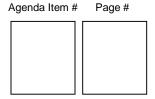


TO:	CHAIR AND MEMBERS PLANNING & ENVIRONMENT COMMITTEE
FROM:	G. KOTSIFAS, P.ENG. MANAGING DIRECTOR, DEVELOPMENT & COMPLIANCE SERVICES & CHIEF BUILDING OFFICIAL
SUBJECT:	APPEALS TO THE ONTARIO MUNICIPAL BOARD APPLICANT/APPELLANT: SOUTHSIDE CONSTRUCTION MANAGEMENT LIMITED. 704 AND 706 BOLER ROAD MEETING ON JUNE 20, 2016

RECOMMENDATION

That, on the recommendation of the Senior Planner, Development Planning, in response to appeals to the Ontario Municipal Board, dated March 11, 2016, submitted by Alan Patton of Patton Cormier Ferreira on behalf of Southside Construction Management Limited (attached Schedule "C") on the basis of a non-decision by the City of London Approval Authority within 180 days relating to a draft plan of subdivision application; and a non-decision by Municipal Council within 120 days relating to a zoning by-law amendment application concerning lands located at 704 and 706 Boler Road:

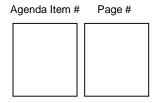
- a) the Ontario Municipal Board BE ADVISED that Municipal Council does not support draft approval of the proposed plan of subdivision, submitted by Southside Construction Management Limited (File No. 39T-15503), which shows 44 single detached lots, one (1) open space block, and one (1) low density block, all served by an extension of Optimist Park Drive, an extension of Apricot Drive, and one (1) new local street, for the following reasons:
 - i) An accepted Environmental Impact Study is required in order to demonstrate that there will be no negative impacts on the natural features or their ecological functions;
 - ii) Without an accepted EIS to confirm the limits of development and identify mitigation measures, it is not possible to recommend red-line revisions to the proposed draft plan, and conditions of draft approval cannot be formulated;
 - iii) The proposed plan of subdivision is not consistent with the Natural Heritage policies in Section 15 of the Official Plan;
 - iv) The proposed plan of subdivision is not consistent with the provisions in Sections 1.6 and 2.1 of the Provincial Policy Statement, and Section 3 of the Planning Act; and
 - v) The plan, as proposed, does not implement the Urban Design principles in Section 11 of the Official Plan or the Placemaking Guidelines adopted pursuant to the Section 19.2 of the Official Plan.
- b) The Ontario Municipal Board **BE ADVISED** that Municipal Council **RECOMMENDS** that the request to amend Zoning By-law No. Z.-1 to change the zoning of the subject property **FROM** a Urban Reserve (UR1) Zone that permits existing uses **TO** a Residential R1 (R1-9) Zone, to permit single detached dwellings with a minimum lot frontage of 16.0 metres, a minimum lot area of 690m², a Residential R6 (R6-5) Zone, to permit medium density development in various forms of cluster housing from single detached dwellings to townhouses and apartments at a maximum density of 35 units per hectare, and an Open Space (OS5) Zone, to permit activity limited to a range of low-impact uses associated with passive recreation, conservation and ecosystem management **BE REFUSED** for the following reasons:

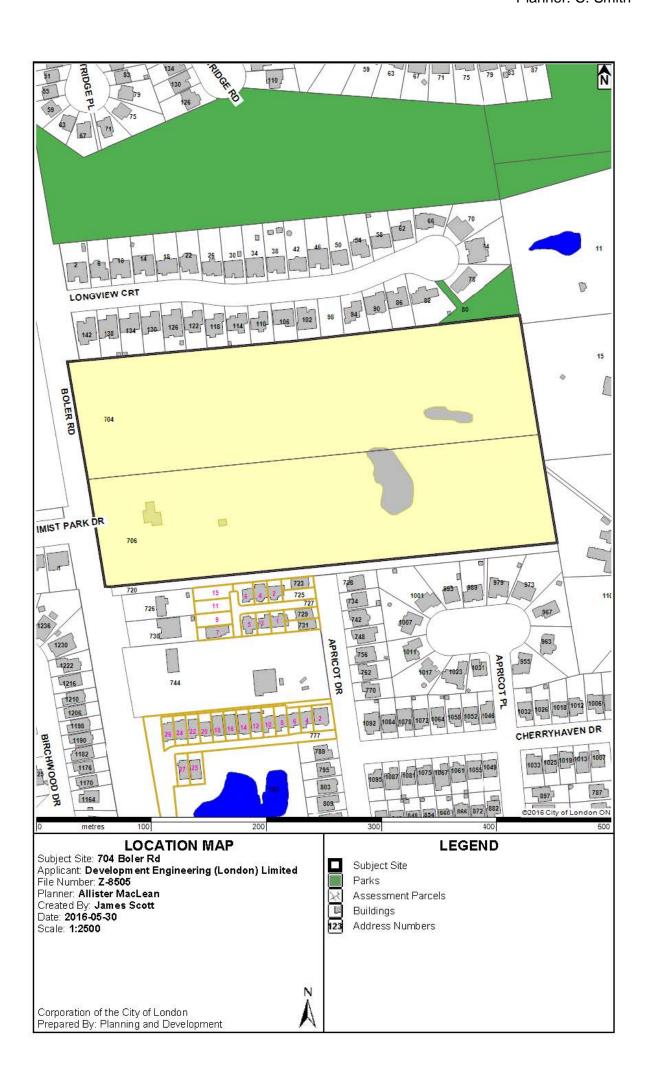


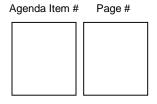
- Without an accepted EIS to confirm the limits of development and the zone boundaries, it is not possible to recommend approval of the requested zoning bylaw amendment; and
- Due to uncertainty of the development limit, it cannot be demonstrated that the requested zoning conforms with the Official Plan and is consistent with Provincial Policy Statement.
- c) The Ontario Municipal Board BE ADVISED that Municipal Council RECOMMENDS that the Official Plan BE AMENDED on a portion of the subject lands attached hereto as Appendix "A" to:
 - i) Amend Schedule "A" Land Use to change the designation **FROM** Low Density Residential **TO** Open Space and Environmental Review.
 - ii) Amend Schedule B-1- Natural Heritage Features, **TO DELETE** Unevaluated Vegetation Patch and **TO ADD** "Significant Woodlands" and "Locally Significant Wetlands".
- d) The Ontario Municipal Board **BE ADVISED** that Municipal Council **RECOMMENDS** that the Zoning By-law No. Z.-1 **BE AMENDED** as attached as Appendix "B", in conformity with the Official Plan as amended in part (c) above **FROM** an Urban Reserve (UR1) Zone which permits existing uses **TO** an Open Space (OS5) Zone which permits conservation lands and passive recreational uses, including City trail systems and an Environmental Review (ER) Zone which is intended to remain in a natural condition until the environmental significance is determined through the completion of more detailed environmental studies.
- e) That the City Solicitor BE DIRECTED to provide legal and planning or expert witness representation at the Ontario Municipal Board hearing in support of Municipal Council's position.

RATIONALE

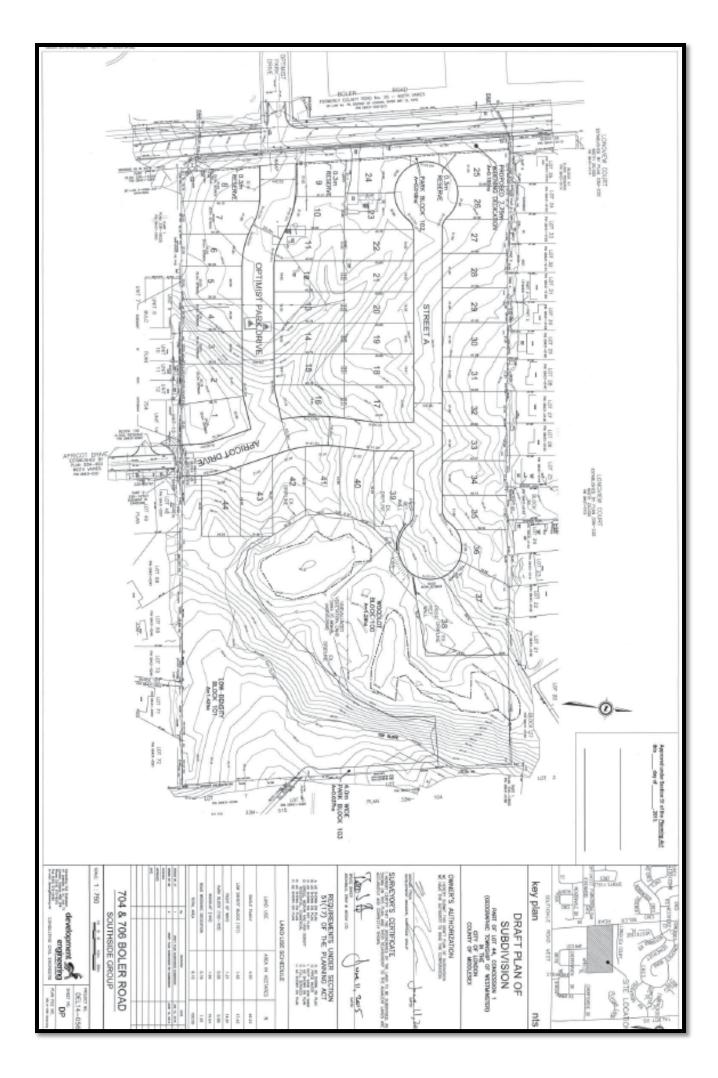
- 1. The recommended amendments are consistent with the policies of the *Provincial Policy Statement*, 2014
- 2. The recommended amendments are consistent with the Natural Heritage policies of the City of London Official Plan.
- 3. The recommended amendments will protect the existing identified Natural Heritage Features (Significant Woodlands, Significant Wildlife Habitat, Locally Significant Wetlands)
- 4. The recommended amendments will protect the woodland as identified in the EIS as a Significant Woodland.
- 5. The recommended amendments protects the full extent of the woodland as identified through the scoping meeting held in March 2014 and recorded in the Environmental Impact Study Issues Summary Checklist Report prior to clearing as Significant Woodland.
- 6. The recommended amendments will require that further environmental studies are completed to the satisfaction of the City prior to any future development.

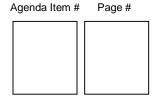






Draft Plan of Subdivision Submitted by Applicant





PURPOSE AND EFFECT OF RECOMMENDED ACTION

This report has been prepared to establish a Municipal Council position in response to appeals from Southside Construction Management Limited on a lack of decision by Council regarding a Zoning By-law amendment application; and lack of decision by the Approval Authority regarding an application for subdivision approval. It is also the purpose of this report to seek direction from Municipal Council to support its position through legal, planning, and environmental representation before the Ontario Municipal Board.

Since a public meeting has not previously been held with respect to the Plan of Subdivision and Zoning By-law amendment applications, this matter has been advertised to provide an opportunity for input from members of the public. However, since the application is under appeal to the Ontario Municipal Board, this is not a statutory public meeting under the *Planning Act.* Any comments received at the public meeting may be provided to the Ontario Municipal Board, together with the position of Municipal Council.

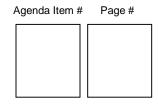
The recommendation in clause (a) serves to advise Ontario Municipal Board that Council does not support draft approval as the proposed subdivision does not conform to the Provincial Policy Statement, the City of London Official Plan and is premature pending the completion and acceptance of an Environmental Impact Study establishing the development limit for residential uses.

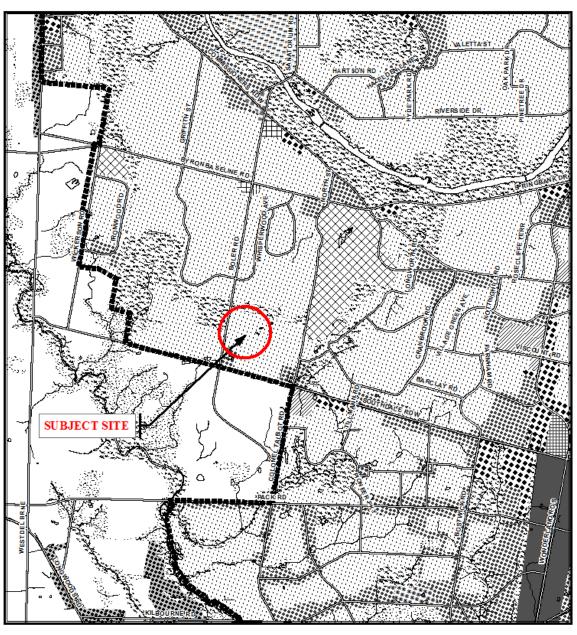
The recommendation outlined in clause (b) is intended to advise the Ontario Municipal Board that Council recommends the refusal of the proposed Zoning By-law Amendments as the proposed zoning is premature pending the completion and acceptance of an Environmental Impact Study that establishes development limits, and does not meet the intent of the City of London Official Plan.

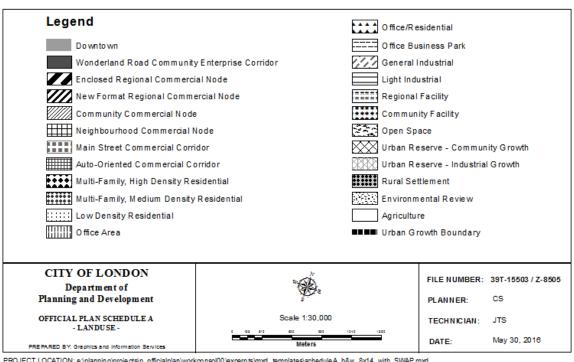
The recommendation in clause (c) is intended to advise the Ontario Municipal Board that Council recommends that the lands containing the significant natural heritage features be redesignated from Low Density Residential to Open Space, Environmental Review on Schedule "A" Land Use and Significant Woodland and Locally Significant Wetland on Schedule "B-1" Natural Heritage Features in the City of London Official Plan. The designations will protect the existing significant natural heritage features and protect the feature from future development.

The recommendation in clause (d) is intended to advise the Ontario Municipal Board that Council recommends that the zoning on the lands be amended from Urban Reserve Urban Reserve (UR1) Zone which permits existing uses to an Open Space (OS5) Zone which permits conservation lands and passive recreational uses and an Environmental Review (ER) Zone which is intended to remain in a natural condition until the environmental significance is determined through the completion of more detailed environmental studies.

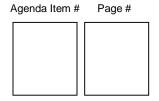
As a result of the appeal, jurisdiction of the Approval Authority and Municipal Council to make decisions has been removed and the matter is now before the Board. A hearing date has not yet been scheduled.

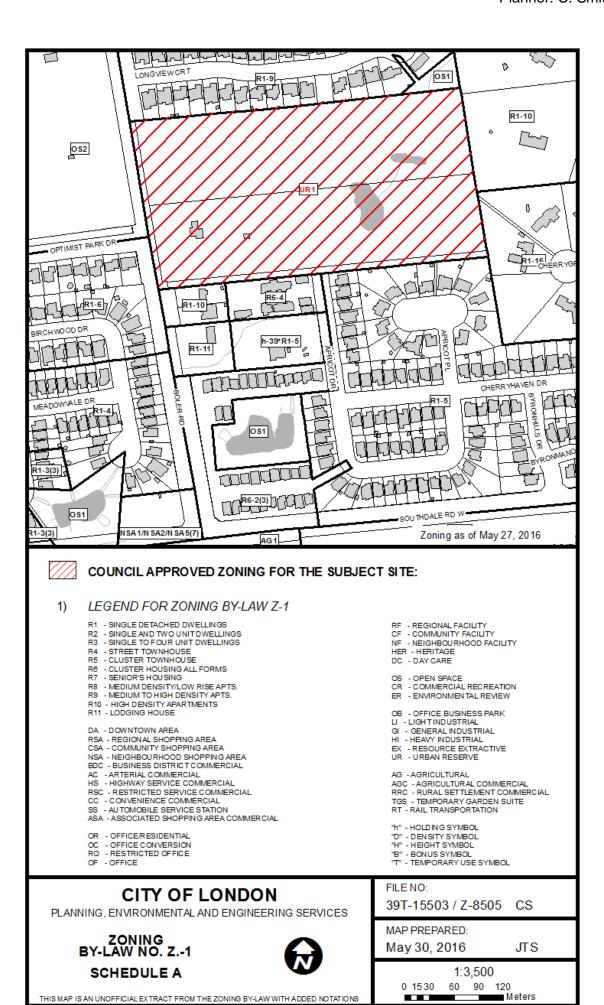


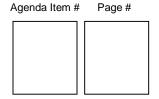




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APPLICATION

Application Accepted:July 7, 2015Applicant:Southside Construction

Management Limited

REQUESTED ACTION:

Draft Plan of Subdivision Application: Consideration of draft plan of subdivision with 44 single detached lots, one (1) open space block, and one (1) low density block, all served by an extension of Optimist Park Drive, an extension of Apricot Drive, and one (1) new local street.

Zoning By-law Amendment Application: An amendment to Zoning By-law Z.-1 to change the zoning of the lands **from** an Urban Reserve (UR1) Zone **to**: a Residential R1 (R1-9) Zone, to permit single detached dwellings with a minimum lot frontage of 16.0 metres, a minimum lot area of 690m²; a Residential R6 (R6-5) Zone, to permit medium density development in various forms of cluster housing from single detached dwellings to townhouses and apartments at a maximum density of 35 units per hectare.; and an Open Space (OS5) Zone, to permit activity limited to a range of low-impact uses associated with passive recreation, conservation and ecosystem management. Development and site alteration is permitted only if it has been demonstrated through an appropriate study that there will be no negative impacts on the features and functions for which the area has been identified.

SIGNIFICANT DEPARTMENTAL/AGENCY AND PUBLIC COMMENTS

Comments have been received from municipal departments, public review agencies and members of the public in response to the notice of application. While some of the comments are detailed and technical in nature, they have been summarized below for the purpose of establishing a position in response to the appeals.

Environmental Ecological Planning Advisory Committee (EEPAC):

Key recommendation provided by EEPAC on August 2015 in response to the Environmental Impact Study, Slope Stability Report and Water Balance reports (full comments attached as Schedule "D").

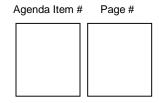
Wooded area previously identified as Significant Woodland needs to be re-established through planting and protected inside the development area. Amphibian studies previously performed are inadequate, new studies are needed to properly establish amphibian populations on site. Branches in some back yards are identified, tree drip line needs to be assessed again, and a minimum setback buffer of 10 metres beyond the drip line needs to be created.

Upper Thames River Conservation Authority (UTRCA):

Summarized comments provided by UTRCA on October 1, 2015 in response to the Environmental Impact Study, Slope Stability Report and Water Balance reports (full comments attached as Schedule "E").

The subject lands are regulated by the UTRCA in accordance with Ontario Regulation 157/06 made pursuant to Section 28 of the Conservation Authorities Act. The Regulation Limit is comprised of a series of wetland pockets The UTRCA has jurisdiction over lands within the regulated area and requires that landowners obtain written approval from the Authority prior to undertaking any site alteration or development within this area including filling, grading, construction, alteration to a watercourse and/or interference with a wetland.

There is a remnant valley slope on the site which is classified as a geotechnical constraint. Section 15.7.2 of the City of London's Official Plan stipulates that remnant valley slopes should be assessed through the community planning process and appropriate measures should be taken to address the constraint and the natural vegetation associated with these features.



File: OMB-39T-15503/Z-8505

Planner: C. Smith

Conclusion

Given all of the outstanding issues, the UTRCA is not in a position to offer conditions of draft plan approval. We recommend that the application be deferred to provide the applicant with an opportunity to address the noted concerns or alternatively be refused.

Environmental Parks and Planning Department (City's Ecologist) EP&P:

Summarized comments provided by E&PP on September 30, 2015 in response to the Environmental Impact Study, Slope Stability Report and Water Balance reports (full comments attached as Schedule "F").

Summary of Main Issues for the Environmental Impact Study

Based on the review of this file under the PPS (2014), City of London OP policies, and EMGs we recommend the following:

- 1) The remaining Significant Natural Features and Areas including the wetlands, woodlands, slopes (valleylands) for water balance and habitat area are required to be retained.
- 2) Restoration of the Significant Woodlands to their original extent prior to removal to restore SWH and Significant Woodlands.
- 3) Provide substantial buffers as calculated by the EMG section 5.0 to these Significant Natural Heritage Features and Areas as required to protect the Significant Natural Heritage Features and Areas, adjacent lands, and their ecological functions.
- 4) The MNRF should be contacted and involved in this file as a number of potential concerns have been identified that Biologic did not identify (as outlined below), including SWH, Significant Woodlands, potential PSW on the subject site, Significant Valleylands, and Endangered Species activity.

City of London Urban Design:

The City of London Urban Design provided the following comments by Memo dated October 21, 2015.

