



Date: December 16, 2014

To: Mayor Mary Smith and Council Members

From: R. Lane Vance, Manager of Financial Services

Subject: Selwyn Township Asset Management Plan –
Phase One (STAMP-P1) 2014 Q4 Update

Status: For Information

Recommendation

That the report of the Manager of Financial Services entitled Selwyn Township Asset Management Plan – Phase One – 2014 Q4 Update be received for information; and

That the Selwyn Township Asset Management Plan – Phase One and the 2014 Annual Update attached to this report be consolidated; and

That the Selwyn Township Asset Management Plan – Phase One consolidated copy be forwarded to the Province of Ontario in accordance with the requirements of the OCIF contribution agreement.

Information

Staff is pleased to provide the Selwyn Township Asset Management Plan – Phase One (STAMP-P1) 2014 Q4 update and Recommendations Summary chart for Council's review. These two documents provide an overview of the current status of the STAMP-P1 at the end of 2014.

With Council's approval of the above noted recommendation, these updates will be compiled with the original plan and the consolidated version will be used to inform the 2015 budget discussions.

With respect to the Recommendations Summary chart, the progress columns provide a brief comment of how the plan is proceeding and next steps that can be expected. Blank rows indicate either little progress to date or action items that are dependent on other items to be completed.

Strategic Plan Reference

Goal # 2 - Achieve excellence in governance and service delivery.

Goal # 3 – Support a sustainable, balanced and investment-ready community.

Financial Impact

The submission of this report is a requirement of the OCIF and acceptance by the Province will result in disbursement of the OCIF annual base grant of \$38,516.

Attachments

- STAMP –P1 – Q4 2014 Update
- STAMP – P1 – additional

R. Lane Vance

Prepared By: R. Lane Vance
Manager of Financial Services/Treasurer

Janice Lavalley

Approved By: Janice Lavalley
CAO

Introduction

In December 2013, Council adopted the Selwyn Township Asset Management Plan – Phase One (STAMP-P1) as the starting point for a new long term asset management planning and budgeting process at Selwyn Township.

Phase One of STAMP-P1 included core infrastructure. For the purposes of the plan, **core infrastructure** included:

1. Roads network (*including stormwater collection*)
2. Water treatment and distribution system
3. Sewage treatment and collection system
4. Stormwater management ponds

In establishing STAMP-P1 every effort was made to tie back to the Township Strategic Plan, and in particular overarching Goal # 3:

Support a sustainable, balanced and investment-ready community

Using STAMP-P1 as a starting point, staff have made progress throughout 2014 in several areas, most notably, improving the fullness and quality of asset data on hand and building upon service level deliverables.

As 2014 draws to a close it is very evident that this process has identified information gaps and the need to establish sound information gathering techniques.

It is also evident that, while overall minimum service levels will be quite straightforward to establish, a customized “made in Selwyn” service level expectation will take considerably more time, effort and debate.

And finally, it is also evident that considerably more effort, and in particular more focus, will be required to take STAMP-P1 to the next level.

While progress on plan refinements was not as fulsome as original envisioned, STAMP-P1 is a ‘living’ document and an ongoing work-in-progress. Annual updates and refinements will ensure that the plan is a key tool for prioritizing investments in maintenance activities and infrastructure renewal.

Core Infrastructure – 2014 Overview

Roads

Working with the Township's most recent Roads Needs Study and up-to-date patrol records, the Manager of Public Works continues to establish annual road maintenance and construction priorities.

The department continues to place a high priority on roadside maintenance, ditching efforts, sweeping, and resurfacing.

In 2014, the department completed the last of a three year pilot related to improved roadside maintenance activities. In this pilot, three different automated brush head units were rented throughout the summer months. The units involved:

- Year 1 – truck with brush head mounted mid way back
- Year 2 - Trackless rubber tired unit with rotary brush head
- Year 3 - Trackless rubber tired unit with flail brush head

As part of the 2015 budget presentations staff will be reviewing the results of the pilot in more detail and recommending purchase of a rotary brush head unit that will mount to the Works department's existing tractor.

Clearing roadside grasses and brush farther away from the road surface, yields better sightlines and improved drying of the road surface. As an added health and safety benefit, the automated unit reduces direct contact by the works employees with poison ivy which is a concern with more hands-on roadside maintenance activities.

