

ST. THOMAS AREA SECONDARY WATER SUPPLY SYSTEM

JOINT BOARD OF MANAGEMENT

Thursday, November 2, 2017 at 4:00 p.m.

City Hall – Room 309

AGENDA

DISCLOSURES OF INTEREST

Minutes

Review and approval of the minutes of September 7, 2017

Reports

1. Report SWB04-17 - 2018 Secondary Water Rate
2. Report SWB05-17 – STASWSS 10 year Capital Project Plan

Unfinished Business

New Business

Adjournment



Corporation of the
City of St. Thomas

Report No.
SWB04-17

File No.

Directed to: Chairman Kohler and the Members of The Joint Board of Management for The St. Thomas Area Secondary Water Supply System

Meeting Date:
November 2, 2017
Date Authored:
October 13, 2017

Department: Environmental Services

Attachments

Prepared By: Lynn Stafford, C.E. T.
Compliance Coordinator

Subject: St. Thomas Area Secondary Water Supply System – 2018 Water Rate

Recommendation:

THAT: Report SWB04-17, St. Thomas Area Secondary Water Supply System – 2018 Water Rate be received for information; and further,

THAT: The Blended Supply Rate for the St. Thomas Area Secondary Water Supply System, \$0.9348/m³, effective January 1st, 2018, be approved.

Origin:

The St. Thomas Area Secondary Water Supply System provides water to the City of St. Thomas, the Municipality of Central Elgin and the Township of Southwold, which is supplied by the Primary System.

The St. Thomas Area Secondary Water Supply System water rate is calculated as a portion of the overall Blended Rate for the St. Thomas and Suburban Service Area. The forecast Blended Supply Rate is calculated to reflect 70% of the overall supply to the area being purchased directly from the Primary System with 30% being purchased from the Secondary System (i.e. a rate comprising both the Primary and Secondary rates). The cost of supplying water services is recovered through the Blended Supply Rate, which forms part of the St. Thomas and Suburban Service Area Rate. The Blended Supply Rate includes water purchased through the Primary and Secondary Systems.

Analysis:

The Primary System Water Rate was approved by the Elgin Area Primary Water Supply System Joint Board of Management on October 5, 2017, at a rate increase of 4%. In 2018 the rate is scheduled to be changed from \$0.7738/m³ to \$0.8047/m³.

In order to meet the requirements of the provincial water legislation and to build an adequate reserve fund balance, the Secondary Water Rate will increase from \$0.3939/m³ to \$0.4336/m³, a 10.1% increase.

The Blended Supply Rate is a combination of the Primary and the Secondary Rates, which will increase from \$0.8921/m³ to \$0.9348/m³, resulting in an **overall rate increase of 4.8%** for the Secondary System.

The table outlines the current rate increase and the projected rates. The full version of the 2015 Secondary Rate Study is available on the city website at <http://www.stthomas.ca/content/secondary-water-supply-system> for the period of 2015-2024.

Year	2017	2018	2019	2020	2021	2022
Secondary Rate (\$/m ³)	0.3939	0.4336	0.4773	0.5255	0.5785	0.6368
Primary Rate (\$/m ³)	0.7738	0.8047	0.8369	0.8620	0.8879	0.9145
Blended Supply Rate (70% Primary and 30% Secondary)	0.8921	0.9348	0.9801	1.0197	1.0615	1.1055
% Increase	5.7%	4.8%	4.8%	4.0%	4.1%	4.1%

Financial Considerations:

The 2018 Residential Customer Water Rate impact for the total annual water increase (Primary and Secondary blended rate) will be an increase of \$7.65 per year, which is in keeping with the approved St. Thomas Area Secondary Water Supply System Water Rate Study.

