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<b>TO:</b>	<b>CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON JUNE 16, 2014</b>
<b>FROM:</b>	<b>JOHN BRAAM, P.ENG. MANAGING DIRECTOR ENVIRONMENTAL &amp; ENGINEERING SERVICES AND CITY ENGINEER</b>
<b>SUBJECT</b>	<b>WHITE OAK DEVELOPMENT AREA STORMWATER MANAGEMENT MUNICIPAL CLASS ENVIRONMENTAL STUDY ADDENDUM</b>

<b>INFORMATION</b>
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That, on the recommendation of the Managing Director Environmental & Engineering Services and City Engineer, the following actions **BE TAKEN** with respect to the White Oak Development Area Stormwater Management Municipal Class EA Addendum:

- (a) The EA Addendum Study **BE ACCEPTED** in accordance with the Municipal Class EA process requirements; it being noted that the preferred servicing alternative, Alternative 4, recommends;
  - one dry regional Stormwater Management (SWM) Facility (#4) for quantity control;
  - one wet regional SWM Facility for quantity and quality control (#3);
  - modification to an existing wet SWM Facility (#2);
  - revegetation of 1600m of the White Oak Channel; and
  - an enclosure of 100 linear metres of the existing portion of the West Tributary channel in the Meadowlands Industrial Park into the proposed conduit/pipe system;
- (b) The consulting fees for AECOM Canada Ltd. **BE INCREASED** by \$5,000 to a new upset limit of \$272,180 (excluding HST) in accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy due to an additional mandatory supplementary Public Information Meeting;
- (c) The financing for this work **BE APPROVED** as set out in the Sources of Financing Report attached hereto as Appendix "A";
- (d) A notice of Completion **BE FILED** with the Municipal Clerk; and
- (e) The Addendum to the Municipal Class EA Schedule "B" for Storm/Drainage and Stormwater Management Works for the White Oak Development Area **BE PLACED** on public record for a 30-day review period.

<b>PREVIOUS REPORTS PERTINENT TO THIS MATTER</b>
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Built and Natural Environment Committee, May 16, 2011 – Request for Additional Engineering Fees for the Addendum to the Municipal Class Environmental Assessment Study for Storm/Drainage and Stormwater Management Servicing Works for the White Oak Area

Environment and Transportation Committee, June 1, 2009 – Appointment of Consulting Engineering for Addendum to the Municipal Class Environmental Assessment Study for the Proposed Storm/Drainage and Stormwater Management Servicing Works for the White Oak Area

Environment and Transportation Committee, August 27, 2001 - Completion of White Oak Area Stormwater Management (SWM) Facility Class EA Schedule B Screening Report

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**BACKGROUND**

**Purpose:**

The objective of this report is to present the completed Addendum to the Municipal Class EA Study Schedule “B” for Storm/Drainage and Stormwater Management Works for the White Oak Development Area to Council to be accepted and to recommend an increase in engineering fees be authorized to the Consultant for additional effort related to the completion of this project (location map is shown in Appendix B).

**Context:**

In April 2001, the City of London completed the Municipal Class EA study, Schedule “B”, for White Oak Area Stormwater Management Facilities. The Municipal Class EA study recommendations identified the proposed remediation works to reduce the risk of surface flooding in the study area; provide adequate conveyance capacity and controls for minor and major system flows under current and future conditions; address requirements of the Dingman Creek Subwatershed Study (DCSS); and address future growth requirements over the long term from a stormwater quality and/or quantity perspective.

The White Oak Municipal Class EA Study completed by Earth Tech identified the preferred alternative that comprises of the following recommendations:

1. A dry detention SWM Facility #1 to be constructed north of the proposed Bradley Avenue extension near its intersection with Wharncliffe Road as part of future land development in the catchment area.
2. A wet quality/quantity/erosion control SWM Facility #3, to be constructed north of the proposed Bradley Avenue extension and west of White Oak Road, to address existing flooding problems and future growth in the upstream service area.
3. A dry detention SWM Facility #4 to be constructed at the confluence of the White Oak channel and the western tributary just upstream of the Dingman Creek to address the existing flooding and erosion deficiencies for the majority of the study drainage area and to service future growth within the study’s service area.
4. A wet quantity/quality/erosion control SWM Facility #2, which was constructed in 2005 by the City as part of the recommended remediation works for this area, to address the existing flood and erosion deficiencies and it is located north of Exeter Road, west of White Oak Road.

In 2005, the City completed the Dingman Subwatershed Study Update (DCSSU) and this study was approved by the City Council. In 2007/2008 the City of London attempted to purchase the land for SWM #4 in order to proceed further with the implementation of the recommended remediation works, however the City was unsuccessful in purchasing these lands. This, in addition to needs to incorporate the requirements of the DCSSU completed by Delcan in 2005 has resulted in the need for this Addendum.

**DISCUSSION**

The objectives of this project were to prepare an Addendum to the Municipal Class EA Study, Schedule “B”, for Storm/Drainage and SWM Remediation/Servicing Works for the White Oak Area in order to:

- Incorporate the requirements of the DCSSU completed by Delcan in 2005 and update the modelling for this study in accordance with these requirements in assessing the servicing option impacts on the confirmed/modified preferred alternative;
- Review and update the recommended works in order to optimize performance of the water resources management and potentially consolidate the previously recommended SWM Facilities in accordance with the approved DCSSU’s SWM Criteria, environmental targets, the recommended implementation strategy and remediation work for the subject lands;

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- Confirm/identify the storm/drainage conveyance system for each of the proposed SWM Facilities;
- Confirm the drainage/catchment areas for each of the proposed SWM Facilities;
- Incorporate the Private Permanent System applications approach and evaluate any future impacts of resizing/revising SWM Facilities for the proposed system; and
- Provide the required conceptual/preliminary design and cost modifications for the recommended preferred option.

