

To: Warden and Members of County Council

From: Director of Public Works

Contract Funding – William Street Sanitary Pumping Station Class Environmental Assessment Study and Enhanced Conceptual Design, Tavistock

RECOMMENDATION

- 1. That Oxford County Council authorize the transfer of \$90,500 from the Wastewater Tavistock Reserve to cover the budget shortfall related to professional engineering services for the William Street Sanitary Pumping Station Class Environmental Assessment Study and Enhanced Conceptual Design.**

REPORT HIGHLIGHTS

- The purpose of this report is to obtain \$90,500 in additional funds to proceed with the Schedule B Class Environmental Assessment (EA) Study and Enhanced Conceptual Design of the William Street Sanitary Pumping Station (SPS) in the village of Tavistock.
- The William Street Class EA Study and Enhanced Conceptual Design will serve to identify a preferred SPS servicing solution to provide wastewater capacity for existing customers and service growth to 2046.
- Project scope was expanded to accelerate the initial SPS design and undertake wastewater collection system flow monitoring and detailed wastewater system hydraulic modelling within the SPS catchment area.
- The Class EA Study and Enhanced Conceptual Design of the preferred SPS solution is anticipated to be completed by the end of 2023.

Implementation Points

Upon Council approval, a consulting agreement will be executed with MTE Canada Ltd. (MTE) prior to proceeding with the work. At this time, based on the estimated timelines associated with the Environmental Compliance Approval (ECA), flow monitoring and Environmental Study, it is anticipated that the Class EA Study and conceptual design will be completed by Q4 2023.

Financial Impact

The Class EA Study and Conceptual design work was planned for and approved as part of the 2022 *Business Plan and Budget*; however, the cost exceeds the approved project budget. The engineering costs and funding source for the project are summarized in Table 1 below.

Table 1: Funding Summary for William Street Sanitary Pumping Station

2022 Budget Summary Account / Description	Amount (excluding HST)
950513 TAV – William SPS (Class EA Study and Conceptual Design)	\$176,654
Project Management (GM BluePlan)	40,000
Non-Refundable HST (1.76%)	3,813
TOTAL ESTIMATED EXPENDITURES	\$220,500
Available 2022 Budget	130,000
BUDGET SHORTFALL	\$90,500

This project was not included within the 2019 Development Charges (DC) Background Study. As this work is partially development driven, staff propose to include this project in the County’s 2024 DC Background Study to determine its eligibility for DC funding. The budgeted 2022 closing balance of the Wastewater Tavistock Reserve is \$3,372,776, which is sufficient to fund the additional amount required.

Communications







Upon Council approval, MTE and the County will ensure that the public consultation process is consistent with the requirements of the Municipal Class EA process, and the County’s Public Works Class EA Study Consultation and Communication Plan. General public consultation will be available from the commencement of the project through August 2023.

After the award of the project, residents and businesses will be informed about status and progress through the Oxford County website. Project updates will also be provided on Speak Up, Oxford! at www.oxfordcounty.ca/speakup. If needed, expanded advertising may also be considered for engagement opportunities.

Staff will continue to work with key internal stakeholders (County Management staff, Water/Wastewater staff) and external stakeholders during the execution of this project as required to ensure the appropriate level of communication and outreach is maintained, and further ensuring all parties involved are updated on project status and outcomes as needed.

Report No. PW 2022-41 will be circulated to the Township of East Zorra-Tavistock following Oxford County Council consideration.

Strategic Plan (2020-2022)

					
WORKS WELL TOGETHER	WELL CONNECTED	SHAPES THE FUTURE	INFORMS & ENGAGES	PERFORMS & DELIVERS	POSITIVE IMPACT
1.i.		3.iii.	4.i., 4.ii.		

DISCUSSION

Background

The William Street SPS was originally constructed in 1989 and has undergone various upgrades since constructed to increase its operational capacity and service reliability. The current overall SPS asset condition rating is fair based on the 2022 *Asset Management Plan Update*. The SPS building condition is fair; however, the poor asset condition of the SPS process equipment is of even greater concern. The SPS is operating close to its maximum rated capacity, with some historical sewage overflows during heavy wet weather events which are managed operationally as required.

Recently, in addition to planned development, staff have received additional near term development interest within the William Street SPS catchment area. The capacity required to service these additional development requests, together with the other planned development within the catchment area, would exceed the available servicing capacity of the SPS.

In order to accommodate the significant development proposals within the catchment area, the SPS wet well storage, pumping rates and standby power requirements will need to be increased to ensure that the facility can provide sustainable long term wastewater capacity to meet the growing servicing needs of the community.

As a result, the County issued a Request for Proposal (RFP) to carry out a Schedule B Class EA Study and Enhanced Conceptual Design to assess the capacity and operation of the SPS and catchment area sewage collection system.

The proposed Class EA Study will assess the existing conditions of the SPS and the sewers in the SPS sewer catchment area, estimate growth rates based upon Oxford County planning growth forecasts, estimate the sanitary sewage design flows for the immediate, 10 year and 25 year planning horizons, identify a number of alternative solutions and select the preferred solution to provide wastewater capacity for existing customers and service growth to 2046.

Comments

The 2022 budget included \$130,000 for the William Street SPS Schedule B Class EA Study and Conceptual Design. Staff conducted a competitive RFP process for this assignment in Q2, 2022. After technical / cost evaluation of the RFP submission bids, MTE was recommended for project award; however, their submission exceeded the approved budget.

There are several cost drivers that were not part of the original project scope which account for the increased costs for this assignment:

- Requirement for “Enhanced” Conceptual Design of the Class EA Study preferred alternative solution to accelerate the overall design process by reducing the amount of work required during subsequent detailed design phase. It is recognized that this approach will reallocate some of the scope/cost from the detailed design phase to the “enhanced” conceptual design stage associated with this assignment. The level of design will incorporate up to approximately 25% of overall detailed design with sufficient detail to generate up to a Class C construction cost estimate (+/- 20% accuracy).
- Requirement for sanitary system flow monitoring to more fully assess the extent of wet weather inflow entering the sewer system or groundwater infiltration into the sewer system.
- Requirement for wastewater collection system hydraulic modelling to more accurately assess the wastewater system area capacity constraints and requirements.

Staff have reviewed the cost submission provided by MTE in the amount of \$176,654 (excluding HST), and confirmed it represents good value for the work in the current market and is reflective of the additional requirements included within this assignment.

As the William Street SPS is operating near its full capacity, it can not accommodate further development within its sanitary catchment area in Tavistock at this time. Should this assignment not be undertaken at this time, the multi-year implementation plan to increase wastewater capacity to service new development within this catchment area of Tavistock will be delayed.

Conclusions

It is recommended that Council approve the above-noted funding allocation in order to undertake the Class EA Study and Enhanced Conceptual Design of the William Street SPS.

The existing William Street SPS can not accommodate further development within its sanitary catchment area in Tavistock at this time. Undertaking the Class EA Study and Enhanced Conceptual Design will serve to identify a preferred SPS servicing solution to accommodate further connections to the wastewater collection system located within the William Street SPS catchment area.

SIGNATURES

Report Author:

Original signed by

Travis Pawlick, P.Eng
Supervisor of Water and Wastewater Technical Services

Departmental Approval:

Original signed by

David Simpson, P.Eng., PMP
Director of Public Works

Approved for submission:

Original signed by

Michael Duben, B.A., LL.B.
Chief Administrative Officer