

**TO:** Mayor Gibson & Members of Council

**FROM:** Mallory Luey, Manager of Corporate Services/Treasurer

**DATE OF MEETING:** May 13, 2020

**SUBJECT:** Central Fire Station Project Financial Overview

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**RECOMMENDATION(S):**

**THAT** Administrative Staff Report ASR-016/2020 respecting Central Fire Station Project Financial Overview be received for information.

**EXECUTIVE SUMMARY:**

This report contains financial information on expenditures incurred on the Central Fire Station to date, as well as financing options and funding strategies for consideration by the committee as it progresses through a review of the Central Fire Station Project. The analyses detailed in this report are based on existing, approved 2019 and 2020 capital budgets. Staff is prepared to produce additional analyses of alternative scenarios at the direction of committee.

**BACKGROUND:**

**January 2019** - Council approved purchase of lands on Highway 3 in Chambers Corners for the proposed purpose of a Fire Station.

**April 2019** - Council approved Phase 1: Land Acquisition and Preconstruction studies and engineering budget of \$850,000.00.

**March 2020** – Council approved Phase 2: Fire Station Construction, Fixtures, Finishes and Equipment (FFE) estimated budget of \$4,500,000.00.

Funding sources explored for capital projects;

1. Capital tax levy
2. Reserve funds
3. Obligatory reserve funds (Development charges)
4. Federal or provincial grant monies
5. Debentures

The funding source approved in the 2020 budget deliberation was a debenture, which had no impact on the 2020 tax levy. Financing is obtained through Infrastructure Ontario and they have two approaches to financing with the option of serial or amortizing loans.

**Serial debenture** – borrowers pay equal amounts of principal every payment and interest is calculated on the declining principal balance

**Amortizing debenture-** borrowers pay equal amounts of blended principal and interest every payment

### Phase 1: Land Acquisition and preconstruction

Approved budget of \$850,000 with funding sources; debenture \$742,000 and infrastructure levy reserve \$108,000.

Description	Estimate included in 2019 Budget	YTD Expenditures
Purchase property	\$450,000.00	\$450,000.00
Topographical & Survey	4,500.00	3,133.39
Geotechnical Survey	10,000.00	11,091.84
Traffic Impact Study	10,000.00	2,485.22
Hydrological Study for well/Potable Water engineering	20,000.00	
Storm Water/Floor Drain Water Management	20,000.00	
Drainage Engineering	10,000.00	
Tree Removal	3,000.00	4,089.23
Fire Pond - Water Source	7,000.00	
Barn Renovation	30,000.00	569.53
Demolition of House	10,000.00	3,320.14
Temporary Electrical work	3,000.00	
Signage	2,000.00	
RFP for Design Architect & Engineer (Estimated 8% of project costs)	270,500.00	
<b>Total Estimated Capital Project Cost for 2019</b>	<b>\$850,000.00</b>	<b>\$474,689.35</b>

**Phase 2: Fire Station Construction, Fixtures, Finishes and Equipment (FFE)**

Approved budget of \$4,500,000 to be debentured. See Appendix A for financing strategies. This project was temporarily paused as a result of the COVID-19 Pandemic, no costs have been incurred at this time.

**OPTIONS/DISCUSSION:**

This report has been prepared to provide funding strategies of the currently approved (2019/2020) budgets for review by Members of Committee.

**FINANCING STRATEGIES OF CURRENTLY APPROVED CAPITAL BUDGETS****Option 1: Serial debenture – Appendix “A, B, C”**

This option requires the borrower to pay equal amounts of principal and interest is calculated on a declining balance. In this option the payment amount is not static, payments start out higher and reduce each year as interest is paid down. This allows for increased cash flows in future years, as well as an overall reduced interest expense. Interest rates are slightly lower for this option as well. The proposal would have a 2% levy increase in years one and two and a 1% levy increase in year three. This is based on the figure that represents 1% in 2021 so year three will be lower than 1% once the actual figure is available. In order to achieve these levy increase targets, the project would be undertaken using very strict cash-flow management techniques along with the strategic use of existing reserves to cushion and spread the levy impact of the project over a number of years.

