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TO:	CHAIR AND MEMBERS BUILT AND NATURAL ENVIRONMENT COMMITTEE MEETING ON NOVEMBER 28, 2011
FROM:	RON STANDISH, P.ENG. DIRECTOR, WASTEWATER AND TREATMENT
SUBJECT	STANLEY STREET SANITARY SEWAGE PUMPING STATION ENVIRONMENTAL ASSESSMENT & SCREENING REPORT EXECUTIVE SUMMARY

RECOMMENDATION

That, on the recommendation of the Director, Wastewater and Treatment, the following actions **BE TAKEN** with respect to the Stanley Street Sanitary Sewage Pumping Station Environmental Assessment & Screening Report Executive Summary:

- (a) The Stanley Street Sanitary Sewage Pumping Station Environmental Assessment Screening Report Executive Summary **BE ACCEPTED**;
- (b) The Environmental Assessment Screening Report **BE PLACED** on public record for a 30 day review period; and
- (c) A Notice of Completion **BE FILED** with the Municipal Clerk after the Environmental Assessment Screening Report public review period is completed.

PREVIOUS REPORTS PERTINENT TO THIS MATTER

- ETC Report of 2010-05-10, 3/6/ETC. Appointment of Consulting Engineers, Infrastructure Lifecycle Renewal Program, 2011, Recommendation (a) (ii).
- BNEC Report of 2011-04-20, 5/22/BNEC. 2011 Infrastructure Lifecycle Renewal Program, Contract #2, Stanley Street – Extension of Consulting Services.
- The report (s) noted above can be found at:

<http://www.london.ca/d.aspx?s=/Meetings/Default/meetingpackages.htm>.

BACKGROUND

Purpose:

The purpose of this report is to communicate the recommendations of the Stanley Street Sanitary Sewage Pumping Station Environmental Assessment Screening Report via the attached Executive Summary. (Appendix A).

Context:

In 2010, Dillon Consulting Limited (Dillon) was retained by the City of London (the City) to act as consulting engineer for the reconstruction of Stanley Street from Wharncliffe Road to the Thames River as part of the 2011 Infrastructure Lifecycle Renewal Program, Contract #2.

As preliminary design progressed, it became evident that the existing sanitary sewer siphon outlet pipe beneath the Thames River servicing the area is nearing the end of its service life (constructed in about 1922), is in poor condition, represents a significant operational and

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environmental liability to the City, and is no longer suitable to serve as the outlet. The City then retained Dillon to complete a Schedule B Class Environmental Assessment (EA) and a Functional Design to confirm the location of a new sanitary sewage pumping station outlet for Stanley Street and the north Wortley Village area. (See Appendix B, Site Location Map)

Discussion:

The proposed Stanley Street Pumping Station will replace an existing sanitary siphon that is located beneath the Thames River at the York Street Bridge. This siphon currently services the residents of Stanley Street and a small area at the north end of Wortley Village. Due to the poor condition of this siphon, alternatives to convey sewage were considered and a small sanitary sewage pumping station was determined to be the only reasonable alternative. Dillon was retained in April 2011 to perform a Class B EA to determine the best location for the construction of the proposed pumping station.

The "Notice of Study Commencement" was sent to area residents and published in the "Living in the City" sections of the London Free Press and City Web Page in June and July 2011. Comments received from residents primarily focussed on impacts to the natural area known as "Lawyers Hill", the Thames River and adjacent valley lands, the impact to Thames Valley Parkway and King Street footbridge, impacts to residents including potential for noise and odour and compatibility with the neighbourhood. The project team has met with Ward 13 Councillor Judy Bryant, members of the local community group, the "Riverforks Community Association" and will continue to work with the group throughout the project. A Phase 2 public meeting was held on October 20, 2011 with notices sent to area residents and published in the "Living in the City" sections of the London Free Press and City Web Page in early October 2011.

