Environmental and Ecological Planning Advisory Committee Report

3rd Meeting of the Environmental and Ecological Planning Advisory Committee
February 21, 2019
Committee Rooms #1 and #2

Attendance

PRESENT: S. Levin (Chair), E. Arellano, A. Boyer, R. Doyle, A. Duarte, C. Dyck, P. Ferguson, S. Hall, B. Krichker, S. Sivakumar, R. Trudeau and I. Whiteside and H. Lysynski (Secretary)

ABSENT: K. Moser and I. Mohamed

ALSO PRESENT: J. MacKay, S. Mathers, L. Pompilii, M. Snowsell, R. Wilcox and P. Yeoman

The meeting was called to order at 5:00 PM

1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

2. Scheduled Items

2.1 City of London Strategic Plan Engagement

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee heard the attached presentation from R. Wilcox, Director, Community and Economic Innovation, with respect to the City of London Strategic Plan 2019-2023.

3. Consent

3.1 2nd Report of the Environmental and Ecological Planning Advisory Committee

That it BE NOTED that the 2nd Report of the Environmental and Ecological Planning Advisory Committee, from its meeting held on January 17, 2019, was received.

3.2 1st Report of the Trees and Forests Advisory Committee

That it BE NOTED that the 1st Report of the Trees and Forests Advisory Committee, from its meeting held on January 23, 2019, was received.

3.3 2nd Report of the Advisory Committee on the Environment

That it BE NOTED that the 2nd Report of the Advisory Committee on the Environment, from its meeting held on February 6, 2019, was received.

3.4 Municipal Council Resolution - 2835 Sheffield Place

That it BE NOTED that the Municipal Council resolution adopted at its meeting held on January 15, 2019, with respect to 2835 Sheffield Place, was received.

3.5 Small Patches Make Critical Contributionss to Biodiversity Conservation

That it BE NOTED that the communication dated January 17, 2019, from S. Sivakumar, with respect to small patches making critical contributions to biodiversity conservation, was received.

4. Sub-Committees and Working Groups

4.1 Clarke Road Environmental Assessment Working Group Comments

That consideration of the Clarke Road Environmental Assessment Working Group comments BE POSTPONED to the next meeting of the Environmental and Ecological Planning Advisory Committee.

4.2 Environmentally Significant Areas and Your Dog Pamphlet

That the Environmental and Ecological Planning Advisory Committee (EEPAC) BE REQUESTED to provide comments to P. Ferguson prior to the next EEPAC meeting with respect to the proposed "You, Your Dog and Environmentally Significant Areas (ESAs)" brochure.

4.3 One River Environmental Assessment - Response to EEPAC Comments

That the Civic Administration BE ADVISED that the Environmental and Ecological Planning Advisory Committee (EEPAC) agrees, in principle, only with the Springbank Dam Environmental Assessment for the preferred solution of the partial decommissioning of the Springbank Dam pending the EEPAC review of the completed Environmental Impact Study and accompanying documentation including the hydrogeological assessment contained in the River Characterization Study and the Natural Heritage Setting Study; it being noted that the EEPAC has reviewed the draft Environmental Impact Statement and has met with Civic Administration to discuss this matter.

4.4 Thames Valley Parkway North Branch Connection

That the attached, revised, Working Group comments relating to the Thames Valley Parkway North Branch Connection BE FORWARDED to the Civic Administration for consideration.

5. Items for Discussion

5.1 Notice of Planning Application - Zoning By-law - Amendment - 6682 Fisher Lane

That it BE NOTED that the Notice of Planning Application for the property located at 6682 Fisher Lane, from M. Sundercock, Planner I, was received.

5.2 Notice of Planning Application - Zoning By-law Amendment - 348 Sunningdale Road East

That a Working Group BE ESTABLISHED consisting of R. Doyle, A. Duarte and I. Whiteside, to review the Notice of Planning Application

relating to the property located at 348 Sunningdale Road East, from B. Debbert, Senior Planner and to report back at the next Environmental and Ecological Planning Advisory Committee meeting.

5.3 Meadowlily Woods ESA Conservation Plan - Phase 1

That a Working Group BE ESTABLISHED consisting of C. Dyck, S. Hall and S. Levin, to review the Meadowlily Woods Environmentally Significant Area Conservation Master Plan, Phase 1 and to report back at the next Environmental and Ecological Planning Advisory Committee meeting.

5.4 Endangered Species Act

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee held a general discussion with respect to the Province's 10th Year Review of Ontario's *Endangered Species Act:* Discussion Paper and Members were asked to provide comments individually.

5.5 2019 Work Plan

That consideration of the 2019 Environmental and Ecological Planning Advisory Committee (EEPAC) Work Plan BE POSTPONED to the next EEPAC meeting.

5.6 April 11, 2019 Meeting Date

That it BE NOTED that the April Environmental and Ecological Planning Advisory Committee meeting will be held on April 11, 2019 instead of April 18, 2019.

5.7 Municipal Council Resolution - Bird Friendly Development

That it BE NOTED that the Municipal Council resolution adopted at its meeting held on January 29, 2019, with respect to the Bird Friendly Development, was received.

5.8 905 Sarnia Road Wetland Relocation Project

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee held a general discussion with respect to the relocation of the wetland at 905 Sarina Road.

6. Deferred Matters/Additional Business

6.1 (ADDED) Meadowlily Woods Environmentally Significant Area Conservation Master Plan – Phase 1

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee heard the attached presentation from K. Richter and D. Riley, NRSI, with respect to the Meadowlily Woods Environmentally Significant Area Conservation Master Plan, Phase 1.

6.2 (ADDED) Notice of Study Completion - Broughdale Dyke - Municipal Class Environmental Assessment

That it BE NOTED that the Notice of Study Completion for the Broughdale Dyke, Municipal Class Environmental Assessment, from P. Adams, Environmental Planner, AECOM, was received.

7. Adjournment

The meeting adjourned at 7:48 PM.

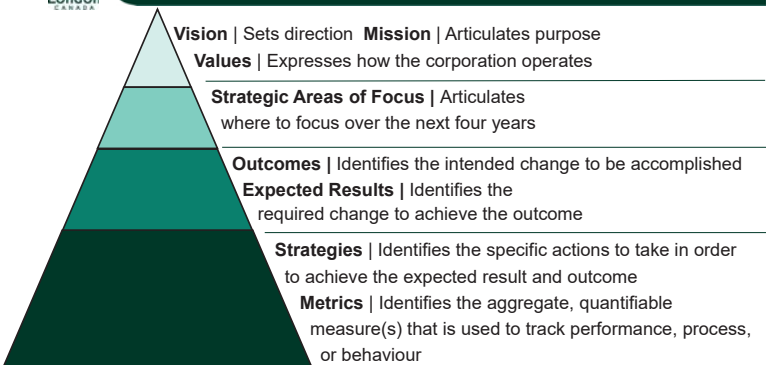
City of London Strategic Plan 2019-2023

Environmental and Ecological Planning Advisory Committee
February 21, 2019

What is the Strategic Plan?

- Council's Strategic Plan…
  - Identifies a **shared vision, mission, and strategic areas of focus** in order to guide the work of Council and Administration over the Council term.
  - Is a **directional document** which guides the work of the Corporation of the City of London, including Council, Administration, and the City's agencies, boards and commissions over the next four years.
  - Is **deliberately connected** with the 2020-2023 Multi-Year Budget
  - Is focused specifically on **strategic directions** that will be implemented in the next four years

Strategic Plan Approach



Strategic Plan Components

Vision, Mission, and Values

- The **Vision** sets the direction for the organization
- **Mission** articulates purpose
- **Values** express how the corporation operates

Strategic Plan Components

Outcomes and Expected Results

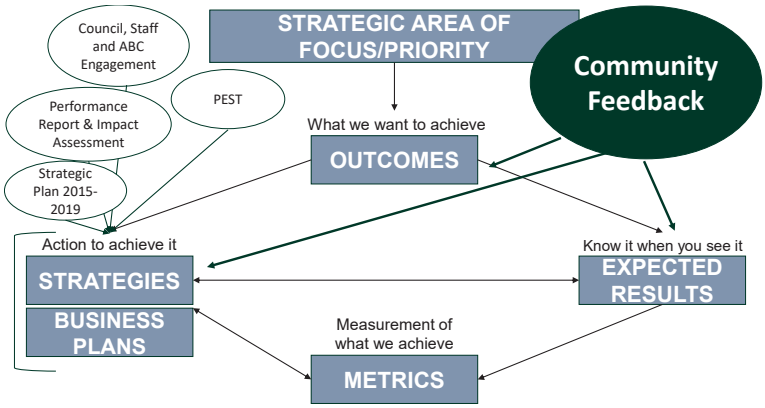
- **Outcomes** identify what we want to accomplish
- **Expected Results** identify the change required to achieve the outcome

The Outcomes and Expected Results should reflect the outcomes we want to accomplish for the community in the next four years.

Strategic Plan Components

Strategies

- **Strategies** are the specific actions that will be taken in order to achieve the outcomes and expected results
- These are the actions we will take in order to move our city forward over the next four years



How Community Feedback will be Used

- Throughout the month of February, feedback will be collected from residents both online and in person at various events across the city, including this one!
- All feedback will be compiled and shared with Council at the **March 4th Strategic Priorities and Policy Committee meeting** to help Council set the Vision, Mission, and Values, as well as the Outcomes, Expected Results, and Strategies, in order to develop and finalize the 2019-2023 Strategic Plan

Share Your Feedback

We want to know what is important to you. Ways to share your feedback include:

- http://getinvolved.London.ca/StratPlan
- Paper surveys (please return to City Hall Lobby front counter c/o Rosanna Wilcox)

Deadline for feedback is February 28, 2019

Thank you!

Environmental and Ecological Planning Advisory Committee Report

2nd Meeting of the Environmental and Ecological Planning Advisory Committee
January 17, 2019
Committee Room #5

Attendance

PRESENT: S. Levin (Chair), E. Arellano, A. Boyer, R. Doyle, A. Duarte, C. Dyck, S. Hall, B. Krichker, I. Mohamed, K. Moser, R. Trudeau and I. Whiteside and H. Lysynski (Secretary)

ABSENT: P. Ferguson and S. Sivakumar

ALSO PRESENT: J. Ackworth, C. Creighton, T. Koza and J. MacKay

The meeting was called to order at 5:00 PM

1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

2. Scheduled Items

2.1 Wonderland Road Class Environmental Assessment Study

That, the following actions be taken with respect to the Wonderland Road Class Environmental Assessment Study:

a) the ~~attached~~ presentation from J. Johnson, Project Manager, Dillon Consulting, was received; and,

b) the ~~attached~~ Notice of Public Information Centre, was received.

2.2 (ADDED) Back to the River Environmental Impact Statement

That the Environmental and Ecological Planning Advisory Committee heard a verbal presentation from M. Does with respect to the Back To the River Environmental Impact Statement.

3. Consent

3.1 1st Report of the Environmental and Ecological Planning Advisory Committee

That it BE NOTED that the 1st Report of the Environmental and Ecological Planning Advisory Committee, from its meeting held on December 13, 2018, was received.

3.2 Municipal Council resolution adopted at its meeting held on December 18, 2018, with respect to the 12th Report of the Environmental and Ecological Planning Advisory Committee

That it BE NOTED that the Municipal Council resolution adopted at its meeting held on December 18, 2018, with respect to the 12th Report of the Environmental and Ecological Planning Advisory Committee, was received.

4. Sub-Committees and Working Groups

4.1 3900 Scotland Drive and Other Properties

That the ~~attached~~ Working Group comments with respect to the application by John Aarts Group, relating to the property located at 3900 Scotland Drive and other properties BE FORWARDED to C. Lowery, Planner II, for consideration; it being noted that the Environmental and Ecological Planning Advisory Committee received and reviewed a Notice of Planning Application, with respect to this matter.

4.2 ReThink Zoning Working Group comments

That the ~~attached~~ Working Group comments with respect to the ReThink Zoning Draft Terms of Reference BE FORWARDED to J. Adema, Planner II, for consideration.

4.3 Springbank Dam Working Group Comments

That it BE NOTED that the Working Group comments reviewed by S. Levin, S. Hall and B. Krichker, relating to the Forks of the Thames and the Springbank Dam Decommissioning Environmental Impact Study, were received.

4.4 Back to the River Environmental Impact Study Working Group Comments

That the ~~attached~~ Working Group comments relating to the Forks of the Thames and Springbank Dam Decommissioning Environmental Impact Statements BE FORWARDED to the Civic Administration for consideration.

5. Items for Discussion

5.1 Proposed April 11, 2019 Meeting Date

That consideration of moving the April 18, 2019 Environmental and Ecological Planning Advisory Committee to April 11, 2019 BE POSTPONED to the next meeting.

5.2 Notice of Planning Application - Official Plan Amendment - Victoria Park Secondary Plan

That it BE NOTED that the Notice of Planning Application for the Victoria Park Secondary Plan, from M. Knieriem, Planner II, was received.

5.3 Natural Heritage Inventory for the Meadowlily Woods Environmentally Significant Area

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee held a discussion with respect to the Natural Heritage Inventory for the Meadowlily Woods Environmentally Significant Area.

6. Deferred Matters/Additional Business

6.1 (ADDED) Wetland Working Group Update

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee heard a verbal update from the Wetland Working Group.

6.2 (ADDED) Byron Gravel Pit Secondary Plan

That the following actions be taken with respect to the Byron Gravel Pit Secondary Plan:

a) the Civic Administration BE ADVISED that a portion of the Byron Gravel Pit be preserved for species-at-risk, specifically bank swallows and cliff swallows; it being noted that bank swallows are a threatened species and the swallows and their habitat are protected under the *Endangered Species Act*; and,

b) the Environmental and Ecological Planning Advisory Committee BE CIRCULATED on any environmental work undertaking as part of the Byron Gravel Pit Secondary Plan.

6.3 (ADDED) Dingman Creek Subwatershed Stakeholder Meeting Update

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee (EEPAC) heard a verbal update from B. Krichker, EEPAC Representative, relating to the Dingman Creek Subwatershed Stakeholder meeting.

6.4 (ADDED) 2019 Shifting the Paradigm Forum

That it BE NOTED that the Environmental and Ecological Planning Advisory Committee (CAC) approved an expenditure of up to $175.00 for R. Trudeau to attend the 2019 Shifting the Paradigm Forum - Growing Health Landscapes Conference; it being noted that the EEPAC has sufficient funds in its 2019 budget for these expenditures.

7. Adjournment

The meeting adjourned at 7:29 PM.

Trees and Forests Advisory Committee

Report

1st Meeting of the Trees and Forests Advisory Committee
January 23, 2019
Committee Room #4

Attendance

PRESENT: R. Mannella (Chair), T. Khan, J. Kogelheide, A. Meilutis, A. Morrison, M. Szabo, S. Teichert, R. Walker; and P. Shack (Secretary)

ABSENT: C. Haindl, C. Linton and G. Mitchell

ALSO PRESENT: A. Beaton, R. Cosby, J. Spence

The meeting was called to order at 12:15 PM.

1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

1.2 Election of Chair and Vice Chair for the term ending June 1, 2019

That the existing appointments of the Chair and Vice Chair for the Trees and Forests Advisory Committee BE EXTENDED to June 1, 2019, to coincide with the end of the current term.

2. Scheduled Items

None.

3. Consent

3.1 11th Report of the Trees and Forests Advisory Committee

That it BE NOTED that the 11th Report of the Trees and Forests Advisory Committee, from its meeting held on November 28, 2018, was received.

3.2 Municipal Council Resolution with respect to the recruitment and appointment of Advisory Committee members for the up coming term.

That it BE NOTED that the Municipal Council resolution from its meeting held on November 20, 2018, with respect to the recruitment and appointment of Advisory Committee members for the up coming term, was received.

3.3 ReThink Zoning Draft Terms of Reference

That it BE NOTED that the ReThink Zoning Draft Terms of Reference, dated October 31, 2018, was received.

3.4 City of London Trees Website - J. Kogelheide

That it BE NOTED that the communication from J. Kogelheide, dated December 9, 2018, was received.

4. Sub-Committees and Working Groups

None.

5. Items for Discussion

5.1 1576 Richmond Street Project - A. Morrison

That it BE NOTED that the ~~attached~~ presentation from A. Morrison, with respect to the construction at the property located at 1576 Richmond Street, was received.

6. Deferred Matters/Additional Business

6.1 (ADDED) RFP 1903 Tree Inventory Update

That it BE NOTED the Trees and Forest Advisory Committee held a general discussion, with respect to RFP 1903, Tree Inventory Update and provided the following comment:

"the information that the City of London gathers may not be of good quality information to support the 2014 Urban Forestry Strategy due to the short timeline".

7. Adjournment

The meeting adjourned at 1:14 PM.

Advisory Committee on the Environment

Report

2nd Meeting of the Advisory Committee on the Environment
February 6, 2019
Committee Room #4

Attendance

PRESENT: S. Ratz (Chair), K. Birchall, M. Bloxam, S. Brooks, S. Hall, M. Hodge, L. Langdon, C. Lyons, D. Szoller and A. Tipping and J. Bunn (Secretary)

ABSENT: J. Howell and T. Stoiber

ALSO PRESENT: J. Ackworth, T. Arnos, G. Barrett, L. McDougall, J. Parsons and J. Stanford

The meeting was called to order at 12:16 PM.

1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

2. Scheduled Items

2.1 London as a Bee City

That the Civic Administration BE ADVISED that the Advisory Committee on the Environment recommends that a communication program be developed related to the Bee City implementation that would increase awareness for members of the public as well as between City of London departments; it being noted that the following items were received with respect to London as a Bee City:

· the ~~attached~~ presentation from L. McDougall, Ecologist Planner, entitled “Protecting and Enhancing Pollinator Habitat in London;

· a verbal delegation from A.M. Valastro;

· a verbal delegation from G. Barrett, Manager – Long Range Planning and Research;

· the resubmitted Memo, appended to the agenda, dated August 22, 2018, entitled “Responses to the ACE’s Plight of the Pollinators and Bee City Recommendations (2014 and 2018)”; and,

· the update document, appended to the agenda, dated Summer 2018, entitled “City of London A Leader in Habitat and Pollinator Protection, Engagement and Creation Initiatives”.

3. Consent

3.1 1st Report of the Advisory Committee on the Environment

That it BE NOTED that the 1st Report of the Advisory Committee on the Environment, from its meeting held on December 5, 2018, was received.

3.2 1st Report of the Transportation Advisory Committee

That it BE NOTED that the 1st Report of the Transportation Advisory Committee, from its meeting held on January 22, 2019, was received.

3.3 Municipal Council Resolution - 1st Report of the Advisory Committee on the Environment

That it BE NOTED that the Municipal Council resolution, from its meeting held on December 18, 2018, with respect to the 1st Report of the Advisory Committee on the Environment, was received.

3.4 Notice of Planning Application - Zoning By-law Amendment - 6682 Fisher Lane

That it BE NOTED that the Notice of Planning Application, dated January 24, 2019, from M. Sundercock, Planner I, with respect to a zoning by-law amendment for the property located at 6682 Fisher Lane, was received.

3.5 West London Dyke Erosion Control - Municipal Class Environmental Assessment - Notice of Study Completion

That it BE NOTED that the Municipal Class Environmental Assessment Notice of Study Completion for the West London Dyke Erosion Control, from C. Gorrie and S. Bergman, Stantec Consulting Ltd., was received.

3.6 Thames Region Ecological Association Representative on the Advisory Committee on the Environment

That it BE NOTED that the communication dated December 4, 2018, from D. Szoller, Thames Region Ecological Association (TREA), with respect to the TREA representative on the Advisory Committee on the Environment, was received.

4. Sub-Committees and Working Groups

4.1 Energy and Built Sub-Committee Report

That the following actions be taken with respect to the Energy and Built Environment Sub-Committee Report dated January 2019:

a) the Civic Administration BE ADVISED that the Advisory Committee on the Environment recommends that the Discover Wonderland Environmental Assessment explore every possible avenue to avoid widening Wonderland Road to six lanes as there are a number of alternative methods that provide better traffic flow, improved options outside of driving ones own personal vehicle (public transit, cycling, walking, etc.), and proper access management; and,

b) the above-noted sub-committee report BE RECEIVED;

it being noted that verbal delegations from J. Ackworth, Transportation Design Technologist and J. Johnson, Dillon Consulting Limited, were received with respect to this matter.

5. Items for Discussion

5.1 Ice Management in Winter

That it BE NOTED that the submission dated January 28, 2019, from M. Bloxam as well as a verbal delegation from J. Parsons, Division Manager, Transportation and Roadside Operations, with respect to ice management in winter, were received.

5.2 The Precautionary Principle as it Applies to the City of London

That it BE NOTED that the ~~attached~~ hand out from K. Birchall with respect to the Precautionary Principle, was received; it being noted that there will be further discussion on this matter at the next meeting of the Advisory Committee on the Environment.

5.3 Revisiting a City Sustainability Office

That it BE NOTED that the Advisory Committee on the Environment held a general discussion with respect to a sustainability office in the City of London.

5.4 Current Recycling and Waste Diverson Efforts in the Downtown Core and the https://getinvolved.london.ca/WhyWasteResource

That it BE NOTED that the Advisory Committee on the Environment held a general discussion with respect to current recycling and waste diversion efforts in the Downtown core.

5.5 Advisory Committee Budget - 2019

That it BE NOTED that the Advisory Committee on the Environment (ACE) held a general discussion with respect to the 2019 ACE budget and work plan.

6. Deferred Matters/Additional Business

6.1 (ADDED) Green Bin Program

That it BE NOTED that the submission, dated December 19, 2018, from J. Kogelheide, with respect to a Green Bin Program, was received.

6.2 (ADDED) Municipal Council Resolution - Bird-Friendly Development

That it BE NOTED that the Municipal Council Resolution, from its meeting held on January 29, 2019 and the staff report dated January 21, 2019, with respect to bird-friendly development, were received.

7. Adjournment

The meeting adjourned at 2:28 PM.

P.O. Box 5035
300 Dufferin Avenue
London, ON
N6A 4L9

January 16, 2019

M. Zunti
Sifton Properties Limited
171 Queens Avenue
London, ON N6A 5J7

I hereby certify that the Municipal Council, at its meeting held on January 15, 2019 resolved:

That, on the recommendation of the Senior Planner, Development Services, the following actions be taken with respect to the application by Sifton Properties Limited, relating to the lands located at 2835 Sheffield Place (also known as Block 153 within the Victoria on the River Draft Plan of Subdivision):

a) the proposed by-law appended to the staff report dated January 7, 2019 as Appendix "A" BE INTRODUCED at the Municipal Council meeting to be held on January 15, 2019 to amend Zoning By-law No. Z.-1, (in conformity with the Official Plan), to change the zoning of the subject lands FROM an Open Space Special Provision (OS5(3)) Zone and a Holding Open Space (h-2•OS4) Zone TO a Holding Residential R6 Special Provision (h•h-100•h-159•R6-2(11)) Zone to permit cluster housing in the form of single detached dwellings; together with a special provision for lot frontage of 12.0 metres minimum, rear yard depth of 4.5 metres minimum, interior side yard depth of 3.0 metres minimum, and lot coverage of 35 percent maximum; and, FROM a Holding Residential R6 Special Provision (h•h-100•h-159•R6-2(11)) Zone TO an Open Space Special Provision (OS5(3)) Zone to permit such uses as conservation lands, conservation works, passive recreation, and managed woodlots;

b) the Municipal Council SUPPORTS proposed red-line revisions to the draft approved plan of subdivision as submitted by Sifton Properties Limited, prepared by Bruce Baker, Ontario Land Surveyor (Drawing No. D4099-DP.dwg, dated July 18, 2017), which shows a revised Low Density Residential Block 153 and Open Space Buffer Block 172, and creation of a new Open Space block, SUBJECT TO the previously approved draft plan conditions;

c) the Approval Authority BE ADVISED that the following issues were raised at the public participation meeting with respect to the proposed revisions to the limits of Block 153 within the Victoria on the River draft plan of subdivision, as submitted by Sifton Properties Limited:

i) encroachment on green space;

ii) concerns over the number of trees to be cut down; and,

iii) the loss of habitat for amphibians;

d) the Approval Authority BE ADVISED that the following issues were raised at the public participation meeting with respect to the application for Draft Plan of Vacant Land Condominium:

i) the amount of traffic using Sheffield Place;

The Corporation of the City of London
Office 519.661.2500 x4856
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hlysynsk@london.ca
www.london.ca

ii) the lack of knowledge that the subject block was being built for multiple residential units in this location;

iii) the status of the Meadowlily Woods Environmentally Significant Area Master Plan as well as what measures will be put in place to educate residents and avoid encroachment and conflicts with the Environmentally Significant Area;

iv) the width of the existing streets; and,

v) how will conflicts between trail and private street crossing be minimized;

it being noted that the Planning and Environment Committee reviewed and received a communication dated January 2, 2019 from A. McEwen, by e-mail;

it being pointed out that at the public participation meeting associated with these matters, the individuals indicated on the attached public participation meeting record made oral submissions regarding these matters;

it being further noted that the Municipal Council approves this application for the following reasons:

- the recommended zoning amendments, revisions to draft plan of subdivision, and proposed vacant land condominium are considered appropriate and consistent with the Provincial Policy Statement;
- the proposal conforms with The London Plan, the 1989 Official Plan, and the Old Victoria Area Plan; and,
  the proposed residential use, form and intensity of development are considered appropriate. The zoning previously approved through the draft plan of subdivision process contemplates low density residential development in the form of single detached cluster housing. (2018-D09) (3.3/2/PEC)

C. Saunders
City Clerk
/lm

cc. G. Kotsifas, Managing Director, Development and Compliance Services and Chief Building Official
P. Yeoman, Director, Development Services
L. Pompilii, Manager, Development Planning
L. Mottram, Senior Planner
J. Minor, Documentation Services Representative
M. Vivinetto, Executive Assistant to the Managing Director, Development and Compliance Services and Chief Building Official
Chair and Members, Environmental and Ecological Planning Advisory Committee
External cc list in the City Clerk's Office

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PUBLIC PARTICIPATION MEETING COMMENTS

3.3 PUBLIC PARTICIPATION MEETING – Application – 2835 Sheffield Place – Zoning By-law Amendment – Revisions to Draft Plan of Subdivision – Draft Plan of Vacant Land Use Condominium (Z-8793/39T-09502/39CD-18502)

- *(Councillor S. Turner enquiring about the swap for the OS-5 lands, if the swapped in lands qualify as Environmentally Significant Area (ESA), and the lands that have been swapped out have already been designated Environmentally Significant Area, why not, through the Environmental Impact Study, was the whole thing not identified as ESA.)*; L. Pompilii, Manager, Development Planning, responding that that was addressed during the review process for the Plan of Subdivision that established the limits of Block 153 at that time; advising that the applicant may be able to provide some further clarification on that as well; *(Councillor S. Turner indicating that if it is deemed as eligible now to be swapped out as a parcel then it was identified at some point to say that this is more worthy of designation than the other parcel so that is where the swap was but it seems odd that after the EIS was completed then now they are in a situation rather than having designated the entire parcel; thinking that rather than just trading one piece for another both of them have been identified to be significant and it seems like they should have both should maintained at the outset rather than now with the swap; having read through the comments and the file, it looks like it is a good candidate for enhancement, the candidate parcel that is being swapped out looks like it is predominantly buckthorn and is not as significant but still, at the outset, it was identified as something that was important and he thinks that was where his question was on that and the other was that there was some commentary about the multi-use pathway, he thinks from the Upper Thames River Conservation Authority comment about whether it was being coursed through the Environmentally Significant Area or OS-5 lands, he could not see that through any of the diagrams; wondering if that is the case or does staff know what the proposed routing for the Thames Valley Parkway is.)*; L. Pompilii, Manager, Development Planning, responding that he is not familiar with the exact routing but he believes it is outside of that area; *(Councillor S. Turner indicating that in the Environmental Policies section of the report, it cites the wording from the Environmental Impact Study itself from the proponent; he is not sure if those clauses that were identified were ones that were agreed upon by staff; wondering if staff concurs with the findings of the EIS as identified in the report.)*; L. Pompilii, Manager, Development Planning, responding that to the best of his knowledge he believes the Ecologist is in agreement with those comments; *(Councillor S. Turner indicating that he realizes L. Pompilii, Manager, Development Planning, is pitch hitting and thanking him for answering his questions.)*
- Maureen Zunti, Sifton Properties Limited – expressing agreement with the staff report; expressing appreciation for the support of staff for their applications; advising that their Ecologist, Dr. Gary Epp, is at the meeting as well as their Engineer, Jason Fleury to assist with any technical questions. (See attached presentation.)
- Gary Brown, 35A – 59 Ridout Street South – indicating that he thought we would have learned our lessons about what happens around the Sifton Bog and the continual encroachment on green space; guessing that ship has sailed unfortunately but that is what he sees here; advising that he knows this area rather well because he used to go seed collecting with ReForest London with Bill who was one of the original founders; enquiring as to how many trees are going to be cut down; noting that on Wharncliffe Road, they clear cut the whole area and it was the same company; wondering what is going to happen here and how many trees are going to be cut down; thinking that is a question that should be answered; mentioning turtles and frog habitat, as far as he knows, amphibians are some of the most endangered creatures in North America and we should be

taking that into account here; understanding this is a swap between one piece of land and the other and it was already approved but he is not so sure the original approval should have been done; stating that green space is very important to our city and this just looks like more sprawl upon our city; reiterating that he would like to know how many trees are going to come down.