With respect to roads construction, 2014 saw the completion of phase 2 of the East Communication Road construction project. This high use, semi-urban tar & chip road was fully rebuilt to an urban, asphalt standard complete with improved storm water management and the addition of sidewalks to complete the pedestrian linkage to the Bridgenorth Rotary trail.

Water

The CAO and Manager of Financial Services continue to work with representative from Peterborough Utilities Services Inc. (PUS), the Township's accredited operator for the Lakefield Water system.

In late 2014 approval was given to incorporate a Lakefield watermain relining project in the overall PUS watermain relining tender slated for 2015. It is

expected that this will garner better pricing as part of a larger tender and will action an item on the PUS annual recommendations for capital maintenance.

The new water tower is functioning well and a final review of the tower interior lining for warranty purposes is planned for Q4 of 2014, but may not occur until Q1 2015.

Water distribution system records and digital plans have been updated to reflect any water main breaks and additional refinements.

Woodland Acres – Water

The Township engineer was engaged to review their records and paper-based plans to provide details on phase one of the Woodland Acres water service area.

Staff are now in receipt of a number of Excel tables related to pipe type, including dimension, length and valves. Next steps are comparison to existing TCA records and updating for any discrepancies. The engineers will be completing work on digital mapping for phase one of Woodland Acres which does not currently exist.

Once all digital updates for phase one have been ground-proofed, they will be added to the phase two digital records on file and then provided to the County of Peterborough to upload to their GIS system.

Sewer

The CAO and Manager of Financial Services continue to work with representative from PUS, the Township's accredited operator for the Lakefield Sewer system.

As outlined in STAMP – P1 next steps in terms of priority and system renewal is replacement of aging pumping stations.

Two stations have been identified as priorities for rehabilitation or replacement;

- George Street pumping station
- Lakefield College School pumping station

The majority of long term planning efforts in 2014 related to the ongoing sewer environmental assessment (EA). The Manager of Building of Planning has taken the lead and is working with engineering firm, the CAO and Manager of Financial Services.

While the sewer EA is broad and all encompassing, an essential piece in the EA is the importance of the George Street pumping station. This involves a combination of required upgrades to this key pumping station and regard for expansion of the system to link the Lakefield South development area and currently underserved areas on west Bridge Street and west Smith Street.



George Street Pumping Station Access

The pumping station:

1. Is nearing the end of its useful life at approximately 40 years old
2. Is the sole sewage transfer point for the west sector with no redundancy
3. Has no standby backup power
4. Creates the need for an immediate response by the system service provider in the event of a power emergency (i.e. call outs)
5. Is located directly adjacent to the Otonabee River on the Trent Severn Waterway and upstream of the City of Peterborough.

Having regard for these key factors, Council provided approval to commence the Lakefield Sewer EA. At the end of Q4 2014, the EA will be nearing the completion of stage 3 of a 5 stage process. Ecological site sampling and reports are completed, preliminary topographic surveys are completed, initial assessment of flows and sewage capacity has been calculated and work is approximately half-way through evaluation of alternatives.

In addition, some preliminary field work was completed in the fall before snow and freeze up to ensure that the EA timeline proceeded without delay.

While all infrastructure investments are necessary, the replacement of the George Street pumping station has been identified as the top investment priority for the Township.



Lakefield College School Pumping Station Access

With respect to the Lakefield College School (LCS) pumping station, discussions have begun on next steps. Likely a replacement would consider changes to power supply configuration and possibly standby back-up power. These changes will be affected by discussions with LCS and some possible cost sharing based on the scope of the project and future needs of LCS.

The sewer collection system grew marginally with a 29 meter extension to service a new lot on Fitzgerald Street.

Woodland Acres – Sewer

Similar to the project outlined above in the Woodland Acres Water section, the Township engineer was engaged to review their records and paper-based plans to provide details on phase one of the Woodland Acres sewer service area.

Staff are now in receipt of a number of Excel tables related to pipe type, including dimension, length and related structures. Next steps are comparison to existing TCA records and updating for any discrepancies. The engineers will be completing work on digital mapping for phase one of Woodland Acres which does not currently exist.

Once all digital updates for phase one have been ground-proofed, they will be added to the phase two digital records on file and then provided to the County of Peterborough to upload to their GIS system.

