2ND REPORT OF THE ENVIRONMENTAL AND ECOLOGICAL PLANNING ADVISORY COMMITTEE

Meeting held on January 18, 2018, commencing at 5:04 PM, in Committee Rooms #1 & #2, Second Floor, London City Hall.

PRESENT: S. Levin (Chair), E. Arellano, A. Boyer, C. Dyck, P. Ferguson, S. Hall, B. Krichker, C. Kushnir, S. Madhavji, K. Moser, S. Sivakumar, N. St. Amour, J. Stinziano, C. Therrien, R. Trudeau and I. Whiteside and H. Lysynski (Secretary).

ABSENT: E. Dusenge and C. Evans.

ALSO PRESENT: Councillor M. van Holst; C. Creighton, J. MacKay and A. Macpherson.

I. CALL TO ORDER

1. Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

II. ORGANIZATIONAL MATTERS

2. Election of Chair and Vice Chair for the term ending November 30, 2018

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee elected S. Levin and S. Hall as Chair and Vice Chair, respectively, for the term ending November 30, 2018.

III. SCHEDULED ITEMS

3. Environmental Assessment Process

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee received the attached presentation from B. Armstrong, Ministry of the Environment (retired) and B. Krichker, with respect to the Environmental Assessment process.

4. Residual Waste Disposal and Resource Recovery Strategies

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee received the attached presentation from J. Stanford, Director, Environment Fleet and Solid Waste and W. Abbott, Project Manager, Solid Waste Management, with respect to the Residual Waste Disposal and Resource Recovery Strategies.

IV. CONSENT ITEMS

5. 1st Report of the Environmental and Ecological Planning Advisory Committee

That it BE NOTED that the 1st Report of the Environmental and Ecological Planning Advisory Committee from its meeting held on December 21, 2017, was received.

6. Municipal Council Resolution - 11th Report of the Environmental and Ecological Planning Advisory Committee

That it BE NOTED that the Municipal Council resolution adopted at its meeting held on December 12, 2017, with respect to the 11th Report of the Environmental and Ecological Planning Advisory Committee, was received.

V. SUB-COMMITTEES & WORKING GROUPS

None.

VI. ITEMS FOR DISCUSSION

7. Workplan

That the following actions be taken with respect to the Environmental and Ecological Planning Advisory Committee Workplan:

a) the attached 2018 Work Plan for the Environmental and Ecological Planning Advisory Committee BE FORWARDED to the Municipal Council for consideration; and,

b) the attached 2017 Environmental and Ecological Planning Advisory Committee Workplan Summary BE FORWARDED to the Municipal Council for information.

8. Issues for Investigation

That a Working Group consisting of S. Madhavji (lead), P. Ferguson, S. Levin, K. Moser and C. Therrien, BE ESTABLISHED to review the proposed issues for investigation as provided by S. Madhavji; it being noted that once the proposed issues for investigation have been completed, they will be added to the 2018 EEPAC Workplan.

VII. DEFERRED MATTERS/ADDITIONAL BUSINESS

9. (ADDED) Green Standards for Light Pollution and Bird-Friendly Development

That the proposed Green Standards for Light Pollution and Bird-Friendly Development BE REFERRED back to the Working Group for finalization and to report back at the next EEPAC meeting.

10. (ADDED) Portion of 3614 and 3630 Colonel Talbot Road and 6621 Pack Road

That it BE NOTED that the communication dated January 15, 2018, from C. Creighton, Land Use Planner, Upper Thames River Conservation Authority, with respect to the application by Sifton Properties Limited, relating to the properties located at a portion of 3614 and 3630 Colonel Talbot Road and 6621 Pack Road, was received.

11. (ADDED) Representative for the Dingman Creek Environmental Assessment Stakeholder Committee

That B. Krichker and R. Trudeau BE APPOINTED to the Dingman Creek Environmental Assessment Stakeholder Committee.

12. (ADDED) EEPAC Review of the Colonel Talbot Property Subject Lands Status Report and Environmental Impact Statement

That the following actions be taken with respect to the Working Group comments relating to the application by Sifton Properties Limited, relating to the properties located on a portion of 3614 and 2630 Colonel Talbot Road and 6621 Pack Road:

a) the attached Working Group comments BE FORWARDED to N. Pasato, Senior Planner, for consideration; it being noted that the Environmental and Ecological Planning Advisory Committee (EEPAC) believes that the work to-date is incomplete and that a hydrogeological study needs to be completed;

b) the proponent BE ADVISED that, with respect to the hydrogeological study referenced in clause a) above, the EEPAC is willing to review; it being noted that the EEPAC has the expertise;

c) the proponent BE ADVISED that the Environmental Impact Statement only dealt with impacts from Phase 1; it being noted that the scope of the analysis should be the entire site and all phases as an Environmental

Impact Statement will be required for all phases of the development;

d) the proponent BE REQUIRED to work with adjacent landowners to coordinate studies and works so that overland flows post development support the ecological features and functions of the Natural Heritage System in the area;

e) N. Pasato, Senior Planner, BE ADVISED that in the opinion of EEPAC this represents piece meal planning for the natural heritage areas of the subject lands and may negatively impact other applications; and,

f) the proponent BE ADVISED that The London Plan includes a connectivity goal to work with and around other plans.

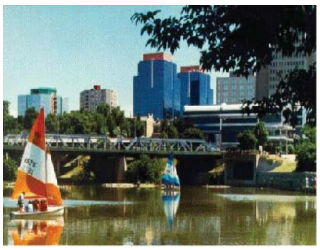
13. (ADDED) East London Servicing Study

That it BE NOTED that the attached Public Information Centre #2 for the Schedule B Environmental Assessment relating to the East London Servicing Study, was received.

VIII. ADJOURNMENT

The meeting adjourned at 7:20 PM.

NEXT MEETING DATE: February 15, 2018



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ENVIRONMENTAL ASSESSMENT ACT (EAA)
Municipal Class Environmental Process and Requirements

PRESENTATION TO THE ENVIRONMENTAL ECCOLOGICAL AND ECOLOGICAL PLANNING ADVISORY COMMITTEE (EEPAC)

PREPARED BY: BILL ARMSTRONG
BERTA B. KRICHKER

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PRESENTATION FRAMEWORK

EAA History and General Requirements
Municipal Class EA Planning and Design Process Overview
Enforcement
Master Plan
Integration
Consultation

3

WHAT IS THE ENVIRONMENTAL ASSESSMENT ACT (EAA) IN ONTARIO AND CANADA?

WHAT WORK/INFRASTRUCTURE REQUIRES APPROVALS UNDER EAA?

HOW EAA IS DESIGNED TO PROTECT THE ENVIRONMENT?

WHAT WORK/INFRASTRUCTURE REQUIRES MUNICIPAL CLASS EA?

HOW IS DESIGNED MUNICIPAL CLASS EA TO PROTECTTHE ENVIRONMENT?