Urban design staff have reviewed the Final Proposal Report including the proposed draft plan of subdivision for the above noted application and provide the following comments. Revisions to the draft plan will be necessary in order to be consistent with the Official Plan as well as the Council approved Placemaking Guidelines:

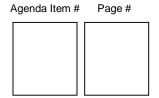
- Re-align Apricot Lane to include a window street along the woodland in order to better connect both physically and visually the existing woodland found on the eastern portion of the site.
- Re-align Apricot Lane to connect through block 36 to Longview Court in order to promote both vehicular and pedestrian connectivity among the greater community.
- Ensure any development along the Boler Road frontage is oriented towards the street as noise attenuation fencing along aterial roads is strongly discouraged, as per Official Plan policy. In order to avoid noise walls, consider including a medium or low density block along the Boler Road frontage that will allow for street oriented development.

Urban design staff are requesting that a holding provision be in place for all lots and/or blocks along the Boler Road frontage to ensure street oriented development.

Public Comments:

Comments were received from 15 area residents in response to the proposed draft plan and zoning by-law amendment, and can be generally summarized as follows:

- Support for the proposed design of the subdivision provided no access to Longview Court is proposed.
- Concerns regarding the scale and form of development on the proposed Residential R6 (R6-5) Zone block.
- Concerns about environmental impact on the natural ravines, removal of trees and vegetation, and loss of wildlife habitat.



BACKGROUND

On August 13, 2014 a pre consultation proposal summary meeting was held with the City, the applicant and commenting agencies. On August 28, 2014 a record of pre consultation was provided to the applicant.

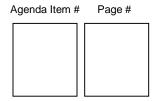
In the record of pre consultation the following items were required to be submitted as part of a complete application package:

- Update the Initial Proposal Report to reflect the comments that have been identified in this Record of Consultation, in accordance with the requirements prescribed in the File Manager Reference Manual.
- FPR is to include updated water, sanitary, stormwater, transportation and development finance components, addressing comments identified in the Record of Consultation (Note: applicant/consultant should undertake off-line discussions with contacts prior to completing the FPR, to ensure all servicing requirements are suitably addressed)
- Planning Evaluation, which addresses relevant OP policies including Urban Design policies, Placemaking Guidelines, Subdivision Review Criteria, and Noise Attenuation Policies for Residential Land Adjacent to Arterial Roads.
- Sanitary Drainage Plan
- Conceptual Stormwater Management Report
- Environmental Impact Study, completed in accordance with the approved ISR and Section 15.5 of the Official Plan
- Archeological Study
- Hydrogeological Study
- Geotechnical Study

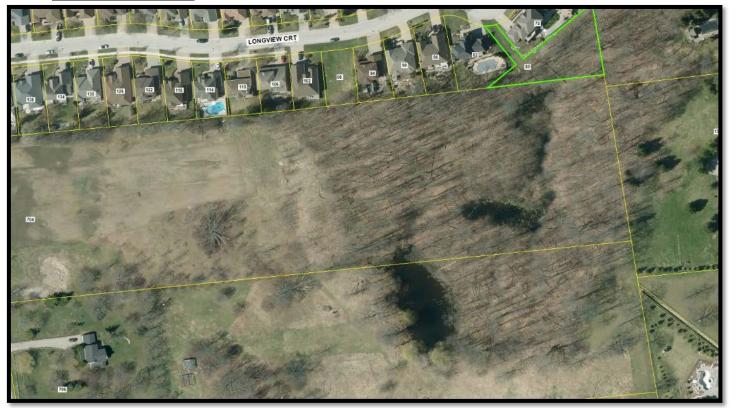
On January 16, 2015 the applicant submitted an application for Draft Plan of Subdivision approval and Zoning By-law Amendment. Staff reviewed the submitted materials and returned the application as incomplete on February 2, 2016 noting the following reasons for deeming the application incomplete:

- 1. Sanitary Drainage The anticipated population within each catchment area was not provided on the plan.
- 2. Draft Plan Block numbers are missing from the draft plan.
- 3. Final Proposal Report As per the Proposal Review Summary Record of Consultation, the FPR is missing a planning evaluation on how the proposal addresses the Placemaking Guidelines in accordance with Section 19.2.2 x) and 19.6.1 vii) of the Official Plan.
- 4. Parks Planning As per the March 31, 2014 Issues Summary Checklist Report and the Proposal Review Summary (August 28, 2014), a Subject Lands Status Report was not completed and reviewed prior to the submission of the Environmental Impact Study. As such, the EIS is incomplete.

Prior to the applicant's resubmitted application for Draft Plan of Subdivision approval and Zoning By-law Amendment the applicant undertook site alterations which included demolition of the residential dwelling and the removal of trees from the property. The below air photos from April 2014 to April 2015 show the extent of the works.

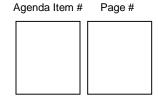


Arial Photo April 2014



Arial Photo April 2015





File: OMB-39T-15503/Z-8505

Planner: C. Smith

On June 12, 2015 the applicant submitted a new application for Draft Plan of Subdivision approval and Zoning By-law Amendment including the following reports/studies: Urban Design Brief, Issues Scoping Report, Environmental Impact Study, Hydrogeological Assessment, Geotechnical Investigation, Slope Assessment, Water Balance Assessment, Review of Surface Water Conditions, Stage 1, 2, 3 and 4 Archaeological Assessment, Final Proposal Report and Zoning Overlay.

Staff reviewed and accepted the applications as complete on July 7, 2015.

On July 13, 2015 the notice of application was circulated to all commenting agencies and all property owners within 120m of the property. The notice of application was advertised in the Londoner on July 23, 2015. Following the circulation period City Staff forwarded all comments to the applicant on October 21, 2015 including comments from UTRCA, EEPAC and the City's Ecologist (Schedules D, E, and F).

On November 26, 2015, the applicant submitted a detailed response letter from Biologic Inc. dated November 23, 2016, an updated Hydrogeological and Water Balance Assessment by exp Services Inc. dated November 2015, and response letters from Zelinka Priamo Ltd. dated November 20, 2015 addressing Environmental Parks and Planning and Urban Design comments.

Through the detailed review process of the additional materials, UTRCA and the City's Ecologist had noted additional concerns. A meeting was held on February 16, 2016 with the applicant, the applicant's Solicitor and Ecologist, City staff including the City Ecologist, Solicitor, Planners and the UTRCA's Ecologist and Planners. The intent of the meeting was to discuss the Natural Heritage issues and to seek resolution to move forward with the application. Resulting from the meeting, Biologic Inc. submitted a further letter dated February 17, 2016 addressing their Provincial Policy Statement evaluation.

On March 4, 2016 the City of London Environmental and Parks Planning (E&PP) and UTRCA provided detailed response to all the subsequent materials submitted by the applicant as listed above. A summary of the comments are provided below:

UTRCA:

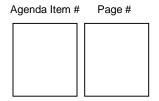
"This report (Hydrogeological and Water Balance, Nov 2015, added) does not adequately address the natural heritage concerns on the site. The UTRCA provided detailed comments on October 1, 2015 regarding the previous hydrogeologic submission and only a high level review has been completed at this time which has confirmed that the analysis still does not meet our submission requirements..." and

"In conclusion, the UTRCA requests that the applicant provide a written response to address the ecological concerns that were detailed in the Conservation Authority's October 1, 2015 correspondence as well as those noted in this letter."

City of London E&PP:

"From our review, E&PP have found that BioLogic's responses have not addressed the comments provided by E&PP. E&PP original comments still stand and are required to be fully addressed in conjunction with the additional comments provided in this E&PP memo. BioLogic's statement that their EIS findings and conclusions remain the same has clearly not addressed significant outstanding issues to identify natural heritage features and functions and appropriate buffers to the natural heritage features to protect these features and their ecological functions over the long term in accordance with Provincial Policy Statement (PPS 2014), City of London Official Plan (OP) policies, and the City of London Environmental Management Guidelines (EMG)."

On March 12, 2016, the City's Clerk' Office received appeals to the Ontario Municipal Board, dated March 11, 2016 submitted by Alan Patton of Patton Cormier Ferreira on behalf of Southside Construction Management Limited on the basis of a non-decision by the City of London Approval Authority within 180 days relating to a draft plan of subdivision application; and a non-decision by Municipal Council within 120 days relating to a zoning by-law amendment application concerning lands located at 704 and 706 Boler Road.



ANALYSIS

Provincial Policy Statement PPS (2014)

Under Section 3 of the *Planning Act*, decisions of Municipal Councils and approval authorities must be consistent with the policy statements issues under subsection (1) that are in effect on the date of the decision. A decision to approve the proposed plan of subdivision would not be consistent with the Provincial Policy Statement (PPS) and therefore cannot be supported by Council and the Approval Authority at this time.

Section 2.1 of the PPS requires the long term protection of natural heritage features and areas. The plan of subdivision, as proposed, does not protect the natural heritage features and functions that have been identified as significant in the Official Plan and the EIS submitted with the application. The PPS clearly states that development and site alteration shall not be permitted in areas of natural heritage significance unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions. This requirement has not been satisfied and the proposed plan of subdivision cannot be approved in its current form.

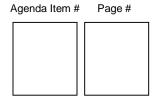
The recommended Official Plan and Zoning By-law amendment is consistent with the PPS and will ensure that no negative impacts occur on the identified Natural Heritage system.

City of London Official Plan

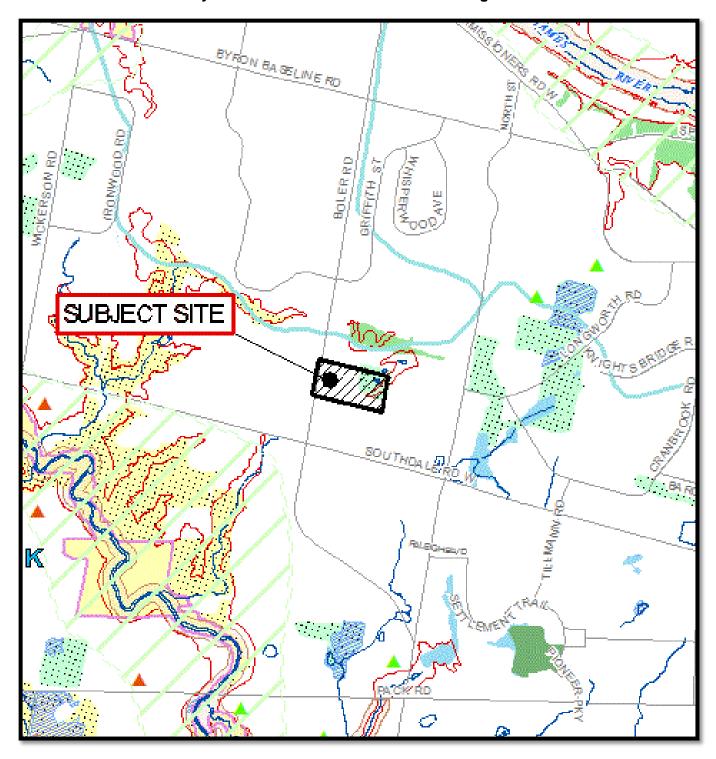
Section 19.6 of the Official Plan provides policies to guide the review and evaluation for plans of subdivision. These policies include criteria which require the plan to be consistent with the objectives and policies of the Official Plan. Specific policies under Section 19.6.1(x) states that the Natural Heritage System will be protected from any negative impacts associated with the plan of subdivision. Environmental Impact Studies are required to be completed in accordance with Section 15.5.1(ii), in consultation with relevant public agencies, prior to approval of a zoning by-law amendment and subdivision application.

As the Environmental Impact Study submitted by the applicant has not yet been accepted by the City, the application for draft plan of subdivision is unable to satisfy the Official Plan criteria, and as such the proposed plan is not consistent with the Natural Heritage policies of the Official Plan. The plan, as proposed, also does not implement the Urban Design Principles in Section 11.1.1 of the Official Plan, or the Placemaking Guidelines adopted pursuant to Section 19.2 of the Official Plan.

City of London Official Plan Schedule B1 - Natural Heritage Features, shows the property containing an Unevaluated Vegetation Patch and Maximum Hazard Lines (see attached). Staff recommend that Council request the Ontario Municipal Board to amend the Official Plan from the Low Density Residential designation to an Space Open Space, Environmental Review on Schedule "A" Land Use and Significant Woodland and Locally Significant Wetland on Schedule "B-1" Natural Heritage Features designation to ensure that the identified Natural Heritage system is protected and evaluated prior to any future development.



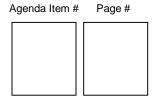
Schedule B1 to the City of London Official Plan- Natural Heritage Features



City of London Zoning By-law Z.-1

The lands are zoned Urban Reserve (UR1). The intent of the Urban Reserve Zone is to protect large tracts of land from premature subdivision and development in order to provide for future comprehensive development on those lands. The proposed Draft Plan of Subdivision and Zoning By-law Amendment to permit residential development prior to the completion and acceptance of the required EIS is premature and does not provide for comprehensive development of the lands.

Based on comments submitted to date it is recommended that Council request the Ontario Municipal Board to amend the existing Urban Reserve (UR1) Zone to Open Space (OS5) Zone which permits conservation lands and passive recreational uses, including City trail systems, an



File: OMB-39T-15503/Z-8505

Planner: C. Smith

Environmental Review (ER) Zone which is intended to remain in a natural condition until the environmental significance is determined through the completion of more detailed environmental studies.

The recommend zoning amendment will protect the Natural Heritage System and will require the completion and acceptance of an EIS that identifies and protects the environmentally significant features.

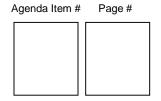
SUMMARY AND CONCLUSION

The appeals from Southside Construction Management Limited are in response to the failure of Municipal Council and the Approval Authority to make decisions on applications for Zoning Bylaw amendments and draft plan of subdivision approval within the statutory periods prescribed in the Planning Act. As a result of the appeals, the authority to decide on the applications now rests with the Ontario Municipal Board.

An accepted Environmental Impact Study is required to be completed in order to demonstrate that there will be no negative impacts on the natural features or their ecological functions. The EIS provides mitigation measures which include environmental buffers for protection of natural features. Without an accepted EIS to confirm the limits of development, it is not possible to consider the draft plan or any design related issues (placemaking), and conditions of draft approval cannot be formulated until such time as these issues have been resolved.

A review of comments received on the proposed plan of subdivision confirm that approval of the application in its current form would not be in conformity with the Official Plan or consistent with the Provincial Policy Statement. Approval of the proposed subdivision and zoning by-law amendment would be premature and not in the public interest.

Planning Staff recommend that Council inform the Ontario Municipal Board that it supports the proposed amendment to change the Official Plan designation on the property from Low Density Residential to to an Space Open Space, Environmental Review on Schedule "A" Land Use and Significant Woodland and Locally Significant Wetland on Schedule "B-1" Natural Heritage Features designation and to amend the Zoning By-law from Urban Reserve to Open Space and Environmental Review. The proposed amendments would protect the existing Natural Heritage Systems and will ensure that the required environmental studies are completed and accepted to the satisfaction of the City.



RECOMMENDED BY:	REVIEWED BY:
C. SMITH SENIOR PLANNER, DEVELOPMENT SERVICES	ALLISTER MACLEAN MANAGER, DEVELOPMENT PLANNING
CONCURRED BY:	SUBMITTED BY:
TERRY GRAWEY MCIP, RPP MANAGER, DEVELOPMENT SERVICES & PLANNING LIAISON	G. KOTSIFAS, P.ENG MANAGING DIRECTOR, DEVELOPMENT & COMPLIANCE SERVICES & CHIEF BUILDING OFFICIAL

CS/

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Page #

Appendix "A"

 $Bill\ No.\ (number\ to\ be\ inserted\ by\ Clerk's\ Office)$ 2016

By-law No. C.P.-1284-____

A by-law to amend the Official Plan for the City of London, 1989 relating to 704 and 706 Boler Road.

The Municipal Council of The Corporation of the City of London enacts as follows:

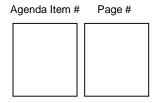
- 1. Amendment No. (to be inserted by Clerk's Office) to the Official Plan for the City of London Planning Area 1989, as contained in the text attached hereto and forming part of this by-law, is adopted.
- 2. This by-law shall come into effect in accordance with subsection 17(38) of the *Planning Act, R.S.O. 1990*, c.P.13.

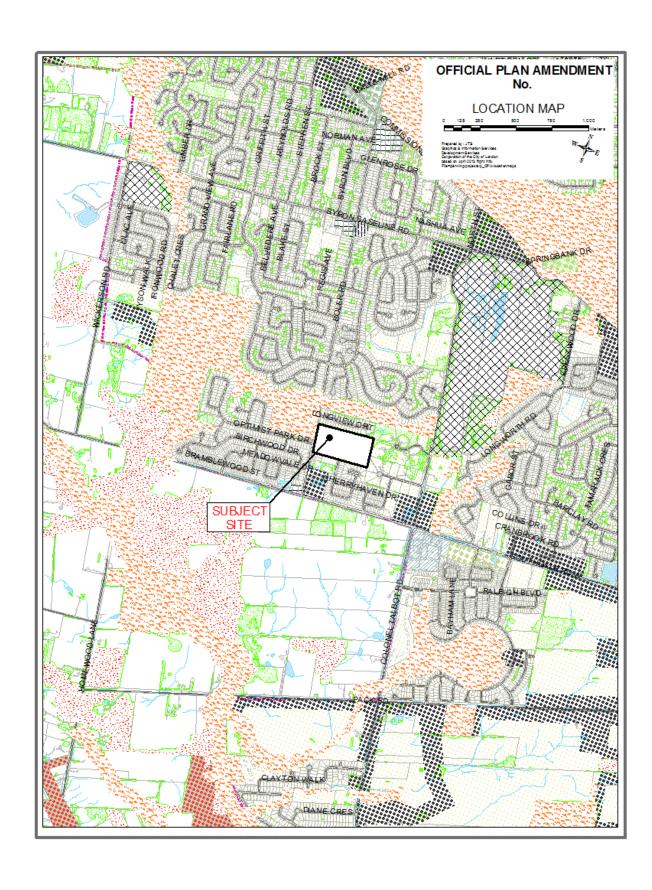
PASSED in Open Council on .

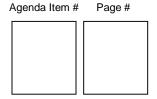
Matt Brown Mayor

Catharine Saunders City Clerk

First Reading – Second Reading -Third Reading -







AMENDMENT NO.

to the

OFFICIAL PLAN FOR THE CITY OF LONDON

A. <u>PURPOSE OF THIS AMENDMENT</u>

The purpose of this Amendment is:

- Amend Schedule "A" Land Use to change the designation on portions of lands located at 704 and 706 Boler Road from Low Density Residential to Open Space and Environmental Review.
- 2. Amend Schedule B-1- Natural Heritage Features to delete Unevaluated Vegetation Patch and to add "Significant Woodlands" and "Locally Significant Wetlands" on portions of lands located at 704 and 706 Boler Road.

B. <u>LOCATION OF THIS AMENDMENT</u>

This Amendment applies to potion of lands located at 704 and 706 Boler Road in the City of London.

C. <u>BASIS OF THE AMENDMENT</u>

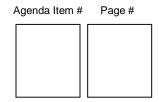
The recommended amendments are consistent with the policies of the Provincial Policy Statement, 2014 and with the Natural Heritage policies of the City of London Official Plan.

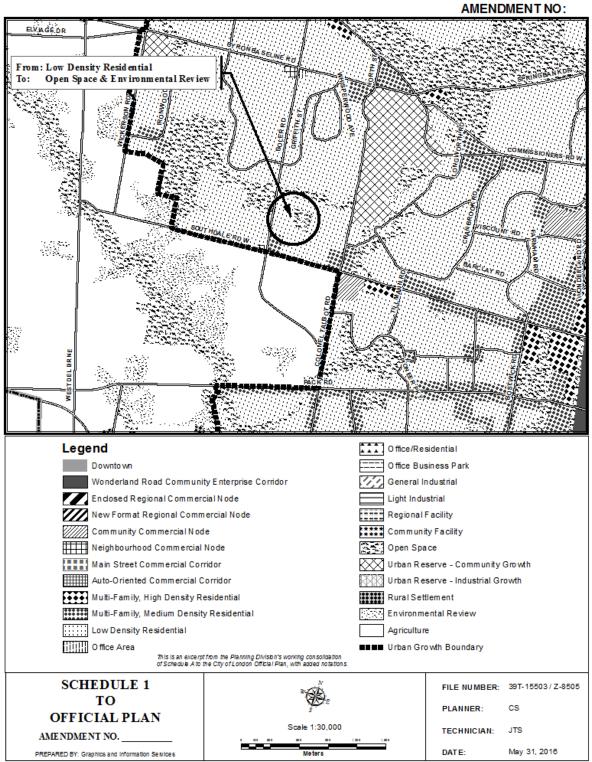
The proposed designations will protect the existing identified Natural Heritage Features (Significant Woodlands, Significant Wildlife Habitat, and Locally Significant Wetlands). The designations will ensure that further environmental studies are completed to the satisfaction of the City prior to consideration of any future land use changes.