Storm Water Management Ponds

The Township of Selwyn owns and is responsible for three (3) municipal storm water management ponds located in the former Village of Lakefield, the former Township of Ennismore and in the Woodland Acres subdivision.

There are four (4) other storm water management ponds pending final approval of subdivision conditions and assumption by the Township. Should approval be granted, these will also be Township owned and maintenance will fall under Township responsibility.

All Township ponds are provided for both storm water quality and quantity. As outlined in STAMP – P1 based on current TCA practice for the Township, storm water management ponds are not capitalized. As such no historical cost was readily available.

Staff have been successful in compiling additional details from planning records related to the stormwater ponds construction and proposed maintenance activities.

As well, staff have had discussions with the engineering firm related to establishing maintenance guidelines. The firm had completed a study for a neighbouring municipality and is in the process of providing this document for review and possible incorporation into maintenance practices for Selwyn Township.

Service Levels

STAMP-P1 did not include a lot of detail on service levels, but rather outlined the principles related to establishing Selwyn's specific approach.

- A range of quantifiable service level targets, that incorporate the quantity and quality of capital assets, should be established for all services.
- Service level data should be measured, reported in relation to established targets, and adjusted annually.
- Service level targets, likely more detailed and tailored to each service area, should complement measures currently being developed for the Township Strategic Plan

In 2014, the CAO, Manager of Public Works and Manager of Financial Services held a number of meetings with the engineer to discuss options for service levels.

It is generally accepted that base levels of service will build upon accepted practices. The established levels of service inform maintenance activities by setting out the objectives (or expectations) to be achieved and level of service standards for each class of infrastructure (e.g. roads, water, wastewater)

An overall level of service target will be assigned for each of the core asset groups. The Target will be used as the measure to assess how the Township is doing in meeting the Plan with respect to each of the groups.

The levels of service will set out a written series of procedures that will guide staff's recommendations to Council as they make financial decisions designed to maintain all of the Township's capital assets to the level appropriate for the Township given its relative priorities and minimum legislated requirements.

The service level standards will ensure the delivery of a quality level of services and an appropriate measure of accountability to municipal taxpayers. Generally established service level standards will support the old adage, "what gets measured, gets done."

Roads – Minimum Overall System Adequacy Rating

The Township's goal is to maintain, as a minimum, an overall system adequacy rating of a given percentage yet to be confirmed. Road Condition ratings are assigned in accordance with the MTO Inventory Condition Manual, 1991.

Water and Wastewater - Meet All Applicable Regulations

Water and Wastewater investments shall be as required to ensure the long-term sustainability of the systems and ensure compliance with the Safe Drinking Water Act and other applicable legislation.

Naturally Great.

Update to Recommendations

STAMP–P1 included a number of recommendations to be addressed over its first year after implementation.

Council received a Q2 update to the recommendation at its July Council meeting. Attached to this update report is the Q4 update and fulfills the need for Asset Management Plan – Annual Updates.

Overall, the Township has committed to moving forward with sustainable asset management planning. Resources and sufficient time to meet and follow through on tasks continues to be a challenge in accomplishing this commitment.

Council recently approved a contribution agreement with the Ministry of Agriculture, Food and Rural Affairs under the Ontario Community Infrastructure Fund (OCIF). As outlined in the contribution agreement, the Government of Ontario created OCIF to:

- (1) provide stable funding to help small communities address critical core infrastructure needs in relation to roads, bridges, water and wastewater;
- (2) further strengthen municipal asset management practices within small communities; and
- (3) help small communities use a broad range of financial tools to address critical infrastructure challenges and provide long-term support for rehabilitation and repair of core infrastructure for those in most need.

Council endorsed the allocation of the initial receipt of OCIF funds to the Asset Management Planning Project to offset program expenses including engineering and consulting work as required and included in the 2015 budget.

With the dedication of funding from OCIF, the Township can rely on expertise of the engineering firm, engage individuals or firms to complete scoped tasks/projects, and generally fill-in the missing gaps. In addition, with the ability to use this dedicated grant funding, and related funding from the tax budget and water and sewer rates, staff will have the resources at hand for long term improvement.

The Township has made considerable effort in recent years to address infrastructure needs and improve the condition of assets. Over time an updated and continually improving asset management plan will provide the Township with the information it needs to make informed decisions on managing capital assets in a sustainable manner over the long term.

