

**COMMITTEE OF THE WHOLE**  
September 3<sup>rd</sup>, 2019

Report #FIN-2019-09  
Richard Bennett, Acting Treasurer

**10 YEAR CAPITAL PLAN**

## **STAFF RECOMMENDATION(S)**

It is recommended:

**“THAT**, the 10 Year Capital Plan be adopted.”

## **BACKGROUND**

Prudent fiscal management requires planning for future capital purchases and how those expenditures are to be funded. The forecasts are key components of our fiscal management program and will become part of the Development Charge Study to be completed in the next couple of months and the Municipal Tangible Capital Asset Plan which is to be updated in the near future.

## **DISCUSSION**

The plan has been organized as follows:

- **Summary**
- **Vehicles & Equipment**
- **Bridges**
- **Roads**
- **Buildings**
- **Other Assets**
- **Reserve Projections**
- **Converting Gravel Roads**
- **Un-Assumed Roads**

It is important to note that the last 2 schedules (Converting Gravel Roads and Un-Assumed Roads) are currently not built into the costs for the 10 year Capital Plan.

Each schedule has an inflation rate of 2% per year built into the estimated costs of acquiring these assets.

The Township has a capitalization threshold of \$20,000 for vehicles and equipment and \$50,000 for linear assets, bridges and buildings so that individual capital assets of lesser value are expensed in the year as an operational expense. These items are not included in the 10 year Capital Plan.

The capital purchases are funded primarily by reserves and grants. This plan does include the use of development charge revenues, gas tax revenues, and specific capital reserve funds. One new debt (in the year 2020 of \$875,000) to complete the upgrades to the Bolingbroke Bridge is also included in the plan. It is estimated that this new debt will add approximately \$50,000 to the annual operating budget as a repayment of this debt over a 25 year timeframe.

It is imperative that the Township continue to contribute funds to capital reserves each year. We have to continue investing in capital projects in order to save (or get under control) operating costs (i.e.: annual vehicle repair costs and annual cold patch costs of \$60,000).

The 2019 budget included \$814,200 in contributions to reserve funds for future capital projects. The attached plan points out the need to increase that contribution in 2020 to \$830,400. (\$16,200 or a .3% levy increase) Also; as the plan has a built in inflation rate on the cost of capital projects, it also suggests an annual increase of 2% in the contributions to the capital reserve accounts.

### **OPTIONS TO BE CONSIDERED**

Council have requested information on the costs associated with converting gravel roads to asphalt or surface treatment and also on assuming roads that are currently private unassumed in old subdivisions. Page 13 and 14 of the attachments provide some details on these options.

As noted, the costs associated with either of these options are not built into the 10 year capital plan and it is staff's opinion that these costs could drive the annual requirements for reserve funds out of reach and would add to the annual operating costs of the public works department.

### **STRATEGIC PLAN LINK**

The Strategic Plan and the current priority setting process could have some effects on future capital projects and staff suggests that this plan be reviewed annually and updated for any changes to capital plans and the estimated cost of each project.

### **FINANCIAL CONSIDERATIONS**

The plan points out the need to increase the contributions to reserves in the annual budget process.

**CONCLUSIONS**

The projects in this 10 year capital plan can be completed with a modest (.3%) annual increase to the contributions to reserves along with the one new long-term debt for the Bolingbroke Bridge project.

