

2016 Off-Site Levy Annual Report

As defined in Off-Site Levy Bylaw No. 2015-07

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1 CONTENTS

1.1 Table of Contents

1 CONTENTS	2
1.1 TABLE OF CONTENTS	2
2 INTRODUCTION.....	3
2.1 INTRODUCTION	3
2.2 METHODOLOGY	3
3 OFFSITE LEVY DEVELOPMENT LANDS AND STAGING	3
3.1 DEVELOPMENT STAGING	7
4 WATER	9
4.1 WATER OFFSITE INFRASTRUCTURE.....	9
4.2 WATER OFFSITE INFRASTRUCTURE GRANTS & CONTRIBUTIONS TO DATE.....	11
4.3 WATER OFFSITE INFRASTRUCTURE BENEFITING PARTIES	11
4.4 EXISTING RECEIPTS	12
4.5 TOTAL WATER OFFSITE LEVY COSTS.....	13
4.6 WATER INFRASTRUCTURE BENEFITING AREAS	14
4.7 DEVELOPMENT AND WATER STAGING IMPACTS	15
4.8 RESERVE BALANCE.....	16
5 SANITARY	18
5.1 SANITARY OFFSITE INFRASTRUCTURE	18
5.2 SANITARY OFFSITE INFRASTRUCTURE GRANTS & CONTRIBUTIONS TO DATE	19
5.3 SANITARY OFFSITE INFRASTRUCTURE BENEFITING PARTIES	20
5.4 EXISTING RECEIPTS	21
5.5 TOTAL SANITARY OFFSITE LEVY COSTS.....	22
5.6 SANITARY INFRASTRUCTURE BENEFITING AREAS.....	23
5.7 DEVELOPMENT AND SANITARY STAGING IMPACTS.....	24
5.8 RESERVE BALANCE.....	25
6 STORMWATER	27
6.1 STORMWATER OFFSITE INFRASTRUCTURE	27
6.2 STORMWATER OFFSITE INFRASTRUCTURE GRANTS & CONTRIBUTIONS TO DATE	29
6.3 STORMWATER OFFSITE INFRASTRUCTURE BENEFITING PARTIES	30
6.4 EXISTING RECEIPTS	31
6.5 TOTAL STORMWATER OFFSITE LEVY COSTS	32
6.6 STORMWATER INFRASTRUCTURE BENEFITING AREAS	32
6.7 DEVELOPMENT AND STORMWATER STAGING IMPACTS	33
6.8 RESERVE BALANCE.....	34
7 TRANSPORTATION.....	36
7.1 TRANSPORTATION OFFSITE INFRASTRUCTURE	36
7.2 TRANSPORTATION OFFSITE INFRASTRUCTURE GRANTS & CONTRIBUTIONS TO DATE	38
7.3 TRANSPORTATION OFFSITE INFRASTRUCTURE BENEFITING PARTIES	39
7.4 EXISTING RECEIPTS	40
7.5 TOTAL TRANSPORTATION OFFSITE LEVY COSTS	41
7.6 TRANSPORTATION INFRASTRUCTURE BENEFITING AREAS	41
7.7 DEVELOPMENT AND STORMWATER STAGING IMPACTS	43
7.8 RESERVE BALANCE.....	43
8 SUMMARY OF OFFSITE LEVY RATES.....	45

2 INTRODUCTION

2.1 Introduction

Parkland County enacted Bylaw 2015-07 on April 28, 2015 (“Off-Site Levy Bylaw”). The bylaw includes rates for transportation, water, sanitary sewer, and stormwater offsite infrastructure.

The Off-Site Levy Bylaw stipulates that on or before April 30th of each year, an annual Off-Site Levy Report is to be provided to Council regarding offsite levies imposed and collected by the County in the previous year and the offsite levy rates to be imposed in the current year. This report outlines the methodology used in updating and establishing offsite levies and the resulting rates under Bylaw No. 2015-07.

2.2 Methodology

Engineering Services have reviewed and amended the list of offsite projects and updated cost estimates (and actual costs) for transportation, water, sanitary sewer, and stormwater infrastructure including completed projects and future projects to support the growth plan within Parkland County. Each project benefiting area was reviewed using the Offsite Development Areas that were established in the bylaw. The County’s assessment also included an analysis of benefits to existing development and future development.

The information contained in the current bylaw was established to December 31st, 2015. During this review, offsite levy information and rates were updated to December 31st, 2016, the most current completed year-end. Information pertaining to 2016 and prior is treated as an “actual”. Information pertaining to 2017 and beyond is treated as an “estimate”. When the next update is completed in 2018, 2017 information will be converted from “estimates” to “actuals”.

Offsite levy rates are not intended to stay static; they are based upon assumptions and the best available data of the day. Planning assumptions, cost estimates etc. can change each year. Accordingly, the *Municipal Government Act* requires that offsite levy rates be updated with the most available information on a regular basis. Should information change, it will be reflected in a future update, and rates adjusted accordingly.

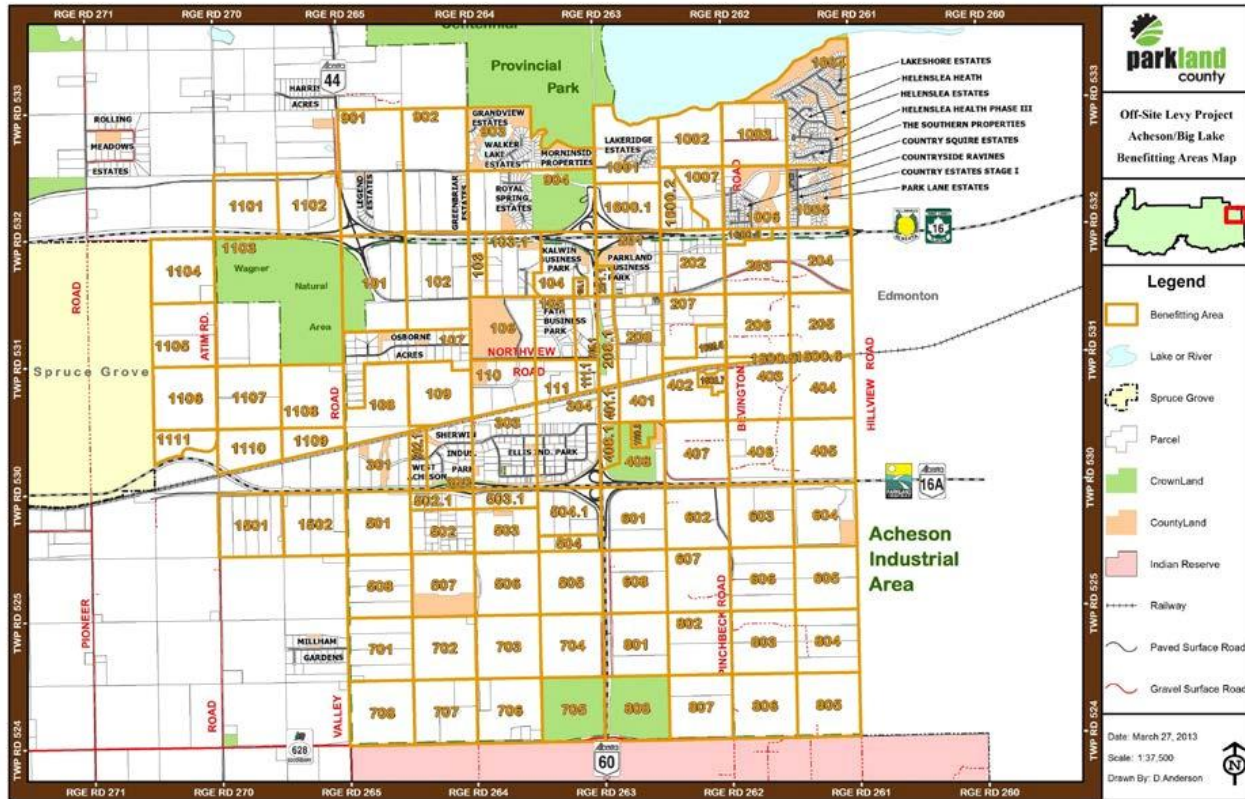
The County utilizes the CORVUS offsite levy model to manage rates. This model is in use in dozens of Alberta municipalities. The model utilizes a “full cost” methodology where by the infrastructure costs, inflation, construction staging, development staging, financing costs, and reserve interest earning and charging impacts are all used to determine rates that allocate all costs to developers on an equitable basis, based on degree of benefit. With the CORVUS model in place, the County is in a position to quickly and efficiently update offsite levy rates each year upon completion of year-end finance activities.

3 OFFSITE LEVY DEVELOPMENT LANDS AND STAGING

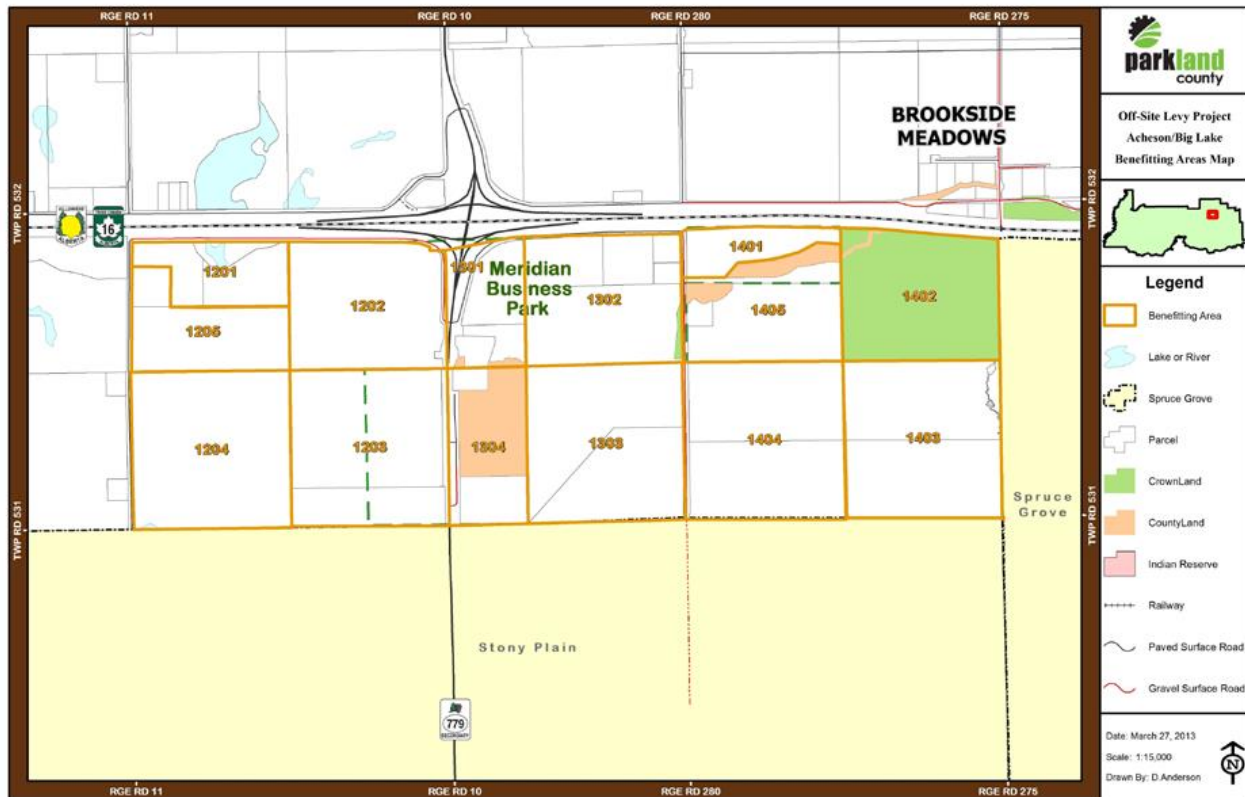
Parkland County has identified 2 key development zones for the implementation of off-site levies: (1) the Acheson/Big Lake development zone, and (2) the Fifth Meridian development zone. The County can add additional zones or amend offsite levy zones as necessary in the future. These two development zones are broken down further into 122 offsite levy areas, as shown in the maps below. Area boundaries conform to geographic and man-made barriers (e.g., highways, property lines, etc.), as well as sanitary and stormwater basins identified by Engineering Services. Each area is a unique land use type, either “residential”, “commercial/industrial”. All offsite infrastructure costs are allocated to one or more offsite levy areas.

Offsite Levy Areas

Acheson / Big Lake Benefitting Map:



5th Meridian Benefitting Map:



Total net development area, the amount of land available for development across all offsite levy areas, is **~4063 hectares** (2015: ~3735 ha) as outlined in the table below. In calculating net development area only those lands remaining to be developed within the area that have not previously paid offsite levies have been considered (as required by legislation/regulation). Planning & Development Services have made allowances in net development area calculations for environmental reserves, municipal reserves, and arterial road right of way.

Offsite Levy Net Development Area

Area Ref. #	Development Area Location	Land Use	Gross Area (ha.)	Environmental Reserves (ha.)	Sub-total	Municipal Reserves	Road Right of Way	Net Development Area (ha.)
101.0	Acheson Zone 1 (W1/2 of 8-53-26)	Commercial / Industrial	16.08	-	16.08	-	-	16.08
102.0	Acheson Zone 1 (E1/2 of 8-53-26)	Commercial / Industrial	71.56	22.46	49.10	-	0.70	48.40
103.0	Acheson Zone 1 (NW9-53-26)	Commercial / Industrial	8.11	-	8.11	-	0.10	8.01
103.1	Acheson Zone 1 (NW9-53-26)	Commercial / Industrial	22.04	-	22.04	-	0.20	21.84
104.0	Acheson Zone 1 (NE9-53-26)	Commercial / Industrial	-	-	-	-	-	-
104.1	Acheson Zone 1 (NE9-53-26)	Commercial / Industrial	4.05	-	4.05	-	-	4.05
105.0	Acheson Zone 1 (SE9-53-26)	Commercial / Industrial	12.82	-	12.82	-	0.12	12.70
105.1	Acheson Zone 1 (SE9-53-26)	Commercial / Industrial	2.68	-	2.68	-	0.12	2.56
106.0	Acheson Zone 1 (SW9-53-26)	Commercial / Industrial	-	-	-	-	-	-
107.0	Acheson Zone 1 Osborne Acres et al	Residential	68.59	-	68.59	-	-	68.59
108.0	Acheson Zone 1 (W1/2 of 5-53-26) - North of Railway	Commercial / Industrial	65.08	29.15	35.93	3.59	-	32.34
109.0	Acheson Zone 1 (NE 5-53-26)	Commercial / Industrial	59.41	22.89	36.52	3.65	-	32.87
110.0	Acheson Zone 1 (SW4-53-26)	Commercial / Industrial	-	-	-	-	-	-
111.0	Acheson Zone 1 (SE4-53-26)	Commercial / Industrial	15.65	-	15.65	-	-	15.65
111.1	Acheson Zone 1 (SE4-53-26)	Commercial / Industrial	8.51	-	8.51	-	0.55	7.97
201.0	Acheson Zone 2 (NW10-53-26)	Commercial / Industrial	-	-	-	-	-	-
201.1	Acheson Zone 2 (NW10-53-26)	Commercial / Industrial	-	-	-	-	-	-
202.0	Acheson Zone 2 (NE10-53-26)	Commercial / Industrial	-	-	-	-	-	-
203.0	Acheson Zone 2 (Pt. NW11-53-26)	Commercial / Industrial	51.12	-	51.12	-	0.56	50.56
204.0	Acheson Zone 2 (NE11-53-26)	Commercial / Industrial	52.20	-	52.20	-	0.56	51.64
205.0	Acheson Zone 2 (SE11-53-26)	Commercial / Industrial	64.00	1.20	62.80	-	-	62.80
206.0	Acheson Zone 2 (SW11-53-26)	Commercial / Industrial	64.60	-	64.60	-	-	64.60
207.0	Acheson Zone 2 (Pt. SE10-53-26)	Commercial / Industrial	22.95	-	22.95	-	-	22.95
208.0	Acheson Zone 2 (SW10-53-26)	Commercial / Industrial	4.00	-	4.00	-	-	4.00
208.1	Acheson Zone 2 (SW10-53-26)	Commercial / Industrial	7.30	-	7.30	-	1.99	5.31
301.0	Acheson Zone 3 (SW5-53-26) - South of Railway	Commercial / Industrial	8.20	-	8.20	-	-	8.20
302.0	Acheson Zone 3 (SE5-53-26)	Commercial / Industrial	-	-	-	-	-	-
302.1	Acheson Zone 3 (SE5-53-26)	Commercial / Industrial	-	-	-	-	-	-
303.0	Acheson Zone 3 (SW4-53-26)	Commercial / Industrial	-	-	-	-	-	-
304.0	Acheson Zone 3 (SE4-53-26)	Commercial / Industrial	-	-	-	-	-	-
401.0	Acheson Zone 4 (NW3-53-26) - South of Railway	Commercial / Industrial	-	-	-	-	-	-
401.1	Acheson Zone 4 (NW3-53-26) - South of Railway	Commercial / Industrial	-	-	-	-	-	-
402.0	Acheson Zone 4 (NE3-53-26) - South of Railway	Commercial / Industrial	41.64	-	41.64	-	1.61	40.03
403.0	Acheson Zone 4 (NW2-53-26) - South of Railway	Commercial / Industrial	61.05	1.36	59.69	-	3.22	56.47
404.0	Acheson Zone 4 (NE2-53-26) - South of Railway	Commercial / Industrial	61.03	0.80	60.23	-	3.22	57.01
405.0	Acheson Zone 4 (SE2-53-26)	Commercial / Industrial	61.70	-	61.70	-	24.28	37.42
406.0	Acheson Zone 4 (SW2-53-26)	Commercial / Industrial	59.26	0.50	58.76	-	-	58.76
407.0	Acheson Zone 4 (SE3-53-26)	Commercial / Industrial	56.89	-	56.89	-	1.61	55.28
408.0	Acheson Zone 4 (SW3-53-26)	Commercial / Industrial	30.13	-	30.13	-	16.20	13.93
408.1	Acheson Zone 4 (SW3-53-26)	Commercial / Industrial	-	-	-	-	-	-
501.0	Acheson Zone 5 (NW32-52-26)	Commercial / Industrial	63.26	-	63.26	-	3.22	60.04
502.0	Acheson Zone 5 (NE32-52-26)	Commercial / Industrial	4.04	-	4.04	-	-	4.04
502.1	Acheson Zone 5 (NE32-52-26)	Commercial / Industrial	4.05	-	4.05	-	-	4.05
503.0	Acheson Zone 5 (NW33-52-26)	Commercial / Industrial	34.17	-	34.17	-	-	34.17
503.1	Acheson Zone 5 (NW33-52-26)	Commercial / Industrial	-	-	-	-	-	-
504.0	Acheson Zone 5 (NE33-52-26)	Commercial / Industrial	19.15	-	19.15	-	-	19.15
504.1	Acheson Zone 5 (NE33-52-26)	Commercial / Industrial	33.42	-	33.42	-	-	33.42
505.0	Acheson Zone 5 (SE33-52-26)	Commercial / Industrial	64.14	-	64.14	-	-	64.14
506.0	Acheson Zone 5 (SW33-52-26)	Commercial / Industrial	63.59	-	63.59	-	-	63.59
507.0	Acheson Zone 5 (SE32-52-26)	Commercial / Industrial	-	-	-	-	-	-
508.0	Acheson Zone 5 (SW32-52-26)	Commercial / Industrial	64.70	1.08	63.62	-	-	63.62
601.0	Acheson Zone 6 (NW34-52-26)	Commercial / Industrial	53.54	0.50	53.04	-	-	53.04
602.0	Acheson Zone 6 (NE34-52-26)	Commercial / Industrial	60.23	-	60.23	-	3.22	57.01
603.0	Acheson Zone 6 (NW35-52-26)	Commercial / Industrial	62.30	3.70	58.60	-	3.22	55.38
604.0	Acheson Zone 6 (NE35-52-26)	Commercial / Industrial	53.11	-	53.11	-	16.20	36.91
605.0	Acheson Zone 6 (SE35-52-26)	Commercial / Industrial	64.75	-	64.75	-	-	64.75
606.0	Acheson Zone 6 (SW35-52-26)	Commercial / Industrial	63.88	-	63.88	-	-	63.88
607.0	Acheson Zone 6 (SE34-52-26)	Commercial / Industrial	64.72	-	64.72	-	-	64.72
608.0	Acheson Zone 6 (SW34-52-26)	Commercial / Industrial	57.14	-	57.14	-	3.22	53.92
701.0	Acheson Zone 7 (NW29-52-26)	Commercial / Industrial	64.75	-	64.75	-	3.22	61.53
702.0	Acheson Zone 7 (NE29-52-26)	Commercial / Industrial	64.34	-	64.34	-	3.22	61.12
703.0	Acheson Zone 7 (NW28-52-26)	Commercial / Industrial	64.75	-	64.75	-	3.22	61.53
704.0	Acheson Zone 7 (NE28-52-26)	Commercial / Industrial	61.73	-	61.73	-	3.22	58.51
705.0	Acheson Zone 7 (SE28-52-26)	Commercial / Industrial	61.46	-	61.46	-	61.46	-
706.0	Acheson Zone 7 (SW28-52-26)	Commercial / Industrial	64.01	-	64.01	-	16.20	47.81
707.0	Acheson Zone 7 (SE29-52-26)	Commercial / Industrial	64.23	1.54	62.69	-	2.42	60.27
708.0	Acheson Zone 7 (SW29-52-26)	Commercial / Industrial	64.79	-	64.79	-	2.42	62.37

