

To: Warden and Members of County Council

From: Director of Public Works

Contract Award – Drumbo Wastewater Treatment Plant Capacity Expansion

RECOMMENDATIONS

1. That Oxford County Council award a two-year contract to the low bidder, ASCO Construction (Toronto) Ltd., in the amount of \$8,747,419 (excluding HST) for the construction of the Wastewater Treatment Plant (WWTP) capacity expansion in the Village of Drumbo;
2. And further, that as part of the multi-year contract award, County Council approve the budgetary commitment of \$4,692,710 in 2022, included in the total contract price cited in Recommendation No. 1 of this report, in advance of the 2022 budget process;
3. And further, that Oxford County Council authorize the Chief Administrative Officer and Director of Public Works to sign all documents related hereto.

REPORT HIGHLIGHTS

- The purpose of this report is to obtain County Council approval to award the above-noted project to ASCO Construction (Toronto) Ltd. in accordance with the County Purchasing Policy.
- The WWTP will be expanded to a rated capacity of 450 m³/day using Membrane Bioreactor (MBR) treatment technology which will serve to support servicing of ongoing development in Drumbo.
- The project will begin in July 2021 and is targeted for substantial completion by October 2022.

Implementation Points

Upon Council approval, a contract will be executed with the low bidder, ASCO Construction (Toronto) Ltd., prior to proceeding with the work.

During phased construction, WWTP operations will be maintained in order to continue to provide wastewater treatment servicing to Drumbo.

Financial Impact

This work was planned for in the 2021 Business Plan and Budget. The construction costs and funding sources for this project are summarized in Table 1 below. The fee of \$8,747,419 (excluding HST and applicable taxes) by the low bidder (ASCO Construction [Toronto] Ltd.) to complete the construction works includes the cost of construction over a two-year period (2021-2022). As such, award of this contract will require a multi-year funding commitment.

Table 1: Funding Summary for *Drumbo WWTP MBR Upgrade Construction*

Budget Summary Account / Description	2021 Budget	2022 Budget	Total Amount
950810 – Drumbo WWTP MBR Upgrade, Construction Fees	\$4,425,472	\$4,321,947	\$8,747,419
Consultant's Construction Admin Fees	150,000	210,983	360,983
Subtotal	4,575,472	4,532,930	9,108,402
Non Refundable HST	80,528	79,780	160,308
Estimated Contract Admin and Inspection (2 %)	95,000	80,000	175,000
Total	\$4,751,000	\$4,692,710	\$9,443,710
2021 Capital Plan	\$4,751,467	\$1,094,000	\$5,845,467
Estimated Shortfall	(\$467)	\$3,598,710	\$3,598,243

When compared to the 2021 capital budget forecast of ~ \$5.85 M (based on preliminary design estimate, +30% / -25%), additional funding is required to cover the budget shortfall for Phase 1 construction. The WWTP plant design was finalized after the 2021 budget was developed. In comparison, the low tender bid submission noted in Table 1 was approximately 22% higher than the upper variance of the preliminary design estimate but within 5% of the pre-tender construction cost estimate generated by R.V. Anderson in 2021.

The Drumbo WWTP Upgrade project is eligible to be funded by Development Charges at 67%, for a total of approximately \$6.3 million over the two year period. The 2020 closing balance in the Drumbo Wastewater Development Charge Reserve is approximately \$315,000. In the meantime, the shortfall in available development charges will be internally funded by debt with repayments, including interest, as development charge revenue is collected.

The remaining project costs of just over \$3.1 million will be required to be funded by the Drumbo system. The 2020 closing balance in the Drumbo Wastewater Reserve is approximately \$1.48 million. The reserve balance is insufficient to fund the estimated 2021 requirements, and in accordance with the 2021 Business Plan and Budget, the insufficient amount will be debenture funded at project completion. The required debenture at project completion is estimated to be approximately \$1.8 million with repayments over a 20-year term.

The cost estimates and funding sources for 2022 will be updated with the annual business plan and budget cycle. In addition, impacts on the Drumbo wastewater system reserve and rates will be addressed in the updated Asset Management Plan anticipated this fall.