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ENVIRONMENTAL ASSESSMENT ACT (EAA) IN ONTARIO

EAA was developed & implemented in Canada in Ontario in 70s

In 1973–1974 environmental factors were brought into infrastructure design making:

- environmental considerations were included in decision making
- Environmental Assessment (EA) Process and requirements were established by this Act
- education about this Act and the EA process was provided to professionals

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EAA IN ONTARIO

The purpose of this Act is the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management in Ontario of the environment. R.S.O. 1990, c. E. 18, s. 2

Application of this Act applies to:

(a) enterprises or activities or proposals, plans or programs in respect of enterprises or activities by or on behalf of Her Majesty in right of Ontario or by a public body or by public bodies or by a municipality or municipalities;

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EAA IN ONTARIO

(b) major commercial or business enterprises or activities or proposals, plans or programs in respect of major commercial or business enterprises or activities of a person or persons, other than a person referred to in clause (a), designated by the regulations; and

(c) an enterprise or activity or a proposal, plan or program in respect of an enterprise or activity of a person or persons, other than a person referred to in clause (a), if an agreement is entered into a under section 3.0.1 in respect of the enterprise, activity, proposal, plan or program. R.S.O.1990, c.E.18,s.3; 2001,c.9,Sched. G,s.3(3)

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EAA in ONTARIO

Approval for undertaking- Individual EA

Every proponent who wishes to proceed with the undertaking shall apply to the Minister (the Minister of MOECC) for approval to do so. 1996,c.27,s.3.

Application

The EA application consists of the proposed terms of reference submitted under subsection 6(1) and the environmental assessment (EA) subsequently submitted under subsection 6.2 (1). 1996,c.27,s.3

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EAA in ONTARIO

Approval for undertaking- Individual EA

The EA application consists of the proposed terms of reference under subsection 6(1) and the environmental assessment (EA) subsequently submitted under subsection 6.2 (1). 1996,c.27,s.3

The proponent of an undertaking to which this Act applies shall submit to the Minister an EA of the undertaking and shall not proceed with the undertaking until:

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EAA in ONTARIO

Approval for undertaking-Individual EA

(a) the EA has been accepted by the Minister; and
(b) the Minister has given the approval to proceed with the undertaking.

When preparing proposed terms of reference and EA the proponent shall issue a Notice of Commencement of this undertaking with the identified deadline and consult with persons/groups that may be interested in this undertaking.

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EAA in ONTARIO

Approval for undertaking- Individual EA

No subsequent approval can be given for the proposed undertaking/works by the Minister (MOECC) to the proponent, if the requirements of EAA have not been met

Any person may choose to comment in writing on the undertaking or on an EA to the Minister (MOECC) and, if the person wishes, the comments are to be considered during the preparation of the Ministry review (comments shall be submitted by the prescribed deadline)

The Minister, prior to giving the approval to proceed with the undertaking, may request a feasibility study, including research, or any action necessary to comply with this Act

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EAA in ONTARIO

Prohibition - Individual EA

No person shall proceed with an undertaking unless the Minister gives his or her approval to proceed under section 9 or the Tribunal gives its approval under section 9.1. 1996, c.27, s. 3; 2000, c. 26, Sched. F, s .11 (6).

No person shall proceed with an undertaking in a manner inconsistent with a condition imposed by the Minister or the Tribunal with it.
1996, c.27, s. 3; 2000, c. 26, Sched. F, s .11 (6).

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ENVIRONMENTAL ASSESSMENT ACT (EAA) in ONTARIO

Approval for class undertaking

Offence

Every person, whether as a principal or agent, or an employee of either of them, who contravenes any provision of this Act or the regulations or fails to comply with an order or a term or condition of an approval issued or given under this Act is guilty of an offence and on conviction is liable on a first conviction to a fine of not more than $10,000 and on subsequent convictions to a fine of not more than $25,000 for every day or part thereof upon which the offence occurs or continues.

Order to comply with Part II

The Minister may by order require a proponent to comply with Part II before proceeding with a proposed undertaking to which a class environmental assessment would otherwise apply

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EAA in ONTARIO
Approval for Class EAs undertaking

Any person may apply to the Minister to approve a Class EA with respect to class of undertaking

The intent to approve the Class EA Process is to streamline and provide more efficient MOECC reviews, approvals and permits for various undertakings and approximately 20 types of Class EAs were permitted under this Act, one of these Class EAs is the Municipal Engineers Association (MEA)'s Class EA for municipal projects

MEA requested to develop a Municipal Class Environmental Assessment (MCEA) for municipal infrastructure work/projects under EAA that was granted. The original MCEA Process/Parent Document was approved in 1997 and 2000, since this time a number of amendments were issued and implemented and the last amendments were implemented in 2015-2016

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MEA CLASS EA

Municipal Engineers Association (MEA)- Municipal Class Environmental Assessment (Class EA) applies in principal to municipal infrastructure projects including:

- Municipal Roads;
- Water (intake, distribution and water treatment systems);
- Wastewater (sanitary and stormwater conveyance and treatment systems); and
- others.

Class EA the following Schedule - A, A+, B and C

These schedules reference the magnitude of the projects anticipated potential adverse environment impacts.

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MEA CLASS EA

Since Class EA projects undertaken by municipalities can vary in their environmental impact, such projects are classified in this Class EA in terms of schedules: applies to municipal infrastructures projects including:

- Schedule A -generally includes normal or emergency operational and maintenance activities with minimal environmental effects/impacts, therefore, these projects are pre-approved

- Schedule A+ - are pre-approved, however, the public is to be advised prior to project implementation

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MEA CLASS EA

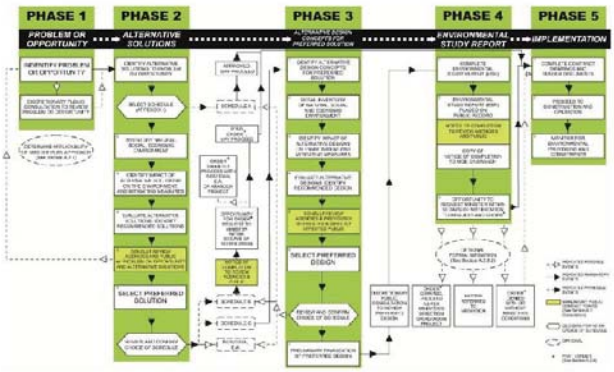
- Schedule B - generally includes improvements and expansion to existing facilities.

  There is the potential for some adverse environmental impacts and the proponent would be required to proceed with a screening process including consultation with those who may be affected, demonstrating that identified low/medium adverse effects can be mitigated.

- Schedule C - generally includes the design and construction of new facilities and major expansions to existing facilities.

  There is the potential for more measurable adverse environmental impacts and the proponent would be required to proceed through the more detailed environmental assessment process with developing an Environmental Study Report (ESR) and including more extensive comprehensive consultation with those who may be affected, demonstrating that identified adverse effects can be mitigated.