801.0	Acheson Zone 8 (NW27-52-26)	Commercial / Industrial	56.85	0.60	56.25	-	3.22	53.03
802.0	Acheson Zone 8 (NE27-52-26)	Commercial / Industrial	63.95	0.96	62.99	-	3.22	59.77
803.0	Acheson Zone 8 (NW26-52-26)	Commercial / Industrial	64.75	1.10	63.65	-	3.22	60.43
804.0	Acheson Zone 8 (NE26-52-26)	Commercial / Industrial	64.90	2.40	62.50	-	3.22	59.28
805.0	Acheson Zone 8 (SE26-52-26)	Commercial / Industrial	64.02	-	64.02	-	32.38	31.64
806.0	Acheson Zone 8 (SW26-52-26)	Commercial / Industrial	64.35	-	64.35	-	24.28	40.07
807.0	Acheson Zone 8 (SE27-52-26)	Commercial / Industrial	63.62	-	63.62	-	24.28	39.34
808.0	Acheson Zone 8 (SW27-52-26)	Commercial / Industrial	59.82	-	59.82	-	59.82	-
901.0	Big Lake West (W1/2 of 17-53-26)	Residential	93.56	18.40	75.16	7.52	-	67.64
902.0	Big Lake West (E1/2 of 17-53-26)	Residential	69.47	52.19	17.28	1.73	-	15.55
903.0	Big Lake West (N1/2 of 16-53-26)	Residential	8.41	-	8.41	0.84	-	7.57
904.0	Big Lake West (S1/2 of 16-53-26)	Residential	78.77	-	78.77	7.88	-	70.89
1001.0	Big Lake East (Pt. W1/2 of 15-53-26)	Residential	36.60	11.09	25.51	2.55	-	22.96
1002.0	Big Lake East (NE15-53-26)	Residential	55.69	19.19	36.50	3.65	-	32.85
1003.0	Big Lake East (NW14-53-26)	Residential	62.17	4.71	57.46	5.75	-	51.71
1004.0	Big Lake East (S1/2 of 23 & NE14-53-26)	Residential	-	-	-	-	-	-
1005.0	Big Lake East (SE14-53-26)	Residential	22.50	4.40	18.10	1.81	-	16.29
1006.0	Big Lake East (SW16-53-26)	Residential	24.42	-	24.42	2.44	-	21.98
1007.0	Big Lake East (Pt. SE15-53-26)	Residential	30.76	3.51	27.25	2.73	-	24.53
1101.0	Acheson West (SW18-53-26)	Commercial / Industrial	48.16	-	48.16	-	-	48.16
1102.0	Acheson West (SE18-53-26)	Commercial / Industrial	44.17	-	44.17	-	-	44.17
1103.0	Acheson West (Sec.7-53-26)	Commercial / Industrial	31.83	0.25	31.58	-	-	31.58
1104.0	Acheson West (NE12-53-27)	Commercial / Industrial	64.34	2.70	61.64	-	-	61.64
1105.0	Acheson West (SE12-53-27)	Commercial / Industrial	64.33	-	64.33	-	-	64.33
1106.0	Acheson West (NE1-53-27)	Commercial / Industrial	64.34	14.07	50.27	-	-	50.27
1107.0	Acheson West (NW6-53-26)	Commercial / Industrial	64.35	-	64.35	-	-	64.35
1108.0	Acheson West (NE6-53-26)	Commercial / Industrial	64.35	-	64.35	-	-	64.35
1109.0	Acheson West (SE6-53-26) - North of Railway	Commercial / Industrial	25.80	-	25.80	-	-	25.80
1110.0	Acheson West (SW6-53-26) - North of Railway	Commercial / Industrial	39.25	-	39.25	-	-	39.25
1111.0	Acheson West (SE1-53-27) - North of Railway	Commercial / Industrial	41.27	9.37	31.90	-	-	31.90
1112.0	Acheson West (SW6-53-26) - South of Railway	Commercial / Industrial	11.04	-	11.04	-	-	11.04
1113.0	Acheson West (SE6-53-26) - South of Railway	Commercial / Industrial	31.97	-	31.97	-	-	31.97
1201.0	Fifth Meridian (NW12-53-1) - North of Watercourse	Commercial / Industrial	20.74	3.92	16.82	-	-	16.82
1202.0	Fifth Meridian (NE12-53-1)	Commercial / Industrial	50.51	6.00	44.51	-	-	44.51
1203.0	Fifth Meridian (SE12-53-1)	Commercial / Industrial	62.52	1.60	60.92	-	-	60.92
1204.0	Fifth Meridian (SW12-53-1)	Residential	64.75	6.70	58.05	5.81	-	52.25
1205.0	Fifth Meridian (NW12-53-1) - South of Watercourse	Residential	30.45	9.44	21.01	2.10	-	18.91
1301.0	Fifth Meridian (NW12-53-28)	Commercial / Industrial	17.60	-	17.60	-	-	17.60
1302.0	Fifth Meridian (NE12-53-28)	Commercial / Industrial	51.75	3.62	48.13	-	-	48.13
1303.0	Fifth Meridian (SE12-53-28)	Commercial / Industrial	64.21	2.75	61.46	-	-	61.46
1304.0	Fifth Meridian (SW12-53-28)	Commercial / Industrial	27.66	-	27.66	-	-	27.66
1401.0	Fifth Meridian (NW7-53-27) - North of watercourse	Commercial / Industrial	14.44	-	14.44	-	-	14.44
1402.0	Fifth Meridian (NE7-53-27)	Residential	49.19	7.22	41.97	4.20	-	37.77
1403.0	Fifth Meridian (SE7-53-27)	Residential	64.75	24.28	40.47	4.05	-	36.42
1404.0	Fifth Meridian (SW7-53-27)	Residential	64.36	0.60	63.76	6.38	-	57.38
1405.0	Fifth Meridian (NW7-53-27) - South of watercourse	Residential	34.36	-	34.36	-	-	34.36
1501.0	Acheson West (NW31-52-26)	Commercial / Industrial	61.92	4.00	57.92	-	-	57.92
1502.0	Acheson West (NE31-52-26)	Commercial / Industrial	62.32	-	62.32	-	-	62.32
1600.1	Big Lake East (Lot 1 & 2, Plan 4149TR in SW15-53-26)	Residential	39.82	-	39.82	3.98	2.31	33.53
1600.2	Big Lake East (Pt. SE15-53-26)	Residential	30.45	-	30.45	3.05	0.62	26.79
1600.3	Acheson Zone 2 (Pt. NW11-53-26)	Commercial / Industrial	2.41	-	2.41	-	-	2.41
1600.4	Acheson Zone 2 (Pt. SE10-53-26 and Pt. NE3-53-26 N of Rail)	Commercial / Industrial	25.93	-	25.93	-	-	25.93
1600.5	Acheson Zone 2 (Pt. NW2-53-26 North of Rail)	Commercial / Industrial	3.70	-	3.70	-	-	3.70
1600.6	Acheson Zone 2 (Pt. NE2-53-26 North of Rail)	Commercial / Industrial	0.40	-	0.40	-	-	0.40
1600.7	Acheson Zone 4 (Plan 9624108 in NE3-53-26)	Commercial / Industrial	8.10	-	8.10	-	-	8.10
1600.8	Acheson Zone 4 (Lot 2, Plan 0722672 in SW3-53-26)	Commercial / Industrial	-	-	-	-	-	-
Total			4,773.05	300.25	4,472.80	73.68	336.06	4,063.05

Summary of Offsite Levy Net Development Area

Planning Area	Gross Area (Ha)	Less Environmental Reserve (ha)	Less Municipal Reserve (Ha)	Less Arterial/Hwy Right-of-Way (Ha)	Net Development Area (Ha)
Acheson	3,603.14	120.63	7.25	0	3,142.13
Big Lake	552.62	113.49	43.91	2.93	392.29
Fifth Meridian	617.29	66.13	22.53	333.13	528.63
All Development Areas	4,773.05	300.25	73.68	336.06	4,063.05

*Note: 1 Hectare = ~2.47 Acres

Net development area definitions will be applied in determining offsite levy obligations of developers on application for subdivision or development within the County. Net development area is defined as follows:

- Gross Area – The area of lands to be developed in hectares that have not previously paid an offsite levy.
 - Less: Any environmental reserves contained within the development area, including environmental reserves and environmental easements.
 - Less: A 10% allowance for Municipal Reserves.
 - Less: The measurement of highway and arterial right of way that bisects the development lands.
- Equals: Net Developable Area, which is the area subject to offsite levies.

3.1 Development Staging

A rate planning period of 25 years was used for this review. This planning period is used by many municipalities as it provides a reasonable time frame to recoup the costs associated with offsite infrastructure construction (without risk of “front-ending stagnation”), and it aligns with the timeframes of many municipal capital planning and construction cycles.

Of the ~4063 hectares of net development area available across all offsite levy areas, Planning & Development Services estimate that approximately 39% of this land (~1587 hectares) will develop during the rate planning period as shown in the tables below.

Summary of Development during the Rate Planning Period (25 years)

Developed Since Model Created	136.07	3.3%
Developed In Next 25 Years	1,586.82	39.1%
Developed Beyond 25 Years	2,340.15	57.6%
Net Development Area	4,063.04	100.0%

Net development areas have been further classified according to anticipated land use. Land use classifications include: (1) Residential, and (2) Commercial / Industrial. The table below outlines the anticipated development by land use type during the rate planning period, and compares it to the previous rate update.

Development by Land Use Type during the Rate Planning Period (25 years)

	Updated	(2017)		Previous	(2016)
Land Use Type	Net Development Area In Next 25 Years	%		Net Development Area In Next 25 Years	%
Residential	323.19	20.4%		323.19	24.8%
Commercial / Industrial	1,263.63	75.2%		978.77	75.2%
Total	1,586.82	100.0%		1,301.96	100.0%

Anticipated Development during the Rate Planning Period (25 years)

[illegible]

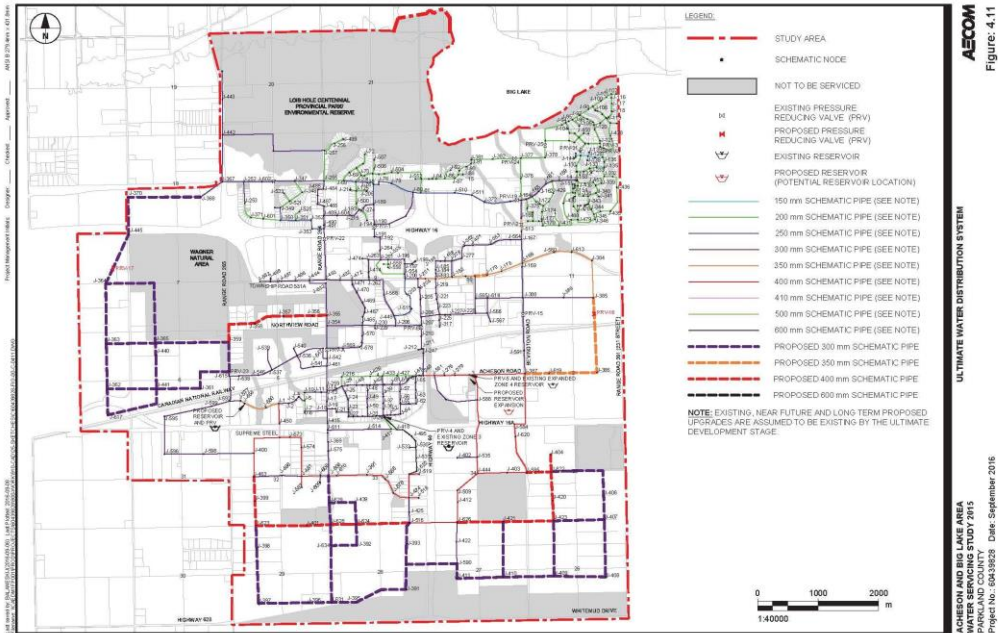
4 WATER

4.1 Water Offsite Infrastructure

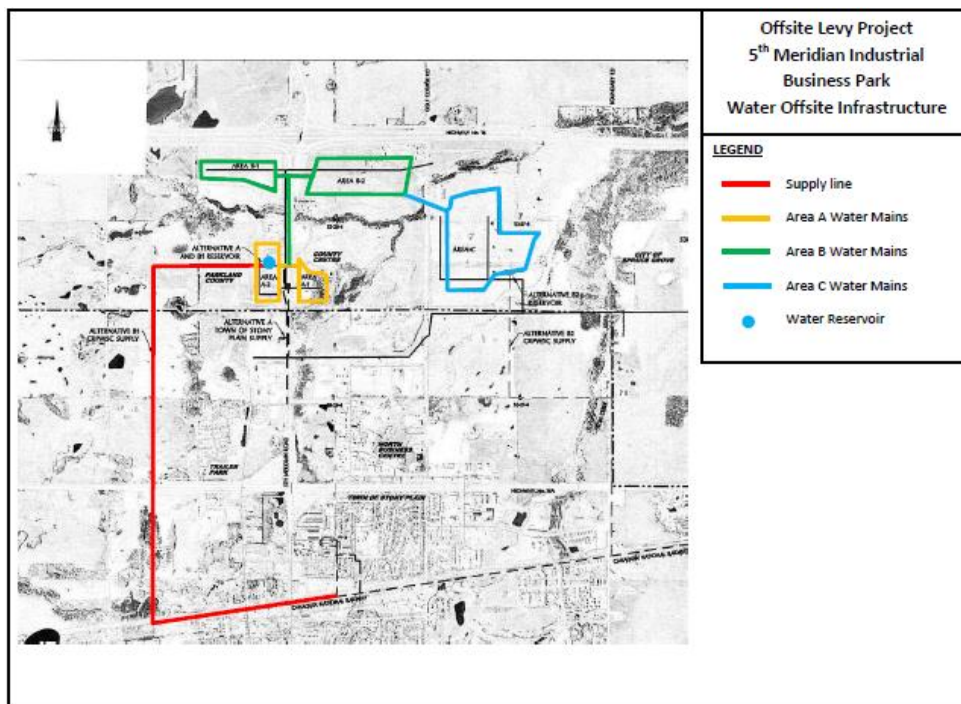
In order to support growth in the County, water offsite infrastructure is required. The model contains 24 water offsite infrastructure projects (2015 – 20 projects), as shown on the maps below:

Location of Water Offsite Infrastructure

Acheson / Big Lake Water Projects Map:



Fifth Meridian Water Projects Map:



The estimated total cost of this infrastructure is comprised of:

- (a) actual construction costs to date;
- (b) debenture interest associated with financing; and
- (c) cost estimates.

Total cost is approximately \$128.95 million (2015 - \$63.73 million) as outlined in the table below. Actual costs, debenture interest (if any), and cost estimates were provided by County staff and engineering advisors. It is important to note that these costs represent “gross” costs, of which only a portion will go to support new development during the 25-year review period. The remainder of this section outlines how total costs are equitably apportioned to new development/growth.

Summary of Water Offsite Infrastructure

Item	Project Description	Cost of Completed Work	Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Estimated Cost
1	Zone 4 Reservoir Expansion (9000m3)	\$ -		\$ 7,200,000	\$ 7,200,000
2	Zone 3 Pump Upgrade	\$ -		\$ -	\$ -
3	Zone 3 Pump Upgrade	\$ -		\$ -	\$ -
4	Zone 3 New West Acheson Park Reservoir 9000m3 & Pumphouse	\$ -		\$ 9,630,000	\$ 9,630,000
5	Zone 3 West Acheson Park Reservoir Expansion 15,000m3	\$ -		\$ 12,000,000	\$ 12,000,000
6	Zone 1 Water Mains	\$ -		\$ 5,420,115	\$ 5,420,115
7	Zone 2 Water Mains	\$ 1,579,772		\$ 1,971,304	\$ 3,551,076
8	Big Lakes East Water Mains	\$ -		\$ 7,579,170	\$ 7,579,170
9	Big Lakes West Water Mains	\$ -		\$ 8,883,203	\$ 8,883,203
10	Zone 3 Water Mains	\$ -		\$ 1,139,603	\$ 1,139,603
11	5th Meridian - Supply Line From Regional Line	\$ -		\$ 3,240,100	\$ 3,240,100
12	5th Meridian - Water Reservoir	\$ -		\$ 7,800,000	\$ 7,800,000
13	5th Meridian (Area A) - Water Mains	\$ -		\$ 2,496,100	\$ 2,496,100
14	5th Meridian (Area B) - Water Mains	\$ -		\$ 4,069,000	\$ 4,069,000
15	5th Meridian (Area C) - Water Mains	\$ -		\$ 6,429,900	\$ 6,429,900
16		\$ -		\$ -	\$ -
17	Old Bylaw #52-2003 (A5 - Hunter's Watermain)	\$ 272,702	\$ 74,981	\$ -	\$ 347,683
18		\$ -		\$ -	\$ -
19	Zone 4 Water Mains	\$ -		\$ 6,164,843	\$ 6,164,843
20	Zone 5 Water Mains	\$ 5,620,043		\$ 4,654,070	\$ 10,274,113
21	Zone 6 Water Mains	\$ -		\$ 6,778,890	\$ 6,778,890
22	Zone 7 Water Mains	\$ -		\$ 3,774,701	\$ 3,774,701
23	Zone 8 Water Mains	\$ -		\$ 3,986,685	\$ 3,986,685
24	Zone 4 Reservoir Expansion (Adjacent to Zone 4 Reservoir) 17,270m3 & Pumphouse	\$ -		\$ 16,635,000	\$ 16,635,000
25	New PRVs (x9)	\$ -		\$ 1,546,875	\$ 1,546,875
		\$ 7,472,517	\$ 74,981	\$ 119,852,682	\$ 128,947,056
Legend:					
Projects Carried Forward From Last Year					
Projects Amended or Merged					
New Projects					
Projects Completed					
* The numbering sequence accounts for those projects that were previously removed.					

4.2 Water Offsite Infrastructure Grants & Contributions to Date

The *Municipal Government Act* enables the County to recoup costs for infrastructure, other than those costs that have been provided by way of special grant or contribution (i.e., contributed infrastructure). Parkland County has not received any special grants, but has received contributions for water offsite infrastructure as shown in the table below (note, if the County receives other grants in the future, it will be reflected in one of the annual updates and rates adjusted accordingly). The County has collected Contributions of approximately \$143 thousand from Development Agreements. The result is that the total reduced project estimated cost is \$128.8 million (2015 - \$63.7 million).

Special Grants and Contributions for Water Offsite Infrastructure

Item	Project Description	Total Project Estimated Cost	Special Provincial Grants	Developer Agreement Contributions	Reduced Project Estimated Cost
1	Zone 4 Reservoir Expansion (9000m3)	\$ 7,200,000			\$ 7,200,000
2	Zone 3 Pump Upgrade	\$ -			\$ -
3	Zone 3 Pump Upgrade	\$ -			\$ -
4	Zone 3 New West Acheson Park Reservoir 9000m3 & Pumphouse	\$ 9,630,000		\$ 34,123	\$ 9,595,877
5	Zone 3 West Acheson Park Reservoir Expansion 15,000m3	\$ 12,000,000			\$ 12,000,000
6	Zone 1 Water Mains	\$ 5,420,115		\$ 15,463	\$ 5,404,652
7	Zone 2 Water Mains	\$ 3,551,076			\$ 3,551,076
8	Big Lakes East Water Mains	\$ 7,579,170			\$ 7,579,170
9	Big Lakes West Water Mains	\$ 8,883,203			\$ 8,883,203
10	Zone 3 Water Mains	\$ 1,139,603			\$ 1,139,603
11	5th Meridian - Supply Line From Regional Line	\$ 3,240,100			\$ 3,240,100
12	5th Meridian - Water Reservoir	\$ 7,800,000			\$ 7,800,000
13	5th Meridian (Area A) - Water Mains	\$ 2,496,100			\$ 2,496,100
14	5th Meridian (Area B) - Water Mains	\$ 4,069,000			\$ 4,069,000
15	5th Meridian (Area C) - Water Mains	\$ 6,429,900			\$ 6,429,900
16		\$ -			\$ -
17	Old Bylaw #52-2003 (A5 - Hunter's Watermain)	\$ 347,683		\$ 21,811	\$ 325,872
18		\$ -			\$ -
19	Zone 4 Water Mains	\$ 6,164,843			\$ 6,164,843
20	Zone 5 Water Mains	\$ 10,274,113		\$ 71,877	\$ 10,202,236
21	Zone 6 Water Mains	\$ 6,778,890			\$ 6,778,890
22	Zone 7 Water Mains	\$ 3,774,701			\$ 3,774,701
23	Zone 8 Water Mains	\$ 3,986,685			\$ 3,986,685
24	Zone 4 Reservoir Expansion (Adjacent to Zone 4 Reservoir) 17,270m3 & Pumphouse	\$ 16,635,000			\$ 16,635,000
25	New PRVs (x9)	\$ 1,546,875			\$ 1,546,875
		\$ 128,947,056	\$ -	\$ 143,273	\$ 128,803,783

4.3 Water Offsite Infrastructure Benefiting Parties

The water offsite infrastructure previously outlined will benefit various parties to varying degrees. There are three potential benefiting parties:

- Parkland County – a portion of the water infrastructure which is required to service existing development.
- Other Stakeholders (or oversizing) – other parties (such as neighboring municipalities) that benefit from infrastructure, as well as that portion of the infrastructure that benefits development beyond the 25 year review period (i.e. oversizing).
- Parkland County Developers – all growth related infrastructure (i.e., levyable water infrastructure costs).

The table below outlines the allocation of water offsite infrastructure costs to benefiting parties. Percentage allocations have been determined after reducing water offsite infrastructure costs for grants and contribution described earlier. Most infrastructure supports new development. That portion of developer cost that has been “deferred” beyond the 25 year review period has been separated from that portion of cost which is included in the current rates.

Allocation of Water Infrastructure to Benefiting Parties

Item	Project Description	Reduced Project Estimated Cost	County Share %	Other Stakeholder Share & Oversizing %	OSL / Developer Share %
1	Zone 4 Reservoir Expansion (9000m3)	\$ 7,200,000		32.0%	68.0%
2	Zone 3 Pump Upgrade	\$ -		0.0%	100.0%
3	Zone 3 Pump Upgrade	\$ -		0.0%	100.0%
4	Zone 3 New West Acheson Park Reservoir 9000m3 & Pumphouse	\$ 9,595,877		104.0%	-4.0%
5	Zone 3 West Acheson Park Reservoir Expansion 15,000m3	\$ 12,000,000		16.0%	84.0%
6	Zone 1 Water Mains	\$ 5,404,652		0.0%	100.0%
7	Zone 2 Water Mains	\$ 3,551,076		32.0%	68.0%
8	Big Lakes East Water Mains	\$ 7,579,170		32.0%	68.0%
9	Big Lakes West Water Mains	\$ 8,883,203		32.0%	68.0%
10	Zone 3 Water Mains	\$ 1,139,603		32.0%	68.0%
11	5th Meridian - Supply Line From Regional Line	\$ 3,240,100		16.0%	84.0%
12	5th Meridian - Water Reservoir	\$ 7,800,000		16.0%	84.0%
13	5th Meridian (Area A) - Water Mains	\$ 2,496,100		16.0%	84.0%
14	5th Meridian (Area B) - Water Mains	\$ 4,069,000		32.0%	68.0%
15	5th Meridian (Area C) - Water Mains	\$ 6,429,900		32.0%	68.0%
16		\$ -		0.0%	100.0%
17	Old Bylaw #52-2003 (A5 - Hunter's Watermain)	\$ 325,872	6.6%	0.0%	93.4%
18		\$ -		0.0%	100.0%
19	Zone 4 Water Mains	\$ 6,164,843		32.0%	68.0%
20	Zone 5 Water Mains	\$ 10,202,236		32.0%	68.0%
21	Zone 6 Water Mains	\$ 6,778,890		32.0%	68.0%
22	Zone 7 Water Mains	\$ 3,774,701		32.0%	68.0%
23	Zone 8 Water Mains	\$ 3,986,685		32.0%	68.0%
24	Zone 4 Reservoir Expansion (Adjacent to Zone 4 Reservoir) 17,270m3 & Pumphouse	\$ 16,635,000		100.0%	0.0%
25	New PRVs (x9)	\$ 1,546,875		32.0%	68.0%
		\$ 128,803,783			

**The allocation shown in the “oversizing” column represents that portion of cost that benefits development beyond the 25 year repayment period. It was determined by first establishing a “cost per year” for each project, and then comparing the anticipated year of construction to the current year to determine the amount of cost allocated beyond the 25 year period. For example, a project which costs \$25 million would have a cost of \$1 million per year. If the project was to be built in year 20, then 5 years’ worth of cost (\$5 million) would be included in the current rates, and 20 years’ worth of cost (\$20 million) would be deferred. During each future update, additional cost would be brought into the rates of the day.*

4.4 Existing Receipts

Prior to allocating costs to benefiting parties, existing offsite levy receipts collected from developers need to be considered in determining the residual/net costs to developers. As of December 31st, 2016, ~\$1.43 million of water levies were collected from developers by way of agreements signed prior to enactment of the previous 2013 Bylaw. These levies have been “credited” to the projects for which they were collected.

Also, ~\$1.32 million was collected under the current bylaw as shown in the table below. This increased from ~\$1.24 million at the last update. This results in a residual developer cost of \$72.51 million.