Communications

Oxford County staff has communicated with Township of Blandford-Blenheim staff with respect to the scope of work and planned schedule, and further communication is planned prior to and throughout construction.

Through the Municipal Class Environmental Assessment (EA) Study (finalized in 2018), the community and stakeholders were engaged through Public Information Centers and project status updates.

During construction, local residents will be updated through a Notice of Construction letter, notices placed in the Ayr News and Oxford Review at key project milestones, and through social media updates.

Strategic Plan (2020-2022)

					
WORKS WELL TOGETHER	WELL CONNECTED	SHAPES THE FUTURE	INFORMS & ENGAGES	PERFORMS & DELIVERS	POSITIVE IMPACT
1.i.	2.i.	3.iii.	4.ii.		

DISCUSSION

Background

The Drumbo WWTP, constructed in 1993, employed a sequencing batch reactor (SBR) with tertiary filtration and ultraviolet (UV) disinfection and has a current rated capacity of 300 cubic metres per day (m³/d); this rating was obtained in 2015. As wastewater servicing demand in Dumbro was nearing the WWTP's rated capacity, Oxford County completed a Class EA Study in 2018 to expand the rated capacity of the plant. The preferred alternative was to expand the Drumbo WWTP to 450 m³/day using modular Membrane Bioreactor (MBR) treatment technology.

Staff previously awarded the engineering design of the Drumbo WWTP MBR upgrade to R.V. Anderson Associates Limited (R.V. Anderson) through a competitive procurement process, as they represented the best value to the County.

Construction Tender

Staff issued a tender to seek a contractor for the construction of the WWTP capacity expansion. The general scope of work includes the construction of:

- New screen building;
- New MBR tankage and building;
- Installation of MBR equipment;
- Modification of existing treatment system to be incorporated into the new WWTP operation;
- Installation of new washroom facilities;
- New backup generator to service the WWTP and the adjacent WTP;
- New yard piping and site works;
- A new effluent forcemain from the WWTP extending approximately 780 m to receiving watercourse; and
- Maintenance of existing WWTP operations while upgrades and commissioning of WWTP is in process.

Comments

Prior to tender, Public Works advertised for the pre-qualification of General Contractors. Fifteen Contractors expressed interest and 15 were pre-qualified. County staff solicited bids from the pre-qualified Contractors and received the following six bids at tender close on Tuesday, June 15, 2021.

Table 2: Summary of Bid Submissions

Contractor	Bid Amount (HST Excluded)
1. ASCO Construction (Toronto) Ltd.	\$8,747,419.00
2. Baseline Constructors Inc.	\$8,797,000.00
3. Torbear Contracting Inc.	\$8,822,783.00
4. BGL Contractors Corp	\$9,208,043.00
5. Finnbilt General Contracting Limited	\$9,226,809.00
6. H.I.R.A Ltd.	\$9,626,175.00

Public Works staff and R.V. Anderson have reviewed the submissions and confirmed that the low bid received from ASCO Construction (Toronto) Ltd. in the amount of \$8,747,419 (excluding HST) represents good value for work when compared to the final pre-tender construction cost estimate provided by R.V. Anderson in 2021.

The WWTP capacity expansion has been designed with a footprint for additional treatment capacity in the future, including strategic oversizing of key tankage, piping and processes. With this approach, the cost of this further treatment expansion is expected to be a small fraction of the current construction cost.

As this project has the possible risks that would be associated with any construction project of this scale and scope, the successful contractor is also required to secure construction bonds and insurance to mitigate risks related to the exposure of financial loss.

This project is anticipated to begin in July 2021 and is targeted for substantial completion by October 2022. Not moving forward with this construction work will prevent ongoing development from occurring in Drumbo, as the existing WWTP is functionally at its capacity limit.

Conclusions

Review of the competitive bid submissions confirms that it is appropriate to award the proposed construction works at the Drumbo WWTP to the low bidder, ASCO Construction (Toronto) Ltd. of Toronto, Ontario. In order to proceed with this contract award, approval from County Council is required.

SIGNATURES

Report Author:

Original signed by

Mitchell Heighway, MBA, P.Eng., PMP
Project Engineer

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