



## Staff Report

To: Committee of the Whole

Department: Operational Services

Report Number: **OS - 2026-010**

Meeting Date: **March 11, 2026**

Subject: Victoria Harbour Wastewater Treatment Plant  
Phase 2 Expansion - Update

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### Recommendation

That Item OS-2026-010, dated March 11, 2026 regarding the Victoria Harbour Wastewater Treatment Plant (VH WWTP) Phase 2 Expansion Update, be received; and,

That Council authorizes staff to proceed with Phase 1 – Redesign of the VH WWTP Phase 2 Expansion, including incorporation of lessons learned from the 2024 tender process and implementation of cost optimization measures as outlined in this Item; and,

That Council authorizes staff and WSP to prepare an updated tender document and proceed with re-tendering the project (Phase 2), subject to confirmation that the revised cost estimate aligns with available funding; and,

That Council authorizes the Mayor and Clerk to execute any required agreements, amendments, or documentation related to the \$29,514,145 grant funding awarded under the Health and Safety Water Stream of the Municipal Housing Infrastructure Program (MHIP); and,

That Council directs staff to report back with the results of the tender process and a final construction cost summary prior to awarding the contract; and,

That Council affirms the Township's commitment to advancing this project as critical municipal infrastructure necessary to:

- Restore available wastewater servicing capacity;

- Remove current development constraints imposed by the Ministry of the Environment, Conservation and Parks (MECP);
- Support housing growth and economic development;
- Maintain regulatory compliance and,
- Protect public health and the environment.

## **Executive Summary**

The Victoria Harbour Wastewater Treatment Plant (VH WWTP) remains a critical infrastructure priority for the Township to restore wastewater servicing capacity, address regulatory limitations, and support planned residential and economic growth. Following the 2024 tender process, staff have reviewed project outcomes and identified opportunities to strengthen the delivery approach. Council authorization is requested to proceed with Phase 1 – Redesign of the Phase 2 Expansion. The redesign will incorporate lessons learned from the previous tender, refine technical elements, and implement cost optimization measures to improve overall project affordability and constructability.

Subject to confirmation that the revised cost estimate aligns with available funding, Council is further requested to authorize staff and WSP to prepare updated tender documents and proceed with re-tendering Phase 2 of the project. Staff will report back to Council with the results of the tender process and a final construction cost summary prior to awarding the contract to ensure transparency and financial oversight.

The project has been awarded \$29,514,145 in grant funding under the Health and Safety Water Stream of the Municipal Housing Infrastructure Program (MHIP). Authorization is requested for the Mayor and Clerk to execute all required agreements, amendments, and related documentation to secure and administer this funding.

Advancing the VH WWTP Phase 2 Expansion is essential to restoring available wastewater servicing capacity, removing development constraints imposed by the Ministry of the Environment, Conservation and Parks (MECP), supporting housing growth and economic development, maintaining regulatory compliance, and protecting public health and the natural environment.

## **Background/Analysis/Options**

The VH WWTP operates under the approval of the MECP Amended Environmental Compliance Approval (ECA) No. 4066-CTPNQA issued on June 26, 2025.

The facility services a wastewater collection area that extends beyond the Victoria Harbour settlement area, which includes Robins Point Road, Bourgeois Beach Road, and the Mitchell's Beach Road area.

The plant was originally constructed in 1982 as an extended aeration facility with a rated average daily capacity of 2,364 m<sup>3</sup>/day and a peak flow capacity of 6,600 m<sup>3</sup>/day. Influent consists primarily of municipal sanitary sewage from serviced connections and includes backwash discharge from the water treatment plant.

A Municipal Class Environmental Assessment (EA) was completed in 2012 to expand the plant to a rated capacity of 3,550 m<sup>3</sup>/day. The Township adopted a phased implementation approach. Phase 1 of the expansion was completed in 2017.

Between 2019 and 2021, the plant operated above its approved rated capacity, with an Average Daily Flow (ADF) of 2,454 m<sup>3</sup>/day, representing approximately 104% of the plant's rated capacity. As a result, MECP has advised that the VH WWTP cannot accept additional sewage flows from new development until additional treatment capacity is constructed and commissioned.

### 2024 Detailed Design and Tender Results

Detailed design for Phase 2 of the expansion commenced in 2022. The project team included WSP, Ontario Clean Water Agency (OCWA) operating and engineering staff, and Township staff. The design was completed and tendered in 2024.

The 2024 tender included the following major components:

- Upgrade of the existing aeration system to accommodate Phase 2 flows and contaminant loadings
- Construction of a new secondary clarifier with sludge and scum removal systems
- Upgrade of the Return Activated Sludge (RAS) and Waste Activated Sludge (WAS) systems
- Construction of new aerobic digesters
- Construction of a digested sludge storage tank
- Construction of a new Biosolids Management Building
- Installation of a thickened sludge storage and loading system
- Construction of a new perimeter access road for biosolids hauling
- Site grading and drainage improvements
- Yard piping modifications
- Landscaping works

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The 2024 tender results were as follows:

- Kingdom Construction Limited – \$47,787,148
- Maple Reinders Construction Limited – \$48,091,899
- North America Construction (1993) Ltd. –\$48,451,522
- Torbear Contracting Inc. – \$50,278,888

The above figures did not include hydro feed upgrades and a new transformer, project management costs, or third-party testing and inspection services.

Due to the significant cost overrun relative to available funding, the project was not awarded.

### Grant Funding and Project Reset

The Township has since secured \$29,514,145 in funding through the Health and Safety Water Stream under the MHIP.