As required by the Class EA, a comparative evaluation of alternative sites was completed to identify the preferred location. The general criteria used in the evaluation incorporated **design and constructability issues** including compatibility with potential future infrastructure, geotechnical constraints, accessibility for maintenance vehicles, consistency with design standards, utility constraints, proximity to the outlet sewer on Becher Street; **socio-economic** including public safety and vandalism, proximity to existing residents and businesses, impacts on Thames Valley Pathway (construction and operation phases), compatibility with future road right-of-way; **natural environment** including impacts on existing vegetation, wildlife, erosion and slope hazards, the Thames River floodplain and **cost** including relative costs and the need for additional property.

Based on the above considerations, Location 1 (see Appendix C, Location Plan) was chosen as the preferred location. The preferred location falls on lands within the Regulated Limits of the Upper Thames River Conservation Authority (UTRCA) watershed. UTRCA has been consulted and additional analysis related to the proposed infrastructure has been undertaken. The Building will be located to accommodate erosion and slope hazard constraints. In addition, it is worth noting that the sewer that crosses the naturalized area between Stanley Street and Becher Street will be constructed utilizing trenchless technologies in order to minimize impact on the existing vegetation.

Building design and architectural treatments for the proposed pumping station building are underway and will be finalized with input from the City of London's Urban Design Peer Review Panel (UDPRP). A presentation will be made to the UDPRP on December 21, 2011.

Conclusion:

The site of the proposed Stanley Street Sanitary Sewage Pumping Station has been selected based on the best location available taking into consideration multiple natural, socio-economic, constructability and cost related factors. Location 1 is recommended as the preferred location.


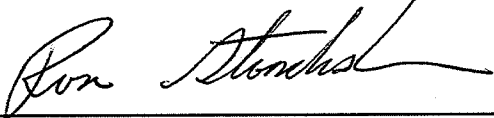
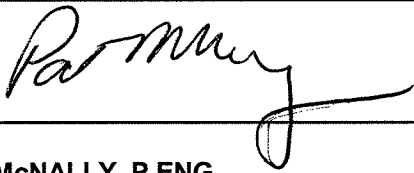
Following council approval, the EA document will be finalized and placed on public record for a 30 day period. A Notice of Completion will then be filed, which will allow for construction to commence in 2012 pending budget approval.

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Acknowledgements:

This report was prepared within the Wastewater and Drainage Engineering Division by Ugo DeCandido, Environmental Services Engineer; Doug Harron, Technologist II.

SUBMITTED BY:	RECOMMENDED BY:
	
TOM COPELAND, P.ENG. DIVISION MANAGER WASTEWATER AND DRAINAGE ENGINEERING	RON STANDISH, P.ENG. DIRECTOR, WASTEWATER AND TREATMENT
CONCURRED BY:	
	
PAT McNALLY, P.ENG. EXECUTIVE DIRECTOR, PLANNING; ENVIRONMENTAL AND ENGINEERING SERVICES	

November 10, 2011

UD/dh

Attach: Appendix "A" – Executive Summary
 Appendix "B" – Site Location Map
 Appendix "C" – Location Plan

c.c. John Braam, City Engineer, City of London
 Geordie Gauld, City of London
 Jim Breschuk, Dillon Consulting Limited

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APPENDIX A

Stanley Street Sanitary Pumping Station Schedule B Class Environmental Assessment Executive Summary

Project Background

As part of the proposed 2012 reconstruction of Stanley Street, the existing combined sewer will be replaced with separate sanitary and storm sewers, as required by the Ministry of the Environment (MOE).

The existing sanitary outlet for this area is a single tube siphon beneath the Thames River. The outlet, which was constructed in the early 1920's, is in poor condition and represents a significant operational and environmental liability to the City. By removing storm water flows from the siphon, there will be insufficient flows to allow it to operate properly. As a result, the "do nothing" option is not feasible.

The City considered a number of options for replacing the sanitary outlet, with the preferred option identified as a new pumping station which connects to the existing sanitary trunk sewer on Becher Street. Alternatives for the forcemain alignment were reviewed, including hanging it from the underside of the York Street Bridge. Due to maintenance difficulties and the potential for a rupture, the forcemain alignment to the Becher sanitary sewer was selected for further study.