D. <u>THE AMENDMENT</u>

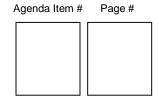
The Official Plan for the City of London is hereby amended as follows:

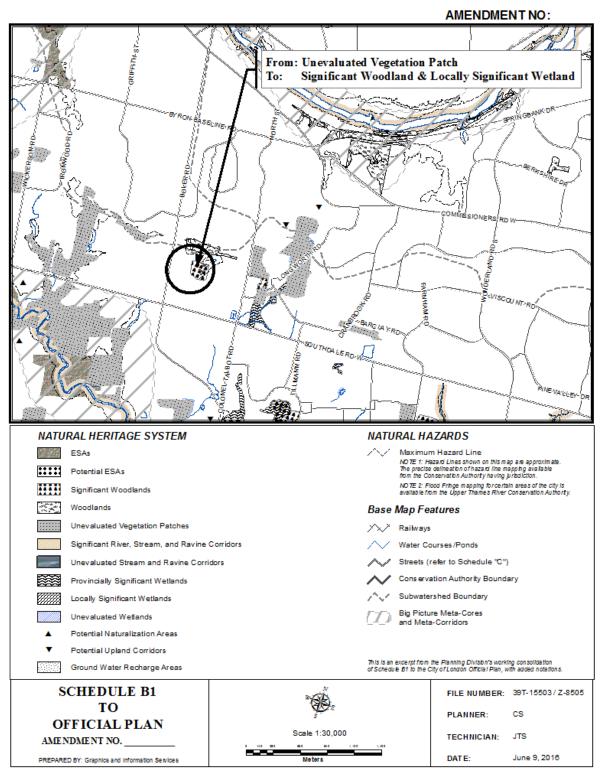
- 1. Amend Schedule "A", Land Use, to the Official Plan for the City of London Planning Area to change the designation on portions of lands located at 704 and 706 Boler Road from Low Density Residential to Open Space and Environmental Review.
- 2. Amend Schedule "B-1" Natural Heritage Features, to the Official Plan for the City of London Planning Area to delete Unevaluated Vegetation Patch and to add "Significant Woodlands" and "Locally Significant Wetlands" on portions of lands located at 704 and 706 Boler Road.



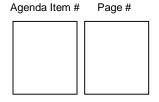


 $PROJECT\ LOCATION: e. \ planning \ projects \ p_official plan \ work consol 00 \ amendments \ oz-8310 \ mxds \ schedule \ A_b. \ w_8x11_with_SWAP. mxds \ amendments \ oz-8310 \ mxds \ schedule \ A_b. \ w_8x11_with_SWAP. mxds \ amendments \ oz-8310 \ mxds \$





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APPENDIX "B"

Bill No. (number to be inserted by Clerk's Office) 2016

By-law No. Z.-1-____

A by-law to amend By-law No. Z.-1 to rezone an area of land located at 704-706 Boler Road.

WHEREAS Southside Construction Management Limited has applied to rezone an area of land located at 704 and 706 Boler Road, as shown on the map attached to this bylaw, as set out below;

AND WHEREAS upon approval of Official Plan Amendment Number (number to be inserted by Clerk's Office) this rezoning will conform to the Official Plan;

THEREFORE the Municipal Council of The Corporation of the City of London enacts as follows:

Schedule "A" to By-law No. Z.-1 is amended by changing the zoning applicable to lands located at 704 and 706 Boler Road, as shown on the attached map, from an Urban Reserve (UR1) Zone to an Open Space (OS5) Zone and an Environmental Review (ER) Zone.

The inclusion in this By-law of imperial measure along with metric measure is for the purpose of convenience only and the metric measure governs in case of any discrepancy between the two measures.

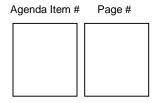
This By-law shall come into force and be deemed to come into force in accordance with section 34 of the *Planning Act, R.S.O. 1990, c. P.13*, either upon the date of the passage of this by-law or as otherwise provided by the said section.

PASSED in Open Council on .

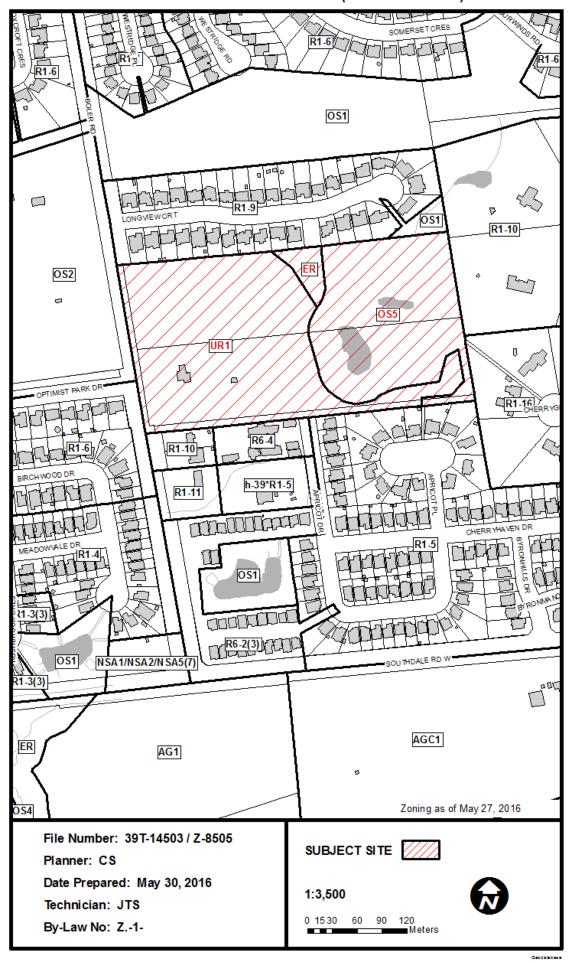
Matt Brown Mayor

Catharine Saunders City Clerk

First Reading - Second Reading - Third Reading -



AMENDMENT TO SCHEDULE "A" (BY-LAW NO. Z.-1)



Agenda Item #	Page #

Schedule "C"



Environment and Land Tribunals Ontario Ontario Municipal Board 655 Bay Street, Suite 1500 Toronto, Ontario M5G 1E5 TEL: (416) 212-6349 or Toll Free: 1-866-448-2248 FAX: (416) 326-5370 www.elto.gov.on.ca APPELLANT FORM (A1) PLANNING ACT

SUBMIT COMPLETED FORM TO MUNICIPALITY/APPROVAL AUTHORITY

Receipt Number (OMB Office Use Only)	

Date Stamp - Appeal Received by Municipality MAR 1 1 201c CITY CLERKS OFFICE

Part 1: Appeal Type (Please check only one box)

SUBJECT OF APPEAL	TYPE OF APPEAL	PLANNING ACT REFERENCE (SECTION)
Minor Variance	Appeal a decision	45(12)
7	Appeal a decision	53(19)
Consent/Severance	Appeal conditions imposed Appeal changed conditions	53(27)
	Failed to make a decision on the application within 90 days	53(14)
Zoning By-law or Zoning By-law Amendment	Appeal the passing of a Zoning By-law	34(19)
	Application for an amendment to the Zoning By-law – failed to make a decision on the application within 120 days	34(11)
	Application for an amendment to the Zoning By-law – refused by the municipality	
Interim Control By-law	Appeal the passing of an Interim Control By-law	38(4)
	Appeal a decision	17(24) or 17(36)
	Failed to make a decision on the plan within 180 days	17(40)
Official Plan or Official Plan Amendment	Application for an amendment to the Official Plan – failed to make a decision on the application within 180 days	22(7)
	Application for an amendment to the Official Plan – refused by the municipality	
	Appeal a decision	51(39)
Plan of Subdivision	Appeal conditions imposed	51(43) or 51(48)
	Failed to make a decision on the application within 180 days	51(34)

Part 2: Location Information	
704 - 706 Boler Road Address and/or Legal Description of property subject to the appeal:	
Municipality/Upper tier: City of London	
A1 Revised April 2010	Page 2 of 5

Agenda Item #	Page #

Part 3: Appellant Information		
First Name:	Last Name:	
Southside Construction Manageri Company Name or Association Name	nent Limited e (Association must be incorporated – include copy of l	etter of incorporation)
Professional Title (if applicable):		
E-mail Address:		
By providing	g an e-mail address you agree to receive communications from th	e OMB by e-mail.
Daytime Telephone #: 519-433-0	634 Alternate Telephone #:	
Fax #:		
Mailing Address: 75 Blackfriars Str	oot .	London
Street Address	Apt/Suite/Unit#	City/Town
Ontario		N6H 1K8
Province	Country (if not Canada)	Postal Code
Signature of Appellant:		Date:
(Signatu	re not required if the appeal is submitted by a law offic	e.)
	Ontario Municipal Board of any change of address of after they have been assigned.	or telephone number in writing. Please
	is form is collected under the provisions of the <i>Plannin</i> R.S.O. 1990, c. O. 28 as amended. After an appeal is	

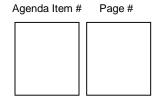
Part 4: Representative Informa	tion (if applicable)	
	ompany and/or individual(s) to represent me:	
First Name: Alan	Last Name: Patton	
Company Name: Patton Cormier	Ferreira	
Professional Title: Lawyer		
E-mail Address:apattoncormier@	pattoncormier.ca	AND
	an e-mail address you agree to receive communications from th	
	282 Alternate Telephone #:	
Fax #:519-432-7285		
Mailing Address:140 Fullarton St	reet 1512	London
Street Address	Apt/Suite/Unit#	City/Town
Ontario		N6A 5P2
Province	Country (if not Canada)	Postal Code
Signature of Appellant:		
		Date: <u>/ Va rch 11, 2016</u>
required by the Board's Rules of Pra	the appellant and are NOT a solicitor, please conf ctice and Procedure, to act on behalf of the appellan	irm that you have written authorization, a
required by the Board's Rules of Pre below.	ctice and Procedure, to act on behalf of the appellan	irm that you have written authorization, a it. Please confirm this by checking the bo
required by the Board's Rules of Pra below. I certify that I have written autho		t. Please confirm this by checking the bo

Agenda Item #	Page #

Part 5: Language and Accessibility
Please choose preferred language: English French
We are committed to providing services as set out in the Accessibility for Ontarians with Disabilities Act, 2005. If you have any accessibility needs, please contact our Accessibility Coordinator as soon as possible.
Part 6: Appeal Specific Information
 Provide specific information about what you are appealing. For example: Municipal File Number(s), By-law Number(s), Official Plan Number(s) or Subdivision Number(s):
(Please print)
The failure of the City of London's Approval Authority to make a decision on a draft plan of subdivision within 180 days after the Application was received by the Approval Authority.
 Outline the nature of your appeal and the reasons for your appeal. Be specific and provide land-use planning reasons (for example: the specific provisions, sections and/or policies of the Official Plan or By-law which are the subject of your appeal - if applicable). **If more space is required, please continue in Part 9 or attach a separate page.
(Please print) The subject land is designated Low Density Residential which permits a range of uses including single detached dwellings and cluster housing. Development of the subject property is infill. The property has frontage on an open public road and existing residential development abuts the property to north, south and east. There will be no unacceptable adverse impact on either the subject property or abutting property. The property is serviced or serviceable to municipal and provincial standards.
THE FOLLOWING SECTIONS (a&b) APPLY ONLY TO APPEALS OF ZONING BY-LAW AMENDMENTS UNDER SECTION 34(11) OF THE PLANNING ACT.
a) DATE APPLICATION SUBMITTED TO MUNICIPALITY: (If application submitted before January 1, 2007 please use the O1 'pre-Bill 51' form.) b) Provide a brief explanatory note regarding the proposal, which includes the existing zoning category, desired zoning category, the purpose of the desired zoning by-law change, and a description of the lands under appeal: "If more space is required, please continue in Part 9 or attach a separate page."
Part 7: Related Matters (if known)
The trial differ appears not yet incommon the manney and the manne
Are there other planning matters related to this appeal? YES NO (For example: A consent application connected to a variance application)
If yes, please provide OMB Reference Number(s) and/or Municipal File Number(s) in the box below:
(Please print)
Municipal File No. Z-8505, being an Application to amend the zoning of the subject lands from Urban Reserve to permit 44 single detached lots, a low density residential Block and an Open Space Block to preserve a woodlot and a small wetland area for passive recreation.

Agenda Item #	# Page #

,						
art 8: Scheduling Information						
ow many days do you estimate are needed for hearing this appeal?	half da	, [1 day	□ 2 da	vs T 3 d	iays
4 days 1 week More than 1 week – please specifi						
ow many expert witnesses and other witnesses do you expect to have a six (6)						-
escribe expert witness(es)' area of expertise (For example: land use pla Land Use Planner, Civil Engineers, Biologist, Hydrogeologist	nner, ar	chitect,	engine	er, etc.):		
to you believe this matter would benefit from mediation? Mediation is generally scheduled only when all parties agree to participate)	YES		NO	~		
o you believe this matter would benefit from a prehearing conference? Prehearing conferences are generally not scheduled for variances or consents)	YES		NO	7		
yes, why?						
art 9: Other Applicable Information **Attach a separate page if mo	re space	is req	uired.			
art 5. Other Approache miorination. Amount a separate page 11 mo						
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						_
						_
						_
					-	
art 10: Required Fee						
otal Fee Submitted: \$ 125.00						
	₽ .					
ayment Method: Certified cheque Money Order	S	olicitor's	s gener	al or trust	account ch	equ
The payment must be in Canadian funds, payable to the Min	nister of	Financ	e.			
Do not send cash.						
PLEASE ATTACH THE CERTIFIED CHEQUE/MONEY ORD	ER TO	THE FE	ONT C	F THIS F	ORM.	
- FLEAGE ATTACK THE CENTIFIED CHEGOEMONET ONL			.5.41			
11 Revised April 2010					Page	5 of



Schedule "D"

EEPAC Review of: 704 AND 706 BOLER ROAD

EIS, Slope Stability Report and Water Balance

Reviewers: B. Gibson, R. Trudeau

August 2015

KEY RECOMMENDATIONS

Wooded area previously identified as Significant Woodland needs to be reestablished through planting and protected inside the development area. Amphibian studies previously performed are inadequate, new studies are needed to properly establish amphibian populations on site. Branches in some back yards are identified, tree drip line needs to be assessed again, and a minimum setback buffer of 10 metres beyond the drip line needs to be created.

4.1.3: Topography

The study notes slope ranges of 16%-35%, while the exp slope stability study ranges from 6 horizontal to 1 vertical to 3 horizontal to 1 vertical. What is the relation to these numbers? Where on the site do these slopes occur?

Report references inclination of the slope to be 6H:1V to 3H:1H, but does not specify where the 6H:1V area is.

• EEPAC assumes it is the area between the woodland and the Block 101 area set aside for parkland/future development. It would have been helpful if the report was clearer. If this area had been included, the Slope Inclination Rating Value would increase from 0 to 16, changing the Slope Instability Rating to 38, which is Moderate Potential.

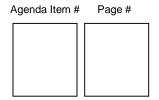
RECOMMENDATION:

Clarification and further detail of the slope positions is needed. This is related to further clarification and detail needed for swale positions and site grading (see below) as well as the Slope Instability Rating.

EEPAC also questions if the photographs are correctly labelled.

Photograph 1:

- The placement of the trees to the right in the picture looks more like the viewer is looking west, given the long vista to the houses in the distance. If the viewer were looking south from Longview Crt., the trees would be on one's left.
- If looking east, with Apricot Dr. on the viewer's right, the woodlot trees would be on the viewer's left.



 The only location that this picture could have been taken is within Block 101 looking south towards the backs of the houses on Apricot Dr somewhere opposite Lots 68-72. This area of the Slope Study is not addressed.

Photograph 2:

Clearly taken looking west. There is a house on Apricot Dr. with a distinctive rear façade, and the view from this photo is not taken "from" Lot 4, but looking towards Lot 4. Again as in Photograph 1, the slope being pictured is not the slope addressed in the Study for Lots 1-9, as they are in the distance in the photograph, about halfway in the picture. This corroborates with the woodlot trees on the viewer's right and the ornamental trees fronting Boler Rd on the horizon.

RECOMMENDATION:

The City and the proponent meet on site to clarify the photographs and if they support the conclusions in the EIS.

4.2.1: Vegetation

EEPAC is surprised to note that woodland previously identified on site at a scoping meeting as Significant Woodland has been removed from the site, before site plan approval. This drastically changes the site under consideration.

RECOMMENDATION:

Remove all previously wooded areas from the development design, and plant new trees to re-establish the area previously identified as Significant Woodland.

RECOMMENDATION:

London City Council amend the Tree Conservation By-law to ensure that a similar situation doesn't occur again, i.e. when a Significant Woodland is identified at a scoping meeting, the Tree Conservation By-law should immediately apply.

4.2.4: Fauna

For the amphibian study (Appendix G), the times were listed as follows:

Study 1: April 14, sunset at 8:06pm, survey at 7:00-7:30pm

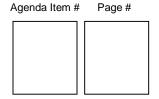
Study 2: May 28, sunset at 8:54pm, time of survey not recorded

Study 3: July 4, sunset at 9:07pm, survey done 9:45-10:15pm

Amphibian studies need to be completed beginning half an hour after sunset as per the Marsh Monitoring Program. Study 1 concluded half an hour before sunset, and it is impossible to determine if study 2 was performed properly, as no time of study is given.

The description of what qualifies as Significant Wildlife Habitat is incomplete.

Presence of breeding population of 1 or more of the listed newt/salamander species or 2 or more of the listed frog/toad species (*grey tree frog and western*



chorus frog are on the list) with at least 20 individuals (adults or eggs masses) or 2 or more of the listed frog/toad species with Call Level Codes of 3 or; Wetland with confirmed breeding Bullfrogs are significant.

RECOMMENDATION:

The EIS be considered incomplete until another set of amphibian studies is completed as the ones submitted in the report were not completed properly. Mapping the location(s) of the stations would also be helpful.

7.1: Indirect Impacts

The report states that "The draft plan has been configured so all rear lot lines are beyond the woodland trees (however in some locations, there is some branch overhang into the rear lots)". This makes the location of the woodland drip line unclear – are the rear lot lines inside the drip line in places?

For lots 37-43, the report recommends a "zero buffer through mitigation" with a homeowners' brochure and rear yard fencing." City of London Guidelines for Determining Ecological Buffers (2007) notes that "An absolute minimum of 5m buffer should be included to allow for variability along ecological edges." and that the minimum buffer width recommended for a woodland is "10m beyond the drip line of trees (protects the rooting zone)". A zero buffer through the proposed "mitigation" is unacceptable. The buffer should be consistent with the Guidelines as the proponent has not provided an acceptable reason for varying the buffer.

RECOMMENDATION:

Re-examine the dripline as identified to ensure that all construction takes place entirely outside of the woodland dripline.

No lots or blocks should be within the dripline. Lots 37-43 and the condo block should not be within the drip line (see page 24).

The trail should be outside the calculated buffer.

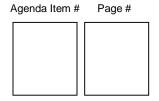
RECOMMENDATION:

Establish a minimum 10m buffer beyond the dripline of the woodland. The root zone of trees extends 1.5-3 times beyond the furthest extents of the tree canopy, so a further buffer may be appropriate.

7.2: Construction Related Impacts

The report recommends "All stormwater should be directed away from the woodland feature through a system of swales during construction, preferably adjacent to the road pattern."

RECOMMENDATION:



Full details of the swale design are needed to assess protection of the woodland feature and slope integrity. Approval by the City of same must be a condition in the development agreement.

Water Balance

The water balance report was done in 2013, prior to the tree clearing. This was a clearly stated as being a pre-development assessment with limited design data, therefore, no data is presented to evaluate the impact to the areas of standing water, which based on previous studies are "sourced from surface run-off and shallow groundwater" (actually in the Slope Study report) post-construction. If this report only addresses the water balance from the groundwater status with the six boreholes, all on relatively high ground, then the surface run-off impact has yet to be addressed.

It is unclear as to how post development surface flows will be comparable to pre development. If they are not, the areas of standing water may dry out.

RECOMMENDATION:

The EIS be considered incomplete until a post development water balance report is completed to the satisfaction of the City. The areas of standing water must be maintained as amphibian habitat.

Post Construction

1. Re-seeding areas of disturbance to maximize erosion protection and minimize volunteer populations of invasive species.

RECOMMENDATION:

This should be done with native species and not hydro-seeding.

GENERAL COMMENTS

Homeowner information material

RECOMMENDATION:

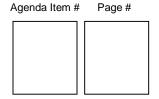
The required information for homeowners include the reason why no gates have been installed in the fences.

Evaluation of Ecologically Significant Woodlands

2015 pg. 22 says that "it is our opinion the City of London Evaluation of Ecologically Significant Woodlands (2006) should not be applied to small patches of this size as the evaluation process was not created for these very small features."

In the introduction to the Woodland Evaluation, it says in the introduction:

These guidelines will apply to all vegetation patches outside ESA's and wetlands as identified on Schedule B and designated as Environmental Review on Schedule A. These patches, generally 4 ha in size or larger, were identified through the Subwatershed Planning Studies.



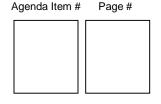
Also see 1.2.4 and 1.2.7 and 1.2.8 and 2.0 of appendix A, all of which indicate the woodland is significant.

Incorrect information regarding species at risk in Ontario

Page 9 says as follows:

"American Chestnut (END) and Butternut (END), while not listed by MNR, can be found in virtually any woodland setting in this region."