- Pawel Kornas, 2823 Sheffield Place – advising that he lives right beside the pond; expressing concern with the amount of cars that will be going by because with the way traffic is right now with the school buses, it is horrible for him and for everybody to go by; indicating that he has two young children and they have nowhere to play except the front or the backyard; stating that with the building of thirty units there are going to be a lot of cars going by.
- Artur Kosinski, 2806 Sheffield Place – expressing concern because he did not know that this area was designed and approved in 2012 but when they were buying their houses on the cul-de-sac, they were assured that they were buying houses on a cul-de-sac not the street because right now it is going to be a street with a roundabout; it is not going to be a cul-de-sac anymore; referring to a previous application that allowed four houses to be built and they have already built two and three others are going to be built there and now thirty more; this is too much and he counted how many trees they need to cut just to get through the pond and it is over twenty and to extend that area to build ten houses is around one hundred; asking that that be considered.
- Sandy Levin, Chair, Environmental and Ecological Planning Advisory Committee (EEPAC) – advising that the EEPAC comments are in the staff report; hoping that some of the EEPAC comments will be in the conditions of development; advising that the bigger ratio and the bigger question that he hopes the Planning and Environment Committee asks to staff is the status of the Meadowlily Woods Environmentally Significant Area Master Plan; noting that it was started back in 2013 and it has come to a dead stop; indicating that EEPAC has asked the status; pointing out that you have a growing neighbourhood adjacent to an Environmentally Significant Area with no real plan for where the trail system is going to go, how that Environmentally Significant Area is going to be used appropriately, without a plan rest assured, people will, as they already have, wandered into the Environmentally Significant Area without knowing its features and functions; asking the Planning and Environment Committee to ask staff what is the status and when is it going to happen; advising that it is a very large Environmentally Significant Area, this is just the far eastern part but there are development pressures throughout.
- Lijuan Zhao, 2803 Sheffield Place – expressing concern with the traffic; advising that they picked that street when they bought the house nobody told them there would be access to the other Block; indicating that they were advised that there was an island and where the street ends; stating that now that they have moved in, after a couple of years, now this; expressing disappointment if this plan is approved because the reason that they picked that street is for the quiet and it is nice; reiterating that is why they picked that house; believing they paid more money than the houses on other streets; stating it was also for safety reasons, the kids play in the street; believing that all of her neighbours picked that street because they think it is quiet and nice and less traffic; advising that another reason is because her husband works the night shift and they picked there because he can sleep quietly during the day; indicating that when they bought their house in the subdivision, the nice subdivision by the trail; but if you open the access to the new block, the trail as to across the traffic across the road, that is not a trial for her; asking that all of the neighbours concerns are considered.
- Cathy Holding, 2824 Sheffield Place – reiterating the previous speakers comments; advising that when they purchased their lot as a “cul-de-sac” and paid the premium rate for the lot, they did not have expectations that this would filter through and have traffic coming straight down all the way through taking away the cul-de-sac and making it a through-way; advising that if you have ever driven through the subdivision, the streets themselves are narrow and to have two cars

going one way is enough, if you have one car parked, then it is an issue getting those two to pass each other and interject children on bikes and balls, to her it is a recipe for disaster if you are going to run thirty to sixty vehicles a day down there on a daily basis.

VICTORIA ON THE RIVER

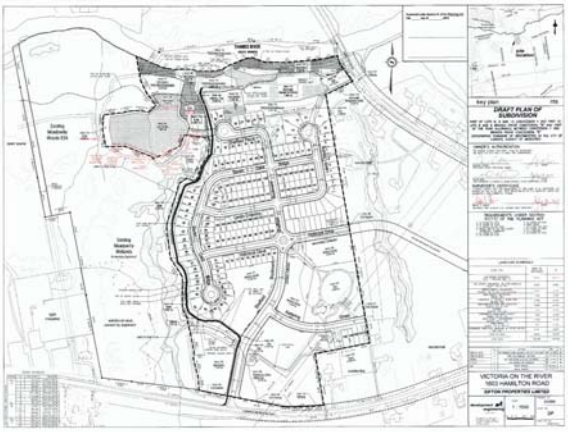
BLOCK 153

January 7, 2019 - PEC

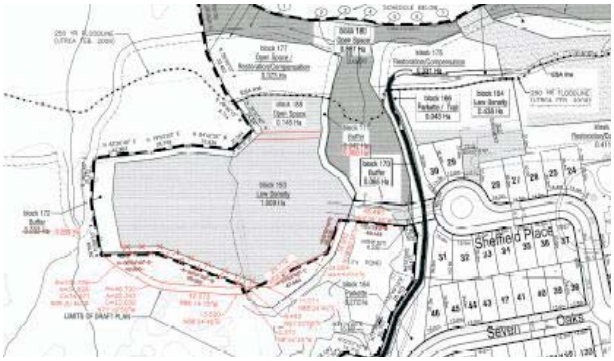
HISTORY

- Residential designation and policies approved in 2007
- Subdivision plan approved in January 2012
- Site Plan pre-consultation - initiated in November 2015
- Site visit with UTRCA and City – January 2016. UTRCA and City suggested that reconfiguration of block to increase corridor width along Thames River would be preferred.
- ZBA application submitted in May 2017
- Site Plan and red-line revisions submitted in July 2017
- Working with City and UTRCA to address technical requirements since then

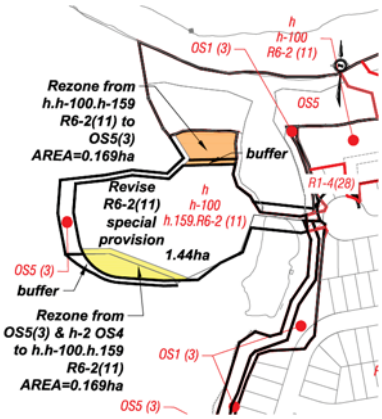
RED-LINE REVISIONS



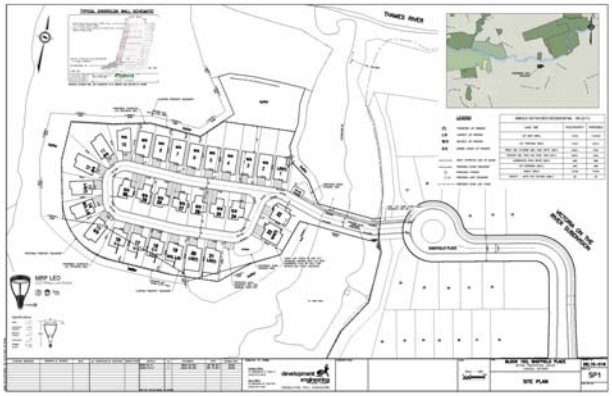
RED-LINE REVISIONS



AREAS TO BE REZONED



BLOCK 153 SITE PLAN



BLOCK 153 SITE PLAN

Sifton

Experience. The Difference.

ELEVATIONS

Sifton

Experience. The Difference.

From: Suba Sivakumar
To: "s.levin
Date: January 17, 2019 at 10:12 AM
Subject: Conserve small patches

Hi Sandy
Very interesting publication:
Small patches make critical contributions to biodiversity conservation
David Lindenmayer
https://urldefense.proofpoint.com/v2/url?u=https-3A__www.pnas.org_cont
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Suba Sivakumar PhD
President- Van Luyk Greenhouses and Garden Centre
1728 Gore Road, London, ON. N5W 5

Response to EEPAC Comments on the Clarke Road Improvements (VMP Extension to Fanshawe Road East) Environmental Impact Study (Stantec, August 15, 2018).

No.	EEPAC Comment	Stantec Response
1.	**Ecological and environmental water quality monitoring is critical, and presently inadequate.** Presently the EIS provides what appears to be a single measurement at one site for pH, conductivity, dissolved oxygen and temperature. There is also a basic description of the aquatic habitat. This is inadequate to provide an accurate estimate of pre-disturbance conditions. Pre-construction conditions need to be measured, recorded and evaluated to establish the existing environmental/ecological baseline for the area where the work is proposed. Also, the monitoring program needs to record and measure any changes, including any potential adverse impacts on environmental/ecological health of this system. The monitoring program should be conducted for a minimum period of one year prior to finalizing the design and construction of this proposed work and be monitored for a minimum of 2-3 years following the construction period. This monitoring program should be based on professionally recognized monitoring program protocols, be comprehensive and should include terrestrial, aquatic and water quality monitoring components. Water quality monitoring should include basic water chemistry (major anions and cations, nutrients, including nutrient constituents, contaminants, chlorophyll a, dissolved oxygen, pH and specific conductivity) together with BioMapping and/or aquatic biomonitoring following CABIN protocols. Water quality monitoring should be done multiple times to capture seasonal variations and should include samples upstream and downstream of the construction site. As noted in the EIS, the bridge and construction will have impacts on the adjacent terrestrial and aquatic systems. It must be ensured that there is an accurate baseline assessment to determine post construction impacts and appropriate mitigation and compensation to protect the ecosystem.	It is agreed that monitoring during and post construction is a critical component of monitoring potential impacts and allows for the adjustment of mitigation measures in an adaptive manner to address issues that may arise. The water quality measurements documented in the EIS were not intended to formulate a baseline of existing conditions, but rather were included as a single visit recording of water quality criteria that indicate the general health of the system (e.g.; adequate dissolved oxygen levels, etc.), as a complement to the general description of the physical habitat. It is anticipated that a monitoring program will be developed during detailed design that will identify specific water quality parameters to be assessed and the frequency of sampling that will be adequate to provide an indication of existing conditions. This baseline will then be used for comparison of during construction results against background levels. The baseline will also provide an indication of variation in the water quality constituents that will assist with determining acceptable levels of deviation that may be observed when monitoring during construction. City staff will work with UTRCA to determine appropriate components of a monitoring program to be undertaken prior to, during, and post construction. EEPAC will continue to be consulted during the Detail Design phase of the project.
2.	**Sediment Erosion Control Plan (SECP) - critical steps required for the design component of the proposed infrastructure that will require careful planning and monitoring.** Based on the EIS, it is clear that an important issue will be the erosion control measures proposed for this project. Without control measures, erosion may have significant effects on the ecological/environmental system, negatively impacting both the terrestrial and aquatic ecosystems. Erosion controls must be proposed and adequately outlined to protect SAR, aquatic water quality and aquatic and terrestrial ecosystems. These controls must be extremely robust and sufficient to avoid sediment intrusion and impact. The proposed SECP/measures should be in principal developed and described in the ESR of this Municipal class EA. The supervision and review of the SECP, mitigations and implementations must be done by the Consultant, the City staff and UTRCA, to ensure accountability.	Section 7.6.1 of the EIS describes general sediment and erosion control measures at an appropriate level of detail for a Class EA study. At the detailed design stage, SECPs are usually assembled so as to address site-specific requirements for protections and to design sediment and erosion control measures best suited for particular design elements, as well as for landscape considerations such as topography, slope and drainage patterns. During detailed design, specific sediment and erosion control measures will be identified and depicted on plans associated with grading and construction. City staff have committed to work with UTRCA during detailed design and prior to the start of construction to ensure that the proposed works are acceptable and to obtain required permits. It is expected that the completion of a SECP will be a component of approvals. EEPAC will continue to be consulted during the Detail Design phase of the project.

3.	**Additional detailed studies are required to better document SAR as is recommended in the EIS report.** Additional detailed environmental studies are recommended. These include surveys, recording and determining the presence or absence of SAR, both aquatic and terrestrial, and should be included as a part of the Municipal Class EA Study's Environmental Study Report (ESR) together with all applicable recommendations for protection of these species and overall ecological health of the system. Examples include documenting Queensnake hibernacular and hairy sedge microenvironment. Is there evidence that hairy sedge can be successfully transplanted? Where is there suitable habitat for such a transplant? Similar questions regarding Weak bluegrass and rhombic-leaved sunflower.	Documenting Queensnake hibernacula will be the responsibility of MNRF and UTRCA. Stantec collected data from both agencies during preparation of the EIS; however, we were not permitted access to search for hibernacula to protect the area from foot traffic and associated disturbance. We are not aware of species-specific guidelines that are available to direct transplanting of hairy fruited sedge, weak bluegrass or rhomic-leaved sunflower. However, a relocation plan will be prepared during detailed design and implemented by experienced professionals to improve success, and a monitoring plan is recommended to track and adapt management efforts as necessary (EIS Section 7.6.2). Hairy fruited sedge forms dense vegetative colonies by spreading via long rhizomes, a characteristic that allows the plant to be easily transplanted to suitable habitat. Illinois wildflowers describes hairy fruited sedges as one of the few sedges that can compete with reed canary grass in wetland habitat (http://www.illinoiswildflowers.info/grasses/plants/hf_sedge.htm). Suitable habitat for this species is present on the seepage valley slope; both the population and habitat were delineated during the EIS (see Figure 2b). Suitable relocation habitat is present in SWDO3, west of the existing population. Weak bluegrass and rhombic-leaved sunflower are both perennials are expected to be readily relocated via seed collections and/or digging root masses. Suitable habitat is available in the Study Area, including woodlands (weak bluegrass) and open areas (rhombic-leaved sunflower). Rhombic-leaved sunflower is particularly adventive in old fields and roadsides. Relocation plans should be prepared during detailed design so that the exact limits of the project, with respect to these species, is understood. Many of the environmental concerns related to this project have been mitigated through the process by which the preferred alternative design was selected, as described in the ESR. The anticipated impacts and proposed mitigation measures developed to the EA level of design have been described in Section 8 of the ESR. The ESR provides a detailed list of specific commitments to be carried forward to Phase 5 of the Municipal Class EA process, Implementation (detailed design and construction). It is recommended in the ESR that these commitments become part of the detailed design phase and contract package so that contractors are aware of the requirements prior to tendering. City staff have committed to work with UTRCA and MNRF during detailed design and prior to the start of construction to ensure that the proposed works are acceptable and to obtain required permits. EEPAC will continue to be consulted during the Detail Design phase of the project.

4.	**The underlying principals and general outline of the proposed compensation and mitigation plans that will be developed and presented for the MNRF and DOF approval permits need to be identified and recommended by the ESR of this Municipal Class EA.** The recommended mitigation and compensation plans and costs associated with this work are critical requirements for the success of the proposed work and should be part of the ESR record.	Authorization from MNRF is required for any work that may cause harm to Eastern Meadowlark, Queensnake, Spiny Softshell, SAR bats, Silver Shiner or their habitat. Consultation with MNRF conducted for the EIS indicates that an overall benefit permit under ESA S.17.2.c will be required to address harm to Queensnake and its regulated habitat. Permitting under the ESA can take up to a year or more from the time the application is submitted; therefore, early consultation with MNRF is recommended to determine if a permit will be required for other protected species. Consultation with MNRF may be initiated by submitting an Information Gathering Form as soon as the preferred alternative is selected, and the footprint of the proposed road improvements is available. Because a permit application is required for Queensnake, the project will be subject to legal tests, including: • Demonstration that reasonable alternatives to avoid adversely affecting the species and its habitat have been considered; • Reasonable steps will be taken to minimize adverse effects; and • Overall benefit to the species can be achieved within a reasonable time. The MNRF and UTRCA will work with the City of London to determine mitigation and compensation requirements during their review of the IGF and S.17.2.c permit application.
5.	**The ESR needs to include a proposed design for the storm/drainage and Storm Water Management (SWM) water quantity/quality plan and the location of storm outlets.** The ESR needs to provide a storm/drainage and SWM plan to determine where discharges of storm sewers will occur. This is a critical piece of water quality control.	SWM design criteria used as part of this study were based on City of London's Design Specifications and the 2003 MOECC Stormwater Management Practices, Planning, and Design Manual. These outline that the SWM measures identified must serve their fundamental role of water balance, surface water quality, quantity, and erosion control when it comes to development impact mitigation. The ESR contains documentation of the existing stormwater management conditions and evaluates the proposed conditions. The existing catchment areas are not anticipated to change in any significant way with respect to their coverage areas, and drainage conveyed via roadside ditches will be used. The area at the south project limit that overlaps with the Veterans Memorial Parkway extension is also subject to ongoing development plans and the Kilally Stormwater Management EA. Due to the existing outlets onto private property, linear storage and infiltration is recommended to control the quantity/quality of the runoff. Modelling of the Thames River relative to the potential widening or replacement of the piers indicates minimal impact. Modelling details are included in the ESR for reference.

6.	**Invasive species control measures need to be described in more detail.** Plans to minimize invasive species are described very generally. With selection of the preferred option, we expect to see more detailed plans in the ESR.	The EIS recommends implementation of a clean equipment protocol to reduce the potential to spread invasive species and references the industry standard guide prepared by MNRF's Steward Council and the Invasive Species Council (Section 7.6.6). The protocol will be specified on contract drawings, including specifications for cleaning equipment prior to entering and/or leaving work sites. The EIS also recommends a management plan to address existing invasive species, including European buckthorn, glossy buckthorn and exotic honeysuckle (Section 8.10) which are on the City of London's "watch List". European and glossy buckthorn are priority management species. The clean equipment protocol and invasive species management plan should be consistent with the London Invasive Plant Management Strategy (https://www.london.ca/residents/Environment/Natural-Environments/Pages/Invassive-Plants.aspx) and London's Phragmites guide, which is still in preparation. The invasive species management plan should consider an integrated approach that includes hand pulling, girdling and cutting, herbicide application, and monitoring over multiple years (e.g. 5 years, which is the term of viability for buckthorn seeds). However, the plan should be developed based on site specific considerations described in Section 8.10 of the EIS, the London Invasive Plant Management Strategy, and species-specific guides such as the Invasive Buckthorn – Best Management Practices in Ontario (https://www.ontarioinvasiveplants.ca/wp-content/uploads/2018/05/OIPC_BMP_Buckthorn_May282012_D61.pdf) The detailed plans should be prepared with input from the landowners, City of London, EEPCA, and UTRCA during detailed design.

Comment/ Page Number	EEPAC Comment	Matrix Response
1. Highlight comment	Recommendation 1: EEPAC feels the Master Plan is incomplete without additional information on the area between the Dam study Area and the Forks Study Area. An EIS would provide additional helpful information for any future projects including the proposed new pathway and access points.	Two additional reports were prepared to characterize the environmental conditions within the entire One River Master Plan Study Area, which includes the area between Springbank Dam and the Forks. The Reports are entitled "Natural Heritage Setting" which summaries the ecological components of the Study Area and the "River Characterization" report which provides more detail on the river's hydraulics, hydrology and geomorphology. These additional reports are provided within the Master Plan. Any future projects recommended as part of the Master Plan component of One River would be required to meet the requirements of the selected EA schedule including the potential requirement for an EIS.
2. Highlight comment	RECOMMENDATION 2: Even if an Overall Benefit Permit is not required, the City should demonstrate that this project provides an overall benefit, not just no net loss.	One objective of the Master Plan is to develop recommendations that provide an overall benefit to Thames River within the study area. The overall benefits are demonstrated through the evaluation process for each project in the Master Plan document, where the environmental aspects are integrated with both social and economic components.
3. Forks Comment	At EEPAC's most recent meeting slides showed the impact of a much freer flowing river on the development of new sand bars etc. Will it also have an impact at the Forks?	Since the establishment of a free flowing river system, sand bars have developed and evolved at the Forks. The Forks of the Thames design is not, however, expected to interact with the riverine environment. Further detail on the morphology and evolution of the channel at the Forks is provided in the River Characterization report.
4. Forks Comment	RECOMMENDATION 4: EEPAC agrees with the recommendation for consultation and permitting discussions but would extend that discussion to include the locating of any access points and new pathways. It is unclear to EEPAC if the access points and additional pathway construction shown in the proposed preferred alternative are actually	Access points and additional pathways meet some of the objectives of the Master Plan to support the integration of the river's social, recreational, and environmental roles. An alternative assessment, including an analysis of the environmental aspects/impacts of additional access points and pathways was completed through the evaluation process and

	necessary or would increase risk to sensitive species and their habitats as there is no information is this or the Dam EIS	described in the Master Plan document. Any future Schedule B project related to river access or pathways would be subject to additional analysis of risk and impacts to sensitive species habitat.
5. Forks Comment	RECOMMENDATION 5: The City address sanitary overflows at the Forks prior to completing any of the proposed projects in this location.	Sanitary sewer overflows have been considered in the Pollution Prevention and Control Plan. Mitigation of overflows has been included in the plan and is being implemented as part of the ongoing efforts by the City to improve water quality in the Thames River and provide a higher level of service for stormwater and sanitary sewer management.
6. Forks Comment	RECOMMENDATION 6: EEPAC would appreciate knowing how much funding will be provided to remove and remediate non-natives and invasives. Given the location in a highly urbanized setting, EEPAC asks the city to consider that the money would be better spent on invasive species management in ESAs and Significant Woodlands.	It is anticipated that future projects for implementing the recommendations of the Master Plan will be developed and funded to appropriate levels.
7. Forks Comment	Turtle overwintering studies- Should this be done? If so, when and by who?	No in-water construction works are anticipated to implement the Forks of the Thames preferred alternative. If in-water construction works are planned for the late fall or early spring, then an overwintering study is recommended. The need for an overwintering study will be assessed during detailed design and completed by an ecologist/biologist.
8. Forks Comment	Snake hibernacula studies- When would the studies be done and by who? It is possible the gabion baskets are hibernacula! The EIS on page iv indicated that the gabion baskets would be removed.	Although gabion baskets are not a typical choice for snake hibernacula there are studies which have identified that in areas where “natural” hibernacula is scarce that snakes will use gabion baskets. The need for emergence surveys will be determined during detailed design and conducted by an ecologist/biologist.
9. Forks Comment	RECOMMENDATION 7: Consultation prior to detail design be carried out with the Species at Risk Ecologist at the UTRCA who specializes in turtle and snake species at risk	Agreed, consultation with appropriate UTRCA staff during detailed design would be an essential part of design development.
10. Forks Comment	It does not appear to be any assessment of the mussel / fish relationship given that mussels rely on certain fish species to carry their eggs/larvae.	The SAR and SCC Appendices identify host fish species for each mussel species. The presence of these fish species was used to identify potential presence within the Thames River.

11. Forks Comment	An Overall Benefit Permit be obtained for these projects. If not required, the projects should demonstrate an overall benefit.	The objective of the Master Plan is to develop recommendations that provide an overall benefit to Thames River within the study area. The overall benefits are demonstrated through the evaluation process for each project in the Master Plan document, where the environmental aspects are integrated with both social and economic components. During the detailed design, required permits (including the need for the Overall Benefit Permit) will be identified.
12. Forks/Dam Comment	RECOMMENDATION 9: The EIS clarify the category of tolerance for this species at risk (Silver Shiner)	Categories will be confirmed during detailed design.
13. Forks Comment	RECOMMENDATION 10: Greater detail as to what "correct mitigation measures" be included in the EIS prior to it being finalized. This information should be included in the EIS so that it does not get lost between now and detailed design.	The "correct mitigation measures" are those identified within Section 7. This sentence will be adjusted in the EIS to be more clear.
14. Forks Comment	Re SHTM1-2 - why Manitoba Maple, a non-native species would be protected? There is also common buckthorn in the understory (p.29). Also Norway Maple is an invasive species. p. iv states that "non-native and invasive species will be removed as part of the *London Invasive Plant Management Strategy* and replaced with native trees and shrub plantings throughout the park as part of the softscape design." The question is to what extent? What about the invasives in SHTM1-1?	Part of the Forks of the Thames design intent is to limit disturbance along the riparian corridor and avoid removing existing vegetation, particularly tree removals. Although some species within polygon SHTM1-2 are non-native, there is still value in their size and ability to provide bank stabilization, carbon storage and wildlife habitat. SHTM1-1 is not located within the footprint for the proposed Forks of the Thames design. The extent of invasive species management outside of the Forks of the Thames design footprint will be based on the projects implemented as part of the Master Plan.
15. Forks Comment	Who prepares the monitoring plan and when? Who cares it out? EEPAC questions when the invasive species management plan would be drafted and by who.	The Schedule B requirements normally include a monitoring plan which includes an invasive species management component. The plan would be drafted by the City or by the design consultant, in conjunction with the City, during the detailed design stage.
16. Forks Comment	RECOMMENDATION 11: EEPAC requests to be involved in the discussions leading up to the preparation of the Invasive	The City will engage EEPAC as part of the detailed design stage.

	Species Management Plan. It is our preference that all non-native and invasive be removed	
17. Forks Comment	RECOMMENDATION 12: EEPAC's preference is that the Invasive Species Management Plan be drafted by Matrix now given it has done the field work with the plan and that the plan be included as a requirement for the winning bidder to implement. Money must be included in the contract budget for monitoring, and monitoring shall be carried out by an ecologist hired by the contractor to the satisfaction of the City and the UTRCA.	A recommendation for the monitoring plan is included in the Mater Plan. Details of that plan are best developed during the development of the detailed design as various aspects of design and construction are confirmed.
18. Forks Comment	p. 54 indicates increased pedestrian activity and that it should be directed to the south. It is unclear how this is possible when there are pathways along the east heading north and along the Dyke. Therefore, it is unclear what areas are to be avoided and what access to the River in addition to the existing fishing dock is proposed and why	The Forks of the Thames design is still preliminary. The EIS suggests that no direct access to the river be placed along the north side, which could potentially connect people to sandbars around the Kensington bridge piers. Additional detail in regard to access and limits to access will be part of the next stage of design.
19. Forks Comment	RECOMMENDATION 13: A clear monitoring plan be developed including who does, when it begins and ends, and its objectives. This could be shown on a timeline scale given the start date is unknown.	A recommendation for the monitoring plan is included in the Mater Plan. Details of that plan are best developed during the development of the detailed design as various aspects of design and construction are confirmed.
20. Forks Comment	RECOMMENDATION 14: Before construction, information on species at risk identification including photos posted in construction trailer during construction. Ideally, this will reduce or avoid mortality	This recommendation will be considered during detailed design.
21. Forks Comment	RECOMMENDATION 15: The phone number of the Species at Risk Biologist from UTRCA be posted prominently so that turtle and snake sightings can be reported. When sightings occur, work must cease until the species at risk biologist has given the go ahead for work to start up again.	This recommendation will be considered during detailed design.
22.	p. 11 wording of the second paragraph is unclear "… with the Technical advisory included … (?)	Agreed, this is unclear, the statement will be revised in the report.
23. Forks Comment	P. 14 vegetation surveys were done too late for any spring ephemerals. No clear explanation of why surveys were not done earlier.	The Terms of Reference (TOR) for this effort was not approved until later in the Spring. The report will be revised to reflect this comment.

