

TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON APRIL 17, 2018
FROM:	KELLY SCHERR, P.ENG.,MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES AND CITY ENGINEER
SUBJECT:	SOUTH LONDON WASTEWATER 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 South London Wastewater Servicing Study:

- (a) The preferred wastewater 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 South London Wastewater 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, May 9, 2017 – Single Source for Pump Replacement at the Wonderland Pumping Station

Civic Works Committee, August 29, 2017 – Appointment of Consulting Engineer – Dingman Creek Pumping Station Municipal Class EA

BACKGROUND

Purpose

The purpose of this report is to identify the preferred servicing alternative developed in the South London Wastewater Servicing Study Schedule 'B' Municipal Class Environmental Assessment (EA), and to recommend filing the Notice of Completion to initiate the 30-day public review period. The preferred EA alternative provides a new wastewater servicing strategy for the south London servicing area. This area includes lands historically serviced by the Wonderland Pumping Station; the built-out and development lands within the Southwest Area Secondary Plan; and lands considered in the Industrial Land Development Strategy.

Context

The Wonderland Pumping Station is one of the City's major wastewater facilities. The station receives wastewater from a large portion of south London and discharges it north for treatment at the Greenway Wastewater Treatment Plant. The Wonderland Pumping Station is reaching its peak operating capacity. Additional capacity will be required to meet the goals of the City's Growth Management Implementation Strategy and Industrial Land Development Strategy. The Environmental Assessment's preferred

alternative includes: constructing a wastewater pumping and pre-treatment facility adjacent to the existing Dingman Creek Pumping Station, constructing a 5.2 km forcemain, and constructing an additional wet weather bypass storage facility.

DISCUSSION

Wonderland Pumping Station

The Wonderland Pumping Station is a key component of the City's wastewater collection system. It is currently the only means to convey wastewater collected from the southwest quadrant of the City, including White Oaks, Pond Mills, all industrial lands south of Highway 401, parts of Lambeth north to Southdale Road, and the lands within the Southwest Area Secondary Plan. Currently Wonderland Pumping Station operates near its rated capacity on a regular basis and operates in conjunction with the Dingman Storage Facility, which is used to reduce peak flows to the station. Given the increasing demand for urban growth in the southwest area there is an imminent need for increased wastewater capacity to service the Southwest.



Figure 1 – Wonderland Pumping Station

In September 2017, the City of London appointed AECOM Canada Limited (AECOM) to carry out the South London Wastewater Servicing Study Environmental Assessment. The study evaluated the options available to the City for increased wastewater conveyance capacity within the Dingman-Wonderland servicing corridor.

The Environmental Assessment examined opportunities to construct additional pumping capacity and to further leverage flow control, along with pre-treatment of wastewater for even better overall system performance and future flexibility. The objectives of the Environmental Assessment were to examine and make recommendations with respect to the following:

- Re-instating or constructing a new Dingman Creek Pumping Station to pump to the Greenway WWTP rather than increasing the capacity of Wonderland Pumping Station;
- Providing pre-treatment at Dingman Creek Pumping Station;

- Enhanced septage receiving at either Dingman Creek Pumping Station or Wonderland Pumping Station;
- Providing primary level treatment at Dingman Creek Pumping Station;
- Flexibility to transfer future flows to a treatment plant other than Greenway.

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

Public/Stakeholder Consultation

As part of the study, a public information centre was conducted. The public information centre was held on February 26, 2018 at Nicholas Wilson Public School, located at 927 Osgoode Drive. This meeting was attended by the public and affected property owners. Notifications of the project were also sent to Federal, Provincial, and Municipal stakeholders, and First Nations.

Preferred Alternative

Upon review of the long list of alternatives, the preferred alternative included the construction of a new pumping station facility at the Dingman Creek Pumping Station site. The addition of a second pumping station rather than increasing the capacity of Wonderland Pumping Station introduces a level of redundancy that will improve the robustness and resiliency of the wastewater servicing infrastructure in the south end.

