

ST. THOMAS AREA SECONDARY WATER SUPPLY SYSTEM

Financial Plan #190-301
2021 - 2031



TOWNSHIP OF
Southwold

St. Thomas Area Secondary Water Supply System

2021 - 2031 Financial Plan #190-301

Table of Contents

1	Introduction.....	2
2	Legislative Drivers.....	2
2.1	Safe Drinking Water Act, 2002.....	2
2.2	Ontario Regulation 453/07 – Financial Plans	2
2.2.1	Financial Plan Requirements – Existing System.....	2
2.2.2	Financial Plan Requirements - General.....	3
2.2.3	Public Sector Accounting Board (PSAB) Requirements	3
3	Sustainable Financial Planning.....	3
3.1	Introduction.....	3
3.2	Water Rate Study.....	4
4	Approach	5
4.1	Overview.....	5
4.2	Conversion Process.....	5
4.2.1	Calculate Tangible Capital Asset Balances	5
4.2.2	Convert Statement of Operations	6
4.2.3	Convert Statement of Financial Position.....	6
4.2.4	Convert Statement of Cash Flow and Net Financial Assets/Debt	6
4.2.5	Verification and Note Preparation.....	6
5	Financial Plan	7
5.1	Introduction.....	7
5.2	Water Financial Plan.....	7
5.2.1	Statement of Financial Position.....	7
5.2.2	Statement of Operations and Accumulated Surplus/(Deficit)	7
5.2.3	Statement of Change in Net Financial Assets/Debts.....	8
5.2.4	Statement of Cash Flow	8
6	Notes to Financial Plan	9
7	Process for Financial Plan Approval and Submission to the Province	11
8	Recommendations	11
	Appendix A: Rate Study – Capital Budget Forecast (2021 – 2031) INFLATED \$	12
	Appendix B: Rate Study – Water Reserve Fund Continuity (2021 – 2031) INFLATED \$	13
	Appendix C: Rate Study – Operating Budget Forecast (2021 – 2031) INFLATED \$	14
	Appendix D: Statement of Financial Position (2021-2031).....	15
	Appendix E: Statement of Operations (2021-2031).....	16
	Appendix F: Schedule of Operating Expenses (2021-2031).....	17
	Appendix G: Statement of Changes in Net Financial Assets/Debt (2021-2031).....	18
	Appendix H: Statement of Cash Flow – Indirect Method (2021-2031)	19
	Appendix I: Balance of Tangible Capital Assets (2021 – 2031).....	20

1 Introduction

The objective of the report provided herein is to convert the findings of the “St. Thomas Area Secondary Water Supply System Water Rate Study, 2021-2031” (2020 Rate Study) into the prescribed reporting requirements for a financial plan as defined by Ontario Regulation 453/07 (O.Reg. 453/07). In general, a financial plan requires an in-depth analysis of capital and operating needs, a review of current and future demand versus supply, and consideration of available funding sources. The detailed financial planning and forecasting for the STASWSS has been completed and documented by City staff within the 2020 Rate Study.

2 Legislative Drivers

2.1 Safe Drinking Water Act, 2002

The Safe Drinking Water Act, 2002 (SDWA) requires that all providers of municipal drinking water obtain a Municipal Drinking Water Licence (MDWL). In order to become licensed, a municipal water provider must satisfy five key requirements as per section 44 (1):

1. Obtain a Drinking Water Works Permit (DWWP).
2. Acceptance of the operational plan for the system based on the Drinking Water Quality Management Standard (DWQMS).
3. Accreditation of the Operating Authority.
4. Prepare and provide a financial plan.
5. Obtain Permit To Take Water (if applicable).

The preparation of a financial plan is a key requirement for licensing and as such, must be undertaken by all municipal drinking water system owners.

2.2 Ontario Regulation 453/07 – Financial Plans

O.Reg. 453/07, under the SDWA, 2002, provides details relating to the preparation of water system Financial Plans. The regulation sets out general Financial Plan requirements and specific requirements for existing water systems.

2.2.1 Financial Plan Requirements – Existing System

The requirements for existing systems are summarized as follows:

- The plans must be approved by Council resolution (or governing body);
- The plans must include a statement that the financial impacts have been considered and apply for a minimum six-year period (commencing in the year of licence expiry);
- The plans must include detail regarding proposed or projected financial operations itemized by total revenues, total expenses, annual surplus/deficit and accumulated surplus/deficit (i.e. the components of a “Statement of Operations” as per the P.S.A.B.) for each year in which the financial plans apply;
- The plans must present financial position itemized by total financial assets, total liabilities, net debt, non-financial assets, and tangible capital assets (i.e. the components of a “Statement of Financial Position” as per P.S.A.B.) for each year in which the financial plans apply;
- Gross cash receipts/payments itemized by operating transactions, capital transactions, investing transactions and financial transactions (i.e. the components of a “Statement of Cash Flow” as per P.S.A.B.) for each year in which the financial plans apply;
- Financial plans applicable to two or more solely-owned drinking water systems can be prepared as if they are for one drinking water system;

- Financial plans are to be made available to the public upon request and at no charge;
- If a website is maintained, financial plans are to be made available to the public through publication on the Internet at no charge;
- Notice of the availability of the financial plans is to be given to the public; and
- Financial plan is to be submitted to the Ministry of Municipal Affairs and Housing.

2.2.2 Financial Plan Requirements - General

The financial plans shall be for a forecast period of at least six years but longer planning horizons are encouraged. The financial plan is to be completed, approved and submitted at the time of licence renewal (i.e. six months prior to licence expiry). Financial plans may be amended and additional information beyond what is prescribed can be included if deemed necessary.

The financial plan must contain on the front page, the appropriate financial plan number as set out in Schedule A of the Municipal Drinking Water Licence document.

2.2.3 Public Sector Accounting Board (PSAB) Requirements

The components of the financial plans indicated by the regulation are consistent with the requirements for financial statement presentation as set out in section PS1200 of the Canadian Institute of Chartered Accountants (C.I.C.A.) Public Sector Accounting Handbook:

“Financial statements should include a Statement of Financial Position, a Statement of Operations, a Statement of Change in Net Debt, and a Statement of Cash Flow.”

The plan has been prepared in accordance with the requirements of PS1200 and PS3150.