24. Forks Comment	No surveys of amphibians. No clear explanation of why not done.	No wetlands or vernal pools are located in the study area, which would limit the presence of amphibians. The need for amphibian surveys were discussed during the EIS scoping meetings and not included in the TOR.
25. Springbank Dam Comments	It is not accurate to say the Terms of Reference were approved by EEPAC. We have no approval authority. It would be more accurate to say EEPAC participated in the review of the Terms of Reference that were approved by the City. I would also suggest the same is true of the UTRCA "approval." Again, I don't believe the city EIS requirements require approval by the UTRCA.	Agreed, these statements will be revised in the EIS reports.
26. Springbank Dam Comments	RECOMMENDATION 2: Additional benthic sampling be done before the EIS is accepted. Alternatively, if there is existing sampling data that would be representative, it can be used instead of additional sampling.	Historical benthic sampling has been completed throughout the Study area reaches and a program for further studies still exists. Additional benthic sampling was not included in the TOR. Benthic conditions are further described in the Natural Heritage Setting report.
27. Springbank Dam Comments	p. 32, notes 7 large Norway maples. RECOMMENDATION 3: These should be removed as part of any invasive species management plan for the study area.	This recommendation will be considered during detailed design.
28. Springbank Dam Comments	A number of SAR fish, mussels, and herps including Spiny Softshell. Any work be done under an Overall Benefit permit	Consultation with MNRF during the detailed design will identify the need for permitting.
29. Springbank Dam Comments	One SWH (turtle overwintering habitat) types is located within the Project Site. The question is where will this be captured in a to-do list for the decommissioning project? It is not noted in section 7.2 Mitigation Measures on page 53. It is not clear what the implications are for the proposed project if the pool is being used for overwintering. RECOMMENDATION 5: Surveys be completed prior to awarding a bid in order to determine if there are species and overwintering habitat within the pool.	It has been recommended that any in-water construction work required for the Springbank Dam Decommissioning be completed outside the overwintering period (October to April). If work cannot be completed during this period an overwintering study is recommended. The need for an overwintering study will be assessed during detailed design and will, if required, be completed by an ecologist/biologist.

30. Springbank Dam Comments	p. 44-45 discusses the 3 categories of general habitat protection Threatened and Endangered fish species like the Silver Shiner receive. However, there is no mention of the category in which the study area is in	Categories will be confirmed during detailed design when more information on the design elements is better understood.
31. Springbank Dam Comments	The Erosion Sediment Control Plan's major objectives and major issues needs to be incorporated in this EIS.	A formal Erosion and Sediment Control plan (ESC) plan that identifies issues and objectives will be completed during detailed design when more information on the design elements is better understood.
32. Springbank Dam Comments	RECOMMENDATION 7: The proposed dewatering procedure needs to identify in more detail what would be incorporated in the proposed protective measures to minimize the estimated potential adverse impacts, the estimated time periods that the existing environmental/ecological system may be effected from these impacts and a list of specific mitigation measures are required to be identified in EIS.	Further details on the dewatering procedures and mitigation measures will be completed during detailed design when project phasing and ESC plans are developed.
33. Springbank Dam Comments	RECOMMENDATION 8: Before construction, information on species at risk identification including photos posted in construction trailer during construction. Ideally, this will reduce or avoid mortality	This recommendation will be considered during detailed design.
34. Springbank Dam Comments	RECOMMENDATION 9: The phone number of the Species at Risk Biologist from UTRCA be posted prominently so that turtle and snake sightings can be reported. When sightings occur, work must cease until the species at risk biologist has given the go ahead for work to start up again.	This recommendation will be considered during detailed design.
35. Springbank Dam Comments	p. 55 (re 4D) – Invasive Species Management Plan) EEPAC questions when the invasive species management plan would be drafted and by who. RECOMMENDATION 10: Our preference is that it be drafted by Matrix now given it has done the field work with the plan included as a requirement for the winning bidder to implement. Money must be included in the contract budget for monitoring, and monitoring shall be carried out by an ecologist hired by the contractor to the satisfaction of the City and the UTRCA.	The Schedule B requirements normally include a monitoring plan which includes an invasive species management component. The plan would be drafted by the City or by the design consultant, in conjunction with the City, during the detailed design stage.

36. Springbank Dam Comments	p. 56 states no long term impacts are anticipated. The ultimate question is what would long term impacts be? Loss of species? Over what period of time? And how would changes be definitively linked to the project impacts? RECOMMENDATION 11: The EIS should include what long term impacts might be so that any compensatory mitigation measures could be implemented at a future date and charged back to the project.	No long-term negative impacts are anticipated. The preferred alternative for Springbank Dam is to remove in-water barriers and re-vegetate/naturalize the river banks, which would further improve river health, habitat, and natural function over the long term.
37. Springbank Dam Comments	page 57 indicates there should be additional consultation with UTRCA to identify any additional studies needed for this project. It is unclear at what stage these consultations would take place and what sort of information the consultants feel is required. RECOMMENDATION 12: The noted additional consultation with the UTRCA take place prior to finalizing the EIS.	Additional consultation with UTRCA will take place during detailed design when design elements are being finalized and construction timing and phasing of the project are determined. The City has consulted with the UTRCA several times during this project. Further consultation with UTRCA has been recommended as the project progresses to ensure that any changes in species at risk habitats are captured and correctly mitigated during construction.
38. Springbank Dam Comments	To authorize and issues various permits for the City to undertake the recommended work, MNRF and DFO, generally require that the Consultant together with City staff will develop and provide some type of Mitigation and Compensation Plans associated with the proposed work to ensure all required protection of various habitats and existing ecological/environmental conditions in accordance with the applicable Federal and Provincial Acts. RECOMMENDATION 13: The major issues; measures and the considered locations for the Mitigation and Compensation Plans needs to include in this EIS.	Consultation with federal and provincial agencies to develop a Mitigation and Compensation plan will occur during detailed design when more information on the design elements is better understood.
39. Springbank Dam Comments	RECOMMENDATION 14: In order to ensure that all proposed work and mitigation/compensation/restoration work is working, in addition to all recommended monitoring, EEPAC recommends that the post-construction monitoring also include Benthic and Basic Chemistry Water Quality Monitoring at the minimum 3 locations - upstream,	This recommendation will be considered during detailed design

	immediately downstream of these works and further at the location app.100 m downstream of the proposed work.	
40. Springbank Dam Comments	EEPAC is concerned about the additional access points and pathways on the north side of the River south of Riverside Drive and west along the River. Without any supporting EIS work, we cannot support the proposed alternative 3 at this time. We look forward to reviewing the studies that concluded such works would have no negative impacts on the natural heritage system or species at risk and their habitat.	Any future projects recommended as part of the Master Plan would meet the requirements of the selected schedule including the requirement for an EIS. The alternatives evaluation process for the Mater Plan includes discussion on the positive and negative aspects of the recommendations.
41. Springbank Dam Comments	Swifts may well have been occupying the chimney that burned down, but, if they were, they would drop in directly and not perch on top of the chimney. Swift use of a chimney is usually confirmed by observation of an actual entry into or exit from the chimney. When swifts first return in the spring, the airspace above the river corridor along Springbank Park is particularly significant as a foraging area. In considering impacts on swifts of activities within the Study Area, it is important to include impacts to the habitat that produces the food on which swifts forage.	Agreed, information about Swifts occupying the house will be removed from the report. Information about the Swifts will only reference foraging.
42. Springbank Dam Comments	p. 48 layout of impacts. EEPAC would like to see this as a requirement for assessment of impacts for ALL projects (add to update of EMG) expressed as a matrix for each impact and its type (4 x 3 matrix) Both direct and indirect impacts on natural heritage features and functions can occur as a result of the preferred alternative. Impacts and residual effects on natural heritage features were assessed based on the following criteria: • Duration - long or short-term • Extent - localized or expansive • Permanent - permanent or temporary • Severity - positive or negative	No response required.

Thames Valley Parkway North Extension

Comments following attendance at preconstruction Open House held January 31, 2019

Submitted to February EEPAC meeting by Prof. K. Mosher and S. Levin

This area is part of the Thames River Valley corridor and is home to many species at risk (SAR) and the increasingly rare habitats which they depend on to survive. Woodlands adjacent to the river form a narrow corridor within the city of London that provides critical habitat to many migratory birds and SAR. It also offers protection for the Thames River from urban development and inputs of sediments, nutrients and contaminants. Therefore, given that the City has made the decision to construct two new bridges to cross the Thames in this ecologically important area, the City has the responsibility to take all possible precautions to protect this environment and species at risk. Given the sensitivity of the site and its importance to SAR, we believe that the city must well beyond normal measures to ensure minimal impact on the environment, and that SAR and their habitat will be protected. A detailed and thorough monitoring plan accurately documents any impacts that occur during or after construction, and provides targets for conservation and mitigation. Here we provide comments and recommendations to help ensure full protection of SAR and their habitats during and after construction.

Monitoring:

Pertinent Note from ESR

A screening for potential SAR in the construction area will be completed prior to construction and mitigation measures, such as exclusionary fencing will be installed. Additional mitigation measures will be developed during detailed design, in consultation with UTRCA and MNRF, based on the final design. A monitoring plan will also be developed, with input from UTRCA. (p. 56)

Concern: There was no information about planned post construction monitoring available at the meeting. EEPAC members were told that it is still a work in progress.

Effective monitoring allows for actions to be taken to minimize deleterious impacts of construction and avoid costly errors.

Monitoring must be done pre-, during and post- construction. Baseline conditions, including water quality, should be accurately determined in order to determine post construction targets. We assume that during-construction monitoring will be done by Dillon, but the pre-and post-construction monitoring will be the responsibility of the City. How will this be co-ordinated to ensure that monitoring effectively shows the impacts of the project? Detailed post construction monitoring plans are still being determined, but that no water quality monitoring is planned.

Given that the detailed design phase is nearly complete and construction is set to start June 2019, EEPAC is concerned that monitoring plans, particularly post construction plans, are not yet available for review. This is an opportunity for the City to show strong environmental leadership by developing a well-planned and effective monitoring strategy.

***Recommendation 1*: EEPAC receives the monitoring plans for review when they are complete.** Given the sensitivity of the site, we are particularly concerned about what measures will be taken beyond the "normal" ones to ensure the protection of sensitive SARs and their habitat. What will be included in the pre- and post-construction monitoring? How long will post-monitoring be done? We urge the City to re-consider including water quality monitoring in the plans. Although construction plans indicate several measures, including silt reducing fencing and de-watering pools, there is still the potential for increased turbidity and nutrients downstream as a result of increased erosion. We presume the erosion control measures will be put in place before the first tree is removed to minimize sediment and nutrient loads to the Thames resulting from vegetation clearing and bridge construction. The loss of a buffer zone during the bridge construction could increase sediment and nutrient loading.

Recommendation 2: **In order to accurately determine any water quality changes related to the bridge construction, pre and post construction water sampling must be done upstream and downstream of the bridge and include other potential inputs located just downstream of the construction site. For each sample, we would recommend basic chemistry and BioMAP benthic water quality index.**

Recommendation 3: More robust erosion sediment control measures be implemented as this is a sensitive site. This must be implemented when large storms or freeze / thaw events are forecasted.

***Recommendation 4*: We also strongly recommend including pre-construction checks for hibernacula in the warm spring when snakes emerge and not just before actual construction. This would also apply to any of the SCC or SAR plants that are spring ephemerals.**

Preventive Measures:

Concern: Owing to the sensitivity of this site, preventive measures should be substantial to protect SARs and their habitat. Such measures should prepare for and prevent any possible damage to the ecosystem. EEPAC requires reassurances that everything possible is being done to prevent loss of species habitat or endangering SAR.

One of the most serious risks to the SAR turtles are dogs. This area is notorious for dogs off leash; in fact many people already treat it as a dog park.

***Recommendation 5*: EEPAC strongly recommends that the City make plans ahead of and after construction to curb dogs off leash in this area.**

EEPAC recommends a strict enforcement of dogs on leash in this area prior to construction and immediately after construction. Sending enforcement officers in weekly in the early morning and evenings to caution and/or fine dog owners would be one strategy. Such a strategy seems to have been quite effective in Komoka Provincial Park. Large clear signage including the amount of the fines and the reason to keep dogs on leash (protection of species at risk) are also recommended.

Screening on bridges should be used to reduce the ability of people standing on the bridge from seeing the spiny softshell turtle nesting site to the north. Dillon argues that the Ross Park bridge is 300 m away and that people walking along Richmond by the car bridge have an even better view. This may be true, in which case screening is also needed at Richmond as well as on this new bridge. Regardless of decisions about the Richmond bridge, the Ross Park Bridge include screening because these bridges are being built for walkers and bikes, not cars, and people are much more likely to stop and observe nature on this type of bridge than pedestrians traversing the Richmond bridge. Given the total costs of the bridges, the screening is a small measure that the City should take to protect SAR.

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Recommendation 10: **EEPAC recommends daily site inspections by an ecologist and that a SAR specialist (perhaps from the UTRCA) will be on-site during construction as required.**

As well, we assume that there will be adequate post-construction monitoring of SARs. Such monitoring would provide much needed knowledge about the impacts of bridge construction on water quality and how to best protect SARs and their habitat. Failing to protect SARs would not only be a major loss for the ecosystems London harbours, but also for the City who has a responsibility to protect species at risk and their habitats. Monitoring will help protect SARs because having accurate data about their numbers before and during bridge construction would mean that if there were a decrease in population or habitat, measures could be taken before the problem worsened.

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This should be city wide, not just this part of the Natural Heritage System.

We are also concerned about post-construction monitoring for invasive species. How will this be done and over what period? Any increase in invasive species requires an immediate action plan to prevent it worsening.

Recommendation 12**: Annually, all parks operation staff, including summer and casual staff, be provided information and training on the identification of the invasives species that have priority for early detection and response and be given a wallet card or similar in order to direct them to call selected staff when species are located.**

Recommendation 13: **The City must monitor the area post construction to see if off path trails are starting and to stamp them out quickly, as city staff at the meeting said that the parks operations staff will be the only ones there regularly from the city – (also see section 10.2 p 40 of the ESR).**

It continues to be unclear what maintenance will be done on the bridge and trails during winter, and what the city policy will be for using these trails for equipment. It is well known that salt can have detrimental effects on water quality which in turn affects fish, mussels and turtles.

Recommendation 14: **EEPAC recommends that the City commit to not use de-icing chemicals (including salt) on the bridges and pathways.**

Although there are other “pathways” for salt to enter the Thames, salt use on the TVP path and bridges would add to the total salt input to the Thames and increases danger to nearby species at risk and their habitat.

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Mitigation Measures

Concern: To build the bridge and extend the pathway many trees have to be removed. EEPAC appreciates the pathway alignment has tried to minimize the loss of trees and to avoid larger trees as much as possible. Still, we are given to understand that 150 trees 30-50 dbh will be removed. The total count by size was not available at open house.

***Recommendation 15*: EEPAC requests further information about tree replacements.**

Replacement is 3:1 for 30-50 dbh, 5:1 for larger trees. We assume it is 1:1 for trees less than 30 dbh. Is that correct? Have locations for plantings been determined? When will plantings take place? Where will plantings be done? In the areas cleared? We understand only native plants will be planted. What types of trees will be used? How long will the trees be cared for after planting? Are tree plantings part of the compensation/enhancement plan? If so, is it available for anyone to see? We would like to see the plans because the loss of trees and re-planting of trees and possible revegetation of the "meadow" area north of the pathway is an environmental concern and we would like to provide our recommendations about these plans. We also understand that some planting will commence prior to completion.

***Recommendation 16*: A minimum five year warranty period for ecological restoration and plantings be required in the tender documents. The warranty period should only begin once 70% or more of the plantings are completed.**

***Recommendation 17*: EEPAC recommends that invasive species control along the Thames and in Huron Woods be a part of the compensatory plan.**

***Recommendation 18*: Professor Emeritus Brock Fenton from Western University be consulted on the proposed installation of bat boxes.**

Other:

Concern: There appears to be no mention regarding the marked trail that runs adjacent to the river. The trail is well marked with white paint and we believe it is part of the Thames Valley Trail. This trail takes people from Adelaide west and up the hill behind the seminary and over to Ross Park. By crossing the Thames at Adelaide you can continue on the trail on the north side of the Thames east through Killaly Woods ESA to Highbury and beyond.

***Recommendation 19*: Prior to construction a plan for this trail should be decided and be part of the detailed design. If the trail is to continue it should be re-routed and made part of the TVP where there is overlap.**

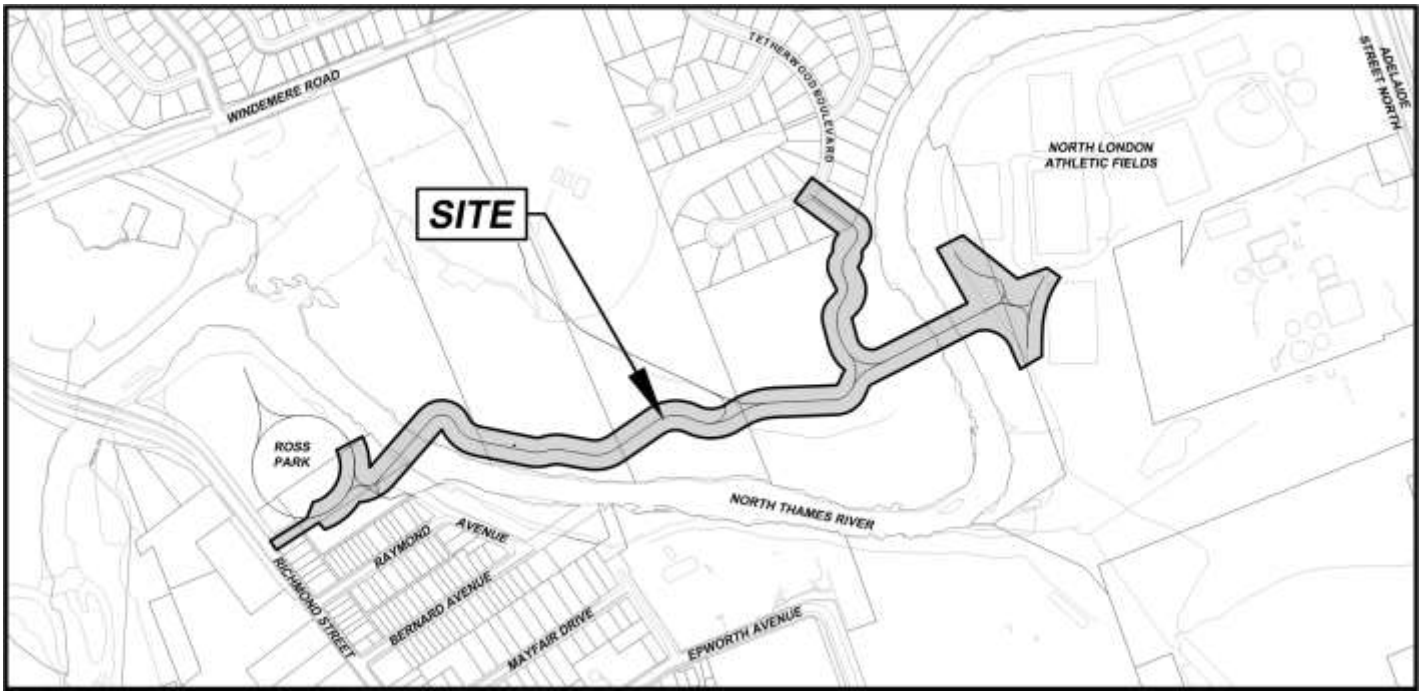
EEPAC was pleased to learn that no in water work will be required as part of this project.

EEPAC continues to believe that the Thames Valley Parkway North Extension is in a part of the Natural Heritage System that meets at least two of the seven criteria as an Environmentally Significant Area (ESA). It should be noted that to date it has not been evaluated against the criteria in the City's Official Plan.

Thames Valley Parkway North Branch Connection
Richmond Street to Adelaide Street
Pre-Construction Information Meeting

The City of London completed a Municipal Class Environmental Assessment (EA) study in 2016 to identify the preferred alternative to complete an existing gap in the Thames Valley Parkway (TVP) between Richmond Street and Adelaide Street. The preferred alignment is shown on the map below. The preferred alignment includes two new pedestrian bridges; one to Ross Park and one to the North London Athletic Fields, with the pathway connecting the bridges north of the river.

The design of the pathway and bridges is now complete and it is anticipated construction will start later in 2019 and be completed in late 2020.



Come out to an informal open house to learn more about the project and how it may impact you.

Date: January 31, 2019
Time: 5:00 p.m. to 7:00 p.m.
Location: Theatre Room, Windermere on the Mount (Lower Level)
1486 Richmond Street, London

Purpose: View the construction plans and get answers to your questions regarding construction.

If you have any questions about this project, please contact either of the individuals listed below.

Karl Grabowski, P.Eng.
City of London Project Manager
Transportation Planning & Design
Tel : 519-661-CITY (2489) Ext.5071
E-mail kgrabows@london.ca

Sabrina Stanlake-Wong, RPP
Consultant Project Manager
Dillon Consulting Limited
Tel: 519-438-1288 Ext. 1235
E-mail: tvp.ea@dillon.ca

THAMES VALLEY PARKWAY
NORTH BRANCH CONNECTION

Richmond Street to Adelaide Street

Pre-Construction Information Meeting
January 31, 2019

DILLON CONSULTING

London CANADA

Project Background

The Thames Valley Corridor is London's *most important natural, cultural, recreational and aesthetic resource.* The river corridor is a complex system of sensitive ecological habitats, intensive public recreation areas and developed urban lands which are all interconnected by a municipal pathway system, the *Thames Valley Parkway (TVP).*

- A Class Environmental Assessment was completed in July 2016 which selected the preferred route to connect the Thames Valley Parkway, from Richmond Street to Adelaide Street
- The preferred alignment includes two new pedestrian bridges over the Thames River
- Detailed Design was initiated in 2017
- Construction is anticipated to begin in late Spring 2019 and be completed in the Fall of 2020.

Design Overview

- Thames Valley Parkway (TVP) Extension:
  - Connects to existing TVP at Ross Park and North London Athletic Fields
  - Easements for the pathway have been provided by the Sisters of St. Joseph, Scouts Canada and Western University
  - Pathway includes an emergency access connection to Tetherwood Boulevard.

- Pedestrian Bridges:
  - Two new bridges will be constructed – at Ross Park and North London Athletic Fields
  - Both bridges are nearly identical designs, providing a consistent look and allowing for efficiencies in the design and construction approach
  - Pathway across the bridges is 4 m wide to provide a comfortable width for two directions of travel by cyclists, pedestrians and other users.

- An Environmental Impact Study (EIS) was completed as part of the Class Environmental Assessment (EA) process and commitments are being met. Throughout the design and construction planning phase, the design team has worked closely with staff from the Upper Thames River Conservation Authority (UTRCA) and City Ecologists. Their input has been incorporated into the plans.

Construction Overview

Subject to receiving final permit/approvals and approval of Council, the schedule includes:

- Tender – February/March 2019
- Construction start – June 2019
- Construction may continue over the winter of 2019/2020 or shut down for a period of time
- Construction complete – anticipate October 2020.

Construction highlights include:

- A temporary access will be constructed from Windermere Road, along Scouts Canada and Western University property to provide access north of the river.

- Construction traffic is only permitted on Tetherwood Boulevard to construct the emergency access pathway. The access will not be used as the primary access for construction vehicles entering the site.

- The Contract includes measures to reduce impacts to the natural environment, including:
  - Minimize tree removals required
  - Exclusionary fencing to restrict wildlife from entering the construction area
  - Tree removals outside of the bird nesting season (April 1 to July 31)
  - Landscape plan to restore the area and compensate for trees and other vegetation removed
  - In-water work is not planned
  - Ecologist and landscape architect will be included on the construction administration team.

THAMES VALLEY PARKWAY NORTH BRANCH
PROPOSED PLAN

THAMES VALLEY PARKWAY NORTH BRANCH
INTERIM WORKS PLAN

Thames Valley Parkway North Extension

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Submitted to February EEPAC meeting by Prof. K. Mosher and S. Levin

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Pertinent Note from ESR

A screening for potential SAR in the construction area will be completed prior to construction and mitigation measures, such as exclusionary fencing will be installed. Additional mitigation measures will be developed during detailed design, in consultation with UTRCA and MNRF, based on the final design. A monitoring plan will also be developed, with input from UTRCA. (p. 56)

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Given that the detailed design phase is nearly complete and construction is set to start June 2019, EEPAC is concerned that monitoring plans, particularly post construction plans, are not yet available for review. This is an opportunity for the City to show strong environmental leadership by developing a well-planned and effective monitoring strategy.

***Recommendation 1*: EEPAC receives the monitoring plans for review when they are complete.** Given the sensitivity of the site, we are particularly concerned about what measures will be taken beyond the "normal" ones to ensure the protection of sensitive SARs and their habitat. What will be included in the pre- and post-construction monitoring? How long will post-monitoring be done? We urge the City to re-consider including water quality monitoring in the plans. Although construction plans indicate several measures, including silt reducing fencing and de-watering pools, there is still the potential for increased turbidity and nutrients downstream as a result of increased erosion. We presume the erosion control measures will be put in place before the first tree is removed to minimize sediment and nutrient loads to the Thames resulting from vegetation clearing and bridge construction. The loss of a buffer zone during the bridge construction could increase sediment and nutrient loading.

Recommendation 2: **In order to accurately determine any water quality changes related to the bridge construction, pre and post construction water sampling must be done upstream and downstream of the bridge and include other potential inputs located just downstream of the construction site. For each sample, we would recommend at a minimum turbidity or total suspended solids, total phosphorus, total nitrogen and major and minor ions. This type of sampling provides a means to determine how the habitat of key species is being affected by construction.**

***Recommendation 3*: We also strongly recommend including pre-construction checks for hibernacula in the warm spring when snakes emerge and not just before actual construction. This would also apply to any of the SCC or SAR plants that are spring ephemerals.**

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Concern: To build the bridge and extend the pathway many trees have to be removed. EEPAC appreciates the pathway alignment has tried to minimize the loss of trees and to avoid larger trees as much as possible. Still, we are given to understand that 150 trees 30-50 dbh will be removed. The total count by size was not available at open house.

***Recommendation 14*: EEPAC requests further information about tree replacements.**

Replacement is 3:1 for 30-50 dbh, 5:1 for larger trees. We assume it is 1:1 for trees less than 30 dbh. Is that correct? Have locations for plantings been determined? When will plantings take place? Where will plantings be done? In the areas cleared? We understand only native plants will be planted. What types of trees will be used? How long will the trees be cared for after planting? Are tree plantings part of the compensation/enhancement plan? If so, is it available for anyone to see? We would like to see the plans because the loss of trees and re-planting of trees and possible revegetation of the "meadow" area north of the pathway is an environmental concern and we would like to provide our recommendations about these plans. We also understand that some planting will commence prior to completion.

***Recommendation 15*: A minimum five year warranty period for ecological restoration and plantings be required in the tender documents. The warranty period should only begin once 70% or more of the plantings are completed.**

***Recommendation 16*: EEPAC recommends that invasive species control along the Thames and in Huron Woods be a part of the compensatory plan.**

***Recommendation 17*: Professor Emeritus Brock Fenton from Western University be consulted on the proposed installation of bat boxes.**

Other:

Concern: There appears to be no mention regarding the marked trail that runs adjacent to the river. The trail is well marked with white paint and we believe it is part of the Thames Valley Trail. This trail takes people from Adelaide west and up the hill behind the seminary and over to Ross Park. By crossing the Thames at Adelaide you can continue on the trail on the north side of the Thames east through Killaly Woods ESA to Highbury and beyond.

***Recommendation 18*: Prior to construction a plan for this trail should be decided and be part of the detailed design. If the trail is to continue it should be re-routed and made part of the TVP where there is overlap.**

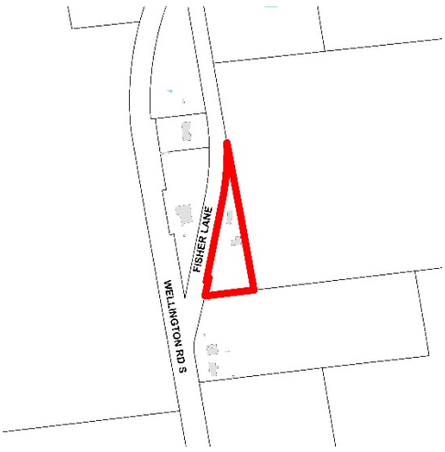
EEPAC was pleased to learn that no in water work will be required as part of this project.

EEPAC continues to believe that the Thames Valley Parkway North Extension is in a part of the Natural Heritage System that meets at least two of the seven criteria as an Environmentally Significant Area (ESA). It should be noted that to date it has not been evaluated against the criteria in the City's Official Plan.

NOTICE OF PLANNING APPLICATION

Zoning By-Law Amendment

6682 Fisher Lane



File: Z-9002
Applicant: Joe Marche and Monique Rodriguez

What is Proposed?