**ATTACHMENTS**

- i) 10 Year Capital Plan

**Prepared and Submitted By:**



**Richard Bennett,  
Acting Treasurer**

**Approved for Submission By:**



**Larry Donaldson,  
Chief Administrative Officer**



Tay Valley Township

**10 YEAR  
CAPITAL PLAN**

**2020 TO 2029**

September 2019

<b>TAY VALLEY TOWNSHIP</b>													
<b>10 YEAR CAPITAL PLAN</b>			<b>SUMMARY</b>										
<b>2020 TO 2029</b>			<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
<b>Public Works Equipment</b>	Expenses		485,000	336,600	234,000	349,800	97,200	544,500	123,200	456,000	0	413,000	30,000
Equipment Reserve	Funding		(400,300)	(319,770)	(222,300)	(332,310)	(92,340)	(517,275)	(117,040)	(433,200)	0	(392,350)	(28,500)
Development Charges	Funding		(84,700)	(16,830)	(11,700)	(17,490)	(4,860)	(27,225)	(6,160)	(22,800)	0	(20,650)	(1,500)
Current Year Levy	Funding		0	0	0	0	0	0	0	0	0	0	0
<b>Bridges Construction</b>	Expenses		1,096,800	898,460	253,864	366,230	112,752	54,120	514,304	193,028	224,244	0	0
Bridge Reserve	Funding		(319,000)	(23,460)	(253,864)	(366,230)	(112,752)	(54,120)	(514,304)	(193,028)	(224,244)	0	0
Gas Tax Funds	Funding		(777,800)										
Financing	Funding			(875,000)									
Current Year Levy	Funding		0	0	0	0	0	0	0	0	0	0	0
<b>Roads Construction</b>	Expenses		1,653,396	639,540	647,920	1,021,840	693,360	809,600	747,040	699,960	530,120	645,460	678,000
Roads Reserve	Funding		(347,488)	(311,388)	(373,064)	(624,776)	(418,682)	(509,120)	(461,592)	(414,962)	(267,476)	(369,323)	(409,640)
Grants	Funding		(1,228,408)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)
Gas Tax Funds	Funding			(250,000)	(200,000)	(300,000)	(200,000)	(210,000)	(200,000)	(200,000)	(200,000)	(200,000)	(200,000)
Development Charges	Funding		(77,500)	(28,152)	(24,856)	(47,064)	(24,678)	(40,480)	(35,448)	(34,998)	(12,644)	(26,137)	(18,360)
Current Year Levy	Funding		0	0	0	0	0	0	0	0	0	0	0
<b>Buildings</b>	Expenses		0	0	0	0	0	0	56,000	0	0	0	0
Buildings Reserves	Funding		0	0	0	0	0	0	(53,200)	0	0	0	0
Development Charges	Funding		0	0	0	0	0	0	(2,800)	0	0	0	0
Current Year Levy	Funding		0	0	0	0	0	0	0	0	0	0	0
<b>Other Assets (IT, Equipment, Recreation)</b>			0	147,900	41,600	0	81,000	97,900	33,600	0	0	0	60,000
Reserves	Funding		0	(30,505)	(39,520)	0	(76,950)	(93,005)	(31,920)	0	0	0	(57,000)
Grants	Funding		0	(110,000)	0	0	0	0	0	0	0	0	0
Development Charges	Funding		0	(7,395)	(2,080)	0	(4,050)	(4,895)	(1,680)	0	0	0	(3,000)
Current Year Levy	Funding		0	0	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>													
Expenditures	Expenses		3,235,196	2,022,500	1,177,384	1,737,870	984,312	1,506,120	1,474,144	1,348,988	754,364	1,058,460	768,000
Reserve Funds Used	Funding		(1,066,788)	(685,123)	(888,748)	(1,323,316)	(700,724)	(1,173,520)	(1,178,056)	(1,041,190)	(491,720)	(761,673)	(495,140)
Development Charges	Funding		(162,200)	(52,377)	(38,636)	(64,554)	(33,588)	(72,600)	(46,088)	(57,798)	(12,644)	(46,787)	(22,860)
Grants	Funding		(1,228,408)	(160,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)	(50,000)
Gas Tax Funds	Funding		(777,800)	(250,000)	(200,000)	(300,000)	(200,000)	(210,000)	(200,000)	(200,000)	(200,000)	(200,000)	(200,000)
Financing	Funding		0	(875,000)	0	0	0	0	0	0	0	0	0
Current Year Levy	Funding		0	0	0	0	0	0	0	0	0	0	0