This is simply wrong and should be removed or reworded. Both trees are on the Provincial Species at Risk Act. There is a recovery strategy for American Chestnut.



Schedule "E"





"Inspiring a Healthy Environment"

October 1, 2015

The Corporation of the City of London Development Services P.O. Box 5035 London, Ontario N6A 4L9

Attention: Craig Smith (sent via e-mail)

Dear Mr. Smith:

Re: File No. 39T-15503/Z-8505 Application for Approval of Draft Plan of Subdivision &

Zoning By-Law Amendment

Applicant: Southside Construction Management Limited Agent: Development Engineering (London) Limited 704 & 706 Boler Road, London

The Upper Thames River Conservation Authority (UTRCA) has reviewed this application with regard for the policies in the Environmental Planning Policy Manual for the Upper Thames River Conservation Authority (June 2006). These policies include regulations made pursuant to Section 28 of the Conservation Authorities Act, and are consistent with the natural hazard and natural heritage policies contained in the Provincial Policy Statement (2014). The Upper Thames River Source Protection Area Assessment Report has also been reviewed in order to confirm whether these lands are located in a vulnerable area. The Drinking Water Source Protection information is being disclosed to the Municipality to assist them in fulfilling their decision making responsibilities under the Planning Act.

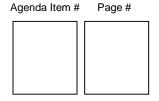
PROPOSAL

The applicant is proposing a residential plan of subdivision comprised of 44 single detached lots an open space block and one low density block.

CONSERVATION AUTHORITIES ACT

The subject lands are regulated by the UTRCA in accordance with Ontario Regulation 157/06 made pursuant to Section 28 of the Conservation Authorities Act. The Regulation Limit is comprised of a series of wetland pockets The UTRCA has jurisdiction over lands within the regulated area and requires that landowners obtain written approval from the Authority prior to undertaking any site alteration or development within this area including filling, grading, construction, alteration to a watercourse and/or interference with a wetland.

There is a *remnant valley slope* on the site which is classified as a *geotechnical constraint*. Section 15.7.2 of the City of London's Official Plan stipulates that remnant valley slopes should be assessed through the community planning process and appropriate measures should be taken to address the constraint and the natural vegetation associated with these features. Such measures may include the preparation of a geotechnical study and/or other supporting technical studies. A slope assessment has been completed and the UTRCA has comments on the submission (please refer to p.6).



UTRCA Comments File No.39T-15503/Z-8505

UTRCA ENVIRONMENTAL PLANNING POLICY MANUAL

Policy which is applicable to the subject lands includes:

3.2.2 General Natural Hazard Policies

These policies direct new development and site alteration away from hazard lands. No new hazards are to be created and existing hazards should not be aggravated. The Authority also does not support the fragmentation of hazard lands through lot creation which is consistent with the Provincial Policy (PPS).

3.2.6 & 3.3.2 Wetland Policies

New development and site alteration is not permitted in wetlands. Furthermore, new development and site alteration may only be permitted in the area of interference and /or adjacent lands of a wetland if it can be demonstrated through the preparation of an Environmental Impact Study (EIS) that there will be no negative impact on the hydrological and ecological function of the feature.

3.3.3.1 Significant Woodlands Policies

The UTRCA does not permit new development and site alteration in woodlands considered to be significant. Furthermore, new development and site alteration is not permitted on adjacent lands to significant woodlands unless an EIS has been completed to the satisfaction of the UTRCA.

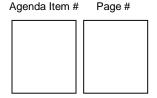
The woodland feature that is located on the subject lands and the adjacent lands has been identified as being significant in the Middlesex Natural Heritage Systems Study (2014) which was prepared by the UTRCA in partnership with the City of London.

Environmental Impact Study

The UTRCA has reviewed *Environmental Impact Study 704 and 706 Boler Road*, dated June 8, 2015 prepared by Biologic and offers the following comments:

- 1. Given the removal of vegetation and the construction of new residences on the steep slopes surrounding the wetlands, demonstrate how water quality, quantity and timing to the wetland habitats will be maintained during construction and once development is complete. Recommendations 7 and 8 in Section 7.2 state that roof leaders for houses backing onto the woodland and wetland features should be directed to the streets to address sediment movement and that all storm water should be directed away from the woodland and wetland feature through a system of swales during construction to maintain slope integrity. What impact will this have on the quantity of water reaching the wetlands during construction? How will this impact the wetland features and their function?
- Section 4.2.1 suggests that the green algae observed in the smaller pond to the east in May 2015 was due to stagnant water in the pond. One possible reason for this could be the eutrophication of the wetland as a result of the recent clearing of the forest on the steep slopes surrounding the wetland. Negative environmental effects of eutrophication include the depletion of oxygen in the water (hypoxia) which may cause death to aquatic animals. The green algae bloom should be monitored during and after construction for at least two years to determine cause and mitigation, if necessary.
- In Section 4.1.4, please provide a contour map with directional flow arrows.
- 4. To ensure the delineation and description of the wetland is as accurate, objective and as complete as possible, please conduct an inventory in mid-summer months. Please provide rationale to support the statement in Section 4.2.4 that the ponds are ephemeral.
- 5. Based on the criteria of the 2103 Ontario Wetland Information System (OWES) please investigate whether the two wetland features that are located on the site should be complexed to the North Talbot Provincially Significant Wetlands (which is located within 750 metres to the east and within the same subwatershed). Please consult with the MNRF regarding the complexing of the wetlands. Accordingly, please revise Section 4.2 of the EIS where it

2



UTRCA Comments File No.39T-15503/Z-8505

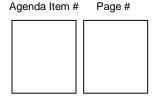
is stated that "There are no Provincially Significant Areas (PSW's or ANSI's) within 1 km of the legal parcel (OMNR 2013)" and also Section 5.1 Provincial Policy—"There are no provincially significant wetlands within or adjacent to the legal parcel. The wetland patches on site are too small to be considered under OWES."

6. We agree with recommendation 9 in Section 7.2 that post development water balance calculations are needed to retain the water features within the woodland. However, this information is required before the detailed design in order to ensure that the proposed development will not have any impacts on these features and functions. The EIS checklist in Appendix A also required a water balance be completed for the pond features to maintain habitat in the woodland.

In addition to the foregoing comments we seek clarification re the following:

- A. In Section 1.2, please confirm that the EIS is consistent with the 2014 PPS systems-based approach that came into effect on April 30, 2014.
- B. Given that Section 5.1 simply states that "There are no Significant Valleylands located within or adjacent to the legal parcel", please confirm that the area defined by the slopes was investigated to determine if it met the NHRM criteria for Significant Valleyland and provide this evaluation.
- C. The moderate to steep slopes (16 35%) on the east portion of the property described in Section 4.1.3 are consistent with the UTRCA remnant valley mapping. We request an assessment to determine an appropriate vegetated buffer to protect the valley slopes.
- D. As indicated in the EIS checklist (Appendix A), the UTRCA should have been consulted with respect to the aquatic biological setting (Section 4.2.2) to confirm that there is no fish habitat on or adjacent to the site, surveys of the ponds for fish or fish habitat is required. Please address.
- E. In Section 4.1.4 Hydrology, based on 2011 information, it is indicated that there are no vulnerable source water protection areas within the legal parcel. Please be advised that based on 2015 information, the subject lands are located in a significant groundwater recharge area and the EIS should be revised accordingly.
- F. In Section 4.2.4, please provide information about the size (width) of the burrows found on site. Note that older burrows may have very little or no digging, making them harder to identify as badger habitat.
- G. Section 4.2.4, states that there is no suitable habitat for the Hackberry Emperor or the Tawny Emperor butterfly species since no hackberry trees were identified during site specific inventories. However, the January 16, 2014 ISR states that hackberry was identified on site during preliminary field work and that any potential habitat for these two butterfly species will be protected from development in lieu of specific butterfly surveys. Please explain this discrepancy and also show the location of the hackberries that were identified in the ISR so that appropriate mitigation measures can be considered.
- H. The appropriate standard for conducting amphibian surveys is the marsh monitoring program that uses three hearing-based surveys to detect the presence or absence and relative abundance of calling amphibians. The amphibian surveys conducted in 2014 did not follow this program since visits 1 and 3 occurred when temperatures were lower than the required minimum temperature and visit 1 occurred too early in the evening. As well, the timing of the survey for visit 2 is not recorded on the field sheet, so it too may have occurred to early in the evening. Please conduct amphibian surveys which are consistent with the marsh monitoring program.
- In Section 5.1, please refer to the updated Significant Wildlife Habitat Ecoregion 7E Criterion Schedule (OMNR, January 2015) to determine the presence of Significant Wildlife Habitat. The 2012 OMNR draft version used in the EIS is obsolete. The following comments are based on an evaluation of Appendix H using the updated 2015 version and the following concerns should be addressed:

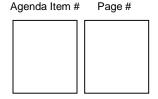
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- There may be candidate SWH for turtle wintering areas since the EIS does not provide depth, temperature, or substrate information for the ponds.
- ii. There may be candidate SWH for snake hibernaculum on site as the temperature on May 7 was only 12 °C and would not be considered a sunny warm day where congregations of snakes are likely to be observed. As well, the EIS does not specify whether the burrows on site were specifically surveyed for snake congregations.
- iii. There may be candidate SWH for Waterfowl Nesting Area as there are MAM 3 ELC Wetland Ecosites present on site and 15 mallards were recorded as breeding, with 8 fledged young. Note that the EIS did not specify whether the evaluation methods for nesting studies were followed. Given the number of mallards observed on June 6 and on June 20, 2014, a specific study for mallards should be conducted to determine if there are 10 or more nesting pairs.
- iv. There may be candidate SWH for woodland amphibian habitat since three of the four listed frog species were recorded. Although the numbers of individuals did not meet the minimum, two of the three surveys were conducted in very low temperatures when frogs are not as likely to call, one of the surveys occurred too early in the evening to hear all the frogs and the timing of the other survey was not recorded so it may also have occurred too early in the evening to hear all the frogs.
- v. There may be candidate SWH for wetland amphibian habitat since three of the seven listed frog species were recorded. Although the numbers of individuals did not meet the minimum, two of the three surveys were conducted in very low temperatures when frogs are not as likely to call, one of the surveys occurred too early in the evening to hear all the frogs and the timing of the other survey was not recorded so it may also have occurred too early in the evening to hear all the frogs.
- There may be candidate SWH for terrestrial crayfish habitat since the ELC Ecosite and habitat criteria are
 present on site and the EIS does not mention specifically surveying for terrestrial crayfish in Section
 4.2.4.
- vii. There may be candidate SWH for wetland and woodland amphibian movement corridors since three of the listed frog species were recorded. Although the numbers of individuals did not meet the minimum, two of the three surveys were conducted in very low temperatures when frogs are not as likely to call, one of the surveys occurred too early in the evening to hear all the frogs and the timing of the other survey was not recorded so it may also have occurred too early in the evening to hear all the frogs. The EIS did not conduct field studies at the time of year when species are expecting to be migrating or entering breeding sites.
- J. According to the City of London Evaluation of Ecologically Significant Woodlands, the definition of a woodland follows the Ecological Land Classification (ELC) for Southern Ontario definition for forests, swamps, shrub and treed bluffs, savannas, woodlands, plantations and thickets. According to the ELC, the minimum size for the delineation of a distinct vegetation community is 0.5 ha. Recognizing that the woodland on site is a 1.4 ha Oak-Hardwood Deciduous Forest (the Final Proposal Report indicates it is 1.29 ha?), is part of an 8.9 ha patch since it "is connected to a larger contiguous patch through a thin vegetated strip of private backyards to an adjacent forest to the north", and that the portion of the woodland feature located on-site is significant as it meets a high standard for both hydrology and size criteria (as stated in the EIS checklist in Appendix A and Table 5 in Section 5.2) despite the fact that only a relatively small part of the overall woodland located on site was evaluated, please justify the statement in Section 5.2 that "the City of London Evaluation of Ecologically Significant Woodlands should not be applied to small patches of this size as the evaluation process was not created for these very small features." Note that the evaluation is even more significant given the size of the woodland feature that was analysed and indicates the importance of this natural heritage feature.

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- K. As previously indicated, please revise Section 5.2 Municipal Policy 15.4.9 Groundwater Recharge Areas, Headwaters and Aquifers, as the property is located within a significant groundwater recharge area (UTRCA, 2015).
- L. We cannot accept the following statement "There are no..... sensitive groundwater areas present on site and no further consideration of water quality and quantity is required." because the submitted a Hydrogeological Assessment and Water Balance does not meet our requirements.
- M. With respect to section 5.3 UTRCA Policy Consideration and Regulated Lands please be advised that pursuant to Section 28. (1) of the Conservation Authorities Act:

Regulations by authority re area under its jurisdiction

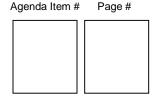
- 28. (1) Subject to the approval of the Minister, an authority may make regulations applicable in the area under its jurisdiction.
- a) restricting and regulating the use of water in or from rivers, streams, inland lakes, ponds, wetlands and natural or artificially constructed depressions in rivers or streams;

"wetland" means land that.

- (a) is seasonally or permanently covered by shallow water or has a water table close to or at its surface,
- (b) directly contributes to the hydrological function of a watershed through connection with a surface watercourse.
- (c) has hydric soils, the formation of which has been caused by the presence of abundant water, and
- (d) has vegetation dominated by hydrophytic plants or water tolerant plants, the dominance of which has been favoured by the presence of abundant water, but does not include periodically soaked or wet land that is used for agricultural purposes and no longer exhibits a wetland characteristic referred to in clause (c) or (d). ("terre marécageuse") 1998, c. 18, Sched. I, s. 12.

The wetlands which are located on the subject lands meet the definition of a wetland pursuant to Conservation Authorities Act and therefore is subject to the UTRCA's regulations in in accordance with Ontario Regulation 157/06. Please revise the text accordingly.

- N. As indicated in Tables 5 and 6, both the woodland and the wetland features on site need protection from the proposed development. Please apply the City of London buffer guidelines to the outermost boundary of all natural heritage features found on site and provide justification for any areas where the maximum buffer limit is not being applied. Please indicate these buffers on a map as it is not sufficient to state that they "have been incorporated into the Open Space boundary".
- O. In Section 7.1, please clarify the statement "all rear lot lines are beyond the woodland trees" since Section 6.0 states that the" rear portions of lots 37 43 and the condo block fall marginally within the woodland drip line" and Section 7.1 further states that "in some locations, there is some branch overhang into the rear lots". What is the definition of the boundary of the woodland tree if the standard drip line is not being used? Given the significance of the woodland features, we expect the rear lot lines to be located outside of the feature and that an adequate buffer is provided from the drip line of the woodland.
- P. Please provide rationale that supports the statement that a zero buffer in combination with measures such as fencing and homeowner education packages will mitigate the buffer distances as calculated by the City of London Guidelines for Determining Ecological Buffers. The EIS needs to consider the encroachment currently extending into the north edge of the vegetation community (where it backs onto the residential subdivision) when



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recommending appropriate mitigation for this residential development.

- Q. Recommendation 1 under Lots 37 43 in Section 7.1 needs to be more specific. Who will develop the brochure? Please include information about the sensitivity of the features on the site, and a more comprehensive list of all potential impacts, such as discharge of swimming pools, domestic animals, back yard trails, dumping, light pollution, noise pollution, grading etc... and how they should be addressed. How will this brochure be available to homeowners far into the future?
- R. Recommendation 3 under Lots 37 43 in Section 7.1 needs to be more specific. For example, please indicate all hazard trees that are to be removed, as well as all snag trees that should be retained for wildlife habitat. Also, who will complete the proposed hazard tree assessment? When and how often will this assessment occur?
- S. Please include the solitary tree identified in Recommendation 3 under Condominium Block in Section 7.1 located in the northeast corner of the proposed condo block as part of the hazard tree assessment. Claiming that it is located in an area that has not yet received approval for development is not a justifiable argument for its removal.
- T. Recommendation 2 in Section 7.2 needs to be more specific. How often should the sediment and erosion control fencing be inspected during construction?
- U. In Section 8.0, it is important to note that investigations to confirm candidate significant wildlife habitat for bat maternity colonies are needed in order to identify this type of wildlife habitat. Since the majority of the natural heritage features were removed without having conducted these surveys, it is incorrect to assume that what remains is suitable habitat for bat maternity colonies. This is also requested in the EIS checklist (Appendix A) where it states that bat protocols are not required if all trees are protected but if trees are to be impacted, and then bat surveys must be conducted.

Slope Assessment

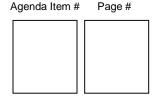
The UTRCA has reviewed Geotechnical Investigation Proposed Site Development 704 & 706 Boler Road, London, ON prepared by exp dated December 2012 and Slope Assessment 704-706 Boler Road, ON prepared by exp dated June 2, 2015 and offers the following comments:

The June 2, 2015 slope assessment report does not meet the UTRCA's submission requirements. We recommend
investigating and surveying the entire slope (no analysis provided for the potential impacts of Block 101) and
providing a proper setback for the proposed development based on the site inspection and geotechnical
investigation and analysis. Our policy requires that the establishment of the hazard and safe setbacks must be
based on the natural state of the slope and not through re-grading or the use of structure or devices to stabilize the
slope.

The geotechnical report shall be supported by a full size site plan which includes contour information with suitable scale showing the cross-sections on the site, top of the slope, toe of the slope, toe erosion if any, water levels, stable top of the slope and the erosion access limit. The site plan shall be signed, sealed and dated by professional engineer.

The cross-sections shall show the slope profile and all the components of the slope such as top of the slope, toe of the slope, toe erosion if any, water levels, stable top of the slope and the erosion access limit shown on 11×17 having suitable vertical and horizontal scale signed, sealed and dated by professional engineer.

The June 2, 2015 report indicates that the slope on the site varies from 6:1 to 3:1. Section 6.1 of the Final Proposal Report describes the significant topographical variation on the site with elevations ranging from approximately 302 m in the northern portion of the site to 294 m in the vicinity of the wetlands and 290m along the southern property boundary. The UTRCA requires cross-sections showing the slope on the site. Also, the existing top of the slope shall be identified on the site and shown on the plan and cross section.



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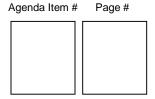
The 6 m erosion access limit shall be established from the top of the 3:1 slope in addition to other setback requirements.

- The June 2, 2015 report makes reference to Drawing C1 (dated May 1, 2015) is that the plan which is appended
 at the end of the Slope Assessment dated June 12, 2015? Please clarify.
- The June 2, 2015 report incorrectly refers to residential lots 1 to 9 being developed along the length of the slope but actually the plan shows lots 34 to 44 and Block 101 along the slope – please revise. The UTRCA recommends that an appropriate setback be established before proposing any development along the slope.
- 4. Table 1 in the December 2013 report shows groundwater fluctuation of approximately 2 metres from November 21, 2013 to December 6, 2013 in short period of time. The UTRCA is of the view that not enough time was considered to fully observe and record the groundwater fluctuation. The duration of the groundwater monitoring is important to measure the fluctuation in the groundwater levels. The UTRCA recommends a longer groundwater monitoring period. Please address.
- In Section 3.3 of the December 2013 report it is indicated that the localized groundwater also appears to be closely associated with at least one of the adjacent low lying and swampy areas of the site. Please provide justification.
- The UTRCA requires a detailed water balance for the site under the pre- and post-development conditions which demonstrates that there will a continued base flow to sustain the low lying area.
- 7. In Section 4.3 of the December 2013 report it is indicated that the pond area should be cleared (of all surface water, topsoil, trees, organics, cat tails and unsuitable fill material) prior to construction and/or placement of engineered fill. Furthermore, after clearing the pond area, the subgrade should be prepared and approved by a geotechnical engineer prior to fill placement to restore grades in the pond. How can a geotechnical engineer recommend the clearing of the natural feature without an EIS being prepared for the site and without considering other hydrologic, geologic and ecologic features of the site? The UTRCA strongly disagrees with this recommendation without considering other hydrologic, hydraulic, hydrogeologic and ecological parameters and variables on the site. Please justify.
- In Section 4.3 of the December 2013 the removal of about 300 to 600 m or more topsoil is mentioned. Please
 consider the effects of removing topsoil on the hydrologic and geologic feature of the sit and is its effects on the
 slope.
- 9. In Section 6.1 Slope Stability Summary of the Final Proposal Report, it is indicated that "the utilization of walk-out basements.... will further improve the stability of the slope". Please provide justification for this statement and be advised that the UTRCA does not allow any grading activities on the face of the slope.
- 10. In the OMNR Slope Stability Rating Chart in the June 2015 report it is indicated that there is no seepage from the slope face yet the text indicates that "seepages from the slope face are not considered to be a concern". Please clarify whether there is seepage from the slope face.

Hydrogeological & Water Balance Assessments

The UTRCA has reviewed the following submissions:

- Water Balance Assessment Proposed Subdivision Development 704 and 706 Boler Road, London On prepared by exp dated May 26, 2015.
- 2. Hydrogeological Assessment 704 and 706 Boler Road, London Ontario prepared by exp dated March 2014.