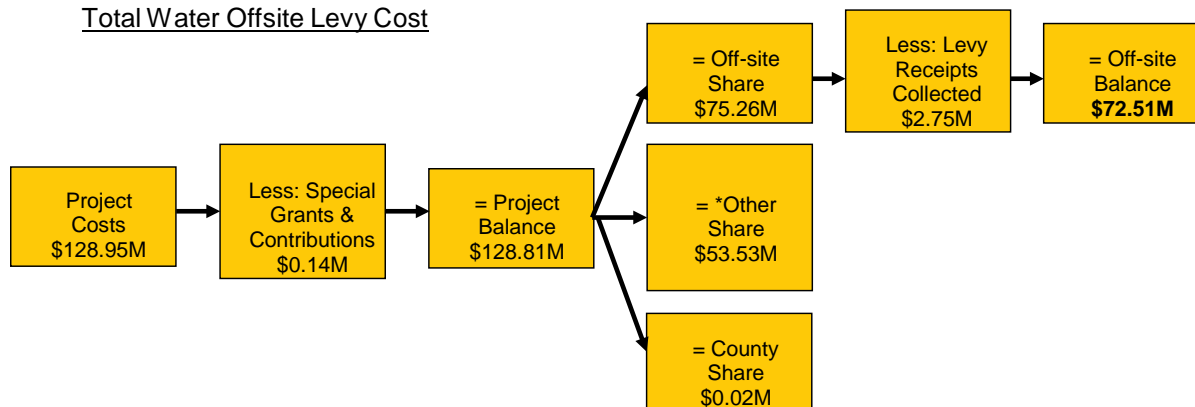
Offsite Levy Funds Collected to Date

Item	Project Description	Developer Cost (Leviable Costs)	Offsite Levy Funds Collected Under Old Bylaw No. 2013-03	Developer (Levy) Funds Collected	Adjusted Developer (Levy) Cost
1	Zone 4 Reservoir Expansion (9000m3)	\$ 4,896,000		\$ 123,542	\$ 4,772,458
2	Zone 3 Pump Upgrade	\$ -		\$ 4,342	\$ (4,342)
3	Zone 3 Pump Upgrade	\$ -		\$ 4,342	\$ (4,342)
4	Zone 3 New West Acheson Park Reservoir 9000m3 & Pumphouse	\$ (383,835)	\$ 1,063,781	\$ 366,180	\$ (1,813,796)
5	Zone 3 West Acheson Park Reservoir Expansion 15,000m3	\$ 10,080,000		\$ 54,491	\$ 10,025,509
6	Zone 1 Water Mains	\$ 5,404,652	\$ 123,287	\$ 7,134	\$ 5,274,231
7	Zone 2 Water Mains	\$ 2,414,732		\$ 17,634	\$ 2,397,097
8	Big Lakes East Water Mains	\$ 5,153,836		\$ 54,027	\$ 5,099,809
9	Big Lakes West Water Mains	\$ 6,040,578	\$ 36,224	\$ -	\$ 6,004,354
10	Zone 3 Water Mains	\$ 774,930		\$ -	\$ 774,930
11	5th Meridian - Supply Line From Regional Line	\$ 2,721,684		\$ -	\$ 2,721,684
12	5th Meridian - Water Reservoir	\$ 6,552,000		\$ -	\$ 6,552,000
13	5th Meridian (Area A) - Water Mains	\$ 2,096,724		\$ -	\$ 2,096,724
14	5th Meridian (Area B) - Water Mains	\$ 2,766,920		\$ -	\$ 2,766,920
15	5th Meridian (Area C) - Water Mains	\$ 4,372,332		\$ -	\$ 4,372,332
16	0	\$ -		\$ -	\$ -
17	Old Bylaw #52-2003 (A5 - Hunter's Watermain)	\$ 304,345	\$ 211,318	\$ -	\$ 93,026
18	0	\$ -		\$ -	\$ -
19	Zone 4 Water Mains	\$ 4,192,093		\$ -	\$ 4,192,093
20	Zone 5 Water Mains	\$ 6,937,521		\$ 687,607	\$ 6,249,913
21	Zone 6 Water Mains	\$ 4,609,645		\$ -	\$ 4,609,645
22	Zone 7 Water Mains	\$ 2,566,797		\$ -	\$ 2,566,797
23	Zone 8 Water Mains	\$ 2,710,946		\$ -	\$ 2,710,946
24	Zone 4 Reservoir Expansion (Adjacent to Zone 4 Reservoir) 17,270m3 & Pumphouse	\$ -		\$ -	\$ -
25	New PRVs (x9)	\$ 1,051,875		\$ -	\$ 1,051,875
		\$ 75,263,773	\$ 1,434,610	\$ 1,319,299	\$ 72,509,864

4.5 Total Water Offsite Levy Costs

As shown in the figure below, the total cost for water infrastructure that forms the basis of the rate is approximately \$72.51 million (2015 - \$32.66 million). The cost allocations to each benefitting party are based on the benefitting percentages shown in Section 4.3. The offsite levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).

Total Water Offsite Levy Cost



“*Other Share” represents the portion of cost allocated to other benefitting parties such as neighbouring municipalities, other orders of government, etc., as well as that portion of cost allocated beyond the 25 year review period.

Net developer costs for each project have been allocated to multiple benefiting offsite levy areas (see table below). Allocations are denoted with a “1” below applicable areas. Benefiting areas were determined by County engineering staff and advisors.

Item	Project Description	Developer Cost	101.0	102.0	103.0	103.1	104.0	104.1	105.0	105.1	106.0	107.0	108.0	109.0	110.0	111.0	111.1	201.0	201.1	202.0	203.0	204.0	205.0	206.0	207.0	208.0	208.1	301.0	302.0	302.1	303.0	304.0
1	Zone 4 Reservoir Expansion (9000m3)	\$ 4,772,458	1	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	Zone 3 Pump Upgrade	\$ (4,342)	1	1	1	1	1	1	1	1	1				1	1	1	1	1	1	1			1	1	1	1	1	1	1	1	1
3	Zone 3 Pump Upgrade	\$ (4,342)	1	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	Zone 3 New West Acheson Park Reservoir 9000m3 & Pumphouse	\$ (1,813,795)	1	1	1	1	1	1	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	Zone 3 West Acheson Park Reservoir Expansion 15,000m3	\$ 10,025,509	1	1	1	1	1	1	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	Zone 1 Water Mains	\$ 5,274,231	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	Zone 2 Water Mains	\$ 2,397,097																1	1	1	1	1	1	1	1	1						
8	Big Lakes East Water Mains	\$ 5,099,809																				1	1	1	1	1						
9	Big Lakes West Water Mains	\$ 6,004,354																														
10	Zone 3 Water Mains	\$ 774,930																										1	1	1	1	1
11	5th Meridian - Supply Line From Regional Line	\$ 2,721,684																														
12	5th Meridian - Water Reservoir	\$ 6,552,000																														
13	5th Meridian (Area A) - Water Mains	\$ 2,096,724																														
14	5th Meridian (Area B) - Water Mains	\$ 2,766,920																														
15	5th Meridian (Area C) - Water Mains	\$ 4,372,332																														
17	Old Bylaw #52-2003 (A5 - Hunter's Watermain)	\$ 93,026							1							1		1									1					
19	Zone 4 Water Mains	\$ 4,192,093																														
20	Zone 5 Water Mains	\$ 6,249,913																														
21	Zone 6 Water Mains	\$ 4,609,645																														
22	Zone 7 Water Mains	\$ 2,566,797																														
23	Zone 8 Water Mains	\$ 2,710,946																														
24	Zone 4 Reservoir Expansion (Adjacent to Zone 4 Reservoir) 17,270m3 & Pumphouse																															

2016 Off-Site Levy Annual Report Page 14 of 45

Item	Project Description	Developer Cost	702.0	703.0	704.0	705.0	706.0	707.0	708.0	801.0	802.0	803.0	804.0	805.0	806.0	807.0	808.0	901.0	902.0	903.0	904.0	1001.0	1002.0	1003.0	1004.0	1005.0	1006.0	1007.0	1101.0	1102.0	1103.0	1104.0
1	Zone 4 Reservoir Expansion (9000m3)	\$ 4,772,458																1	1	1	1	1	1	1	1	1	1	1	1	1		
2	Zone 3 Pump Upgrade	\$ (4,342)																1	1	1	1	1	1	1	1	1	1	1	1	1		
3	Zone 3 Pump Upgrade	\$ (4,342)																1	1	1	1	1	1	1	1	1	1	1	1	1		
4	Zone 3 New West Acheson Park Reservoir 9000m3 & Pumphouse	\$ (1,813,796)	1	1	1	1	1	1	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	Zone 3 West Acheson Park Reservoir Expansion 15,000m3	\$ 10,025,509	1	1	1	1	1	1	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	Zone 1 Water Mains	\$ 5,274,231																														
7	Zone 2 Water Mains	\$ 2,397,097																														
8	Big Lakes East Water Mains	\$ 5,099,809																														
9	Big Lakes West Water Mains	\$ 6,004,354																1	1	1	1											
10	Zone 3 Water Mains	\$ 774,930																														
11	5th Meridian - Supply Line From Regional Line	\$ 2,721,684																														
12	5th Meridian - Water Reservoir	\$ 6,552,000																														
13	5th Meridian (Area A) - Water Mains	\$ 2,096,724																														
14	5th Meridian (Area B) - Water Mains	\$ 2,766,920																														
15	5th Meridian (Area C) - Water Mains	\$ 4,372,332																														
17	Old Bylaw #52-2003 (A5 - Hunter's Watermain)	\$ 93,026																														
19	Zone 4 Water Mains	\$ 4,192,093																														
20	Zone 5 Water Mains	\$ 6,249,913																														
21	Zone 6 Water Mains	\$ 4,609,645																														
22	Zone 7 Water Mains	\$ 2,566,797	1	1	1	1	1	1	1																							
23	Zone 8 Water Mains	\$ 2,710,946								1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24	Zone 4 Reservoir Expansion (Adjacent to Zone 4 Reservoir) 17,270m3 & Pumphouse	\$ -	1	1	1	1	1	1	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	New PRVs (x9)	\$ 1,051,875	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		\$ 72,509,864																														

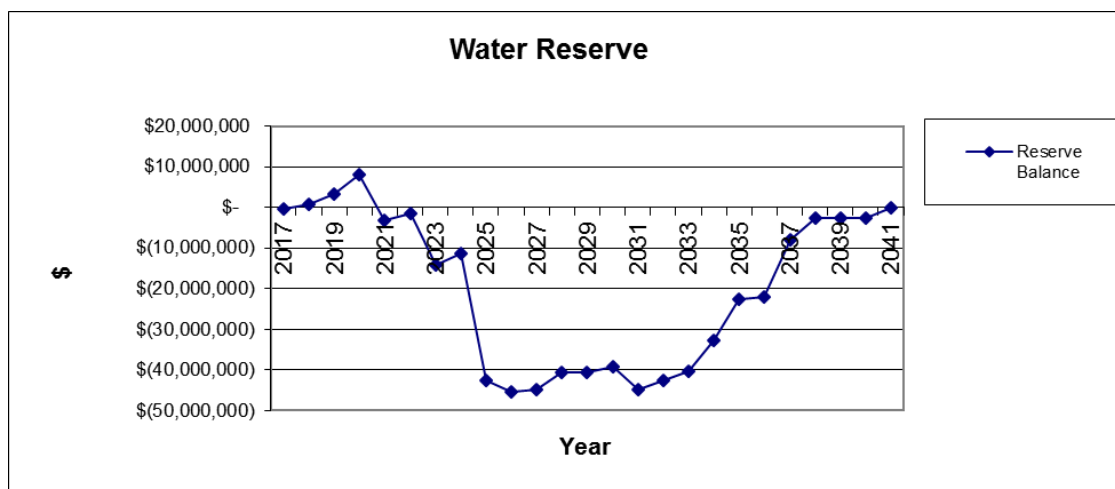
Item	Project Description	Developer Cost	1105.0	1106.0	1107.0	1108.0	1109.0	1110.0	1111.0	1112.0	1113.0	1201.0	1202.0	1203.0	1204.0	1205.0	1301.0	1302.0	1303.0	1304.0	1401.0	1402.0	1403.0	1404.0	1405.0	1501.0	1502.0	1600.1	1600.2	1600.3	1600.4	1600.5	1600.6	1600.7	1600.8	
1	Zone 4 Reservoir Expansion (9000m3)	\$ 4,772,458																																		
2	Zone 3 Pump Upgrade	\$ (4,342)																											1	1	1	1	1		1	1
3	Zone 3 Pump Upgrade	\$ (4,342)																											1	1	1	1	1		1	1
4	Zone 3 New West Acheson Park Reservoir 9000m3 & Pumphouse	\$ (1,813,796)	1	1	1	1	1	1	1	1	1																1	1	1	1	1	1	1	1	1	1
5	Zone 3 West Acheson Park Reservoir Expansion 15,000m3	\$ 10,025,509	1	1	1	1	1	1	1	1	1																1	1	1	1	1	1	1	1	1	1
6	Zone 1 Water Mains	\$ 5,274,231																																		
7	Zone 2 Water Mains	\$ 2,397,097																																		
8	Big Lakes East Water Mains	\$ 5,099,809																											1	1						
9	Big Lakes West Water Mains	\$ 6,004,354																																		
10	Zone 3 Water Mains	\$ 774,930																																		
11	5th Meridian - Supply Line From Regional Line	\$ 2,721,684										1	1	1	1	1	1	1	1	1	1	1	1	1	1											
12	5th Meridian - Water Reservoir	\$ 6,552,000										1	1	1	1	1	1	1	1	1	1	1	1	1	1											
13	5th Meridian (Area A) - Water Mains	\$ 2,096,724											1																							
14	5th Meridian (Area B) - Water Mains	\$ 2,766,920											1					1	1		1															
15	5th Meridian (Area C) - Water Mains	\$ 4,372,332																					1	1	1	1										
17	Old Bylaw #52-2003 (A5 - Hunter's Watermain)	\$ 93,026																																		
19	Zone 4 Water Mains	\$ 4,192,093																																		
20	Zone 5 Water Mains	\$ 6,249,913																									1	1							1	1
21	Zone 6 Water Mains	\$ 4,609,645																																		
22	Zone 7 Water Mains	\$ 2,566,797																																		
23	Zone 8 Water Mains	\$ 2,710,946																																		
24	Zone 4 Reservoir Expansion (Adjacent to Zone 4 Reservoir) 17,270m3 & Pumphouse	\$ -	1	1	1	1	1	1	1	1	1																1	1	1	1	1	1	1	1	1	1
25	New PRVs (x9)	\$ 1,051,875	1	1	1	1	1	1	1	1	1																1	1	1	1	1	1	1	1	1	1
		\$ 72,509,864																																		

4.7 Development and Water Staging Impacts

Water offsite infrastructure will be constructed in staged fashion over the 25-year development period. We have reviewed the availability of offsite levy funds to meet these construction requirements and found that offsite levy reserve funds will not be sufficient to pay for construction of water infrastructure from time to time—front-ending of infrastructure will be required. A front-end is the party that constructs and pays up front for infrastructure that benefits other parties. The front-end is repaid over time as offsite levies are collected from future development.

In order to compensate parties for capital they provide in front-ending offsite infrastructure construction, a 1.50% interest allowance has been charged to the reserve in 2016 when in a negative balance. Further, a 1.50% interest credit has been provided to reduce offsite levy rates for interest earned on positive reserve balances. Interest earning and charge rates should be updated each year to reflect the current economic context. The graph and table below outline water levy reserve balances over the 25-year development period.

Anticipated Water Offsite Levy Reserve Balance



*A “staging adjustment” is made to rates to account for the anticipated impact of interest on the reserve (earning and charging rates). In this way, the reserve is assured to achieve breakeven at the end of the review period without collecting too much from developers or too little.

4.8 Water Reserve Balance

From end-2010 to end-2016 interest impacts on the reserve were captured in alignment with the interest earning and charging rates in effect at that time:

Interest Earning Rate

- 2011 and 2012 = 1.20%
- 2013 = 2.00%
- 2014 = 1.43%
- 2015 = 1.34%
- 2016 = 1.50%

Interest Charging Rate

- 2011 to 2013 = 3.00%
- 2014 = 3.86%
- 2015 = 3.057%
- 2016 = 1.50%

Notes

- ¼ year rule – expenditures are deemed to have been made in September each year.
- ½ year rule – receipts are deemed to have been made in June each year.

The water reserve balance as at December 31st, 2010 was amended to \$724,552 in alignment with year-end results that year, and front-ending amounts owed to front-ending parties. The reserve balance at December 31st, 2010 assumes that \$140,159 has not been withdrawn from the reserve to repay the front-ending parties what they were due up to that point in time. These parties were repaid in 2014.

As at December 31st, 2013 the water reserve balance was \$1,361,110. This balance includes the credit provided to Remington Development Agreement for front-ending of Zone 5 water offsite infrastructure. It was recommended at the end of 2013 that the County’s ledgers should be amended to reflect this balance. It is also recommended that the County develop a set of “manual sub-ledgers” to track the amounts due to front-ending parties, including interest owed in accordance with the rates in effect at that time.

As at December 31st, 2014 the water reserve balance was \$1,563,306.26.

As at December 31st, 2015 the water reserve balance was \$1,587,638.95.

As at December 31st, 2016 the water reserve balance was **\$1,823,084.45.**

Water Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Offsite Levy Expenditures to December 31, 2010		\$272,702.00	\$ (272,702.00)
Offsite Levy Receipt Allocations to December 31, 2010	\$ 132,542.66		\$ (140,159.34)
Unallocated Receipts to December 31, 2010	\$ 724,551.99		\$ 584,392.65
Front-ending Repayments Left In The Reserve to December 31st, 2010	\$ 140,159.34		\$ 724,551.99
Opening Balance December 31st, 2010			\$ 724,551.99
2011			\$ 724,551.99
Interest on Opening Balance (2011)	\$ 8,694.62		\$ 733,246.61
Project Expenditures (2011)		\$ -	\$ 733,246.61
Offsite Levy Receipts (2011)	\$ -		\$ 733,246.61
Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2011)	\$ 136,761.78		\$ 870,008.39
Debenture Interest (2011)		\$ -	\$ 870,008.39
Interest on Project Expenditure (2011)		\$ -	\$ 870,008.39
Interest on Offsite Levy Receipts (2011)	\$ -		\$ 870,008.39
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2011)	\$ 820.57		\$ 870,828.96
Interest on Debenture Interest (2011)		\$ -	\$ 870,828.96
2012			\$ 870,828.96
Interest on Opening Balance (2012)	\$ 10,449.95		\$ 881,278.91
Project Expenditures (2012)		\$ -	\$ 881,278.91
Offsite Levy Receipts (2012)	\$ -		\$ 881,278.91
Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2012)	\$ 165,087.60		\$ 1,046,366.51
Debenture Interest (2012)		\$ -	\$ 1,046,366.51
Interest on Project Expenditure (2012)		\$ -	\$ 1,046,366.51
Interest on Offsite Levy Receipts (2012)	\$ -		\$ 1,046,366.51
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2012)	\$ 990.53		\$ 1,047,357.04
Interest on Debenture Interest (2012)		\$ -	\$ 1,047,357.04
2013			\$ 1,047,357.04
Interest on Opening Balance (2013)	\$ 20,947.14		\$ 1,068,304.18
Project Expenditures (2013)		\$ 1,180,953.36	\$ (112,649.18)
Offsite Levy Receipts (2013)	\$ 1,210,281.00		\$ 1,097,631.82
Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2013)	\$ 257,655.73		\$ 1,355,287.55
Debenture Interest (2013)		\$ -	\$ 1,355,287.55
Interest on Project Expenditure (2013)		\$ 8,857.15	\$ 1,346,430.40
Interest on Offsite Levy Receipts (2013)	\$ 12,102.81		\$ 1,358,533.21
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2013)	\$ 2,576.56		\$ 1,361,109.77
Interest on Debenture Interest (2013)		\$ -	\$ 1,361,109.77
2014			\$ 1,361,109.77
Interest on Opening Balance (2014)	\$ 19,463.87		\$ 1,380,573.64
Project Expenditures (2014)		\$ 1,419,659.49	\$ (39,085.85)
Offsite Levy Receipts (2014)	\$ 1,454,065.89		\$ 1,414,980.04
Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2014)	\$ 150,552.91		\$ 1,565,532.95
Debenture Interest (2014)		\$ -	\$ 1,565,532.95
Interest on Project Expenditure (2014)		\$ 13,699.71	\$ 1,551,833.23
Interest on Offsite Levy Receipts (2014)	\$ 10,396.57		\$ 1,562,229.80
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2014)	\$ 1,076.45		\$ 1,563,306.26
Interest on Debenture Interest (2014)		\$ -	\$ 1,563,306.26
2015			\$ 1,563,306.26
Interest on Opening Balance (2015)	\$ 20,948.30		\$ 1,584,254.56
Project Expenditures (2015)		\$ 1,884,307.90	\$ (300,053.34)
Offsite Levy Receipts (2015)	\$ 1,884,307.90		\$ 1,584,254.56
Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2015)	\$ 5,126.01		\$ 1,589,380.57
Debenture Interest (2015)		\$ -	\$ 1,589,380.57
Interest on Project Expenditure (2015)		\$ 14,400.82	\$ 1,574,979.75
Interest on Offsite Levy Receipts (2015)	\$ 12,624.86		\$ 1,587,604.61
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2015)	\$ 34.34		\$ 1,587,638.95
Interest on Debenture Interest (2015)		\$ -	\$ 1,587,638.95
2016			\$ 1,587,638.95
Interest on Opening Balance (2016)	\$ 23,814.58		\$ 1,611,453.54
Project Expenditures (2016)		\$ 2,714,894.70	\$ (1,103,441.16)
Offsite Levy Receipts (2016)	\$ 2,789,506.77		\$ 1,686,065.61
Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2016)	\$ 125,338.36		\$ 1,811,403.97
Debenture Interest (2016)		\$ -	\$ 1,811,403.97
Interest on Project Expenditure (2016)		\$ 10,180.86	\$ 1,801,223.11
Interest on Offsite Levy Receipts (2016)	\$ 20,921.30		\$ 1,822,144.41
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2016)	\$ 940.04		\$ 1,823,084.45
Interest on Debenture Interest (2016)		\$ -	\$ 1,823,084.45

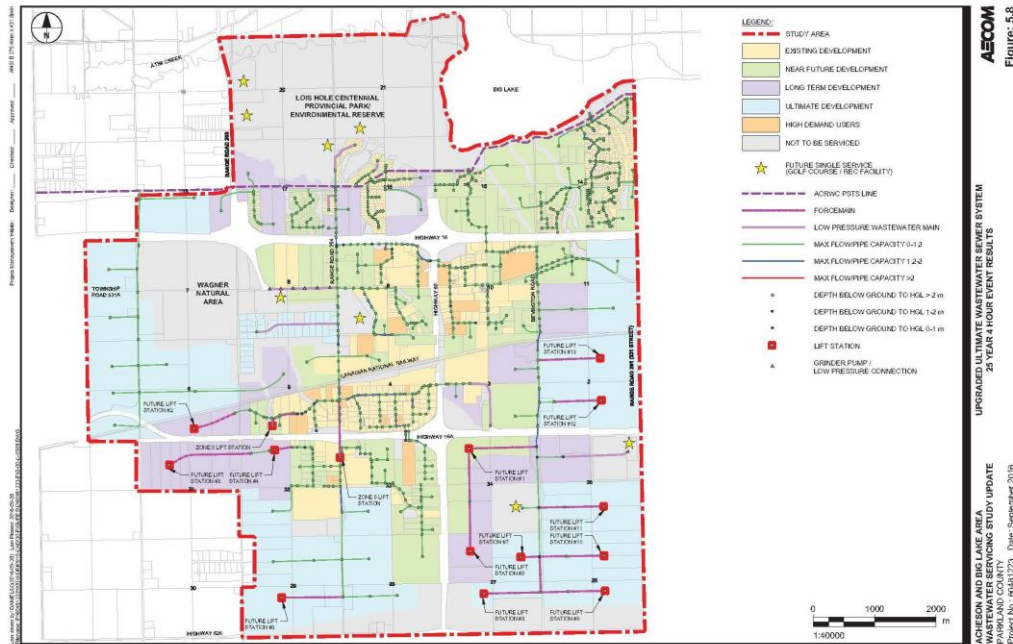
5 SANITARY

5.1 Sanitary Offsite Infrastructure

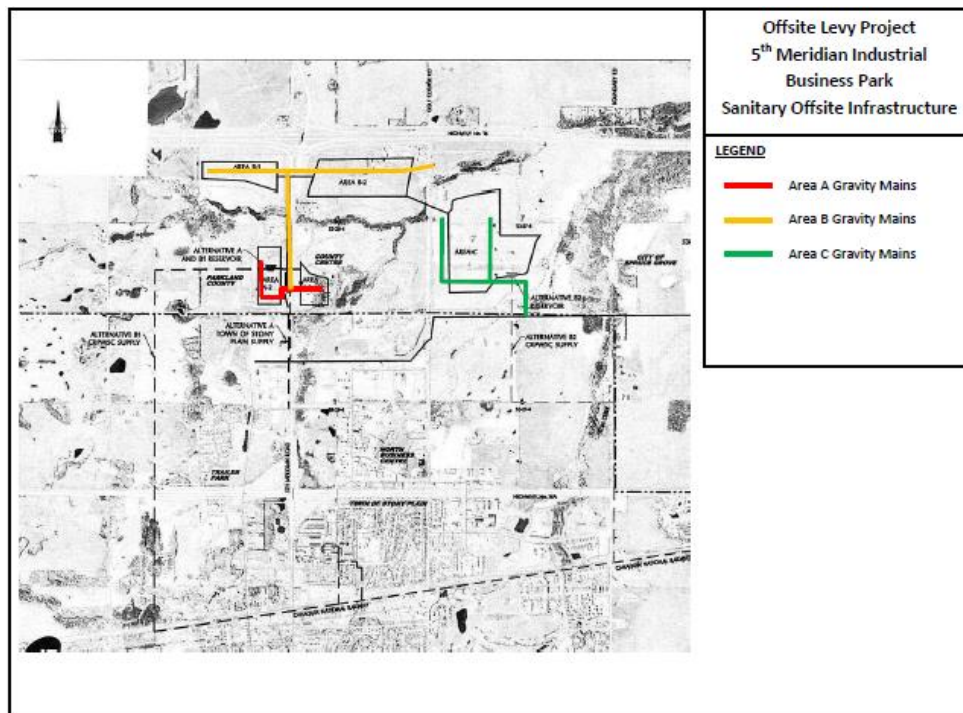
In order to support growth in the County, sanitary offsite infrastructure is required. The model contains 18 sanitary offsite infrastructure projects (2015 – 14 projects), as shown on the maps below:

Location of Sanitary Offsite Infrastructure

Acheson / Big Lake Sanitary Projects Map:



5th Meridian Sanitary Projects Map:



The estimated total cost of this infrastructure is comprised of:

- (a) actual construction costs to date;
- (b) debenture interest associated with financing; and
- (c) cost estimates.