The City of London retained Dillon Consulting Limited to complete the environmental assessment (EA) for the new sanitary pumping station. The EA was undertaken as a Schedule B project following the Municipal Class Environmental Assessment (2007).

The purpose of the EA was to identify a site for the new sanitary pumping station within the area known as "Lawyer's Hill", which is bounded by Becher Street to the north, the Thames River to the east, Stanley Street to the south and an existing private property to the west.

Alternative Site Locations

Three potential locations for the pumping station were identified:

- Site 1 – immediately south of the public parking area on Becher Street
- Site 2 – between Becher Street and Stanley Street, along the western boundary of the study area
- Site 3 – north of Stanley Street, in front of the existing billboards.

As required by the Class EA, a comparative evaluation of the three sites was completed to identify the preferred location. The general criteria used in the evaluation included: design and constructability, socio-economic environment, natural environment and cost.

Existing Conditions

The study area is adjacent to the Thames River and is identified as a Significant Corridor in the City's Official Plan. A review of the existing natural environment, including existing trees, was completed. One tree has been identified for removal and five trees for relocation prior to construction.

A Stages 1 and 2 Archaeological Assessment was completed and nothing of heritage value or interest was uncovered.

Preferred Site and Pumping Station Features

Site 1 was identified as the preferred location due to:

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- No conflicts with existing utilities.
- Best access for future maintenance at the station.
- Adequate separation distance from existing residences and businesses. The closest residence is approximately 60 metres west of the site.
- Limited disruption to the existing natural environment. Tree removal/relocation will be required at the site as well as removal of shrubs, grasses and other vegetation. A landscape/planting plan will be developed during the design phase and will include use of native, non-invasive species to the extent possible. ReForest London has completed two projects in the area and will be consulted on the development of the landscape plan.
- Construction cost is similar to Site 2 and is less than Site 3.

The pumping station will include:

- A new building to house the electrical equipment. The design of the building is currently underway and will be finalized with input from the city's Urban Design Peer Review Panel as well as area residents. The building will be designed to complement the existing community.
- Underground valve chambers and pumping station.
- Driveway, landscaping and fence around the station.

The new sanitary sewer from Stanley Street to the pumping station will be constructed using trenchless technologies where possible in order to minimize impacts to the existing trees. Due to the depth of the sewer, it is anticipated the existing trees along the sewer route will be preserved.

Public and Agency Consultation

The project team has met with members of the Riverforks Community Association throughout the study and will continue to keep the group involved as the design and construction proceeds.

As part of the EA process, public and agency consultation has been undertaken throughout the study. The commencement notice was sent to area residents and published in the "Living in the City" sections of the London Free Press and City Web Page in June and July 2011.

A Public Information Centre was held on October 20, 2011 at City Hall and was attended by approximately 15 people. In general, residents were in favour of the preferred site. The following provides a summary of concerns expressed:

- Impacts to the natural environment.
- General disruption during construction.
- Impact to the Thames Valley Parkway and King Street Footbridge.
- Pumping station location is at the top of the neighbourhood tobogganing hill.
- Potential noise and odour from the pumping station.
- Compatibility with the local neighbourhood.

To address concerns raised by the public, the contract will include measures to minimize overall impacts including transplanting trees where possible, delineating environmentally sensitive areas on the construction drawings which will be off-limits to the contractor and installing tree protection barriers around existing trees.