Zoning amendment to allow:

- A new single detached dwelling with a reduced minimum front yard depth of 18 metres and a reduced rear yard depth of 0 metres;
- And to temporarily allow two single detached dwellings on the subject property for a period of time not exceeding three years to allow for the existing dwelling to remain while a new dwelling is being constructed

LEARN MORE & PROVIDE INPUT

Please provide any comments by **February 13, 2019**
Planner: Meg Sundercock
msundercock@london.ca
519-661-CITY (2489) ext. 4471
Development Services, City of London, 300 Dufferin Avenue, 6th Floor,
London ON PO BOX 5035 N6A 4L9
File: Z-9002
london.ca/planapps

You may also discuss any concerns you have with your Ward Councillor:
Steven Hillier
shillier@london.ca
519-661-CITY (2489) ext. 4014

If you are a landlord, please post a copy of this notice where your tenants can see it. We want to make sure they have a chance to take part.

Date of Notice: January 24, 2019

Application Details

Commonly Used Planning Terms are available at london.ca/planapps.

Requested Zoning By-law Amendment

To change the zoning from an Agricultural (AG2) Zone to an Agricultural Special Provision/ Temporary (AG2(_)/T-_) Zone. Special provisions would permit a new single detached dwelling with a reduced minimum front yard depth of 18 metres whereas 30 metres is required, and a reduced rear yard depth of 0 metres whereas 30 metres is required. The requested Temporary Use Zone would permit the use of the lands for two single detached dwellings for a period of time not exceeding three years. Changes to the currently permitted land uses and development regulations are summarized below. The complete Zoning By-law is available at london.ca/planapps.

Current Zoning
Zone: Agricultural (AG2) Zone
Permitted Uses: Agricultural uses, livestock facilities, farm dwellings, conservation lands etc.
Front & Exterior Side Yard Depth (min.): 30 metres
Rear Yard Depth (min.): 30 metres

Requested Zoning
Zone: Agricultural Special Provision/ Temporary (AG2(_)/T-_)) Zone
Permitted Uses: Agricultural uses, livestock facilities, farm dwellings, conservation lands etc., and to temporarily allow two dwellings on the subject property while the new dwelling is under construction, and prior to the demolition of the existing dwelling for a period of time not exceeding three years.

The City may also consider the use of holding provisions and additional special provisions.

Planning Policies

Any change to the Zoning By-law must conform to the policies of the Official Plan, London's long-range planning document. These lands are currently designated as Agriculture and Environmental Review in the Official Plan, which permits agricultural uses such as the cultivation of land and livestock operations as the main uses, though also contemplates existing residential uses.

The subject lands are in the Farmland and Green Space Place Types in *The London Plan*, permitting a range of agricultural and recreational uses associated with the passive enjoyment of natural features, but also allows for residential dwellings on existing lots of record.

How Can You Participate in the Planning Process?

You have received this Notice because someone has applied to change the zoning of land located within 120 metres of a property you own, or your landlord has posted the notice of application in your building. The City reviews and makes decisions on such planning applications in accordance with the requirements of the *Planning Act*. The ways you can participate in the City's planning review and decision making process are summarized below. For more detailed information about the public process, go to the Participating in the Planning Process page at london.ca.

See More Information

You can review additional information and material about this application by:

- visiting Development Services at 300 Dufferin Ave, 6th floor, Monday to Friday between 8:30am and 4:30pm;
- contacting the City's Planner listed on the first page of this Notice; or
- viewing the application-specific page at london.ca/planapps.

Reply to this Notice of Application

We are inviting your comments on the requested changes at this time so that we can consider them as we review the application and prepare a report that will include Development Services staff's recommendation to the City's Planning and Environment Committee. Planning considerations usually include such matters as land use, development intensity, and form of development.

Attend a Future Public Participation Meeting

The Planning and Environment Committee will consider the requested zoning changes on a date that has not yet been scheduled. The City will send you another notice inviting you to

attend this meeting, which is required by the *Planning Act. Y*ou will also be invited to provide your comments at this public participation meeting. The Planning and Environment Committee will make a recommendation to Council, which will make its decision at a future Council meeting.

What Are Your Legal Rights?

Notification of Council Decision

If you wish to be notified of the decision of the City of London on the proposed zoning by-law amendment, you must make a written request to the City Clerk, 300 Dufferin Ave., P.O. Box 5035, London, ON, N6A 4L9, or at docservices@london.ca. You will also be notified if you speak to the Planning and Environment Committee at the public meeting about this application and leave your name and address with the Secretary of the Committee.

Right to Appeal to the Local Planning Appeal Tribunal

If a person or public body would otherwise have an ability to appeal the decision of the Council of the Corporation of the City of London to the Local Planning Appeal Tribunal but the person or public body does not make oral submissions at a public meeting or make written submissions to the City of London before the by-law is passed, the person or public body is not entitled to appeal the decision.

If a person or public body does not make oral submissions at a public meeting or make written submissions to the City of London before the by-law is passed, the person or public body may not be added as a party to the hearing of an appeal before the Local Planning Appeal Tribunal unless, in the opinion of the Tribunal, there are reasonable grounds to do so.

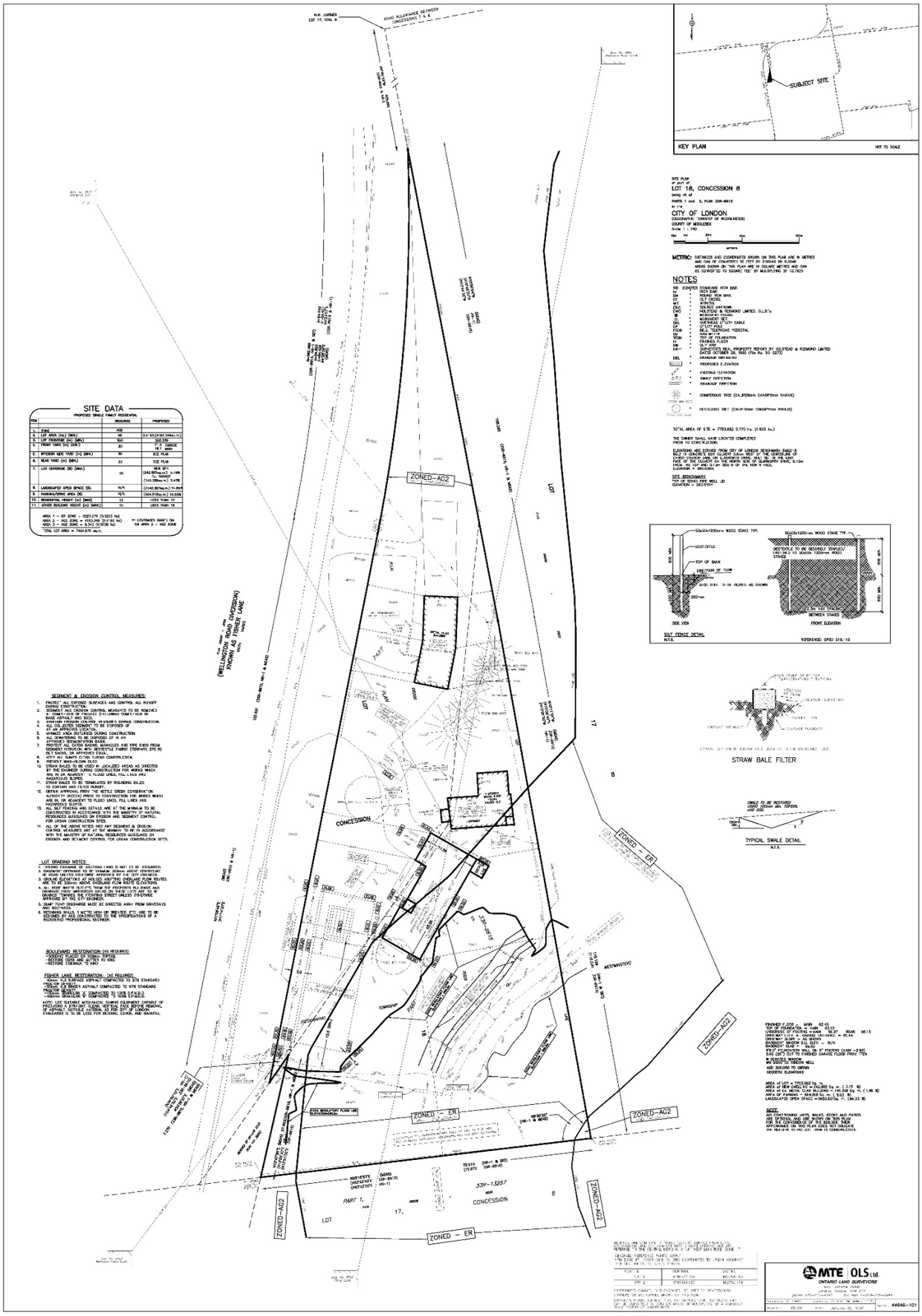
For more information go to http://elto.gov.on.ca/tribunals/lpat/about-lpat/.

Notice of Collection of Personal Information

Personal information collected and recorded at the Public Participation Meeting, or through written submissions on this subject, is collected under the authority of the *Municipal Act*, 2001, as amended, and the *Planning Act*, 1990 R.S.O. 1990, c.P.13 and will be used by Members of Council and City of London staff in their consideration of this matter. The written submissions, including names and contact information and the associated reports arising from the public participation process, will be made available to the public, including publishing on the City's website. Video recordings of the Public Participation Meeting may also be posted to the City of London's website. Questions about this collection should be referred to Cathy Saunders, City Clerk, 519-661-CITY(2489) ext. 4937.

Accessibility – Alternative accessible formats or communication supports are available upon request. Please contact accessibility@london.ca or 519-661-CITY(2489) extension 2425 for more information.

Site Concept



Proposed Site Plan

The above image represents the applicant's proposal as submitted and may change.

MTE | OLS Ltd.

December 5, 2018

RE: 6682 Fisher Lane, London

Owner – Joseph Marche

MTE OLS Ltd. project number – 44646-101

ENVIRONMENTAL JUSTIFICATION REPORT:

We have had numerous discussions with the Kettle Creek Conservation Authority, namely Joe Gordon.

He has reviewed our plan and as evidenced by his attached email correspondence he is satisfied that all of the new development is directed away and outside of the regulatory floodplain.

With this being said, the development is clear of the riparian corridor (Harry White/Wright Drain), therefore keeping it clear, open and not impacted.

Our client is aware that dredging work will take place in 2019 on the Harry White/Wright Drain.

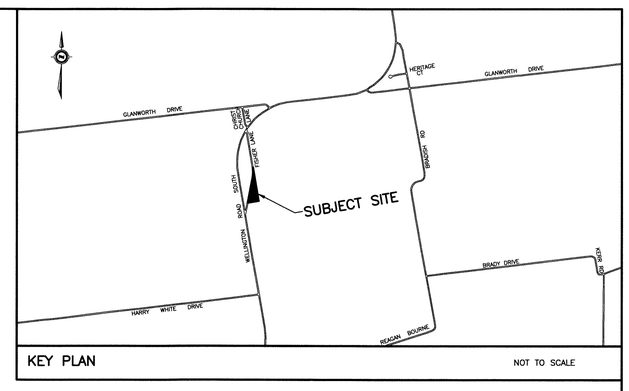
Please note that a plan is attached indicating where new vegetation will be placed and the Kettle Creek Conservation Authority has provided their input and approval on this matter.

MTE OLS Ltd.,
Patrick R. Levac, OLS

MTE OLS Ltd.
Ontario Land Surveyors
649 Colborne Street
London, Ontario N6A 3Z2
Phone: 519-672-4551
Fax: 519-672-4587

www.mte85.com

MEMBER



KEY PLAN — NOT TO SCALE

SITE GRADING PLAN SHOWING TREE PRESERVATION
of part of
LOT 18, CONCESSION 8
being all of
PARTS 1 and 2, PLAN 33R-8615
in the
CITY OF LONDON
(GEOGRAPHIC TOWNSHIP OF WESTMINSTER)
COUNTY OF MIDDLESEX
Scale 1 : 250

10m 0m 20m 50m 100m
METRES

METRIC: DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048
AREAS SHOWN ON THIS PLAN ARE IN SQUARE METRES AND CAN BE CONVERTED TO SQUARE FEET BY MULTIPLYING BY 10.7639

NOTES

SIB	DENOTES	STANDARD IRON BAR.
IB	"	IRON BAR.
IB⌀	"	ROUND IRON BAR.
CC	"	CUT CROSS.
WIT	"	WITNESS.
(SU)	"	SOURCE UNKNOWN
(HR)	"	HOLSTEAD & REDMOND LIMITED, O.L.S.'s.
■	"	MONUMENT FOUND.
□	"	MONUMENT SET.
OHU	"	OVERHEAD UTILITY CABLE
UP	"	UTILITY POLE
PEDB	"	BELL TELEPHONE PEDESTAL
GM	"	GAS METER
TFDN	"	TOP OF FOUNDATION
FF	"	FINISHED FLOOR
GW	"	GUY WIRE
HR-1	"	SURVEYOR'S REAL PROPERTY REPORT BY HOLSTEAD & REDMOND LIMITED DATED OCTOBER 26, 1995 (File No. 95-0273)
DBL	"	DRAINAGE BREAKLINE
80.60	"	PROPOSED ELEVATION
+263.35	"	EXISTING ELEVATION
	"	SWALE DIRECTION
	"	DRAINAGE DIRECTION
TRCON 300 3000	"	CONIFEROUS TREE (CALIPERmm CANOPYmm RADIUS)
TRDEC 600 6000	"	DECIDUOUS TREE (CALIPERmm CANOPYmm RADIUS)

TOTAL AREA OF SITE = 7703.862 0.770 ha. (1.903 Ac.)

THE OWNER SHALL HAVE LOCATES COMPLETED PRIOR TO CONSTRUCTION.

ELEVATIONS ARE DERIVED FROM CITY OF LONDON BENCHMARK BM02-8 BOLT IN CONCRETE BOX CULVERT 0.6km WEST OF THE CENTERLINE OF CHRIST CHURCH LANE ON GLANWORTH DRIVE. BOLT SET IN THE EAST FACE OF THE CULVERT ON THE NORTH SIDE OF GLANWORTH DRIVE, 0.12m FROM THE TOP AND 0.13m SOUTH OF THE NORTH FACE.
ELEVATION = 260.536m

SITE BENCHMARK
TOP OF STAND PIPE WELL LID
ELEVATION = 263.510m

SITE DATA
PROPOSED SINGLE FAMILY RESIDENTIAL

ITEM		REQUIRED	PROPOSED Mun. No. 119
1.	ZONE	AG2	
2.	LOT AREA (ha.) (MIN.)	40	0.77 (7703.862sq.m.)
3.	LOT FRONTAGE (m) (MIN.)	300	208.5
4.	FRONT YARD (m) (MIN.)	30	21.9 GARAGE 18.1 MAIN
5.	INTERIOR SIDE YARD (m) (MIN.)	30	43.3 – SOUTH
6.	REAR YARD (m) (MIN.)	30	13.8
7.	LOT COVERAGE (%) (MAX.)	10	NEW SFR (242.865sq.m.) 3.15% Ex. GARAGE (145.358sq.m.) 1.89%
8.	LANDSCAPED OPEN SPACE (%)	N/A	(6650.821sq.m.) 86.33%
9.	RESIDENTIAL HEIGHT (m) (MAX)	12	LESS THAN 4
10.	ALL OTHER BUILDING HEIGHT(%)(MAX.)	15	LESS THAN 4

SEDIMENT & EROSION CONTROL MEASURES:

1. PROTECT ALL EXPOSED SURFACES AND CONTROL ALL RUNOFF DURING CONSTRUCTION.
2. SEDIMENT AND EROSION CONTROL MEASURES TO BE REMOVED AT COMPLETION OF PROJECT (FOLLOWING COMPLETION OF BASE ASPHALT AND SOD).
3. MAINTAIN EROSION CONTROL MEASURES DURING CONSTRUCTION.
4. ALL COLLECTED SEDIMENT TO BE DISPOSED OF AT AN APPROVED LOCATION.
5. MINIMIZE AREA DISTURBED DURING CONSTRUCTION.
6. ALL DEWATERING TO BE DISPOSED OF IN AN APPROVED SEDIMENTATION BASIN.
7. PROTECT ALL CATCH BASINS, MANHOLES AND PIPE ENDS FROM SEDIMENT INTRUSION WITH GEOTEXTILE FABRIC (TERRAFIX 270 R) SILT SACKS, OR APPROVED EQUAL.
8. KEEP ALL SUMPS CLEAN DURING CONSTRUCTION.
9. PREVENT WIND-BLOWN DUST.
10. STRAW BALES TO BE USED IN LOCALIZED AREAS AS DIRECTED BY THE ENGINEER DURING CONSTRUCTION FOR WORKS WHICH ARE IN OR ADJACENT TO FLOOD LINES, FILL LINES AND HAZARDOUS SLOPES.
11. STRAW BALES TO BE TERMINATED BY ROUNDING BALES TO CONTAIN AND FILTER RUNOFF.
12. OBTAIN APPROVAL FROM THE KETTLE CREEK CONSERVATION AUTHORITY (KCCCA) PRIOR TO CONSTRUCTION FOR WORKS WHICH ARE IN, OR ADJACENT TO FLOOD LINES, FILL LINES AND HAZARDOUS SLOPES.
13. ALL SILT FENCING AND DETAILS ARE AT THE MINIMUM TO BE CONSTRUCTED IN ACCORDANCE WITH THE MINISTRY OF NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES.
14. ALL OF THE ABOVE NOTES AND ANY SEDIMENT & EROSION CONTROL MEASURES ARE AT THE MINIMUM TO BE IN ACCORDANCE WITH THE MINISTRY OF NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES.

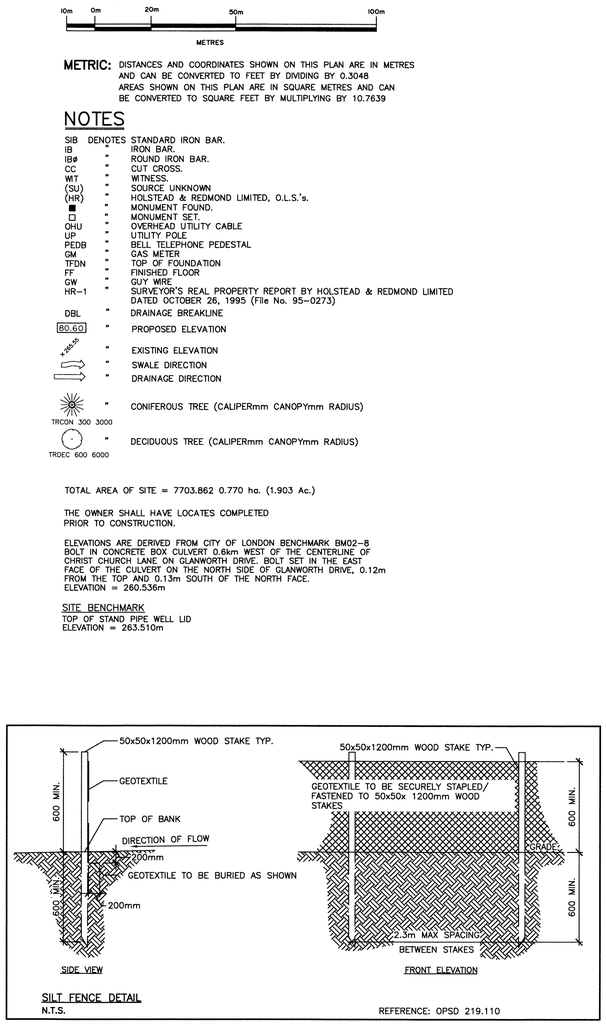
LOT GRADING NOTES

1. EXISTING DRAINAGE OF ABUTTING LAND IS NOT TO BE DISTURBED.
2. BASEMENT OPENINGS TO BE MINIMUM 300mm ABOVE CENTRELINE OF ROAD UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
3. GROUND ELEVATIONS AT HOUSES ABUTTING OVERLAND FLOW ROUTES ARE TO BE 225mm ABOVE OVERLAND FLOW ROUTE ELEVATIONS.
4. ALL ROOF WATER OUTLETS FROM THE PROPOSED BUILDINGS AND DRAINAGE FROM IMPERVIOUS AREAS ON THESE LOTS ARE TO BE DRAINED TOWARDS THE FRONTING STREET UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
5. SUMP PUMP DISCHARGE MUST BE DIRECTED AWAY FROM DRIVEWAYS AND SIDEYARDS.
6. RETAINING WALLS, 1 METRE HIGH OR GREATER, ETC. ARE TO BE DESIGNED BY AND CONSTRUCTED TO THE SPECIFICATIONS OF A REGISTERED PROFESSIONAL ENGINEER.

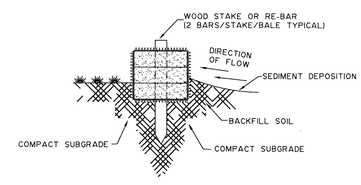
BOULEVARD RESTORATION: (AS REQUIRED)
- –SODDING PLACED ON 100mm TOPSOIL
- –RESTORE CURB AND GUTTER TO KIND
- –RESTORE SIDEWALK TO KIND

FISHER LANE RESTORATION: (AS REQUIRED)
- –40mm HL3 SURFACE ASPHALT COMPACTED TO 97% STANDARD PROCTOR DENSITY.
- –50mm HL8 BINDER ASPHALT COMPACTED TO 97% STANDARD PROCTOR DENSITY.
- –150mm GRANULAR 'A' COMPACTED TO 100% S.P.M.D.D.
- –450mm GRANULAR 'B' COMPACTED TO 100% S.P.M.D.D.

NOTE: USE SUITABLE MECHANICAL SAWNG EQUIPMENT CAPABLE OF PRODUCING A STRAIGHT, CLEAN, VERTICAL FACE BEFORE REMOVAL OF ASPHALT. SUITABLE MATERIAL AS PER CITY OF LONDON STANDARDS IS TO BE USED FOR BEDDING, COVER, AND BACKFILL.

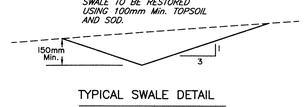


SILT FENCE DETAIL
N.T.S.
REFERENCE: OPSD 219.110



TYPICAL SECTION OF STRAW BALE USED TO FILTER OVERLAND FLOW

STRAW BALE FILTER



TYPICAL SWALE DETAIL
N.T.S.

FINISHED FLOOR = MAIN 62.40
TOP OF FOUNDATION = MAIN 62.10
UNDERSIDE OF FOOTING = MAIN 59.27 REAR 58.13
DRIVEWAY ELEV. AT GARAGE ENTRANCE = 61.44
DRIVEWAY SLOPE = AS SHOWN
BASEMENT WINDOW SILL ELEV. = N/A
BASEMENT SLAB = 59.50
8'9.5" FOUNDATION WALL ON 6" FOOTING (MAIN –2.83)
0.66 (26") CUT TO FINISHED GARAGE FLOOR FROM TFDN

W DENOTES WINDOW
WW DENOTES WINDOW WELL
ADD 200.000 TO OBTAIN GEODETIC ELEVATIONS

AREA of LOT = 7703.862 Sq. m.
AREA of NEW DWELLING = 242.865 Sq. m. (3.15 %)
AREA of Ex. METAL CLAD BUILDING = 145.358 Sq. m. (1.89 %)
AREA OF PARKING = 664.818 Sq. m. (8.63 %)
LANDSCAPED OPEN SPACE = 6650.821Sq. m. (86.33 %)

NOTE
AIR CONDITIONING UNITS, WALKS, DECKS AND PATIOS ARE OPTIONAL AND ARE SHOWN ON THIS PLAN FOR THE CONVENIENCE OF THE BUILDER. THEIR APPEARANCE ON THIS PLAN DOES NOT OBLIGATE THE BUILDER TO INCLUDE THEM IN CONSTRUCTION.

GRADING CERTIFICATE:

I HEREBY CERTIFY THAT THE PROPOSED GRADING AND APPURTENANT DRAINAGE WORKS COMPLY WITH SOUND ENGINEERING DESIGN AND THAT THE PROPOSED GRADING IS COMPATIBLE WITH THE EXISTING DRAINAGE PATTERNS ON AND ACROSS THESE LANDS AND THE ADJOINING LANDS OR APPLICABLE CITY BY-LAWS.

NOTE TO BUILDER: THIS CERTIFICATION DOES NOT INCLUDE THE INVESTIGATION OF ANY POTENTIAL UTILITY CONFLICTS WITHIN THE ROAD ALLOWANCE FRONTING AND/OR FLANKING THE SUBJECT LOT, OR THE LOCATION OF A DRIVEWAY CURB CUT IF APPLICABLE, AND IT IS IN THE INTEREST OF THE BUILDER TO CONFIRM UTILITY AND DRIVEWAY LOCATIONS.

P.R. LEVAC, O.L.S.

BEARINGS ARE UTM GRID IN NAD83 (2010.0) DERIVED FROM G.P.S. OBSERVATIONS AND THE CAN-NET BASE STATION NETWORK AND ARE REFERRED TO THE CENTRAL MERIDIAN 81°00' WEST LONGITUDE, ZONE 17

OBSERVED REFERENCE POINTS (ORPs)
UTM ZONE 17, NAD83 (2010.0) GRID COORDINATES TO URBAN ACCURACY PER SEC. 14 (2) OF O.REG. 216/10

POINT ID	NORTHING	EASTING
ORP 1	4745327.704	482784.790
ORP 2	4745186.655	482759.139

COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.

DISTANCES SHOWN ON THIS PLAN ARE GROUND LEVEL DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY A COMBINED SCALE FACTOR OF 0.999569425

MTE | OLS Ltd.
ONTARIO LAND SURVEYORS
649 Colborne Street
London, Ontario, N6A 3Z2
phone 519-672-4551 toll free 1-800-265-4945

Surveyed by : N. Rebic	Checked by : B. van der Veen, O.L.S.	
Drawn by : AS/SM	Date : December 05, 2018	File No : 44646-101

MTE | OLS Ltd.

December 5, 2018

RE: 6682 Fisher Lane, London – Owner: Joseph Marche

MTE OLS Ltd. project number – 44646-101

PLANNING JUSTIFICATION REPORT:

The pre-consultation meeting was held on July 30, 2018. The owner, Joe Marche, is proposing to move a single detached dwelling to the subject property. The existing single detached dwelling will be retained until the new dwelling has been fully moved/constructed. After which, the existing dwelling will be demolished.

This site is unique in its shape and designation, being agricultural and open space. The London plan has this site designated as farmland place and green space type even though there is no farming taking place on site and there is an existing single family home on the property. The site is too small to allow farming and has a Municipal drain going through the south portion of the site. The current zoning is listed as AG2 and Environmental Review Zone.

We are requesting special provisions under the AG2 zone to permit reduced setbacks for the new single detached dwelling. The existing dwelling also does not meet the requirements of the AG2 zone. The attached site plan/grading plan illustrates the proposed location of the new dwelling. The new dwelling and accessory structures have been placed outside the regulatory floodplain as located and shown on the attached site plan. This plan has been reviewed and approved by the Kettle Creek Conservation Authority. Please see the attached email correspondence from Joe Gordon, Supervisor of Planning & Conservation Areas, Kettle Creek Conservation Authority.

The site plan also addresses the minimum distance separation by noting the distance to the surrounding structures on the adjacent farms. This is a requirement due to the agricultural nature of the surrounding area. The plantings have also been addressed on the site plan. Kettle Creek has commented on location and type of plantings they want to see. These have been shown on the site plan. Please see email correspondence from Kettle Creek.

From our pre-consultation meeting and discussions with the Conservation Authority we are confident that there is no adverse impact with this development from a planning perspective.

MTE OLS Ltd.,
Patrick R. Levac, OLS

MTE OLS Ltd.
Ontario Land Surveyors
649 Colborne Street
London, Ontario N6A 3Z2
Phone: 519-672-4551
Fax: 519-672-4587

www.mte85.com

MEMBER

Kettle Creek
Conservation Authority

44015 Ferguson Line
St. Thomas, ON N5P 3T3
P 519-631-1270 | F 519-631-5026
www.kettlecreekconservation.on.ca
Member of Conservation Ontario

June 29, 2018

Joe Marche
6682 Fisher Lane
London, ON N6N 1G9
Actiondrainage16@outlook.com

RE: 6682 Fisher Lane, City of London

Dear Mr. Marche,

It is the understanding of Kettle Creek Conservation Authority (KCCA) that you are proposing to construct a new dwelling and septic system upon the subject property.