The study reviewed and evaluated proposed Stormwater Servicing alternatives in accordance with the Municipal Class EA Addendum Study process requirements and was compared to the preferred recommended alternative identified in the Municipal Class EA completed in 2001.

City staff recommends that Alternative 4 be the selected preferred alternative for stormwater management/servicing of the White Oak Development Area.

Alternative 4 includes the following proposed recommendations:

- SWM Facility #4 is proposed to be substantially increased in volume and land requirements, compared to the original White Oak Area Class EA recommendations due to the SWM storage requirements of the 2005 DCSSU;
- SWM Facility #3 is proposed to be reduced in size by approximately 19%;
- Permanent Private Systems (PPS) will be required to be implemented for the approximately 45ha of presently undeveloped industrial/commercial lands that will drain to the facilities, and the identified diversion of storm flows from 17ha of land to the Pincombe Drain;
- SWM Facility #1 is proposed to be eliminated and all major flows from the previously proposed SWM Facility #1 drainage area will be directed via an open channel storm sewer to SWM Facility #3 and minor flows from the previously proposed SWM Facility #1 drainage area will be conveyed via proposed storm sewers to the existing SWM Facility #2;
- All necessary modifications of the existing SWMF Facility #2 will be undertaken;
- Revegetation of 1600m of the White Oak Channel and West Tributary defined by reaches W01, WCT1, and WCT2;
- Increasing the capacity of the Wharnccliffe culvert between catchments B1-Nb and B1-Nc; and
- Enclosure of the existing 100 linear metres of the tributary channel into the proposed conduit system.

The total estimated cost of the preferable recommended servicing option is in the amount of approximately \$9.0 M, including 20% of engineering and contingency costs (excluding HST). The total estimated cost of the recommended servicing option identified in the 2001 Class EA was approximately \$9.7 M, including 20% of engineering and contingency costs (excluding HST).

### **Public Consultation**

As part of the Addendum Study to the White Oak Area Municipal Class EA Schedule 'B', two public meetings were conducted. These meetings were well attended by the public and affected property owners.

An additional Public Information Meeting was required as part of the Municipal Class EA due to the recommended alternative being changed from Alternative 3 to Alternative 4. Alternative 3 included the previously proposed SWM Facility #1 and no modifications to the other previously proposed SWM Facilities. Alternative 3 was presented to the public in May of 2010 and since the preferred alternative changed to Alternative 4, which proposes different sizing and land requirements of SWM Facilities, a second public meeting was required which was held in May of 2014.

Additional funding is requested to be allocated for this to cover AECOM's consulting fees for the additional Public Information Meeting. It is recommended to increase the consulting fees for AECOM by \$5,000 to a new upset limit of \$272,180 (excluding HST) in accordance with Section 15.2 (g) of the Procurement of Goods and Services Policy to deal with the additional scope of work.

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<b>CONCLUSION</b>
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**Recommendation**

Staff recommend that the Addendum Study to the Municipal Class EA Schedule “B” for Storm/Drainage and Stormwater Management Works for the White Oak Development Area be accepted which identifies the preferred servicing alternative, Alternative 4, that includes one dry regional SWM Facility (#4) for quantity control, one wet regional SWM Facility (#3) for quantity and quality control, modification to an existing wet SWM Facility (#2), revegetation of 1600m of the White Oak Channel, and an enclosure of 100 linear metres of the existing portion of the West Tributary channel in the Meadowlands Industrial Park into the proposed conduit/pipe system.

Alternative 4 recommends storm/drainage and SWM servicing options that:

- Comply with the Dingman Creek Subwatershed SWM criteria/benefits and environmental targets;
- Optimize the water resource management approach to maintain and integrate the ecological conditions within the Dingman Creek; and,
- Are consistent with the City and MOE’s design standards and requirements as well as the requirements of the MOE and the UTRCA.

The implementation of the recommended works under Alternative 4 will be subject to written approval and UTRCA permits for the proposed remediation and servicing works in accordance with Section 28 of the Conservation Authorities Act.

**Next Steps:**

Upon acceptance by Council:

- 1) The study report will be filed for review by the public and governing review agencies in order to complete the public review portion of the Class EA process.
- 2) A “Notice of Completion” be published identifying that the study report is available for public review for the mandatory 30 calendar days.
- 3) Stakeholders encouraged to provide input and comments regarding this study during this time period.
- 4) Should stakeholders feel that issues have not been adequately addressed, they provide written notification within the 30-day review period to the Minister of the Environment requesting further consideration. This process is termed a “Part II Order” (formerly known as a Bump-Up Request).
- 5) Subject to no requests for a Part II Order being received, the project will be in a position to move forward to the design and construction stages in accordance with the recommendations of the study and in accordance with the expected timelines of the City’s Growth Management Implementation Strategy.

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### Acknowledgements

This report was prepared with the assistance of Mitchell Highway, Stormwater Management EIT of the Stormwater Management Unit.

<b>PREPARED BY:</b>  <b>BERTA KRICKER, M.ENG., F.E.C., P.ENG. MANAGER OF STORMWATER MANAGEMENT UNIT</b>	<b>REVIEWED AND CONCURRED BY:</b>  <b>EDWARD SOLDO, P. ENG. DIRECTOR, ROADS AND TRANSPORTATION</b>
<b>RECOMMENDED BY:</b>  <b>JOHN BRAAM, P. ENG. MANAGING DIRECTOR, ENVIRONMENTAL &amp; ENGINEERING SERVICES &amp; CITY ENGINEER</b>	

June 11, 2014

Attach: Appendix 'A' – Source of Financing  
Appendix 'B' – Project Location Map

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