Class EA Process



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MEA CLASS EA

Class EA Process consists of 5 Phases

- Phase 1= Statement of Problem/Opportunity Statement

- Phase 2 = Identification of Environmental Conditions that may be impacted by possible solution to the identified problem; Identification and the preliminary evaluations of possible solutions leading to the Preliminary Preferred Solutions; and Confirmation of the Project Schedule

MEA CLASS EA

Class EA Process consists of 5 Phas

- Phase 3 = Detailed assessment of Design Concept to implement preferred solution and the recommended Conceptual/Preliminary Design for Preferred Option
- Phase 4 = Completion of Environmental Study Report (ESR)
- Phase 5 = Implementation of Class EA Solution

MEA CLASS EAs

Key Products of ESR (Phase 3 &4):

- Detailed Description and Conceptual Design of Preferred Options/Alternatives
  - The detailed evaluation of the State of Environment (ecology, environment targets, geotechnical and…)
  - Identify mitigating measures
  - Consultation Process Review engagement with the public, agencies, FNs
  - Selection of the preferred solution
  - Confirmation of the Class EA Schedule
  - Completion ESR and issue of a Notice of Completion

MEA CLASS EAs

Critical Class EA Process Points:

- Notice of Initiation
- Engagement in a Consultation Review Process with the public, government agencies, First Nation (FN) Communities (1-3 Public Consultations)
- Selection of the preferred solution
- Schedule B = Notice of Completion
- Schedule C
- Consult with the public, government agencies, FN Communities
- Select Preferred Design
- Completion ESR
- Schedule C = Notice of Completion

MEA CLASS EAs

Critical Class EA Process Points:

- Notice of Completion
  - 30 days public review period
  - a letter of concerns to the proponent
  - Part II Order Request to Minister
  - Minister's Decision
  - Approval with Conditions
  - 10 year deadline to start construction
  - Addendum to ESR
- All approval permits shall not be issued until the Class EA project has been accepted

MEA CLASS EAs Enforcement

Self-Administered Class EA Process:

- The proponent is responsible to follow the Minister's approved process

Opportunity within this Class EA process for the Public and the First Nations alliances to provide comments, participate and to contribute into the selection of the preferred solution

The Province expects the proponent to undertake all reasonable efforts to address any issues arising from the proponent's Class EA project comments. The proponent is obligated to make every effort to address any "appeal" and/or problems associated with the proponent's Class EA project/process, as well as to be able to mitigate any issue arising via Part II Order from the Minister. Also known as "BUMP UP"during 30 days review period

MEA CLASS EAs Enforcement

Self-Administered Class EA Process:

- The proponent is responsible to follow the Minister's approved process

The Province (MOECC) can enforce any required conditions or refuse to grant approvals for the Class EA project, if the proponent has not followed the process and the EAA requirements are not met, no subsequent the provincial appeal can be filed

MEA CLASS EAs
Consultation

Mandatory Consultation

- During Phase 2
- During Completion Phase 2 for Schedule B Projects
- Notice of Completion (30 days) – Bump Up

- During Completion Phase 3 for Schedule C Projects

- on completion of ESR in Phase 4 for Schedule C Projects
- Notice of Completion (30 days)

The Province (MOECC) can enforce, if the proponent has not followed the process and the EAA requirements are not met, no subsequent the provincial appeal can be filed

MEA CLASS EAs
MASTER PLANS

Provide broad framework of a system or the study area to support detailed environment review of the specific project

The expectation that Master Servicing Plans will go in correlation with some planning studies such as Area Secondary Plans for example

At the minimum Master Servicing Plans will complete Phases 1 and 2 of MCEA

No Part II Order Provision

MEA CLASS EAs
Integration of Class EA Process with Planning Process

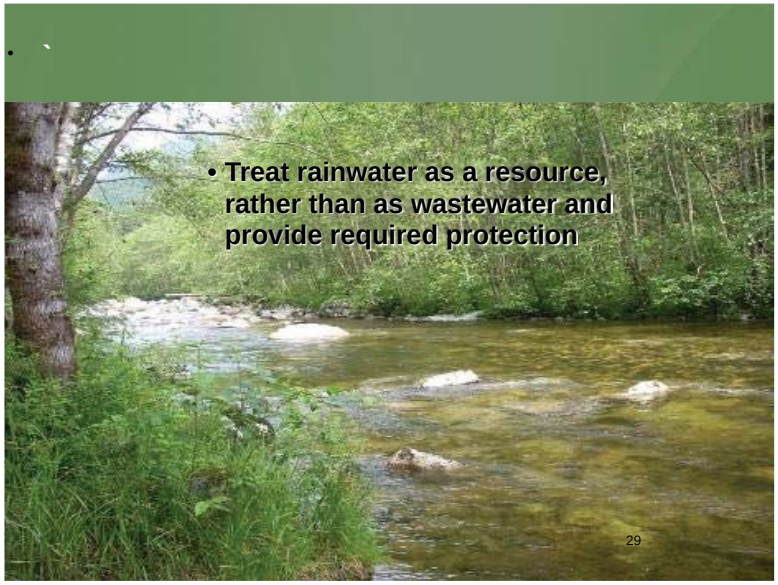
Aiming for more comprehensive environmental impact assessment into land planning

Sometimes there are public concerns over planning decisions, which eventually go to OMB, due to a lack of required knowledge and understanding of environmental science and environmental assessment methods

Integration of Class EA Process with the Planning Process is not common

Canadian Environmental Assessment Act

- Triggers– Federal Funds and/or major impacts
  - MOE between Federal and Ontario Government
  - Following Class EA Procedure with additional Federal requirements



UPDATES

- Residual Waste Disposal Strategy
- 60% Waste Diversion Action Plan
- Resource Recovery Strategy

Environmental and Ecological Planning Advisory Committee

January 18, 2018

Overview

Part 1 – Update 4 Key Project Parameters

Part 2 – November/2017 Open House Information – EA Focus

Part 3 – 60% Waste Diversion & RR Strategy

1. Length of Time

Considerations	New Disposal Planning Periods (years)			
	20	**25**	30	35
Consistent with Other EAs	✓	✓	✓	✓
Consistent with Waste-Free Strategy	✓	✓	×	×
MOECC Comments	✓	✓	×	×
Understanding of Community Considerations	✓	×	×	×
Financial Considerations	×	✓	✓	✓

2. Limits on Annual Tonnage

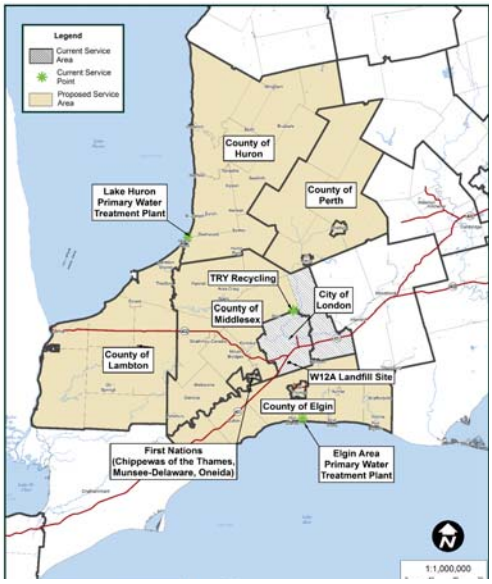
- Current limit = 650,000 tonne/year
- Proposed limit = 500,000 tonne/year

Consideration	Tonnes
Existing Service Area (estimated peak)	377,000
Additional from Expanded Area (average)	53,000
Contingency (about 15%)	70,000
Total	**500,000**

3. Service Area (Disposal)

Consider allowing neighbouring municipalities to use new/expanded facilities.