Total cost is approximately \$28.48 million (2014 - \$17.34 million) as outlined in the table below. Actual costs, debenture interest (if any), and cost estimates were provided by County staff and engineering advisors. It is important to note that these costs represent “gross” costs, of which only a portion will go to support new development during the 25-year review period. The remainder of this section outlines how total costs are equitably apportioned to new development/growth.

Summary of Sanitary Offsite Infrastructure

Item	Project Description	Cost of Completed Work	Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Estimated Cost
1	5th Meridian (Area A) Gravity Main	\$ -		\$ 964,600	\$ 964,600
2	5th Meridian (Area B) Gravity Main	\$ -		\$ 3,024,580	\$ 3,024,580
3	5th Meridian (Area C) Gravity Main	\$ -		\$ 2,512,510	\$ 2,512,510
4	Parkland Business Park (Sewer Main Upsizing, etc)	\$ -		\$ 1,932,671	\$ 1,932,671
5	Parkland Industrial Estates (Sewer Main Upsizing, etc)	\$ -		\$ -	\$ -
6	Kalwin Business Park (Sewer Main Upsizing, etc)	\$ -		\$ 242,126	\$ 242,126
7	Acheson Road (Sewer Main Upsizing, etc)	\$ -		\$ 1,019,850	\$ 1,019,850
8	Glowing Embers (Sewer Main Upsizing, etc)	\$ 1,004,242		\$ -	\$ 1,004,242
9	Residential (Meridian Avenue) Creek Crossing (Sewer Main Upsizing, etc)	\$ -		\$ 550,344	\$ 550,344
10	Bevington Trunk (Hwy 16 A to Hwy 16 Parkland Industrial Estates)	\$ 5,825,711		\$ -	\$ 5,825,711
11	Old Bylaw #52-2003 (A1 - Acheson Trunk)	\$ 323,024	\$ 88,816.95	\$ -	\$ 411,841
12	Old Bylaw #52-2003 (A2 - Hunter's Trunk)	\$ 202,499	\$ 67,666.46	\$ -	\$ 270,165
13	Old Bylaw #52-2003 (A3 - Acheson Collection)	\$ 359,314	\$ 98,795.36	\$ -	\$ 458,109
14	Bevington Trunk (Oversizing for Acheson Zone 6)	\$ 743,873		\$ -	\$ 743,873
15	Leder Development Area (Sewer Main Upsizing, etc)	\$ -		\$ 849,397	\$ 849,397
16	Acheson Trunk North of CN Railway (Sewer Main upsizing, etc.)	\$ -		\$ 1,706,830	\$ 1,706,830
17	Zone 5 Liftstation Upgrade & Acheson Trunk Upstream of Zone 5 Liftstation (Sewer Main Upsizing, etc)	\$ -		\$ 4,658,260	\$ 4,658,260
18	Acheson Trunk Extension from DS MH N267 to US MH N672 (Zone 7)	\$ -		\$ 2,308,250	\$ 2,308,250
		\$ 8,458,662	\$ 255,279	\$ 19,769,418	\$ 28,483,359
Legend:					
Projects Carried Forward From Last Year					
Projects Amended or Merged					
New Projects					
Projects Completed					

5.2 Sanitary Offsite Infrastructure Grants & Contributions to Date

The *Municipal Government Act* enables the County to recoup costs for infrastructure, other than those costs that have been provided by way of special grant or contribution (i.e., contributed infrastructure). Parkland County has not received any special grants, but has received \$3.36 million of contributions for sanitary offsite infrastructure as shown in the table below (note, if the County receives grants in the future, it will be reflected in one of the annual updates and rates adjusted accordingly). The result is that the total reduced project estimated cost is \$25.12 million (2015 - \$14.02 million).

Special Grants and Contributions for Sanitary Offsite Infrastructure

Item	Project Description	Total Project Estimated Cost	Special Provincial Grants	Developer Agreement Contributions	Reduced Project Estimated Cost
1	5th Meridian (Area A) Gravity Main	\$ 964,600			\$ 964,600
2	5th Meridian (Area B) Gravity Main	\$ 3,024,580			\$ 3,024,580
3	5th Meridian (Area C) Gravity Main	\$ 2,512,510			\$ 2,512,510
4	Parkland Business Park (Sewer Main Upsizing, etc)	\$ 1,932,671		\$ 284,367	\$ 1,648,304
5	Parkland Industrial Estates (Sewer Main Upsizing, etc)	\$ -			\$ -
6	Kalwin Business Park (Sewer Main Upsizing, etc)	\$ 242,126		\$ 125,467	\$ 116,659
7	Acheson Road (Sewer Main Upsizing, etc)	\$ 1,019,850			\$ 1,019,850
8	Glowing Embers (Sewer Main Upsizing, etc)	\$ 1,004,242			\$ 1,004,242
9	Residential (Meridien Avenue) Creek Crossing (Sewer Main Upsizing, etc)	\$ 550,344			\$ 550,344
10	Bevington Trunk (Hwy 16 A to Hwy 16 Parkland Industrial Estates)	\$ 5,825,711		\$ 2,909,771	\$ 2,915,939
11	Old Bylaw #52-2003 (A1 - Acheson Trunk)	\$ 411,841		\$ 17,478	\$ 394,363
12	Old Bylaw #52-2003 (A2 - Hunter's Trunk)	\$ 270,165			\$ 270,165
13	Old Bylaw #52-2003 (A3 - Acheson Collection)	\$ 458,109		\$ 25,440	\$ 432,669
14	Bevington Trunk (Oversizing for Acheson Zone 6)	\$ 743,873			\$ 743,873
15	Leder Development Area (Sewer Main Upsizing, etc)	\$ 849,397			\$ 849,397
16	Acheson Trunk North of CN Railway (Sewer Main upsizing, etc.)	\$ 1,706,830			\$ 1,706,830
17	Zone 5 Liftstation Upgrade & Acheson Trunk Upstream of Zone 5 Liftstation (Sewer Main Upsizing, etc)	\$ 4,658,260			\$ 4,658,260
18	Acheson Trunk Extension from DS MH N267 to US MH N672 (Zone 7)	\$ 2,308,250			\$ 2,308,250
		\$ 28,483,359	\$ -	\$ 3,362,524	\$ 25,120,835

5.3 Sanitary Offsite Infrastructure Benefiting Parties

The sanitary offsite infrastructure previously outlined will benefit various parties to varying degrees. There are three potential benefiting parties:

- Parkland County – a portion of the sanitary infrastructure which is required to service existing development.
- Other Stakeholders (or oversizing) – other parties (such as neighboring municipalities) that benefit from infrastructure, as well as that portion of the infrastructure that benefits development beyond the 25 year review period (i.e. oversizing)..
- Parkland County Developers – all growth related infrastructure (i.e., levyable sanitary infrastructure costs).

The table below outlines the allocation of sanitary offsite infrastructure costs to benefiting parties. Percentage allocations have been determined after reducing sanitary offsite infrastructure costs for grants described earlier. Most infrastructure supports new development. That portion of developer cost that has been “deferred” beyond the 25 year review period has been separated from that portion of cost which is included in the current rates.

Allocation of Sanitary Infrastructure to Benefiting Parties

Item	Project Description	Reduced Project Estimated Cost	County Share %	Other Stakeholder Share & Oversizing %	OSL / Developer Share %
1	5th Meridian (Area A) Gravity Main	\$ 964,600		16.0%	84.0%
2	5th Meridian (Area B) Gravity Main	\$ 3,024,580		36.0%	64.0%
3	5th Meridian (Area C) Gravity Main	\$ 2,512,510		56.0%	44.0%
4	Parkland Business Park (Sewer Main Upsizing, etc)	\$ 1,648,304		16.0%	84.0%
5	Parkland Industrial Estates (Sewer Main Upsizing, etc)	\$ -		0.0%	100.0%
6	Kalwin Business Park (Sewer Main Upsizing, etc)	\$ 116,659		16.0%	84.0%
7	Acheson Road (Sewer Main Upsizing, etc)	\$ 1,019,850		16.0%	84.0%
8	Glowing Embers (Sewer Main Upsizing, etc)	\$ 1,004,242		16.0%	84.0%
9	Residential (Meridien Avenue) Creek Crossing (Sewer Main Upsizing, etc)	\$ 550,344		16.0%	84.0%
10	Bevington Trunk (Hwy 16 A to Hwy 16 Parkland Industrial Estates)	\$ 2,915,939		0.0%	100.0%
11	Old Bylaw #52-2003 (A1 - Acheson Trunk)	\$ 394,363	2.8%	0.0%	97.2%
12	Old Bylaw #52-2003 (A2 - Hunter's Trunk)	\$ 270,165	8.7%	0.0%	91.3%
13	Old Bylaw #52-2003 (A3 - Acheson Collection)	\$ 432,669	8.0%	0.0%	92.0%
14	Bevington Trunk (Oversizing for Acheson Zone 6)	\$ 743,873		0.0%	100.0%
15	Leder Development Area (Sewer Main Upsizing, etc)	\$ 849,397		72.0%	28.0%
16	Acheson Trunk North of CN Railway (Sewer Main upsizing, etc.)	\$ 1,706,830		72.0%	28.0%
17	Zone 5 Liftstation Upgrade & Acheson Trunk Upstream of Zone 5 Liftstation (Sewer Main Upsizing, etc)	\$ 4,658,260		100.0%	0.0%
18	Acheson Trunk Extension from DS MH N267 to US MH N672 (Zone 7)	\$ 2,308,250		4.0%	96.0%
		\$ 25,120,835			

**The allocation shown in the "oversizing" column represents that portion of cost that benefits development beyond the 25 year repayment period. It was determined by first establishing a "cost per year" for each project, and then comparing the anticipated year of construction to the current year to determine the amount of cost allocated beyond the 25 year period. For example, a project which costs \$25 million would have a cost of \$1 million per year. If the project was to be built in year 20, then 5 years' worth of cost (\$5 million) would be included in the current rates, and 20 years' worth of cost (\$20 million) would be deferred. During each future update, additional cost would be brought into the rates of the day.*

5.4 Existing Receipts

Prior to allocating costs to benefiting parties, existing offsite levy receipts collected from developers need to be considered in determining the residual/net costs to developers.

As of December 31st, 2015, ~\$0.54 million of sanitary levies were collected from developers by way of agreements signed prior to enactment of the 2013 bylaw. These levies have been "credited" to the projects for which they were collected. No levies collected under the current bylaw as shown in the table below.

Also, ~\$0.49 million was collected under the current bylaw as shown in the table below. This was the same at the last update.

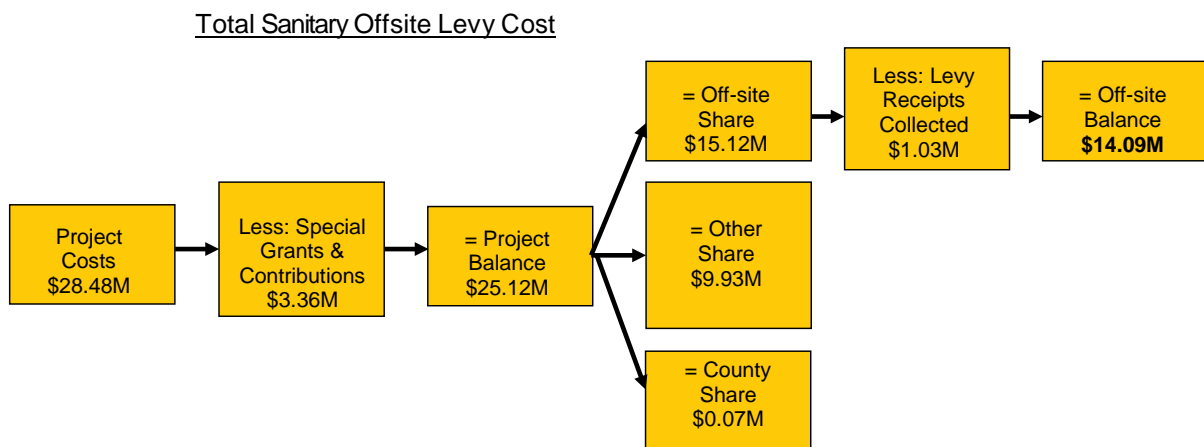
This results in a residual developer cost of \$14.09 million (2015 - \$9.83 million).

Offsite Levy Funds Collected to Date

Item	Project Description	Developer Cost (Leviable Costs)	Offsite Levy Funds Collected Under Old Bylaw No. 2013-03	Developer (Levy) Funds Collected	Adjusted Developer (Levy) Cost
1	5th Meridian (Area A) Gravity Main	\$ 810,264	\$ -	\$ -	\$ 810,264
2	5th Meridian (Area B) Gravity Main	\$ 1,935,731	\$ -	\$ -	\$ 1,935,731
3	5th Meridian (Area C) Gravity Main	\$ 1,105,504	\$ -	\$ -	\$ 1,105,504
4	Parkland Business Park (Sewer Main Upsizing, etc)	\$ 1,384,575	\$ -	\$ -	\$ 1,384,575
5	Parkland Industrial Estates (Sewer Main Upsizing, etc)	\$ -	\$ -	\$ -	\$ -
6	Kalwin Business Park (Sewer Main Upsizing, etc)	\$ 97,993	\$ -	\$ -	\$ 97,993
7	Acheson Road (Sewer Main Upsizing, etc)	\$ 856,674	\$ -	\$ -	\$ 856,674
8	Glowing Embers (Sewer Main Upsizing, etc)	\$ 843,563	\$ -	\$ 339,640	\$ 503,923
9	Residential (Meridian Avenue) Creek Crossing (Sewer Main Upsizing, etc)	\$ 462,289	\$ -	\$ -	\$ 462,289
10	Bevington Trunk (Hwy 16 A to Hwy 16 Parkland Industrial Estates)	\$ 2,915,939	\$ -	\$ -	\$ 2,915,939
11	Old Bylaw #52-2003 (A1 - Acheson Trunk)	\$ 383,447	\$ 203,286	\$ 62,345	\$ 117,815
12	Old Bylaw #52-2003 (A2 - Hunter's Trunk)	\$ 246,661	\$ 110,051	\$ -	\$ 136,610
13	Old Bylaw #52-2003 (A3 - Acheson Collection)	\$ 398,268	\$ 228,724	\$ 83,352	\$ 86,192
14	Bevington Trunk (Oversizing for Acheson Zone 6)	\$ 743,873	\$ -	\$ -	\$ 743,873
15	Leder Development Area (Sewer Main Upsizing, etc)	\$ 237,831	\$ -	\$ -	\$ 237,831
16	Acheson Trunk North of CN Railway (Sewer Main upsizing, etc.)	\$ 477,912	\$ -	\$ -	\$ 477,912
17	Zone 5 Liftstation Upgrade & Acheson Trunk Upstream of Zone 5 Liftstation (Sewer Main Upsizing, etc)	\$ -	\$ -	\$ -	\$ -
18	Acheson Trunk Extension from DS MH N267 to US MH N672 (Zone 7)	\$ 2,215,920	\$ -	\$ -	\$ 2,215,920
		\$ 15,116,446	\$ 542,061	\$ 485,337	\$ 14,089,048

5.5 Total Sanitary Offsite Levy Costs

As shown in the figure below, the total costs for sanitary infrastructure that forms the basis of the rate is approximately \$9.83 million (2014 - \$9.31 million). The cost allocations to each benefiting party are based on the benefiting percentages shown in Section 5.3. The offsite levy balance (due from developers) is allocated to various benefiting areas (as described in the next section).



*"Other Share" represents the portion of cost allocated to other benefiting parties such as neighbouring municipalities, other orders of government, etc., as well as that portion of cost allocated beyond the 25 year review period.

5.6 Sanitary Infrastructure Benefiting Areas

Net developer sewer costs for each project have been allocated to multiple benefiting offsite levy areas (see tables below). Allocations are denoted with a "1" below applicable areas. Benefiting areas were determined by County engineering staff and advisors.

Benefiting Areas for Sanitary Offsite Infrastructure

Item	Project Description	Developer Cost	101.0	102.0	103.0	103.1	104.0	104.1	105.0	105.1	106.0	107.0	108.0	109.0	110.0	111.0	111.1	201.0	201.1	202.0	203.0	204.0	205.0	206.0	207.0	208.0	208.1	301.0	302.0	302.1	303.0	304.0	
1	5th Meridian (Area A) Gravity Main	\$ 810,264																															
2	5th Meridian (Area B) Gravity Main	\$ 1,935,731																															
3	5th Meridian (Area C) Gravity Main	\$ 1,105,504																															
4	Parkland Business Park (Sewer Main Upsizing, etc)	\$ 1,384,575			1	1	1	1		1								1	1							1	1						
5	Parkland Industrial Estates (Sewer Main Upsizing, etc)	\$ -																								1	1						
6	Range Road 264 & Twp Rd 531A (Sewer Main Upsizing, etc)	\$ 97,993				1																											
7	Acheson Road (Sewer Main Upsizing, etc)	\$ 856,674																														1	
8	Glowing Embers (Sewer Main Upsizing, etc)	\$ 503,923																															
9	Residential (Meridian Avenue) Creek Crossing (Sewer Main Upsizing, etc)	\$ 462,289																															
10	Bevington Trunk (Hwy 16 A to Hwy 16 Parkland Industrial Estates)	\$ 2,915,939																			1												
11	Old Bylaw #52-2003 (A1 - Acheson Trunk)	\$ 117,815	1	1	1	1	1	1	1	1	1				1	1	1	1	1								1	1			1		
12	Old Bylaw #52-2003 (A2 - Hunter's Trunk)	\$ 136,610				1				1							1		1								1						
13	Old Bylaw #52-2003 (A3 - Acheson Collection)	\$ 86,192																												1			
14	Bevington Trunk (Oversizing for Acheson Zone 6)	\$ 743,873																															
15	Leder Development Area (Sewer Main Upsizing, etc)	\$ 237,831																															
16	Acheson Trunk North of CN Railway (Sewer Main upsizing, etc.)	\$ 477,912																										1	1	1	1	1	
17	Zone 5 Liftstation Upgrade & Acheson Trunk Upstream of Zone 5 Liftstation (Sewer Main Upsizing, etc)	\$ -																															
18	Acheson Trunk Extension from DS MH N267 to US MH N672 (Zone 7)	\$ 2,215,920																															
		\$ 14,089,048																															

Item	Project Description	Developer Cost	401.0	401.1	402.0	403.0	404.0	405.0	406.0	407.0	408.0	408.1	501.0	502.0	502.1	503.0	503.1	504.0	504.1	505.0	506.0	507.0	508.0	601.0	602.0	603.0	604.0	605.0	606.0	607.0	608.0	701.0	
1	5th Meridian (Area A) Gravity Main	\$ 810,264																															
2	5th Meridian (Area B) Gravity Main	\$ 1,935,731																															
3	5th Meridian (Area C) Gravity Main	\$ 1,105,504																															
4	Parkland Business Park (Sewer Main Upsizing, etc)	\$ 1,384,575																															
5	Parkland Industrial Estates (Sewer Main Upsizing, etc)	\$ -																															
6	Range Road 264 & Twp Rd 531A (Sewer Main Upsizing, etc)	\$ 97,993																															
7	Acheson Road (Sewer Main Upsizing, etc)	\$ 856,674	1	1							1	1																					
8	Glowing Embers (Sewer Main Upsizing, etc)	\$ 503,923																1	1														
9	Residential (Meriden Avenue) Creek Crossing (Sewer Main Upsizing, etc)	\$ 462,289																															
10	Bevington Trunk (Hwy 16 A to Hwy 16 Parkland Industrial Estates)	\$ 2,915,939				1	1	1	1																								
11	Old Bylaw #52-2003 (A1 - Acheson Trunk)	\$ 117,815	1	1							1	1	1	1	1	1	1	1	1														
12	Old Bylaw #52-2003 (A2 - Hunter's Trunk)	\$ 136,610																															
13	Old Bylaw #52-2003 (A3 - Acheson Collection)	\$ 86,192		1								1				1		1		1													
14	Bevington Trunk (Oversizing for Acheson Zone 6)	\$ 743,873																						1	1	1	1				1		
15	Leder Development Area (Sewer Main Upsizing, etc)	\$ 237,831											1	1	1																		
16	Acheson Trunk North of CN Railway (Sewer Main upsizing, etc.)	\$ 477,912	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1									1	
17	Zone 5 Liftstation Upgrade & Acheson Trunk Upstream of Zone 5 Liftstation (Sewer Main Upsizing, etc)	\$ -											1	1	1	1	1	1	1	1	1	1	1									1	
18	Acheson Trunk Extension from DS MH N267 to US MH N672 (Zone 7)	\$ 2,215,920																			1												1
		\$ 14,089,048																															