TAY VALLEY TOWNSHIP															
10 YEAR CAPITAL PLAN															
2020 TO 2029															
		Inflation = 2%												Note #1	Note #1
		Repair/Replacement		1	2	3	4	5	6	7	8	9	10		
BRIDGES		Cost	Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
STRUCTURE NO.	Various Repairs & Guard Rails			50,000											
15-A04	9th Concession Road														
15-092	Adam's Mill Road	80,000	2025						8,800	80,640					
15-A01	Allan's Mill Road	230,000	2021		23,460	215,280									
15-051	Anderson Road	164,000	2026							18,368	168,264				
C15-A02	Anglican Church Road Culvert														
15-159	Black Lake Road														
15-072	Bolingbroke Bridge (Crow Lake)	935,000	2020	60,000	875,000										
15-093	Bowes Side Road	412,000	2025						45,320	415,296					
C15-A03	Doran Road Culvert														
15-075	Doran Road (Fall River Bridge)	161,000	2027								16,100	144,900			
15-050	Ennis Road														
15-076	Gambles Side Road	142,000	2022			14,768	135,468								
15-094	Glen Tay Road	777,800	2019	777,800											
C15-096	Glen Tay Road Open Footing Culvert	116,000	2023				12,296	112,752							
15-139	Haughians Road	76,000	2027								8,664	79,344			
C15-048	Hunter Side Road Culvert (Colton Creek)														
15-088	Menzies Munro Side Road														
15-070	Munro Road (Fall River Bridge)														
15-091	Noonans Side Rd	149,000	2019	149,000											
15-087	Second Line Road	229,000	2022			23,816	218,466								
15-089	Upper Scotch Line Road Culvert														
15-095	Upper Scotch Line Road Bridge														
	Upper Scotch Line Newly Identified 2016														
	6th Concession (Bath.) Culvert Replacement	60,000	2019	60,000											
				1,096,800	898,460	253,864	366,230	112,752	54,120	514,304	193,028	224,244	0	0	
	<b>Funding:</b>														
	Bridges Reserve			319,000	23,460	253,864	366,230	112,752	54,120	514,304	193,028	224,244	0	0	
	Federal Gas Tax			777,800											
	Debt				875,000										
	<b>Total</b>			1,096,800	898,460	253,864	366,230	112,752	54,120	514,304	193,028	224,244	0	0	
Note #1	The next OSIM Report will be used to determine capital work for 2028 and 2029														

TAY VALLEY TOWNSHIP															
10 YEAR CAPITAL PLAN															
2020 TO 2029															
ROADS	KMS	Last Work	Inflation = 2%		YEAR	LEGEND:									
			Repair/Replacement	Cost		Year	Pavement Presevation					Reconstruction			
					2019	1	2	3	4	5	6	7	8	9	10
					2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
Deficiencies Elimination Prgm					60,000										
<b>SURFACE TREATMENT (LCB)</b>															
L Allan's Side Road	1.808	2015	76,000	2022			80,560								
L Anglican Church Road	3.343	2008	134,000	2023				144,720							
L Armstrong Line	2.571	2018													
L Ashby Road	0.462	-	76,000	2027								88,160			
L Bathurst 7th Concession	2.374	-	353,000	2025						395,360					
L Cameron Side Road (2)	3.480	-	457,000	2023			493,560								
L Christie Lake North Shore Road (2)	2.592	-	1,309,396	2019	1,309,396										
L Christie Lake North Shore Road (2)	2.592	-	104,000	2028									122,720		
L Crow Lake Road	2.938	2008	443,000	2028									522,740		
L Crozier Road	1.095	2009	134,000	2020		136,680									
L Crozier Road	1.095	2009	45,000	2029											54,000
L Ennis Road	1.202	-													
L Ferrier Road	0.575	2010													
L Hanna Road (2)	4.761	2014	284,000	2019	284,000										
L Iron Mine Road	1.025	-	145,000	2020		147,900									
L Iron Mine Road	1.025	-	45,000	2029											54,000
L McVeigh Road	0.384	-	54,000	2025						60,480					
L Menzies Munro Side Road	2.568	2018													
L Merkley Road	0.273	-													
North Mac Lane															
L Powers Road	2.190	2018	88,000	2027								102,080			
L Ritchie Side Road	0.887	2009	123,000	2020		125,460									
L Ritchie Side Road	0.887	2009	36,000	2029											43,200
L Stanley Road	1.888	2018	306,000	2029											367,200
L Stanleyville Road	1.870	2013	75,000	2019		76,500									
L Upper Scotch Line (2)	4.104	2009	478,000	2021			497,120								
L Walters Lane	0.093	-													
L Zealand Road (2)	4.196	2008	614,000	2026							699,960				
<b>PAVED (HCB)</b>															
H Brooke Valley Road	0.363	-	108,000	2025						120,960					
H Bygrove Lane	0.695	2012	29,000	2029											34,800
H Clarchris Road	0.682	2016													
H Crozier Road	2.240	2009	90,000	2029											108,000
H Glenn Drive	0.882	-	142,000	2027								164,720			
H Glen Tay Road (Hwy 7 to CR 6)	0.419	-	150,000	2020		153,000									
Glen Tay Road (CR6 to CR10)	2.928	2007	145,000	2021			150,800								
Harper Road (1)	3.757	2015	151,000	2027								175,160			
H Harper Road (2)	2.612	-	589,000	2022			624,340								
H Jodi Lane	0.201	2018													
H Keays Road	1.334	-	299,000	2022			316,940								
H Kenyon Road	2.158	2018													
H Lakewood Road	1.916	1987	362,000	2024					398,200						
H Maberly Main Street	0.301	-													