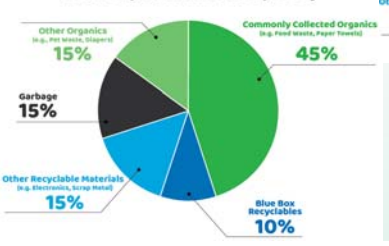
Note; use of potential resource recovery facilities has a larger potential area.



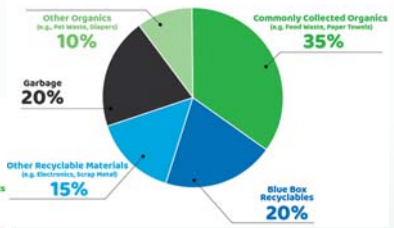
4. Diversion from 45% to 60% by 2022

45% +

Composition of Garbage from Curbside Collection (Single-Family Homes, Townhomes, etc.)



Composition of Garbage from Multi-Residential Collection (Apartments)



Part 2 - Second Series of Open Houses (November 29 & 30, 2017)

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getinvolved.london.ca/WhyWasteDisposal

getinvolved.london.ca/WhyWasteResource

Existing Design

8

Area
107 hectares

Height
9 metres high

Design Concept 1

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Area
107 hectares
(no change)

Height
35 metres high
(increase of 26)

Design Concept 2

10

Area
134 hectares
(increase of 27)

Height
27 metres high
(increase of 18)

Design Concept 3

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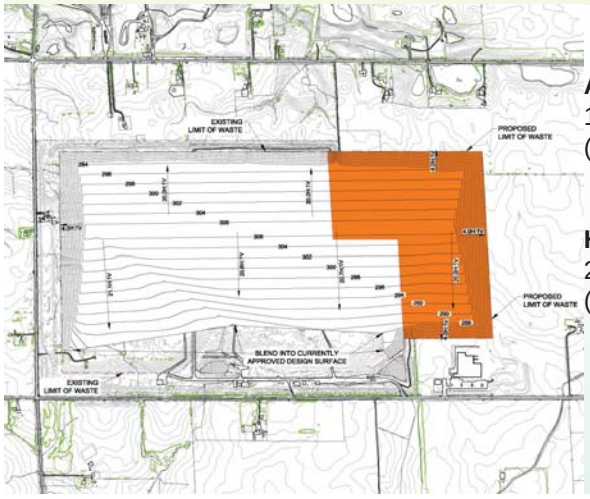

Area
143 hectares
(increase of 36)

Height
24 metres high
(increase of 15)

Visual Impact – Worst Case

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Environmental Components

Category	Environmental Component	Environmental Sub-components
Environmental	Atmosphere	Air quality (including dust, odour and greenhouse gases) Noise
	Biology	Aquatic ecosystems Terrestrial ecosystems
	Geology & Hydrogeology	Groundwater quality
	Surface Water	Surface water quality Surface water quantity
Social	Agriculture	Agriculture
	Archaeology	Archaeology
	Culture	Cultural heritage landscapes Cultural heritage resources (including built heritage)
	Land Use	Current and planned future land uses
	Socio-economic	Local economy Residents and community
	Visual	Visual
Technical	Design and Operations	Technical Considerations Financial Considerations
	Transportation	Traffic

Top Ranked
- Groundwater Quality
- ***Aquatic Ecosystems***
- ***Terrestrial Ecosystems***
- Air Quality

Bottom Ranked
- Heritage Landscapes
- Heritage Resources
- Archaeology
- Noise

Aquatic and Terrestrial Ecosystems – Within 500 metres

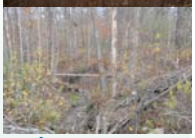
Terrestrial
- potential ESA
- significant Woodlands
- unevaluated vegetation patch
- unevaluated wetlands
- locally significant wetland

Aquatic
- most watercourses have been altered
- either Type 2 (generally important but not critical) or Type 3 (marginal/severely degraded) fish habitat

Aquatic and Terrestrial Ecosystems – Studies

Terrestrial
- Herpetofauna Surveys (*Vernal Pool, Auditory Amphibian, Visual Amphibian/Salamander)*
- Bat Habitat Suitability Assessment
- Snake Cover Board &Area Searches
- Breeding Bird Surveys
- Ecological Land Classification Confirmation and Floral Inventory
- Wetland Community Boundary Delineation
- Lepidoptera and Odonata Surveys
- Significant Wildlife Habitat Surveys

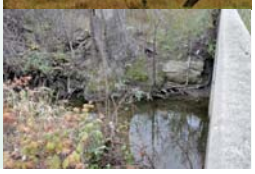




Aquatic and Terrestrial Ecosystems – Studies

Aquatic
Habitat assessment of each watercourse:
- channel morphology
- specialized habitat
- bank and riparian community characteristics
- benthic (macro) invertebrate surveys





EA Key Upcoming Dates

Major Activity	Date / Timeframe
Waste Management Working Group	February 2018
Submission of Draft Proposed Terms of Reference (ToR) to Civic Works Committee (CWC)	March 2018
Seek stakeholder input on Draft Proposed Terms of Reference	April/May 2018
Public Participation Meeting (PPM) at CWC	June 2018
Council approval of Proposed ToR and submission to the Province	June/July 2018

PART 3 – 60% Waste Diversion & RR Strategy

With respect to organics. . . Council approved on October 30, 2017:

d)The W12A Landfill expansion be sized assuming the residential waste diversion rate is 60% by 2022 noting this does not prevent increasing London's residential waste diversion rate above 60% between 2022 and 2050.