Please be advised that a portion of the subject property is affected by regulations of KCCA. Pursuant to Section 28 of the Conservation Authorities Act, permission is required of the Conservation Authority prior to any development within its regulatory jurisdiction. The current regulation for the Kettle Creek watershed is *"Ontario Regulation 181/06: Development, Interference with Wetlands and Alterations to Shorelines and Watercourses."*

A portion of the subject property is also subject to flooding hazards during a regulatory storm event (Hurricane Hazel Standard). The regulatory flood elevation for the vicinity of the subject property is 259.2m GSC.

Attached is a copy of KCCA's Regulation Limit mapping which also shows the extent of the Flood Hazard Limit.

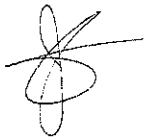
The general intent of natural hazard policies of the Province of Ontario and Conservation Authority Regulations is to direct development away from hazardous lands that are subject to flooding hazards and/or erosion hazards.

In review of the provided site plan sketch, undated, it appears that portions of the proposed "3 Bedroom House" and "Raised Filter Bed" are located upon or within an area affected by *Ontario Regulation 181/06.* Therefore, a permit from KCCA will be required prior to any construction activities occurring within the Regulation Limit.

It does appear that the location of the proposed development is situated outside of the Flood Hazard Limit. However, as part of KCCA's application process, we will require a grading plan with geodetic elevations to confirm that the building and septic system are indeed located outside of, and above the regulatory flood elevation of 259.2m GSC.

Thank you for the opportunity to comment. If you have any questions regarding the above, please contact the undersigned at extension 226.

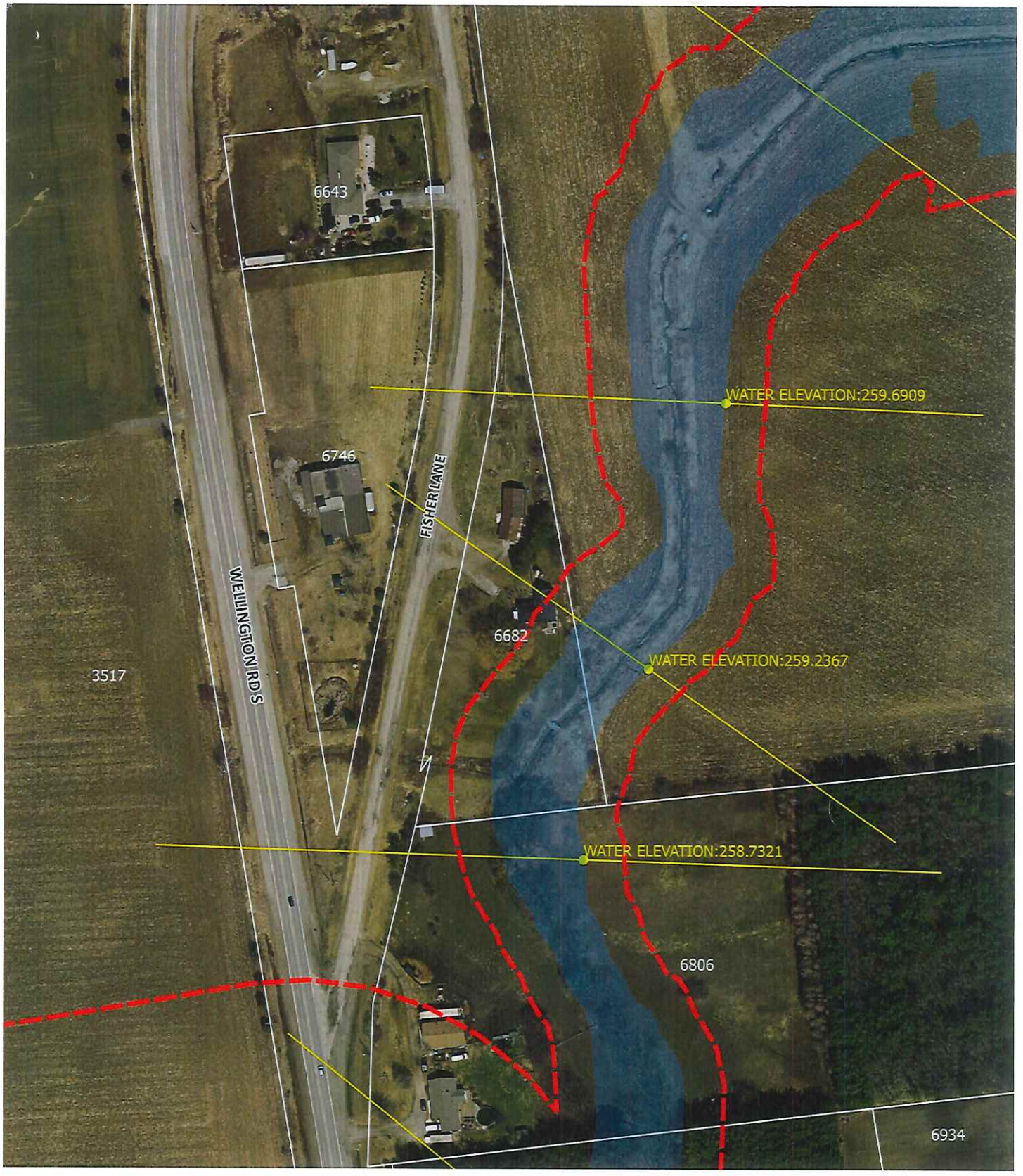
Yours truly,
KETTLE CREEK CONSERVATION AUTHORITY



(Digitally signed)
Joseph (Joe) Gordon
Director of Operations

Attachments

1. *Regulation Limit:*



Legend:

- Regulation Limit
- Flood Hazard Limit

Disclaimer: The KCCA disclaims explicitly any warranty, representation or guarantee as to the content, sequence, accuracy, timeliness, fitness for a particular purpose, merchantability or completeness of any of the data depicted and provided therein.
The KCCA assumes no liability for any errors, omissions or inaccuracies in the information provided herein and further assumes no liability for any decisions made or actions taken or not taken by any person in reliance upon the information and data furnished hereunder.

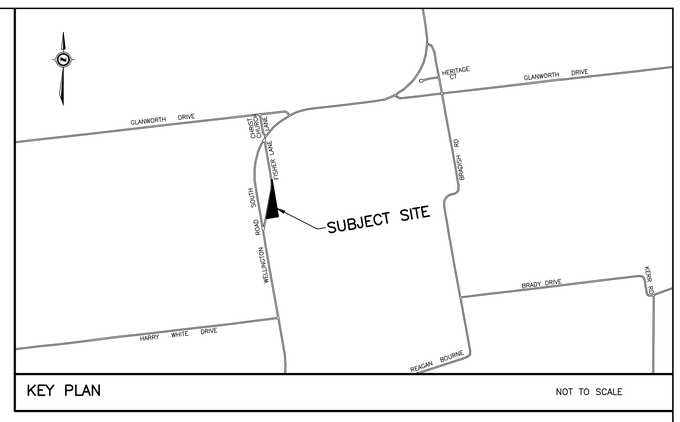
Imagery: 2015 SWOOP

Date: June 29, 2018

ONTARIO REGULATION 181/06

Development, Interference with Wetlands and Alterations to Shorelines and Watercourses

Kettle Creek Conservation Authority



KEY PLAN NOT TO SCALE

SITE PLAN
of part of
LOT 18, CONCESSION 8
being all of
PARTS 1 and 2, PLAN 33R-8615
in the
CITY OF LONDON
(GEOGRAPHIC TOWNSHIP OF WESTMINSTER)
COUNTY OF MIDDLESEX
Scale 1 : 250

10m 0m 20m 50m 100m
METRES

METRIC: DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048
AREAS SHOWN ON THIS PLAN ARE IN SQUARE METRES AND CAN BE CONVERTED TO SQUARE FEET BY MULTIPLYING BY 10.7639

NOTES

SIB	DENOTES	STANDARD IRON BAR.
IB	"	IRON BAR.
IBø	"	ROUND IRON BAR.
CC	"	CUT CROSS.
WIT	"	WITNESS.
(SU)	"	SOURCE UNKNOWN
(HR)	"	HOLSTEAD & REDMOND LIMITED, O.L.S.'s.
■	"	MONUMENT FOUND.
□	"	MONUMENT SET.
OHU	"	OVERHEAD UTILITY CABLE
UP	"	UTILITY POLE
PEDB	"	BELL TELEPHONE PEDESTAL
GM	"	GAS METER
TFDN	"	TOP OF FOUNDATION
FF	"	FINISHED FLOOR
GW	"	GUY WIRE
HR-1	"	SURVEYOR'S REAL PROPERTY REPORT BY HOLSTEAD & REDMOND LIMITED DATED OCTOBER 26, 1995 (File No. 95-0273)
DBL	"	DRAINAGE BREAKLINE
80.60	"	PROPOSED ELEVATION
x260.55	"	EXISTING ELEVATION
	"	SWALE DIRECTION
	"	DRAINAGE DIRECTION
TRCON 300 3000	"	CONIFEROUS TREE (CALIPERmm CANOPYmm RADIUS)
TRDEC 600 6000	"	DECIDUOUS TREE (CALIPERmm CANOPYmm RADIUS)

TOTAL AREA OF SITE = 7703.862 0.770 ha. (1.903 Ac.)

THE OWNER SHALL HAVE LOCATES COMPLETED PRIOR TO CONSTRUCTION.

ELEVATIONS ARE DERIVED FROM CITY OF LONDON BENCHMARK BM02-8 BOLT IN CONCRETE BOX CULVERT 0.6km WEST OF THE CENTERLINE OF CHRIST CHURCH LANE ON GLANWORTH DRIVE. BOLT SET IN THE EAST FACE OF THE CULVERT ON THE NORTH SIDE OF GLANWORTH DRIVE, 0.12m FROM THE TOP AND 0.13m SOUTH OF THE NORTH FACE.
ELEVATION = 260.536m

SITE BENCHMARK
TOP OF STAND PIPE WELL LID
ELEVATION = 263.510m

SITE DATA

PROPOSED SINGLE FAMILY RESIDENTIAL

ITEM		REQUIRED	PROPOSED
1.	ZONE	AG2	
2.	LOT AREA (ha.) (MIN.)	40	0.4193 (4193.348sq.m.)
3.	LOT FRONTAGE (m) (MIN.)	300	208.539
4.	FRONT YARD (m) (MIN.)	30	21.9 GARAGE 18.1 MAIN
5.	INTERIOR SIDE YARD (m) (MIN.)	30	???
6.	REAR YARD (m) (MIN.)	30	???
7.	LOT COVERAGE (%) (MAX.)	10	NEW SFR (242.865sq.m.) 5.79% Ex. GARAGE (145.358sq.m.) 3.47%
8.	LANDSCAPED OPEN SPACE (%)	N/A	(3140.307sq.m.) 74.89%
9.	PARKING/DRIVE AREA (%)	N/A	(664.818sq.m.) 15.85%
10.	RESIDENTIAL HEIGHT (m) (MAX)	12	LESS THAN 12
11.	OTHER BUILDING HEIGHT (m) (MAX.)	15	LESS THAN 15

AREA 1 – ER ZONE = 3223.279 (0.3223 ha)
AREA 2 – AG2 ZONE = 4193.348 (0.4193 ha)
AREA 3 – AG2 ZONE = 8.343 (0.0008 ha)
TOTAL LOT AREA = 7424.970 sq.m.

** COVERAGES BASED ON AREA 2 – AG2 ZONE

SEDIMENT & EROSION CONTROL MEASURES:

1. PROTECT ALL EXPOSED SURFACES AND CONTROL ALL RUNOFF DURING CONSTRUCTION.
2. SEDIMENT AND EROSION CONTROL MEASURES TO BE REMOVED AT COMPLETION OF PROJECT (FOLLOWING COMPLETION OF BASE ASPHALT AND SOD).
3. MAINTAIN EROSION CONTROL MEASURES DURING CONSTRUCTION.
4. ALL COLLECTED SEDIMENT TO BE DISPOSED OF AT AN APPROVED LOCATION.
5. MINIMIZE AREA DISTURBED DURING CONSTRUCTION.
6. ALL DEWATERING TO BE DISPOSED OF IN AN APPROVED SEDIMENTATION BASIN.
7. PROTECT ALL CATCH BASINS, MANHOLES AND PIPE ENDS FROM SEDIMENT INTRUSION WITH GEOTEXTILE FABRIC (TERRAFIX 270 R) SILT SACKS, OR APPROVED EQUAL.
8. KEEP ALL SUMPS CLEAN DURING CONSTRUCTION.
9. PREVENT WIND-BLOWN DUST.
10. STRAW BALES TO BE USED IN LOCALIZED AREAS AS DIRECTED BY THE ENGINEER DURING CONSTRUCTION FOR WORKS WHICH ARE IN OR ADJACENT TO FLOOD LINES, FILL LINES AND HAZARDOUS SLOPES.
11. STRAW BALES TO BE TERMINATED BY ROUNDING BALES TO CONTAIN AND FILTER RUNOFF.
12. OBTAIN APPROVAL FROM THE KETTLE CREEK CONSERVATION AUTHORITY (KCCCA) PRIOR TO CONSTRUCTION FOR WORKS WHICH ARE IN, OR ADJACENT TO FLOOD LINES, FILL LINES AND HAZARDOUS SLOPES.
13. ALL SILT FENCING AND DETAILS ARE AT THE MINIMUM TO BE CONSTRUCTED IN ACCORDANCE WITH THE MINISTRY OF NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES.
14. ALL OF THE ABOVE NOTES AND ANY SEDIMENT & EROSION CONTROL MEASURES ARE AT THE MINIMUM TO BE IN ACCORDANCE WITH THE MINISTRY OF NATURAL RESOURCES GUIDELINES ON EROSION AND SEDIMENT CONTROL FOR URBAN CONSTRUCTION SITES.

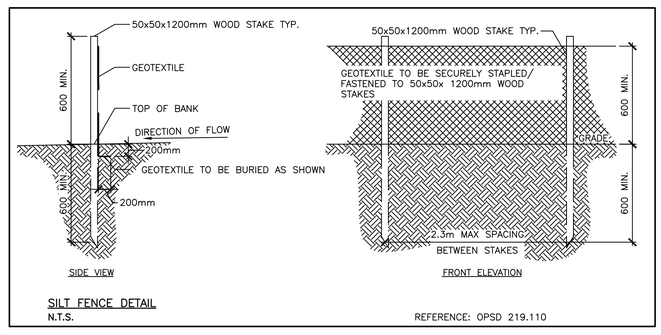
LOT GRADING NOTES

1. EXISTING DRAINAGE OF ABUTTING LAND IS NOT TO BE DISTURBED.
2. BASEMENT OPENINGS TO BE MINIMUM 300mm ABOVE CENTRELINE OF ROAD UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
3. GROUND ELEVATIONS AT HOUSES ABUTTING OVERLAND FLOW ROUTES ARE TO BE 225mm ABOVE OVERLAND FLOW ROUTE ELEVATIONS.
4. ALL ROOF WATER OUTLETS FROM THE PROPOSED BUILDINGS AND DRAINAGE FROM IMPERVIOUS AREAS ON THESE LOTS ARE TO BE DRAINED TOWARDS THE FRONTING STREET UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
5. SUMP PUMP DISCHARGE MUST BE DIRECTED AWAY FROM DRIVEWAYS AND SIDEYARDS.
6. RETAINING WALLS, 1 METRE HIGH OR GREATER, ETC. ARE TO BE DESIGNED BY AND CONSTRUCTED TO THE SPECIFICATIONS OF A REGISTERED PROFESSIONAL ENGINEER.

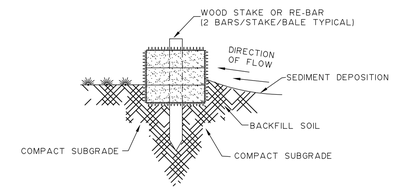
BOULEVARD RESTORATION: (AS REQUIRED)
- SODDING PLACED ON 100mm TOPSOIL
- RESTORE CURB AND GUTTER TO KIND
- RESTORE SIDEWALK TO KIND

FISHER LANE RESTORATION: (AS REQUIRED)
- 40mm HL3 SURFACE ASPHALT COMPACTED TO 97% STANDARD PROCTOR DENSITY.
- 50mm HL8 BINDER ASPHALT COMPACTED TO 97% STANDARD PROCTOR DENSITY.
- 150mm GRANULAR 'A' COMPACTED TO 100% S.P.M.D.D.
- 450mm GRANULAR 'B' COMPACTED TO 100% S.P.M.D.D.

NOTE: USE SUITABLE MECHANICAL SAWING EQUIPMENT CAPABLE OF PRODUCING A STRAIGHT, CLEAN, VERTICAL FACE BEFORE REMOVAL OF ASPHALT. SUITABLE MATERIAL AS PER CITY OF LONDON STANDARDS IS TO BE USED FOR BEDDING, COVER, AND BACKFILL.

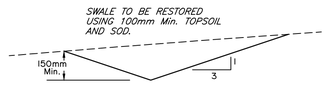


SILT FENCE DETAIL
N.T.S. REFERENCE: OPSD 219.110



TYPICAL SECTION OF STRAW BALE USED TO FILTER OVERLAND FLOW

STRAW BALE FILTER



TYPICAL SWALE DETAIL
N.T.S.

FINISHED FLOOR = MAIN 62.40
TOP OF FOUNDATION = MAIN 62.10
UNDERSIDE OF FOOTING = MAIN 59.27 REAR 58.13
DRIVEWAY ELEV. AT GARAGE ENTRANCE = 61.44
DRIVEWAY SLOPE = AS SHOWN
BASEMENT WINDOW SILL ELEV. = N/A
BASEMENT SLAB = 59.50
8'9.5" FOUNDATION WALL ON 6" FOOTING (MAIN -2.83)
0.66 (26") CUT TO FINISHED GARAGE FLOOR FROM TFDN

W DENOTES WINDOW
WW DENOTES WINDOW WELL

ADD 200.000 TO OBTAIN GEODETIC ELEVATIONS

AREA of LOT = 7703.862 Sq. m.
AREA of NEW DWELLING = 242.865 Sq. m. (3.15 %)
AREA of Ex. METAL CLAD BUILDING = 145.358 Sq. m. (1.89 %)
AREA OF PARKING = 664.818 Sq. m. (8.63 %)
LANDSCAPED OPEN SPACE = 6650.821Sq. m. (86.33 %)

NOTE
AIR CONDITIONING UNITS, WALKS, DECKS AND PATIOS ARE OPTIONAL AND ARE SHOWN ON THIS PLAN FOR THE CONVENIENCE OF THE BUILDER. THEIR APPEARANCE ON THIS PLAN DOES NOT OBLIGATE THE BUILDER TO INCLUDE THEM IN CONSTRUCTION.

BEARINGS ARE UTM GRID IN NAD83 (2010.0) DERIVED FROM G.P.S. OBSERVATIONS AND THE CAN-NET BASE STATION NETWORK AND ARE REFERRED TO THE CENTRAL MERIDIAN 81°00' WEST LONGITUDE, ZONE 17

OBSERVED REFERENCE POINTS (ORPs)
UTM ZONE 17, NAD83 (2010.0) GRID COORDINATES TO URBAN ACCURACY PER SEC. 14 (2) OF O.REG. 216/10

POINT ID	NORTHING	EASTING
ORP 1	4745327.704	482784.790
ORP 2	4745186.655	482759.139

COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.

DISTANCES SHOWN ON THIS PLAN ARE GROUND LEVEL DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY A COMBINED SCALE FACTOR OF 0.999569425

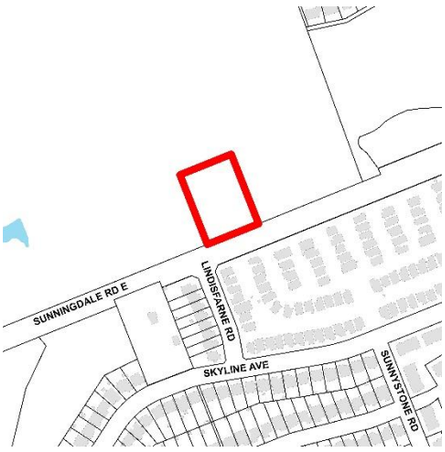
MTE | OLS Ltd.
ONTARIO LAND SURVEYORS
649 Colborne Street
London, Ontario, N6A 3Z2
phone 519-672-4551 toll free 1-800-265-4945

Surveyed by : N. Rebic | Checked by : B. van der Veen, O.L.S.
Drawn by : AS/SM | Date : January 09, 2018 | File No : 44646-101

NOTICE OF PLANNING APPLICATION

Zoning By-Law Amendment

348 Sunningdale Road East



File: Z-9011
Applicant: Westchester Homes Ltd.

What is Proposed?

Zoning amendment to allow:

- two, 3 storey townhouse dwellings with a total of 17 units

LEARN MORE & PROVIDE INPUT

Please provide any comments by **February 25, 2019**
Barb Debbert
bdebbert@london.ca
519-661-CITY (2489) ext. 5345
Development Services, City of London, 300 Dufferin Avenue, 6th Floor,
London ON PO BOX 5035 N6A 4L9
File: Z-9011
london.ca/planapps

You may also discuss any concerns you have with your Ward Councillor:
Maureen Cassidy
mcassidy@london.ca
519-661-CITY (2489) ext. 4005

If you are a landlord, please post a copy of this notice where your tenants can see it. We want to make sure they have a chance to take part.

Date of Notice: February 4, 2019

Application Details

Commonly Used Planning Terms are available at london.ca/planapps.

Requested Zoning By-law Amendment

To change the zoning from an Urban Reserve (UR1) Zone to a Residential R5 Special Provision (R5-2(_)) Zone. Changes to the currently permitted land uses and development regulations are summarized below. The complete Zoning By-law is available at london.ca/planapps.

Current Zoning
Zone: Urban Reserve (UR1)
Permitted Uses: existing dwellings; agricultural uses except for mushroom farms, commercial greenhouses, livestock facilities and manure storage facilities; conservation lands; managed woodlot; wayside pit; and passive recreation use.
Special Provision(s): n/a
Residential Density: n/a
Height: 15.0 metres

Requested Zoning
Zone: Residential R5 Special Provision (R5-2(_))
Permitted Uses: cluster townhouse dwellings and cluster stacked townhouse dwellings
Special Provision(s): side yard setbacks of 3.0 metres in place of 6.0 metres for units with windows on the side elevations
Residential Density: 30 units per hectare
Height: 12 metres (3 storeys)

An Environmental Impact Study has been prepared to assist in the evaluation of this application.

Planning Policies

Any change to the Zoning By-law must conform to the policies of the Official Plan, London's long-range planning document. These lands are currently designated as Multi-family, Medium Density Residential in the Official Plan, which permits multiple attached dwellings, such as row houses or cluster houses, low-rise apartment buildings, rooming and boarding houses, emergency care facilities, converted dwellings and small-scale nursing homes, rest homes and homes for the aged as the main uses.

The subject lands are in the Neighbourhoods Place Type in *The London Plan*, permitting a broad range of residential forms up to low-rise apartment buildings, home occupations, group homes, emergency care establishments, rooming houses, and supervised correctional residences.

How Can You Participate in the Planning Process?

You have received this Notice because someone has applied to change the zoning of land located within 120 metres of a property you own, or your landlord has posted the notice of application in your building. The City reviews and makes decisions on such planning applications in accordance with the requirements of the *Planning Act*. The ways you can participate in the City's planning review and decision making process are summarized below. For more detailed information about the public process, go to the Participating in the Planning Process page at london.ca.

See More Information

You can review additional information and material about this application by:

- visiting Development Services at 300 Dufferin Ave, 6th floor, Monday to Friday between 8:30am and 4:30pm;
- contacting the City's Planner listed on the first page of this Notice; or
- viewing the application-specific page at london.ca/planapps.

Reply to this Notice of Application

We are inviting your comments on the requested changes at this time so that we can consider them as we review the application and prepare a report that will include Development Services staff's recommendation to the City's Planning and Environment Committee. Planning considerations usually include such matters as land use, development intensity, and form of development.

This request represents residential intensification as defined in the policies of the Official Plan. Under these policies, Development Services staff and the Planning and Environment

Committee will also consider detailed site plan matters such as fencing, landscaping, lighting, driveway locations, building scale and design, and the location of the proposed building on the site. We would like to hear your comments on these matters.

Attend a Future Public Participation Meeting

The Planning and Environment Committee will consider the requested zoning changes on a date that has not yet been scheduled. The City will send you another notice inviting you to attend this meeting, which is required by the *Planning Act. Y*ou will also be invited to provide your comments at this public participation meeting. The Planning and Environment Committee will make a recommendation to Council, which will make its decision at a future Council meeting.

What Are Your Legal Rights?

Notification of Council Decision

If you wish to be notified of the decision of the City of London on the proposed zoning by-law amendment, you must make a written request to the City Clerk, 300 Dufferin Ave., P.O. Box 5035, London, ON, N6A 4L9, or at docservices@london.ca. You will also be notified if you speak to the Planning and Environment Committee at the public meeting about this application and leave your name and address with the Secretary of the Committee.

Right to Appeal to the Local Planning Appeal Tribunal

If a person or public body would otherwise have an ability to appeal the decision of the Council of the Corporation of the City of London to the Local Planning Appeal Tribunal but the person or public body does not make oral submissions at a public meeting or make written submissions to the City of London before the by-law is passed, the person or public body is not entitled to appeal the decision.

If a person or public body does not make oral submissions at a public meeting or make written submissions to the City of London before the by-law is passed, the person or public body may not be added as a party to the hearing of an appeal before the Local Planning Appeal Tribunal unless, in the opinion of the Tribunal, there are reasonable grounds to do so.

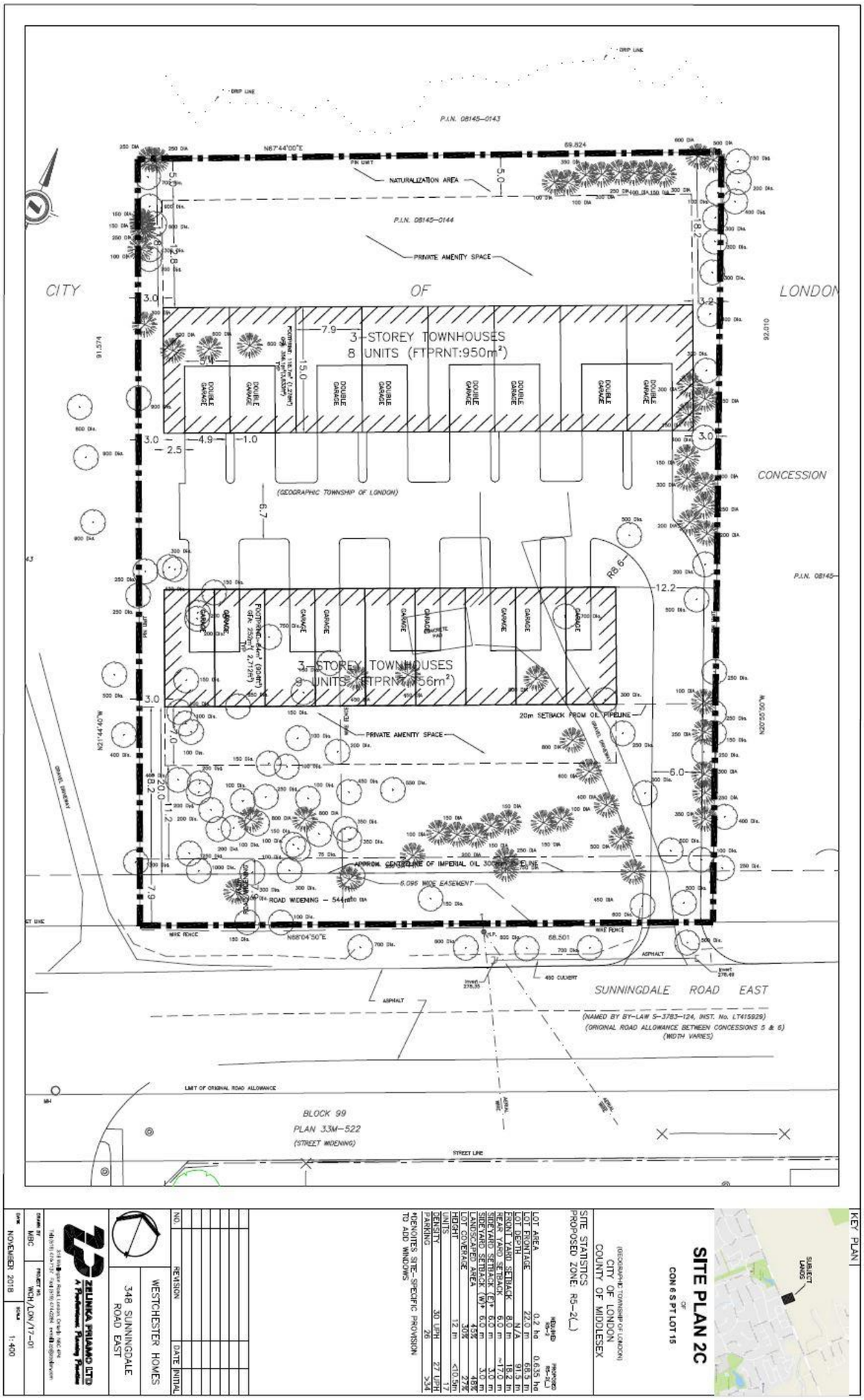
For more information go to http://elto.gov.on.ca/tribunals/lpat/about-lpat/.