3 Sustainable Financial Planning

3.1 Introduction

In general, sustainability refers to the ability to maintain a certain position over time. While the SDWA, 2002 requires a declaration of the financial plan’s sustainability, it does not give a clear definition of what would be considered sustainable. The Ministry of the Environment, Conservation and Parks (MECP) released a guideline entitled “Towards Financially Sustainable Drinking-Water and Wastewater Systems”, that provides the following guiding principles to achieving sustainability:

- | | |
|--------------|--|
| Principle #1 | Ongoing public engagement and transparency can build support for, and confidence in, financial plans and the system(s) to which they relate. |
| Principle #2 | An integrated approach to planning among water, wastewater, and storm water systems is desirable given the inherent relationship among these services. |
| Principle #3 | Revenues collected for the provision of water and wastewater services should ultimately be used to meet the needs of those services. |
| Principle #4 | Life-cycle planning with mid-course corrections is preferable to planning over the short-term, or not planning at all. |
| Principle #5 | An asset management plan is a key input to the development of a financial plan. |
| Principle #6 | A sustainable level of revenue allows for reliable service that meets or exceeds environmental protection standards, while providing sufficient resources for future rehabilitation and replacement needs. |

St. Thomas Area Secondary Water Supply System

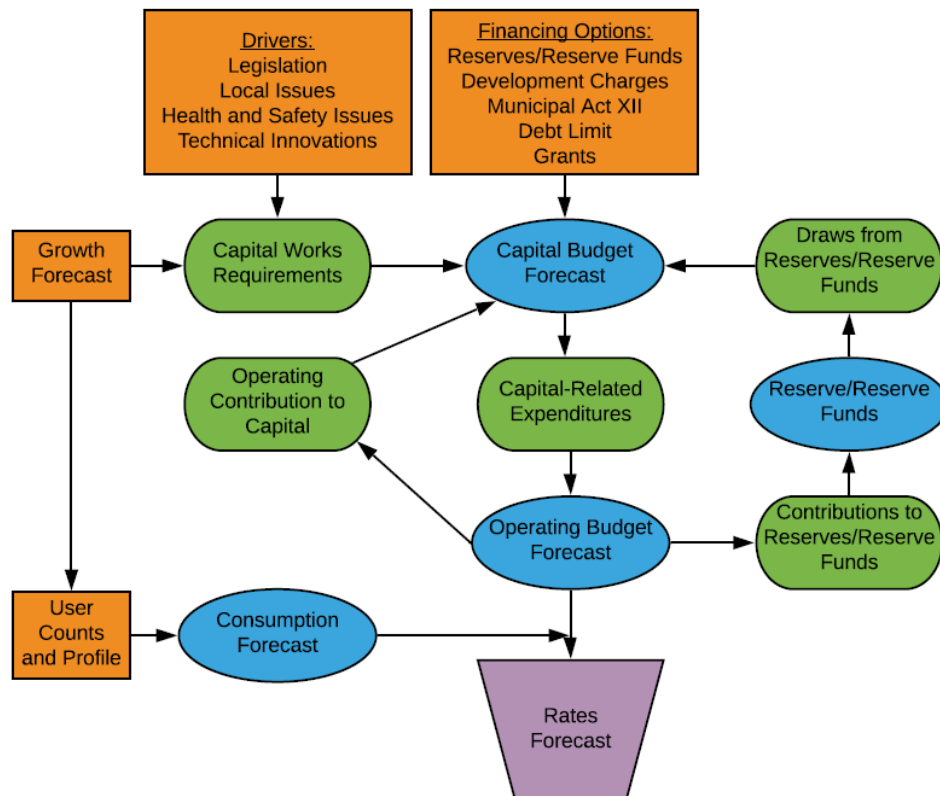
2021 - 2031 Financial Plan #190-301

- Principle #7 Ensuring users pay for the services they are provided leads to equitable outcomes and can improve conservation. In general, metering and the use of rates can help ensure users pay for services received.
- Principle #8 Financial plans are “living” documents that require continuous improvement. Comparing the accuracy of financial projections with actual results can lead to improved planning in the future.
- Principle #9 Financial plans benefit from the close collaboration of various groups, including engineers, accountants, auditors, utility staff, and municipal council.

3.2 Water Rate Study

City of St. Thomas Staff have completed extensive financial planning, as documented in the 2020 Rate Study, conducted on behalf of the STASWSS. The study process was designed to address “full cost” principles and reflect the guiding principles toward sustainable financial planning. Figure 3-1 below summarizes the process.

Figure 3-1: Water Rate Calculation Process



As a result of employing this process, the 2020 Rate Study provides a sound financial plan for the STASWSS by providing:

- A detailed assessment of current and future capital needs including an analysis of potential funding sources;
- An analysis of fixed and variable operating costs in order to determine how they will be impacted by evolving infrastructure needs and system growth;
- A review and recommendation on rate structures that ensure revenues are equitable and sufficient to meet system needs; and
- A public process that involves ongoing consultation with the main stakeholders

including staff, the Joint Board of Management, the general public (specifically the users of the system) and others with the aim of gaining input and collaboration on the sustainability of the financial plan.

The details of the financial plan arising from the 2020 Rate Study are contained in Appendices A, B and C.

4 Approach

4.1 Overview

The 2020 Rate Study has been prepared on a modified cash basis; therefore, a conversion was required in order to present a full accrual financial plan for the purposes of this report. The conversion process used will help to establish the structure of the financial plan along with the opening balances that will underpin the forecast. The following section outlines the conversion process utilized and summarizes the adjustments made to prepare the financial plan.

4.2 Conversion Process

The conversion from the existing modified cash basis financial plan to the full accrual reporting format required under O.Reg. 453/07 can be summarized in the following steps:

1. Calculate Tangible Capital Asset Balances
2. Convert Statement of Operations
3. Convert Statement of Financial Position
4. Convert Statement of Cash Flow and Net Assets/Debt
5. Verification and Note Preparation

4.2.1 Calculate Tangible Capital Asset Balances

In calculating tangible capital asset balances, existing and future purchased, developed, and/or contributed assets have been considered. For existing water assets, an inventory has already been compiled and summarized within the 2020 Rate Study. Given the prospective nature of the 2020 Rate Study, replacement cost is provided for each asset. However, historical cost (which is the original cost to purchase, develop, or construct each asset) is required for financial reporting purposes. Historical costs were provided by City of St. Thomas staff.

Future water capital needs have also been determined and summarized within the 2020 Rate Study. The STASWSS does not anticipate any assets to be contributed by developers and other parties (at no or partial cost to the STASWSS).

For all assets, existing and planned the following formula has been used to calculate the tangible capital asset balances for each year of the forecast period for this water financial plan.