**Option2: Amortizing debenture- Appendix “A, D, E”**

This option the borrower pays equal amounts of blended and interest each payment, so the payments remain the same throughout the term of the loan. The cost of borrowing is higher with an amortizing loan as the amount applied to principal is lower for each payment. The interest rates are slightly higher as well. This proposal would have a 2% levy increase in year one and two, and .57% in year three, which will be lower once actual value becomes available. As with the serial debenture option, the project would be undertaken using very strict cash-flow management techniques along with the strategic use of existing reserves to cushion and spread the levy impact of the project over a number of years.

**FINANCIAL CONSIDERATIONS:**

It is prudent that all financing options are explored and a strategy is developed to mitigate the impact to a single years tax levy. Debt financing allows a municipality to obtain the infrastructure when it is needed and spread the cost over the useful life of the asset. This means that the beneficiaries of the capital investment will share the financial burden.

**OTHERS CONSULTED:**

- 1) Strategic Leadership Team

**ATTACHMENTS:**

- 1) Appendix "A" – Financing Strategies of Currently Approved Capital Budgets
- 2) Appendix "B" – Serial Debenture Schedule – Phase 2
- 3) Appendix "C" – Serial Debenture Schedule – Phase 1
- 4) Appendix "D" – Amortizing Debenture Schedule – Phase 2
- 5) Appendix "E" – Amortizing Debenture Schedule – Phase 1
- 6) Appendix "F" – 2020 Budgeted Reserve Forecast

Respectfully submitted by,

Approved by,

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Mallory Luey  
Manager of Corporate Services/Treasurer

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William J. Kolasa  
Chief Administrative Officer

APPENDIX "A" - ASR-016/2020

**Option 1: Serial Debenture**

	Years	Budget Approved	Repayment Amounts	2021	CY Levy Impact	2022	CY Levy Impact	2023	CY Levy Impact	TOTAL
<b>Debenture</b>										
Phase 2: Turn key	25	\$ 4,500,000	\$ 285,300.00	\$ 285,300.00		\$ 281,088.00		\$ 276,876.00		\$ 843,264.00
Phase 1: Preconstruction	15	\$ 742,000	\$ 63,861.47	\$ 63,861.47		\$ 62,901.82		\$ 61,942.16		\$ 188,705.45
<b>Total Debenture amount:</b>		<b>\$ 5,242,000</b>	<b>\$ 349,161.47</b>	<b>\$ 349,161.47</b>		<b>\$ 343,989.82</b>		<b>\$ 338,818.16</b>		<b>\$ 1,031,969.45</b>
<b>Funding Source</b>										
Tax Levy				\$ 130,851.20	2%	\$ 261,702.40	2.00%	\$ 327,128.00	1%	\$ 719,681.60
Reserves				\$ 218,310.27		\$ 82,287.42		\$ 11,690.16		\$ 312,287.85
Development charges										
Grant monies										
<b>Total funding source:</b>				<b>\$ 349,161.47</b>		<b>\$ 343,989.82</b>		<b>\$ 338,818.16</b>		<b>\$ 1,031,969.45</b>

\*\* 1% Increase is based on 2021 figures and equals \$ 65,425.60

**Option 2: Amortizing Debenture**

	Years	Budget Approved	Repayment Amounts	2021	CY Levy Impact	2022	CY Levy Impact	2023	CY Levy Impact	TOTAL
<b>Debenture</b>										
Phase 2: Turn key	25	\$ 4,500,000	\$ 241,179.14	\$ 241,179.14		\$ 241,179.14		\$ 241,179.14		\$ 723,537.42
Phase 1: Preconstruction	15	\$ 742,000	\$ 57,616.98	\$ 57,616.98		\$ 57,616.98		\$ 57,616.98		\$ 172,850.94
<b>Total Debenture amount:</b>		<b>\$ 5,242,000</b>	<b>\$ 298,796.12</b>	<b>\$ 298,796.12</b>		<b>\$ 298,796.12</b>		<b>\$ 298,796.12</b>		<b>\$ 896,388.36</b>
<b>Funding Source</b>										
Tax Levy				\$ 130,851.20	2%	\$ 261,702.40	2%	\$ 298,796.12	0.57%	\$ 691,349.72
Reserves				\$ 167,944.92		\$ 37,093.72				\$ 205,038.64
Development charges										
Grant monies										
<b>Total funding source:</b>				<b>\$ 298,796.12</b>		<b>\$ 298,796.12</b>		<b>\$ 298,796.12</b>		<b>\$ 896,388.36</b>