Notice of Collection of Personal Information

Personal information collected and recorded at the Public Participation Meeting, or through written submissions on this subject, is collected under the authority of the *Municipal Act*, 2001, as amended, and the *Planning Act*, 1990 R.S.O. 1990, c.P.13 and will be used by Members of Council and City of London staff in their consideration of this matter. The written submissions, including names and contact information and the associated reports arising from the public participation process, will be made available to the public, including publishing on the City's website. Video recordings of the Public Participation Meeting may also be posted to the City of London's website. Questions about this collection should be referred to Cathy Saunders, City Clerk, 519-661-CITY(2489) ext. 4937.

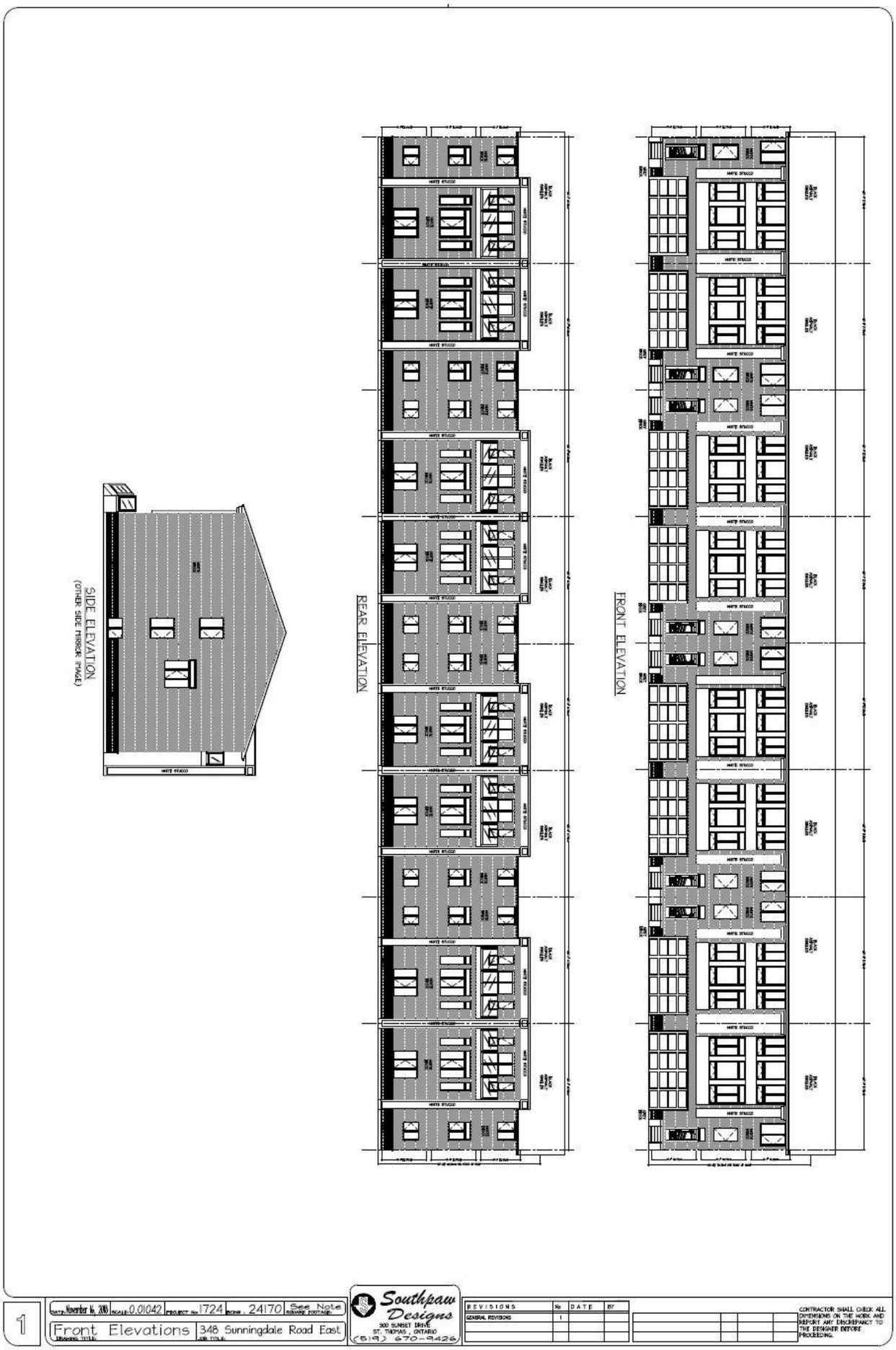
Accessibility – Alternative accessible formats or communication supports are available upon request. Please contact accessibility@london.ca or 519-661-CITY(2489) extension 2425 for more information.

Site Concept



The above image represents the applicant's proposal as submitted and may change.

Building Elevations



The above images represent the applicant's proposal as submitted and may change.

ENVIRONMENTAL IMPACT STUDY REPORT

348 Sunningdale Rd., London

Prepared for:
Westchester Homes

November 20, 2018

BioLogic Incorporated
110 Riverside Drive, Suite 201
London, Ontario N6H 4S5
Telephone: 519-434-1516
Fax: 519-434-0675

www.biologic.ca

Windsor Office
2280 Ambassador Drive
Windsor, Ontario N9C 4E4
Telephone: 519-966-1645
Fax: 519-966-1645

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1.0 INTRODUCTION

Westchester Homes (the proponent) has initiated the planning process for a proposed Zoning By-law Amendment for the lands at 348 Sunningdale Road East [Figure 1] to permit townhouse dwelling units in a condominium format. The legal parcel is referred to the Subject Lands for the purposes of this report [Figure 1]. There was a single residential home on the Subject Lands up until late 2016.

An Initial Proposal Summary prepared by Zelinka Priamo was completed in August 2017 and submitted to the City of London. An Issues Scoping Report (BioLogic, December 12 2017) was submitted to the City of London, followed by a scoping meeting on January 11, 2018 with the City of London and UTRCA. The City of London requested that the residential yard trees be evaluated using the City of London Guideline Document for the Evaluation of Ecologically Significant Woodlands (Woodland Guidelines) (2006). Despite not meeting the requirements for the application of the Woodland Guidelines, the guidelines were applied to the site to flag anything that might be considered important as a part of the site plan application, with the results compiled into a letter to the City of London April 3, 2018. The results are also discussed in this report. Further to this, a site meeting took place on May 2, 2018 to refine any additional life science requirements for this EIS [Appendix A].

The Site Plan has been updated since the submission of the Issues Scoping Report (BioLogic, December 12, 2017). The 2017 Site Plan had a condominium style development of 9 single detached units and 2 townhouse style buildings with 4 units each. The Site Plan is reduced now to 2 row townhouse style buildings and one internal road to accommodate a pipeline setback.

1.1 Report Objective

This EIS is submitted in support of a planning application for a condominium development of two townhouse style units: one 3-storey building with 8 units, and one 3-storey building with 9 units. The two buildings will have associated stormwater and sanitary servicing on the Subject Lands.

This report assesses the natural heritage features and functions, based on the life science data collected for this EIS.

The process and reporting is also designed to provide a support document to subsequent site alteration permit applications which may be submitted to the Upper Thames River Conservation Authority (UTRCA).

1.2 Format

Natural heritage features and functions identified in this EIS are evaluated through a review of the Natural Heritage Reference Manual (NHRM, 2010) for policy 2.1 of the Provincial Policy Statement (MAH, 2014); and Section 15 of the City of London Official Plan (Office Consolidation, January 2006). The EIS will also follow the City of London Environmental Management Guidelines (2007).

The EIS contains the following components, in accordance with the standards noted above:

Section 2.0	Land Use Setting
Section 3.0	Triggers for EIS
Section 4.0	Description of the Natural Environment
Section 5.0	Natural Heritage Policy Considerations
Section 6.0	Description of Development
Section 7.0	Potential Impacts and Mitigation Recommendations
Section 8.0	Summary and Conclusions

1.3 Background Documents

The following existing data and studies were used to review the current environment.

- Uplands North Area Plan (City of London, 2003)

1.4 Pre-Consultation

To date, pre-consultation has consisted of discussions with the City of London and UTRCA including:

- Pre-Application Consultation August 22, 2017
- A Scoping meeting January 11, 2018
- A site meeting May 2, 2018
- Scope of project (by email) May 25, 2018 [Appendix A].

2.0 LAND USE SETTINGS

The Subject Lands are 0.64 ha and located at 348 Sunningdale Rd, approximately 20m east of the intersection of Lindisfarme Road and Sunningdale Road East. The site is a vacant residential lot that was formerly occupied by a single detached house and outbuilding that were removed in 2016. The Subject Lands are currently accessed by a gravel driveway to Sunningdale Road East near the east boundary of the site. There is residential development on the south side of Sunningdale Road East, opposite the Subject Lands. There are agricultural lands approximately 90m to the north [Figure 1].

The descriptions in this section are based on a review of the records available. The descriptions of the site based on field investigations are found in Section 4.0 Description of the Natural Environment.

2.1 Environmental Designations

There are no natural heritage features identified on the Subject Lands on Schedule B1(London Official Plan, September 2015) [Figure 2]. There is an unevaluated vegetation patch abutting the north property boundary, and a Provincially Significant Wetland (PSW) further north of the unevaluated vegetation patch [Figure 2]. The PSW is somewhat linear and loosely wraps around the west, north and east sides of the Subject Lands. This linear feature continues through to the south side of Sunningdale Road East on the west side of the Subject Lands [Figure 2] (City of London Official Plan September 2015). There are also flow paths and Maximum Hazard Lines associated with the PSW offsite to the north.

2.2 Land Use Designations

The Subject Lands are designated as Multi-family Medium Density Residential, and surrounded by Open Space which corresponds to the PSW boundary. North of the PSW, the lands are designated Low Density Residential (City of London Official Plan Schedule A, 2015) [Figure 3]. There is a flow path shown from the (mid) east property line to the Powell Drain, a flow path not shown on the Natural Heritage Features map.

2.3 Zoning Bylaws

The Subject Lands are zoned Urban Reserve (UR1) Zone (City of London Zoning). Urban Reserve zoning is applied to lands to protect large tracts of land from premature subdivision and development, to ensure comprehensive development [Figure 4]. The proposed re-zoning will bring the lands in conformity with the Official Plan.

2.4 Upper Thames River Conservation Authority (UTRCA) Regulation

There is a small portion of the northwest corner that is regulated by Upper Thames River Conservation Authority (UTRCA) under Ontario Regulation 157/06 [Figure 4] for Hazard Lands (Zelinka Priamo, August 2017). This graphic is from the City of London zoning map rather than the official regulation map provided by UTRCA. As agreed in the Scoping meeting of January 11, 2018, there were no regulatory issues for the Subject Lands.

3.0 TRIGGERS FOR EIS

When a development proposal requires a Planning Act application (ie. Draft Plan submission, or amendments to the Official Plan and/or zoning by-law), the City of London requires an EIS to be completed if the Subject Lands are entirely or partially within specified distances adjacent to the natural heritage components set out in Table 15-1 of the City of London Official Plan (2006).

The proponent is planning a medium density development within the Subject Lands which will require planning amendments.

Triggers for the Environment Impact Study are as follows:

- proposed development within 120m of a Provincially Significant Wetland

As well, application for a permit under the UTRCA Ontario Regulation 157/06 may require an EIS

- Subject Lands are within the UTRCA's regulation limits

In addition, the Endangered Species Act (2007) protects species and habitat that are not always identified on Official Plan Schedules. To be consistent with the Provincial Policy Statement (MMAH, 20005 & MMAH, 2014) the requirements for an additional study can be triggered without any adjacent features identified on the Official Plan.

The following section (Section 4) reviews the natural heritage setting of the legal property. Section 5 reviews the proposed land use change in conjunction with generic natural heritage issues which may require consideration in the application process.

4.0 DESCRIPTION OF THE NATURAL ENVIRONMENT

The following section reviews the abiotic and biotic features on and directly adjacent to the Subject Lands that contribute to the overall natural heritage features and functions. This review provides relevant background information for interpreting environmental features and functions on the Subject Lands for the evaluation in Section 5.

4.1 Physical Setting

4.1.1 Physiography

Quaternary structural features include sandy, silt, loam, till of the Arva Moraine (Sado and Vagners, 1971). The surficial physical landscape in the area is Till Moraine (Chapman and Putnam, 1984).

4.1.2 Soils

Soils on the Subject Lands are associated with an Eroded Channel; the eroded channel appears to be related to the wetland and flow path further north. Soils of the lands surrounding the Subject Lands are Bryanston association, comprised of well drained Bryanston, imperfectly drained Thorndale, and poorly drained Nissouri soils of silt loam and loam glacial till (Hagerty and Kingston, 1992).

The water well record for the domestic well on site indicate there is thin layer of gravel (~1m) beneath 42m of clay (with streaks of sand) (Ontario.ca) [Appendix B].

4.1.3 Topography

Regionally the area is very gently sloped to gently sloped (Hagerty and Kingston, 1992).

In general, the Subject Lands are gently sloped to the south, however there are some localized undulations within the property. The northwest corner of the site slopes (approximately 3:1) to the north, where the slopes start about 5m from the north boundary, with the majority of the slopes offsite. At the southeast quadrant, off property, the gradients rise slightly to the east. The northeast quadrant is flat with some evidence of sheet flow off site to the east. There is also a rise in grade from Sunningdale Rd to the south property line. There are no low areas of localized ponded water.

4.1.4 Hydrology

The Subject Lands are within the Stoney Creek Subwatershed in the City of London.

Water well records for dug well for the prior home on the Subject Lands indicate ground water was found 41m below ground surface, within a thin layer of gravel (Ontario.ca). There were no seeps or springs observed on the Subject Lands.

4.2 Biological Setting

Provincially Significant Areas

The Powell Drain wetland (a unit of the Arva Moraine PSW Complex) is identified to the north, west and east of the Subject Lands (City of London, 2003; LIO, December 2017). The wetland boundary is 32m away from the Subject Lands, at its closest location, at the northwest corner, and 95m from the west property line and 60m at the northeast corner.

Area Plan Data (i.e. Uplands North Area Plan)

The Uplands North Area Plan (City of London, 2003) completed an analysis of the Powell Drain wetland that surrounds the Subject Lands on the west, north and east sides. At the time of the Area Plan, the Powell Drain wetland was designated as Open Space on Schedule A of the City of London Official Plan (Consolidated January 2001) and protected as a Locally Significant Wetland (Wetlands Class 4-7) on Schedule B.

4.2.1 Vegetation

Investigations for Ecological Land Classification (ELC) [based on Lee *et al* (1998)] for the Subject Lands were conducted on October 18, 2017, June 5 and June 20, 2018 by Will Huys (MNRF certified in ELC) [Appendix C]. The Subject Lands are former residential lands from which the buildings have been removed, however the residential yard trees remain. The most densely treed section of the former yard is concentrated in the southwest corner of the property and is best classified as a Mineral Cultural Woodland Ecosite (CUW1). This community is dominated by Sugar Maple (*Acer saccharum*), Norway Spruce (*Picea abies*), and Red Pine (*Pinus resinosa*). Within this community, near the south central edge of the Subject Lands, a mature Tulip Tree (*Liriodendron tulipifera*) is notable as a specimen tree in the City of London. Vegetation within the former residential lands outside of the Cultural Woodland community, includes a hedgerow of 10 Norway Spruce at the northeast corner and a few ornamental

shrubs (Honeysuckle and Lilac) mainly limited to the edges of the property. The groundlayer is dominated by grasses from the former residential lawn, however, Goldenrods (*Solidago* sp.), Asters (*Symphiotrichum* sp.) and Canada Thistle (*Cirsium arvense*) are beginning to colonize the area. [Figures 5a and 5b].

On the adjacent lands, there is a Cultural Thicket community to the north and abutting the east property line; and a Cultural Woodland community abutting the west property line [Figures 5a and 5b]. Between the north property line and the Cultural Thicket there are no trees, save and except where the Cultural Thicket abuts the Cultural Woodland towards the northwest corner of the Subject Lands.

A tree inventory was conducted for the Subject Lands to identify valuable trees for retention (RKLA, 2017). First and Second Priority trees for retention and hazard trees were identified [Appendix D].

4.2.2 Wildlife Habitat

MNRF Significant Wildlife Habitat (SWH) Criteria Schedules for Ecoregion 7E (January 2015) uses ELC Ecosite codes and habitat criteria (eg. size of ELC polygon, location of ELC polygon) to identify candidate significant wildlife habitat. The Residential lands/cultural woodland (A1/CUW1) on the Subject Lands did not meet the habitat criteria thresholds for candidate significant wildlife habitat according to the MNRF Criteria Schedules (2015) [Appendix E].

There were individual snag/wildlife trees on the Subject Lands, but not enough to meet the quantity and habitat area (>10/ha >25cm DBH) to be considered SWH (habitat for Bat Maternity Colonies). The snag trees as potential habitat for Species At Risk bats is discussed below under Section 4.2.5 Fauna.

Summary

There is no candidate significant wildlife habitat on the Subject Lands.

4.2.3 Aquatic

There are no aquatic Species At Risk or species of provincial interest listed by NHIC within 1 km of the legal parcel (NHIC website) [Appendix F].

At the east boundary of the Subject Lands, in the northern third of the property, there is some sheet flow that generates on site and flows to the east. However, there is no defined channel on or next to the site.

By air photo interpretation, there appears to be a small wetland pocket (less than 100m^2) to the east of the Subject Lands. There are no channels, watercourses, or ponded water within the Subject Lands.

Summary

There is no aquatic habitat, nor aquatic species found on the Subject Lands.

4.2.4 Flora

Branching Burreed *(Sparganium androcladum*) (SH) was the only floral species of provincial interest that has the potential to be found within 1km of the Subject Lands (NHIC website) [Appendix F]. No floral Species At Risk (SAR) were listed by NHIC.

A three season floral inventory was conducted by Will Huys on October 18, 2017, May 22, June 5, June 20 and July 10, 2018 [Appendix G]. There was no habitat [bogs or shallow water (Britton and Brown, 1970)] suitable for Branching Burreed observed on the Subject Lands. While there was some Red-osier Dogwood observed on and adjacent (to the east) to the Subject Lands, this species is not indicative of groundwater (TRCA, 2017) but instead likely represent a small lowland pocket or possibly a hole (old well, foundation, tree uprooted) that has been subsequently been filled with loose material.

No floral Species At Risk, including Butternut (Endangered), Chestnut (Endangered) or Blue Ash (Threatened), were observed on the Subject Lands. No floral Species At Risk were observed on the adjacent lands, with observations from the property limits.

Summary

There is no habitat for Species At Risk (Endangered or Threatened) nor species of provincial interest (Special Concern, or S1-S3 Ranked) on or adjacent to the Subject Lands.

4.2.5 Fauna

Snapping Turtle (*Chelydra serpentina*) (Special Concern) was the only faunal species of provincial interest that has the potential to be found within 1km of the Subject Lands (NHIC website). There were no faunal Species At Risk listed by NHIC within 1km of the Subject Lands (NHIC website) [Appendix F].

Birds

A breeding bird study was conducted by Will Huys on June 5 and 20, 2018 for the Subject Lands. No Species At Risk, nor species of provincial interest were observed on the Subject Lands, nor on adjacent lands during the breeding bird study [Appendix H].

Summary

There is no significant habitat for breeding birds on the Subject Lands.

Amphibians

Amphibian monitoring was completed by Laura McLennan on April 23, May 22 and June 18, 2018 [using the Great Lakes Marsh Monitoring Protocols (Bird Studies Canada)]. In 2018, spring temperatures were not consistently over 5ºC until latter half of April. During these investigations, there were no frogs heard on the Subject Lands [Appendix I]. On the adjacent lands to the north (Powell Drain Wetland) Spring Peepers were heard in early spring, while Green Frogs were heard in summer [Appendix I].

Summary

There is no significant habitat for amphibian species on the Subject Lands.

Reptiles

During site investigations in 2017 (October 18) and 2018 (April 25, May 22, June 5, June 20, July 10), investigators did not locate any open water features (including those shown on the City of London Official Plan Schedule A [Figure 3]) nor gravelly or sandy areas (Ontario.ca) that could be potential nesting habitat for Snapping Turtle (SC). There were no incidental observations of turtles including Snapping Turtle on the Subject Lands during any site investigations through 2018. There was also no incidental evidence of reptile hibernacula during any site investigations through 2018.

Summary

There is no significant habitat for reptiles on the Subject Lands.

Mammals

During site investigations in 2017 (October 18) and 2018 (April 25, May 22, June 5, June 20, July 10), investigators incidentally searched for large burrows that had the potential to be American Badger (Endangered) habitat, and none were observed. American Badgers require deep sandy soils with organic

matter to create dens for resting, rearing young and overwintering (Ontario American Badger Recovery Team, 2010). The underlying soils are mineral and not conducive for large burrows for American Badger.

A site investigation for potential bat maternity roost habitat was completed on April 25 2018, during leaf-off conditions. There were 10 trees identified as potential Species At Risk bat maternity roost habitat trees [Appendix J]. A Stage 1 Information Request was submitted to MNRF (August 1, 2018) that included the inventory and decay class of the potential SAR bat maternity roost habitat trees. A Letter to Proponent was issued by MNRF on October 30, 2018 stating that the project activities are not likely to contravene the Endangered Species Act (2007) if tree removal was limited to a timing window (outside of May - September) and bat boxes were installed at a rate of 2:1 [Appendix K]. Fewer trees are planned for removal with the updated application than what was presented to MNRF in their approval.

Summary

There is no significant habitat for American Badger (Endangered) or SAR bats on the Subject Lands, although replacement of suitable snag trees with bat boxes was requested by MNRF.

5.0 NATURAL HERITAGE POLICY CONSIDERATIONS

This section reviews the provincial, municipal and Conservation Authority regulatory policies within the project location with respect to Natural Heritage considerations.

The provincial and municipal natural heritage policies provide guidelines that determine appropriate land uses on and adjacent to natural heritage features and functions. Policies that pertain to this site include:

- the 2014 Provincial Policy Statement from MAH, Section 2.1
  - these have been reviewed with the Natural Heritage Reference Manual (NHRM) (MNR, 2010),
- the City of London Official Plan, Section 15.2 and 15.4,
- the City of London Environmental Management Guidelines (2007), and
- the UTRCA Regulations.

The natural features and functions identified in Section 4 of this EIS, are applied to the above policies in order to determine which components of the natural heritage system will require additional consideration. Features which warrant further evaluation for significance or require guidance with respect to construction activity are discussed in more detail in Section 6.

5.1 Provincial Policy

The Provincial Policy considerations are based on Provincial Policy Statement from MAH, 2014, section 2.1 and reviewed using the Natural Heritage Reference Manual (Sections 5-11) (MNR, 2010).

2.1.4

a), b) Significant Wetlands/Coastal Wetlands

Section 6 - Significant Wetlands and Significant Coastal Wetlands

The adjacent Powell Drain wetland (a unit of the Arva Moraine PSW Complex) that surrounds (32m away at its closest location on the north side) the Subject Lands has been identified as provincially significant (NHIC website, December 2017; and City of London Official Plan Schedule B1, September 2015) [Figure 2].

While this PSW unit is approximately 32m to the north, the functions of the wetland will require further consideration.

2.1.5

b) Significant Woodlands

Section 7 - Significant Woodlands

The residential trees within the Subject Lands are not a provincially significant woodland as they did not form part of Official Plan updates. Woodlands are further evaluated for local significance with the City of London municipal policy (item 15.4.5 of the following Section 5.2).

c) Significant Valleylands

Section 8 - Significant Valleylands

The Subject Lands are relatively flat and there are no significant Valleylands on or adjacent to the Subject Lands.

d) Significant Wildlife Habitat

Section 9 - Significant Wildlife Habitat

Criteria to identify wildlife habitats that should be considered significant are taken from the Ecoregion Criteria Schedules (MNRF, 2015) [Appendix E]. There was no candidate significant wildlife habitat (based on ELC) as discussed in Section 4.2.2. There was no significant wildlife habitat confirmed with site investigations and evaluation of species use for the Subject Lands.

e) Areas of Natural and Scientific Interest

Section 10 - Significant Areas of Natural and Scientific Interest

There are no ANSIs identified on or adjacent to the Subject Lands.

2.1.6

Fish Habitat

Section 11 - Fish Habitat - Broad Scale

Broad scale fish habitat, for the purposes of this review, considers downstream fisheries. There is likely indirect fish habitat associated with the wetland 32m to the north of the Subject Lands. However there are no flow paths that directly connect the Subject Lands to this habitat. The flow path to the east is not a defined channel and is dominated by terrestrial grasses through this broad swale.

Section 11 - Fish Habitat - Detailed Scale

Detailed scale fish habitat, for the purposes of this review, considers fisheries habitat within the Subject Lands. There are no channels, watercourses or fish habitat within the Subject Lands.

2.1.7

Habitat of Endangered Species and Threatened Species

Section 5 - Significant Habitat of Endangered and Threatened Species

There were no Species At Risk (Endangered or Threatened species) or habitat of Species At Risk found within the Subject Lands [Appendix K].

Summary - Provincial Policy:

This EIS will need to consider adjacent features and functions including the Powell Drain Wetland to address provincial planning policy.

5.2 Municipal Policy

The Municipal Policy Natural Heritage considerations are based on the City of London Official Plan, 2006, section 15.4.

15.4.1 Environmentally Significant Areas

There are no ESAs on or adjacent to the Subject Lands.

15.4.2 Wetlands

The Powell Drain Wetland (a unit of the Arva Moraine PSW Complex) is on the adjacent lands to the north, west and east of the Subject Lands. Uplands North Area Plan (City of London, 2003) Environmental Management Recommendations include the consideration of buffers to the Powell Drain wetland to mitigate adjacent land impacts and that the buffers should consider slope, vegetation and soils. In this location, the Subject Lands are well set back (at least 32m) from the wetland boundary and no additional buffer is required to protect the wetland from physical disturbances and/or direct impacts.

The unevaluated pocket of wetland (less than 100m^2) habitat appears to be approximately 35m to the east (off property) by air photo interpretation. This feature is too small to be considered under City of London

Official Plan policies (not on a map and much smaller than 0.5 ha).

15.4.3 Areas of Natural and Scientific Interest

There are no ESAs on or adjacent to the Subject Lands.

15.4.4 Habitat of Endangered, Threatened and Vulnerable Species

There were no Species At Risk (Endangered or Threatened species) or habitat of Species At Risk found within the Subject Lands, as discussed above.

15.4.5 Woodlands

The City of London requested that the Woodland Evaluation from the City of London Guidelines (2007) be applied to the residential yard trees [Appendix L]. The treed area on the Subject Lands does not meet any high standard for significance using the City guidelines [Appendix L].

15.4.6 Corridors

Any corridor function would be limited to the Powell Drain Wetland on the adjacent lands to the north.

15.4.7 Wildlife Habitat

There is no significant wildlife habitat on the Subject Lands.

i) The review of significance of wildlife habitat is based on the following considerations that have had regard for and having regard for the Significant Wildlife Habitat Technical Guide (MNR, 2000)

a) 1) Habitats of seasonal concentrations of animals:
No seasonal concentration areas were identified.