Recommendations	Updates and Activity Progress - 2014 - Second Quarter	Updates and Activity Progress - 2014 - Fourth Quarter
1. Maintain Accurate Infrastructure Information		
Ensure Asset Inventories are Updated Regularly		
<ul style="list-style-type: none"> In order to make sound asset management decisions, the information in the asset database needs to be detailed, supportable and accurate. 	making use of detailed Excel sheets, .pdf scans and asset registers to improve data quality.	work is ongoing.
<ul style="list-style-type: none"> The Township should regularly update the asset database as part of ongoing operations. 	scan of all accounts payable invoices when received for capital purchases beginning in Q1 2014. .pdf copies saved on public folder in Finance dept. for retrieval.	using scanned copies in TCA yearend work. Capturing additional details to aid in asset mgmt. planning as appropriate.
<ul style="list-style-type: none"> Regular updates should have regard for not only the cost of asset purchases but also have regard for the rationale for the asset upgrades, consider asset condition ratings, and include information about remaining useful life. 		
Filling Information Gaps		
<ul style="list-style-type: none"> A scope of work should be developed and estimates should be obtained from the Township engineer and/or PUS to more accurately document the water main types and sizes in the Woodland Acres subdivision to ensure a more accurate inventory. 	initial inventory received and under review. Analyzing any impacts on PSAB TCA related data.	PSAB TCA data comparison underway. No TCA changes will be made until ground-proofing has been completed - likely 2015.
<ul style="list-style-type: none"> A scope of work should be developed and estimates should be obtained from the Township engineer and/or PUS to more accurately document the sewer main types and sizes in the Woodland Acres subdivision to ensure a more accurate inventory. 	initial inventory received and under review. Analyzing any impacts on PSAB TCA related data.	PSAB TCA data comparison underway. No TCA changes will be made until ground-proofing has been completed - likely 2015.
<ul style="list-style-type: none"> A scope of work should be developed within Township staff to update and discuss the existing stormwater management ponds database to create a more robust inventory. 	initial collection of readily available files received.	
Capture Intangible Corporate Knowledge Now		
The need to capture intangible corporate knowledge is important and proper documentation is required now. Over the next decade many key employees and senior managers for the Township and PUS will be eligible for retirement and their working knowledge of asset details needs to be captured. This is a key part of good succession management and time needs to be dedicated to this task.		discussed at management team level. Hoping that some interesting ideas may arise from involvement in non-profit sector forums and/or through discussions at the human resource professionals level.
Make Use of GIS Capabilities		
Resources should be recommended to maximize the use of reliable GIS data and work with the County of Peterborough to upload GIS layers. As a minimum these layers should include:	County GIS currently has data layers for water and sewer. Process for annual updates to be determined with County GIS staff.	discussions with County GIS staff needs to be completed.
<ul style="list-style-type: none"> Updated water distribution systems 	engineer data updated to May 2014. Need to transmit to County for GIS updating.	Paper plans received from engineer. Verifying data for electronic transfer to County.
<ul style="list-style-type: none"> Updated sewage collection systems 	engineer data updated to May 2014. Need to transmit to County for GIS updating.	Paper plans received from engineer. Verifying data for electronic transfer to County.
<ul style="list-style-type: none"> Updated Township road systems 		road network data received. Will need to discuss how existing road network is laid out with respect to neighbourhood, collector and arterial roads network on County system.
<ul style="list-style-type: none"> Storm water pond locations 		Paper based parcel map to be updated and provided to County GIS department.
2. Optimize the Useful life of Existing Assets		
In seeking to extend the useful life of current assets, the Township should consider the following activities:		
Roads		
<ul style="list-style-type: none"> Conduct a series of meetings with the Township engineer to further refine the Roads Needs Study. 	meeting convened to discuss current status of Roads Needs Study and next steps. Proposal has been received from engineer and accepted. Timelines being developed.	Work with engineer is ongoing. Sample service levels guidance document has been received and reviewed.
<ul style="list-style-type: none"> Consider the pros and cons of using road base versus road surface as a method for prioritization 	will be part of refined study recommendations.	work is ongoing.
Water		
<ul style="list-style-type: none"> Review water conservation measures currently in place in other jurisdictions and compile report with recommended actions in Selwyn 	some research to be completed in Q3 using in-house staff as resources available.	to be considered as part of 2015 water utility budget
<ul style="list-style-type: none"> Implement water conservation measures as approved 		waiting for conservation plan with recommendations before implementation is developed.
<ul style="list-style-type: none"> Continue watermain relining programs and use of trenchless technologies where appropriate 	engineering budget for one relining project in 2015 approved. Need to develop comprehensive multi-year plan for system.	top watermain relining project identified by PUS and included in 2015 tender. Engineer will be engaged for multi-year plan and made available to PUS annually.
<ul style="list-style-type: none"> Further refine the PUS capital recommendation process with respect to prioritization and improve documentation on condition ratings 		better response and follow up system has been put in place with PUS. Still working with PUS on ratings/priority rankings.

