	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	TLC Signalization	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Century Road Widening/Landscaping	\$	-	1	1	1	1	1	1			1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Grove Drive East/West	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Traffic Signals - Jennifer Heil Way and Hawthorne Gate Intersection	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	Century Road South of Diamond Ave.	\$		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	Traffic Signals - Highway 16A/Century Crossing	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	Century Road/ Grove Drive Intersection	\$	-	1	1	1	1	1				1					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Grove Drive East Extension	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Traffic Signals - (1) Grove Dr and Greystone, and (2) Grove Dr and Harvest Ridge	\$	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Pioneer Rd - Grove Dr to Highway 16A with roundabout at McLeod Ave and Grove Dr	\$	11,749,677	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	South Industrial Arterial - Tamarack Drive	\$	723,085	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Traffic Signals - Grove Drive and Deer Park	\$	118,292	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Widening Jennifer Heil Road/Campsite Rd from McLeod Ave to south of the CN rail		1,005,491	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Tamarack Drive 2LAUD - 200m from Golden Spike Rd east	\$	418,925	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	Tamarack Drive 2LAUD - 1400m from existing to Century Rd	\$	2,932,477	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21	Tamarack Drive 4LAUD - 1600m from Golden Spike Rd to Century Rd	\$	5,775,357	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22	Tamarack Drive 2LAUD - 90m from Golden Spike Rd west	\$	238,614	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23	Tamarack Drive 2LAUD - 1500m from existing to Campsite Rd	\$	3,976,894	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24	Tamarack Drive 4LAUD - 1600m from Golden Spike Rd to Campsite Rd	\$	2,015,476	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Pioneer Road 2LAUD - 400m south of Hwy 16A	\$	281,214	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Pioneer Road 4LAUD - 400m south of Hwy 16A	\$	58,560	1	1	1	1	1				1		1			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Pioneer Road 4LAUD - 1400m Hwy 16A to Grove Dr	\$	2,542,832	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Century Road 2LAUD - 2400m Hwy 16A to south boundary		2,447,704	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Century Road 4LAUD - 2400m Hwy 16A to south boundary	\$	1,019,323	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Grove Drive East 4LAUD - 1000m to Pioneer Rd	\$	2,593,540	1	1	1	1	1		1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Grove Drive West 2LAUD - 600m to Boundary Rd Grove Drive West 4LAUD - 1400m to Boundary Rd	\$ \$	2,276,723 557,976	1	1	1	1	1									1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Campsite Road 2LAUD - 1300m from CN to south boundary	\$	2,180,294	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34	Campsite Road 4LAUD - 1300m from CN to south	\$	156,000	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35	boundary Golden Spike Road 2LAUD - 1400m to south boundary	\$	2,829,803	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36	Golden Spike Road 4LAUD - 1400m to south boundary	\$	984,251	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37	Boundary Road 2LAUD - 1200m to Hwy16A	\$	9,845,824	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38	Traffic Signals - Boundary @ McLeod	\$	41,776	1	1	1	1	1									1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39	Traffic Signals - Hwy 16A - between Boundary & Campsite	\$	315,531	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40	Traffic Signals - Campsite - between Grove Dr & Hwy 16	\$	251,287	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41	Traffic Signals - Campsite @ Diamond	\$	192,341	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
42	Traffic Signals - Campsite @ Tamarack	\$	178,653	1	1		_	1			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
43	Traffic Signals - Golden Spike @ Diamond	\$	274,468	1	1		1	1									1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44	Traffic Signals - Golden Spike @ Tamarack	\$	192,341	1	1			1									1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
45 46	Traffic Signals - Century @ Diamond Traffic Signals - Century @ Tamarack	\$ \$	260,780 28.088	1	1								_				1	1	1	1	1 1	1	1	1	1	1	1	1	1	1	1	+	1
40	Traffic Signals - Century @ Tamarack Traffic Signals - Grove Dr @ Greenbury Blvd	э \$	301,843	1	1												1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
48	Arterial Toplift Asphalt	\$	783,143	1													1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1
49	Pioneer Road Top Lift Asphalt	\$	1,409,760	1	1					1	1	_	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Campsite Road Functional Plan	\$	220,800	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Century Road 2LAUD - Century Close to south boundary	\$	2,579,400	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

5.7 Reserve Balance – Transportation

On December 31, 2019, the balance of the City's transportation reserve was **\$(13,771,602.05)**, as shown in the table below. The amount takes into consideration expenditures up to the end of 2019.