The preferred alternatives also identified the following additional works (See Appendix 'A' – PIC #1 Information).

- Construct a new pumping station facility at and/or adjacent to existing Dingman Creek Pumping Station site, and construct a new forcemain along existing forcemain route;
- Include preliminary treatment capability (screening and grit removal), as well as enhanced septage receiving facilities in the facility design;
- Construct a new wastewater storage pond adjacent to existing facility to provide enhanced wet weather peak shaving, emergency storage and primary treatment prior to overflow, if an overflow is required.

Constructing a new facility on the property adjacent to the existing Dingman Pumping Station property will simplify the construction of the facility by virtually eliminating conflicts with existing operations. This will reduce the overall cost of the facility and reduce construction risk. In addition, the new forcemain can be installed in the same easement that the existing forcemain occupies; therefore, no additional land or easements are required.

The new facility would include screening and grit removal (pre-treatment), as well as enhanced septage receiving facilities. Pre-treatment of the wastewater flows will reduce the operational challenges currently experienced at the Wonderland Pumping Station and will also enable the use of more energy efficient pumps at the new pumping station.

Finally, the new storage facility will increase the Division's operational ability to reduce peak flows, thereby reducing the number of overflows to the environment, both to the Dingman Creek and at Greenway WWTP.



Figure 2 – Dingman Creek Storage Facility

Natural Environment

No significant impacts to the natural environment were identified with any elements of the preferred alternative. The Upper Thames River Conservation Authority was consulted regarding construction within the floodplain, and compensatory flood storage volume will be considered as required.

Cultural Heritage

A cultural heritage property was identified at one of the locations of the preferred alternative, 3544 Dingman Drive. A Cultural Heritage Evaluation Report (CHER) was prepared and presented to the London Advisory Committee on Heritage. Evaluation of opportunities for adaptive reuse will form a specific component of the detailed design for the new facility.

Project Funding

The preferred alternative identified in the South London Wastewater Servicing Study includes new pieces of infrastructure essential to servicing growth in south London. The current EA level estimate for the costs for all aspects of the preferred alternative ranges from \$25 – \$38 million. The various components of the preferred alternative will be phased and incorporated into the next multi-year budget process.

The first phase of the preferred alternative is needed imminently to support new growth in the southwest. The need for increased capacity for the southwest was previously projected to be required in the 2024 timeframe. As such, two growth funded projects were identified in the 2014 Development Charges Background Study related to wastewater servicing in south London:

- ES5263 – Southwest Capacity Improvement (\$15 million, 2024); and
- ES5264 – Wonderland Pumping Station Upgrade (\$2.5 million, 2024).

Given increasing residential, industrial, and commercial development pressure in the southwest the need for wastewater capacity has accelerated by approximately 5 years. Correspondingly, the timing of the two Southwest treatment capacity project will need to be accelerated to 2018-2019. The growth related work will include construction of a new pumping station facility and a new forcemain. Due to the urgency of providing growth required capacity a report recommending a consultant assignment to undertake the detailed design of the growth related servicing work will be submitted to the Civic Works Committee in Q2-2018.

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/South-London-Wastewater-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 and Climate Change requesting further consideration. This process is termed a “Part II Order” (informally known as a Bump-Up Request). Subject to no requests for a Part II Order being received, the Project File will be finalized.

CONCLUSIONS

The South London Wastewater Servicing Study was undertaken to establish the preferred strategy for accommodating growth in south London. Staff recommends that the preferred servicing alternative of constructing a new multi-faceted facility at the Dingman Creek Pumping Station site be accepted and posted for the 30-day public review period. Due to the urgency of providing growth required capacity a report recommending a consultant assignment to undertake the detailed design will be submitted to committee in Q2-2018.

Acknowledgements

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

SUBMITTED BY:	REVIEWED AND CONCURRED BY:
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RECOMMENDED BY:	
KELLY SCHERR, P. ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL & ENGINEERING SERVICES & CITY ENGINEER	

April 3, 2018

Attach: Appendix "A" – PIC#1 Information

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