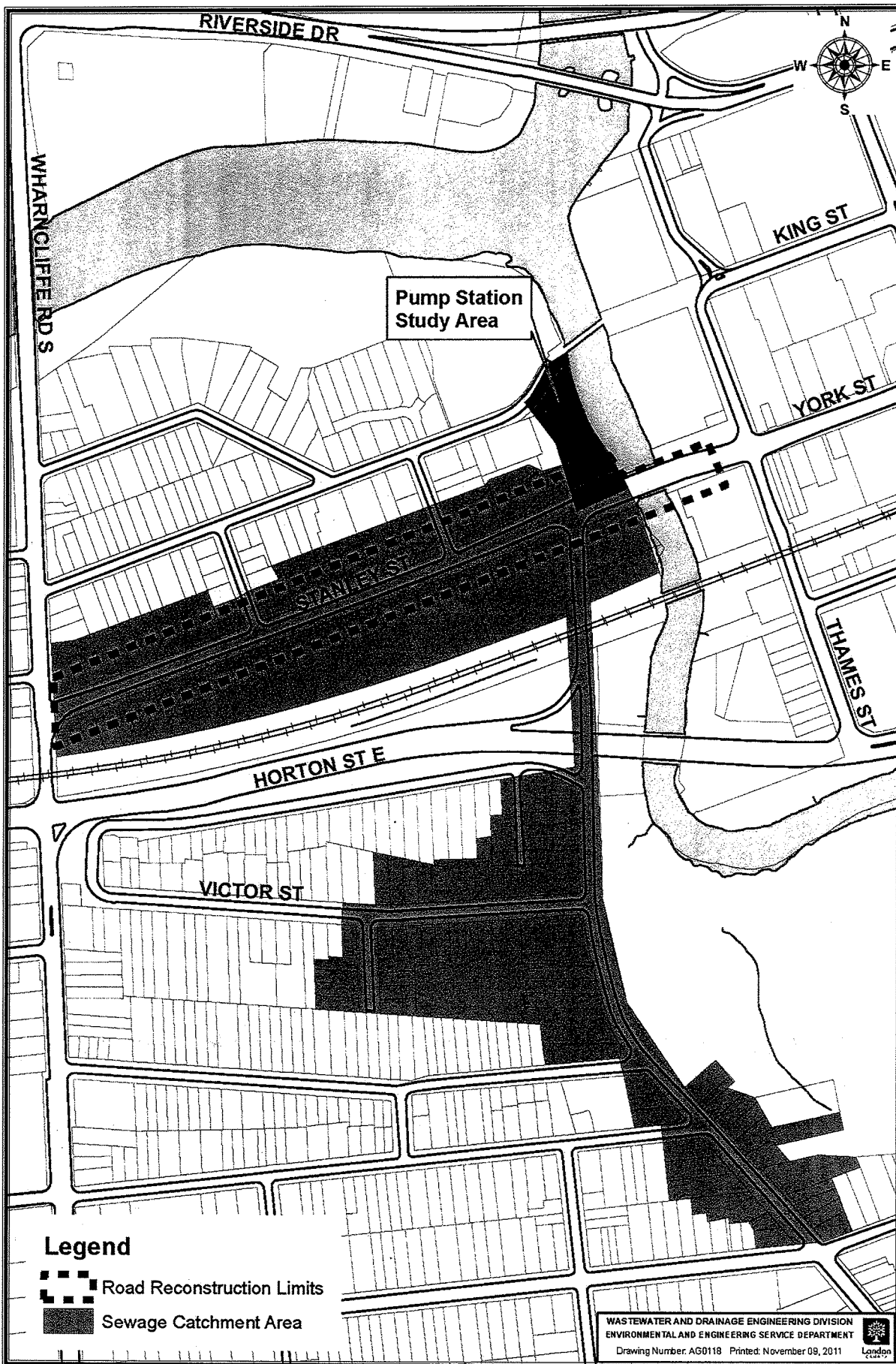
The preferred location falls on lands within the Regulated Limits of the Upper Thames River Conservation Authority (UTRCA) watershed. UTRCA has been consulted and additional analysis related to the proposed infrastructure has been undertaken. The Building will be located to accommodate erosion and slope hazard constraints.

There should be no odour from the pumping station and noise must comply with the Ministry of the Environment's noise policies.

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APPENDIX B
Site Location Map



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APPENDIX C
Location Plan