TAY VALLEY TOWNSHIP																
10 YEAR CAPITAL PLAN																
2020 TO 2029																
ROADS																
	KMS	Last Work	Inflation = 2%	Repair/Replacement Cost	Year	YEAR 2019	1 2020	2 2021	3 2022	4 2023	5 2024	6 2025	7 2026	8 2027	9 2028	10 2029
H McLaren Road	2.011	1997		374,000	2024						411,400					
H Muttons Road	0.524	2016														
H Norris Road	0.154	2016														
H Old Brooke Road	0.442	-		118,000	2025							132,160				
H Orchard Crescent	0.846	2001		34,000	2025						38,080					
H Otty Lake Side Road (shared)	4.222	2018														
H Park Lane Court	0.172	2018														
H Posner Lane	0.344	2012		14,000	2029											16,800
H Somerville Drive (2)	1.247	2018														
H Stanleyville Road (1)	1.263	2009		51,000	2023					55,080						
	83.991					1,653,396	639,540	647,920	1,021,840	693,360	809,600	747,040	699,960	530,120	645,460	678,000
<b>Funding:</b>																
Roads Reserve						347,488	311,388	373,064	624,776	418,682	509,120	461,592	414,962	267,476	369,323	409,640
Grants						1,178,408										
OCIF - Formula Based Funding						50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Development Charges (5% of Reconstruction)						77,500	28,152	24,856	47,064	24,678	40,480	35,448	34,998	12,644	26,137	18,360
Federal Gas Tax							250,000	200,000	300,000	200,000	210,000	200,000	200,000	200,000	200,000	200,000
<b>Total</b>						<b>1,653,396</b>	<b>639,540</b>	<b>647,920</b>	<b>1,021,840</b>	<b>693,360</b>	<b>809,600</b>	<b>747,040</b>	<b>699,960</b>	<b>530,120</b>	<b>645,460</b>	<b>678,000</b>
Note: This schedule does not include all Township Roads - only those with Capital Improvement plans in the next 10 years.																

<b>TAY VALLEY TOWNSHIP</b>														
<b>10 YEAR CAPITAL PLAN</b>														
<b>2020 TO 2029</b>		<b>Inflation = 2%</b>												
<b>BUILDINGS</b>		<b>Repair/Replacement</b>			<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
	<b>Year Aquired</b>	<b>Cost</b>	<b>Year</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
2010	Municipal Office													
1973	Bathurst (Glen Tay) garage													
1973	Burgess Hall													
1973	Burgess Garage													
1884	Maberly Hall													
1973	Maberly Garage													
1995	Bathurst (Glen Tay) salt shed													
2010	SS Fire Hall													
2012	Burgess Salt Shed													
	ReUse Centre	50,000	2025							56,000				
					<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>56,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Funding:</b>														
	Reserve Funds			0	0	0	0	0	0	53,200	0	0	0	0
	Development Charges			0	0	0	0	0	0	2,800	0	0	0	0
	<b>Total</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>53,200</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
				<b>Note #1</b>	Assume that Development Charges can finance 5% of capital spending									

<b>TAY VALLEY TOWNSHIP</b>														
<b>10 YEAR CAPITAL PLAN</b>														
<b>2020 TO 2029</b>														
		<b>Inflation = 2%</b>												
		<b>Repair/Replacement</b>												
		<b>Cost</b>	<b>Year</b>	<b>2019</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>Other Assets</b>														
<b>IT Assets</b>														
	Computer Server 1 (shared)	20,000	2020		20,400									
	Computer Server 2	30,000	2025							33,600				
	Computer Work Stations	39,000	2024						42,900					
<b>Recreation Assets</b>														
	Tennis Court, Outdoor Rinks, Playground Equip	75,000	2023					81,000						
	Ball Diamonds													
	Otty Lake Boat Launch	40,000	2021			41,600								
	Solar Farm Trail	125,000	2020		127,500									
<b>Waste Site Assets</b>														
	Waste Compactor 1	50,000	2024						55,000					
	Waste Compactor 2	50,000	2029											60,000
	Waste Compactor 3													
				<b>0</b>	<b>147,900</b>	<b>41,600</b>	<b>0</b>	<b>81,000</b>	<b>97,900</b>	<b>33,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60,000</b>
<b>Funding:</b>														
	<b>Reserve Funds</b>			0	30,505	39,520	0	76,950	93,005	31,920	0	0	0	57,000
	<b>Grant</b>				110,000									
	<b>Development Charges</b>			0	7,395	2,080	0	4,050	4,895	1,680	0	0	0	3,000
	<b>Total</b>			<b>0</b>	<b>147,900</b>	<b>41,600</b>	<b>0</b>	<b>81,000</b>	<b>97,900</b>	<b>33,600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60,000</b>
<b>Notes:</b>														
	The recreation Master Plan could have significant effects on these capital plans													
	The Township priority session could also have significant effects on these future capital plans													