Item	Project Description	Developer Cost	702.0	703.0	704.0	705.0	706.0	707.0	708.0	801.0	802.0	803.0	804.0	805.0	806.0	807.0	808.0	901.0	902.0	903.0	904.0	1001.0	1002.0	1003.0	1004.0	1005.0	1006.0	1007.0	1101.0	1102.0	1103.0	1104.0	
1	5th Meridian (Area A) Gravity Main	\$ 810,264																															
2	5th Meridian (Area B) Gravity Main	\$ 1,935,731																															
3	5th Meridian (Area C) Gravity Main	\$ 1,105,504																															
4	Parkland Business Park (Sewer Main Upsizing, etc)	\$ 1,384,575																															
5	Parkland Industrial Estates (Sewer Main Upsizing, etc)	\$ -																															
6	Range Road 264 & Twp Rd 531A (Sewer Main Upsizing, etc)	\$ 97,993																															
7	Acheson Road (Sewer Main Upsizing, etc)	\$ 856,674																															
8	Glowing Embers (Sewer Main Upsizing, etc)	\$ 503,923																															
9	Residential (Meridian Avenue) Creek Crossing (Sewer Main Upsizing, etc)	\$ 462,289																									1	1					
10	Bevington Trunk (Hwy 16 A to Hwy 16 Parkland Industrial Estates)	\$ 2,915,939																															
11	Old Bylaw #52-2003 (A1 - Acheson Trunk)	\$ 117,815																															
12	Old Bylaw #52-2003 (A2 - Hunter's Trunk)	\$ 136,610																															
13	Old Bylaw #52-2003 (A3 - Acheson Collection)	\$ 86,192																															
14	Bevington Trunk (Oversizing for Acheson Zone 6)	\$ 743,873								1																							
15	Leder Development Area (Sewer Main Upsizing, etc)	\$ 237,831																															
16	Acheson Trunk North of CN Railway (Sewer Main upsizing, etc.)	\$ 477,912	1	1	1	1	1	1	1																								
17	Zone 5 Liftstation Upgrade & Acheson Trunk Upstream of Zone 5 Liftstation (Sewer Main Upsizing, etc)	\$ -	1	1	1	1	1	1	1																								
18	Acheson Trunk Extension from DS MH N267 to US MH N672 (Zone 7)	\$ 2,215,920	1	1		1	1	1	1																								
		\$ 14,089,048																															

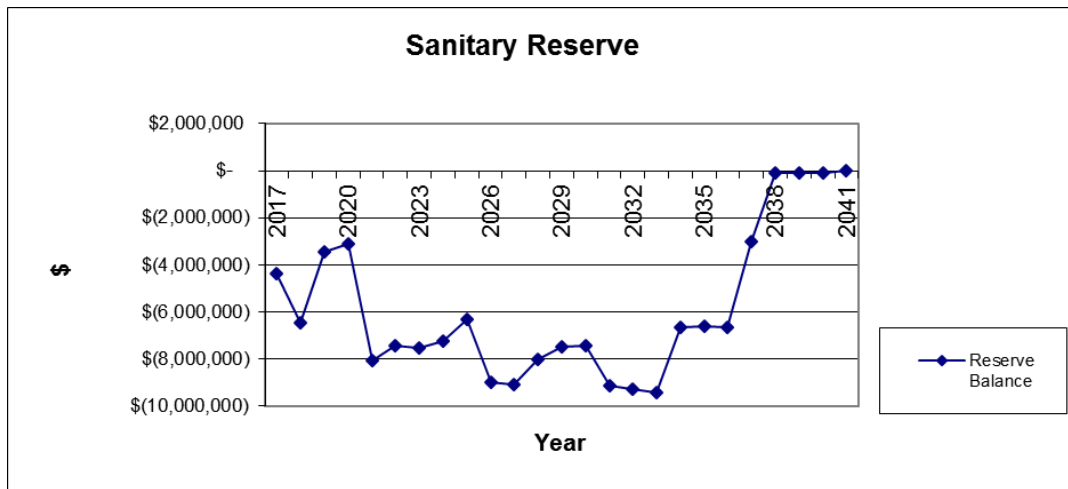
Item	Project Description	Developer Cost	1105.0	1106.0	1107.0	1108.0	1109.0	1110.0	1111.0	1112.0	1113.0	1201.0	1202.0	1203.0	1204.0	1205.0	1301.0	1302.0	1303.0	1304.0	1401.0	1402.0	1403.0	1404.0	1405.0	1501.0	1502.0	1600.1	1600.2	1600.3	1600.4	1600.5	1600.6	1600.7	1600.8	
1	5th Meridian (Area A) Gravity Main	\$ 810,264																		1																
2	5th Meridian (Area B) Gravity Main	\$ 1,935,731											1				1	1																		
3	5th Meridian (Area C) Gravity Main	\$ 1,105,504																				1		1	1											
4	Parkland Business Park (Sewer Main Upsizing, etc)	\$ 1,384,575																																		
5	Parkland Industrial Estates (Sewer Main Upsizing, etc)	\$ -																																		
6	Range Road 264 & Twp Rd 531A (Sewer Main Upsizing, etc)	\$ 97,993																																		
7	Acheson Road (Sewer Main Upsizing, etc)	\$ 856,674																																		1
8	Glowing Embers (Sewer Main Upsizing, etc)	\$ 503,923																																		
9	Residential (Meridian Avenue) Creek Crossing (Sewer Main Upsizing, etc)	\$ 462,289																											1							
10	Bevington Trunk (Hwy 16 A to Hwy 16 Parkland Industrial Estates)	\$ 2,915,939																											1	1	1	1	1	1	1	1
11	Old Bylaw #52-2003 (A1 - Acheson Trunk)	\$ 117,815																												1						1
12	Old Bylaw #52-2003 (A2 - Hunter's Trunk)	\$ 136,610																																		
13	Old Bylaw #52-2003 (A3 - Acheson Collection)	\$ 86,192																																		
14	Bevington Trunk (Oversizing for Acheson Zone 6)	\$ 743,873																																		
15	Leder Development Area (Sewer Main Upsizing, etc)	\$ 237,831																									1	1								
16	Acheson Trunk North of CN Railway (Sewer Main upsizing, etc.)	\$ 477,912																									1	1								
17	Zone 5 Liftstation Upgrade & Acheson Trunk Upstream of Zone 5 Liftstation (Sewer Main Upsizing, etc)	\$ -																									1	1								
18	Acheson Trunk Extension from DS MH N267 to US MH N672 (Zone 7)	\$ 2,215,920																																		
		\$ 14,089,048																																		

5.7 Development and Sanitary Staging Impacts

Sanitary offsite infrastructure will be constructed in staged fashion over the 25-year development period. We have reviewed the availability of offsite levy funds to meet these construction requirements and found that offsite levy reserve funds will not be sufficient to pay for construction of sanitary infrastructure from time to time—front-ending of infrastructure will be required. A front-end is the party that constructs and pays up front for infrastructure that benefits other parties. The front-end is repaid over time as offsite levies are collected from future development.

In order to compensate parties for capital they provide in front-ending offsite infrastructure construction, a 1.50% interest allowance has been charged in 2016 to the reserve when in a negative balance. Further, a 1.50% interest credit has been provided to reduce offsite levy rates for interest earned on positive reserve balances. Interest earning and charge rates should be updated each year to reflect the current economic context. The graph and table below outline sanitary levy reserve balances over the 25-year development period.

Anticipated Sanitary Offsite Levy Reserve Balances



*A “staging adjustment” is made to rates to account for the anticipated impact of interest on the reserve (earning and charging rates). In this way, the reserve is assured to achieve breakeven at the end of the review period without collecting too much from developers or too little.

5.8 Reserve Balance

From end-2010 to end-2015 interest impacts on the reserve were captured in alignment with the interest earning and charging rates in effect at that time:

Interest Earning Rate

- 2011 and 2012 = 1.20%
- 2013 = 2.00%
- 2014 = 1.43%
- 2015 = 1.34%
- 2016 = 1.50%

Interest Charging Rate

- 2011 to 2013 = 3.00%
- 2014 = 3.86%
- 2015 = 3.057%
- 2016 = 1.50%

Notes

- ¼ year rule – expenditures are deemed to have been made in September each year.
- ½ year rule – receipts are deemed to have been made in June each year.

The sanitary reserve balance as at December 31st, 2010 was amended to (\$4,111,489) in alignment with year-end results that year and front-ending amounts owed to front-ending parties, as shown in the table below. The reserve balance at December 31st, 2010 assumes that \$4,111,489 is owed to front-ending parties (County and TAG Developments) up to that point in time.

As at December 31st, 2013 the sanitary reserve balance was (\$4,456,662). The County’s ledgers should be amended to reflect this balance. It is also recommended that the County develop a set of “manual sub-ledgers” to track the amounts due to front-ending parties, including interest owed in accordance with the rates in effect at that time.

As at December 31st, 2014 the sanitary reserve balance was (\$4,197,853.36).

As at December 31st, 2015 the sanitary reserve balance was (\$4,269,090.39).

As at December 31st, 2016 the sanitary reserve balance was (**\$4,286,120.79**).

Sanitary Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Offsite Levy Expenditures to December 31, 2010		\$ 4,544,648.63	\$ (4,544,648.63)
Offsite Levy Receipt Allocations to December 31, 2010	\$ 433,159.18		\$ (4,111,489.45)
Unallocated Receipts to December 31, 2010	\$ -		\$ (4,111,489.45)
			\$ (4,111,489.45)
Opening Balance December 31st, 2010			\$ (4,111,489.45)
2011			\$ (4,111,489.45)
Interest on Opening Balance (2011)		\$ 123,344.68	\$ (4,234,834.13)
Project Expenditures (2011)		\$ -	\$ (4,234,834.13)
Offsite Levy Receipts (2011)	\$ -		\$ (4,234,834.13)
Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2011)	\$ 12,435.93		\$ (4,222,398.20)
Debenture Interest (2011)		\$ -	\$ (4,222,398.20)
Interest on Project Expenditure (2011)		\$ -	\$ (4,222,398.20)
Interest on Offsite Levy Receipts (2011)	\$ -		\$ (4,222,398.20)
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2011)	\$ 74.62		\$ (4,222,323.59)
Interest on Debenture Interest (2011)		\$ -	\$ (4,222,323.59)
2012			\$ (4,222,323.59)
Interest on Opening Balance (2012)		\$ 126,669.71	\$ (4,348,993.30)
Project Expenditures (2012)		\$ -	\$ (4,348,993.30)
Offsite Levy Receipts (2012)	\$ -		\$ (4,348,993.30)
Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2012)	\$ 10,652.63		\$ (4,338,340.67)
Debenture Interest (2012)		\$ -	\$ (4,338,340.67)
Interest on Project Expenditure (2012)		\$ -	\$ (4,338,340.67)
Interest on Offsite Levy Receipts (2012)	\$ -		\$ (4,338,340.67)
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2012)	\$ 63.92		\$ (4,338,276.75)
Interest on Debenture Interest (2012)		\$ -	\$ (4,338,276.75)
2013			\$ (4,338,276.75)
Interest on Opening Balance (2013)		\$ 130,148.30	\$ (4,468,425.05)
Project Expenditures (2013)		\$ -	\$ (4,468,425.05)
Offsite Levy Receipts (2013)	\$ -		\$ (4,468,425.05)
Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2013)	\$ 11,646.71		\$ (4,456,778.34)
Debenture Interest (2013)		\$ -	\$ (4,456,778.34)
Interest on Project Expenditure (2013)		\$ -	\$ (4,456,778.34)
Interest on Offsite Levy Receipts (2013)	\$ -		\$ (4,456,778.34)
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2013)	\$ 116.47		\$ (4,456,661.88)
Interest on Debenture Interest (2013)		\$ -	\$ (4,456,661.88)
2014			\$ (4,456,661.88)
Interest on Opening Balance (2014)		\$ 172,027.15	\$ (4,628,689.02)
Project Expenditures (2014)		\$ 548,946.80	\$ (5,177,635.82)
Offsite Levy Receipts (2014)	\$ 978,086.48		\$ (4,199,549.34)
Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2014)	\$ -		\$ (4,199,549.34)
Debenture Interest (2014)		\$ -	\$ (4,199,549.34)
Interest on Project Expenditure (2014)		\$ 5,297.34	\$ (4,204,846.68)
Interest on Offsite Levy Receipts (2014)	\$ 6,993.32		\$ (4,197,853.36)
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2014)	\$ -		\$ (4,197,853.36)
Interest on Debenture Interest (2014)		\$ -	\$ (4,197,853.36)
2015			\$ (4,197,853.36)
Interest on Opening Balance (2015)		\$ 128,328.38	\$ (4,326,181.74)
Project Expenditures (2015)		\$ (548,946.80)	\$ (3,777,234.94)
Offsite Levy Receipts (2015)	\$ (492,749.36)		\$ (4,269,984.30)
Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2015)	\$ -		\$ (4,269,984.30)
Debenture Interest (2015)		\$ -	\$ (4,269,984.30)
Interest on Project Expenditure (2015)		\$ (4,195.33)	\$ (4,265,788.97)
Interest on Offsite Levy Receipts (2015)	\$ (3,301.42)		\$ (4,269,090.39)
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2015)	\$ -		\$ (4,269,090.39)
Interest on Debenture Interest (2015)		\$ -	\$ (4,269,090.39)
2016			\$ (4,269,090.39)
Interest on Opening Balance (2016)		\$ 64,036.36	\$ (4,333,126.75)
Project Expenditures (2016)		\$ 1,004,241.53	\$ (5,337,368.28)
Offsite Levy Receipts (2016)	\$ 1,004,241.53		\$ (4,333,126.75)
Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2016)	\$ 42,918.17		\$ (4,290,208.58)
Debenture Interest (2016)		\$ -	\$ (4,290,208.58)
Interest on Project Expenditure (2016)		\$ 3,765.91	\$ (4,293,974.49)
Interest on Offsite Levy Receipts (2016)	\$ 7,531.81		\$ (4,286,442.67)
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2016)	\$ 321.89		\$ (4,286,120.79)
Interest on Debenture Interest (2016)		\$ -	\$ (4,286,120.79)

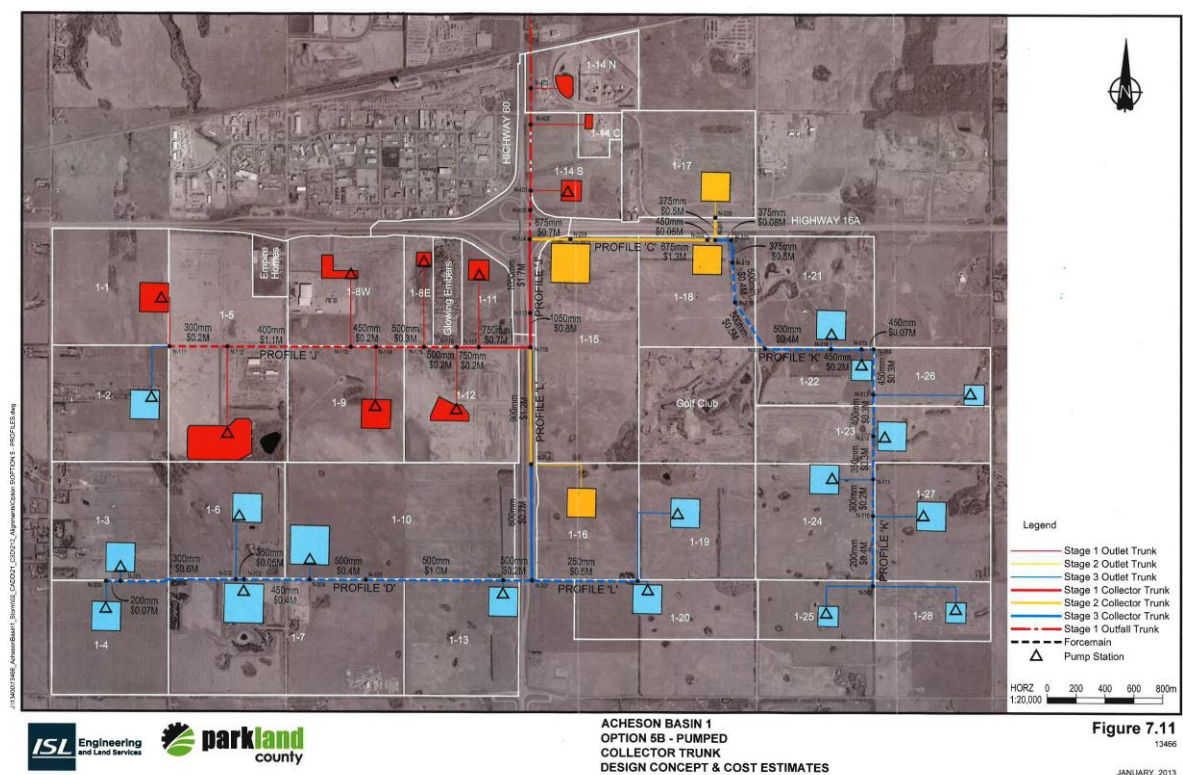
6 STORMWATER

6.1 Stormwater Offsite Infrastructure

In order to support growth in the County, stormwater offsite infrastructure is required. The model contains 16 stormwater offsite infrastructure projects (2015 – 16 projects), as shown on the map below:

Location of Stormwater Offsite Infrastructure

Acheson / Big Lake Stormwater Projects Map:



5th Meridian Stormwater Projects Map:

N/A

Summary of Stormwater Offsite Infrastructure

The estimated total cost of this infrastructure is comprised of:

- (a) actual construction costs to date;
- (b) debenture interest associated with financing; and
- (c) cost estimates.

Total cost is approximately \$46.18 million (2015 - \$51.11 million) as outlined in the table below. Actual costs, debenture interest (if any), and cost estimates were provided by County staff and engineering advisors. It is important to note that these costs represent “gross” costs, of which only a portion will go to support new development during the 25-year review period. The remainder of this section outlines how total costs are equitably apportioned to new development/growth.

Item	Project Description	Cost of Completed Work	Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Estimated Cost
1	Outfall	\$ 22,543,366	\$ 3,423,959.54	\$ 1,553,000	\$ 27,520,326
2					
3	Collector Stage 1, Zone 5 N-111 to N-112	Included with Outfall		\$ -	\$ -
4	Collector Stage 1, Zone 5 N-112 to N-113	Included with Outfall		\$ -	\$ -
5	Collector Stage 1, Zone 5 N-113 to N-114	Included with Outfall		\$ -	\$ -
6	Collector Stage 1, Zone 5 N-114 to N-115	Included with Outfall		\$ -	\$ -
7	Collector Stage 1, Zone 5 N-115 to N-116	Included with Outfall		\$ -	\$ -
8	Collector Stage 1, Zone 5 N-116 to N-117	Included with Outfall		\$ -	\$ -
9	Collector Stage 1, Zone 5 N-117 to N-118	Included with Outfall		\$ -	\$ -
10	Collector Stage 1, Zone 5,6,7&8 N-118 to N-119	\$ -		\$ 1,117,749	\$ 1,117,749
11	Collector Stage 1, Zone 5,6,7&8 N-119 to N-120	\$ -		\$ 2,272,091	\$ 2,272,091
12	Collector Stage 2, Zone 4 N-200 to N-201	\$ -		\$ 619,623	\$ 619,623
13	Collector Stage 2, Zone 4&6 N-201 to N-202	\$ -		\$ 64,609	\$ 64,609
14	Collector Stage 2, Zone 4&6 N-202 to N-203	\$ -		\$ 1,765,641	\$ 1,765,641
15	Collector Stage 2, Zone 4&6 N-203 to N-204	\$ -		\$ 945,451	\$ 945,451
16	Collector Stage 2, Zone 4&6 N-204 to N-205	\$ -		\$ 1,582,791	\$ 1,582,791
17					
18	Collector Stage 3, Zone 7 N-300 to N-301	\$ -		\$ 96,235	\$ 96,235
19	Collector Stage 3, Zone 7 N-301 to N-302	\$ -		\$ 810,101	\$ 810,101
20	Collector Stage 3, Zone 7 N-302 to N-303	\$ -		\$ 60,804	\$ 60,804
21	Collector Stage 3, Zone 7 N-303 to N-304	\$ -		\$ 536,345	\$ 536,345
22	Collector Stage 3, Zone 7 N-304 to N-305	\$ -		\$ 558,710	\$ 558,710
23	Collector Stage 3, Zone 7 N-305 to N-306	\$ -		\$ 1,365,144	\$ 1,365,144
24	Collector Stage 3, Zone 7 N-306 to N-307	\$ -		\$ 293,576	\$ 293,576
25	Collector Stage 3, Zone 7&8 N-307 to N-308	\$ -		\$ 949,158	\$ 949,158
26	Collector Stage 3, Zone 8 N-308 to N-309	\$ -		\$ 738,824	\$ 738,824
27	Collector Stage 3, Zone 8 N-309 to N-310	\$ -		\$ 528,051	\$ 528,051
28	Collector Stage 3, Zone 8 N-310 to N-311	\$ -		\$ 300,802	\$ 300,802
29	Collector Stage 3, Zone 8 N-311 to N-312	\$ -		\$ 372,003	\$ 372,003
30	Collector Stage 3, Zone 6 N-312 to N-313	\$ -		\$ 366,778	\$ 366,778
31	Collector Stage 3, Zone 6 N-313 to N-314	\$ -		\$ 353,167	\$ 353,167
32	Collector Stage 3, Zone 6 N-314 to N-315	\$ -		\$ 94,576	\$ 94,576
33	Collector Stage 3, Zone 6 N-315 to N-316	\$ -		\$ 239,090	\$ 239,090
34	Collector Stage 3, Zone 6 N-316 to N-317	\$ -		\$ 540,421	\$ 540,421
35	Collector Stage 3, Zone 6 N-317 to N-318	\$ -		\$ 686,632	\$ 686,632
36	Collector Stage 3, Zone 6 N-318 to N-319	\$ -		\$ 557,280	\$ 557,280
37	Collector Stage 3, Zone 6 N-319 to N-320	\$ -		\$ 735,853	\$ 735,853
38	Collector Stage 3, Zone 6 N-320 to N-201	\$ -		\$ 103,752	\$ 103,752
		\$ 22,543,366	\$ 3,423,960	\$ 20,208,255	\$ 46,175,581
	Legend:				
	Projects Carried Forward From Last Year				
	Projects Amended or Merged				
	New Projects				
	Projects Completed				
	* The numbering sequence accounts for those projects that were previously removed.				

Special Grants and Contributions for Stormwater Offsite Infrastructure

6.2 Stormwater Offsite Infrastructure Grants & Contributions to Date

The *Municipal Government Act* enables the County to recoup costs for infrastructure, other than those costs that have been provided by way of special grant or contribution (i.e., contributed infrastructure). Parkland County has not received any special grants, but has received \$1.01 million (2015 - \$0.72 million) of contributions for stormwater offsite infrastructure as shown in the table below (note, if the County receives additional grants in the future, it will be reflected in one of the annual updates and rates adjusted accordingly). The result is that the total reduced project estimated cost is \$45.17 million (2015 - \$51.04 million).