Respectfully Submitted,



Lynn Stafford, C.E.T.
Compliance Coordinator

Reviewed By: David Christie Justin _____
Treasury Env Services Planning City Clerk HR Other



Directed to:

Chairman Kohler and the Members of the Board of Management for the St. Thomas Area Secondary Water Supply System

Meeting Date: November 2, 2017

Date Authored: October 17, 2017

Department:

Environmental Services

Attachment

Prepared By:

Nathan Bokma, P. Eng.
Manager of Development and Compliance

STASWSS 10 Year Capital Plan

Subject:

St. Thomas Area Secondary Water Supply System 10 Year Capital Plan Update

Recommendation:

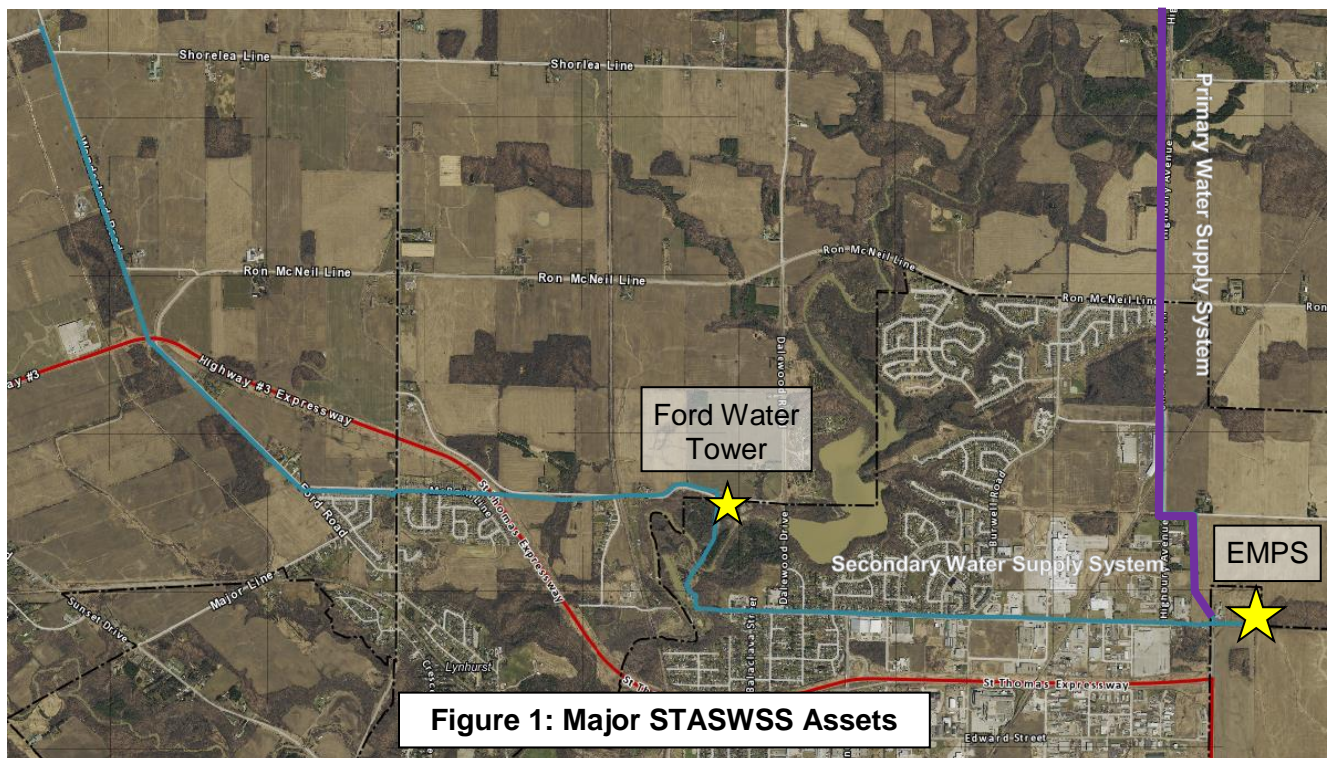
THAT: Report SWB 05-17, St. Thomas Area Secondary Water Supply System (STASWSS) 10 Year Capital Plan Update, be received for information.

Origin:

As per Report SWB 08-16, staff updated the Board of the STASWSS about upcoming capital project in the next few years. In consideration of these recent projects, staff have revisited the projects outlined in the STASWSS Water Rate Study (Watson & Associates, March 2015), and revised them accordingly due to timing and current infrastructure needs of the secondary water system.