<b>TAY VALLEY TOWNSHIP</b>												2020
<b>10 YEAR CAPITAL PLAN</b>												Budget
<b>2020 TO 2029</b>												Contribution
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Change
<b>RESERVES</b>												
<b>PW Equipment Reserve</b>												
Opening	491,155	297,655	202,885	210,085	111,865	258,297	(15,431)	115,947	(63,866)	194,588	65,861	
Annual Contribution	206,800	225,000	229,500	234,090	238,772	243,547	248,418	253,387	258,454	263,623	268,896	18,200
Annual Spending	(400,300)	(319,770)	(222,300)	(332,310)	(92,340)	(517,275)	(117,040)	(433,200)	0	(392,350)	(28,500)	
Closing	297,655	202,885	210,085	111,865	258,297	(15,431)	115,947	(63,866)	194,588	65,861	306,257	
<b>Bridge Construction</b>												
Opening	604,436	414,936	546,476	450,712	245,744	297,479	411,136	67,965	49,492	3,294	184,901	
Annual Contribution	129,500	155,000	158,100	161,262	164,487	167,777	171,133	174,555	178,046	181,607	185,239	25,500
Annual Spending	(319,000)	(23,460)	(253,864)	(366,230)	(112,752)	(54,120)	(514,304)	(193,028)	(224,244)	0	0	
Closing	414,936	546,476	450,712	245,744	297,479	411,136	67,965	49,492	3,294	184,901	370,141	
<b>Road Construction</b>												
Opening	594,658	534,670	603,282	617,818	388,394	372,971	275,175	233,134	246,114	415,138	491,046	
Annual Contribution	287,500	380,000	387,600	395,352	403,259	411,324	419,551	427,942	436,501	445,231	454,135	92,500
Annual Spending	(347,488)	(311,388)	(373,064)	(624,776)	(418,682)	(509,120)	(461,592)	(414,962)	(267,476)	(369,323)	(409,640)	
Closing	534,670	603,282	617,818	388,394	372,971	275,175	233,134	246,114	415,138	491,046	535,541	
<b>Federal Gas Tax</b>												
Opening	710,804	282,300	204,155	183,821	63,487	50,965	28,443	15,943	10,943	5,943	8,743	
Annual Contribution	349,296	171,855	179,666	179,666	187,478	187,478	187,500	195,000	195,000	202,800	202,800	
Annual Spending	(777,800)	(250,000)	(200,000)	(300,000)	(200,000)	(210,000)	(200,000)	(200,000)	(200,000)	(200,000)	(200,000)	
Closing	282,300	204,155	183,821	63,487	50,965	28,443	15,943	10,943	5,943	8,743	11,543	
<b>Development Charge Reserve</b>												
Opening	408,818	296,618	294,241	305,605	291,051	307,463	284,863	288,775	280,977	318,333	321,546	
Annual Contribution	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
Annual Spending	(162,200)	(52,377)	(38,636)	(64,554)	(33,588)	(72,600)	(46,088)	(57,798)	(12,644)	(46,787)	(22,860)	
Closing	296,618	294,241	305,605	291,051	307,463	284,863	288,775	280,977	318,333	321,546	348,686	
<b>Buildings = Township Office/Garage + Burgess Hall/Garage + Sherbrooke Garage + Salt Sheds + Maberley Hall + SS Fire Dept Reserves</b>												
Opening	326,410	322,710	354,010	385,310	416,610	447,910	479,210	563,710	595,010	626,310	657,610	
Annual Contribution	151,300	31,300	31,300	31,300	31,300	31,300	31,300	31,300	31,300	31,300	31,300	(120,000)
Annual Spending	(155,000)	0	0	0	0	0	53,200	0	0	0	0	
Closing	322,710	354,010	385,310	416,610	447,910	479,210	563,710	595,010	626,310	657,610	688,910	
<b>Other Assets = Office Equip + Waste Sites + Cemetery + Recreation Equipment Reserves</b>												
Opening	121,228	71,328	79,923	79,503	118,603	80,753	26,848	34,028	73,128	112,228	151,328	
Annual Contribution	39,100	39,100	39,100	39,100	39,100	39,100	39,100	39,100	39,100	39,100	39,100	0
Annual Spending	(89,000)	(30,505)	(39,520)	0	(76,950)	(93,005)	(31,920)	0	0	0	(57,000)	
Closing	71,328	79,923	79,503	118,603	80,753	26,848	34,028	73,128	112,228	151,328	133,428	16,200