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The stated objective of the Hydrogeological Assessment and Water Balance Assessment was to examine the hydrogeological characteristics of the site relating to the proposed development

There are natural heritage features and regulated areas that exist on the identified properties. The UTRCA minimum requirements are that all Hydrogeological Assessments meet the Hydrogeological Assessment Submissions Conservation Authority Guidelines to Support Development Applications and APGO, Professional Practice Guidelines for Groundwater Resources Evaluation, Development, Management and Protection Programs in Ontario. Part of the site is in a Significant Groundwater Recharge Area. The document does not meet the Guidelines.

Outlined below are *some* of the deficiencies of these submissions. Comments must be read in conjunction with Conservation Ontario Hydrogeological Assessment Guidelines (enclosed). The Hydrogeological Assessment is a standalone document and all figures and maps should be clearly labelled and of suitable scale to be legible in the format provided. Maps need to include a scale appropriate location of the site. Maps and figures must include a scale (include a bar scale) and legend for all parameters included. Included for reference are diagrams from consultants in the London area.

Existing Conditions

In general, all commentary needs to be site specific documentation. Demonstrate that hydrogeologic thought processes enter the discussion. The diagrams and documentation are poor. All information is included for a reason and is not a place holder without explanation.

Introduction & Background

- Include a description of type of site servicing
- Provision of a development or draft plan
- Present land use

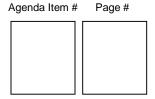
Site Location & Description should include the following information:

- Site location including street address, UTM (or northing and easting, NAD83),
- Township/municipality, lot, concession (MOECC well logs are described in concessions and lots. Clear mapping should indicate these locations), size of property, area to be developed/disturbed
- Description of the proposed undertaking or development (size and purpose)
- Identification of the type of site servicing
- Description of construction/site disturbance activities
- Provision of the development plan or draft plan in readable format
- Land use designations of the Official Plan(s) and permitted uses in the zoning of the site
- Present land use of the site and adjacent lands
- Regional map
- Local map showing the site, major/minor roads, environmentally sensitive areas, wetland and watercourse
 features within 500 metres of the site or the area of influence; whichever is greater.

Scope of Work: The site specific hydrogeologic model developed from the MOECC water well logs (Section 1.2 Desktop study) was not included in the report and is a requirement. This regional cross section is a guide to locate the monitoring wells (target individual horizons and justify why) and ensure that all wells were screened across a relevant interval. Upon cursory evaluation, it appears that wells have been developed on the property.

Site description: The figure does not adequately display the location of the proposed development. Addresses are absent on the referenced figure. The site could occur anywhere in a multi block area.

Site physiography and surficial geology: All relevant/supporting information should be provided within the report. The report should contain a minimum of two cross-sections (along perpendicular lines) to support discussions on geology, stratigraphy and flow patterns. Too vague and descriptions do not contribute to an understanding of the hydrogeologic setting of the site.



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The scale and location of the map is not appropriate for the site size and location. It is difficult to determine the physiography at the site from the diagram or how this impacts the hydrogeologic setting. The statement 'glacial ice sheets advanced several times into the southern part of the province from various directions and then receded... (which is included in all exp site descriptions)' conveys nothing about the site or how it affects the site hydrogeology. The description does not reveal the intent of the inclusion of the topic. For example, the site is likely on the Ingersoll moraine. Thick sequences of gravel, sand and diamicton or till might be expected at this site. Also due to the proximity of the Ingersoll moraine (what till might be expected associated with the Ingersoll moraine) possibly at depth. Remember, the hydrogeology- aquitards and aquifers and their characteristics are being described - this is a geotechnical description. See Conservation Ontario guidelines for proper completion of this section.

Surficial geology should be interpreted to the landscape on the cross sections somewhere. Tie the surficial geology to the MOECC data and make an attempt at an interpretation beyond the site which includes the MOECC data. What is present at depth? What is the rationale for the borehole depth?

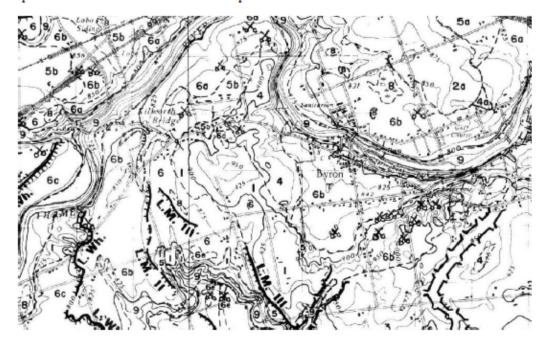


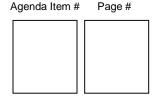
Figure 1 study area appears to be in 6b P0238 Dreimanis: St. Thomas West.

Glacio-lacustrine and Glacio-fluvial

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6 Gravel and gravelly sand
6e Beach deposits

L.Wa.: Lake Warren
L.Wh.: Lake Whittlesey
L.A.: Lake Arkona
L.M.III: Lake Maumee III
L.M.III. Lake Maumee III
6d Deltaic deposits in Lake Warren and Lake Arkona
6c Deltaic deposits in Lake Whittlesey
6b Deltaic deposits in Lake Whittlesey
6b Deltaic deposits in Lake Maumee II, covered by a veneer
of silty sand of Lake Maumee III; 6b'-older than L.Maumee II
6a Valley trains
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Q



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Well Survey: Well data for private wells within 500 m of the margins of the site is to be used. The proponent may refer to published reports regarding typical hydraulic conductivity properties for the geologic units or utilize data from field tests (single well response tests) conducted on monitoring or test wells on the site. The well test included in the appendix appears to be incomplete. Both Kh and Kv estimates should be provided where available and discussed in the text. The pump test included in Appendix C is not discussed. From the borehole log for BH5 it's not clear where the water table is located. Nor is it clear that well screen is located in the saturated zone. It is not properly documented to understand if the minimum requirements of the test were met.

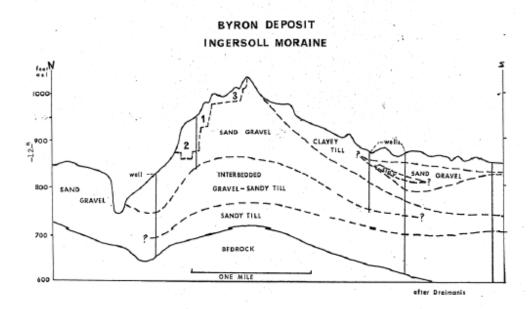


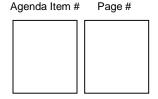
Figure 2 OGS Open file report 5182. E.V. Sado (Station 2 Byron Pit Lot 41, Con 1 The site is located on the Ingersoll moraine. Open file report 5182. E.V. Sado states localized outwash deltas were

The site is located on the Ingersoll moraine. Open file report 5182. E.V. Sado states localized outwash deltas were developed along the lake margins at Byron and is obvious in the regional topography. The Byron deposit described above is from the Byron Pit east of the property. These deltas contain the majority of coarse aggregate available in this area.

Surface water features and drainage are inadequately described. Site drainage and hydrogeology needs to be referenced with respect to the natural heritage, regulated areas, and the property.

Monitoring wells: To characterize the groundwater conditions at the site, both groundwater levels and flow patterns should be discussed along with the appropriate documentation and maps. This should include: 1) a description of groundwater levels and seasonal fluctuations; 2) direction of groundwater flow; and 3) areas of groundwater discharge along with estimated volumes. A description of both shallow and deep (where appropriate) groundwater flow systems should be provided along with a contour plan showing flow direction. Flow system attributes such as the average horizontal hydraulic gradient, and vertical gradients between hydrogeological units should be included. An indication of seasonal fluctuations and highest seasonal water table is expected over a period of time. Where site grade alterations are anticipated, the water table should be discussed in relation to both pre-development and the finished grade.

a. Field work should be carried out to assess the potential impacts of the proposed development on natural heritage. In addition, the consultant should also provide a description of regional groundwater conditions that can be summarized from regional monitoring well data (where available) and water well records



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within the vicinity of the site (range and average well depth, range and average pumping rate, shallowest /deepest well, any flowing well conditions, etc.) to supplement site specific data.

- Identification and characterization of hydrostratigraphic units, including local and regional aquifers
- c. A summary of infiltration and recharge rates associated with the site materials
- d. Description and characterization of hydraulic conductivity and hydraulic gradients
- e. General description of surface water/groundwater relationships
- f. Water well characteristics that may be useful in characterization of the system (well depth, pumping rate, water level, types of wells, flowing conditions etc.)
- g. Summary of groundwater levels, including seasonal fluctuations and highest water table evaluation
- h. Groundwater flow characteristics
- i. Characterization of hydraulic gradients
- j. Well completion details: include grout, cement, sand pack, screen length and diameter, casing diameter, slot size, and purge and clean records. This information is a necessity for corroboration of well response tests. Reference to this information needs to be included in the body of the report and clearly labeled on the borehole logs and single well response reports. Saturated thickness and characterize whether the screen is completed below the water table. All units need to be clearly labelled. Appropriate legends for well completion need to be included on the borehole logs.

Figures:

- a. Water table figure showing shallow groundwater flow direction
- Piezometeric surface for deeper aquifers showing groundwater flow direction. There are multiple aquifers
 at the site

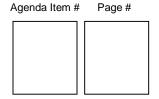
Description of Surface Water Features: A description of the site should include all surface water features (e.g. wetlands) on/or bounding the site which include a description of size and extent. Surface and groundwater interactions and associated features should be noted. Areas of groundwater discharge should be noted where anticipated; either through water table elevations generated from water well records mapped above or near ground surface elevation or observed in the field. Where groundwater models exist, figures showing simulated groundwater discharge within the gauged reach may be provided. Where tile drainage is known to exist, it should be noted. General description of surface water features on or near the site and their relationship to groundwater discharge and location to the water table. Figure of watercourses and wetlands (provincially and locally significant) on or near the site.

Water Quality: A description of water quality (ground and surface) should be provided. Water samples from on-site monitoring wells need to be analyzed. This is to establish a baseline to assess potential future impacts to natural heritage and to surface and groundwater resources. The consultant should request monitoring data where such data are available, and comment on anticipated impacts from the development to both ground and surface water bodies in the area. Where impacts are anticipated, the consultant should suggest ways to mitigate these impacts. Even where these impacts may be unavoidable or necessary to ensure human safety (such as impacts from road salting), such considerations would allow a holistic approach to the maintenance of watershed health.

Groundwater Levels: Where the pre-development shallow groundwater levels are shown to support natural features (wetland and/or discharge to another surface water feature), and where the proposed development will require dewatering or is anticipated to result in a change in the volume and/or alteration to infiltration or recharge rates, an impact assessment of the groundwater levels must be included in the report. The following information should be included:

- Where the proposed development will result in a change in the infiltration/recharge rate, information on how and where water levels will be changed (i.e. increased or decreased)
- Anticipated impacts to sensitive groundwater-dependent features (wetland and watercourse), regulated area impact- mitigation plans to address the impacts need to be provided.

Pumping Tests Pumping Tests: Where the proposed development requires a dewatering pumping test, the design and interpretation of the test should be done by a qualified professional. The following information should be provided:



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- Rate and duration of pumping test water level data in the form of hydrographs from observation wells used to
 measure impacts (i.e. shallow and deep aquifer units, mini piezometers in surface water features, nearby private
 wells)
- Documentation of the test and interpretations should be provided (i.e. data and output from a manual analysis or from a commercially available software e.g. AquiferTest)

Groundwater Discharge (Baseflow): As part of their mandate, Conservation Authorities are concerned with the potential impact of development on groundwater contribution to baseflow. In many areas in the province, baseflow represents between 50 and 90% of summer flow in many creeks with established aquatic life and watershed species dependencies. Dewatering and tile drain or large pipe installations can significantly reduce the volume of baseflow contributions from the subsurface. Changes to shallow groundwater flow patterns induced through development have also been linked to flooding and resulting damage to private property. It is recommended that the proponent ensure that the impact assessment considers and either avoids, or sufficiently mitigates, impacts to baseflow.

Estimate/quantify reduction to baseflow

Groundwater Quality: The impact of the proposed development on groundwater quality should be assessed. This may include impacts to a surface water feature from road maintenance, landscaping practices and/or chemical processing or storage. In addition, water quality should be assessed as it relates to:

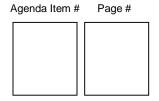
- Private water supply servicing
- Discharge water as a result of dewatering activities
- The existing water quality will need to be determined by sampling and testing of the water source to understand baseline conditions. The parameters analyzed should include general chemistry, bacteriological parameters, and site specific parameters of concern relating to past, existing and proposed land use. Based on the type of proposed development, an appropriate guideline (e.g. Ontario Drinking Water Quality Standards or Provincial Water Quality Objectives) should be selected from which to compare the test results. Other water quality guidelines may be considered for comparison on a case by case basis. Regardless of the aquifer chosen for the water supply, the water quality, and the potential impacts that might arise from the proposed development, within the upper shallow aquifer, if applicable, must be assessed. This assessment will include the potential water quality impacts to the shallow groundwater flow system as well as to any sensitive groundwater dependent features such as wetlands or watercourses.

Mitigation Requirements: The majority of development application studies should include recommendation(s) for actions to mitigate potential impacts identified through the hydrogeological studies. Specific measures should be described to mitigate the potential impacts identified in Section 3.2. Mitigation recommendations shall address both the anticipated long-term and short-term impacts. To this end, a monitoring program to address potential impacts prior to, during and post-development may be requested by the Conservation Authority at its discretion. In this case a contingency plan may also be required (see contingency plans).

Mitigation measures might include, but are not limited to:

- Recharge or infiltration basins for urban runoff
- Preservation of setbacks (buffer areas) from recharge/discharge areas
- Sedimentation control plans to prevent siltation of recharge/discharge areas
- Spill Control Plans
- Re-vegetation plans for disturbed areas
- Re-orientation of local surface water drainage
- Provisions for land use and site control plans (e.g., tree cutting restrictions, prohibition of use or storage of specified contaminants, access restrictions, etc.)

Maintenance of Infiltration: The maintenance of infiltration and interflow hydraulic functions is a key target to ensure that discharge to ecological features in close proximity will not be impacted and that the overall watershed health is sustained.



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It is recommended that especially in areas delineated Ecologically Significant Recharge Areas, pre-development infiltration should be matched in the post-development scenarios utilizing low impact development solutions.

It should be noted that promoting infiltration from paved surfaces, such as parking lots, roadways, etc. will generally not be approved unless the water has been pre-treated to prevent groundwater contamination.

Another consideration in recommending enhanced infiltration techniques is thermal considerations. Thermal impacts are important to aquatic life in areas where shallow discharge to streams is significant. Where proposed mitigation measures to increase infiltration are identified, these can also be beneficial to creeks with cold water thermal regimes by buffering them from prolonged spikes in air temperatures or inputs of hot urban stormwater. Cold water fish community assemblages have limits to the water temperatures they can tolerate. If these limits are surpassed frequently or for prolonged periods of time, then degradation in the health and the makeup of the fish community can be expected. As such, mitigation measures that promote stormwater infiltration can be of great benefit to enhancing groundwater contributions to cold water creeks thereby protecting and enhancing the thermal stability of these fish communities.

Pre and Post development monitoring programs and contingency plans should be addressed as recommended in the CO standards.

Comments on Figure requirements and inclusions: Any symbol included on a diagram should be included in the legend. The report should include appropriately scaled figures sufficient to describe the subject property. All information needs to be legible.

Cross-sections should include a scale and scale bar, directions and placement of the site require all details to understand the site. All elements of the diagram need to be legible in the form submitted- in this case a paper copy. The discussion includes how the site was mapped and how it relates to the surficial geology and water resources. For example provide description of rationale for correlating units beyond the well logs. The cross sections need to include correlation to nearby MOECC wells offsite.

Discussion of hydraulic conductivity: example of included discussion in the report. This information is not buried in an appendix. Anything that appears in an appendix needs discussion in the text of the main document which includes interpretation and rationale not a simple copy of the text in the appendix to the main document.

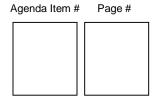
5.2.3 Hydraulic Conductivity Testing

Short duration pumping tests were conducted in two of the on-Site monitoring wells (11-DH-080 and 11-DH-081) on August 2, 2012 to estimate the hydraulic conductivity of the sand and gravel deposit. Prior to initiating the tests, each monitoring well was instrumented with a pressure transducer equipped with a datalogger to continuously measure water levels within the well during the tests.

A Grundfos Redi-Flo 2 submersible electric pump was used for the pumping tests, with the discharge directed away from the wells using 16 mm inside diameter polyethylene tubing. During the tests, the pumping rate was manually measured at regular intervals at the discharge location. Monitoring well 11-DH-080 was pumped at a rate of approximately 28.8 L/min for a duration of 180 minutes. Monitoring well 11-DH-081 was pumped at a rate of approximately 25.2 L/min for a duration of 60 minutes. The volume pumped from each well was less than the threshold value of 50,000 L/day, above which a Permit to Take Water from the MOECC would be required. The water level data collected during the tests is provided graphically in Appendix D.

The water level dataset collected during the pumping tests was analyzed using the AQTESOLV software package. Aquifer transmissivity values for each test were estimated using the Cooper-Jacob solution for an unconfined aquifer. The results of the analysis were used in conjunction with the inferred saturated aquifer thickness to estimate the hydraulic conductivity at each location. The results indicate that the hydraulic conductivity of the sand and gravel deposit in the vicinity of 11-DH-080 and 11-DH-081 ranges between

Required inclusions require discussion. For example, the MOECC well data is not a place holder but is a review that



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should be completed prior to any installation of monitoring wells. Describe aquifer(s) possibly present on the site based on well logs and other reports.

When the minimum standards as outlined above are met, a hydrogeological assessment review will be completed.

A water balance cannot be completed without an approved hydrogeological assessment. The water balance assessment is incomplete.

Overall, this is not an acceptable hydrogeological assessment or water balance assessment.

Final Proposal Report (FPR)

The UTRCA has reviewed the Final Proposal Report 704/706 Boler Road Subdivision prepared by Development Engineering dated June 12, 2015 and we offer the following comments:

Section 4.0 Zoning/By-Law suggests that the wetland features that are located on the subject lands are not regulated. This statement is incorrect. As previously indicated, the subject lands are regulated by the UTRCA in accordance with Ontario Regulation 157/06 made pursuant to Section 28 of the Conservation Authorities Act. Please revise accordingly.

Reference is made to "blue patches with the red overlay grid" on page 7. The blue patches represent wetlands and the red overlay indicates the UTRCA's regulated area.

Section 6 makes reference to "two small ponds". This should be revised to two wetlands.

Section 6.2 Provincially Significant Wetlands – this statement is incorrect and should be revised to indicate that the provincially significant North Talbot Wetlands is located within 1 km of the legal parcel.

The EIS Summary on page 10 should be revised once all of the deficiencies in the EIS have been addressed such that a more accurate description of the natural heritage system that is located on the subject lands is presented in the FPR.

In Section 10.2 Proposed Strategy for Stormwater – it is suggested that the "the existing woodlot will remain undisturbed and.... will store stormwater." The wetlands within the woodland cannot be used for stormwater. Clean water needs to be directed to these features to ensure that the water balance is maintained for the features and their functions. Please revise the text accordingly.

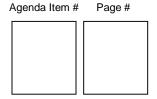
Figure 6.1, 6.2, 8.1, 9.1, 10.1 11.1 shows the connection between the two wetlands.

DRINKING WATER SOURCE PROTECTION

The Clean Water Act (CWA), 2006 is intended to protect existing and future sources of drinking water. The Act is part of the Ontario government's commitment to implement the recommendations of the Walkerton Inquiry as well as protecting and enhancing human health and the environment. The CWA sets out a framework for source protection planning on a watershed basis with Source Protection Areas established based on the watershed boundaries of Ontario's 36 Conservation Authorities. The Upper Thames River, Lower Thames Valley and St. Clair Region Conservation Authorities have entered into a partnership for The Thames-Sydenham Source Protection Region. Drinking Water Source Protection represents the first barrier for protecting drinking water including surface and ground water from becoming contaminated or overused thereby ensuring a sufficient, clean, safe supply now and for the future.