Item	Project Description	Total Project Estimated Cost	Special Provincial Grants	Developer Agreement Contributions	Reduced Project Estimated Cost
1	Outfall	\$ 27,520,326		\$ 1,008,910	\$ 26,511,415
2					
3	Collector Stage 1, Zone 5 N-111 to N-112	\$ -			\$ -
4	Collector Stage 1, Zone 5 N-112 to N-113	\$ -			\$ -
5	Collector Stage 1, Zone 5 N-113 to N-114	\$ -			\$ -
6	Collector Stage 1, Zone 5 N-114 to N-115	\$ -			\$ -
7	Collector Stage 1, Zone 5 N-115 to N-116	\$ -			\$ -
8	Collector Stage 1, Zone 5 N-116 to N-117	\$ -			\$ -
9	Collector Stage 1, Zone 5 N-117 to N-118	\$ -			\$ -
10	Collector Stage 1, Zone 5,6,7&8 N-118 to N110	\$ 1,117,749			\$ 1,117,749
11	Collector Stage 1, Zone 5,6,7&8 N-110 to N104	\$ 2,272,091			\$ 2,272,091
12	Collector Stage 2, Zone 4 N-200 to N-201	\$ 619,623			\$ 619,623
13	Collector Stage 2, Zone 4&6 N-201 to N-202	\$ 64,609			\$ 64,609
14	Collector Stage 2, Zone 4&6 N-202 to N-203	\$ 1,765,641			\$ 1,765,641
15	Collector Stage 2, Zone 4&6 N-203 to N-104	\$ 945,451			\$ 945,451
16	Collector Stage 2, Zone 4&6 N-204 to N-118	\$ 1,582,791			\$ 1,582,791
17					
18	Collector Stage 3, Zone 7 N-300 to N-301	\$ 96,235			\$ 96,235
19	Collector Stage 3, Zone 7 N-301 to N-302	\$ 810,101			\$ 810,101
20	Collector Stage 3, Zone 7 N-302 to N-303	\$ 60,804			\$ 60,804
21	Collector Stage 3, Zone 7 N-303 to N-304	\$ 536,345			\$ 536,345
22	Collector Stage 3, Zone 7 N-304 to N-305	\$ 558,710			\$ 558,710
23	Collector Stage 3, Zone 7 N-305 to N-306	\$ 1,365,144			\$ 1,365,144
24	Collector Stage 3, Zone 7 N-306 to N-307	\$ 293,576			\$ 293,576
25	Collector Stage 3, Zone 7&8 N-307 to N-204	\$ 949,158			\$ 949,158
26	Collector Stage 3, Zone 8 N-308 to N-307	\$ 738,824			\$ 738,824
27	Collector Stage 3, Zone 8 N-309 to N-310	\$ 528,051			\$ 528,051
28	Collector Stage 3, Zone 8 N-310 to N-311	\$ 300,802			\$ 300,802
29	Collector Stage 3, Zone 8 N-311 to N-312	\$ 372,003			\$ 372,003
30	Collector Stage 3, Zone 6 N-312 to N-313	\$ 366,778			\$ 366,778
31	Collector Stage 3, Zone 6 N-313 to N-314	\$ 353,167			\$ 353,167
32	Collector Stage 3, Zone 6 N-314 to N-315	\$ 94,576			\$ 94,576
33	Collector Stage 3, Zone 6 N-315 to N-316	\$ 239,090			\$ 239,090
34	Collector Stage 3, Zone 6 N-316 to N-317	\$ 540,421			\$ 540,421
35	Collector Stage 3, Zone 6 N-317 to N-318	\$ 686,632			\$ 686,632
36	Collector Stage 3, Zone 6 N-318 to N-319	\$ 557,280			\$ 557,280
37	Collector Stage 3, Zone 6 N-319 to N-320	\$ 735,853			\$ 735,853
38	Collector Stage 3, Zone 6 N-320 to N-201	\$ 103,752			\$ 103,752
		\$ 46,175,581	\$ -	\$ 1,008,910	\$ 45,166,671

Allocation of Stormwater Infrastructure to Benefiting Parties

6.3 Stormwater Offsite Infrastructure Benefiting Parties

The stormwater offsite infrastructure previously outlined will benefit various parties to varying degrees. There are three potential benefiting parties:

- Parkland County – a portion of the stormwater infrastructure which is required to service existing development.
- Other Stakeholders (or oversizing) – other parties (such as neighboring municipalities) that benefit from infrastructure, as well as that portion of the infrastructure that benefits development beyond the 25 year review period (i.e. oversizing).
- Parkland County Developers – all growth related infrastructure (i.e., levyable stormwater infrastructure costs).

The table to the right outlines the allocation of stormwater offsite infrastructure costs to benefiting parties. Percentage allocations have been determined after reducing water offsite infrastructure costs for grants and contribution described earlier. Most infrastructure supports new development. That portion of developer cost that has been “deferred” beyond the 25 year review period has been separated from that portion of cost which is included in the current rates.

Item	Project Description	Reduced Project Estimated Cost	County Share %	Other Stakeholder Share & Oversizing %	OSL / Developer Share %
1	Outfall	\$ 26,511,415		0.0%	100.0%
2		\$ -			
3	Collector Stage 1, Zone 5 N-111 to N-112	\$ -		0.0%	100.0%
4	Collector Stage 1, Zone 5 N-112 to N-113	\$ -		0.0%	100.0%
5	Collector Stage 1, Zone 5 N-113 to N-114	\$ -		0.0%	100.0%
6	Collector Stage 1, Zone 5 N-114 to N-115	\$ -		0.0%	100.0%
7	Collector Stage 1, Zone 5 N-115 to N-116	\$ -		0.0%	100.0%
8	Collector Stage 1, Zone 5 N-116 to N-117	\$ -		0.0%	100.0%
9	Collector Stage 1, Zone 5 N-117 to N-118	\$ -		0.0%	100.0%
10	Collector Stage 1, Zone 5,6,7&8 N-118 to N-110	\$ 1,117,749		0.0%	100.0%
11	Collector Stage 1, Zone 5,6,7&8 N-110 to N-104	\$ 2,272,091		0.0%	100.0%
12	Collector Stage 2, Zone 4 N-200 to N-201	\$ 619,623		12.0%	88.0%
13	Collector Stage 2, Zone 4&6 N-201 to N-202	\$ 64,609		12.0%	88.0%
14	Collector Stage 2, Zone 4&6 N-202 to N-203	\$ 1,765,641		12.0%	88.0%
15	Collector Stage 2, Zone 4&6 N-203 to N-104	\$ 945,451		12.0%	88.0%
16	Collector Stage 2, Zone 4&6 N-204 to N-118	\$ 1,582,791		12.0%	88.0%
17		\$ -			
18	Collector Stage 3, Zone 7 N-300 to N-301	\$ 96,235		0.0%	100.0%
19	Collector Stage 3, Zone 7 N-301 to N-302	\$ 810,101		0.0%	100.0%
20	Collector Stage 3, Zone 7 N-302 to N-303	\$ 60,804		0.0%	100.0%
21	Collector Stage 3, Zone 7 N-303 to N-304	\$ 536,345		72.0%	28.0%
22	Collector Stage 3, Zone 7 N-304 to N-305	\$ 558,710		72.0%	28.0%
23	Collector Stage 3, Zone 7 N-305 to N-306	\$ 1,365,144		72.0%	28.0%
24	Collector Stage 3, Zone 7 N-306 to N-307	\$ 293,576		72.0%	28.0%
25	Collector Stage 3, Zone 7&8 N-307 to N-204	\$ 949,158		0.0%	100.0%
26	Collector Stage 3, Zone 8 N-308 to N-307	\$ 738,824		100.0%	0.0%
27	Collector Stage 3, Zone 8 N-309 to N-310	\$ 528,051		100.0%	0.0%
28	Collector Stage 3, Zone 8 N-310 to N-311	\$ 300,802		100.0%	0.0%
29	Collector Stage 3, Zone 8 N-311 to N-312	\$ 372,003		100.0%	0.0%
30	Collector Stage 3, Zone 6 N-312 to N-313	\$ 366,778		100.0%	0.0%
31	Collector Stage 3, Zone 6 N-313 to N-314	\$ 353,167		100.0%	0.0%
32	Collector Stage 3, Zone 6 N-314 to N-315	\$ 94,576		100.0%	0.0%
33	Collector Stage 3, Zone 6 N-315 to N-316	\$ 239,090		100.0%	0.0%
34	Collector Stage 3, Zone 6 N-316 to N-317	\$ 540,421		100.0%	0.0%
35	Collector Stage 3, Zone 6 N-317 to N-318	\$ 686,632		100.0%	0.0%
36	Collector Stage 3, Zone 6 N-318 to N-319	\$ 557,280		100.0%	0.0%
37	Collector Stage 3, Zone 6 N-319 to N-320	\$ 735,853		100.0%	0.0%
38	Collector Stage 3, Zone 6 N-320 to N-201	\$ 103,752		100.0%	0.0%
		\$ 45,166,671			

**The allocation shown in the “oversizing” column represents that portion of cost that benefits development beyond the 25 year repayment period. It was determined by first establishing a “cost per year” for each project, and then comparing the anticipated year of construction to the current year to determine the amount of cost allocated beyond the 25 year period. For example, a project which costs \$25 million would have a cost of \$1 million per year. If the project was to be built in year 20, then 5 years’ worth of cost (\$5 million) would be included in the current rates, and 20 years’ worth of cost (\$20 million) would be deferred. During each future update, additional cost would be brought into the rates of the day.*

Offsite Levy Funds Collected to Date

6.4 Existing Receipts

Prior to allocating costs to benefiting parties, existing offsite levy receipts collected from developers need to be considered in determining the residual/net costs to developers.

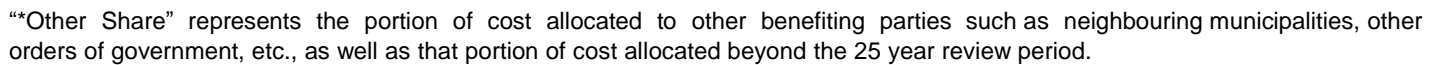
As of December 31st, 2016, ~\$2.96 million of stormwater levies were collected from developers by way of agreements signed prior to enactment of the 2013 bylaw. These levies have been “credited” to the projects for which they were collected.

Also, ~\$2.83 million was collected under the current bylaw as shown in the table below. This is the same from the last update.

This results in a residual developer cost of \$31.18 million (2015 - \$33.96 million).

Item	Project Description	Developer Cost (Leviable Costs)	Offsite Levy Funds Collected Under Old Bylaw No. 2013-03	Developer (Levy) Funds Collected	Adjusted Developer (Levy) Cost
1	Outfall	\$ 26,511,415	\$ 2,964,467	\$ 1,871,613	\$ 21,675,336
2					
3	Collector Stage 1, Zone 5 N-111 to N-112	\$ -	\$ -	\$ -	\$ -
4	Collector Stage 1, Zone 5 N-112 to N-113	\$ -	\$ -	\$ -	\$ -
5	Collector Stage 1, Zone 5 N-113 to N-114	\$ -	\$ -	\$ 18,731	\$ (18,731)
6	Collector Stage 1, Zone 5 N-114 to N-115	\$ -	\$ -	\$ 32,665	\$ (32,665)
7	Collector Stage 1, Zone 5 N-115 to N-116	\$ -	\$ -	\$ 22,387	\$ (22,387)
8	Collector Stage 1, Zone 5 N-116 to N-117	\$ -	\$ -	\$ 75,353	\$ (75,353)
9	Collector Stage 1, Zone 5 N-117 to N-118	\$ -	\$ -	\$ 260,378	\$ (260,378)
10	Collector Stage 1, Zone 5, 6, 7 & 8 N-118 to N-119	\$ 1,117,749	\$ -	\$ 180,805	\$ 936,944
11	Collector Stage 1, Zone 5, 6, 7 & 8 N-119 to N-120	\$ 2,272,091	\$ -	\$ 367,530	\$ 1,904,561
12	Collector Stage 2, Zone 4 N-200 to N-201	\$ 545,268	\$ -	\$ -	\$ 545,268
13	Collector Stage 2, Zone 4 & 6 N-201 to N-202	\$ 56,856	\$ -	\$ -	\$ 56,856
14	Collector Stage 2, Zone 4 & 6 N-202 to N-203	\$ 1,553,764	\$ -	\$ -	\$ 1,553,764
15	Collector Stage 2, Zone 4 & 6 N-203 to N-204	\$ 831,997	\$ -	\$ -	\$ 831,997
16	Collector Stage 2, Zone 4 & 6 N-204 to N-205	\$ 1,392,856	\$ -	\$ -	\$ 1,392,856
17					
18	Collector Stage 3, Zone 7 N-300 to N-301	\$ 96,235	\$ -	\$ -	\$ 96,235
19	Collector Stage 3, Zone 7 N-301 to N-302	\$ 810,101	\$ -	\$ -	\$ 810,101
20	Collector Stage 3, Zone 7 N-302 to N-303	\$ 60,804	\$ -	\$ -	\$ 60,804
21	Collector Stage 3, Zone 7 N-303 to N-304	\$ 150,177	\$ -	\$ -	\$ 150,177
22	Collector Stage 3, Zone 7 N-304 to N-305	\$ 156,439	\$ -	\$ -	\$ 156,439
23	Collector Stage 3, Zone 7 N-305 to N-306	\$ 382,240	\$ -	\$ -	\$ 382,240
24	Collector Stage 3, Zone 7 N-306 to N-307	\$ 82,201	\$ -	\$ -	\$ 82,201
25	Collector Stage 3, Zone 7 & 8 N-307 to N-308	\$ 949,158	\$ -	\$ -	\$ 949,158
26	Collector Stage 3, Zone 8 N-308 to N-309	\$ -	\$ -	\$ -	\$ -
27	Collector Stage 3, Zone 8 N-309 to N-310	\$ -	\$ -	\$ -	\$ -
28	Collector Stage 3, Zone 8 N-310 to N-311	\$ -	\$ -	\$ -	\$ -
29	Collector Stage 3, Zone 8 N-311 to N-312	\$ -	\$ -	\$ -	\$ -
30	Collector Stage 3, Zone 6 N-312 to N-313	\$ -	\$ -	\$ -	\$ -
31	Collector Stage 3, Zone 6 N-313 to N-314	\$ -	\$ -	\$ -	\$ -
32	Collector Stage 3, Zone 6 N-314 to N-315	\$ -	\$ -	\$ -	\$ -
33	Collector Stage 3, Zone 6 N-315 to N-316	\$ -	\$ -	\$ -	\$ -
34	Collector Stage 3, Zone 6 N-316 to N-317	\$ -	\$ -	\$ -	\$ -
35	Collector Stage 3, Zone 6 N-317 to N-318	\$ -	\$ -	\$ -	\$ -
36	Collector Stage 3, Zone 6 N-318 to N-319	\$ -	\$ -	\$ -	\$ -
37	Collector Stage 3, Zone 6 N-319 to N-320	\$ -	\$ -	\$ -	\$ -
38	Collector Stage 3, Zone 6 N-320 to N-201	\$ -	\$ -	\$ -	\$ -
		\$ 36,969,351	\$ 2,964,467	\$ 2,829,462	\$ 31,175,422

As shown in the figure below, the total costs for stormwater infrastructure that forms the basis of the rate is approximately \$31.18 million (2015 - \$33.96 million). The cost allocations to each benefitting party are based on the benefitting percentages shown in Section 6.3. The offsite levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).



Net developer costs for each project have been allocated to multiple benefiting offsite levy areas (see tables below). Allocations are denoted with a “1” below applicable areas. Benefiting areas were determined by County staff and advisors.

Item	Project Description	Developer	2012	2013	2014	2015	2016	2017	2018	2019	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	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463
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*A “staging adjustment” is made to rates to account for the anticipated impact of interest on the reserve (earning and charging rates). In this way, the reserve is assured to achieve breakeven at the end of the review period without collecting too much from developers or too little.

6.8 Reserve Balance

From end-2010 to end-2015 interest impacts on the reserve were captured in alignment with the interest earning and charging rates in effect at that time:

Interest Earning Rate

- 2011 and 2012 = 1.20%
- 2013 = 2.00%
- 2014 = 1.43%
- 2015 = 1.34%
- 2016 = 1.50%

Interest Charging Rate

- 2011 to 2013 = 3.00%
- 2014 = 3.86%
- 2015 = 3.057%
- 2016 = 1.50%

Notes

- $\frac{1}{4}$ year rule – expenditures are deemed to have been made in September each year.
- $\frac{1}{2}$ year rule – receipts are deemed to have been made in June each year.

The stormwater reserve balance as at December 31st, 2010 was \$0 in alignment with year- end results that year, as shown in the table below.

As at December 31st, 2013 the stormwater reserve balance was \$4,168,557. The County’s ledgers should be amended to reflect this balance. It is also recommended that the County develop a set of “manual sub-ledgers” to track the amounts due to front-ending parties, including interest owed in accordance with the rates in effect at that time.

As at December 31st, 2014 the stormwater reserve balance was \$5,814,461.78.

As at December 31st, 2015 the stormwater reserve balance was (\$4,826,652.06).

As at December 31st, 2016 the stormwater reserve balance was (\$15,968,013.23).

Stormwater Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Offsite Levy Expenditures to December 31, 2010		\$ -	\$ -
Offsite Levy Receipt Allocations to December 31, 2010	\$ -		\$ -
Unallocated Receipts to December 31, 2010	\$ -		\$ -
			\$ -
Opening Balance December 31st, 2010			\$ -
2011			\$ -
Interest on Opening Balance (2011)	\$ -		\$ -
Project Expenditures (2011)		\$ -	\$ -
Offsite Levy Receipts (2011)	\$ -		\$ -
Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2011)	\$ 272,428.56		\$ 272,428.56
Debenture Interest (2011)		\$ -	\$ 272,428.56
Interest on Project Expenditure (2011)		\$ -	\$ 272,428.56
Interest on Offsite Levy Receipts (2011)	\$ -		\$ 272,428.56
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2011)	\$ 1,634.57		\$ 274,063.13
Interest on Debenture Interest (2011)		\$ -	\$ 274,063.13
2012			\$ 274,063.13
Interest on Opening Balance (2012)	\$ 3,288.76		\$ 277,351.89
Project Expenditures (2012)		\$ -	\$ 277,351.89
Offsite Levy Receipts (2012)	\$ -		\$ 277,351.89
Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2012)	\$ 2,031,922.96		\$ 2,309,274.85
Debenture Interest (2012)		\$ -	\$ 2,309,274.85
Interest on Project Expenditure (2012)		\$ -	\$ 2,309,274.85
Interest on Offsite Levy Receipts (2012)	\$ -		\$ 2,309,274.85
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2012)	\$ 12,191.54		\$ 2,321,466.39
Interest on Debenture Interest (2012)		\$ -	\$ 2,321,466.39
2013			\$ 2,321,466.39
Interest on Opening Balance (2013)	\$ 46,429.33		\$ 2,367,895.71
Project Expenditures (2013)		\$ -	\$ 2,367,895.71
Offsite Levy Receipts (2013)	\$ 1,508,317.32		\$ 3,876,213.03
Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2013)	\$ 274,515.45		\$ 4,150,728.48
Debenture Interest (2013)		\$ -	\$ 4,150,728.48
Interest on Project Expenditure (2013)		\$ -	\$ 4,150,728.48
Interest on Offsite Levy Receipts (2013)	\$ 15,083.17		\$ 4,165,811.66
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2013)	\$ 2,745.15		\$ 4,168,556.81
Interest on Debenture Interest (2013)		\$ -	\$ 4,168,556.81
2014			\$ 4,168,556.81
Interest on Opening Balance (2014)	\$ 59,610.36		\$ 4,228,167.17
Project Expenditures (2014)		\$ -	\$ 4,228,167.17
Offsite Levy Receipts (2014)	\$ 1,189,433.37		\$ 5,417,600.54
Developer Contributions collected prior to Bylaw	\$ 385,599.75		\$ 5,803,200.29
Debenture Interest (2014)		\$ -	\$ 5,803,200.29
Interest on Project Expenditure (2014)		\$ -	\$ 5,803,200.29
Interest on Offsite Levy Receipts (2014)	\$ 8,504.45		\$ 5,811,704.74
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2014)	\$ 2,757.04		\$ 5,814,461.78
Interest on Debenture Interest (2014)		\$ -	\$ 5,814,461.78
2015			\$ 5,814,461.78
Interest on Opening Balance (2015)	\$ 77,913.79		\$ 5,892,375.57
Project Expenditures (2015)		\$10,833,387.43	\$ (4,941,011.86)
Offsite Levy Receipts (2015)	\$ 131,711.71		\$ (4,809,300.15)
Developer Contributions collected prior to Bylaw	\$ 71,952.33		\$ (4,737,347.82)
Debenture Interest (2015)		\$ 7,814.90	\$ (4,745,162.72)
Interest on Project Expenditure (2015)		\$ 82,794.16	\$ (4,827,956.88)
Interest on Offsite Levy Receipts (2015)	\$ 882.47		\$ (4,827,074.42)
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2015)	\$ 482.08		\$ (4,826,592.34)
Interest on Debenture Interest (2015)		\$ 59.73	\$ (4,826,652.06)
2016			\$ (4,826,652.06)
Interest on Opening Balance (2016)		\$ 72,399.78	\$ (4,899,051.84)
Project Expenditures (2016)		\$11,709,978.85	\$ (16,609,030.69)
Offsite Levy Receipts (2016)	\$ -		\$ (16,609,030.69)
Developer Contributions collected prior to Bylaw	\$ 936,958.07		\$ (15,672,072.62)
Debenture Interest (2016)		\$ 258,087.55	\$ (15,930,160.17)
Interest on Project Expenditure (2016)		\$ 43,912.42	\$ (15,974,072.59)
Interest on Offsite Levy Receipts (2016)	\$ -		\$ (15,974,072.59)
Interest on Offsite Levy Receipts Collected Under Old Bylaw #52-2003 (2016)	\$ 7,027.19		\$ (15,967,045.41)
Interest on Debenture Interest (2016)		\$ 967.83	\$ (15,968,013.23)

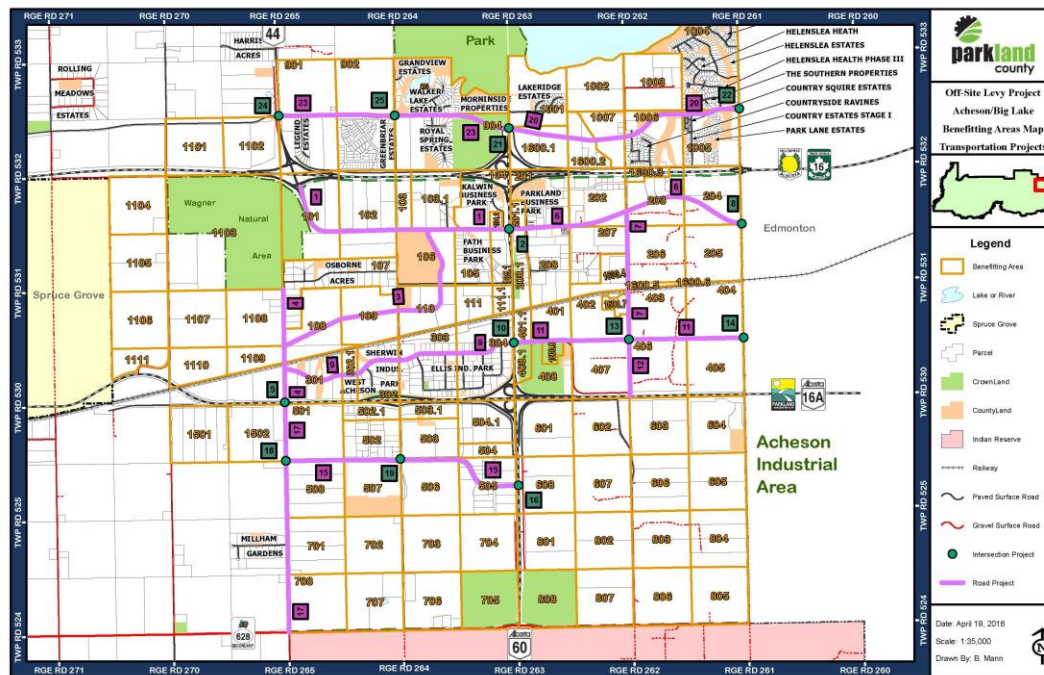
7 TRANSPORTATION

7.1 Transportation Offsite Infrastructure

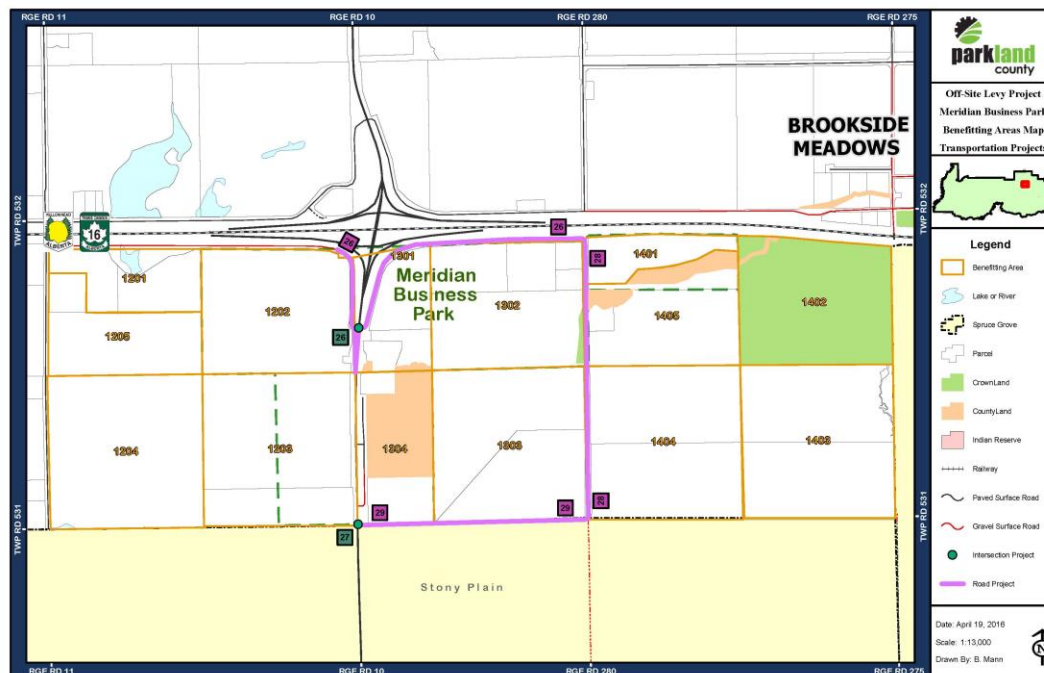
In order to support growth in the County, transportation offsite infrastructure is required. The model contains 35 transportation offsite infrastructure projects (2015 – 31 projects), as shown on the maps below:

Location of Transportation Offsite Infrastructure

Acheson / Big Lake Transportation Projects Map:



5th Meridian Transportation Projects Map:



Summary of Transportation Offsite Infrastructure

The estimated total cost of this infrastructure is comprised of:

- (a) actual construction costs to date;
- (b) debenture interest associated with financing; and
- (c) cost estimates.