**TAY VALLEY TOWNSHIP**  
**10 YEAR CAPITAL PLAN**  
**2020 TO 2029**

**Converting Gravel Roads to Surface Treatment**

Road	From	To	Length (km)	Estimated Cost
Long Lake Rd	Narrows Lock Rd	Elm Grove Rd	4.9	\$ 588,000
Miners Point Rd	Narrows Lock Rd	Bass Bay Rd	3.6	\$ 432,000
McVeigh Rd	Dokken	Bathurst 7th Conc.	4.4	\$ 528,000
McVeigh Rd	Doran Rd	Dokken	3.7	\$ 444,000
Doran Rd	Hwy 7	McViegh Rd	1.3	\$ 156,000
Bathurst 5th	Hwy 7	Harper Rd	5.5	\$ 660,000
Bathurst 5th	Harper Rd	Hwy 511	3.9	\$ 468,000
<b>Total</b>				<b>\$3,276,000</b>

Cost Estimate			
Item	Unit Price	Quantity	Price
Geotextile Blanket	\$ 0.30	6000	\$ 1,800
Granular B	\$ 14.00	2728	\$ 38,192
Granular A	\$ 14.00	2728	\$ 38,192
Double Surface Treatment	\$ 5.50	6000	\$ 33,000
Fog Seal	\$ 1.25	6000	\$ 7,500
<b>Total Price Per Km</b>			<b>\$ 118,684</b>
<b>Rounded</b>			<b>\$ 120,000</b>

**NOTE:** Staff have selected 5 of what we would consider our busiest gravel roads in the township as candidates for surface treatment, but if Council chooses to select a road not on the list, it is around \$120,000 per km assuming the road width is sufficient and all of the underground infrastructure is in good condition (culverts).