60% Diversion Action Plan & Resource Recovery Strategy

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Key information presented for:

- Food Waste Avoidance
- Home Composting
- Community Composting
- City Waste Organics – Curbside
- City Waste Organics - Multi-Residential
- Other Recyclables

Example - Food Waste Reduction

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Tell us how much you want us to invest in this initiative?[1]	Moderate (investment of resources)	Significant (investment of resources)
How will resources be invested?	• Promotion and community outreach programs, and information to households.	• Same as Moderate plus provide each household with a food waste reduction tool kit to help them reduce food waste.
How much closer will it get us to the 60% goal?	0.12% (190 tonnes) →	1.3% (2,100 tonnes)
Annual cost	$180 K →	$1.2 M
Cost per household	$1 →	$7
Cost per tonne	$950 ←	$570
Expected annual household savings	$ 1 M →	$10 M
GHG[2] avoided	600 tonnes →	6,100 tonnes
GHG reduction for every tonne diverted	2.9 tonnes	

Getting to 60% by 2022

Achievable with Today's Technologies

Component	Diversion Rate	Comment
Existing Diversion	45%	• Blue Box, leaf/ yard, depots, etc.
Food Waste Avoidance & More Home Composting	0.5% to 1.5%	• Drive by education and awareness
Source Separated Organics (Green Bin)	8% to 10%	• May need to go to biweekly garbage
Other Programs	4% to 5%	• Reduction, more recycling, etc.
Total	**60%**	

60% Diversion Action Plan & Resource Recovery Strategy

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Revised Timeframe – Tied to Provincial Direction, Policies & Legislation

	Current Timeframe	Revised Timeframe
Draft 60% Diversion Action Plan (i.e., how to achieve 60%) – for final comments	March - April 2018	**May - June 2018**
Final 60% Diversion Action Plan	May - June 2018	**July - August 2018**
Draft Resource Recovery Strategy – for final comments	May - June 2018	**July - August 2018**
Final Resource Recovery Strategy	July - August 2018	**January 2019**

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Questions ?????

Advisory Committee Work Plan – 2018

January 2018

Activity	Background	Responsibility	Timeline	Strategic Plan Alignment
Environmental Management Guidelines	Design standards, including snake hibernacula; research whether or not there is something other than what is located at the Toronto Zoo and/or Long Point; bat boxes; barn swallow galleries; artificial nesting cavities/ roosting; aquatic habitat data collection for the Environmental Management Guidelines or Community Master Plans Restoration standards for wetlands, including microbes in soil and muck		Continuation of the work undertaken in 2016 with respect to the Environmental Management Guidelines	
Protecting Environmentally Significant Areas	Communicating why it is important that cats and dogs are controlled in and around Environmentally Significant Areas (cats indoors, dogs on leash) with the assistance of Corporate Communications; EEPAC will work with AWAC on this			
Collaboration with other Advisory Committees	An EEPAC representative is cross appointed to ACE and TFAC, and, where appropriate, EEPAC members will provide advice to its representative on this body Ongoing work with the Dark Sky/Bird deaths in relation to high rise buildings Working Group consisting of EEPAC, ACE & AWAC representatives	In Progress – Expect completion of Dark Sky/Bird Deaths in February		
Review of Environmental Impact Studies and Environmental Assessments submissions as part of Planning application and the *Environmental Assessment Act*	EEPAC is circulated and asked to review consultant submissions and provide input to City staff. In cases of significant disagreement, EEPAC advises PEC	Working Groups as required	As required, usually provide turnout in one meeting cycle	

Conservation Master Plans	During 2017, Phase 2 of the Medway Valley Environmentally Significant Area Conservation Master Plan is set to begin. EEPAC has a representative on the Local Advisory Committee and will provide review to the full plan. There may also be progress on the Conservation Master Plan for the Meadowlily Conservation Master Plan during this year.	Presenting at PEC – February 20, 2018		
Trail Advisory Group	EEPAC has a representative on this staff directed group. It reviews trail locations and potential new trails for compatibility with the Significant Wildlife Habitat, if any, in the area. Recent examples including Westminster Ponds/Pond Mills ESA and Medway Valley Heritage Forest ESA.			
Wetland Relocation, Monitoring and Creation and Relocation of Wildlife	A Working Group has been established to do research on matters pertaining to wetland relocation.	R. Trudeau, C. Dyck, S. Sivakumar, C. Therrien		

Advisory Committee Work Plan – 2017

October 2017

Activity	Background	Responsibility	Timeline	Strategic Plan Alignment
Environmental Management Guidelines	Design standards, including snake hibernacula; research whether or not there is something other than what is located at the Toronto Zoo and/or Long Point; bat boxes; barn swallow galleries; artificial nesting cavities/ roosting; aquatic habitat data collection for the Environmental Management Guidelines or Community Master Plans Restoration standards for wetlands, including microbes in soil and muck		Continuation of the work undertaken in 2016 with respect to the Environmental Management Guidelines	
Protecting Environmentally Significant Areas	Communicating why it is important that cats and dogs are controlled in and around Environmentally Significant Areas (cats indoors, dogs on leash) with the assistance of Corporate Communications; EEPAC will work with AWAC on this			
Collaboration with other Advisory Committees	An EEPAC representative is cross appointed to ACE and TFAC, and, where appropriate, EEPAC members will provide advice to its representative on this body Ongoing work with the Dark Sky/Bird deaths in relation to high rise buildings Working Group consisting of EEPAC, ACE & AWAC representatives	In Progress		
Review of Environmental Impact Studies and Environmental Assessments submissions as part of Planning application and the *Environmental Assessment Act*	EEPAC is circulated and asked to review consultant submissions and provide input to City staff. In cases of significant disagreement, EEPAC advises PEC	Working Groups as required	As required, usually provide turnout in one meeting cycle	
Conservation Master Plans	During 2017, Phase 2 of the Medway Valley Environmentally Significant Area Conservation Master Plan is set to begin. EEPAC has a representative on the Local Advisory Committee and will provide review to the full plan. There may also be progress on the Conservation Master Plan for the Meadowlily Conservation Master Plan during this year.			

Trail Advisory Group	EEPAC has a representative on this staff directed group. It reviews trail locations and potential new trails for compatibility with the Significant Wildlife Habitat, if any, in the area. Recent examples including Westminster Ponds/Pond Mills ESA and Medway Valley Heritage Forest ESA.			
Wetland Relocation, Monitoring and Creation and Relocation of Wildlife	A Working Group has been established to do research on matters pertaining to wetland relocation.	R. Trudeau, C. Dyck, S. Sivakumar, C. Therrien		

EEPAC Review of the Colonel Talbot Property Subject Lands Status Report and Environmental Impact Statement

Reviewed by Joseph Stinziano and Randy Trudeau

The Subject Lands Status Report and Environmental Impact Study prepared by Natural Resource Solutions Inc. was comprehensive in surveying the ecology of the subject lands and considering the environmental impacts of the development proposed by Sifton Properties Limited. We would like to thank them for writing the report so that it was easy to follow and understand. That being said, we have several concerns regarding mitigation measures, ecological monitoring, and the lack of context for the Phase II and III developments.

Both reports speak to issues that will be addressed in the future, including compensation of the wetlands (Pg 27-28 of the EIS). We are of the opinion, in context of the hydrogeological report (Sifton Properties Limited, Hydrogeological Assessment, Project Number KIT-00233911-HG, 2017), that relocating (instead of removal and compensation) the wetland features on-site adjacent to FOD where the proposed park will be located in Phase II/III would be the best option for mitigation. Since wetlands can provide a storm-water management function, and a storm-water management pond is planned south of FOD, relocating the wetlands adjacent to FOD could not only provide ecological benefits and preclude issues of where the wetland compensation will occur, it could also provide storm-water management functions, reducing the necessary size of the storm-water management pond. Perhaps the relocated wetland would even be integrated with the storm-water management pond. As well, the mitigation measures should commence concurrently with, or before, development of Phase I, and mitigation plans be prepared as soon as possible.