2) Rare vegetation communities
No rare vegetation communities were identified.

3) Specialized habitat for wildlife
No specialized habitat for wildlife was identified.

4) Habitat of species of conservation concern:

There are no species of conservation concern no habitat of species of conservation concern on the Subject Lands.

5) Animal movement corridors:
There are no distinct passageways for wildlife movement between habitats that are required to complete wildlife species life cycles. The Subject Lands are not linked to a significant animal movement corridor. Any corridor function would be limited to the Powell Drain Wetland on the adjacent lands to the north.

b) The Subject Lands do not have any habitat that is under represented in the City of London.

c) There are no areas of habitat having a high diversity of species composition that are of value for research, conservation, education and passive recreation opportunities.

ii) There are no areas of Significant Wildlife Habitat identified on Schedule B1.

15.4. 8 Fish Habitat

There is no direct fish habitat and no drainage features within the Subject Lands.

15.4.9 Groundwater Recharge Areas, Headwaters and Aquifers

There are no groundwater recharge areas, headwater and aquifers identified on the Subject Lands.

15.4.10 Water Quality and Quantity

Water quality and quantity to the adjacent Powell Drain Wetland needs to be considered in this EIS.

15.4.11 Potential Naturalization Areas

There are no potential naturalization areas identified on or adjacent to the Subject Lands.

15.4.12 Carolinian Canada Big Picture Concept

The Subject Lands are not identified as part of the local Big Picture Meta-Cores and Meta-Corridors.

15.4.13 Unevaluated Vegetation Patches

There is an unevaluated vegetation patch associated with the Powell Drain Wetland to the north of the Subject Lands.

15.4.14 Other Woodland Patches larger than 0.5 Hectares

The residential yard trees abut the cultural woodland habitat that is on the adjacent lands to the west. The residential trees however would not be considered a woodland patch due to managed lawn in groundlayer. There is one Tulip Tree within the frontage of the property that would be considered a specimen tree in the City of London.

15.4.15 Other Drainage Features

There are no drainage features within the Subject Lands.

Summary - Municipal Policy:

This EIS will need to consider adjacent features and functions including the Powell Drain Wetland, and water quality and quantity to address municipal planning policy.

5.3 UTRCA Policy Considerations and Regulated Lands

Wetland Interference

A portion of the northwest corner of the Subject Lands are within the Regulation Limit. This EIS will need to consider wetland interference to the Powell Drain Wetland on adjacent lands.

Conservation Authority Regulation Limit

Any development proposed within the areas regulated by UTRCA will require a permit.

Summary - Conservation Authority Regulations

An EIS that considers adjacent features and functions including the wetland, and wetland interference will provide the appropriate supporting information to be submitted with a Site Alteration Permit Application to the Upper Thames River Conservation Authority (UTRCA).

5.4 Summary of Identified Features and Functions

The features and functions in Table 1 have been identified through the policy review as requiring further consideration in this EIS. In the ISR, a 30m setback from wetland habitat was set as the Environmental Management Strategy [Figure 6 (Figure 7b in ISR)] to make sure wetland habitat features were protected.

Table 1: Environmental Considerations for the Subject Lands:

Policy Category	Environmental Consideration	Natural Heritage Feature
Provincial Policy Statement	Wetland	Powell Drain Wetland
City of London	Wetland	Powell Drain Wetland
	Water Quality and Quantity	On site water contribution
UTRCA Regulations	Wetland Interference area	Powell Drain Wetland

6.0 DESCRIPTION OF THE DEVELOPMENT

Westchester Homes is proposing a condominium development on the property located at 348 Sunningdale Rd in London. Access to the development will be from Sunningdale Rd at the south end of the property [Figure 7].

The proposed site plan consists of two townhouse style buildings: one 3 storey building with 9 units and one 3 storey building with 8 units, private amenity space at the rear of each building, and an internal road accessed from Sunningdale Rd [Figure 7]. The development proposal, which will require a zoning bylaw amendment, is limited to the central portion of the Subject Lands within an Urban Reserve zoning. The rear of the north building is setback 18m from the north property line; the rear of the south building is setback 25m from Sunningdale Rd.

Piped and cabled services will be placed within the municipal road allowances and under the pavement deck of internal roads. Sanitary services will be provided through connections to the municipal system, serviced from Sunningdale Rd. Water supply will be from the watermain on Sunningdale Rd. Service depths of between 2 to 4 metres will not interfere with groundwater on the property. Grades will be matched within the limits of the Subject Lands.

7.0 Impacts and Mitigation

Westchester Homes (the proponent) is proposing a 17 Unit condominium development on a property that is approximately 0.635ha in area, located at 348 Sunningdale Rd East in London [Figure 7]. This plan represents a smaller footprint than first circulated as a result of setbacks from a pipeline that were not previously considered.

The proposed Site Plan respects the environmental management strategy proposed in the Issues Scoping Report [Figure 6], whereby the plan is 30m or more from any wetland feature.

While the Subject Lands is void of significant natural heritage features, it does have a Tulip Trees within the frontage that would be considered a specimen tree in London. The Site Plan retains the majority of the residential yard trees (including the Tulip Tree) in the frontage of the property and is setback 18m from the north property line (at least 50m from the Powell Drain Wetland) [Figure 8]. Additionally, the development footprint will retain any sheet flow that is generated at or near the east boundary (in the northern third of the property) with a setback of 3.2m to the east property line.

This section identifies potential indirect impacts to the significant natural heritage features adjacent to the Subject Lands. Protection and mitigation measures for indirect impacts are presented. A net effects table is provided at the end of this section.

Water Balance and Wetland

Considering the lack of drainage features, clay soils and relatively steep slopes to the north at the northwest corner, there is likely minor surface flow contributions to the Powell Drain Wetland from the Subject Lands.

Recommendation 1: The development footprint is setback 18m from the north property line (50m from the wetland at its closest in the northwest corner). The development avoids impact to the northerly slopes localized to the northwest corner. Easterly from this location, the development footprint is up to 130m away from the wetland. The post-development runoff should be managed so that flows do not scour a flow channel down the slope at the northwest corner. If the development is modified or the private amenity space requires grading, it

should be reviewed for potential natural heritage impacts again.

Recommendation 2: No surface road runoff should be conveyed directly to the north. These flows should be directed to the stormwater sewers. Roof leaders should direct water to the vegetated areas to the rear of the buildings.

Recommendation 3: A landscape plan should be developed at detailed design.

Wildlife

Nesting migratory birds are protected under the *Migratory Birds Convention Act* (MBCA), 1994. No work is permitted to proceed that would result in the destruction of active nests (nests with eggs or young birds), or the wounding or killing of birds, of species protected under the *Migratory Birds Convention Act*, 1994 and/or Regulations under that Act.

Recommendation 4: Avoid vegetation clearing during migratory bird breeding season (May to July 31) to ensure that no active nests will be removed or disturbed, in accordance with the *Migratory Birds Convention Act* and/or Regulations under that Act. If works are proposed within the breeding season, prior to any vegetation removal, the area should be checked for nesting birds. If there are any nesting birds, works within the nesting area should not proceed until after July 31.

There are wildlife/snag trees found within the Subject Lands that are candidate SAR bat maternity roost habitat trees. MNRF has issued a Letter to Proponent on October 30, 2018 stating that the project activities are not likely to contravene the Endangered Species Act (2007) with the following recommendations:

Recommendation 5: If candidate bat roosting trees require removal for construction works, removal should be limited to a timing window (outside May - September) to avoid critical habitat use times. If the private amenity space does not require grading, three candidate bat roosting trees will be removed for the buildings and roadway. Six bat boxes should be installed (2 bat boxes for every candidate tree removed) near the vegetated edges of the property [Figure 8]

as requested by MNRF and the City of London. If the private amenity space requires removal of additional candidate bat maternity trees, more bat boxes will need to be installed. Any changes to private amenity space will also need to be reviewed for a hazard tree assessment.

Recommendation 6: The locations of the bat boxes should be incorporated into the landscape plan.

Construction Related Impacts

There is general construction related impacts that require mitigation.

Recommendation 7: Prior to construction, sediment and erosion control fencing should be installed along the development limit. This fence will:

- act as a barrier to keep construction equipment and spoil away from the slope in the northwest corner, and surrounding vegetation to remain.
- prevent erosion and sedimentation

Recommendation 8: Sediment and erosion control fencing should be inspected prior construction to ensure it was installed correctly and during construction to ensure that the fencing is being maintained and functioning properly. Any issues that are identified are resolved in the same day.

Recommendation 9: Sediment and erosion control fencing will be installed according to the Guidelines for Erosion and Sediment Control for Urban Construction Sites (OMNR, 1987) and the applicable standards established in the Ontario Provincial Standard Specification/Ontario Provincial Standard Drawings (OPSS/OPSD) documents.

Recommendation 10: Sediment and erosion control fencing should not be removed until adequate re-vegetation and site stabilization has occurred. Additional re-vegetation plantings and/or more time for vegetation to establish may be required, however two growing seasons are typically sufficient to stabilize most sites.

Recommendation 11: A tree preservation report should be completed in conjunction with the grading plan for the trees to remain outside the development footprint.

Recommendation 12: All disturbed areas should be re-seeded as soon as possible to maximize erosion protection and to minimize volunteer populations of invasive species which may spread to the adjacent feature.

Recommendation 13: Once construction is complete, installation of a black chain link fence at the property boundary to prevent indiscriminate trails in the adjacent lands.

Recommendation 14: Roof runoff to bare ground can generate considerable sediment movement beyond the construction limits. Until rear yards have been vegetated and stable for housing backing onto vegetation, roof leaders should be directed to the streets or nearby stabilized vegetated areas. To facilitate surface flows to the north, roof leaders from the northerly townhouse building should be directed to the rear.

Recommendation 15: All stormwater should be temporarily directed away from the natural heritage feature through a system of swales, preferably adjacent to the road pattern.

Homeowner Education

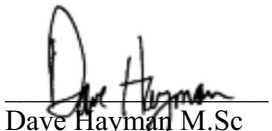
Recommendation 16: Develop an information package to educate residents and the condominium corporation on appropriate ways to dispose of landscaping and lawn maintenance waste and protect the natural heritage components beyond the property boundaries. This is important for preservation of the vegetation and wetland features, and also to minimize encroachment issues which can occur from private lands if not properly managed.

8.0 Summary and Conclusions

Westchester Homes (the proponent) is proposing a 17 Unit condominium development on the property located at 348 Sunningdale Rd East in London [Figure 6]. The proposed Site Plan reflects the environmental management strategy proposed in the Issues Scoping Report and also retains the majority of the residential yard trees (including the specimen Tulip Tree) in the frontage of the property. The development footprint is 50m from the Powell Drain Wetland at its closest location [Figure 8].
The Site Plan avoids impacts with natural heritage features and the EIS has set out recommendations to protect the adjacent significant natural heritage features. Provided these are met, the Zoning change can proceed as proposed. When there is confirmation on the development plan, the water balance and stormwater management requirements will come forward at the Site Plan approval stage.

BioLogic seeks comments from the City of London and the UTRCA with respect to the contents of this EIS. Formal comments can be submitted in writing to BioLogic on behalf of the client. Should you wish to clarify any questions or require additional information as part of the review of this EIS, do not hesitate to contact us.

BioLogic Incorporated



Dave Hayman M.Sc
WestchesterHomesEIS_final.wpd
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Table 7: Net Effects Table - Westchester Homes 348 Sunningdale Rd E

Source of Impact	Affected Feature, Function or Linkage	Predictions of physical impact and effect on features, functions and linkages	Mitigation Strategy	Net Effects Summary	Recommendations for Management and Monitoring
Artificial lighting	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	low impacts expected - 17 residential yard lights	Avoidance; development footprint is 50m from wetland, tree preservation for frontage	no net effect	none
Litter and garbage	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	low impacts expected - garbage litter from residents	Garbage bins available on condo grounds; grounds maintenance by condo corporation	no net effect	public garbage bins should be readily available and emptied regularly
Yard waste	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	low impacts expected - yard maintenance is managed by condo corporation	Educational brochure, web based resources	no net effects	monitoring and on-going education provided to condo board
Increased access to sensitive area	No sensitive areas within the subject lands, adjacent Powell Drain wetland	medium impacts expected - access to Powell Drain wetland, trampling	Fence, educational brochure, web based resources, guide residents to the existing open space at Heron Haven Park	no net effects	on-going education provided to condo board, monitor for fence openings
Creation of new trails	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	low impact expected - there are no formal trails planned	There are no planned trails; Fence and guide residents to the existing open space at Heron Haven Park	no net effects	on-going education provided to condo board, and residents
Increased trail use	No sensitive areas within the subject lands, adjacent Powell Drain wetland	low impact expected - residents of 17 units will not impact near-by trails	There are no planned trails; Fence and guide residents to the existing open space at Heron Haven Park	no net effects	on-going education provided to condo board, and residents

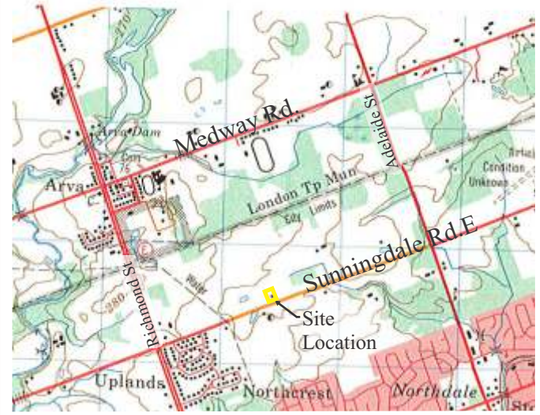
Tree damage	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	medium impacts expected - limb removal, tree forts	Educational brochure, web based resources	no net effects	condo board to monitor for tree forts, and dismantle
Increased noise	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	low impacts expected -common wildlife species found	Avoidance; development footprint is 50m from wetland	no net effects	Residential by-laws restrict excessive noise
Decreased infiltration and increased run-off	Adjacent Powell Drain wetland, residential/cultural woodland -common plants	low impacts expected	Avoidance; setback distance of 50m is large enough to support sufficient surface flows to the wetland, clay soils are not conducive to infiltration, stormwater management strategies to control flow during construction and post construction, sediment and erosion control fencing at edge development, fencing should remain until the area is serviced by storm sewers and disturbed areas are seeded; all issues with sediment and erosion control measures should be resolved the same day; roof leaders directed to vegetated areas	no net effects	monitor sediment and erosion control fence

Increased erosion	slopes at northwest corner	low impacts expected	sediment and erosion control fencing at edge development, fencing should remain until the area is serviced by storm sewers and disturbed areas are seeded; all issues with sediment and erosion control measures should be resolved the same day; roof leaders directed to vegetated areas	no net effects	monitor sediment and erosion control fence
Increased nutrient, pesticide and sediment	Adjacent Powell Drain wetland, residential/cultural woodland -common plants	low impacts expected - grounds are managed by condo corp.	stormwater management; sediment and erosion control during construction; ban on cosmetic pesticides	no net effects	on-going education provided to condo board, and residents
Visual intrusion	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	there are no adjacent houses or parkland	Avoidance; tree preservation plant, development footprint is 18m from the rear lot line and 25m from road ROW	no net effects	
Domestic animals	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	low impacts expected - cats that roam and catch small animals; off leash dogs can trample plants	educational brochure - including information on the impacts of cats on wildlife; dogs on leashes; signage; fence	no net effects	on-going education provided to condo board, and residents
Introduced invasive plants	Adjacent Powell Drain wetland, residential/cultural woodland -common plants	low impacts expected - residence do not manage or maintain grounds	educational brochure for condo corporation/grounds maintenance staff; ensure use of only native plants	no net effects	on-going education provided to condo board, and residents
Increase in urban wildlife species	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	medium impacts expected - limited garbage will be generated with this small development; garbage can attract nuisance wildlife	educational brochure, web based resources; including information on what attracts nuisance wildlife; ensure an accessible garbage disposal location	no net effects	on-going education provided to condo board, and residents

Air pollution	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	no impacts expected	residential homes and parkland will not generate substantial air pollution	no net effects	
Fire hazards	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	low impacts expected - potential for recreational gatherings in the adjacent lands	educational brochure, web based resources; including information on potential impacts of recreational bonfires in the woods	no net effects	
Use of heavy machinery - broken limbs	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	high impacts expected - machinery too close to trees on site can break off branches	install construction fence to restrict access to areas protected in the tree preservation report	no net effects	tree protection fencing/sediment and erosion control fencing should be inspected by a qualified ecological consultant
Use of heavy machinery - soil compaction	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	medium impacts expected - machinery too close to the trees can compact soils over vital tree roots	install construction fence to restrict access to the patch; tree protection fencing/sediment and erosion control fencing should be inspected by a qualified ecological consultant	no net effects	
Use of heavy machinery - oil, gasoline, grease spill	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	medium impacts expected - machinery can leak or refueling can generate spills	establish storage/refueling area away from property edges	no net effects	low infiltration soils on site; containment of spills should be included in plan
Changes in soil grade	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	medium impacts expected -lowering the grades may result in removal of tree roots -raising the grades may result in root suffocation - grade changes can alter water table or drainage patterns	setback are 3m on the west side adjacent to cultural woodland trees, tree preservation report will review tree species to be protected	subject to tree preservation report and grading plan	

Figure 1: Site Location

(City of London Air Photo 2016)



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Key Plan

Print on 11X17, Landscape Orientation

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Scale 1:5000

November 2018

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AQUATIC AND TERRESTRIAL ECOSYSTEM PLANNERS

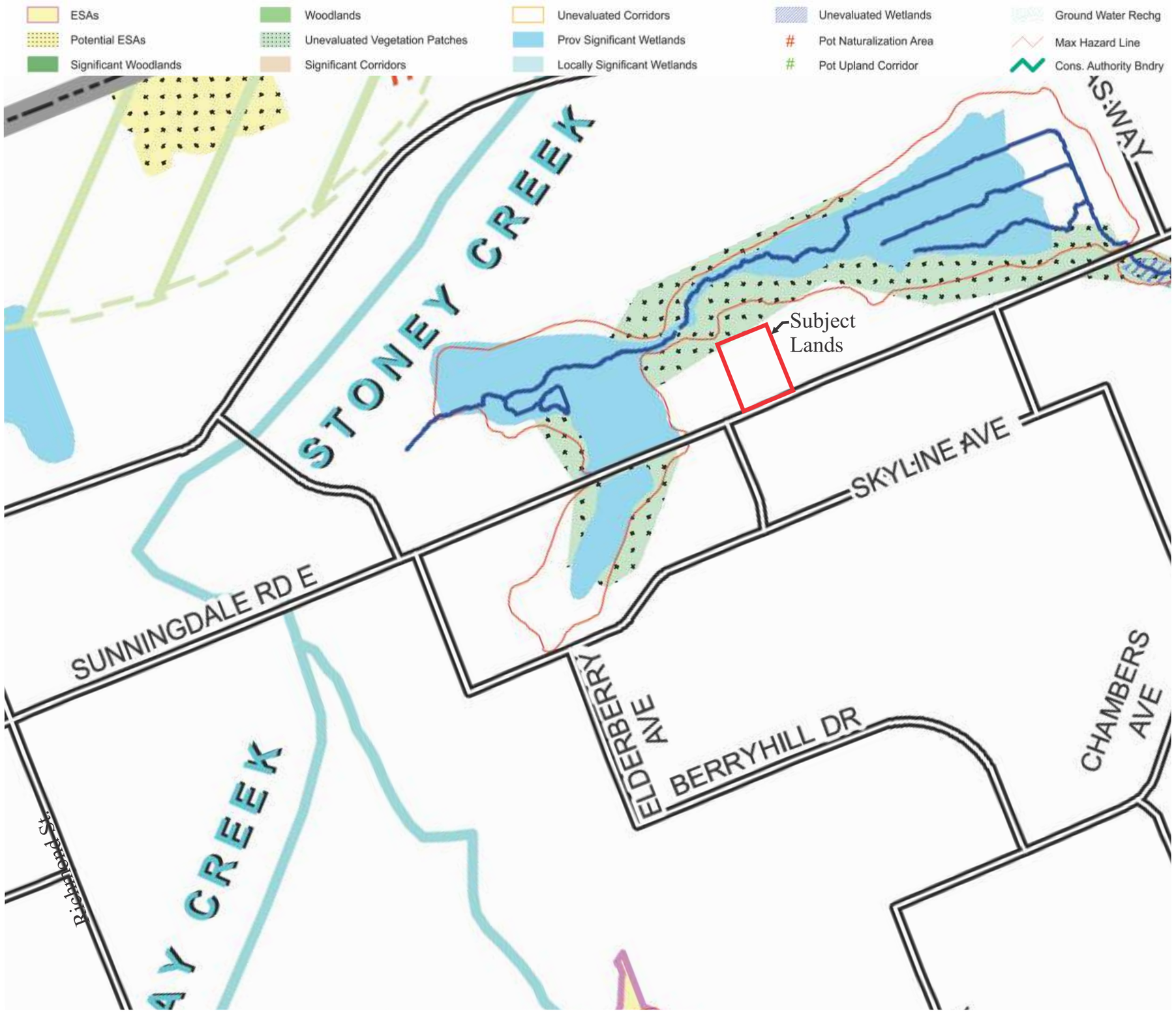
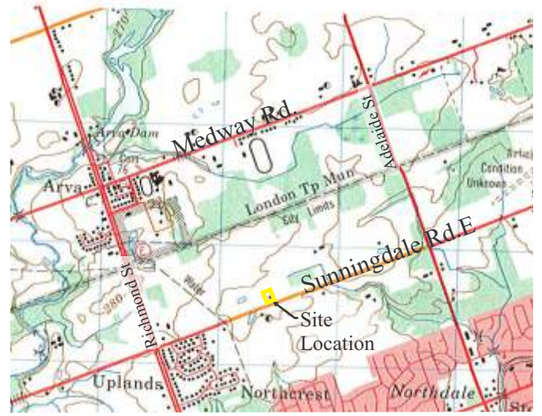


Figure 2: Natural Heritage Features

(City of London Official Plan Schedule B1, September 2015)



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Scale 1:50,000

Key Plan

Print on 11X17, Landscape Orientation

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Scale 1:5000

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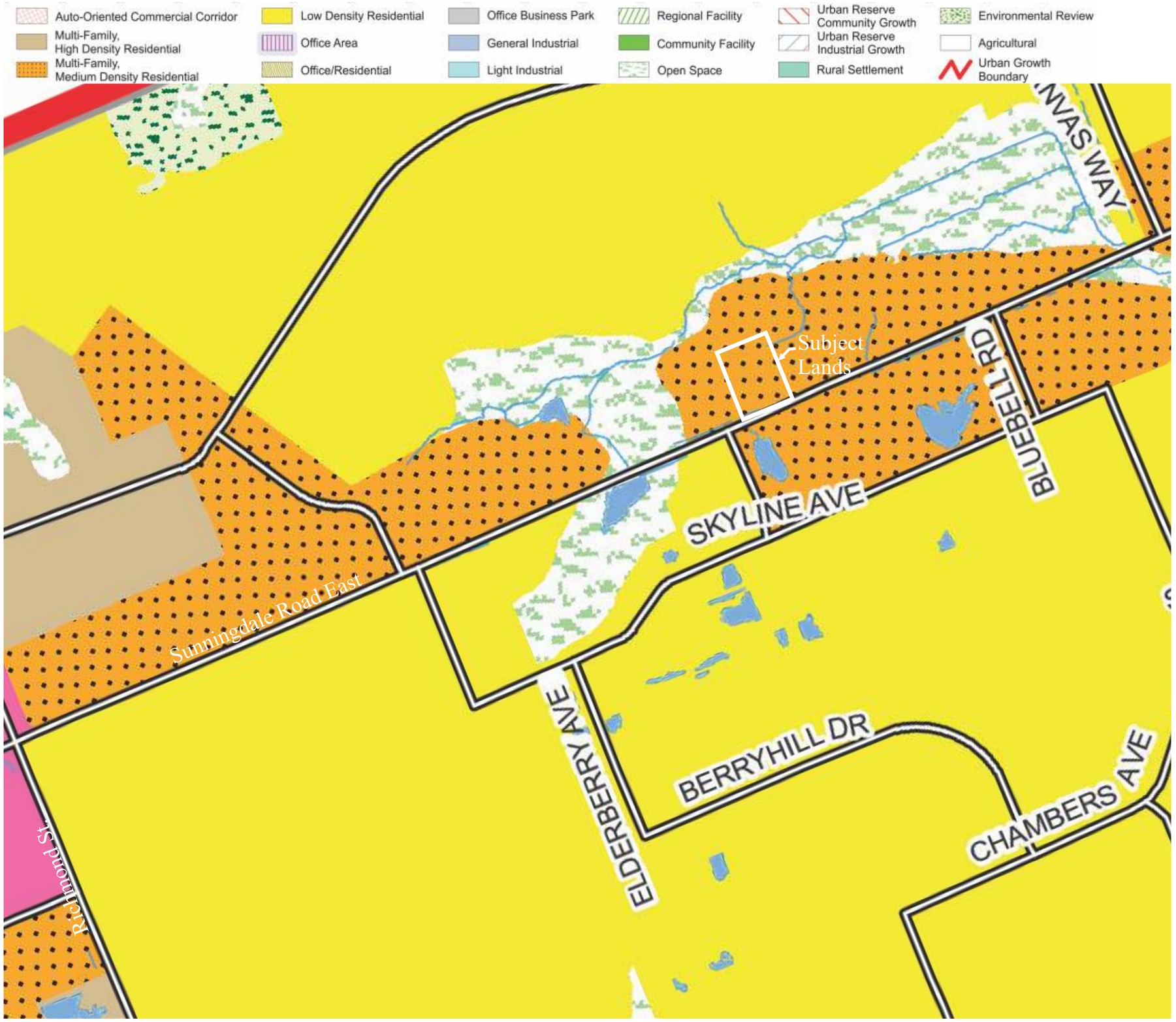
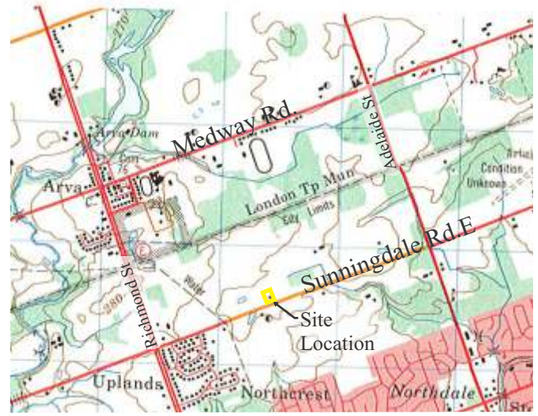
Figure 3: Land Use

(City of London Official Plan Schedule A, September 2015)





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Scale 1:50,000
Key Plan

Print on 11X17, Landscape Orientation
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November 2018