Analysis:

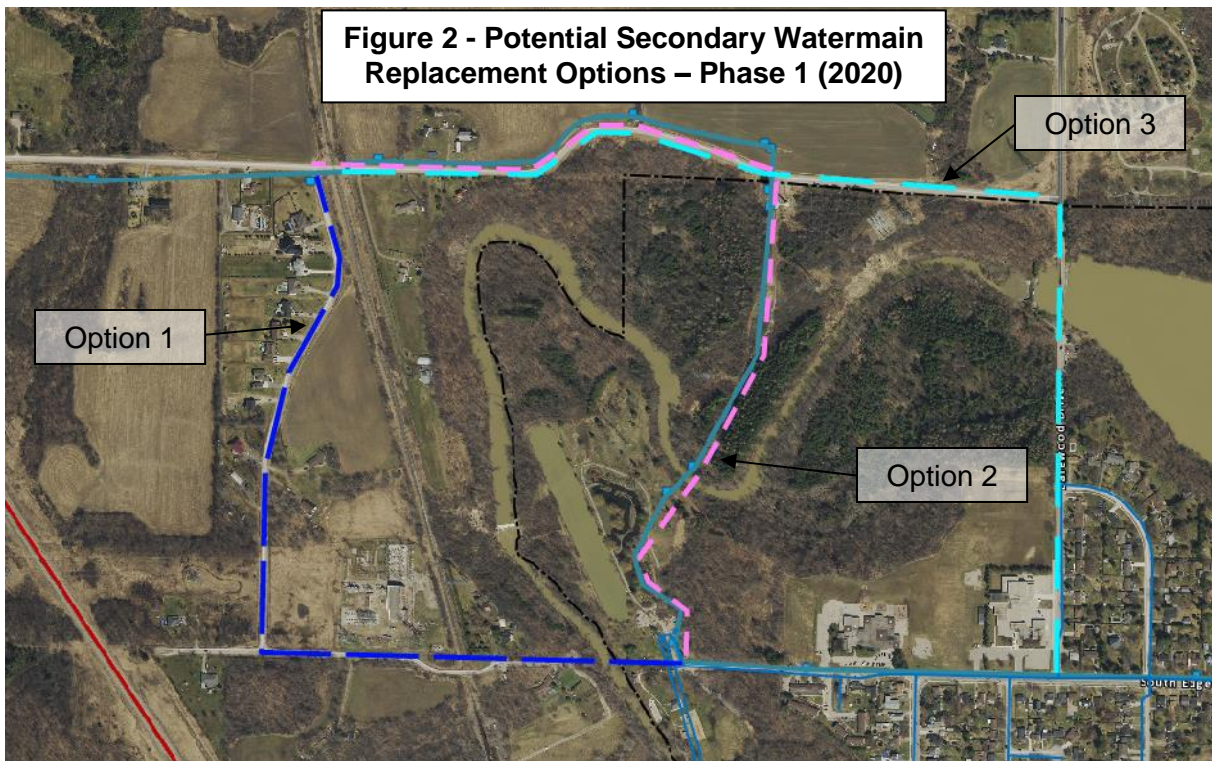
Staff reviewed the projects from the 2015 Water Rate Study and integrated recent projects into the updated 10 Year Capital Plan. By setting the capital plan now, staff can make the necessary arrangements to complete the work ahead of time.



A few highlights of the revised plan are as follows:

- Initiation of the Ford Water Tower removal in 2018.
- Moving up the replacement of the ravine portion (Phase 1) of the STASWSS watermain to 2020.
- Continuation of the watermain replacement in 2024.

Staff have prioritized the replacement of the ravine portion of the STASWSS watermain due to its location and difficulty to repair in a potential break situation. There are several options for new watermain alignments, and these options would be explored in detail by staff with assistance from consultants as necessary pending approval.



Financial Considerations

The update to the 10 year capital plan can be found as the attachment to this report. The financing for the STASWSS capital projects depends on the annual transfers to the Secondary water reserves. The amount used for the annual transfer is based on the 2018 Operating Budget amount with a 3% increase each year, which is conservatively based on the annual rate increase.

The funding allocated for the EMPS Pump Upgrades project has already been taken into account prior to this 10 year capital plan, and should have no adverse effect on this capital plan.