\*\* 1% Increase is based on 2021 figures and equals \$ 65,425.60



## >> Serial Debenture Schedule

Organization Name	Phase 2: Central Fire Station
Principal Amount	Project
Annual Interest Rate	\$4,500,000.00
Loan Term (Year)	2.34 %
Debenture Date (mm/dd/yyyy)	25
Maturity Date (mm/dd/yyyy)	10/01/2020
Payment Frequency	10/01/2045
Loan Type	Annual
	Serial

Payment Date	Total Payment	Principal Amount	Interest Amount	Principal Balance
10/01/2021	\$285,300.00	\$180,000.00	\$105,300.00	\$4,320,000.00
10/01/2022	\$281,088.00	\$180,000.00	\$101,088.00	\$4,140,000.00
10/01/2023	\$276,876.00	\$180,000.00	\$96,876.00	\$3,960,000.00
10/01/2024	\$272,917.87	\$180,000.00	\$92,917.87	\$3,780,000.00
10/01/2025	\$268,452.00	\$180,000.00	\$88,452.00	\$3,600,000.00
10/01/2026	\$264,240.00	\$180,000.00	\$84,240.00	\$3,420,000.00
10/01/2027	\$260,028.00	\$180,000.00	\$80,028.00	\$3,240,000.00
10/01/2028	\$256,023.72	\$180,000.00	\$76,023.72	\$3,060,000.00
10/01/2029	\$251,604.00	\$180,000.00	\$71,604.00	\$2,880,000.00
10/01/2030	\$247,392.00	\$180,000.00	\$67,392.00	\$2,700,000.00
10/01/2031	\$243,180.00	\$180,000.00	\$63,180.00	\$2,520,000.00
10/01/2032	\$239,129.56	\$180,000.00	\$59,129.56	\$2,340,000.00
10/01/2033	\$234,756.00	\$180,000.00	\$54,756.00	\$2,160,000.00
10/01/2034	\$230,544.00	\$180,000.00	\$50,544.00	\$1,980,000.00
10/01/2035	\$226,332.00	\$180,000.00	\$46,332.00	\$1,800,000.00
10/01/2036	\$222,235.40	\$180,000.00	\$42,235.40	\$1,620,000.00
10/01/2037	\$217,908.00	\$180,000.00	\$37,908.00	\$1,440,000.00
10/01/2038	\$213,696.00	\$180,000.00	\$33,696.00	\$1,260,000.00
10/01/2039	\$209,484.00	\$180,000.00	\$29,484.00	\$1,080,000.00
10/01/2040	\$205,341.24	\$180,000.00	\$25,341.24	\$900,000.00
10/01/2041	\$201,060.00	\$180,000.00	\$21,060.00	\$720,000.00
10/01/2042	\$196,848.00	\$180,000.00	\$16,848.00	\$540,000.00
10/01/2043	\$192,636.00	\$180,000.00	\$12,636.00	\$360,000.00
10/01/2044	\$188,447.08	\$180,000.00	\$8,447.08	\$180,000.00
10/01/2045	\$184,212.00	\$180,000.00	\$4,212.00	\$0.00
	<b>\$5,869,730.87</b>	<b>\$4,500,000.00</b>	<b>\$1,369,730.87</b>	

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## >> Serial Debenture Schedule

Organization Name	Phase1: preconstruction
Principal Amount	\$742,000.00
Annual Interest Rate	1.94 %
Loan Term (Year)	15
Debenture Date (mm/dd/yyyy)	10/01/2020
Maturity Date (mm/dd/yyyy)	10/01/2035
Payment Frequency	Annual
Loan Type	Serial