Recommendation 1: Instead of compensating for the wetland removal off-site at a later date, we recommend relocating the wetland adjacent to FOD concurrent with the start of Phase I development.

Recommendation 2: Mitigation plans be prepared imminently instead of 'in the future'.

The reports also observed possible habitat for bats and possible nesting sites for Barn Swallow, and proposed re-evaluating the potential habitat a few weeks prior to the start of development. We agree with this, however there is currently no mitigation plan in place if the habitat becomes occupied with these species prior to development.

Recommendation 3: Prepare a set plan for checking possible species at risk and species of special concern habitat prior to construction with a mitigation plan in the event that SAR or SC are found.

The hydrogeological study shows that FOD7 will be removed during development. However, the SLSR and EIS report that this is a significant woodland and there are no mitigation measures in place for its removal. We recommend that FOD7 be retained. The buffer around FOD7 may then be a good place for relocating the common evening-primrose and an area for milkweed seeding.

Recommendation 4: The significant woodland (FOD7) at the southeast corner of the property be retained instead of being developed as currently planned.

The SLSR and EIS address mitigation measures for Phase I only of the development, however the hydrogeological report shows that development will lead to the removal of the significant woodland FOD7. Furthermore, mitigation of the wetland features is proposed off-site, but based on the plan in the hydrogeological report, there is ample space to incorporate wetland mitigation into the development without reducing the number of lots. We think it would be valuable to have any necessary EISs for Phase II and III of the development completed as soon as possible, as this piecemeal approach to considering each phase separately may overlook opportunities that benefit both the local ecology and the development.

Recommendation 5: That any necessary EIS for phase II and III be completed as soon as possible to ensure that any opportunities for mitigation measures on-site (including wetland relocation) can be pursued prior to the completion of Phase I.

The SLSR and EIS have no proposed monitoring plans for mitigation measures. We recommend that a monitoring plan for mitigation measures be included in the EIS, with a minimum of 3 years' monitoring commencing one year after the mitigation measures are finished to track the establishment and persistence of the new features.

Recommendation 6: A comprehensive 3-year minimum monitoring plan be established for mitigation measures that begins upon completion of the respective mitigation measures.

DRAFT COLONEL TALBOT PROPERTY – HYDROGEOLOGY COMMENTS

Dated September, 2017 (Revised from September, 2016), received by Development Services on October 18, 2017, and at EEPAC November 19, 2017

Reviewer: I. Whiteside

The main issues identified in this report were as follows:

1. Identification of a suitable site for the re-location of the Significant Wildlife Habitat being removed as part of Phase 1 of the development.
2. Additional information with respect to surface water flows post development.
3. Clarification with respect to subsurface geological conditions/ site characterization.

Theme #1 – Relocation of Wetland features

The report highlights that the wetland pockets found in the Phase 1 part of the development may be reconstructed/ mimicked with a new habitat feature on the east side of the property; however, no specific recommendations as to where or when this relocation will occur. Consistent with EEPAC's recommendation from our review of the exp. report titled "Geotechnical and Hydrogeological Assessment" of the subject site dated November 2016 (reviewed by Whiteside/Regehr, presented at the February 2017 EEPAC meeting), relocation of the wetland into the eastern part of the development does seem feasible given the existing wetland at 6499 Pack Road, the existing silty/clayey soils could act as a barrier to pond drainage into the underlying silty/sandy aquifer, and the fact that that initial report from November 2016 noted that the three wetland features present on site were potentially connected to the pond located at 6499 Pack Road. Given that the existing wetland habitat will be destroyed as part of the Phase 1 development, the relocation plan should be developed and executed concurrent with Phase 1, and not later at some indeterminate point in the future.

Recommendation 1: Investigate the feasibility of creating offsetting wetland areas within Phase 2 of the development to compensate for the three wetland features that will be lost as part of Phase 1; as the existing wetland features are potentially connected to the pond at 6499 Pack Road, that area could be suitable for wetland relocation. The offsetting wetland areas should be developed concurrently with the destruction of the existing wetland areas in Phase 1 of the development.

Theme #2 – Surface Water Flows

Surface water flows for Catchment Area A (occupying much of the Phase 1 part of the development) are projected to increase from 11,101 m^3/year to between 17,175 m^3/yr (with 50% runoff to secondary infiltration) and 34,350 m^3/yr (with no secondary infiltration). The report indicates that runoff from the site will flow across Colonel Talbot Road, eventually reaching Mathers stream. EEPAC has some concern that this increased surface water flow could impact the aquatic habitat in Mathers stream.

The EIS for the subject site prepared by Natural Resources Solutions Inc. (dated December 2017, received by Development Services on December 12, 2017 and by EEPAC on December 21, 2017) highlights on page 23/ Map 4:

a. fish were observed at a culvert transecting Colonel Talbot Road immediately south of the site;
b. Watercress was observed within the channel on the downstream side of the culvert; and,
c. said watercress is an indicator of cold water, and may indicate groundwater input.

Lastly, the EIS also stated that while minor flows from the development will be discharged to the North Lambeth subdivision storm sewer on Isaac Drive, major flows will travel overland to the culvert discussed above.

EEPAC is concerned that this overland flow could be deleterious to existing ecological conditions of the site by introducing warm surface water to a potentially cold water habitat and by allowing untreated runoff from the subdivisions into a fish habitat. Furthermore, the area is part of Dingman Creek Subwatershed "B", and will eventually drain into Dingman Creek. The 2005 Dingman Creek Subwatershed Study Update recommended that existing conditions be preserved at minimum and, to the extent practicable, improve the environmental and ecological capacity of Dingman Creek

Recommendation 2: Assess the impact of the storm water management plan for the site with respect to the impact from surface water flows going off site. That assessment should ensure that the stormwater management plan for the site demonstrates at minimum that the environmental/ecological function of Mathers stream, and the Dingman Creek system overall will be preserved at minimum, and, to the extent possible, improved.

Theme #3 – Site Characterization

EEPAC has a few comments on the overall report:

- There was no site location map for the cross sections. Having a cross sectional location map would make it easier to quickly identify which wells/pits/boreholes are part of the cross section.
- Cross section A-A' indicates essentially a contiguous sand/silty sand/sand and gravel aquifer underlying the surficial clayey silt/ clayey silty till; however, large differences in groundwater elevation between the existing Water Supply Wells used in the cross section (see 4103917, 4112333, 4103918, 4104936; Figure 11 – page 20) and MW17-8 and MW17-9 (and indeed, the steep gradient between those two wells) could indicated perched aquifers at these wells rather than the actual sand/silty sand aquifer.
- The borehole log for MW17-9 shows clayey silt till through end of the borehole at 11.1m bgs (with some sand and gravel encountered at 10.7m bgs), whereas the cross section shows the sand layer beginning at ~6m bgs. The hydraulic conductivity (3.9x10-9 m/s) is indicative of a clayey silt and thus the cross section may not accurately show the start of the sand layer.
- Net, the underlying sand/silty sand aquifer may not be suitably delineated at these wells, and the cross-section may create the false impression of a contiguous sand layer where such continuity does not indeed exist.