2019 interest impacts on the reserve were captured in alignment with the interest earning and charging rates in effect at that time:

CIBC Borrowing Rate = 2.50%

HISA interest = 2.40%

Transportation Off-site Levy Reserve Balance

Description		Dr	Cr	Balance
Offsite Levy Expenditures to December 31, 2016			\$ 23,395,137.23	\$ (23,395,137.23)
Offsite Levy Receipt Allocations to December 31, 2016	\$	18,898,345.18		\$ (4,496,792.05)
Adjustments made during 2019 update - see updated continuity	\$	556,372.94	\$ 2,745.00	\$ (3,943,164.11)
				\$ (3,943,164.11)
Opening Balance				\$ (3,943,164.11)
2017				\$ (3,943,164.11)
Interest on Opening Balance			\$ 106,859.75	\$ (4,050,023.86)
Project Expenditures (OSL Share)			\$ 3,960,947.32	\$ (8,010,971.18)
Offsite Lew Receipts	\$	1,896,536		\$ (6,114,434.73)
Offsite Levy Receipts Collected Under Old Agreement or Old				
Bylaw (if any)	\$	-		\$ (6,114,434.73)
Debenture Interest Accrued This Year			\$ -	\$ (6,114,434.73)
Interest on Project Expenditure			\$ 26,835.42	\$ (6,141,270.15)
Interest on Offsite Levy Receipts	\$	80,602.80		\$ (6,060,667.35)
Offsite Lew Receipts Collected Under Old Agreement or Old				
Bylaw (if any)	\$	-		\$ (6,060,667.35)
Interest on Debenture Interest			\$ -	\$ (6,060,667.35)
2018				\$ (6,060,667.35)
Interest on Opening Balance				
			\$ 164,244.09	\$ (6,224,911.43)
Project Expenditures (OSL Share)			\$ 4,806,439.90	\$ (11,031,351.33)
Offsite Levy Receipts	\$	492,524.00		\$ (10,538,827.33)
Offsite Lew Receipts Collected Under Old Agreement or Old				
Bylaw (if any)	\$	-		\$ (10,538,827.33)
Debenture Interest Accrued This Year			\$ -	\$ (10,538,827.33)
Interest on Project Expenditure			\$ 32,563.63	\$ (10,571,390.96)
Interest on Offsite Levy Receipts	\$	20,932.27		\$ (10,550,458.69)
Offsite Levy Receipts Collected Under Old Agreement or Old				
Bylaw (if any)	\$	-	 	\$ (10,550,458.69)
Interest on Debenture Interest			\$ -	\$ (10,550,458.69)
2019				\$ (10,550,458.69)
Interest on Opening Balance			\$ 84,957.10	\$ (10,635,415.79)
Project Expenditures (OSL Share)			\$ 3,185,850.06	\$ (13,821,265.85)
Offsite Levy Receipts	\$	68,740.52		\$ (13,752,525.33)
Offsite Lew Receipts Collected Under Old Agreement or Old				
Bylaw (if any)	\$	-		\$ (13,752,525.33)
Debenture Interest Accrued This Year			\$ -	\$ (13,752,525.33)
Interest on Project Expenditure			\$ 19,901.61	\$ (13,772,426.94)
Interest on Offsite Levy Receipts	\$	824.89		\$ (13,771,602.05)
Offsite Levy Receipts Collected Under Old Agreement or Old				
Bylaw (if any)	\$	-		\$ (13,771,602.05)
Interest on Debenture Interest			\$ -	\$ (13,771,602.05)

Notes:

- 1/4 year rule expenditures are deemed to have been made in September of each year
- 1/2 year rule receipts are deemed to have been made in June of each year

6 SUMMARY OF OFF-SITE LEVY RATES

The table below shows the combined off-site levy rates (per hectare) associated with construction of transportation, water, and sanitary off-site infrastructure for each off-site levy area. Cumulative rates vary from a low of \$69,162 per hectare (Areas 6 and 7) to a high of \$96,402 per hectare (Areas 10 and 11). The weighted average rate total of all areas is \$84,842 per hectare. This is down from the \$88,730 per hectare at the last update. *Note: The weighted average is provided for information purposes only; developers are charged the rate applicable to their specific levy area.*

Area #	Tra	nsportation Levies	Water Levies	Sanitary Levies	Total
1.0	\$	67,254	\$ 1,908	\$ -	\$ 69,162
2.0	\$	67,254	\$ 1,908	\$ 21,369	\$ 90,532
3.0	\$	67,254	\$ 1,908	\$ 21,369	\$ 90,532
4.0	\$	67,254	\$ 1,908	\$ 4,164	\$ 73,326
5.0	\$	67,254	\$ 1,908	\$ 4,210	\$ 73,372
6.0	\$	67,254	\$ 1,908	\$ -	\$ 69,162
7.0	\$	67,254	\$ 1,908	\$ -	\$ 69,162
8.0	\$	67,254	\$ 4,801	\$ -	\$ 72,055
9.0	\$	67,254	\$ 1,908	\$ -	\$ 69,162
10.0	\$	67,254	\$ 4,801	\$ 24,347	\$ 96,402
11.0	\$	67,254	\$ 4,801	\$ 24,347	\$ 96,402

Summary of Off-site Levies by Area

Off-site Levies Variance by Area

	Tr	ansportation Levies (/Net Ha.)	W	/ater Levies (/Net Ha.)	Sanitary Levies (/Net Ha.)	Total (/Net Ha.)
High	\$	67,254	\$	4,801	\$ 24,347	\$ 96,402
Low	\$	67,254	\$	1,908	\$ -	\$ 69,162
Weighted Average	\$	67,254	\$	2,905	\$ 14,683	\$ 84,842