- Historical Cost (to end of prior year)
- Plus – Acquisition Cost of New Assets
- Plus – Gain on Disposal(s)
- Less – Accumulated Amortization to end of prior year
- Less – Current Year Amortization
- Less – Loss on Disposal(s)
- Net Book Value

The TCA balances are reported on the Statement of Financial Position and Schedule of Tangible Capital Assets.

4.2.2 Convert Statement of Operations

To convert the Statement of Operations from a modified cash to full accrual basis, a number of adjustments are required.

- Debt Repayment
 - The principal portion of the payment needs to be removed under the accrual basis
 - The principal payments are reported on the Statement of Financial Position
- Transfers to and from Reserves
 - These transfers are represented by changes in cash and cash equivalents and accumulated surplus
- Tangible Capital Asset related Transactions
 - Amortization and gains/losses on disposals are reported on the Statement of Operations in order to include the costs related to their operating activities over their useful lives

4.2.3 Convert Statement of Financial Position

As outlined in PS1200, the opening balances for the remaining accounts: accounts receivable, accounts payable, outstanding debt (principal only) and deferred revenue; have been recorded and classified.

It is noted that for accounts payable, it is difficult to isolate the water only portion. Refer to Projected Statement of Financial Position under the Financial Plan section of this report for more information.

4.2.4 Convert Statement of Cash Flow and Net Financial Assets/Debt

The Statement of Cash Flow summarizes how the STASWSS financed its activities. The statement relies on Statement of Financial Position, the Statement of Operations and other available data.

The Statement of Change in Net Financial Assets/Debt reconciles the difference between the surplus or deficit from current operations and the change in net financial assets/debt for the year. Although the Statement of Change in Net Financial Assets/Debt is not required under O.Reg. 453/07, it has been included in this report as a further indicator of financial viability.

4.2.5 Verification and Note Preparation

The final step in the conversion process is to ensure that all of the statements created by the previous steps are in balance. The Statement of Financial Position summarizes the resources and obligations of the STASWSS at a set point in time. The Statement of Operations summarizes how these resources and obligations changed over the reporting period. To this end, the accumulated surplus/deficit reported on the Statement of Financial Position should equal the accumulated surplus/deficit reported on the Statement of Operations.

The Statement of Change in Net Financial Assets/Debt and the Statement of Financial Position are also linked in terms of reporting on net financial assets/debt. On the Statement of Financial Position, net financial assets/debt is equal to the difference between financial assets and liabilities and should equal net financial assets/debt as calculated on the Statement of Net Financial Assets/Debt.

5 Financial Plan

5.1 Introduction

The following tables provide the complete financial plan for the STASWSS for the periods ending from December 31, 2020 projected to December 31, 2031. As required, these statements are prepared in accordance with the Public Sector Accounting Standards. A brief description and analysis of each table is provided below.

It is important to note that the financial statements included are projected based on assumptions determined by financial and operational managers of the water system. These statements are not audited and contain various estimates as described in the “Notes to the Financial Plan” section below. Actual financial results will vary from the projections herein and the differences may be material.

5.2 Water Financial Plan

5.2.1 Statement of Financial Position

The Statement of Financial Position includes a number of financial indicators for financial sustainability. The first important indicator is net financial assets/(debt), which provides an indication of the system’s future revenue requirement. A net financial asset position is where financial assets are greater than liabilities and implies that the system has the resources to finance future operations. Conversely, a net debt position implies that the future revenues generated by the system will be needed to finance past transactions, as well as future operations. The Statement of Financial Position, included in Appendix D indicates that at the end of 2021, the STASWSS will be in a net financial asset position of approximately \$3,232,500. The financial plan forecasts that net financial asset position will vary over the period, as the STASWSS is planning to initiate replacement of the Transmission main within the period, requiring significant investment from reserves, however no use of debt is considered. Net financial assets are projected to grow by approximately \$76,000 over the forecast period.

Another important indicator on the Statement of Financial Position is the tangible capital asset balance. In general terms, an increase in the tangible capital asset balance indicates that assets may have been acquired either through purchase by the STASWSS or donation/contribution by a third party. A decrease in the tangible capital asset balance can indicate a disposal, write down, or use of assets. A use of assets is usually represented by an increase in accumulated amortization due to annual amortization expenses arising as a result of allocating the cost of the asset to operations over the asset’s useful life. The Statement of Financial Position included in Appendix D shows that tangible capital assets are expected to increase by approximately \$7.3 million over the forecast period. This indicates that the STASWSS has plans to invest in tangible capital assets in excess of the anticipated use of existing assets over the forecast period.

5.2.2 Statement of Operations and Accumulated Surplus/(Deficit)

The Statement of Operations included in Appendix E summarizes the revenues and expenses generated by the water system. The annual surplus/deficit measures whether the revenues generated were sufficient to cover the expenses incurred and in turn, whether net financial assets have been maintained or depleted. The Statement of Operations, included in Appendix E illustrates the ratio of expenses to revenues hovering in the 77 – 83% range for the majority of the period, indicating that revenues are sufficient to cover the expenses incurred. The exception to the statement above, is 2021 (101%), in which, a significant one-time non-TCA related expense is anticipated. Annual surplus increases from approximately \$607,000 in 2021 to \$765,500 in 2031. It is important to

note that an annual surplus is beneficial to ensure funding is available to non-expense costs such as tangible capital asset acquisitions, reserve/reserve fund transfers and debt principal payments.

Another important indicator on this statement is accumulated surplus/deficit. An accumulated surplus indicates that the available net resources are sufficient to provide future water services. An accumulated deficit indicates that resources are insufficient to provide future services and that borrowing, or rate increases are required to finance annual deficits. The Statement of Operations included in Appendix E, proposes to add approximately \$7.4 million to a 2021 opening accumulated surplus of \$3.7 million over the forecast period. This accumulated surplus, as indicated in The Statement of Operations, is predominantly made up of reserve and reserve fund balances as well as planned and historical investments in tangible capital assets.