Assessment Reports:

The Thames-Sydenham Source Protection Region has prepared Assessment Reports which contain detailed scientific information that identify vulnerable areas associated with drinking water systems, assess the level of vulnerability in these areas and identify activities within those vulnerable areas which pose threats to the drinking water systems, and assess the risk due to those threats. The Assessment Report for the Upper Thames watershed delineates three types of vulnerable areas: Wellhead Protection Areas, Highly Vulnerable Aquifers and Significant Groundwater Recharge Areas. We wish to



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advise that the subject lands are located in a Significant Groundwater Recharge Area and mapping which shows these areas is available at:

http://maps.thamesriver.on.ca/Viewer_HTML5_233/?viewer=tsrassessmentreport

Source Protection Plans:

Using the information in the Assessment Report, a Source Protection Plan has been developed for the Upper Thames watershed. The Source Protection Plan has now been approved by the Minister of the Environment, on September 17, 2015 and will take effect December 31, 2015. The Approved Source Protection Plan is available at:

http://www.sourcewaterprotection.on.ca/source-protection-plan/approved-source-protection-plan/

The Source Protection Plan consists of a range of policies that together, will reduce the risks posed by the identified water quality and quantity threats in the vulnerable areas. These policies include a range of voluntary and regulated approaches to manage or prohibit activities which pose a threat to drinking water. Activities that can lead to; low, medium and significant threats have been identified in Appendix 10 of the Upper Thames River Source Protection Area Assessment Report, Approved September 16, 2015 and is available at:

http://www.sourcewaterprotection.on.ca/source-protection-plan/approved-assessment-reports/

AREA OF VULNERABILITY	VULNERABILITY SCORE	THREATS & CIRCUMSTANCES
Significant Groundwater Recharge Area (SGRA)	2	No Threats

Policies in the Approved Source Protection Plan may prohibit or restrict activities identified as posing a significant threat to drinking water. Municipalities may also have or be developing policies that apply to vulnerable areas when reviewing development applications. Proponents considering land use changes, site alteration or construction in these areas need to be aware of this possibility.

Provincial Policy Statement (PPS, 2014)

Section 2.2.1 requires that "Planning authorities shall protect, improve or restore the quality and quantity of water by: e) implementing necessary restrictions on development and site alteration to 1) protect all municipal drinking water supplies and designated vulnerable areas; and 2) protect, improve or restore vulnerable surface and ground water features, and their hydrological functions"

Section 2.2.2 requires that "Development and site alteration shall be restricted in or near sensitive surface water features and sensitive ground water features such that these features and their related hydrologic functions will be protected, improved or restored".

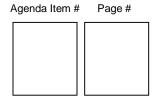
Municipalities must be consistent with the Provincial Policy Statement when making decisions on land use planning and development.

RECOMMENDATION

Given all of the outstanding issues, the UTRCA is not in a position to offer conditions of draft plan approval. We recommend that the application be deferred to provide the applicant with an opportunity to address the noted concerns or alternatively be refused.

UTRCA REVIEW FEES

Consistent with UTRCA Board of Directors approved policy, Authority Staff are authorized to collect fees for the review of Planning Act applications. Our fee for the review of this application is \$3100 and will be invoiced to the applicant under separate cover. In addition, the UTRCA collects a peer review for the review of technical reports. Our fee for this



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review is \$1500.00. Please note that our peer review fee includes one comprehensive review and one revised report review and that additional fees will be collected for subsequent peer reviews.

Thank you for the opportunity to comment. If you have any questions, please contact the undersigned at extension 293.

Yours truly.

UPPER THAMES RIVER CONSERVATION AUTHORITY

Christine Creighton Land Use Planner

Christine L

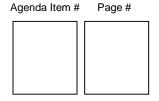
Land Use Planner IS/TT/LN/CC/cc

Enclosure -

Hydrogeological Assessments meet the Hydrogeological Assessment Submissions Conservation Authority Guidelines to Support Development Applications (2013)

c.c. Sent via email -

Applicant - Southside Construction Management Limited Agent - Development Engineering (London) Limited UTRCA - Mark Snowsell, Land Use Regulations Officer



Heritage River



0..... 1.0015

October 1, 2015

Southside Group 75 Blackfriars Street London, Ontario N6H 1K8

Attention:

Michael Frijia - Development Manager

Dear Mr. Frijia:

Re:

704-706 Boler Road

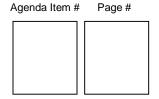
exp Services Review of Surface Water Conditions

The Upper Thames River Conservation Authority acknowledges receipt of an exp Services report entitled "Review of Surface Water Conditions – 704 & 705 Boler Road, London, Ontario", dated May 6, 2015 and e-mailed to the UTRCA on May 10, 2015. The UTRCA has completed a review of the exp document in conjunction with our review of various other reports and studies prepared in support of the planning applications submitted to the City of London (City files 39T-15503 and Z-8505). Briefly, we concur with the exp statement that the surface water ponded in the low areas is expected to be influenced by surface topography and seasonal conditions. However, we disagree with the summary statement on page 3 which reads in part "...there is no evidence that the low areas at the site share a hydraulic connection to any other surface water features..."

Based on information submitted in support of the above-noted planning applications, including the exp summary and the "Final Proposal Report" by Development Engineering (London) Limited (June 12, 2015), in addition to a review of historical aerial photography and documentation prepared in support of neighbouring residential development, we believe the wetland features on the subject property are both hydraulically and hydrologically connected with tributaries of Dingman Creek. We are also of the opinion that the wetland features meet all other criteria outlined in Section 25 of the Conservation Authorities Act which reads in part:

"wetland" means land that,

- (a) is seasonally or permanently covered by shallow water or has a water table close to or at its surface,
- (b) directly contributes to the hydrological function of a watershed through connection with a surface watercourse,
- (c) has hydric soils, the formation of which has been caused by the presence of abundant water, and
- (d) has vegetation dominated by hydrophytic plants or water tolerant plants, the dominance of which has been favoured by the presence of abundant water, but does not include periodically soaked or wet land that is used for agricultural purposes and no longer exhibits a wetland characteristic...



Under separate cover, we are providing the City of London and Southside Group with comprehensive comments on the reports circulated in support of your planning applications and it is anticipated that the UTRCA will update Regulation Limit mapping for 704 and 706 Boler Road upon receipt of satisfactory clarification on points raised through our technical peer review (including but not limited to establishing suitable buffers around the perimeter of the wetland features).

In closing, it is the position of the UTRCA that the wetlands on the subject property are regulated pursuant to Section 28 of the Conservation Authorities Act and no activity must take place within these features and the necessary Section 28 approvals are required if development is proposed adjacent to these wetlands. Failure to comply with these requirements will result in the Conservation Authority evaluating its options, including the possibility of legal action.

If you have any questions regarding this letter, we would encourage you to review the detailed peer review comments in our planning letter first and then we could then arrange to meet to discuss specific items.

Yours truly,

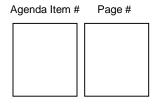
UPPER THAMES RIVER CONSERVATION AUTHORITY

Mark Snowsell

Land Use Regulations Officer

MS/ms

c.c. Terry Grawey, City of London
Allister MacLean, City of London
Craig Smith, City of London
Andrew Macpherson, City of London
James MacKay, City of London
Rebecca Walker, exp Services
Tracy Annett, UTRCA
Christine Creighton, UTRCA
Tara Tchir, UTRCA



Planner: C. Smith

Schedule "F"



To: Allister MacLean

Manager - Development Planning

Development Services

From: Environmental and Parks Planning

Date: September 30, 2015

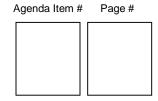
RE 39T-15503: Review of Biologic's 704 and 706 Boler Road Environmental Impact Study

Environmental and Parks Planning (E&PP) received the Environmental Impact Study (EIS) Report on June 15, 2015. From our review, E&PP have found significant and numerous deficiencies and errors in the EIS Report. E&PP conclude that Biologic's EIS does not comply with our Environmental Management Guidelines (EMG), City of London Official Plan (OP) policies, and the Provincial Policy Statement (PPS 2014). Therefore the EIS cannot be supported by E&PP at this time. Detailed comments on the EIS are presented below.

Summary of Main Issues for the Environmental Impact Study

- Inaccurate data collection
- Incomplete data collection (either no data collected or missed season)
- Misidentified species
- Incorrect ELC codes applied
- Incorrect review and application of Significant Wildlife Habitat Criteria
- Data not included or ignored in EIS
- Significant Woodlands and Significant Wildlife Habitat was removed in 2015
- Mischaracterization of site characteristics (i.e. hydrology, vegetation, aquatic, UTRCA regulated areas)
- Potential for Wetlands to be considered Provincially Significant Wetlands (PSW) not identified
- American Badger (Endangered Species) activity on the subject site
- Unidentified bat species active on the subject site
- Significant Natural Heritage Features and their ecological functions have not been fully identified and described
- Significant Natural Heritage Features and their functions have not been protected
- Inadequate impact analysis and no net effects provided
- A development limit line has not been established based on EMGs, OP policies, or PPS (2014)
- The EIS has not demonstrated that there will be no negative impacts on the Significant Natural Heritage Features or their ecological functions. Therefore no development/ site alteration is allowed within the Significant Natural Heritage Features or adjacent lands.

Based on the EIS review, the deficiencies identified in the field work and reporting, and the supplemental information gathered by the City of London Ecologist, the subject site has multiple Significant Natural Heritage Features and Areas and associated ecological functions that have not been fully identified, described, or protected. Significant Woodlands, Significant Valleylands, Significant Wildlife Habitat for multiple species, Species of Special Concern, and Endangered Species activity have all been identified; there is also the potential for the wetlands to obtain Provincially Significant Wetland status that requires consideration. The removal of approximately 1 hectare or more of mature woodlands that was part of the Unevaluated Vegetation Patch meeting the criteria to be identified as Significant Woodlands, in addition to being Significant Wildlife Habitat, is not acceptable. This vegetation removal was against Council policy, and is contrary to the PPS (2014) and City of London OP policies. The



Planner: C. Smith

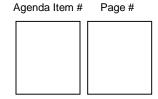
woodlands (including what was removed) along with the slopes was/is providing habitat and Significant Wildlife Habitat (SWH) to numerous groups including but not limited to amphibians and reptiles, bats, Special Concern species, PIF bird species, and American Badger (Endangered Species).

Based on the review of this file under the PPS (2014), City of London OP policies, and EMGs we recommend the following:

- 5) The remaining Significant Natural Features and Areas including the wetlands, woodlands, slopes (valleylands) for water balance and habitat area are required to be retained.
- 6) Restoration of the Significant Woodlands to their original extent prior to removal to restore SWH and Significant Woodlands.
- 7) Provide substantial buffers as calculated by the EMG section 5.0 to these Significant Natural Heritage Features and Areas as required to protect the Significant Natural Heritage Features and Areas, adjacent lands, and their ecological functions.
- 8) The MNRF should be contacted and involved in this file as a number of potential concerns have been identified that Biologic did not identify (as outlined below), including SWH, Significant Woodlands, potential PSW on the subject site, Significant Valleylands, and Endangered Species activity.

Detailed Comments on the Environmental Impact Study

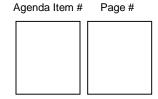
- 1. Section 1.2 Format This Section indicates that the PPS will be updated in 2014. Please note that the update has already occurred and that the PPS (2014) has been in full effect since April 2014. Did Biologic apply the updated PPS (2014) to all sections within the EIS document? Action: Update language to reflect that the PPS (2014) has been in effect for over a year and reference to it being updated in 2014 is no longer accurate. Also, indicate if the PPS 2014 was used throughout the EIS.
- 2. Section 1.3 Background Documents This section does not identify all of the background documents Biologic was to review and incorporate into the EIS. The identified list was determined at the scoping stage as can be seen in the Environmental Impact Study Issues Summary Checklist Report (ISR) (Appendix A of Biologic's EIS). It is important to insure that all available data was considered and reviewed as part of the EIS. Action: The consultant is required to review and discuss as appropriate, all relevant studies associated with this application as identified and agreed to with the ISR.
- 3. Section 2.4 Upper Thames River Conservation Authority (UTRCA) Regulation The statement that neither features are regulated is incorrect. The statement that only two wetlands are present on the subject property is incorrect. There are vernal pools in addition to the permanent wetlands. While the UTRCA regulation mapping shows two wetlands, Biologic should be aware that any wetlands found on a subject site are regulated by the UTRCA, unless the UTRCA specifically indicates that specific wetlands are not regulated. The Regulation covers all wetlands regardless of what the mapping shows. Biologic is in error that these features are not Regulated. Action: Revise this section to properly identify that the wetlands located within the subject site are regulated by the UTRCA, unless stated and agreed to by the UTRCA that they are not.
- 4. Section 2.4 / Section 5.3 Upper Thames River Conservation Authority (UTRCA) Regulation On what basis is Biologic determining that the wetlands located on the subject site are not regulated. Has the UTRCA agreed with this conclusion? Whether or not the wetlands are regulated by the UTRCA and if a permit is required is an important component of the EIS and has potential implications depending upon the result. Action: Revise this section to indicate that the wetlands located on the subject property are regulated features under the jurisdiction of the UTRCA.
- 5. <u>Section 4.1.4 Hydrology</u> This section does not accurately identify the hydrological features and functions of the subject site. A thorough review of the background documents and EXP's own Hydrological Assessment (March 2014), have figures that



Planner: C. Smith

clearly depict a watercourse originating on the subject site within the valley and connecting offsite further south and eventually into Dingman Creek. This can be further seen on the MNRF Natural Heritage Areas base maps (2015). Adjacent to this site (to the south), there is a storm water intake pipe to receive overland flow emanating from the wetlands. Both Biologic's EIS and EXP's Memo (2015) make very serious omissions regarding existing conditions on the subject site that would impact the determination of wetlands being regulated or not. First, EXP indicated that there appears to be no surface water connection leading off-site from the wetlands based off of their borehole data and a site visit they conducted in the spring (EXP 2015). Biologic's EIS agrees with this assessment. No substantial effort was made by either EXP or Biologic to substantiate this significant claim. Also, both the EIS and EXP's Surface Water Conditions Memo (2015) do not reference figures contained within EXP's other reports submitted with this application or other sources identified above that clearly show a surface water connection leading off-site further south and eventually into Dingman Creek. Furthermore, Biologic and EXP both ignored a recently created artificial berm located at the low point of the west wetland (pictures taken by the City of London Ecologist), that appears to have been placed in a position to block water from flowing overland. This large and clearly visible feature on the landscape was not mentioned in any of the reports. It is also noted that the UTRCA and City of London Ecologist pointed out this feature to the reviewer/author (Mr. Hayman) of the EIS Report during the dripline staking that took place on May 19th, The feature was clearly constructed recently and the placement appears to perform the function of preventing overland flow from the wetlands. Even though Biologic was made fully aware of this artificially created berm, it was not mentioned in the June 09, 2015 Biologic EIS. The overland flow intake pipe to receive overland flow and convey it along the tributary further south was also not identified in EXP's Report or Biologic's EIS. This is also a serious omission. These two features were completely ignored. Also, Biologic references a borehole from the EXP Report (2014) that indicates groundwater was below 3m, but this is only part of the data presented in the EXP Report (2014). Further monitoring of this borehole by EXP saw groundwater levels rise to within 0.4 m below the surface, indicating groundwater levels do fluctuate and come close to the surface adjacent to the wetlands. Action: A full revision of this section is required to accurately characterise the hydrology of the subject site. Using all available background data and existing conditions as they are found on the subject site. Why were important features found on the subject site and relevant to the EIS The EIS cannot ignore existing conditions that potentially alter the characteristics of the site. The EIS is required to present all existing conditions in an unbiased manner.

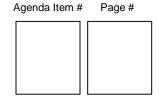
- 6. <u>Section 4.1.4 Hydrology</u> The water balance prepared by EXP is not acceptable. The water balance does not address any of the identified requirements for the water balance. It was clearly identified in the ISR in 2014 that a water balance addressing the wetlands was required. It is unacceptable that this has not been properly addressed even though it was identified very early on in the process. In addition, the pre-water balance was done for the entire site and no specific information is provided for the wetland water balance for both the pre and post (the post water balance was not even undertaken as part of the water balance). Action: A complete and specific water balance is required, which was identified in the ISR in March 2014. An explanation and justification as to why a detailed and full water balance was not undertaken is required.
- 7. Section 4.2 Biological Setting Biologic describe the contiguous forest patch in this area as a "strip of trees". A "strip of trees" would typically be used to reference a hedgerow. Upon further analysis, this description is completely inaccurate and diminishes the significance of this corridor and contiguous nature of the mature deciduous forest characteristic of the valley. Prior to the removal of a portion of the woodland in early 2015, the woodland was between 100m and 200m wide. This remaining "strip of trees" at its narrowest measures approximately 50m in width and in many places over 70m in width. Action: Revise this section to accurately identify the connection of the forest through this corridor and that it contains a mature Oak Forest as later identified in the EIS. Provide an explanation on how at a minimum 50m width of mature Oak Forest can be ecologically described as a "strip of trees".
- 8. Section 4.2 Biological Setting The statement "There are no Provincially Significant Areas (PSW's or ANSI's) within 1km of the legal parcel (OMNR, 2013)." is false. MNR



Planner: C. Smith

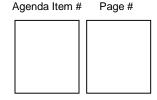
Natural Heritage Areas mapping (2015) clearly identifies the North Talbot Provincially Significant Wetland Complex within 1 km of the legal parcel. In addition, further analysis identifies that the wetlands located on the subject property are within 750m of the North Talbot PSW. The OWES criteria allow for wetlands located within 750m to be complexed and assessed for significance as a whole. Given that other Significant Natural Features are associated with the wetlands, their diversity, their ecological functions, and hydrological functions, the wetlands located on the subject site should be assessed using the OWES for Provincial Significance. The MNR should be contacted and consideration given to complexing in these wetlands, which are within the required distance to be complexed. Action: Update this section with the correct information and provide an explanation on how the North Talbot PSW Complex was not identified by Biologic during their review. Furthermore, given the significance of the wetlands on the subject site, despite their relatively small size, the wetlands should be evaluated using the OWES in accordance with City of London OP policy and the MNR contacted to have them consider complexing in these wetlands with the North Talbot PSWs.

- 9. Section 4.2.1 Vegetation Biologic makes no direct mention that over 1 hectare of mature Oak woodland was removed from this site in 2015. Biologic refers to an anthropogenic disturbed community and that it was recently cleared. The hectare of woodlands removed was not an anthropogenic disturbed feature, even according to Biologic's own ELC data. This is a complete mischaracterization of the removals. There was mature Oak woodland within the cleared area (as identified on Biologic's ELC card) that also met the criteria for being identified as significant woodland (this was discussed and clearly identified in the ISR located in Appendix A of Biologic's EIS). Biologic is well aware of what was present on this site before it was cleared against Council policy. What justification was used for characterizing the mature woodland as an anthropogenic feature? Action: Revise this section to accurately identify what vegetation was removed in March/ April 2015 and how much vegetation was removed from the feature.
- 10. <u>Section 4.2.1 Vegetation</u> This section contains serious inaccuracies and mischaracterizations of the vegetation features on the subject site. These significant errors call into question the quality of reporting and the ability of Biologic to carry out basic ecological field work.
 - First, the two wetlands have been identified by Biologic to be Reed-canary Grass Organic Meadow Marsh Types (MAM 3-2). However, during the site visits conducted by the City of London Ecologist, it was very evident that the dominant vegetation around the wetlands was in fact Rice cut Grass (pictures and specimens were taken by the City of London's Ecologist). It is difficult to understand how these species can be confused given the characteristics of Rice cut Grass that would be apparent if conducting proper and thorough ELC and plant inventory field work. How was Reed-canary Grass misidentified when both at a distance and up-close the two species are quite different. Furthermore, Biologic's Ecologist identifies these wetlands as organic. Yet no soil auger data is presented; this would have been recorded on the ELC cards, if they were conducted in the first place (a space is provided on the ELC data cards specifically for soil auger data), which is standard when determining the soil type using proper ELC methodology. In order for soils to be considered organic, a minimum of 40 cm of organics is required. A couple sample soil augers for the wetlands conducted by the City of London's Ecologist in August 2015 did not find 40 cm of organics. How did Biologic determine that both wetlands warrant the designation of organic soils? Why were no soil augers carried out for the wetlands as part of the ELC?
 - Second, Biologic's Ecologist indicated that during a site visit in May of 2015 that the east pond was covered in Green Algae. During a site visit conducted by the City's Ecologist in August 2015, it was clearly evident that what was identified as Green Algae by Biologic, was actually Duckweed, which was clearly evident in the east wetland (pictures and specimens were taken by the City of London's Ecologist). Again, this species is very distinguishable from Green Algae. Did Biologic's Ecologist ever approach or enter these wetlands to conduct a thorough investigation (plant inventory and ELC) at any point during field work? It is



difficult to understand how this error can be made in addition to the first error.

