

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON AUGUST 13, 2018
FROM:	KELLY SCHERR, P.ENG. MANAGING DIRECTOR ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	EAST LONDON SANITARY SERVICING STUDY MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT: NOTICE OF COMPLETION

RECOMMENDATION

That, on the recommendation of the Managing Director Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the East London Sanitary Servicing Study:

- (a) The preferred treatment and collection servicing alternatives **BE ACCEPTED** in accordance with the Schedule B Municipal Class Environmental Assessment process requirements;
- (b) A Notice of Completion **BE FILED** with the Municipal Clerk; and,
- (c) The Municipal Class Environmental Assessment Schedule B project file for the East London Sanitary Servicing Study **BE PLACED** on public record for a 30-day review period.

PREVIOUS REPORTS PERTINENT TO THIS MATTER
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Civic Works Committee, September 22, 2014 - Optimization of London Wastewater Treatment Plants – A Strategy and Roadmap

Civic Works Committee, June 2, 2015 – Appointment of Consultant – Engineering Services for the Stress-Testing and Re-Rating of Adelaide, Pottersburg & Vauxhall Wastewater Treatment Plants

Civic Works Committee, November 3, 2015 – Appointment of Consultant – Master Plan/Municipal Class EA for the Pottersburg-Vauxhall Interconnect

Civic Works Committee, November 29, 2016 – Appointment of Consultants – Clean Water and Wastewater Fund Projects

Civic Works Committee, July 17, 2017 – Appointment of Consulting Engineer – Design and Construction Administration Services - Pottersburg-Vauxhall Wastewater Treatment Plants Interconnection Project

BACKGROUND

Purpose

The purpose of this report is to identify the preferred servicing alternatives developed in the East London Sanitary Servicing Study Schedule ‘B’ Municipal Class Environmental Assessment (EA), and recommend filing the Notice of Completion for the study to initiate the statutory 30-day public review period. The preferred alternatives identified in

the Class EA provide a strategy for short-term upgrades and long-term strategies for servicing growth in east London.

Context

The Vauxhall Wastewater Treatment Plant (WWTP) and Pottersburg WWTP service a significant portion of east London. The Vauxhall WWTP services an area that is for the most part built-out. The Pottersburg WWTP's service area has the potential for significant amounts of new industrial development; however, the capacity improvements required to upgrade the Pottersburg WWTP are extremely costly. The capacity of the Vauxhall WWTP can be upgraded at a relatively low cost. The purpose of the East London Sanitary Servicing Study is to consider the servicing challenges within Vauxhall and Pottersburg WWTP sewershed areas and provide a preferred approach for providing wastewater collection and treatment to support future development. A copy of the East London Sanitary Servicing Study's Executive Summary has been included as Appendix 'A' of this report.

DISCUSSION

In December 2016, the City of London appointed CH2M Canada Limited (CH2M) to carry out the East London Sanitary Servicing Study. The study evaluated the sanitary servicing alternatives for collection and treatment of flows generated within the Vauxhall WWTP and Pottersburg WWTP sewersheds.

The objectives of the East London Sanitary Servicing Study were to examine and make recommendations with respect to the following:

- Identify current collection and treatment operations within the Vauxhall and Pottersburg WWTP sewersheds;
- Establish potential optimizations at each WWTP, considering the planned Pottersburg-Vauxhall Interconnection;
- Develop recommendations for long-term servicing strategies to accommodate growth in the study area.

The study prepared a long list of servicing alternatives that were evaluated based on technical, environmental, social/cultural/planning and economic criteria.

Public/Stakeholder Consultation

As part of the study, two Public Information Centres were conducted. Notifications for each meeting were published in the two weeks preceding the meeting as well as on the City's webpage. The meetings were held on June 21, 2017 and January 31, 2018 at Tweedsmuir Public School. These meetings were attended by the public and affected property owners. Notifications of the project were also sent to Federal, Provincial, and Municipal stakeholders, and local First Nations communities.

Preferred Treatment System Alternatives

The environmental assessment process identified a short-term and a long-term preferred treatment system alternative.

Short-Term Treatment Solution

The recommended short-term treatment solution includes the following components and is anticipated to provide capacity to the Vauxhall/Pottersburg sewershed areas for the next twenty years:

- Construct the Pottersburg-Vauxhall Interconnection with associated pumping stations;
- Complete a major capacity increase at Vauxhall WWTP from 20.9 million litres per day to 60 million litres per day; and
- Consolidate solids handling operations to Pottersburg WWTP.