5.2.3 Statement of Change in Net Financial Assets/Debts

The Statement of Change in Net Financial Assets/Debt indicates whether revenue generated was sufficient to cover operating and non-financial asset costs (i.e. inventory supplies, prepaid expenses, tangible capital assets, etc.) and in so doing, explains the difference between the annual surplus/deficit and the change in net financial assets/debt for the period. The Statement of Change in Net Financial Assets/Debt indicates that in 2025 and 2029, forecasted tangible capital asset acquisitions (net of amortization) exceed forecasted annual surpluses resulting in decreases in net financial assets/(debt). In the remaining years forecasted annual surplus exceeds forecasted tangible capital asset acquisitions (net of amortization) resulting in annual increases in net financial assets/(debt). Overall, this allows for a long-term plan of funding capital through accumulated surplus (i.e. reserves and reserve funds). This is evidenced by the ratio of cumulative annual surplus before amortization to cumulative tangible capital asset acquisitions, after initially increasing from 3.22 in 2021 to 6.92 in 2024, the ratio dips to 0.66 in 2025 as Transmission Main replacement initiates. The ratio subsequently increases to a value of 0.99 in 2031, to round out the forecast period.

5.2.4 Statement of Cash Flow

The Statement of Cash Flow included as Appendix H summarizes how water systems are expected to generate and use cash resources during the forecast period. The statement of cash flows focuses on the cash aspects of the activities of a water system; it is the link between the cash based and accrual-based accounting. The Statement of Cash Flow indicates that cash from operations will be used to fund capital transactions (i.e. tangible capital asset acquisitions) and build internal reserves and reserve funds over the forecast period.

The financial plan projects the cash position of the water system to vary throughout the period as a result of significant investment in tangible capital assets. Cash positions move from a 2021 balance of approximately \$3.0 million, increasing to nearly \$4.5 in 2024, followed by a decrease in 2025 due to TCA acquisition. The cash balance will increase again to 2028, and be depleted to just over \$1.0 million in 2029, again due to TCA acquisition. The balance at period end, 2031, is anticipated to be approximately \$2.5 million. For further discussion on projected cash balances please refer to the Notes to the Financial Plan.

6 Notes to Financial Plan

The financial plan format as outlined in section 4 closely approximates the full accrual format used by the public sector on their audited financial statements. However, the financial plan is not an audited document and contains various estimates. In this regard, Section 3 (2) of O.Reg. 453/07 states the following:

“Each of the following sub-subparagraphs applies only if the information referred to in the sub-subparagraph is known to the owner at the time the financial plans are prepared:

1. Sub-subparagraphs 4 i A, B and C of subsection (1)
2. Sub-subparagraphs 4 iii A, C, E and F of subsection (1).”

The information referred to in sub-subparagraphs 4 i A, B and C of subsection (1) includes:

- A. Total financial assets (i.e. cash and receivables);
- B. Total liabilities (i.e. payables, debt and deferred revenue);
- C. Net debt (i.e. the difference between A and B above).

The information referred to in sub-subparagraphs 4 iii A, C, E and F of subsection (1) includes:

- A. Operating transactions that are cash received from revenues, cash paid for operating expenses and finance charges
- B. Investing transactions that are acquisitions and disposal of investments
- C. Change in cash and cash equivalents during the year
- D. Cash and cash equivalents at the beginning and end of the year

The assumptions used in creating this financial plan have been documented below:

1. Cash, Receivables and Payables

It is assumed that the opening cash balances required to complete the financial plan are equal to:

Ending Reserve/Reserve Fund Balance
Plus: Ending Accounts Payable Balance
Less: Ending Accounts Receivable Balance
Equals: *Approximate Ending Cash Balance*

For the St. Thomas Area Secondary Water Supply System, receivable and payable balances were estimated for each year of the forecast period based on the following factors:

- a) Receivables: Based on historical levels of system-wide payables, as a proportion of revenues; and
- b) Payables: Based on historical levels of system-wide payables, as a proportion of expenses.

2. Debt

STASWSS had no outstanding water related debt at the end of 2021, and no debt proceeds are anticipated during the forecast period.

For financial reporting purposes, debt principal payments represent a decrease in debt liability and the interest payments represent a current year operating expense.

3. Deferred Revenue

Deferred revenue is typically made up of water development charge reserve fund balances which are considered to be a liability for financial reporting purposes until the funds are used to emplace the works for which they have been collected.

The St. Thomas Area Secondary Water Supply System does not collect water development charges, therefore deferred revenue is assumed to be zero over the forecast period.

4. Tangible Capital Assets

- Opening net book value of tangible capital assets includes water related assets in the following categories:
 - i. Linear Assets (i.e. mains)
 - ii. Facilities
- Amortization is calculated based on the straight-line approach.
- Given the planned asset replacement forecast in the 2020 Rate Study, useful life on acquisitions of facility-related assets is assumed to be equal to the weighted average useful life for all assets on hand.
- Write-offs are assumed to equal \$0 for each year in the forecast period.
- Tangible capital assets are shown on a net basis. It is assumed that disposals occur when the asset is being replaced, unless the asset is documented as a new asset. The value of each asset disposal is calculated by estimating the original purchase/construction date and deflating current replacement cost values to those estimated dates in order to calculate original historical cost.
- Residual value is assumed to be \$0 for all assets contained within the forecast period.
- Contributed Assets are deemed to be insignificant/unknown during the forecast period and are, therefore, assumed to be \$0.
- The STASWSS is unaware of any specific lead service piping in the municipal water system. However, when older portions of the water main system are replaced as part of the ongoing replacement program, any lead service pipes will be replaced if and when found.

The balance of tangible capital assets is summarized in Appendix I:

5. Accumulated Surplus

Opening accumulated surplus for the forecast period is reconciled as follows:

OPENING ACCUMULATED SURPLUS, 2021

Reserve Balances

Reserves: Capital/Other	2,793,454
Total Reserve Balance	2,793,454
Add: Tangible Capital Assets	912,902
Total Opening Balance	3,706,356

The accumulated surplus reconciliation for all years within the forecast period is contained in Appendix E.

6. Other Revenue

Other revenue typically includes grants, late payment charges and other non- operating

general revenues.

7. Operating Expenses

Capital expenditures for items not meeting the definition of tangible capital assets have been reclassified as operating expenses and have been expensed in the year in which they occur.