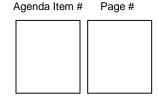
- It is noted based on the review of Biologic's EIS, that William Huys was the Ecologist who conducted the ELC and plant inventory field work. William Huys characterised all vegetation communities on the subject site on September 11, 2013 and May 11, 2015. In addition, William Huys conducted plant inventories on May 7, 2014 and September 8, 2014. How are these inaccurate characterizations not identified during any one of the field visits? In addition, the reviewer/author of this report (Mr. Hayman) was out in the field at least once (during the dripline staking in May 2015) and failed to identify these inaccuracies in Biologic's EIS Report. The level of inaccuracies calls into question all the field work conducted by Biologic. Action: A complete rewrite of this section is required. All inaccurately identified features, ELC codes, and dominant species need to be reconsidered and updated. A thorough explanation of how these errors that were never corrected over multiple site visits can be made by professional ecologists. Provide justification on how Biologic's field data collection and identification is reliable. Provide the CV of all the ecologists who conducted field work on the subject site, the ecologist who wrote the EIS, and senior ecologist (reviewer) of this EIS report (this is also a standard requirement).
- 11. Section 4.2.1 Vegetation The last paragraph of this section identifies that along the northern edge of the subject site that backs onto an adjacent residential development that evidence of yard waste and landscaping materials has been dumped in at least several locations. While this is an accurate observation, it is disconcerting to note that while the time was taken by Biologic to point out these piles, no mention of the artificially created berm in the middle of the property that is blocking overland flows was noted by Biologic's Ecologists. This berm has been created by what looks to be remnant building materials from a demolished home including bricks, roof shingles, and other materials (pictures taken by the City of London Ecologist). The artificial berm was not seen on aerial photographs taken in 2014, it has likely been placed there within the last year. Also, there were a couple noted piles of additional debris adjacent to the southern property edge to other homes located on Cherrygrove Drive. Action: Revise this section accordingly. Accurately identify all debris piles located on the subject property.
- 12. Section 4.2.1 Vegetation The one ELC sheet provided by Biologic was completed on September 11, 2013 and indicated Preliminary (as seen in the IPR 2014). This was then modified to include an additional site visit almost 2 years later on May 11, 2015. It is noted that the word "preliminary" that was written on the ELC cards has been whited out and replaced with the updated ELC date of May 11, 2015 (this was identified by comparing the ELC sheets submitted with the IPR 2014 and this EIS). If the September 2013 ELC site visit was only preliminary, when was a full and detailed ELC site visit conducted? Also, absolutely no changes in species composition, stand description, standing snag analysis, size class analysis, deadfall analysis, prism sweeps (basal area), and species abundance analysis changed between 2013 and 2015 according to Biologic's ELC data card. This does not make any sense, as the same surveyor (William Huys) conducted both field site visits and should have noticed that the features evaluated on the ELC card in 2013 are now missing over a hectare of mature woodlands. It is not possible for the data not to have changed after a significant removal event. In addition the second ELC visit was during a time of year when leaves and other vegetation have still not yet fully come in. Also, no ELC data was provided for Polygon 1 in the EIS, and pictures taken by the City of London Ecologist in August 2015 show a cultural meadow habitat with varying species compositions. Why was an ELC card for this large polygon not completed? Action: Biologic is to provide an explanation on how the exact same data was used for two separate ELC site visits when it has been established that a significant amount of vegetation had been removed. This is not acceptable to identify separate ELC site visits on the same ELC sheet and to whiteout part of the official record for the original site visit. ELC sheets must be completed and provided for all polygons.
- 13. <u>Section 4.2.2 Aquatic</u> While there is no open permanent stream through the subject site, it is inaccurate to state that background mapping did not show an overland connection. Several background documents showed an overland connection as already identified in earlier comments. Again, Biologic fails to identify an artificial berm created at



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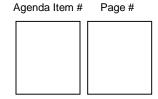
the low point adjacent to the wetland to block overland flow from the wetland or identify the receiving pipe inlet along the sites' south property line that carries overland flow along the tributary off-site. Was the UTRCA consulted for any available fish data or potential fish habitat? Did Biologic look for any potential fish in the ponds? Action: Revise aquatic section accordingly and consider all background documents. Identify the artificial berm blocking overland flow from the wetlands and contours that convey this flow to the inlet pipe. Identify field work that confirmed no fish are located within the ponds and that the UTRCA was contacted for any available data. The overland flow to the tributary from the wetlands and headwaters is to be maintained.

- 14. Section 4.2.3 Flora The ISR identified that a flora inventory was required for the subject site. The standard protocol is a three season inventory covering spring, summer, and fall. Biologic has only completed two seasons. This section identifies that flora inventories occurred on May 7, 2014 (spring) and September 8, 2014 (fall). A summer plant inventory was not conducted and therefore Biologic did not follow the EMG document. This feature was identified as unevaluated and required a full inventory, no changes to the inventory requirements were identified in the ISR (apart from possibly not conducting a fall inventory if Biologic confirmed they had done one in 2013). Action: Biologic has not followed the plant inventory protocols and is required to complete a summer season plant inventory. It is not acceptable to ignore an entire season of plant inventory work.
- 15. <u>Section 4.2.3 Flora</u> Action: Provide a floristic quality analysis once the full inventory work has been accurately completed.
- 16. Section 4.2.4 Fauna (Birds) This section identifies that a Species of Special Concern was identified in addition to several PIF bird species during field work conducted in June of 2014. The EIS makes note that suitable habitat is present for these species including a number of snags. However, this section fails to note that over a hectare of mature woodlands (suitable habitat) have been removed after field work was completed. Action: Address the loss of habitat for the Species of Special Concern and PIF bird species as a direct result of the removal of mature oak forest and snag trees identified by Biologic. How many suitable snag trees remain after the removals? Do snag trees still exist on the subject property and where?
- 17. Section 4.2.4 Fauna (Reptiles) The statement made in this section that "Although there are two small wetland inclusions on site, the features are ephemeral..." is not accurate. What data is Biologic using to indicate that the wetlands are no longer present in the summer/fall? The two main wetlands are permanent features. They typically retain their water throughout the year. The additional wetlands at the north east end of the subject site are ephemeral, as they do dry up during the summer. These observations should have been identified during the numerous site visits Biologic conducted. A City of London Ecologist site visit in August 2015 confirmed that the east and west wetlands were still present. Action: Revise section to accurately characterise the wetlands on the subject site.
- 18. Section 4.2.4 Fauna (Reptiles) The statement that there is "virtually no basking habitat in this feature as there is very little open water and perches for turtles" is incorrect. The City of London Ecologist having visually observed the site from the public walkway after the trees were removed in March/April/May 2015, noted open water in the wetlands, air photo interpretation from April of 2014 noted open water in the wetlands. Site walks during August and September (2015) by the City of London Ecologist noted many potential basking perches for turtles (pictures taken by the City of London Ecologist), and water was still present in the wetlands. Action: Revise this section to correct the inaccurate statements characterising the wetlands.
- 19. <u>Section 4.2.4 Fauna (Reptiles)</u> The statement "Basking turtle surveys were completed" does not appear to be true. Only one apparent survey record for basking turtles is presented in Appendix G (Faunal surveys) of the EIS. However, it does not specifically say that basking surveys were conducted as part of this site visit. Second, the site visit was conducted in the mid-late afternoon when typically basking surveys are conducted in the mornings. Second, it is noted on this data record that there was 80% cloud cover that



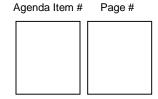
day. Basking turtles are normally present when the sun is out, which would not have been the case during this one site visit. No other data record is presented with the EIS that identifies proper turtle basking surveys were conducted or that multiple basking surveys were carried out. Action: Biologic does not appear to have completed turtle basking surveys as claimed. This combined with the mischaracterization of the wetlands (that they are ephemeral, no basking habitat present, and very little open water); Biologic is required to conduct appropriate surveys in a proper and acceptable manner in order to conclude that turtles are not using the subject site.

- 20. Section 4.2.4 Fauna (Mammals) The American Badger assessment conducted by Biologic's Ecologist was completely inaccurate. Biologic claims that the burrows found had none of the sandy soil piles associated with American Badger nor did they have the shape and size. A further analysis by the City of London Ecologist identified multiple burrows that showed multiple signs of badger activity. Including the size, shape, sandy piles (cast a characteristic distance from the burrows), claw marks, and tunnel indentations. It is difficult to understand how Biologic's Ecologist concluded that no evidence was present at the burrows, some were clearly groundhog burrows, but clear evidence was present for American Badger activity (pictures were taken by the City of London's Ecologist). Please note that to confirm if active Badger dens (in addition to feeding activity) were present on the subject site, experts from the MNR were on site in September with the City of London Ecologist to review the Burrows that were identified. The MNR agreed that clear signs of badger feeding activity were present on the subject site, but that they currently were not using the site (of the existing dens investigated) as part of their breeding habitat. It was also noted that there was the potential for burrows to have been located along the slopes that were cleared and grubbed, but would have been filled in as a result of this action. There is potential for this Endangered Species to use this habitat not only for active feeding (confirmed), but specifically dens as part of their breeding requirements. Action: Revise this section to identify that American Badger activity is present within the subject site and that while no definitive habitat dens (for breeding) are present and therefore Section 10 of the Endangered Species Act (ESA) would likely not apply currently; Section 9 of the ESA does apply and if/when further activity is identified needs to be investigated properly and promptly. American Badgers are an Endangered Species and they are protected from kill, harm, harass, and capture. A burrow monitoring and response protocol is required to be applied as part of the development approval and to be carried out during all pre construction activities, during construction and post construction monitoring. This will include educating all construction personnel on identifying burrows during work related activities and establishing buffers around any new burrows until a qualified City of London or MNR Ecologists confirms if it is a new den requiring protection. This identification of an Endangered Species being present and active within the subject property should be reflected in considering overall significance and sensitivity of the features and ecological functions in addition to buffer considerations on the subject site.
- 21. Section 4.2.4 Fauna (insects) The IPR (2014) prepared in part by Biologic identified that Hackberry was present within the woodland. The EIS now submitted by Biologic indicates that no Hackberry trees are present. Did the woodland removal take out all Hackberry trees identified by Biologic? What impact does this have to the diversity of the Significant Natural Heritage Features and the Hackberry Emperor and Tawny Emperor? Action: Clearly identify and explain the situation that Hackberry was initially identified by Biologic, but has now been changed to indicate no Hackberry trees are present. Address diversity and ecological concerns. Biologic indicated in the IPR that "Any potential habitat for Hackberry Emperor and Tawny Emperor will be protected from development where possible, in lieu of butterfly surveys". If all Hackberry trees were removed, were specific butterfly surveys conducted before vegetation removals as indicated? The EIS did not identify that butterfly surveys were carried out and no data was presented.
- 22. <u>Section 4.2.4 Fauna (Amphibians)</u> the amphibians section requires an entire rewrite as the information presented by Biologic is flawed and inaccurate.
 - 9) The standard Marsh Monitoring Protocols for conducting amphibian calling surveys was not followed and therefore the data presented in the EIS can be considered not valid.



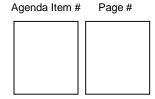
- 10) The survey conducted on April 14, 2014 by Laura McLennan indicated she started her survey at 7:00 pm and concluded at 7:30pm. Sunset in London Ontario on this date was at 8:06 PM. Marsh monitoring protocols indicate that that monitoring should start no earlier than 30 minutes after sunset. Biologic started an amphibian calling survey a full hour and a half before the minimum required start time of 8:36 pm on that date. As Biologic should be aware, amphibian calls and their intensity are tied directly to the time of day, season, weather conditions, and temperature. Therefore Biologic's decision to conduct an amphibian calling survey during a critical season over an hour and a half before the required start time likely would impact the potential number of amphibians herd calling from the wetlands. Biologic's data likely underrepresents the number of individuals calling on this day; and this would be one of the reasons that their conclusion that no SWH for amphibians (woodlands) are present is not valid.
- 11) The second visit was conducted on May 28, 2014; the surveyor did not record the start and end times of the calling survey. Given the significant error identified in the first survey, it cannot be reliably claimed by Biologic that the Marsh Monitoring Protocols were correctly followed for this survey, since no times were recorded. It therefore is also possible that the number of individuals heard calling on this day are also underrepresented. This would be another reason that Biologic's conclusion that no SWH for amphibians (woodlands) are present is not valid.
- 12) No figures are provided to indicate where the surveyors stood to record the calling surveys. The reference numbers (wetlands?) indicated in Appendix G have no definitive meaning without any description and accompanying figure to show which wetlands the individuals are being attributed to.
- 13) Where is the "Adjacent" location? It is assumed this is referring to the wetland located approximately 80m north east of the subject property wetlands on the adjacent property within the valley. Why is this wetland considered separate from the wetlands located on subject site? The adjacent wetland had a calling code 3 of spring peepers (to many to count) according to Biologic. How is the property line functioning as a barrier to amphibian movement between these wetlands? The woodlands function as a corridor between wetlands that are in the same valley feature. These wetlands are part of the same system and are required to be considered in this way. This is supported by the Natural Heritage Reference Manual (2010). Therefore, with the large number of spring peepers (calling code 3) combined with the individuals present on the subject site, based on Biologic's own inaccurate and underrepresented data, these wetlands still met the criteria to be identified as SWH in 2014 and are a protected features under the PPS (2014). These wetlands should have been identified as such and well before the SWH was removed in March/April of 2015.
- 14) In addition to Comment #22 E above, the extent of the SWH for these wetlands includes all of the wetland area and the woodland habitat (MNRF SWH Criteria for Ecoregion 7E, both versions 2012 and 2015). The vegetation removals conducted on the subject site in March/April of 2015 therefore destroyed SWH.
- 15) Due to concerns over the quality of data being presented by Biologic during the first EIS submission (rejected for being incomplete), the City of London Ecologist conducted proper calling surveys for the first two surveys of the Marsh Monitoring Program, to accurately identify the number of species and individuals present and to ensure they were done at the correct time of day:
 - Multiple surveys conducted; official survey conducted on April 17, 2015 (with both City of London Ecologists present) start time 8:45 PM end time 9:15 PM. Many dozens or more of Spring Peepers were herd calling from the subject site wetlands (calling code 3) and 2 individual (calling code 1) Western Corus Frogs (note, very difficult to hear the chorus frog over the full spring peeper chorus, potentially more present).
 - Official survey conducted on May 8, 2015 start time 9:15 PM end time 9:45 PM. Dozens or more of Spring Peepers were heard calling (calling code 3), and 6 Gray Treefrogs (calling code 2).

The results obtained from accurate calling surveys conducted for 704-706 Boler Road in 2015 show very productive wetlands located on the subject property. It is difficult to understand how so many spring peepers can be heard calling from the wetlands on the subject site, yet only a few Spring Peepers were recorded by Biologic the previous year from the same wetlands. These results in conjunction



with the significant numbers of individuals calling within the wetland on the adjacent property strongly indicates that significantly more than 20 individuals of two or more listed species are present on the subject site. The subject site meets the criteria for designation as SWH under the PPS (2014). The conclusion by Biologic that less than 20 individuals of two or more listed species are present is not accurate based on their own data in addition to being based on faulty data Action: Revise this entire section to reflect that the data collection. collected by Biologic even when underrepresenting what was found within the wetlands does meet the criterion of SWH (see all of Comment #22 E). The follow up by City of London Ecologists correctly carried out amphibian calling surveys in the spring of 2015 clearly show (and confirm) that the wetlands meet the criteria to be identified as SWH. It must be identified in the Report that Biologic did not follow the Marsh Monitoring Protocols for data collection. A thorough explanation for why Marsh Monitoring Protocols were not followed is required. In addition, a scientific justification for using the property line as an ecological barrier to wildlife movement is needed. Biologic seemed to ignore the large number of Spring Peepers recorded from the wetland on the "adjacent lands" that are located in the same valley as the wetlands on the subject property. These wetlands are part of the same system and are within a mature vegetated corridor, which is supported by the Natural Heritage Reference Manual (2010). Further justification is needed for why this adjacent wetland was considered separately for determining SWH. The method used by Biologic is not supported by the PPS (2014) for confirming SWH.

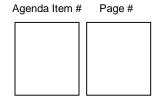
- 23. Section 4.2.4 Fauna (Mammals) During amphibian surveys conducted by the City of London Ecologist, at least five bats were seen foraging overhead. Were surveys of nesting cavities carried out before the woodland was cleared? How many potential nesting trees were removed? Did Biologic not observe any foraging bats during amphibian surveys or other field work in 2014? Action: Given the clear presence of unknown bat species within the subject lands that were not previously identified by Biologic, a bat survey is required to identify the species present. In addition, the ISR in Appendix A specifically indicates that if all trees are protected bat protocols are not required. However if trees were to be impacted, then bat surveys were required. Over a hectare of mature woodlands that contained snags were removed. Did Biologic conduct bat surveys prior to their removal? As identified in the ISR, since trees were impacted and may be further impacted, bat surveys are required. This will identify if any listed/protected bat species are present and a detailed nesting cavity survey is needed to potentially identify further Significant Wildlife Habitat for bats.
- 24. Section 4.2.4 Fauna The ISR identified that incidental Butterfly and Odonata were to be recorded. A list of these species was not identified or discussed in the EIS and E&PP do not accept that none were observed during the numerous site visits conducted by Biologic. The City of London Ecologist identified numerous Butterfly and Odonata species during site visits (pictures taken by the city of London Ecologist), this included multiple Monarch Butterflies. Again, this shows the diversity this site contains, but is not identified or discussed in the EIS. Action: Biologic was required to make incidental observations for various groups to help provide an accurate picture of the diversity and wildlife use of the subject site.
- 25. Section 5.1 Provincial Policy (2.1.4) The indication that the wetlands are too small to be considered is not accurate, in general wetlands <2 ha in size can still be considered. In this particular case, given the diversity of species present on site and the function that these wetlands provide, they should be considered under the OWES. Please see Comment #8. Action: Revise statement to accurately reflect the language used in the OWES (2014), which allows small wetlands to be evaluated. Furthermore, this comment ties directly back to Comment #8 above.
- 26. Section 5.1 Provincial Policy (2.1.5 d Significant Valleylands) Upon further review and consideration of all available data, the valleylands located in this area should be identified as Significant Valleylands. The feature and its functions support this designation. These features (all slopes) are a significant and important functional ecological component to



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the subject site. Action: Identify the area as a Significant Valleylands and the need to stake top of slope for all slops that form the valleyland feature on the subject property and that also contribute to the other significant natural heritage features and associated ecological functions, noting that the valley lands extend well north of the subject site as well. The top of slope line currently identified does not encompass the entire valley system, and no top of slope line is provided on the north/west side of the valley.

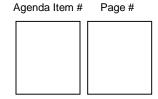
- 27. Section 5.1 Provincial Policy (2.1.5 e Significant Wildlife Habitat) Landbird Migratory Stopover The assertion that Biologic continues to make within the EIS that the woodland is only 1.4 ha in size is not accurate. Again, the property line of the subject site does not function as an ecological barrier. The woodlands located in the area is connected with the subject site are greater than 4ha. Action: Correct this statement throughout the EIS to accurately reflect the true complete size of the woodland patch 10056. The City of London OP and also the PPS speaks to Natural features in their entirety, regional context, and connections to other natural heritage features and areas. Biologic is ignoring this approach by only looking at the feature within the subject site and not having consideration for the feature beyond the property line, which is not ecologically justifiable and it does not have a PPS (2014) or OP policy rationale.
- 28. Section 5.1 Provincial Policy (2.1.5 e Significant Wildlife Habitat) Amphibian Breeding (woodland) See all relevant comments above regarding this section. Biologic has incorrectly indicated that the number of listed individuals is less than 20 for the wetlands. Action: Revise section to indicate that there is SWH for Breeding Amphibians (woodlands).
- 29. Section 5.1 Provincial Policy (2.1.5 e Significant Wildlife Habitat) Terrestrial Crayfish -The Terrestrial Crayfish section of the SWH evaluation is missing from the EIS. It is noted that in the SWH criteria evaluation tables in Appendix H the field work conducted by Biologic indicates that no suitable habitat for Terrestrial Crayfish is present and that no chimneys are present. How did Biologic come to the conclusion that no habitat is present? Biologic identified marsh habitats within the subject site and borehole data suggests that soils are suitable as well. The City of London Ecologist during field site visits confirmed suitable habitat was present and found over a half dozen Terrestrial Crayfish chimneys (pictures taken by the City of London Ecologist) located around the east wetland and also within the vernal pools located at the back of the subject property. Additional chimneys are likely present throughout the site. Action: Include this section in the Provincial Policy analysis and update it to include that Terrestrial Crayfish habitat is indeed present and that Terrestrial Crayfish chimneys have been confirmed within suitable habitat. Identify that all suitable habitat is now protected SWH for Terrestrial Crayfish. Provide an explanation to indicate how Biologic concluded that these wetlands were not suitable habitat, and how so many Terrestrial Crayfish chimneys could have been missed during the approximately 10+ hours William Huys had spent on this subject property conducting various surveys.
- 30. Section 5.1 Provincial Policy (2.1.7) Habitat of Endangered and Threatened Species It has been identified as indicated in Comment #20 that American Badgers are active within the subject site and habitat to carry out their life cycle is present, but not yet confirmed to be using dens for breeding. It should also be noted, that any dens assessed by Biologic that were contained on the slopes within the forest habitat that were removed would have been filled in as a result of the tree removal and grubbing activity. It is possible given the inaccurate statements by Biologic that the dens had no evidence of Badger activity, that there may have been additional dens within the subject site that would meet the requirement for protection under Section 10 of the ESA. Consideration must be provided for this Endangered Species on the subject site. Furthermore, bats were identified during amphibian breeding surveys and further studies are needed to identify if any listed species are present. Action: Revise this section to reflect the accurate information provided by the City of London Ecologist and confirmed by the MNR site visit in September 2015.
- 31. Section 5.1 Provincial Policy Summary Action: The summary section here must be



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updated to reflect the numerous errors made by Biologic in this section.