Recommendations	Updates and Activity Progress - 2014 - Second Quarter	Updates and Activity Progress - 2014 - Fourth Quarter
Sewer		
<ul style="list-style-type: none"> Complete periodic condition assessment reviews of sewer mains through flushing and camera inspection. Crack seal and grout as required to repair infiltration issues on existing mains Further refine the PUS capital recommendation process with respect to prioritization and improve documentation on condition ratings 	in-house research to be completed in Q3 to determine game plan for assessment review by quadrant in Lakefield and by subdivision section in Woodland Acres.	<p>in house research outstanding. Need to dedicate some effort to this in 2015 Q1</p> <p>determined on an annual basis after initial plan is completed.</p> <p>better response and follow up system has been put in place with PUS. Still working with PUS on ratings/priority rankings.</p>
Storm water		
<ul style="list-style-type: none"> Develop documentation for proper maintenance practices for each type of pond identified. 	initial work with planning staff to prepare information on hand. Consider gaps and discuss with engineering firm. Develop process to hand-off maintenance manuals to Public Works.	To review stormwater ponds maintenance guideline with engineer. Possibly create a Selwyn maintenance plan for ponds to be monitored by Public Works department.
All Assets Classes		
<ul style="list-style-type: none"> Repair and replacement of capital works should be prioritized more formally and include asset condition ratings as a key prioritization factor The process for urban area infrastructure improvements should continue to have regard for all components of road sections including road, water, sewer and storm sewer The Township should, where possible, coordinate the construction of new infrastructure with infrastructure repairs and replacement to achieve cost efficiencies. 		<p>prioritization is still quite informal, although based on plans of record and common sense approach.</p> <p>understood by staff involved in process. Will be noted in formal guidelines/level of service documents.</p>
3. Establish and Track Service Levels		
<ul style="list-style-type: none"> A range of quantifiable service level targets that incorporate the quantity and quality of capital assets should be established for all services. Service level data should be measured, reported in relation to established targets, and adjusted annually. Service level targets, likely more detailed and tailored to each service area, should complement measures currently being developed for the Township Strategic Plan 	will be initiated as part of Roads recommendation above.	<p>Work with engineer is ongoing. Sample service levels guidance document has been received and reviewed.</p> <p>strategic plan measures now in place. Will see how level of service can complement existing strategic plan measures and ongoing performance reporting.</p>
4. STAMP Reporting		
Asset Management Plan – Short Term Updates		
<ul style="list-style-type: none"> As additional information becomes available, refinements to this plan should be completed as part of the 2014 budget process. In the second quarter of 2014, an update should be provided to Council on STAMP-P1 in advance of the formatted plan being posted to the Township website. 	<p>no capital grants received under first round of infrastructure investment. Continuing with AMP work in order to be ready for next round.</p> <p>this report fulfills the recommendation. Formatted plan expected by end of Q3.</p>	<p>Council has approved contribution agreement under Ontario Community Investment Fund. Endorsed use of funds to support asset management planning project specifically.</p> <p>Plan posted on website in Q4 following receipt and approval by Council</p>
Asset Management Plan – Annual Updates		
The resolution and end result of recommendations included above should be included in an annual update to this report.	annual update report expected as part of the year end Strategic Plan review meeting	First annual update report completed. This document is included as a schedule.
Comprehensive Asset Management Plan Update Frequency		
STAMP should be comprehensively reviewed and updated every five (5) years.	planning work to begin in 2018	