7 Process for Financial Plan Approval and Submission to the Province

As mentioned in section 1.2, the requirement to prepare the financial plan is provided in Section 32 (5) 2 ii of the S.D.W.A. Proof of the preparation of a financial plan is one of the submission requirements for municipal drinking water licensing and upon completion, must be submitted to the Ministry of the Environment, Conservation and Parks. As part of O.Reg. 453/07, the process established for plan approval, public circulation and filing is set out as follows:

1. The financial plan must be approved by resolution of the municipality who owns the drinking water system or the governing body of the owner. (O.Reg. 453/07, Section 3 (1) 1)
2. The owner of the drinking water system must provide notice advertising the availability of the financial plan. The plans will be made available to the public upon request and without charge. The plans must also be made available to the public on the municipality's website. (O.Reg. 453/07, Section 3 (1) 5)
3. The owner of the drinking water system must provide a copy of the financial plan to the Director of Policy Branch, Ministry of Municipal Affairs and Housing. (O.Reg. 453/07, Section 3 (1) 6)
4. The owner of the drinking water system must provide proof satisfactory to the Ministry of the Environment, Conservation and Parks that the financial plans for the system satisfy the requirements under the Safe Drinking Water Act. (S.D.W.A. Section 32 (5) 2ii)

8 Recommendations

This report presents the water financial plan for the St. Thomas Area Secondary Water Supply System in accordance with the mandatory reporting formats for water systems as detailed in O.Reg. 453/07. It is important to note that while mandatory, the financial plan is provided for the Joint Board of Management's interest and approval however, for decision making purposes, it may be more informative to rely on the information contained within the 2020 Rate Study. Nevertheless, the Joint Board of Management is required to pass certain resolutions with regard to this plan and regulations and it is recommended that:

1. The St. Thomas Area Secondary Water Supply System Water Financial Plan prepared by City of St. Thomas Staff, for the period of 2021-2031 be approved.
2. Notice of availability of the Financial Plan be advertised.
3. The Financial Plan, the Board Resolution approving the Financial Plan, and the 2020 Water Rate Study underpinning the Financial Plan be submitted to the Ministry of Municipal Affairs and Housing. (O.Reg. 453/07, Section 3 (1) 6)
4. The Financial Plan, the Board Resolution approving the Financial Plan, and the 2020 Water Rate Study underpinning the Financial Plan be submitted to the Ministry of the Environment, Conservation and Parks, satisfying the requirements under the Safe Drinking Water Act. (S.D.W.A. Section 32 (5) 2 ii)

Appendix A: Rate Study – Capital Budget Forecast (2021 – 2031) INFLATED \$

	Total	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Pump 1 Discharge Control Valve PRV Surge	3,333		3,333									
Pump 2 Discharge Control Valve PRV Surge	3,333		3,333									
Pump 3 Discharge Control Valve PRV Surge	3,333		3,333									
Pump 1 Suction Valve	10,100		10,100									
Pump 2 Suction Valve	10,100		10,100									
Pump 3 Suction Valve	10,100		10,100									
Total Pump 1	13,433	0	13,433	0	0	0	0	0	0	0	0	0
Total Pump 2	13,433	0	13,433	0	0	0	0	0	0	0	0	0
Total Pump 3	13,433	0	13,433	0	0	0	0	0	0	0	0	0
Generator Multilin Controller Replacement	0											
Generator Engine Major Reconditioning	25,000				25,000							
Diesel Demo and make good	15,000			15,000								
Generator Load Testing Connection Panel	0											
Total Generator	40,000	0	0	15,000	25,000	0	0	0	0	0	0	0
Chlorinator System Upgrade - Eng.	20,000					20,000						
Chlorinator System Upgrade	101,000						101,000					
Total Chlorination	121,000	0	0	0	0	20,000	101,000	0	0	0	0	0
PLC Control Panel Wiring	0											
Replacement of Underground Primary Cables from Ple to Metal Clad Switch	0											
Steel Piping Replacement	50,000				50,000							
Total Misc. Process/HVAC/Electrical	50,000	0	0	0	50,000	0	0	0	0	0	0	0
WCC Secondary Chamber	65,307					65,307						
WCF001 Chamber #46	65,307					65,307						
WCF002 Chamber #47	65,307					65,307						
WCF003 Chamber #48	65,307					65,307						
WCF004 Chamber #49	65,307					65,307						
WCF005 Chamber #50	70,690									70,690		
WCF006 Chamber #51	70,690									70,690		
WCF012 Chamber #2A	60,334	60,334										
WCF013 Chamber #3	60,334	60,334										
Total Chambers	588,583	120,667	0	0	0	326,535	0	0	0	141,381	0	0
Valves	77,000	77,000										
Ford Tower Decommissioning	500,000		500,000									
Total Ford Tower	577,000	77,000	500,000	0	0	0	0	0	0	0	0	0
East Chamber	139,943					139,943						
West Chamber	151,479									151,479		
Total E & W Chambers	291,422	0	0	0	0	139,943	0	0	0	151,479	0	0
Transmission Main (500 mm)	0											
Transmission Main (750 mm)	7,191,103					3,730,214				3,460,889		
Total Transmission Main	7,191,103	0	0	0	0	3,730,214	0	0	0	3,460,889	0	0
Review and Test SCADA alarms	0											
Review and Update O&M manual	0											
Drawing Revisions	0											
Watermain Replacement Study	150,000		150,000									
Total Planning and Studies	150,000	-	150,000	0	0	0	0	0	0	0	0	0
Total Capital Expenditures		197,667	690,299	15,000	75,000	4,216,692	101,000	-	-	3,753,748	-	-
Capital Plan Funding		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Provincial/Federal Grants		-	-	-	-	-	-	-	-	-	-	-
Debentures		-	-	-	-	-	-	-	-	-	-	-
Secondary Water Reserve		197,667	690,299	15,000	75,000	4,216,692	101,000	-	-	3,753,748	-	-
Total Capital Plan Funds		197,667	690,299	15,000	75,000	4,216,692	101,000	-	-	3,753,748	-	-

Appendix B: Rate Study – Water Reserve Fund Continuity (2021 – 2031) INFLATED \$

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Reserve Balance (beginning of year)	2,793,454	3,232,509	3,241,979	4,009,026	4,771,466	1,354,215	2,097,342	2,987,605	3,925,806	1,054,043	1,953,287
Transfer to Capital	197,667	690,299	15,000	75,000	4,216,692	101,000	-	-	3,753,748	-	-
Transfer from Operating	584,807	648,925	717,507	758,760	788,345	819,062	848,317	878,449	878,544	878,164	877,283
Interest	51,916	50,844	64,540	78,681	11,095	25,064	41,947	59,752	3,441	21,081	39,066
Reserve Balance (End of Year)	\$3,232,509	\$3,241,979	\$4,009,026	\$4,771,466	\$1,354,215	\$2,097,342	\$2,987,605	\$3,925,806	\$1,054,043	\$1,953,287	\$2,869,637