Payment Date	Total Payment	Principal Amount	Interest Amount	Principal Balance
10/01/2021	\$63,861.47	\$49,466.67	\$14,394.80	\$692,533.33
10/01/2022	\$62,901.82	\$49,466.67	\$13,435.15	\$643,066.66
10/01/2023	\$61,942.16	\$49,466.67	\$12,475.49	\$593,599.99
10/01/2024	\$61,014.06	\$49,466.67	\$11,547.39	\$544,133.32
10/01/2025	\$60,022.86	\$49,466.67	\$10,556.19	\$494,666.65
10/01/2026	\$59,063.20	\$49,466.67	\$9,596.53	\$445,199.98
10/01/2027	\$58,103.55	\$49,466.67	\$8,636.88	\$395,733.31
10/01/2028	\$57,164.93	\$49,466.67	\$7,698.26	\$346,266.64
10/01/2029	\$56,184.24	\$49,466.67	\$6,717.57	\$296,799.97
10/01/2030	\$55,224.59	\$49,466.67	\$5,757.92	\$247,333.30
10/01/2031	\$54,264.94	\$49,466.67	\$4,798.27	\$197,866.63
10/01/2032	\$53,315.80	\$49,466.67	\$3,849.13	\$148,399.96
10/01/2033	\$52,345.63	\$49,466.67	\$2,878.96	\$98,933.29
10/01/2034	\$51,385.98	\$49,466.67	\$1,919.31	\$49,466.62
10/01/2035	\$50,426.27	\$49,466.62	\$959.65	\$0.00
	<b>\$857,221.50</b>	<b>\$742,000.00</b>	<b>\$115,221.50</b>	

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## >> Amortizing Debenture Schedule

Organization Name	Phase 2: Central Fire Station
Principal Amount	Project
Annual Interest Rate	\$4,500,000.00
Loan Term (Year)	2.39 %
Debenture Date (mm/dd/yyyy)	25
Maturity Date (mm/dd/yyyy)	10/01/2020
Payment Frequency	10/01/2045
Loan Type	Annual
	Amortizing

Payment Date	Total Payment	Principal Amount	Interest Amount	Principal Balance
10/01/2021	\$241,179.14	\$133,629.14	\$107,550.00	\$4,366,370.86
10/01/2022	\$241,179.14	\$136,822.88	\$104,356.26	\$4,229,547.98
10/01/2023	\$241,179.14	\$140,092.94	\$101,086.20	\$4,089,455.04
10/01/2024	\$241,179.14	\$143,441.16	\$97,737.98	\$3,946,013.88
10/01/2025	\$241,179.14	\$146,869.41	\$94,309.73	\$3,799,144.47
10/01/2026	\$241,179.14	\$150,379.59	\$90,799.55	\$3,648,764.88
10/01/2027	\$241,179.14	\$153,973.66	\$87,205.48	\$3,494,791.22
10/01/2028	\$241,179.14	\$157,653.63	\$83,525.51	\$3,337,137.59
10/01/2029	\$241,179.14	\$161,421.55	\$79,757.59	\$3,175,716.04
10/01/2030	\$241,179.14	\$165,279.53	\$75,899.61	\$3,010,436.51
10/01/2031	\$241,179.14	\$169,229.71	\$71,949.43	\$2,841,206.80
10/01/2032	\$241,179.14	\$173,274.30	\$67,904.84	\$2,667,932.50
10/01/2033	\$241,179.14	\$177,415.55	\$63,763.59	\$2,490,516.95
10/01/2034	\$241,179.14	\$181,655.78	\$59,523.36	\$2,308,861.17
10/01/2035	\$241,179.14	\$185,997.36	\$55,181.78	\$2,122,863.81
10/01/2036	\$241,179.14	\$190,442.69	\$50,736.45	\$1,932,421.12
10/01/2037	\$241,179.14	\$194,994.28	\$46,184.86	\$1,737,426.84
10/01/2038	\$241,179.14	\$199,654.64	\$41,524.50	\$1,537,772.20
10/01/2039	\$241,179.14	\$204,426.38	\$36,752.76	\$1,333,345.82
10/01/2040	\$241,179.14	\$209,312.17	\$31,866.97	\$1,124,033.65
10/01/2041	\$241,179.14	\$214,314.74	\$26,864.40	\$909,718.91
10/01/2042	\$241,179.14	\$219,436.86	\$21,742.28	\$690,282.05
10/01/2043	\$241,179.14	\$224,681.40	\$16,497.74	\$465,600.65
10/01/2044	\$241,179.14	\$230,051.28	\$11,127.86	\$235,549.37
10/01/2045	\$241,179.00	\$235,549.37	\$5,629.63	\$0.00
	<b>\$6,029,478.36</b>	<b>\$4,500,000.00</b>	<b>\$1,529,478.36</b>	