Total cost is approximately \$132.31 million (2015 - \$122.69 million) as outlined in the table below. Actual costs, debenture interest (if any), and cost estimates were provided by County staff and engineering advisors. It is important to note that these costs represent “gross” costs, of which only a portion will go to support new development during the 25-year review period. The remainder of this section outlines how total costs are equitably apportioned to new development/growth.

Item	Project Description	Cost of Completed Work	Debenture Interest	Estimated Cost of Work Yet to be Completed	Total Project Estimated Cost
1	114 Avenue: Hwy 44 to Hwy 60 (Acheson Zone 1)	\$ -		\$ 8,794,769	\$ 8,794,769
2	114 Avenue / Hwy 60 Intersection (Acheson Zone 1 & 2)	\$ 971,936		\$ 8,018,964	\$ 8,990,899
3	Zone 1 Collector Road: 114 Avenue to Spruce Valley Road	\$ -		\$ 3,787,813	\$ 3,787,813
4	Spruce Valley Road: Hwy 16A to Osborne Acres (Acheson Zone 1)	\$ -		\$ 1,071,656	\$ 1,071,656
5	Spruce Valley Road / Hwy 16A Intersection (Acheson Zone 1 & 5)	\$ -		\$ 1,596,631	\$ 1,596,631
6	114 Avenue: Bevington Road to 231 Street (Acheson Zone 2)	\$ 2,067,715		\$ 1,491,963	\$ 3,559,678
7	Bevington Road: 114 Avenue to CN Crossing (Acheson Zone 2)	\$ -		\$ 2,024,719	\$ 2,024,719
8	114 Avenue / 231 Street Intersection (Acheson Zone 2 & Winturburn)	\$ -		\$ 1,078,125	\$ 1,078,125
9	Acheson Road: Spruce Valley Road to Hwy 60 (Acheson Zone 3)	\$ -		\$ 1,114,063	\$ 1,114,063
10	Acheson Road / Hwy 60 Intersection (Acheson Zone 3 & 4)	\$ -		\$ 3,593,750	\$ 3,593,750
11	Acheson Road: Hwy 60 to 231 Street (Acheson Zone 4 & Winturburn)	\$ -		\$ 7,130,000	\$ 7,130,000
12	Bevington Road: CN Crossing to Hwy 16A (Acheson Zone 4)	\$ -		\$ 3,342,188	\$ 3,342,188
13	Acheson Road / Bevington Road Intersection (Acheson Zone 4)	\$ -		\$ 1,078,125	\$ 1,078,125
14	Acheson Road / 231 Street Intersection (Acheson Zone 4 & Winturburn)	\$ -		\$ 1,078,125	\$ 1,078,125
15	96 Avenue: Hwy 60 to Spruce Valley Road (Acheson Zone 5)	\$ 4,585,639		\$ 6,145,298	\$ 10,730,937
16	96 Avenue / Hwy 60 Intersection (Acheson Zone 5 & 6)	\$ 3,512,106		\$ -	\$ 3,512,106
17	Spruce Valley Road: Hwy 16A to Hwy 628 (Acheson Zone 5 & 7)	\$ -		\$ 1,380,000	\$ 1,380,000
18	Spruce Valley Road / 96 Avenue Intersection (Acheson Zone 5)	\$ -		\$ 986,125	\$ 986,125
19	96 Avenue / 279 Street Intersection (Acheson Zone 5)	\$ -		\$ 503,125	\$ 503,125
20	Meridian Ave - Hwy 60 to 231 Street (Big Lake East)	\$ 687,393		\$ 4,143,326	\$ 4,830,719
21	Meridian Ave / Hwy 60 Intersection (Big Lake East)	\$ -		\$ 1,246,744	\$ 1,246,744
22	Meridian Ave / 231 Street Intersection (Big Lake East)	\$ -		\$ 589,734	\$ 589,734
23	Meridian Ave: Hwy 44 to Hwy 60 (Big Lake West)	\$ -		\$ 2,415,359	\$ 2,415,359
24	Meridian Ave / Hwy 44 Intersection (Big Lake West)	\$ -		\$ 1,924,453	\$ 1,924,453
25	Meridian Ave / RR264 Intersection (Big Lake West)	\$ -		\$ 756,844	\$ 756,844
26	Hwy 779 / New Service Road Intersection (5th Meridian ASP)	\$ -		\$ 27,227,616	\$ 27,227,616
27	Hwy 779 / Proposed Road (5th Meridian ASP)	\$ -		\$ 5,415,998	\$ 5,415,998
28	Golf Course Road (5th Meridian ASP)	\$ -		\$ 3,342,188	\$ 3,342,188
29	New Proposed Road (5th Meridian ASP)	\$ -		\$ 2,673,750	\$ 2,673,750
30	114 Avenue: Hwy 60 to Bevington Road (Acheson Zone 2)	\$ -		\$ 3,655,102	\$ 3,655,102
31	92 Avenue / Hwy 60 Intersection (Acheson Zone 7 & 8)	\$ -		\$ 4,132,924	\$ 4,132,924
32	92 Avenue: Highway 60 to Spruce Valley Road (Acheson Zone 7)	\$ -		\$ 6,145,298	\$ 6,145,298
33	92 Avenue / Spruce Valley Road Intersection (Acheson Zone 7)	\$ -		\$ 986,125	\$ 986,125
34	92 Avenue / 279 Street Intersection (Acheson Zone 7)	\$ -		\$ 503,125	\$ 503,125
35	279 Street: 92 Avenue to 96 Avenue (Acheson Zone 5 & 7)	\$ -		\$ 1,114,063	\$ 1,114,063
		\$ 11,824,788	\$ -	\$ 120,488,085	\$ 132,312,873
Legend:					
Projects Carried Forward From Last Year					
Projects Amended or Merged					
New Projects					
Projects Completed					

Special Grants and Contributions for Transportation Offsite Infrastructure

7.2 Transportation Offsite Infrastructure Grants & Contributions to Date

The *Municipal Government Act* enables the County to recoup costs for infrastructure, other than those costs that have been provided by way of special grant or contribution (i.e., contributed infrastructure). Parkland County has not received any special grants, but has received \$1.31 million (2015 - \$0.165 million) of contributions for transportation offsite infrastructure as shown in the table below (note, if the County receives additional grants in the future, it will be reflected in one of the annual updates and rates adjusted accordingly). The result is that the total reduced project estimated cost is at \$131.01 million.

Item	Project Description	Total Project Estimated Cost	Special Provincial Grants	Developer Agreement Contributions	Reduced Project Estimated Cost
1	114 Avenue: Hwy 44 to Hwy 60 (Acheson Zone 1)	\$ 8,794,769		\$ 241,226	\$ 8,553,543
2	114 Avenue / Hwy 60 Intersection (Acheson Zone 1 & 2)	\$ 8,990,899			\$ 8,990,899
3	Zone 1 Collector Road: 114 Avenue to Spruce Valley Road	\$ 3,787,813			\$ 3,787,813
4	Spruce Valley Road: Hwy 16A to Osborne Acres (Acheson Zone 1)	\$ 1,071,656			\$ 1,071,656
5	Spruce Valley Road / Hwy 16A Intersection (Acheson Zone 1 & 5)	\$ 1,596,631			\$ 1,596,631
6	114 Avenue: Bevington Road to 231 Street (Acheson Zone 2)	\$ 3,559,678			\$ 3,559,678
7	Bevington Road: 114 Avenue to CN Crossing (Acheson Zone 2)	\$ 2,024,719			\$ 2,024,719
8	114 Avenue / 231 Street Intersection (Acheson Zone 2 & Winterburn)	\$ 1,078,125			\$ 1,078,125
9	Acheson Road: Spruce Valley Road to Hwy 60 (Acheson Zone 3)	\$ 1,114,063			\$ 1,114,063
10	Acheson Road / Hwy 60 Intersection (Acheson Zone 3 & 4)	\$ 3,593,750			\$ 3,593,750
11	Acheson Road: Hwy 60 to 231 Street (Acheson Zone 4 & Winterburn)	\$ 7,130,000			\$ 7,130,000
12	Bevington Road: CN Crossing to Hwy 16A (Acheson Zone 4)	\$ 3,342,188			\$ 3,342,188
13	Acheson Road / Bevington Road Intersection (Acheson Zone 4)	\$ 1,078,125			\$ 1,078,125
14	Acheson Road / 231 Street Intersection (Acheson Zone 4 & Winterburn)	\$ 1,078,125			\$ 1,078,125
15	96 Avenue: Hwy 60 to Spruce Valley Road (Acheson Zone 5)	\$ 10,730,937		\$ 817,657	\$ 9,913,280
16	96 Avenue / Hwy 60 Intersection (Acheson Zone 5 & 6)	\$ 3,512,106			\$ 3,512,106
17	Spruce Valley Road: Hwy 16A to Hwy 628 (Acheson Zone 5 & 7)	\$ 1,380,000			\$ 1,380,000
18	Spruce Valley Road / 96 Avenue Intersection (Acheson Zone 5)	\$ 986,125			\$ 986,125
19	96 Avenue / 279 Street Intersection (Acheson Zone 5)	\$ 503,125			\$ 503,125
20	Meridian Ave - Hwy 60 to 231 Street (Big Lake East)	\$ 4,830,719		\$ 107,034	\$ 4,723,684
21	Meridian Ave / Hwy 60 Intersection (Big Lake East)	\$ 1,246,744			\$ 1,246,744
22	Meridian Ave / 231 Street Intersection (Big Lake East)	\$ 589,734			\$ 589,734
23	Meridian Ave: Hwy 44 to Hwy 60 (Big Lake West)	\$ 2,415,359			\$ 2,415,359
24	Meridian Ave / Hwy 44 Intersection (Big Lake West)	\$ 1,924,453			\$ 1,924,453
25	Meridian Ave / RR264 Intersection (Big Lake West)	\$ 756,844			\$ 756,844
26	Hwy 779 / New Service Road Intersection (5th Meridian ASP)	\$ 27,227,616			\$ 27,227,616
27	Hwy 779 / Proposed Road (5th Meridian ASP)	\$ 5,415,998			\$ 5,415,998
28	Golf Course Road (5th Meridian ASP)	\$ 3,342,188			\$ 3,342,188
29	New Proposed Road (5th Meridian ASP)	\$ 2,673,750			\$ 2,673,750
30	114 Avenue: Hwy 60 to Bevington Road (Acheson Zone 2)	\$ 3,655,102		\$ 140,090	\$ 3,515,012
31	92 Avenue / Hwy 60 Intersection (Acheson Zone 7 & 8)	\$ 4,132,924			\$ 4,132,924
32	92 Avenue: Highway 60 to Spruce Valley Road (Acheson Zone 7)	\$ 6,145,298			\$ 6,145,298
33	92 Avenue / Spruce Valley Road Intersection (Acheson Zone 7)	\$ 986,125			\$ 986,125
34	92 Avenue / 279 Street Intersection (Acheson Zone 7)	\$ 503,125			\$ 503,125
35	279 Street: 92 Avenue to 96 Avenue (Acheson Zone 5 & 7)	\$ 1,114,063			\$ 1,114,063
		\$ 132,312,873	\$ -	\$ 1,306,007	\$ 131,006,866

Allocation of Transportation Infrastructure to Benefiting Parties

7.3 Transportation Offsite Infrastructure Benefiting Parties

The transportation offsite infrastructure previously outlined will benefit various parties to varying degrees. There are three potential benefiting parties:

- Parkland County – a portion of the transportation infrastructure which is required to service existing development.
- Other Stakeholders (or oversizing) – other parties (such as neighboring municipalities) that benefit from infrastructure, as well as that portion of the infrastructure that benefits development beyond the 25 year review period (i.e. oversizing).
- Parkland County Developers – all growth related infrastructure (i.e., levyable transportation infrastructure costs).

The table below outlines the allocation of transportation offsite infrastructure costs to benefiting parties. Percentage allocations have been determined after reducing transportation offsite infrastructure costs for grants and contributions described earlier. Most infrastructure supports new development. That portion of developer cost that has been “deferred” beyond the 25 year review period has been separated from that portion of cost which is included in the current rates.

Item	Project Description	Reduced Project Estimated Cost	County Share %	Other Stakeholder Share & Oversizing %	OSL / Developer Share %
1	114 Avenue: Hwy 44 to Hwy 60 (Acheson Zone 1)	\$ 8,553,543		0.0%	100.0%
2	114 Avenue / Hwy 60 Intersection (Acheson Zone 1 & 2)	\$ 8,990,899		0.0%	100.0%
3	Zone 1 Collector Road: 114 Avenue to Spruce Valley Road	\$ 3,787,813		0.0%	100.0%
4	Spruce Valley Road: Hwy 16A to Osborne Acres (Acheson Zone 1)	\$ 1,071,656		24.0%	76.0%
5	Spruce Valley Road / Hwy 16A Intersection (Acheson Zone 1 & 5)	\$ 1,596,631		40.0%	60.0%
6	114 Avenue: Bevington Road to 231 Street (Acheson Zone 2)	\$ 3,559,678		8.0%	92.0%
7	Bevington Road: 114 Avenue to CN Crossing (Acheson Zone 2)	\$ 2,024,719		20.0%	80.0%
8	114 Avenue / 231 Street Intersection (Acheson Zone 2 & Winterburn)	\$ 1,078,125		20.0%	80.0%
9	Acheson Road: Spruce Valley Road to Hwy 60 (Acheson Zone 3)	\$ 1,114,063		40.0%	60.0%
10	Acheson Road / Hwy 60 Intersection (Acheson Zone 3 & 4)	\$ 3,593,750		28.0%	72.0%
11	Acheson Road: Hwy 60 to 231 Street (Acheson Zone 4 & Winterburn)	\$ 7,130,000		28.0%	72.0%
12	Bevington Road: CN Crossing to Hwy 16A (Acheson Zone 4)	\$ 3,342,188		8.0%	92.0%
13	Acheson Road / Bevington Road Intersection (Acheson Zone 4)	\$ 1,078,125		24.0%	76.0%
14	Acheson Road / 231 Street Intersection (Acheson Zone 4 & Winterburn)	\$ 1,078,125		80.0%	20.0%
15	96 Avenue: Hwy 60 to Spruce Valley Road (Acheson Zone 5)	\$ 9,913,280		0.0%	100.0%
16	96 Avenue / Hwy 60 Intersection (Acheson Zone 5 & 6)	\$ 3,512,106		0.0%	100.0%
17	Spruce Valley Road: Hwy 16A to Hwy 628 (Acheson Zone 5 & 7)	\$ 1,380,000		100.0%	0.0%
18	Spruce Valley Road / 96 Avenue Intersection (Acheson Zone 5)	\$ 986,125		100.0%	0.0%
19	96 Avenue / 279 Street Intersection (Acheson Zone 5)	\$ 503,125		12.0%	88.0%
20	Meridian Ave - Hwy 60 to 231 Street (Big Lake East)	\$ 4,723,684		0.0%	100.0%
21	Meridian Ave / Hwy 60 Intersection (Big Lake East)	\$ 1,246,744		16.0%	84.0%
22	Meridian Ave / 231 Street Intersection (Big Lake East)	\$ 589,734		40.0%	60.0%
23	Meridian Ave: Hwy 44 to Hwy 60 (Big Lake West)	\$ 2,415,359		16.0%	84.0%
24	Meridian Ave / Hwy 44 Intersection (Big Lake West)	\$ 1,924,453		16.0%	84.0%
25	Meridian Ave / RR264 Intersection (Big Lake West)	\$ 756,844		16.0%	84.0%
26	Hwy 779 / New Service Road Intersection (5th Meridian ASP)	\$ 27,227,616		64.0%	36.0%
27	Hwy 779 / Proposed Road (5th Meridian ASP)	\$ 5,415,998		100.0%	0.0%
28	Golf Course Road (5th Meridian ASP)	\$ 3,342,188		64.0%	36.0%
29	New Proposed Road (5th Meridian ASP)	\$ 2,673,750		100.0%	0.0%
30	114 Avenue: Hwy 60 to Bevington Road (Acheson Zone 2)	\$ 3,515,012		28.0%	72.0%
31	92 Avenue / Hwy 60 Intersection (Acheson Zone 7 & 8)	\$ 4,132,924		0.0%	100.0%
32	92 Avenue: Highway 60 to Spruce Valley Road (Acheson Zone 7)	\$ 6,145,298		0.0%	100.0%
33	92 Avenue / Spruce Valley Road Intersection (Acheson Zone 7)	\$ 986,125		100.0%	0.0%
34	92 Avenue / 279 Street Intersection (Acheson Zone 7)	\$ 503,125		8.0%	92.0%
35	279 Street: 92 Avenue to 96 Avenue (Acheson Zone 5 & 7)	\$ 1,114,063		8.0%	92.0%
		\$ 131,006,866			

**The allocation shown in the “oversizing” column represents that portion of cost that benefits development beyond the 25 year repayment period. It was determined by first establishing a “cost per year” for each project, and then comparing the anticipated year of construction to the current year to determine the amount of cost allocated beyond the 25 year period. For example, a project which costs \$25 million would have a cost of \$1 million per year. If the project was to be built in year 20, then 5 years’ worth of cost (\$5 million) would be included in the current rates, and 20 years’ worth of cost (\$20 million) would be deferred. During each future update, additional cost would be brought into the rates of the day.*

Offsite Levy Funds Collected to Date

7.4 Existing Receipts

Prior to allocating costs to benefiting parties, existing offsite levy receipts collected from developers need to be considered in determining the residual/net costs to developers.

As of December 31st, 2015, ~\$7.02 million of transportation levies were collected from developers by way of agreements signed prior to enactment of the 2010 bylaw. These levies have been “credited” to the projects for which they were collected.

Also, ~\$2.19 million was collected under the current bylaw as shown in the table below. This increased from ~\$2.10 million at the last update.

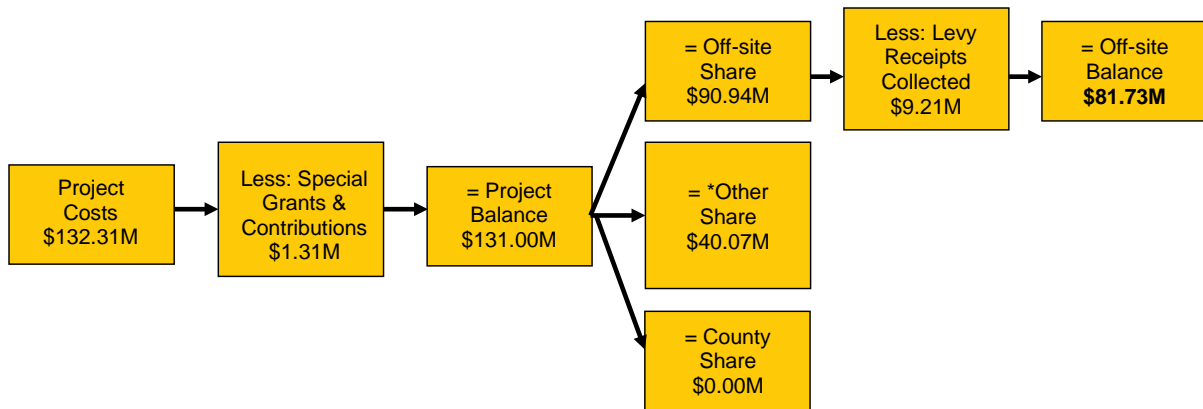
This results in a residual developer cost of \$81.73 million (2015 - \$69.99 million).