Appendix C: Rate Study – Operating Budget Forecast (2021 – 2031) INFLATED \$

DESCRIPTION	2021 FORECAST	2022 FORECAST	2023 FORECAST	2024 FORECAST	2025 FORECAST	2026 FORECAST	2027 FORECAST	2028 FORECAST	2029 FORECAST	2030 FORECAST	2031 FORECAST
Operating											
E/S Wage Allocation	47,195	48,139	49,102	50,084	51,086	52,108	53,150	54,213	55,297	56,403	57,531
Job Costing Labour	48,960	49,939	50,938	51,957	52,996	54,056	55,137	56,240	57,364	58,512	59,682
CMMS Support Fee	3,009	3,069	3,131	3,193	3,257	3,322	3,389	3,456	3,526	3,596	3,668
Secondary Water System - Contractor	103,020	105,080	107,182	109,326	111,512	113,742	116,017	118,338	120,704	123,118	125,581
Misc. Contracted Services	35,700	36,414	37,142	37,885	38,643	39,416	40,204	41,008	41,828	42,665	43,518
Job Costing Equipment	8,670	8,843	9,020	9,201	9,385	9,572	9,764	9,959	10,158	10,361	10,569
Job Costing Subcontractors	20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	24,380	24,867
City Own Property Taxes	4,998	5,098	5,200	5,304	5,410	5,518	5,629	5,741	5,856	5,973	6,093
Insurance Expense	17,768	18,124	18,486	18,856	19,233	19,618	20,010	20,410	20,819	21,235	21,660
Communications	20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	24,380	24,867
SCADA Maintenance	10,302	10,508	10,718	10,933	11,151	11,374	11,602	11,834	12,070	12,312	12,558
Electricity (Hydro)	141,750	148,838	156,279	164,093	172,298	180,913	189,959	199,456	209,429	219,901	230,896
Natural Gas - Heating	5,100	5,202	5,306	5,412	5,520	5,631	5,743	5,858	5,975	6,095	6,217
Chemicals	5,100	5,202	5,306	5,412	5,520	5,631	5,743	5,858	5,975	6,095	6,217
Job Costing Materials	1,030	1,051	1,072	1,093	1,115	1,137	1,160	1,183	1,207	1,231	1,256
SubTotal Operating	\$473,403	\$487,124	\$501,331	\$516,046	\$531,290	\$547,085	\$563,454	\$580,422	\$598,014	\$616,257	\$635,179
Purchase of Water											
Primary Supply Rate Forecast	0.8965	0.9234	0.9511	0.9796	1.0090	1.0393	1.0705	1.1026	1.1357	1.1697	1.2048
Forecasted Water Demand (m3)	1,998,025	2,027,727	2,056,888	2,086,157	2,115,698	2,145,838	2,172,717	2,199,880	2,227,332	2,255,078	2,283,122
SubTotal Purchase of Water	\$1,791,253	\$1,872,418	\$1,956,326	\$2,043,689	\$2,134,808	\$2,230,176	\$2,325,854	\$2,425,580	\$2,529,525	\$2,637,866	\$2,750,790
EMPS Occupancy											
EMPS Occupancy Fee	60,000	61,200	62,424	63,672	64,946	66,245	67,570	68,921	70,300	71,706	73,140
SubTotal EMPS Rental	\$60,000	\$61,200	\$62,424	\$63,672	\$64,946	\$66,245	\$67,570	\$68,921	\$70,300	\$71,706	\$73,140
TOTAL OPERATING EXPENDITURES	\$2,324,656	\$2,420,741	\$2,520,081	\$2,623,408	\$2,731,044	\$2,843,506	\$2,956,878	\$3,074,923	\$3,197,838	\$3,325,828	\$3,459,108
Revenues											
Total Operating Revenue	-	-	-	-	-	-	-	-	-	-	-
Water Billing Recovery	2,909,463	3,069,666	3,237,588	3,382,168	3,519,389	3,662,568	3,805,195	3,953,372	4,076,381	4,203,992	4,336,392
TOTAL REVENUE	2,909,463	3,069,666	3,237,588	3,382,168	3,519,389	3,662,568	3,805,195	3,953,372	4,076,381	4,203,992	4,336,392

Appendix D: Statement of Financial Position (2021-2031)

Statement of Financial Position (2021 – 2031) – UNAUDITED

	Notes	2021	2022	2023	2024	2025	FORECAST 2026	2027	2028	2029	2030	2031
Financial Assets												
Cash	1	3,009,821	3,055,204	3,740,727	4,497,119	1,482,602	1,802,228	2,670,506	3,596,359	1,089,720	1,602,955	2,508,271
Accounts Receivable	1	242,455	255,806	269,799	281,847	293,282	305,214	317,100	329,448	339,698	350,333	361,366
Total Financial Assets		3,252,276	3,311,009	4,010,526	4,778,966	1,775,884	2,107,442	2,987,605	3,925,806	1,429,418	1,953,288	2,869,637
Liabilities												
Bank Indebtedness		-	-	-	-	-	-	-	-	-	-	-
Accounts Payable & Accrued Liabilities	1	19,767	69,030	1,500	7,500	421,669	10,100	-	-	375,375	-	-
Debt (Principal Only)	2	-	-	-	-	-	-	-	-	-	-	-
Total Liabilities		19,767	69,030	1,500	7,500	421,669	10,100	-	-	375,375	-	-
Net Financial Assets/(Debt)		3,232,509	3,241,979	4,009,026	4,771,466	1,354,215	2,097,342	2,987,605	3,925,806	1,054,043	1,953,288	2,869,637
Non-Financial Assets												
Tangible Capital Assets	4	1,081,284	1,054,821	1,036,509	1,076,381	5,167,471	5,169,148	5,067,805	4,967,477	8,551,898	8,400,099	8,248,300
Total Non-Financial Assets		1,081,284	1,054,821	1,036,509	1,076,381	5,167,471	5,169,148	5,067,805	4,967,477	8,551,898	8,400,099	8,248,300
Accumulated Surplus/(Deficit)	5	4,313,794	4,296,801	5,045,535	5,847,847	6,521,686	7,266,490	8,055,411	8,893,283	9,605,941	10,353,387	11,117,937
Financial Indicators												
	Total Change	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1) Increase/(Decrease) in Net Financial Assets	76,183	439,055	9,470	767,046	762,441	(3,417,251)	743,127	890,264	938,201	(2,871,763)	899,245	916,349
2) Increase/(Decrease) in Tangible Capital Assets	7,335,398	168,382	(26,463)	(18,312)	39,871	4,091,090	1,677	(101,343)	(100,329)	3,584,421	(151,799)	(151,799)
3) Increase/(Decrease) In Accumulated Surplus	7,411,581	607,437	(16,993)	748,734	802,312	673,839	744,804	788,921	837,872	712,658	747,446	764,550