**IMPORTANT** = None of the above costs are currently built into the 10 year Capital Plan.

**TAY VALLEY TOWNSHIP**

**10 YEAR CAPITAL PLAN**

**2020 TO 2029**

**Assuming and Upgrading Un-Assumed Roads**

Road Name	From	To	Length (km)	Cost for Gravel (No Widening Rq)	Cost for Gravel (Widening Rq)	Cost for Surface Treatment (LCB)	Cost for Asphalt (HCB)	Yearly Operation Cost (Gravel)	Yearly Operation Cost (LCB/HCB)
Burke Lane	Old Burke Road	Pine Lane	2.08	\$ 104,000	\$ 395,200	\$ 291,200	\$ 395,200	\$ 11,648	\$ 9,568
Cherle Hill	Glen Drive	Dead End	0.6	\$ 30,000	\$ 114,000			\$ 3,360	
Christie Lake North Shore Road	Christie Lake North Shore Road	Dead End	0.28	\$ 14,000	\$ 53,200			\$ 1,568	
Christie Lane	Christie Lake North Shore Road (CLNSR to #117)	Dead End	0.1	\$ 5,000	\$ 19,000			\$ 560	
Clear Lake Lane 31	Armstrong Line	Dead End	1.96	\$ 98,000	\$ 372,400			\$ 10,976	
Clear Lake Lane 31A	Clear Lake Lane 31 from #325	#542	0.27	\$ 13,500	\$ 51,300			\$ 1,512	
Cooper Drive	Narrows Lock Road (CR #14)	#641	0.62	\$ 31,000	\$ 117,800			\$ 3,472	
Killarney Lane	Christie Lake Road (CR#6)	Dead End	0.2	\$ 10,000	\$ 38,000			\$ 1,120	
Lakeshore Boulevard	Miner's Point Road (private)	Miner's Point Road	0.43	\$ 21,500	\$ 81,700			\$ 2,408	
Little Silver Lake Road	Bolingbroke Road (CR #36)	Dead End	1.94	\$ 97,000	\$ 368,600			\$ 10,864	
Maple Lane	Bolingbroke Road (CR #36)	Dean End	0.17	\$ 8,500	\$ 32,300	\$ 23,800	\$ 32,300	\$ 952	\$ 782
McKay Farm Road	Elm Grove Road (CR #21)	Drummond/North Elmsley)	0.35	\$ 17,500	\$ 66,500			\$ 1,960	
Meadow Lane Court	Burke Lane	Dead End	0.53	\$ 26,500	\$ 100,700	\$ 74,200	\$ 100,700	\$ 2,968	\$ 2,438
Miller Bay Road	Elm Grove Road (CR #21)	Boat Ramp	0.23	\$ 11,500	\$ 43,700			\$ 1,288	
Miners Point Road	Miner's Point Road	Dead End	2.81	\$ 140,500	\$ 533,900			\$ 15,736	
Oak Court	Pine Lane	Dead End	0.15	\$ 7,500	\$ 28,500	\$ 21,000	\$ 28,500	\$ 840	\$ 690
Oak Road	Red Pine Road	Cul de sac	0.19	\$ 9,500	\$ 36,100	\$ 26,600	\$ 36,100	\$ 1,064	\$ 874
Old Mine Road	McVeigh Road	Dead End	0.3	\$ 15,000	\$ 57,000			\$ 1,680	
Pike Lake Route 10	Scotch Line (CR #10)	Dead End	0.2	\$ 10,000	\$ 38,000			\$ 1,120	
Pine Lane	Burke Lane	Scott Court	1.71	\$ 85,500	\$ 324,900	\$ 239,400	\$ 324,900	\$ 9,576	\$ 7,866
Pine Ridge Lane	Elm Grove Road (CR #21)	Dead End	0.46	\$ 23,000	\$ 87,400			\$ 2,576	
Pond Lane	Pond Road	Cul de sac	0.25	\$ 12,500	\$ 47,500	\$ 35,000	\$ 47,500	\$ 1,400	\$ 1,150
Pond Road	Red Pine Road	Cul de sac	0.65	\$ 32,500	\$ 123,500	\$ 91,000	\$ 123,500	\$ 3,640	\$ 2,990
Rainbow Lane	Bolingbroke Road (CR #36)	Cul de sac	1.33	\$ 66,500	\$ 252,700			\$ 7,448	
Rainbow Lane A	Rainbow Lane	Dead End	0.54	\$ 27,000	\$ 102,600			\$ 3,024	
Rainbow Lane B	Rainbow Lane	Dead End	0.02	\$ 1,000	\$ 3,800			\$ 112	
Red Pine Lane	Red Pine Road	Cul de sac	0.94	\$ 47,000	\$ 178,600	\$ 131,600	\$ 178,600	\$ 5,264	\$ 4,324
Red Pine Road	Bolingbroke Road (CR #36)	Dead End	0.32	\$ 16,000	\$ 60,800	\$ 44,800	\$ 60,800	\$ 1,792	\$ 1,472
Scott Court	Burke Lane	Dead End	0.69	\$ 34,500	\$ 131,100	\$ 96,600	\$ 131,100	\$ 3,864	
Sherbrooke Drive	Crow Lake Road	Dead End	1.9	\$ 95,000	\$ 361,000			\$ 10,640	
Silvery Lane	Bolingbroke Road (CR #36)	Dead End	2.1	\$ 105,000	\$ 399,000			\$ 11,760	\$ 9,660
<b>Totals</b>				\$ 1,216,000	\$ 4,620,800	\$ 1,075,200	\$ 1,459,200	\$ 136,192	\$ 41,814

**NOTES:**

Where the cells are highlighted green, blue and red, the existing road base is "pretty good" and therefore widening is not required. In this case there are 3 options for consideration.

1)- apply a lift of gravel and assume the road as a gravel road, 2)- upgrade the road to a surface treated road and assume it and 3)- upgrade the road to an asphalt road and assume it.

Where the cell is highlighted orange, the existing road base is insufficient and only one option is recommended. This is to widen the road and assume it as a gravel road.

**IMPORTANT** = None of the above costs are currently built into the 10 year Capital Plan.