In light of this successful funding application, and given the completion of the 2024 tender process, staff are recommending that the Township proceed with a redesign and re-tender of the project. As part of this reset, staff have directed WSP to undertake a comprehensive review of the previous design and implement cost optimization measures while maintaining regulatory compliance and required treatment capacity.

### Redesign and Optimization Scope

The updated tender package will include the following tasks:

1. Review of 2024 Addenda and Enquiries

A total of 727 contractor enquiries were received during the 2024 tender process. WSP will review all questions and issued addenda and incorporate necessary clarifications and revisions into the updated tender documents.

2. Design Optimization to Reduce Capital and Operating Costs

Working collaboratively with WSP and OCWA, the following design changes will be implemented to reduce capital and lifecycle costs while maintaining required treatment performance and flow capacity:

- Elimination of sludge cake hoppers and associated truck loading systems
- Elimination of centrifuge and sludge cake conveyor systems
- Reduction of the overall footprint of the Biosolids Management Building

- Reconfiguration of internal building layout to optimize use of the reduced footprint
- Retention of sludge thickening within the upgraded process to reduce long-term biosolids hauling costs

These optimization efforts are anticipated to yield potential capital cost savings of approximately \$10 million compared to the 2024 tendered design.

### 3. Additional Engineering Reviews

The redesign will also include review and refinement of the following components:

- Reassessment of plant electrical capacity, including evaluation of the existing 1,000 kVA transformer with the objective of retaining the current hydro feed and transformer
  - The previous design required a new hydro feed and larger transformer, estimated at \$1.5–\$2.0 million and a 2-year delivery
- Review of thickened biosolids storage tank sizing and storage capacity
- Update of site drainage and stormwater management design

### Path Forward

The proposed path forward is as follows:

#### **Phase 1 – Redesign**

Update expansion drawings and specifications, incorporating cost optimization measures and lessons learned from the 2024 tender process.

#### **Phase 2 – Tender**

Issue updated tender package, respond to enquiries, evaluate submissions, and provide award recommendation.

#### **Phase 3 – Construction**

Construction of the Phase 2 expansion works, with WSP providing contract administration and site inspection services.

The proposed timelines:

<b>Task</b>	<b>Time Period</b>
Updates and Redesign to 90% Detailed Design	10 weeks
Township/OCWA review and 90% Review meeting	3 weeks

Preparation of 100% Detailed Design(Tender Package)	6 weeks
Tender Period	6 weeks
Tender review and Recommendation Award	4 weeks
Construction Period	104 weeks
Warranty Period	52 weeks

The total estimated timeline for the completion of the project is 2.5 years.

**Financial and Resource Implications**

The updated construction estimate for the VH WWTP Phase 2 Expansion, incorporating proposed redesign and cost optimization measures, is summarized below.

<b>Victoria Harbour WWTP – Phase 2 Design/Project Management/Tender and Construction Costs</b>		
<b>Division</b>	<b>Item</b>	<b>Total Estimate</b>
Division 1	General Requirements	\$2,789,000
Division 2	Site Works & Existing Conditions	\$4,173,000
Division 3	Concrete	\$5,407,000
Division 4	Masonry	\$414,000
Division 5	Metals	\$710,000
Division 6	Woods and Plastics	\$34,000
Division 7	Insulation	\$1,081,000
Division 8	Doors	\$323,000
Division 9	Finishes	\$284,000
Division 10	Specialties	\$70,000
Division 11	Process Equipment	\$9,199,000
Division 13	Instrumentation & Control	\$1,700,000
Division 15	Mechanical	\$1,999,000
Division 16	Electrical	\$4,746,000
<b>Sub-Total</b>		<b>\$32,929,000</b>
Overhead & Profit	15%	\$4,939,000
Contingency	5%	\$1,650,000
Consultant Site Services (CA & Inspection)	Including updating the design	\$3,179,609
Allowance for SCADA Programming	Third Party service	\$200,000

Allowance for Test during construction	Third Party service	\$250,000
Contingency on Engineering Services	Possible extension of construction period, change orders etc. during construction	\$430,000
<b>Sub-Total</b>		<b>\$4,059,609</b>
<b>Total Construction and Engineering estimates</b>		<b>\$43,577,609</b>

This estimate reflects the anticipated savings achieved through the redesign and optimization efforts when compared to the 2024 tendered cost, while maintaining the required treatment capacity and regulatory requirements.

Funding Strategy

The 2026 Draft Budget includes the following funding sources for this project:

Grant – Province of Ontario <sup>1</sup>	\$29,514,145
2022-2024 Ontario Community Infrastructure Fund (OCIF)	\$2,840,087
Debt Financing <sup>2</sup>	\$18,478,184
Wastewater Capital Reserve <sup>3</sup>	\$54,042
DC Reserve <sup>4</sup>	TBD
Land sale revenue (see related report OS-2026-006)	TBD

<sup>1</sup> The provincial funding is provided through the Health and Safety Water Stream under the MHIP. The grant represents 73% of eligible project costs, to a maximum contribution of \$30 million.

<sup>2</sup> Debt financing will reflect the actual amount required at the completion of construction and final reconciliation of all project costs and funding sources.

<sup>3</sup> The 2026 budget reflected \$54,042 in funding from the Wastewater Capital Reserve as a portion of this funding has been spent on project preparation and planning costs up to this point.

<sup>4</sup> The VH WWTP is a growth-related item identified in the current development charge background study and is an eligible project for funding from development charges collected.

### **Relationship to Strategic Plan**

Tay Resilient - Encouraging increased development of housing, specifically affordable housing.

### **Reference Documents**

There are no reference documents associated with this Item.

### **Attachments**

There are no attachments to this Item.

### **Prepared By**

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### **Approvals**

Andrea Fay, Chief Administrative Officer/Deputy Clerk  
March 6, 2026