Appendix E: Statement of Operations (2021-2031)

Statement of Operations (2021 - 2031) – UNAUDITED

	Notes	2021	2022	2023	2024	2025	FORECAST 2026	2027	2028	2029	2030	2031
Water Revenue												
Rate Based Revenue		2,909,463	3,069,666	3,237,588	3,382,168	3,519,389	3,662,568	3,805,195	3,953,372	4,076,381	4,203,992	4,336,392
Other Revenue (interest on Reserves)	6	51,916	50,844	64,540	78,681	11,095	25,064	41,947	59,752	3,441	21,081	39,066
Total Revenues		2,961,378	3,120,510	3,302,128	3,460,848	3,530,484	3,687,632	3,847,142	4,013,124	4,079,823	4,225,073	4,375,458
Water Expenses												
Operating Expenses	App. C.	2,324,656	3,070,741	2,520,081	2,623,408	2,731,044	2,843,506	2,956,878	3,074,923	3,197,838	3,325,828	3,459,108
Amortization	4	29,285	31,501	33,312	35,129	67,368	99,323	101,343	100,329	126,157	151,799	151,799
Loss on disposal of TCAs		-	35,261	-	-	58,234	-	-	-	43,170	-	-
Total Expenses		2,353,941	3,137,503	2,553,393	2,658,536	2,856,646	2,942,828	3,058,221	3,175,252	3,367,164	3,477,627	3,610,907
Annual Surplus/(Deficit)		607,437	(16,993)	748,734	802,312	673,839	744,804	788,921	837,872	712,658	747,446	764,550
Accumulated Surplus/(Deficit), beginning of year	5	3,706,356	4,313,794	4,296,801	5,045,535	5,847,847	6,521,686	7,266,490	8,055,411	8,893,283	9,605,941	10,353,387
Accumulated Surplus/(Deficit), end of year		4,313,794	4,296,801	5,045,535	5,847,847	6,521,686	7,266,490	8,055,411	8,893,283	9,605,941	10,353,387	11,117,937
Accumulated Surplus/Deficit) Reconciliation												
Reserve Balances												
Reserves: Capital/Other		3,232,509	3,241,979	4,009,026	4,771,466	1,354,215	2,097,342	2,987,605	3,925,806	1,054,043	1,953,287	2,869,637
Total Reserves Balance												
Less: Debt Obligations and Deferred Revenue		-	-	-	-	-	-	-	-	-	-	-
Add: TCA's	4	1,081,284	1,054,821	1,036,509	1,076,381	5,167,471	5,169,148	5,067,805	4,967,477	8,551,898	8,400,099	8,248,300
Total Ending Balance		4,313,794	4,296,801	5,045,535	5,847,847	6,521,686	7,266,490	8,055,411	8,893,283	9,605,941	10,353,387	11,117,937
Financial Indicators												
	Total Change	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1) Expense to Revenue Ratio	-	79%	101%	77%	77%	81%	80%	79%	79%	83%	82%	83%
2) Increase/(Decrease) to Accumulated Surplus	7,411,581	607,437	(16,993)	748,734	802,312	673,839	744,804	788,921	837,872	712,658	747,446	764,550

Appendix F: Schedule of Operating Expenses (2021-2031)

Schedule of Operating Expenses (2021 - 2031) – UNAUDITED

<u>Operating Expenses</u>	Notes	FORECAST										
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
E/S Wage Allocation		47,195	48,139	49,102	50,084	51,086	52,108	53,150	54,213	55,297	56,403	57,531
Job Costing Labour		48,960	49,939	50,938	51,957	52,996	54,056	55,137	56,240	57,364	58,512	59,682
CMMS Support Fee		3,009	3,069	3,131	3,193	3,257	3,322	3,389	3,456	3,526	3,596	3,668
Secondary Water System - Contractor		103,020	105,080	107,182	109,326	111,512	113,742	116,017	118,338	120,704	123,118	125,581
Misc. Contracted Services		35,700	36,414	37,142	37,885	38,643	39,416	40,204	41,008	41,828	42,665	43,518
Job Costing Equipment		8,670	8,843	9,020	9,201	9,385	9,572	9,764	9,959	10,158	10,361	10,569
Job Costing Subcontractors		20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	24,380	24,867
City Own Property Taxes		4,998	5,098	5,200	5,304	5,410	5,518	5,629	5,741	5,856	5,973	6,093
Insurance Expense		17,768	18,124	18,486	18,856	19,233	19,618	20,010	20,410	20,819	21,235	21,660
Communications		20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	24,380	24,867
SCADA Maintenance		10,302	10,508	10,718	10,933	11,151	11,374	11,602	11,834	12,070	12,312	12,558
Electricity (Hydro)		141,750	148,838	156,279	164,093	172,298	180,913	189,959	199,456	209,429	219,901	230,896
Natural Gas - Heating		5,100	5,202	5,306	5,412	5,520	5,631	5,743	5,858	5,975	6,095	6,217
Chemicals		5,100	5,202	5,306	5,412	5,520	5,631	5,743	5,858	5,975	6,095	6,217
Job Costing Materials		1,030	1,051	1,072	1,093	1,115	1,137	1,160	1,183	1,207	1,231	1,256
Purchase of Water		1,791,253	1,872,418	1,956,326	2,043,689	2,134,808	2,230,176	2,325,854	2,425,580	2,529,525	2,637,866	2,750,790
EMPS Occupancy Fee		60,000	61,200	62,424	63,672	64,946	66,245	67,570	68,921	70,300	71,706	73,140
Non-TCA Expenses from Capital Budget	7	-	650,000	-	-	-	-	-	-	-	-	-
TOTAL OPERATING EXPENSES		2,324,656	3,070,741	2,520,081	2,623,408	2,731,044	2,843,506	2,956,878	3,074,923	3,197,838	3,325,828	3,459,108

Appendix G: Statement of Changes in Net Financial Assets/Debt (2021-2031)