The estimated cost of all works in the preferred alternative is \$34M to \$74.5M depending on technology selected to meet new effluent criteria.

Long-Term Treatment

The long-term treatment solution will be required beyond the current 20 year period. The preferred alternative includes replacing both Pottersburg and Vauxhall WWTPs with a single new treatment plant. The plan also provides the flexibility of servicing additional lands beyond the Vauxhall/Pottersburg sewershed area. The preliminary estimated cost to construct a new treatment plant to service the two sewersheds is \$330M-\$460M. The timing of construction of this new treatment plant will be dependent on growth in the sewersheds and would ideally be scheduled to coincide with the end of both plants useful lives. Future life cycle improvements at the Vauxhall and Pottersburg WWTP will be planned in consideration that both plants are likely to be decommissioned in a 20 to 30 year timeframe.

Preferred Collection System Alternatives

The preferred alternative for the collection system includes several programs and projects:

- Promote inflow and infiltration reduction by disconnecting weeping tiles from the sanitary sewer system and continuing with sewer inspection programs;
- Continue with the separation of combined sewers in the Vauxhall sewershed;
- Replace and realign the Pottersburg Trunk Sewer upstream of Dundas Street (multiple phases over the next 5 – 10 years); and
- Implement pump capacity upgrades at East Park Pumping Station (design ongoing).

These projects would be scheduled over the next 10-year period and provide the required capacity for development for the next 20-year period.

Budget Implications

The estimated cost of the wastewater treatment projects recommended in the East London Sanitary Servicing Study range from \$34M to \$74.5M. The cost estimate is highly dependent on the treatment technology required at the Vauxhall WWTP that will be selected as part of the Vauxhall Wastewater Treatment Plant Expansion EA. It is projected that these projects would provide growth servicing for the next 20 years. The funds required for the majority of the wastewater collection projects are included in the current wastewater 20-year plan. The costs related to the expansion of the Vauxhall WWTP or the Pottersburg transfer pumping station are not currently included in the 20-year plan. All the costs related to the short-term collection and treatment projects recommended in the East London Sanitary Servicing Study will be included for Council consideration as part of the 2020-2023 multi-year budget process.

Environmental Assessment Next Steps

Upon acceptance by Council of the recommendations of this report, a “Notice of Completion” will be published identifying that the study report is available for public review for the mandatory 30 calendar days at City Hall – 9th Floor and online at:

<http://www.london.ca/residents/Environment/EAs/Pages/East-London-Sanitary-Servicing-Study.aspx>

Stakeholders are encouraged to provide input and comments regarding this study during this time period. Should stakeholders feel that issues have not been adequately addressed, they can provide written notification within the 30-day review period to the Minister of the Environment, Conservation and Parks requesting further consideration. This process is termed a “Part II Order”. Subject to no requests for a Part II Order being received, the Project File will be finalized.

CONCLUSIONS

The East London Sanitary Servicing Study was undertaken to develop a wastewater servicing strategy that would accommodate development in the Vauxhall WWTP and Pottersburg WWTP sewersheds. The recommended strategy capitalizes on lower cost capacity at the Vauxhall WWTP, maximizes the useful lives of the Pottersburg and Vauxhall WWTPs, and defers hundreds of millions of dollars of costs related to a new wastewater treatment plant. It is recommended that the preferred servicing alternatives identified in this study be accepted and posted for the 30-day public review period.

Acknowledgements

This document has been prepared with the assistance of Kirby Oudekerk, P.Eng., Environmental Services Engineer in the Wastewater Treatment Operations Division, in consultation with the Wastewater and Drainage Engineering Division.

SUBMITTED BY:	REVIEWED AND CONCURRED BY:
GEORDIE GAULD DIVISION MANAGER, WASTEWATER TREATMENT OPERATIONS	SCOTT MATHERS, MPA, P. ENG. DIRECTOR, WATER AND WASTEWATER
RECOMMENDED BY:	
KELLY SCHERR, P. ENG., FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER	

August 1, 2018

Attach: Appendix 'A' – ELSS Executive Summary

cc. Tom Mahood, CH2M
Tom Copeland, Wastewater and Drainage Engineering
Alan Dunbar, City of London
Jason Davies, City of London