- Alternatively, MW17-8 may be part of the underlying sandy aquifer, and water level measurements at the groundwater supply wells were not taken at the same time as those for MW17-8 (I could not find when water levels at the supply wells were taken). In that case, groundwater levels on the cross section are misleading, as groundwater gradients and flow directions can only be determined if all measurements were taken as close as possible (i.e. on the same day).
- Lastly, groundwater levels should be obtained at various times throughout the year to determine seasonal fluctuations in groundwater levels. No measurements were taken over the winter months, and groundwater levels for the MW-17 series wells are only available for April-2017 and June-2017 (late spring and summer).

EEPAC PREVIOUS COMMENTS:

DRAFT COLONEL TALBOT PROPERTY SUBJECT LANDS STATUS REPORT
Dated November 9, 2016, received by Development Services on January 9, 2017, at EEPAC January 19, 2017

Reviewers: C. Evans, S. Levin, A. Regehr, R. Trudeau, I. Whiteside

February 10, 2017

The main issues for phase 1 of this development:

1. The proposed re-location of the Significant Wildlife Habitat. EEPAC is also concerned that Pond A was drained in 2016 without a permit from the UTRCA, and Pond B, on the adjoining property, was drained. EEPAC notes that Pond B was assessed by NRSI in 2013 as a deciduous swamp surrounded by meadow marsh (page 21 SLSR). It appears it too was removed without a permit.

   In its 2015 Environmental Assessment for the SWM facility south of Pack Road west of Colonel Talbot, Parsons noted that this area is part of the drainage area for Mathers Stream, the tributary of Dingman Creek that flows from west to east on the other side of Col. Talbot Road. Parsons also notes on page 42 of the EA that "there are additional flows to Mathers Stream from the 600 mm culvert under Colonel Talbot Road which contributes flows from the south east corner of Pack Road and Colonel Talbot. It is unclear how much flow has been interrupted due to the draining of Pond A.

2. Clarification is required with respect to the water balance calculations. Specifically, the size of Area 01 and the differing assumptions as to the size of the pervious area in Area 01 and Area 02. We have concern that the post development infiltration calculations over-represent the amount that will actually infiltrate, which is of notably concern given the south-west corner of the site is a Significant Groundwater Recharge Area with Vulnerability Rating of 6.

Theme #1 – Water balance calculations

The water balance calculations require additional clarification. We observed the following inconsistencies in the pre and post development water balance calculations:

- Catchment Area 01 is referenced in size at 5.1 hectares; however, the total area used in the calculation in Appendix I is 117,051 m2 (11.7 hectares), and consequently, the calculated pre and post development infiltration volumes appear to be overstated.
- The post-development assumptions with respect to the pervious and impervious surface area differ between Area 01 and Area 02. Area 01 is assumed to be 73.9% pervious while Area 02 is assumed to be 40% pervious. The site plan for the development appears to have a similar level

of development in both areas, and so the percent of area that is pervious in Area 01 appears to be overstated.

The net impact from these two assumptions is the post-development infiltration rates may be overstated by as much as 65%. Given that Conservation Ontario Guidelines suggest a target of 80% of predevelopment infiltration be maintained in post development conditions, additional mitigation measures may be required to achieve the 80% target. Lastly, we note that the south-western portion of the site includes a Significant Groundwater Recharge Area with Vulnerability Rating of 6, and as such, it is important to maximize the level of groundwater infiltration relative to pre-development conditions in order to protect the Highly Vulnerable Aquifer as a groundwater resource.

Recommendation 1: The assumption set within the water balance assessment need to be revisited to ensure their correctness. Should the recalculated groundwater infiltration rates be lower than currently estimated, additional mitigation techniques beyond those currently recommended should be employed such that the post-development infiltration rate is no less than 80% of the pre-development infiltration rates.

Theme #3 – Groundwater levels

We note that the groundwater levels were measured in January, which is the seasonal low point for precipitation in the area; three of the four monitoring wells were dry when measured. As such, the report may not have correctly characterized the hydraulic conditions on site.

Recommendation 2: Additional groundwater measurements should be obtained during periods of increased precipitation (Spring and Fall) to assess seasonal variations in groundwater levels and the near surface hydraulic conditions.

Theme #4 – Wetland features

The report noted that the three wetland features present on site were potentially connected to the pond located at 6499 Pack Road. Based on the site design, these three wetland features will not exist post development.

Recommendation 3: Investigate the feasibility of creating offsetting wetland areas to compensate for the three wetland features that will be lost with this development. As the existing wetland features are potentially connected to the pond at 6499 Pack Road, that area could be suitable for wetland relocation.

THEME #2 – Relocation of Significant Wildlife Habitat

EEPAC reminds staff and the proponent that development will not be permitted within the SWH unless it can be demonstrated that there will be no negative impacts on the feature or its ecological function (OMNRF 2014). The ELC ecosite that contains the terrestrial crayfish burrow(s) is a SWH. (SWHMiST 2014, p. 391)

It is clear from the SLSR that terrestrial crayfish are well established around the MAM2-2 on the subject lands. The adjacent FOD / Shallow Water ecosite was also identified as SWH. EEPAC has mixed opinions regarding the relocation of Significant Wildlife Habitat. It is only aware of one such case in London (905 Sarnia Road). This has taken place in the last year and EEPAC has not received any reports on the success or failure of the relocation. Hence our caution.

EEPAC notes from the Geotechnical and Hydrogeological Assessment by exp that the soil conditions vary on the site and that no investigation of the soils around the SWH took place. Therefore, it is unclear as to how this area maintained sufficient moisture to maintain such a large colony of terrestrial crayfish.

> *Surface water that is directed toward crayfish habitat has the potential to have adverse effects as this may result in flooding of burrows, unstable water levels within burrows and introduction of contaminants into the crayfish habitat (e.g., urban and industrial pollution, road runoff). Additionally, surface water has the potential to introduce sediments into crayfish habitat. If the clay and silty-clay soils that they require become covered with other sediments, the soils may not be suitable for burrowing or constructing chimneys. (SWHMiST 2014, p. 391)*
>
> *Development on adjacent land also has the potential to affect populations of burrowing crayfish. Activities that result in a change in the water table (drainage works, flow diversions, piping watercourses, etc.) may either result in flooding of burrows or making the soils too dry to support crayfish. Higher water tables may result in asphyxiation of crayfish if the burrow becomes filled with water too near the surface. Crayfish may also be forced to move to adjacent areas where the water table is lower to obtain the correct mix of air and water within the burrow. If the water table declines or if areas are drained/dewatered, the soil may become too hard and dry for the crayfish to burrow in it, or they may have to burrow an excessive depth to reach water. (ibid.)*
>
> *Development within habitat for the Meadow and Chimney Crayfish will result in direct loss of their habitat and possibly extirpation of the local population. (SWHMiST 2014, p. 390).*

Hence the following recommendation regarding the proposed relocation.