Item	Project Description	Developer Cost (Leviable Costs)	Offsite Levy Funds Collected Under Old Bylaw No. 01-2010	Developer (Levy) Funds Collected	Adjusted Developer (Levy) Cost
1	114 Avenue: Hwy 44 to Hwy 60 (Acheson Zone 1)	\$ 8,553,543	\$ 1,269,583	\$ -	\$ 7,283,960
2	114 Avenue / Hwy 60 Intersection (Acheson Zone 1 & 2)	\$ 8,990,899	\$ 534,094	\$ 79,347	\$ 8,377,459
3	Zone 1 Collector Road: 114 Avenue to Spruce Valley Road	\$ 3,787,813	\$ 546,796	\$ -	\$ 3,241,017
4	Spruce Valley Road: Hwy 16A to Osborne Acres (Acheson Zone 1)	\$ 814,459	\$ 154,701	\$ -	\$ 659,758
5	Spruce Valley Road / Hwy 16A Intersection (Acheson Zone 1 & 5)	\$ 957,979	\$ 166,003	\$ 53,949	\$ 738,027
6	114 Avenue: Bevington Road to 231 Street (Acheson Zone 2)	\$ 3,274,903	\$ 926,671	\$ 311,538	\$ 2,036,694
7	Bevington Road: 114 Avenue to CN Crossing (Acheson Zone 2)	\$ 1,619,775	\$ 350,135	\$ 92,502	\$ 1,177,138
8	114 Avenue / 231 Street Intersection (Acheson Zone 2 & Winturburn)	\$ 862,500	\$ 186,440	\$ 35,831	\$ 640,228
9	Acheson Road: Spruce Valley Road to Hwy 60 (Acheson Zone 3)	\$ 668,438	\$ -	\$ -	\$ 668,438
10	Acheson Road / Hwy 60 Intersection (Acheson Zone 3 & 4)	\$ 2,587,500	\$ 4,269	\$ -	\$ 2,583,231
11	Acheson Road: Hwy 60 to 231 Street (Acheson Zone 4 & Winturburn)	\$ 5,133,600	\$ 8,820	\$ -	\$ 5,124,780
12	Bevington Road: CN Crossing to Hwy 16A (Acheson Zone 4)	\$ 3,074,813	\$ 4,135	\$ -	\$ 3,070,678
13	Acheson Road / Bevington Road Intersection (Acheson Zone 4)	\$ 819,375	\$ 1,334	\$ -	\$ 818,041
14	Acheson Road / 231 Street Intersection (Acheson Zone 4 & Winturburn)	\$ 215,625	\$ 1,334	\$ -	\$ 214,291
15	96 Avenue: Hwy 60 to Spruce Valley Road (Acheson Zone 5)	\$ 9,913,280	\$ 1,111,103	\$ 1,294,194	\$ 7,507,983
16	96 Avenue / Hwy 60 Intersection (Acheson Zone 5 & 6)	\$ 3,512,106	\$ 159,708	\$ 234,207	\$ 3,118,191
17	Spruce Valley Road: Hwy 16A to Hwy 628 (Acheson Zone 5 & 7)	\$ -	\$ 102,700	\$ (13,442)	\$ (89,258)
18	Spruce Valley Road / 96 Avenue Intersection (Acheson Zone 5)	\$ -	\$ 73,388	\$ (9,605)	\$ (63,782)
19	96 Avenue / 279 Street Intersection (Acheson Zone 5)	\$ 442,750	\$ 37,443	\$ 19,181	\$ 386,127
20	Meridian Ave - Hwy 60 to 231 Street (Big Lake East)	\$ 4,723,684	\$ 395,455	\$ 79,790	\$ 4,248,439
21	Meridian Ave / Hwy 60 Intersection (Big Lake East)	\$ 1,047,265	\$ 3,665	\$ 9,519	\$ 1,034,081
22	Meridian Ave / 231 Street Intersection (Big Lake East)	\$ 353,841	\$ -	\$ 6,958	\$ 346,883
23	Meridian Ave: Hwy 44 to Hwy 60 (Big Lake West)	\$ 2,028,902	\$ 949,540	\$ -	\$ 1,079,362
24	Meridian Ave / Hwy 44 Intersection (Big Lake West)	\$ 1,616,541	\$ 23,702	\$ -	\$ 1,592,839
25	Meridian Ave / RR264 Intersection (Big Lake West)	\$ 635,749	\$ 4,645	\$ -	\$ 631,104
26	Hwy 779 / New Service Road Intersection (5th Meridian ASP)	\$ 9,801,942	\$ -	\$ -	\$ 9,801,942
27	Hwy 779 / Proposed Road (5th Meridian ASP)	\$ -	\$ -	\$ -	\$ -
28	Golf Course Road (5th Meridian ASP)	\$ 1,203,188	\$ -	\$ -	\$ 1,203,188
29	New Proposed Road (5th Meridian ASP)	\$ -	\$ -	\$ -	\$ -
30	114 Avenue: Hwy 60 to Bevington Road (Acheson Zone 2)	\$ 2,530,808	\$ -	\$ -	\$ 2,530,808
31	92 Avenue / Hwy 60 Intersection (Acheson Zone 7 & 8)	\$ 4,132,924	\$ -	\$ -	\$ 4,132,924
32	92 Avenue: Highway 60 to Spruce Valley Road (Acheson Zone 7)	\$ 6,145,298	\$ -	\$ -	\$ 6,145,298
33	92 Avenue / Spruce Valley Road Intersection (Acheson Zone 7)	\$ -	\$ -	\$ -	\$ -
34	92 Avenue / 279 Street Intersection (Acheson Zone 7)	\$ 462,875	\$ -	\$ -	\$ 462,875
35	279 Street: 92 Avenue to 96 Avenue (Acheson Zone 5 & 7)	\$ 1,024,938	\$ -	\$ -	\$ 1,024,938
		\$ 90,937,309	\$ 7,015,661	\$ 2,193,968	\$ 81,727,680

7.5 Transportation Offsite Levy Costs

As shown in the figure below, the total costs for transportation infrastructure that forms the basis of the rate is approximately \$81.73 million (2015 - \$69.99 million). The cost allocations to each benefitting party are based on the benefitting percentages shown in Section 7.3. The offsite levy balance (due from developers) is allocated to various benefitting areas (as described in the next section).

Total Transportation Offsite Levy Cost



“*Other Share” represents the portion of cost allocated to other benefitting parties such as neighbouring municipalities, other orders of government, etc., as well as that portion of cost allocated beyond the 25 year review period.

7.6 Transportation Infrastructure Benefiting Areas

Net developer costs for each project have been allocated to multiple benefitting offsite levy areas (see tables below). Allocations are denoted with a “1” below applicable areas. Benefitting areas were determined by County staff and advisors.

Benefiting Areas for Transportation Offsite Infrastructure

Item	Project Description	Developer Cost	101.0	102.0	103.0	103.1	104.0	104.1	105.0	105.1	106.0	107.0	108.0	109.0	110.0	111.0	111.1	201.0	201.1	202.0	203.0	204.0	205.0	206.0	207.0	208.0	208.1	301.0	302.0	302.1	303.0	304.0
1	114 Avenue: Hwy 44 to Hwy 60 (Acheson Zone 1)	\$ 7,283,960	1	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	114 Avenue / Hwy 60 Intersection (Acheson Zone 1 & 2)	\$ 8,377,459	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
3	Zone 1 Collector Road: 114 Avenue to Spruce Valley Road	\$ 3,241,017	1	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	Spruce Valley Road: Hwy 16A to Osborne Acres (Acheson Zone 1)	\$ 659,758	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1											1	1	1	1	1
5	Spruce Valley Road / Hwy 16A Intersection (Acheson Zone 1 & 5)	\$ 738,027	1	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	114 Avenue: Bevington Road to 231 Street (Acheson Zone 2)	\$ 2,036,694	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
7	Bevington Road: 114 Avenue to CN Crossing (Acheson Zone 2)	\$ 1,177,138																	1	1	1	1	1	1	1	1	1					
8	114 Avenue / 231 Street Intersection (Acheson Zone 2 & Winturburn)	\$ 640,228																1	1	1	1	1	1	1	1	1	1					
9	Acheson Road: Spruce Valley Road to Hwy 60 (Acheson Zone 3)	\$ 668,438																											1	1	1	1
10	Acheson Road / Hwy 60 Intersection (Acheson Zone 3 & 4)	\$ 2,583,231																											1	1	1	1
11	Acheson Road: Hwy 60 to 231 Street (Acheson Zone 4 & Winturburn)	\$ 5,124,780																											1	1	1	1
12	Bevington Road: CN Crossing to Hwy 16A (Acheson Zone 4)	\$ 3,070,678																														
13	Acheson Road / Bevington Road Intersection (Acheson Zone 4)	\$ 818,041																														
14	Acheson Road / 231 Street Intersection (Acheson Zone 4 & Winturburn)	\$ 214,291																														
15	96 Avenue: Hwy 60 to Spruce Valley Road (Acheson Zone 5)	\$ 7,507,983																														
16	96 Avenue / Hwy 60 Intersection (Acheson Zone 5)	\$ 3,118,191																														
17	Spruce Valley Road: Hwy 16A to Hwy 628 (Acheson Zone 5 & 7)	\$ (89,258)																														
18	Spruce Valley Road / 96 Avenue Intersection (Acheson Zone 5)	\$ (63,782)																														
19	96 Avenue / 279 Street Intersection (Acheson Zone 5)	\$ 386,127																														
20	Meridian Ave - Hwy 60 to 231 Street (Big Lake East)	\$ 4,248,439																														
21	Meridian Ave / Hwy 60 Intersection (Big Lake East)	\$ 1,034,081																														
22	Meridian Ave / 231 Street Intersection (Big Lake East)	\$ 348,883																														
23	Meridian Ave: Hwy 44 to Hwy 60 (Big Lake West)	\$ 1,079,362																														
24	Meridian Ave / Hwy 44 Intersection (Big Lake West)	\$ 1,592,839																														
25	Meridian Ave / RR264 Intersection (Big Lake West)	\$ 631,104																														
26	Hwy 779 / New Service Road Intersection (5th Meridian ASP)	\$ 8,801,942																														
27	Hwy 779 / Proposed Road (5th Meridian ASP)	\$ -																														
28	Golf Course Road (5th Meridian ASP)	\$ 1,203,188																														
29	New Proposed Road (5th Meridian ASP)	\$ -																														
30	114 Avenue: Hwy 60 to Bevington Road (Acheson Zone 2)	\$ 2,530,808	1	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	92 Avenue / Hwy 60 Intersection (Acheson Zone 7 & 8)	\$ 4,132,924																														
32	92 Avenue: Highway 60 to Spruce Valley Road (Acheson Zone 7)	\$ 6,145,298																														
33	92 Avenue / Spruce Valley Road Intersection (Acheson Zone 7)	\$ -																														
34	92 Avenue / 279 Street Intersection (Acheson Zone 7)	\$ 462,875																														
35	279 Street: 92 Avenue to 96 Avenue (Acheson Zone 5 & 7)	\$ 1,024,938																														
		\$ 81,727,680																														

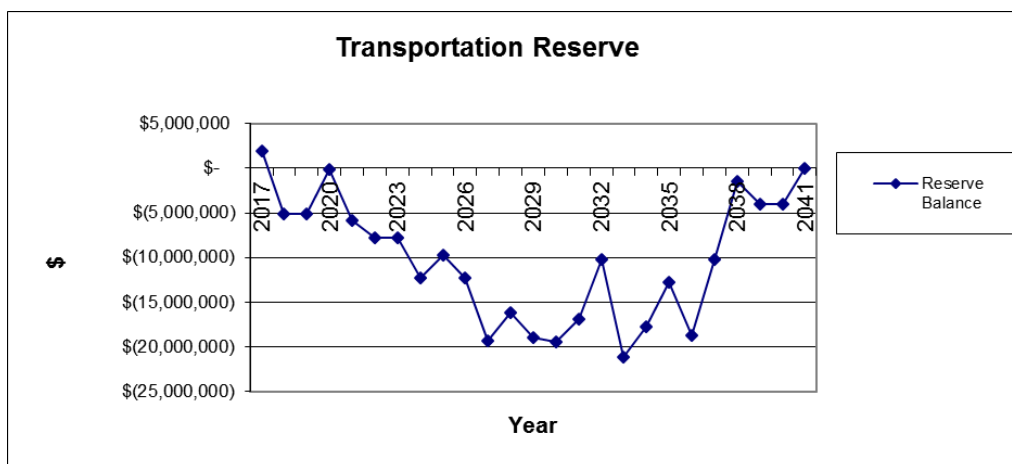
[illegible]

7.7 Development and Transportation Staging Impacts

Transportation offsite infrastructure will be constructed in staged fashion over the 25-year development period. We have reviewed the availability of offsite levy funds to meet these construction requirements and found that offsite levy reserve funds will not be sufficient to pay for construction of transportation infrastructure from time to time—front-ending of infrastructure will be required. A front-end is the party that constructs and pays up front for infrastructure that benefits other parties. The front-end is repaid over time as offsite levies are collected from future development.

In order to compensate parties for capital they provide in front-ending offsite infrastructure construction, a 1.50% interest allowance has been charged to the reserve in 2016 when in a negative balance. Further, a 1.50% interest credit has been provided to reduce offsite levy rates for interest earned on positive reserve balances. Interest earning and charge rates should be updated each year to reflect the current economic context. The graph and table below outline transportation levy reserve balances over the 25-year development period.

Anticipated Transportation Offsite Levy Reserve Balances



*A “staging adjustment” is made to rates to account for the anticipated impact of interest on the reserve (earning and charging rates). In this way, the reserve is assured to achieve breakeven at the end of the review period without collecting too much from developers or too little.

7.8 Reserve Balance

Prior to the adoption of Bylaw No. 2015-07, transportation levies were collected under previous Bylaw No. 01-2010. From end-2014 to end-2015 interest impacts on the reserve were captured in alignment with the interest earning and charging rates in effect at that time:

Interest Earning Rate

- 2014 = 1.43%
- 2015 = 1.34%
- 2016 = 1.50%

Interest Charging Rate

- 2014 = 3.86%
- 2015 = 3.057%
- 2016 = 1.50%

Notes

- ¼ year rule – expenditures are deemed to have been made in September each year.
- ½ year rule – receipts are deemed to have been made in June each year.

As at December 31st, 2014 the transportation reserve balance was \$8,422,411.96.
As at December 31st, 2015 the transportation reserve balance was \$8,778,457.48.
As at December 31st, 2016 the transportation reserve balance was **\$10,167,737.35**.

Transportation Offsite Levy Reserve Balance

Description	Dr	Cr	Balance
Offsite Levy Expenditures to December 31, 2013		\$ 1,813,957.99	\$ (1,813,957.99)
Offsite Levy Receipt Allocations to December 31, 2013	\$ 1,629,054.24		\$ (184,903.75)
Bylaw 01-2010 Schedule A	\$ 2,351,520.51		\$ 2,166,616.76
Bylaw 01-2010 Schedule B	\$ 1,671,829.67		\$ 3,838,446.43
Bylaw 01-2010 Schedule C	\$ 19,664.42		\$ 3,858,110.85
Bylaw 01-2010 Schedule D	\$ 1,222,205.36		\$ 5,080,316.21
Bylaw 01-2010 Schedule F	\$ 46,297.98		\$ 5,126,614.19
Interest on Bylaw 01-2010	\$ 44,154.65		\$ 5,170,768.84
Opening Balance December 31, 2013			\$ 5,170,768.84
2014			\$ 5,170,768.84
Interest on Opening Balance	\$ 73,941.99		\$ 5,244,710.84
Project Expenditures		\$ -	\$ 5,244,710.84
Offsite Levy Receipts	\$ -		\$ 5,244,710.84
Offsite Levy Receipts Collected Under Old Bylaw	\$ 3,155,141.86		\$ 8,399,852.70
Debenture Interest		\$ -	\$ 8,399,852.70
Interest on Project Expenditures		\$ -	\$ 8,399,852.70
Interest on Offsite Levy Receipts	\$ -		\$ 8,399,852.70
Interest on Offsite Levy Receipts Collected Under Old Bylaw	\$ 22,559.26		\$ 8,422,411.96
Interest on Debenture Interest		\$ -	\$ 8,422,411.96
2015			\$ 8,422,411.96
Interest on Opening Balance (2015)	\$ 112,860.32		\$ 8,535,272.28
Project Expenditures (2015)		\$ 6,971,179.66	\$ 1,564,092.62
Offsite Levy Receipts (2015)	\$ 7,160,960.22		\$ 8,725,052.84
Developer Contributions collected prior to Bylaw	\$ 58,312.75		\$ 8,783,365.59
Debenture Interest (2015)			\$ 8,783,365.59
Interest on Project Expenditure (2015)		\$ 53,277.24	\$ 8,730,088.35
Interest on Offsite Levy Receipts (2015)	\$ 47,978.43		\$ 8,778,066.79
Interest on Offsite Levy Receipts Collected Under Old Bylaw #01-2010 (2015)	\$ 390.70		\$ 8,778,457.48
Interest on Debenture Interest (2015)		\$ -	\$ 8,778,457.48
2016			\$ 8,778,457.48
Interest on Opening Balance (2016)	\$ 131,676.86		\$ 8,910,134.34
Project Expenditures (2016)		\$ 3,039,650.55	\$ 5,870,483.79
Offsite Levy Receipts (2016)	\$ 3,135,917.50		\$ 9,006,401.29
Developer Contributions collected prior to Bylaw	\$ 1,140,660.41		\$10,147,061.70
Debenture Interest (2016)			\$10,147,061.70
Interest on Project Expenditure (2016)		\$ 11,398.69	\$10,135,663.01
Interest on Offsite Levy Receipts (2016)	\$ 23,519.38		\$10,159,182.40
Interest on Offsite Levy Receipts Collected Under Old Bylaw #01-2010 (2016)	\$ 8,554.95		\$10,167,737.35
Interest on Debenture Interest (2016)		\$ -	\$10,167,737.35

8 SUMMARY OF OFFSITE LEVY RATES

The table below shows the combined offsite levy rates (per hectare) associated with construction of transportation, water, sanitary and stormwater offsite infrastructure for each offsite levy area. Cumulative rates vary from a low of \$10,813 per hectare (Area 1101.0) to a high of \$232,685 per hectare (Area 408.0). **The weighted average rate total of all areas is \$110,107 per hectare.** This is up from \$97,652 per hectare at the last update. (Note, the weighted average rate is provided for information purposes only; developers are charged the rate applicable to their specific levy area).

Summary of Offsite Levies (2017) by Benefitting Area

Area Ref. #	Transportation Charges	Water Charges	Sanitary Charges	Storm Charges	Total	Area Ref. #	Transportation Charges	Water Charges	Sanitary Charges	Storm Charges	Total
101.0	\$ 72,747	\$ 30,740	\$ 469	\$ -	\$ 103,956	704.0	\$ 73,662	\$ 21,673	\$ 1,618	\$ 61,925	\$ 158,878
102.0	\$ 72,747	\$ 30,740	\$ 469	\$ -	\$ 103,956	705.0					
103.0	\$ 72,747	\$ 30,740	\$ 31,666	\$ -	\$ 135,153	706.0					
103.1	\$ 72,747	\$ 30,740	\$ 40,032	\$ -	\$ 143,519	707.0					
104.0						708.0					
104.1	\$ 72,747	\$ 30,740	\$ 31,666	\$ -	\$ 135,153	801.0					
105.0	\$ 72,747	\$ 30,740	\$ 469	\$ -	\$ 103,956	802.0					
105.1	\$ 72,747	\$ 35,321	\$ 35,405	\$ -	\$ 143,473	803.0					
106.0						804.0					
107.0						805.0					
108.0	\$ 72,747	\$ 25,682	\$ -	\$ -	\$ 98,429	806.0					
109.0	\$ 72,747	\$ 25,682	\$ -	\$ -	\$ 98,429	807.0					
110.0						808.0					
111.0	\$ 72,747	\$ 30,740	\$ 469	\$ -	\$ 103,956	901.0	\$ 19,037	\$ 40,689	\$ -	\$ -	\$ 59,727
111.1	\$ 72,747	\$ 35,321	\$ 4,208	\$ -	\$ 112,276	902.0	\$ 19,037	\$ 40,689	\$ -	\$ -	\$ 59,727
201.0						903.0	\$ 19,037	\$ 40,689	\$ -	\$ -	\$ 59,727
201.1						904.0	\$ 19,037	\$ 40,689	\$ -	\$ -	\$ 59,727
202.0						1001.0	\$ 33,286	\$ 33,408	\$ -	\$ -	\$ 66,694
203.0	\$ 64,587	\$ 21,021	\$ -	\$ -	\$ 85,608	1002.0	\$ 33,286	\$ 33,408	\$ -	\$ -	\$ 66,694
204.0	\$ 64,587	\$ 15,962	\$ 24,728	\$ -	\$ 105,277	1003.0	\$ 33,286	\$ 33,408	\$ -	\$ -	\$ 66,694
205.0	\$ 64,587	\$ 15,962	\$ -	\$ -	\$ 80,549	1004.0					
206.0						1005.0	\$ 33,286	\$ 33,408	\$ -	\$ -	\$ 66,694
207.0	\$ 64,587	\$ 21,021	\$ -	\$ -	\$ 85,608	1006.0	\$ 33,286	\$ 33,408	\$ 21,690	\$ -	\$ 88,385
208.0	\$ 64,587	\$ 21,021	\$ 31,666	\$ -	\$ 117,274	1007.0					
208.1	\$ 64,587	\$ 25,602	\$ 35,405	\$ -	\$ 125,594	1101.0	\$ 5,818	\$ 4,994	\$ -	\$ -	\$ 10,813
301.0	\$ 97,728	\$ 83,765	\$ 1,618	\$ -	\$ 183,112	1102.0	\$ 5,818	\$ 10,053	\$ -	\$ -	\$ 15,871
302.0						1103.0					
302.1						1104.0					
303.0						1105.0					
304.0						1106.0					
401.0						1107.0					
401.1						1108.0					
402.0	\$ 95,360	\$ 37,919	\$ -	\$ -	\$ 133,279	1109.0					
403.0						1110.0					
404.0						1111.0					
405.0						1112.0					
406.0						1113.0					
407.0	\$ 95,360	\$ 37,919	\$ -	\$ 60,909	\$ 194,188	1201.0					
408.0	\$ 95,360	\$ 37,919	\$ 65,510	\$ 33,896	\$ 232,685	1202.0	\$ 62,678	\$ 87,403	\$ 33,079	\$ -	\$ 183,159
408.1						1203.0	\$ 62,678	\$ 72,156	\$ 10,482	\$ -	\$ 145,316
501.0	\$ 55,999	\$ 35,010	\$ 5,687	\$ 39,440	\$ 136,136	1204.0					
502.0	\$ 55,999	\$ 40,069	\$ 5,687	\$ 39,440	\$ 141,195	1205.0					
502.1	\$ 55,999	\$ 40,069	\$ 8,736	\$ 39,440	\$ 144,244	1301.0	\$ 89,136	\$ 87,403	\$ 33,079	\$ -	\$ 209,618
503.0						1302.0					
503.1						1303.0					
504.0	\$ 55,999	\$ 40,069	\$ 19,037	\$ 40,399	\$ 155,504	1304.0	\$ 89,136	\$ 72,156	\$ 10,482	\$ -	\$ 171,774
504.1	\$ 55,999	\$ 40,069	\$ 22,086	\$ 39,809	\$ 157,963	1401.0					
505.0						1402.0					
506.0						1403.0					
507.0						1404.0					
508.0	\$ 53,838	\$ 35,010	\$ 1,618	\$ 39,440	\$ 129,906	1405.0					
601.0						1501.0					
602.0						1502.0					
603.0						1600.1	\$ 33,286	\$ 33,408	\$ 24,728	\$ -	\$ 91,422
604.0						1600.2					
605.0						1600.3	\$ 64,587	\$ 21,021	\$ 24,728	\$ -	\$ 110,336
606.0						1600.4	\$ 64,587	\$ 21,021	\$ 24,728	\$ -	\$ 110,336
607.0						1600.5					
608.0						1600.6					
701.0						1600.7	\$ 95,360	\$ 37,919	\$ 24,728	\$ -	\$ 158,007
702.0						1600.8					
703.0	\$ 73,662	\$ 21,673	\$ 38,759	\$ 61,925	\$ 196,018						

Legend:

Residential
Commercial / Industrial
No Development Area Avail
Development >25 Years