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## >> Amortizing Debenture Schedule

Organization Name	Phase1: preconstruction
Principal Amount	\$742,000.00
Annual Interest Rate	1.97 %
Loan Term (Year)	15
Debenture Date (mm/dd/yyyy)	10/01/2020
Maturity Date (mm/dd/yyyy)	10/01/2035
Payment Frequency	Annual
Loan Type	Amortizing

Payment Date	Total Payment	Principal Amount	Interest Amount	Principal Balance
10/01/2021	\$57,616.98	\$42,999.58	\$14,617.40	\$699,000.42
10/01/2022	\$57,616.98	\$43,846.67	\$13,770.31	\$655,153.75
10/01/2023	\$57,616.98	\$44,710.45	\$12,906.53	\$610,443.30
10/01/2024	\$57,616.98	\$45,591.25	\$12,025.73	\$564,852.05
10/01/2025	\$57,616.98	\$46,489.39	\$11,127.59	\$518,362.66
10/01/2026	\$57,616.98	\$47,405.24	\$10,211.74	\$470,957.42
10/01/2027	\$57,616.98	\$48,339.12	\$9,277.86	\$422,618.30
10/01/2028	\$57,616.98	\$49,291.40	\$8,325.58	\$373,326.90
10/01/2029	\$57,616.98	\$50,262.44	\$7,354.54	\$323,064.46
10/01/2030	\$57,616.98	\$51,252.61	\$6,364.37	\$271,811.85
10/01/2031	\$57,616.98	\$52,262.29	\$5,354.69	\$219,549.56
10/01/2032	\$57,616.98	\$53,291.85	\$4,325.13	\$166,257.71
10/01/2033	\$57,616.98	\$54,341.70	\$3,275.28	\$111,916.01
10/01/2034	\$57,616.98	\$55,412.23	\$2,204.75	\$56,503.78
10/01/2035	\$57,616.90	\$56,503.78	\$1,113.12	\$0.00
	<b>\$864,254.62</b>	<b>\$742,000.00</b>	<b>\$122,254.62</b>	

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**TOWNSHIP OF WAINFLEET  
2020**

**DRAFT RESERVE AND RESERVE FUNDS**

	Balance December 31, 2018	2019 Income	2019 Expense	Balance December 31, 2019	2020 Income	2020 Expense	Balance December 31, 2020
<b>Reserve</b>							
<b>Working Funds</b>	800,000	-	-	800,000	-	-	800,000
<b>Municipal Modernization</b>	-	671,120	100,000	571,120		161,098	410,022
<b>Infrastructure Levy</b>	815,822	608,213	158,000	1,266,035	726,804	435,000	1,557,839
<b>Fire</b>	159,004	10,000	80,000	89,004	15,000	20,000	84,004
<b>Fire Station</b>	-	10,000	-	10,000	15,000	-	25,000
<b>Fire Apparatus</b>	-	40,000	-	40,000	40,000	-	80,000
<b>Fire SCBA</b>	-	40,000	-	40,000	40,000	80,000	-
<b>Fire Points</b>	64,661	-	-	64,661	-	-	64,661
<b>Fire Donations Specific</b>	3,936	-	-	3,936	-	-	3,936
<b>General Reserve</b>	366,019	45,000	87,500	323,519	75,000	50,000	348,519
<b>Total Reserves</b>	2,209,442	1,424,333	425,500	3,208,275	911,804	746,098	3,373,981
<b>Reserve Funds</b>							
<b>Development Charges (All)</b>	333,671	-	55,000	278,671	-	10,100	268,571
<b>Total Reserve Funds</b>	333,671	-	55,000	278,671	-	10,100	
<b>Total :</b>	<b>2,543,112</b>	<b>1,424,333</b>	<b>480,500</b>	<b>3,486,945</b>	<b>911,804</b>	<b>756,198</b>	<b>3,373,981</b>