Statement of Changes in Net Financial Assets/Debt (2021 - 2031) – UNAUDITED

	Notes	FORECAST										
		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Annual Surplus/(Deficit)		607,437	(16,993)	748,734	802,312	673,839	744,804	788,921	837,872	712,658	747,446	764,550
Less: Acquisition of Tangible Capital Assets	4	197,667	40,299	15,000	75,000	4,216,692	101,000	-	-	3,753,748	-	-
Add: Amortization of Tangible Capital Assets	4	29,285	31,501	33,312	35,129	67,368	99,323	101,343	100,329	126,157	151,799	151,799
(Gain)/Loss on disposal of Tangible Capital Assets		-	35,261	-	-	58,234	-	-	-	43,170	-	-
Add: Proceeds on Sale of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-	-
Add: Write-downs of Tangible Capital Assets		-	-	-	-	-	-	-	-	-	-	-
Increase/(Decrease) in Net Financial Assets/(Net Debt)		439,055	9,470	767,046	762,441	(3,417,251)	743,127	890,264	938,201	(2,871,763)	899,245	916,349
Net Financial Assets/(Net Debt), beginning of year		2,793,454	3,232,509	3,241,979	4,009,026	4,771,466	1,354,215	2,097,342	2,987,605	3,925,806	1,054,043	1,953,288
Net Financial Assets/(Net Debt), end of year		3,232,509	3,241,979	4,009,026	4,771,466	1,354,215	2,097,342	2,987,605	3,925,806	1,054,043	1,953,288	2,869,637
Financial Indicators		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
1) Acquisition of Tangible Capital Assets (Cumulative)		197,667	237,966	252,966	327,966	4,544,658	4,645,658	4,645,658	4,645,658	8,399,406	8,399,406	8,399,406
2) Annual Surplus / Deficit before Amortization (Cumulative)		636,722	651,230	1,433,277	2,270,717	3,011,924	3,856,051	4,746,314	5,684,515	6,523,330	7,422,575	8,338,924
3) Ratio of Annual Surplus before Amortization to Acquisition of TCA's (Cumulative)		3.22	2.74	5.67	6.92	0.66	0.83	1.02	1.22	0.78	0.88	0.99

Appendix H: Statement of Cash Flow – Indirect Method (2021-2031)

Statement of Cash Flow - Indirect Method (2021 - 2031) - UNAUDITED

	Notes	2021	2022	2023	2024	2025	FORECAST 2026	2027	2028	2029	2030	2031
Operating Transactions												
Annual Surplus/(Deficit)		607,437	(16,993)	748,734	802,312	673,839	744,804	788,921	837,872	712,658	747,446	764,550
Add: Amortization of TCA's	4	29,285	31,501	33,312	35,129	67,368	99,323	101,343	100,329	126,157	151,799	151,799
(Gain)/Loss on disposal of TCA's		-	35,261	-	-	58,234	-	-	-	43,170	-	-
Change in A/R (increase)/decrease		(242,455)	(13,350)	(13,994)	(12,048)	(11,435)	(11,932)	(11,886)	(12,348)	(10,251)	(10,634)	(11,033)
Change in A/P increase/(decrease)		19,767	49,263	(67,530)	6,000	414,169	(411,569)	(10,100)	-	375,375	(375,375)	-
Less: Interest Proceeds		51,916	50,844	64,540	78,681	11,095	25,064	41,947	59,752	3,441	21,081	39,066
Cash Provided by Operating Transactions		362,118	34,838	635,983	752,712	1,191,079	395,561	826,331	866,101	1,243,668	492,155	866,250
Capital Transactions												
Proceeds on sale of tangible capital assets		-	-	-	-	-	-	-	-	-	-	-
Less: Cash used to acquire tangible capital assets	4	197,667	40,299	15,000	75,000	4,216,692	101,000	-	-	3,753,748	-	-
Cash Applied to capital transactions		(197,667)	(40,299)	(15,000)	(75,000)	(4,216,692)	(101,000)	-	-	(3,753,748)	-	-
Investing Transactions												
Proceeds from investments		51,916	50,844	64,540	78,681	11,095	25,064	41,947	59,752	3,441	21,081	39,066
Less: Cash used to acquire investments		-	-	-	-	-	-	-	-	-	-	-
Cash provided by (applied to) investing transactions		51,916	50,844	64,540	78,681	11,095	25,064	41,947	59,752	3,441	21,081	39,066
Financing Transactions												
Not applicable	2	-	-	-	-	-	-	-	-	-	-	-
Increase in cash and cash equivalents		216,367	45,383	685,523	756,392	(3,014,517)	319,626	868,278	925,853	(2,506,639)	513,236	905,316
Cash and Cash equivalents, beginning of year	1	2,793,454	3,009,821	3,055,204	3,740,727	4,497,119	1,482,602	1,802,228	2,670,506	3,596,359	1,089,720	1,602,955
Cash and Cash equivalents, end of year	1	3,009,821	3,055,204	3,740,727	4,497,119	1,482,602	1,802,228	2,670,506	3,596,359	1,089,720	1,602,955	2,508,271

Appendix I: Balance of Tangible Capital Assets (2021 – 2031)

Balance of Tangible Capital Assets (2021 - 2031) – UNAUDITED											
Asset Historical Cost						FORECAST					
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Opening Tangible Capital Asset Balance	1,775,092	1,961,915	1,925,593	1,940,593	2,015,593	6,041,601	6,142,601	6,142,601	6,142,601	9,734,087	9,734,087
Acquisitions	197,667	40,299	15,000	75,000	4,216,692	101,000	0	0	3,753,748	0	0
Disposals	10,844	76,621	0	0	190,684	0	0	0	162,262	0	0
Closing Tangible Capital Asset Balance	1,961,915	1,925,593	1,940,593	2,015,593	6,041,601	6,142,601	6,142,601	6,142,601	9,734,087	9,734,087	9,734,087
Opening Accumulated Amortization	862,190	880,631	870,772	904,084	939,212	874,130	973,453	1,074,795	1,175,124	1,182,189	1,333,988
Amortization Expense	29,285	31,501	33,312	35,129	67,368	99,323	101,343	100,329	126,157	151,799	151,799
Loss on disposal of Tangible Capital Assets	0	35,261	0	0	58,234	0	0	0	43,170	0	0
Amortization on Disposal	10,844	76,621	0	0	190,684	0	0	0	162,262	0	0
Ending Accumulated Amortization	880,631	870,772	904,084	939,212	874,130	973,453	1,074,795	1,175,124	1,182,189	1,333,988	1,485,787
Net Book Value	1,081,284	1,054,821	1,036,509	1,076,381	5,167,471	5,169,148	5,067,805	4,967,477	8,551,898	8,400,099	8,248,300