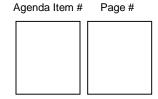
- 32. Section 5.2 Municipal Policy (15.4.2) Wetlands The wetlands are not too small to be evaluated on their own in this case, given the diversity of aquatic habitat, wildlife usage, and provincial significance. Action: Update this section to provide an accurate summary of the wetlands. See Comments #8 and Comment #25. OP policy identifies the requirement for the OWES to be used.
- 33. <u>Section 5.2 Municipal Policy (15.4.4) Habitat of Endangered and Threatened Species</u> **Action: See comment #30**.
- 34. Section 5.2 Municipal Policy (15.4.6) Corridors Upon further review and consideration of all available data, the valleylands located in this area should be identified as a Significant River, Stream and Ravine Corridor. This should have been reviewed, discussed and identified by Biologic. No analysis is provided for the valleylands in the EIS. The feature and its functions support this designation. These features (all slopes) are a significant and important functional ecological component to the subject site Action: Identify the area as a Significant River, Stream and Ravine Corridor and the need to stake top of slope for all slops that form the valleyland feature on the subject property and that also contribute to the other significant natural heritage features and associated ecological functions, noting that the valley lands extend well north of the subject site as well. The top of slope line currently identified does not encompass the entire valley system, and no top of slope line is provided on the north/west side of the valley. The overland flow to the tributary is to be maintained.
- 35. Section 5.2 Municipal Policy (15.4.7) Wildlife Habitat (a) In addition to what has been mentioned in section (a), Biologic has not added other important wildlife species that are susceptible to impacts for components of their life cycle. These include active American Badger within the site, Terrestrial Crayfish habitat and chimneys present, and Amphibian breeding (woodlands) habitat that should have been identified in Biologic's work, and was confirmed by the City of London Ecologists. Action: Revise section to account for all wildlife species as indicated.
- 36. Section 5.2 Municipal Policy (15.4.7) Wildlife Habitat (b) update this section to provide comment on the wetlands located within the woodlands and the valleylands located here. This type of habitat (very productive habitat) within woodlands especially in an urbanized environment surrounding a large portion of the site is not as well represented. This adds to the overall importance and significance of this feature. Action: Revise this section to accurately reflect the diversity of habitats on the subject site.
- 37. Section 5.2 Municipal Policy (15.4.7) Wildlife Habitat (c) Revise this section to reflect accurate data found for this site, as detailed in previous comments. This area has been shown to hold value for conservation, potentially research with regards to American Badger and passive recreation opportunities with how productive the wetlands are for amphibians. Action: Revise this section, as the current statement is not accurate.
- 38. Section 5.2 Municipal Policy (15.4.9) Groundwater Recharge Areas, Headwaters, and Aquifers As previously identified, there is overland flow from this site and acts as headwaters of an unnamed tributary to Dingman Creek. The inlet pipe located on the south side of the subject lands functions to carry overland flow from the wetlands along the tributary connecting eventually with Dingman Creek. In addition, the artificial berm currently functions to block/impede overland flow from the wetlands. These issues were never identified or discussed in the EIS. Action: Revise section accordingly.
- 39. Section 5.2 Municipal Policy (15.4.10) Water Quality and Quantity This section deals with the protection of water quality and quantity concerns with regards to natural heritage features and their associated functions. Detailed consideration is required in this section to address water quality and quantity with regards to the Significant Natural Heritage Features and their associated ecological functions including SWH. This should also be strongly addressed in the Impact Assessment section of the EIS. The City of London OP Section 15.4.10: "Water quality and quantity are addressed from a number of perspectives in this Plan. The Natural Heritage System policies address water quality and quantity through the protection of: natural heritage features and areas such as river,



stream and valley corridors; fish habitat; and ground water recharge, headwaters and aquifers.....Development and site alteration will be restricted and mitigative measures or alternative development approaches may be required in or near sensitive surface water features and sensitive ground water features in order to protect, improve and/or restore these features and their related hydrologic functions."

Action: A detailed analysis is required to address these concerns that the OP requires to be addressed in order for development to proceed. This is also a requirement of the PPS (2014) (Section 2.1 Natural Heritage and Section 2.2 Water). The EIS does not speak to or address PPS (2014) requirements for Natural Heritage Feature protection and water quality/quantity. The wetlands seem to be primarily sustained from overland flow via the tablelands and slopes. Currently, Biologic has provided no analysis and has not demonstrated any concern for water quality and quantity and the impacts to the significant Natural Heritage Features and their ecological functions as has be identified on the subject site. No discussion on maintaining the overland flow route (valleylands) offsite. These valleylands and wetlands are the headwaters for a tributary emptying into Dingman Creek. Biologic also does not acknowledge or address the loss of over a hectare of mature woodlands that filter runoff, attenuate flows, and provide habitat and SWH for the life cycles of various species. The development has not satisfied requirements of the PPS (2014), or London OP policies.

- 40. Section 5.2 Municipal Policy (15.4.13) Unevaluated Vegetation Patches The first paragraph inaccurately identifies the size of the woodland. This woodland is part of a larger woodland and valley system that extends onto adjacent lands. Also, Biologic makes no indication that this vegetation patch was over a hectare larger just a few months ago until its removal against Council policy. Action: Update this paragraph to correctly identify the actual size of the entire woodland. Biologic should be aware that property lines do not function as ecological barriers when identifying the size and contiguous nature of Natural Features and Areas. The way in which Biologic presents this is against the intention of the OP policy and the PPS (2014). Biologic should indicate that the woodland was removed against Council policy, and before it was fully evaluated.
- 41. Section 5.2 Municipal Policy (15.4.13) Unevaluated Vegetation Patches The second paragraph makes a completely inaccurate statement that the woodland located on the subject property is only "loosely connected" to the larger patch. In fact the woodland (including the original size of the woodland before being removed) was always considered to be part of patch 10056 (not patch 10058 as Biologic indicates, see the ISR Appendix A). What evidence is presented to conclude that the woodland is not located on Schedule A because of private treed backyards? It is currently unevaluated and meets the criteria for significance from previous high level evaluations and the current EIS. Section 4.0 of the EMG for the Evaluation of Ecologically Significant Woodlands requires the entire patch be evaluated. This is very clearly stated in the EMG. Biologic's opinion that the evaluation criteria should not be applied to the woodland is false. Biologic is required to be in compliance with the PPS (2014) and City of London OP policies which include applying the EMGs as approved by Council. Furthermore, Biologic's insistence that this woodland is "very small", a "strip of trees", and "loosely connected" to the contiguous woods is deeply concerning to E&PP, as this approach has no ecological basis to be considered in such a manner. As explained earlier, property lines do not separate contiguous ecological features. The mature woods extend beyond the property line as clearly shown on Biologic's own Figures. It is difficult to understand Biologic's insistence on this position given it is contrary to OP policy and the PPS (2014), and has no ecological basis as presented. Action: this section makes inaccurate and false statements with regards to the characteristics of the woodland as indicated. Fully revise this section.
- 42. Section 5.2 Municipal Policy (15.4.13) Table 5 Evaluation of Ecologically Significant Woodlands The title of the Table is not acceptable: "Evaluation of Ecologically Significant Woodlands (guideline Document for the Evaluation of Ecologically Significant Woodlands, 2006) as applied to a very small patch". The continued insistence of this being referred to as a small patch seems to be used in order to convey a message of non-significance and to try to persuade the reviewer that this feature is not important and should not even be considered for evaluation (as Biologic previously indicated it should

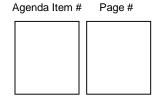


not be). To properly assess the significance of a natural features Biologic is required to address London OP policies and apply the EMG document using the standards developed for its implementation as approved by Council. The evaluation of woodlands is to be applied to the entire patch, as is clearly indicated in Section 4.0 of the EMG. Evaluating only what is on the "subject site" and ignoring the context of anything located outside of the property line is not ecologically justified and not supported by the EMGs, OP policies, or the PPS (2014). Action: Modify the title of Table 5 to represent the application of the guideline documents to the woodland patch 10056.

- 43. Section 5.2 Municipal Policy (15.4.13) Table 5 Evaluation of Ecologically Significant Woodlands Biologic did not accurately apply the evaluation criteria, as they did not apply it to the entire woodland patch. In addition, Biologic did not include the Woodland Patch Assessment Score Sheet or the Summary Score Sheet contained within Section 4.0 of the EMG. It is noted that Biologic also clearly ignored multiple criteria that require evaluation as they have not been included in Table 5. It is unacceptable that Biologic chose to ignore criteria and not conduct a full evaluation for the significance of the woodland.
 - For example, under Category 1.1 Site Protection, Biologic indicates only a medium ranking. However a thorough analysis of this category found the following: The Dingman Creek Subwatershed Study (not reviewed by Biologic, even though it was a required background document in the ISR) identified this woodland patch as category "1" woodland, which in addition to having one or more hydrological functions would actually rank this category as High. This category could also be ranked high based on the erosion and slope protection (1.1 b), which was ignored by Biologic in their evaluation. The slopes within the patch reach up to 35%, the criteria threshold for a High ranking are step slopes >25%. The steep slopes were even identified by Biologic at the beginning of the EIS Report, but ignored for this evaluation for some unknown reason.
 - Under Criterion 2 (2.1 b) Biologic did not calculate the Mean Coefficient of Conservatism, which is a requirement. Biologic did not calculate the Floristic Quality of the subject site.
 - Under Criterion 2 (2.2 a) Patch Size, Biologic indicates this patch ranks Low (<2 ha in size). However, as clearly shown in the air photos, field work, and this report, this patch is part of a larger patch (and identified as Patch 10056) that goes beyond the property line. The patch clearly contains a woodland >4 ha this would rank the patch as High (as identified in the ISR Appendix A, which was completed in March 2014 with Biologic). Biologic was made aware of the overall size of this Woodland Patch during the ISR meeting and that it was approximately 8.9 ha in size at the time, this was well before the submission of the EIS Report in June 2015. This practice of not using available data and applying the criterion incorrectly is not acceptable to E&PP. This practice of ignoring data when evaluating the Significance of Features or identifying their ecological functions is not supported by the EMGs, OP polices, or the PPS (2014). There is also no ecological basis for using the property line as a physical ecological barrier.

Action: Biologic is required to rewrite this section to correctly evaluate each Criterion fully, as required. Biologic is required to provide the associated scoring sheets detailing the criteria evaluation. Biologic is required to use all data and not ignore data that is relevant to the evaluation.

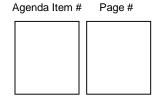
44. Section 5.3 UTRCA Policy Considerations and Regulated Lands – The UTRCA has indicated that the features are regulated. Biologic should be aware that even if not identified on Regulatory mapping, wetlands are regulated features by the UTRCA unless specifically told otherwise by the Regulatory Authority. The UTRCA has made no such indication that these wetlands are not regulated. Biologic also did not present any rationale to definitely indicate that these wetlands are not considered regulated wetlands (see previous related comments). Both Biologic and EXP ignored visible evidence in the field of an artificial berm placed in a manner that blocks overland flow from the wetlands. Furthermore Biologic ignored background studies showing a tributary originating within the valleyland/wetlands located on the subject site, and the online natural heritage map generator used by the MNRF (2015) to show NHIC data and other relevant Natural



Planner: C. Smith

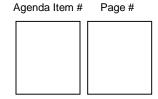
Heritage Areas information also displays a watercourse originating within the valleylands/wetlands down to Dingman Creek. This is conveyed downstream through an inlet pipe that was installed as part of the adjacent development to allow this to continue (pictures taken by the City of London Ecologist). Action: Revise this section to accurately identify that the wetlands on the subject site are regulated by the UTRCA.

- 45. Section 5.3 UTRCA Policy Considerations and Regulated Lands The UTRCA had indicated to the City of London staff that during the removal of trees on the subject site in March/April 2015 that the tree removals were not to be within 10m of the wetlands. It was clear based on the dripline staking conducted in May 2015 that tree/vegetation removals in some locations occurred within 10m of the high water mark of the wetlands and wetland habitat (pictures taken by City of London Ecologist). This is unacceptable and should have been easily avoided with proper staking of 10 m setbacks from the wetlands. Action: Provide justification for why removals occurred within 10m of wetlands in some places when it was an agreed to requirement to not have this occur.
- 46. <u>Section 5.4 Summary of identified Features and Functions</u> No functions have been identified in this summary section. There are additional policy categories that apply to the subject site. **Action: Review and revise this section accordingly.**
- 47. Section 6.0 Development Proposal There are additional natural heritage features and functions within and adjacent to the subject site that warrant consideration, which includes the areas where the woodland was removed, as identified in the above comments. The associated slopes and SWH that should have been correctly identified (but were not) by Biologic previously, are not being respected or protected with this development proposal. Action: Update and revise this section accordingly based on the various comments presented here.
- 48. Section 7.0 Impacts and Mitigation The use of "critical" and "core" feature language is not being used correctly and not being consistent with the OP policies within London or the PPS (2014). Both speak to the protection of the entire feature and all of its functions. This is a systems based approach. Protecting only portions of a feature and having no regard for protecting the functions as Biologic implies is not acceptable. Action: Revise the language used in this section to be consistent with the City of London OP policies and the PPS (2014). The entire features and their functions are to be protected, as required.
- 49. Section 7.0 Impacts and Mitigation The last paragraph makes a couple of large omissions. The woodland patch was evaluated as Significant, yet is not identified here. Why has this feature been ignored as an identified Significant Natural Heritage Feature? These valleylands should be identified as Significant. There is also confirmed SWH for Amphibian Breeding (woodlands) and SWH for Terrestrial Crayfish. In addition, Active American Badger (Endangered Species) is present and confirmed during an MNR site visit on September 14, 2015. Action: Revise this section to accurately identify all Significant and potentially Significant Natural Heritage Features and the ecological functions that also can be impacted by the proposed development on the subject site as identified in the various comments.
- 50. Section 7.1 Impacts and Mitigation The header "Core and Secondary Natural Heritage Features" is again not being applied correctly and are not following OP policies or PPS (2014) language. This language seems to be used by Biologic to diminish the importance and sensitivity of some of the Significant Natural Heritage features and their ecological functions. All Significant Natural Heritage Features and adjacent lands are to be protected along with their ecological functions; this would be in keeping with the EMG, OP policies, and PPS (2014). Action: Remove descriptive language that insinuates different levels of or reduced significance of the identified Significant Natural Heritage Features and Areas and their ecological functions. Remove language that is not consistent with the OP policies and PPS (2014).
- 51. <u>Section 7.1 Impacts and Mitigation</u> The statement "the draft plan has been configured so all rear lot lines are beyond the woodland trees" is false, as in the same sentence Biologic indicates that some braches overhang the rear lot lines. In addition, Biologic



then concludes that no direct impacts are anticipated. No thorough direct impact analysis is presented, no discussion is provided. Simply claiming no direct impacts without providing any serious justification for the claim is not acceptable and is also false for this development as proposed. The development is currently proposed within the valleylands habitat, directly impacting the features and functions wetlands/woodlands/valleys. In addition, there are significant direct impacts on the remaining woodland and associated wetlands as a result of the development proposal as identified in the comments. Biologic was also required to conduct a thorough review and analysis on the impacts the removal of the woodlands had on the Features and ecological functions. This was agreed to at the conference call meeting with City staff, UTRCA staff, Biologic, and the proponent. Biologic has not provided any analysis of these impacts. Biologic also did not provide an analysis on the water balance to show how the Natural Heritage features will be protected and maintained over the long term, instead biologic claims no impacts because of fencing and handing out a pamphlet. No in-depth discussion on the significance and sensitivity of the valley slopes, removed habitat, SWH, the creation of new edge habitat, and other identified concerns within these comments is provided in this section. Biologic has not satisfied EMG, OP, and PPS (2014) requirements. Action: After correcting and revising all previous sections, provide a thorough impact analysis on the proposed development and the resulting impacts that the over 1 hectare of woodlands removed including the exposure of steep slopes has on the features and ecological functions. This is to be done in the context of also addressing all of the comments identified by E&PP within this document.

- 52. Section 7.1 Impacts and Mitigation The statement "Buffers required to protect the core and secondary natural heritage features on site have been incorporated into the Open Space boundary" is completely false. No buffers have been provided to the Features, and the language does not accurately reflect the identified Significant Natural Heritage Features or identify their ecological functions. Rear lots are located along or within the dripline with zero meter buffers (as specifically stated by Biologic within this very section of the EIS) for both the residential houses and condominium block. Biologic ignores Section 5.0 of the EMG for calculating buffers and has not addressed the sensitivities of these Natural Features and ecological functions. Handing out pamphlets and putting up fences does not supersede serious protection and mitgative measures needed to protect the ecological functions of the Significant Natural Features. The slopes (valleylands) and adjacent lands surrounding the woodlands/wetlands/valleylands are part of the features and are required for the ecological functions of the wetlands, other Significant Natural Features identified, but ignored by Biologic. The original woodland on the subject site, before removal, met the criteria under the PPS (2014) to be identified as SWH. Development is being proposed within the feature (slopes, woodland that was removed) and will clearly directly impact the features and ecological functions as proposed. No water balance data is provided or discussed to show wetland water quality and quantity will be protected over the long-term. There is no support through the EMG, London OP policies, PPS (2014) and supporting document (NHRM 2010) for a 0 m buffer from these significant features and associated ecological functions. Action: This section is completely unacceptable. Baseless claims of no direct impacts are made. No buffers or EMG buffer calculations have been provided or discussed, which is required. The ecological functions and sensitivity of the wetlands, woodlands (existing and removed), slopes and valleylands, Significant Wildlife Habitats, Special Concern Species habitats, and Endangered Species activity have not been protected and no consideration has been given to them. No scientific justification based on the EMG, OP policies or Natural Heritage Reference Manual (2010) has been presented to justify the development proposal and lack of protective measures for all the features and their ecological functions. EMG buffer calculations and other considerations using accurate data indicate substantial buffers are needed. Completely revise this section. The EIS has in no way demonstrated that negative impacts on the Significant Natural Heritage Features, adjacent lands, and their ecological functions shall not occur. This is required to be in accordance with the EMG, OP policies and the PPS (2014).
- 53. <u>Section 8.0 Summary and Conclusion</u> This section is not acceptable in its current form, as the conclusion are based on faulty inventory data, missing inventory data, failure to identify all Significant Natural Heritage Features and Areas, failure to identify the



ecological functions of all the natural heritage features and areas (their extent, description, sensitivity, and understanding of how this system functions), failure to provide any type of protection to the significant natural heritage features and their ecological functions (substantial buffers are required), failure to identify the significance of the woodland and SWH habitat that was removed and the significance of the slopes (valleylands), failure to provide a thorough and in-depth impact analysis and associated net effects table, failure to apply the EMG guidelines, failure to comply with OP polices and the PPS (2014). Action: Once all of the errors and omissions have been corrected and accounted for, this section will require an entire rewrite.

- 54. <u>Section 8.0 Summary and Conclusion</u> An Environmental Management Plan and monitoring program are not identified or discussed. No effort is made to monitor potential impacts to the Significant Natural Heritage Features and Areas and to monitor their ecological functions to ensure no negative impacts are occurring. **Action: A detailed Environmental Management Plan including monitoring and restoration plan is required.**
- 55. Section 9.0 References During the review, it was noted that references have not been included in this list and others are not appropriately referenced. Action: Once the document has been thoroughly updated and reviewed, this section needs to fully represent all the documents used and provide proper referencing. It is unacceptable for a professional report to not have an accurate reference section given that this is supposed to represent the information the consultant used to justify their descriptions, characterizations, conclusions, and recommendations.
- 56. <u>Figures</u> The hard copy EIS submitted by Biologic was in black and white. This is not acceptable as it makes already difficult to read figures unreviewable in some respects. The electronic version was in colour and the hard copies should have been as well. Action: Provide legible and colored reports when submitting complete applications.
- 57. <u>Figures</u> As previously indicated, the Figures are very difficult to read. Information and details presented in many cases are not legible. **Action: Provide high quality figures, where the details are all clearly legible.**
- 58. <u>Figures</u> The legends do not contain all pertinent data indicated in the figures. **Action: Update legends accordingly.**
- 59. Figures The boundary delineations of the wetlands as shown in Biologic Figures #6, 7, 8, and 9 have not been properly identified. They appear to have been arbitrarily drawn on. The wetland boundaries extend beyond what is shown based on supplemental field work (photos taken by the City of London Ecologist). How were these wetland boundaries determined? Are these surveyed lines? No survey stakes or flags were found in the field delineating the wetland boundary. Action: Accurate and correct wetland boundaries are required. Wetland boundaries are not acceptable as shown and do not represent the entirety of the wetland area.
- 60. Figures There seems to be very odd discrepancies with the dripline. This dripline was apparently surveyed and updated after the May 2015 visit with City and UTRCA staff. But several odd inconsistencies are present. The dripline is not as far back from the wetlands in some places as shown on Figure #6 (and others). And in some places shows 10m setback from the wetland, but in the field this was not found to be accurate. Action: Provide the georeferenced layer prepared by the surveyor to be plotted on our mapping for comparison. Who was the surveyor and what company completed this task? What equipment did they use and what was the level of accuracy? Why is none of this information identified in the EIS Report? Identify the surveyed line on the figures and include the company name and date of the surveyed points. The dripline staking in the field was in some places much closer than shown and needs to be addressed in order to show an accurate dripline on the subject site.