***Recommendation 4*:** Detailed study (including a water balance study) of the soil and groundwater conditions be undertaken. If a suitable site for relocation is not found on the subject lands, alternative sites outside the subject lands must be used. These could include, but not be limited to, the ESA adjacent to Mather Stream on the west side of Col. Talbot Road (owned by the owner of the lands containing Pond B), or the OS1 lands in the Talbot Village development to the north.

EEPAC cautions that the lands to the north may not be suitable as the Beacon report to the City (*EIS Performance Evaluation, p. 30*) noted that there have been changes in community types in the Talbot Village wetland and dumping; introduction of trees, shrubs, ornamentals, food crops, mown grass, trails, bird feeders, mulch, flagstones, and trails. There is a paved path adjacent to this area as well.

Recommendation 5:

- **a.** At the new site surface water runoff needs to be directed away from potential crayfish burrows to avoid sedimentation that adversely affects the crayfish's ability to dig burrows. (SWHMiST 2014, p. 392)
- **b.** Suitable vegetation must be at the new site to provide forage for the crayfish.

Theme #5 – Species at Risk

Barn swallows were noted as foraging in the area. The consultants identified that it is possible that nesting sites would be found in buildings.

Recommendation 6*:* The breeding status of Barn Swallow and any use of the existing buildings/structures on site must be confirmed prior to any building/structure demolition or site development. (p. 27, SLSR). If nests are found, there is an MNRF protocol that must be followed.

Page 28 of the SLSR indicates that the regionally rare Common Evening Primrose was found on site. The consultant recommended it be moved late 2016 or early 2017. There is no information if this was done or to where the plants were moved.

Recommendation 7: The proponent report on what has happened to this plant. If the plants are still on site, a suitable location for relocation be identified with the advice of a City Ecologist and the firm used in the SLSR. The plants should only be moved when the likelihood of re-rooting is highest.

Theme #6 – Site Plan / Development Agreements

Recommendation 8: The site plan and design elements include:

a. If Phase 2 starts more than three years after the date of the draft SLSR, the proponent be required to submit a new SLSR to determine if there have been any changes to the evaluation of the woodland.
b. There be an EIS to determine the buffer distance from the FOD/Shallow Water ecosite which was identified as Significant Wildlife Habitat.
c. In the Phase 2 development, a formal bat habitat assessment be required including bat exit surveys, and any cavity trees be preserved in the woodland. (page 25 and 27, SLSR)
d. A tree retention report be required.
e. The proponent be required to monitor the relocated SWH for three years and report in the spring and fall to a City Ecologist as to the restoration of the terrestrial crayfish and Western Chorus Frog populations.
f. If the wetland is relocated on this site, phase 2 might have a negative impact on the new feature, including impacts caused by changes to or piping of the tributaries on site. A water balance study must be part of the monitoring program.
g. Any new interference with watercourses or wetlands will result in the forfeiture of any securities and charges under Section 28 of the Conservation Authorities Act.

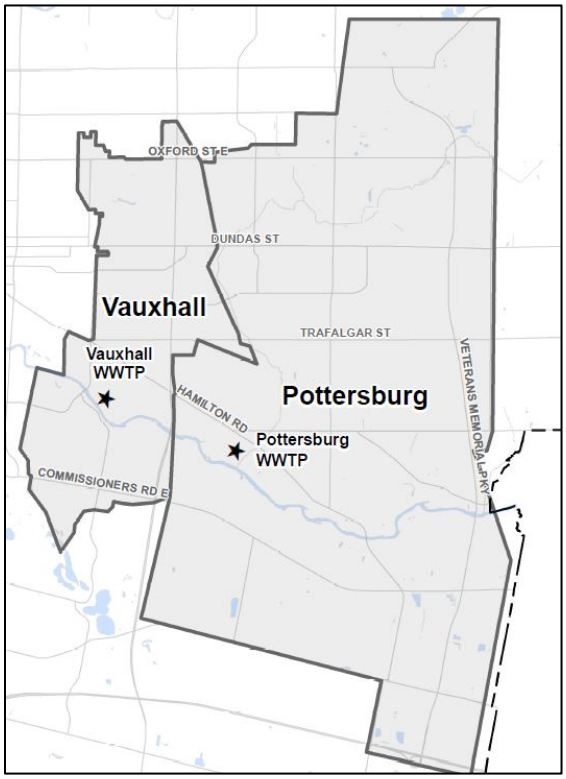
Theme #7 - Dewatering Activity

With respect to the recommendation regarding sediment control for dewatering systems, we would reinforce that need given the proximity of nearby surface water channels that are connected ponds and wetlands located east of the site and are tributaries to Dingman Creek. We reference the City of London guidelines for Sediment and Erosion, which specifies that controls must be put in place to ensure adequate protection of water quality in open watercourses within the City's boundaries.

Schedule B Environmental Assessment
East London Servicing Study

PUBLIC INFORMATION CENTRE #2

The City of London (the City) is conducting a study to identify the preferred approach for managing future wastewater flows collected within the Vauxhall and Pottersburg sewersheds and treated at the Vauxhall and Pottersburg Wastewater Treatment Plants (WWTPs). The study will develop environmentally sound recommendations that reflect the current and future needs of the Vauxhall and Pottersburg sewersheds through a collaborative public and stakeholder consultation process. The study will follow the requirements for a Schedule B project under the Municipal Class Environmental Assessment (EA) process. The EA will serve to determine the preferred approach to address the current and future needs within each sewershed to improve WWTP performance; speak to population growth; address future effluent quality issues at the WWTPs; mitigate the effects of basement flooding; and, improve operational flexibility.



The second and final Public Information Centre (PIC) is being held to present information on the preferred alternative solutions for the WWTPs and collection systems within the two sewersheds prior to confirming the final solutions for the study. You are invited to learn more about the preferred alternative solutions

as well as ask questions and provide input. Project information will be available for viewing, and members of the City and their consultant, CH2M, will be available to discuss the information and answer questions.

Date: Wednesday, January 31, 2018

Time: 6:00 PM to 8:00 PM

Location: Tweedsmuir Public School
349 Tweedsmuir Avenue, London ON

Public and agency consultation is a key component of the Class EA process. All those with an interest in the project are encouraged to attend the PIC to provide input into the study. If you are unable to attend the PIC, and wish to provide feedback, you can do so by contacting:

Kirby Oudekerk, P.Eng.
Environmental Services Engineer
Wastewater Treatment Operations
City of London
109 Greenside Ave.
London, ON N6J 2X5
Phone: (519) 471-1537
Email: koudeker@london.ca

Tom Mahood, P.Eng.
Environmental Assessment Lead
CH2M HILL Canada Limited
72 Victoria St. S
Kitchener, ON N2G 4Y9
Phone: (519) 579-3000 ext. 73241
Email: tom.mahood@ch2m.com

The information presented at the PIC will be available on the City's Website after January 31, 2018: https://www.london.ca/ELSS