Respectfully Submitted,

Nathan Bokma, P. Eng.
 Manager of Development and Compliance

Reviewed By:  _____
 Treasury Env Services Planning City Clerk HR Other

St. Thomas Area Secondary Water Supply System - 10 Year Capital Plan

Capital Expenditures													
EMPS Capital Plan 2018-2028	Project Cost	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Grand Total
Chlorination Equipment (50% of \$100k, shared with Aylmer)	\$ 50,000			\$ 50,000									\$ 50,000
Process Electrical & HVAC SCADA PLC Server	\$ 35,000	\$ 35,000											\$ 35,000
Replacement of 1050mm Suction Header Valve and Actuator (33% of \$125k shared with London and Aylmer)	\$ 42,000	\$ 42,000											\$ 42,000
Replacement of suction header coupling between St Thomas Header and London Header	\$ 12,500	\$ 12,500											\$ 12,500
Pump Discharge Control Valve Rebuilding	\$ 20,000	\$ 20,000											\$ 20,000
Generator Engine Major Reconditioning (50% of \$50k shared with Aylmer)	\$ 25,000					\$ 25,000							\$ 25,000
St. Thomas Equipment Sub Metering	\$ 10,000		\$ 10,000										\$ 10,000
Chlorinator System (Annual \$5k amount)		\$ 5,000	\$ 5,000										\$ 10,000
Diesel Storage Demolition and Make Good	\$ 15,000		\$ 15,000										\$ 15,000
Generator Full Load testing (every 2 years)	\$ 10,000		\$ 2,000		\$ 2,000		\$ 2,000		\$ 2,000		\$ 2,000		\$ 10,000
DWQMS Audits	\$ 26,000	\$ 2,000	\$ 3,000	\$ 2,000	\$ 2,000	\$ 3,000	\$ 2,000	\$ 2,000	\$ 3,000	\$ 2,000	\$ 2,000	\$ 3,000	\$ 26,000
Drawing Revisions	\$ 10,000	\$ 10,000											\$ 10,000
Asset Condition Assessment	\$ 5,000		\$ 5,000										\$ 5,000
Valve and steel piping painting in lower level of EMPS	\$ 7,500		\$ 7,500										\$ 7,500
Single Line Drawing Update for EMPS Complex	\$ 5,000		\$ 5,000										\$ 5,000
Replace all light fixture upper and lower level.	\$ 15,000	\$ 15,000											\$ 15,000
MCC Replacement	\$ 152,000						\$ 152,000						\$ 152,000
Grand Total	\$ 440,000	\$ 141,500	\$ 52,500	\$ 52,000	\$ 4,000	\$ 28,000	\$ 156,000	\$ 2,000	\$ 5,000	\$ 2,000	\$ 4,000	\$ 3,000	\$ 450,000

Meter/Chambers	Project Cost	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Grand Total
Valves in chambers	\$ 831,000						\$ 831,000						\$ 831,000
Grand Total	\$ 831,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 831,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 831,000

Ford Tower	Project Cost	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Grand Total
Valves	\$ 77,000	\$ 77,000											\$ 77,000.00
Ford Tower Decommissioning	\$ 400,000	\$ 400,000											\$ 400,000.00
Grand Total	\$ 477,000	\$ 477,000											\$ 477,000.00

Watermains	Project Cost	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Grand Total
Transmission Main	\$ 10,000,000			\$ 2,000,000				\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000		\$ 10,000,000
Grand Total	\$ 10,000,000	\$ -	\$ -	\$ 2,000,000	\$ -	\$ -	\$ -	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ -	\$ 10,000,000
End of Year Expenditures	\$ 11,748,000	\$ 618,500	\$ 52,500	\$ 2,052,000	\$ 4,000	\$ 28,000	\$ 987,000	\$ 2,002,000	\$ 2,005,000	\$ 2,002,000	\$ 2,004,000	\$ 3,000	

Capital Financing													
Reserve Fund		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Grand Total
Yearly Transfer to Reserves		\$ 871,000	\$ 897,000	\$ 924,000	\$ 952,000	\$ 981,000	\$ 1,010,000	\$ 1,040,000	\$ 1,071,000	\$ 1,103,000	\$ 1,136,000	\$ 1,170,000	\$ 11,155,000
Grand Total	\$ 846,000	\$ 1,717,000	\$ 1,995,500	\$ 2,867,000	\$ 1,767,000	\$ 2,744,000	\$ 3,726,000	\$ 3,779,000	\$ 2,848,000	\$ 1,946,000	\$ 1,080,000	\$ 246,000	
End of Year Water Reserve Balance		\$ 1,098,500	\$ 1,943,000	\$ 815,000	\$ 1,763,000	\$ 2,716,000	\$ 2,739,000	\$ 1,777,000	\$ 843,000	\$ (56,000)	\$ (924,000)	\$ 243,000	