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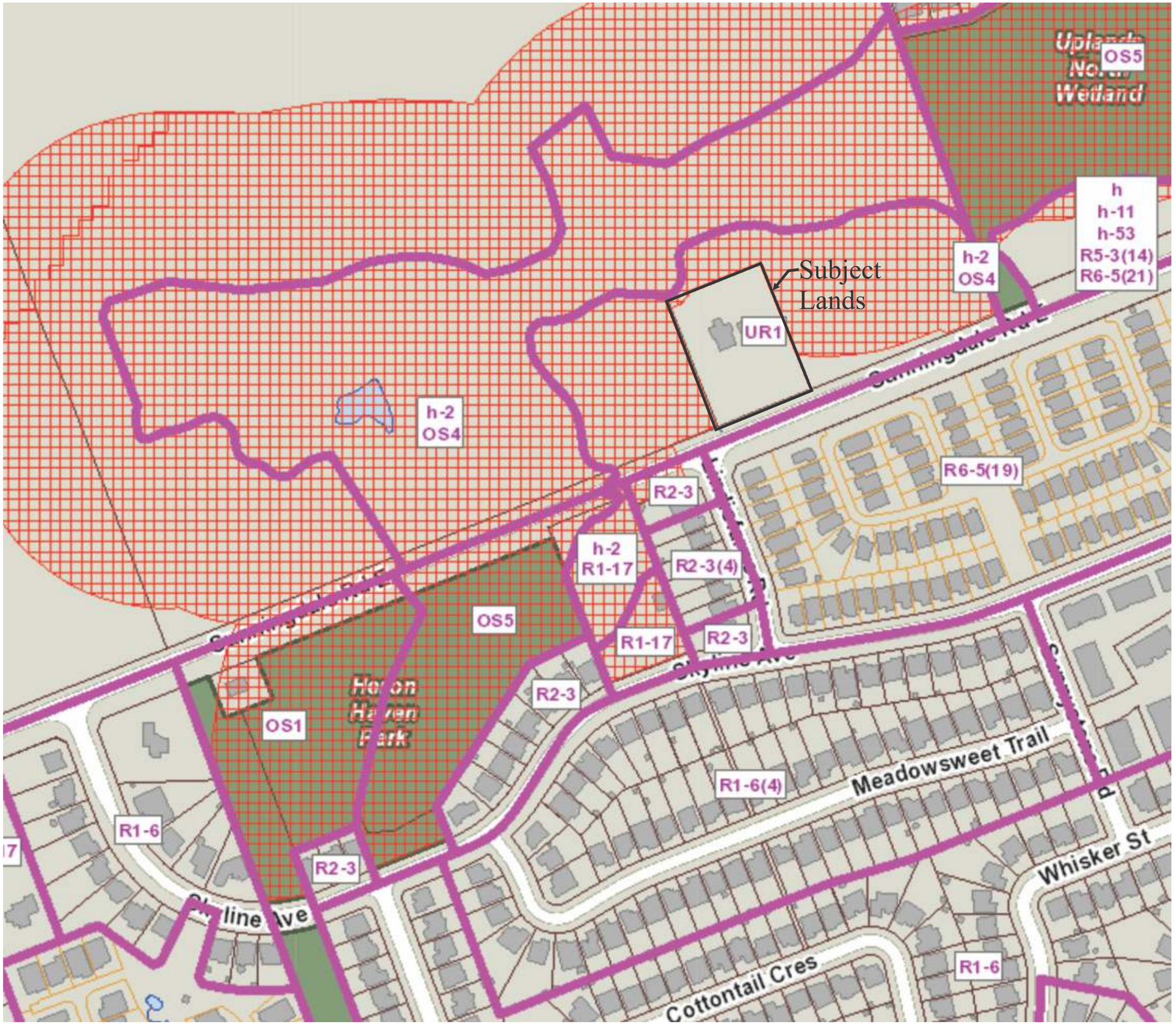
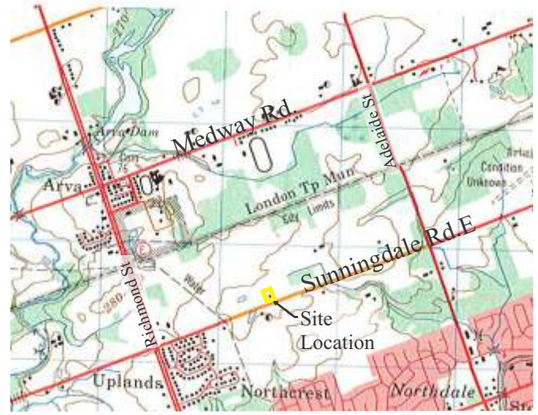
Figure 4: Zoning

(City of London Zoning Bylaw)





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Scale 1:50,000

Key Plan

UTRCA Regulated

Print on 11X17, Landscape Orientation

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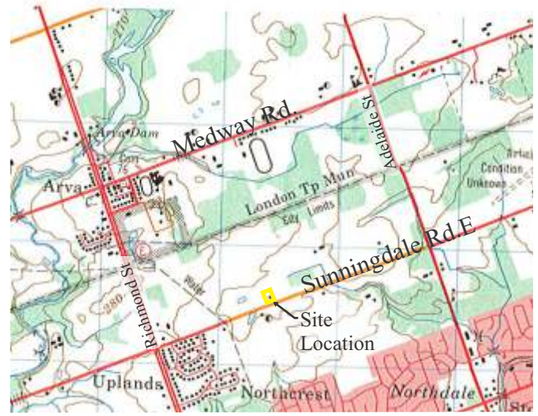
Figure 5a: Vegetation Communities
(City of London Air Photo 2017)



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Key Plan

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November 2018

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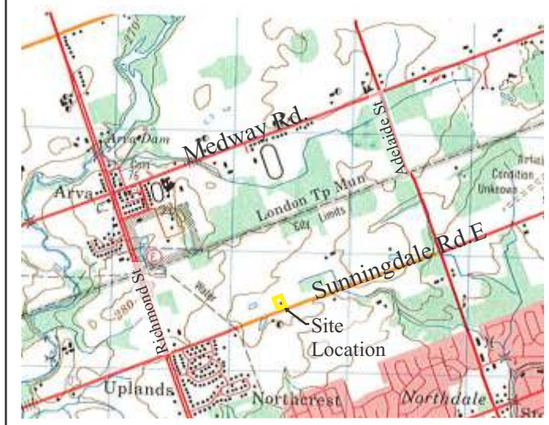
AQUATIC AND TERRESTRIAL ECOSYSTEM PLANNERS

Figure 5b: Vegetation communities with Site Photos

(City of London Air Photo 2017)



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Scale 1:50,000

Key Plan

Print on 11X17, Landscape Orientation

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Scale 1:750

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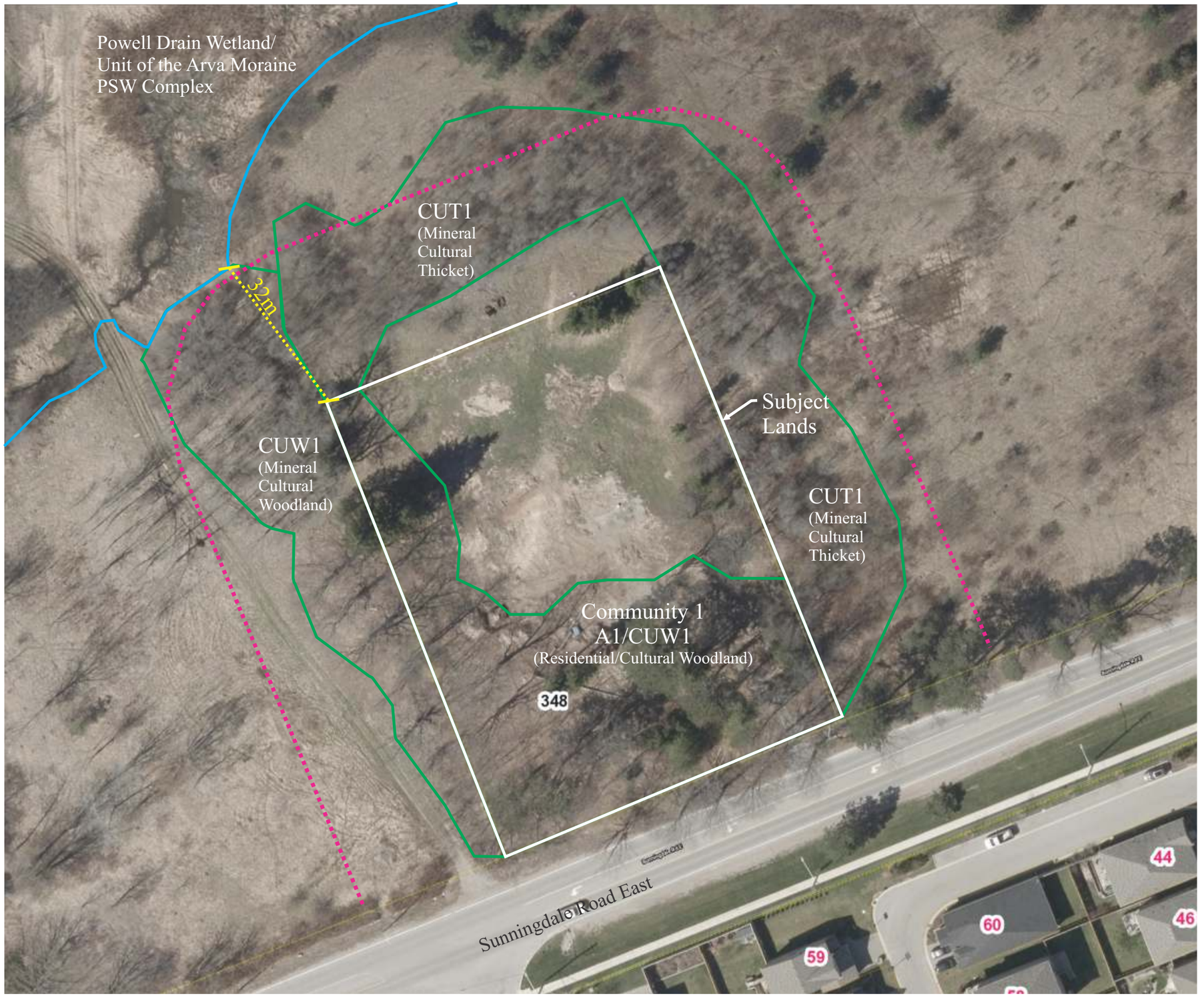
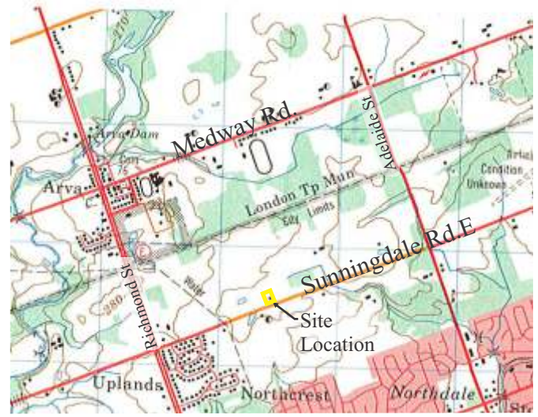
Figure 6: Environmental Management Strategy

(City of London Air Photo 2017)





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Scale 1:50,000

Key Plan

30m Setback Distance

Print on 11X17, Landscape Orientation

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Scale 1:750

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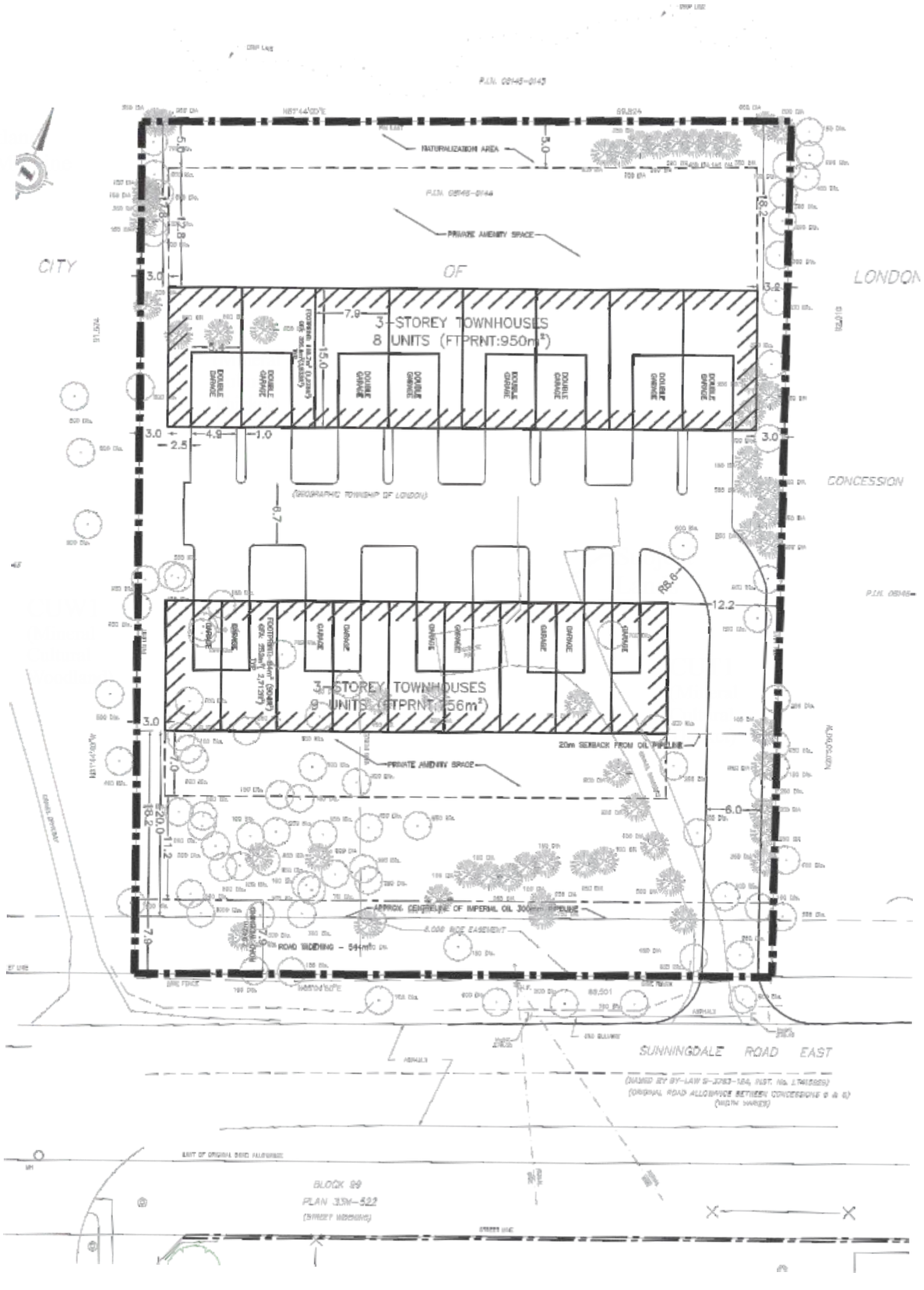
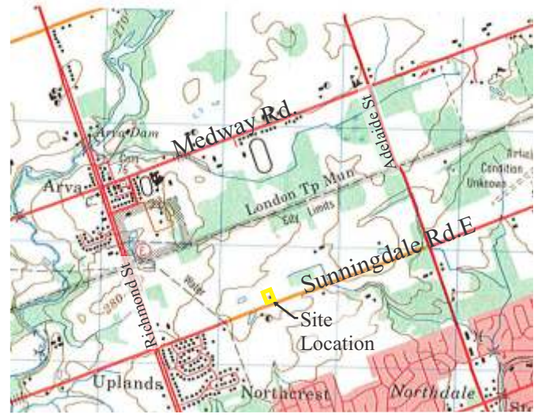


Figure 7: Development Proposal



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Scale 1:50,000
Key Plan

Print on 11X17, Landscape Orientation
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Scale 1:500
November 2018

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AQUATIC AND TERRESTRIAL ECOSYSTEM PLANNERS

Figure 8: Development Proposal Overlay

(City of London Air Photo 2017)

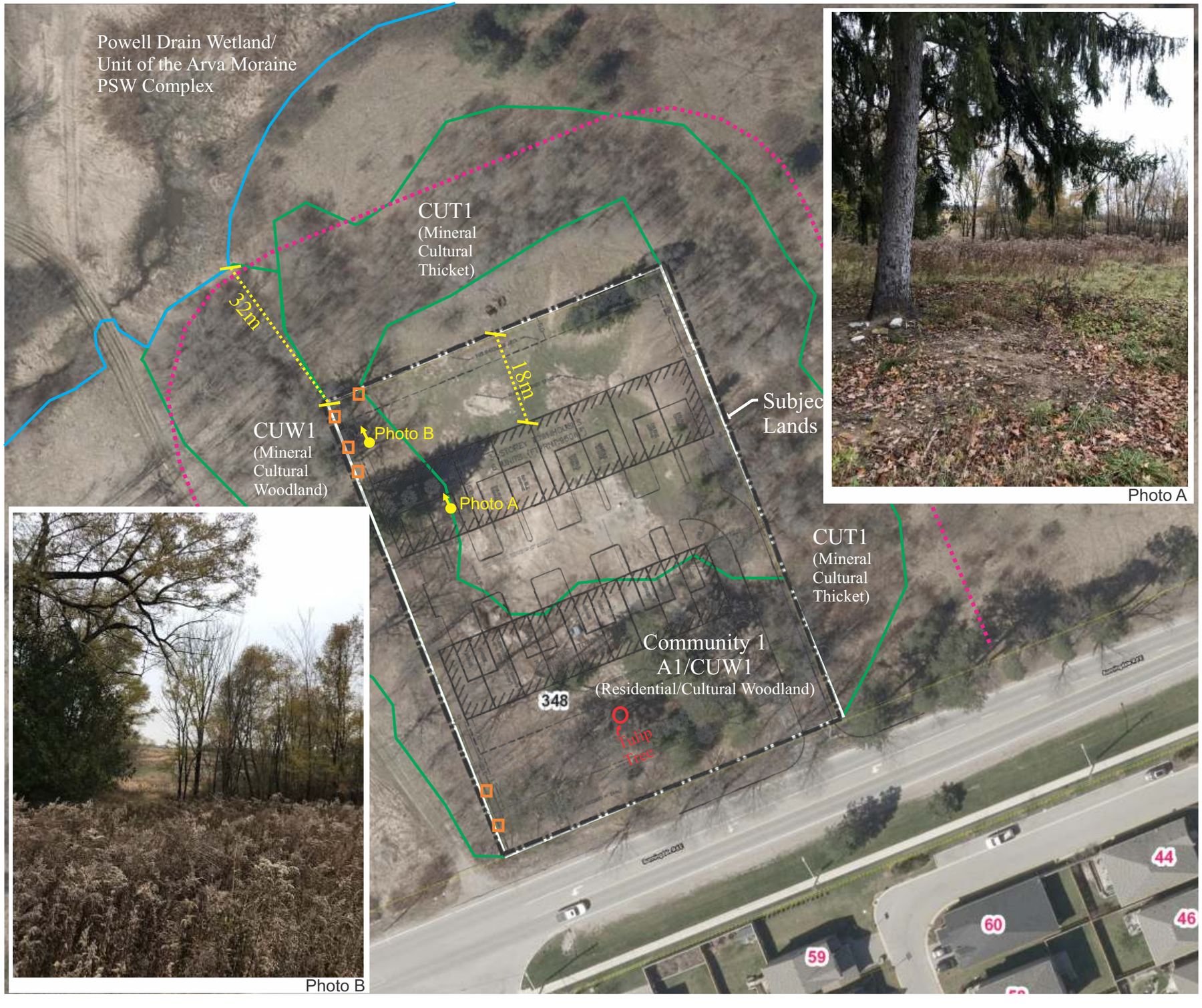
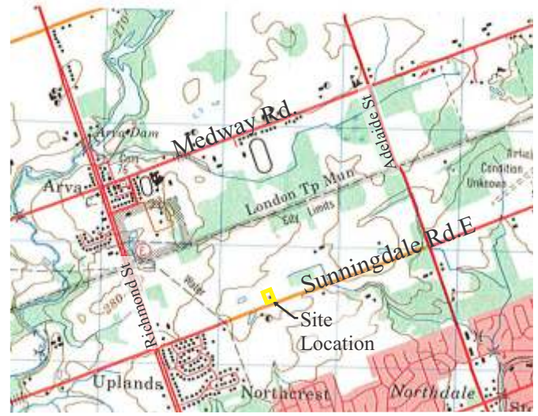


Photo A

Photo B



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Scale 1:50,000

Key Plan

30m Setback Distance

Conceptual Location of Bat Box

Print on 11X17, Landscape Orientation

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Scale 1:750

November 2018

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AQUATIC AND TERRESTRIAL ECOSYSTEM PLANNERS

Appendix A
EIS Scoping notes

Laura McLennan

From: MacKay, James <jmackay@london.ca>
Sent: Wednesday, May 23, 2018 8:19 AM
To: Laura McLennan
Cc: mathew.c@zpplan.com; Dave Hayman; Tchir, Tara; Page, Bruce
Subject: RE: Westchester Homes Sunningdale Rd East

Hi Laura, I will try to follow-up with the UTRCA this week to confirm what they want to see as well. But based on our site visit and what we discussed in the field, doing the basic inventory work is still required – Birds, veg (2 season), etc. Please follow-up with the MNRF regarding bats. Based on the site visit, even if SAR bats are confirmed to be in the area and likely using the multiple cavities identified in the field, the MNRF may not identify the cultural woodland as SAR habitat based. Providing bat boxes in place of the cavity trees at the rear of the property may be sufficient and would not require acoustic monitoring surveys according to MNRF Aylmer district protocols. However, if the MNRF indicate that the woodland could still be designated as SAR habitat, studies according to the protocols would likely need to be carried out to confirm.

Regards,

James MacKay, M.Sc.
Ecologist
ISA Certified Arborist
City of London, Planning Services
Environmental and Parks Planning
T: (519) 661-CITY (2489) ext. 4865 | F: (519) 963-1483 | E: jmackay@london.ca

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From: Laura McLennan [mailto:lmclennan@biologic.ca]
Sent: Tuesday, May 22, 2018 2:01 PM
To: MacKay, James <jmackay@london.ca>
Cc: mathew.c@zpplan.com; Dave Hayman <dhayman@biologic.ca>; Tchir, Tara <TchirT@thamesriver.on.ca>
Subject: FW: Westchester Homes Sunningdale Rd East

Hello James,
Following up again. I am looking for the scope of life science work for the Westchester Homes location at 348 Sunningdale Rd East.

Laura McLennan
BioLogic Incorporated
110 Riverside Dr, Suite 201
London, ON N6H 4S5

Tel: 519-434-1516
Fax: 519-434-0575

From: Laura McLennan
Sent: Thursday, May 17, 2018 2:56 PM
To: 'MacKay, James' <jmackay@london.ca>
Cc: 'mathew.c@zpplan.com' <mathew.c@zpplan.com>; Dave Hayman <dhayman@biologic.ca>; Tchir, Tara <TchirT@thamesriver.on.ca>
Subject: FW: Westchester Homes Sunningdale Rd East

Hello James,
Just following up again to see if you have some direction for us on the Westchester Homes location at 348 Sunningdale Rd East.

Thanks,

Laura McLennan
BioLogic Incorporated
110 Riverside Dr, Suite 201
London, ON N6H 4S5

Tel: 519-434-1516
Fax: 519-434-0575

From: Laura McLennan
Sent: Tuesday, May 15, 2018 12:18 PM
To: MacKay, James <jmackay@london.ca>
Cc: Dave Hayman <dhayman@biologic.ca>; Tchir, Tara <TchirT@thamesriver.on.ca>
Subject: Westchester Homes Sunningdale Rd East

Hello James
This email is to follow up on our site meeting of May 2, 2018 at the Westchester Homes location at 348 Sunningdale Rd East in London.
As discussed, you were going to get back to us with the scope of the life science inventory to complete the EIS for the proposed condominium development at this location.
Please provide this information so we can move forward with the data collection as necessary.

Thanks and regards,
Laura McLennan
BioLogic Incorporated
110 Riverside Dr, Suite 201
London, ON N6H 4S5

Tel: 519-434-1516
Fax: 519-434-0575

Appendix B
Water Well Records

UTM 17 z 477440 E
5 R 4765320 N
Elev. 4 R 50930
Basin 12 Middlesex

The Ontario Water Resources Commission Act

WATER WELL RECORD

41 № 2112

County or District Middlesex .... Township, ~~Village, Town or City~~ London
[redacted] Lot 15 .... Date completed 5 (day) apr. (month) 63 (year)
[redacted]ess London R.R.5

Casing and Screen Record	
Inside diameter of casing	5"
Total length of casing	141
Type of screen	—
Length of screen	—
Depth to top of screen	—
Diameter of finished hole	5"

Pumping Test	
Static level	70
Test-pumping rate	10 G.P.M.
Pumping level	90
Duration of test pumping	15 hrs
Water clear or cloudy at end of test	clear
Recommended pumping rate	10 G.P.M.
with pump setting of	110 feet below ground surface

Well Log: Overburden and Bedrock Record	From ft.	To ft.	Water Record: Depth(s) at which water(s) found	Kind of water (fresh, salty, sulphur)
dug well	0	25	136	fresh
clay and streaks of sand	25	138		
gravel	138	141		

For what purpose(s) is the water to be used? house

Is well on upland, in valley, or on hillside?

Drilling or Boring Firm Ron Smith

Address ..... Glanfield

Licence Number 934

Name of Driller or Borer

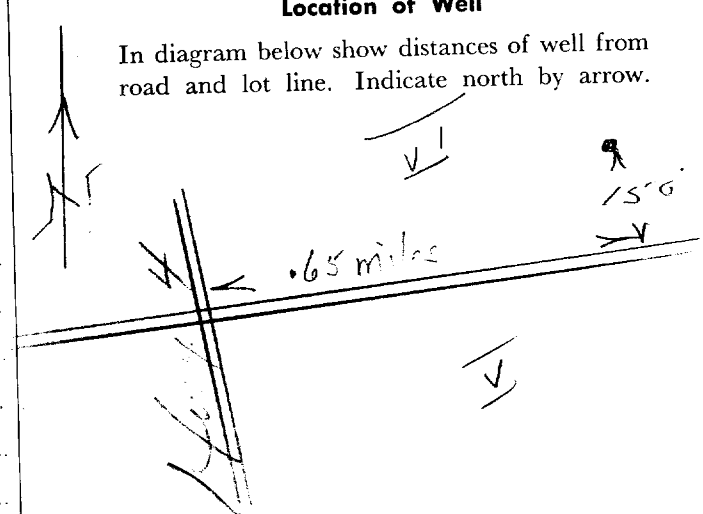
Address

Date 5 Mar 63

Ron Smith
(Signature of Licensed Drilling or Boring Contractor)

Location of Well

In diagram below show distances of well from road and lot line. Indicate north by arrow.



Form 7 10M-62-1152

CSS.58

OWRC COPY

Appendix C

Ecological Land Classification Information Sheets

ELC
COMMUNITY DESCRIPTION & CLASSIFICATION

SITE: Auburn 348 Sunningdale		POLYGON: 1	
SURVEYOR(S): WH	DATE: Oct 18	TIME: start	finish
UTMZ:	UTME:	UTMN:	

POLYGON DESCRIPTION

SYSTEM	SUBSTRATE	TOPOGRAPHIC FEATURE	HISTORY	PLANT FORM	COMMUNITY
☑ TERRESTRIAL	☐ ORGANIC	☐ LACUSTRINE	☐ NATURAL	☐ PLANKTON	☐ LAKE
☐ WETLAND	☑ MINERAL SOIL	☐ RIVERINE	☑ CULTURAL	☐ SUBMERGED	☐ POND
☐ AQUATIC	☐ PARENT MIN.	☐ BOTTOMLAND		☐ FLOATING-LVD.	☐ RIVER
	☐ ACIDIC BEDRK.	☐ TERRACE		☐ GRAMINOID	☐ STREAM
	☐ BASIC BEDRK.	☐ VALLEY SLOPE		☐ FORB	☐ MARSH
	☐ CARB. BEDRK.	☑ TABLELAND		☐ LICHEN	☐ SWAMP
		☐ ROLL. UPLAND		☐ BRYOPHYTE	☐ FEN
		☐ CLIFF		☑ DECIDUOUS	☐ BOG
		☐ TALUS		☐ CONIFEROUS	☐ BARREN
		☐ CREVICE / CAVE		☑ MIXED	☐ MEADOW
		☐ ALVAR			☐ PRAIRIE
		☐ ROCKLAND			☐ THICKET
		☐ BEACH / BAR			☐ SAVANNAH
		☐ SAND DUNE			☐ WOODLAND
		☐ BLUFF			☐ FOREST
					☐ PLANTATION

SITE	COVER
☐ OPEN WATER	☑ OPEN
☐ SHALLOW WATER	☐ SHRUB
☑ SURFICIAL DEP.	☑ TREED
☐ BEDROCK	

STAND DESCRIPTION:

	LAYER	HT	CVR	SPECIES IN ORDER OF DECREASING DOMINANCE (up to 4 sp) (>> MUCH GREATER THAN; > GREATER THAN; = ABOUT EQUAL TO)
1	CANOPY	2	3	ACESasa = PICabie ≥ PINresi
2	SUB-CANOPY			
3	UNDERSTOREY	3	2	LONtata = SYRvulg > RHUltyph
4	GRD. LAYER	6	4	GRASSES > CIRarve > SYLcana > SYMpilo

HT CODES: 1 = >25 m 2 = 10<HT 25 m 3 = 2<HT 10 m 4 = 1<HT 2 m 5 = 0.5<HT 1 m 6 = 0.2<HT 0.5 m 7 = HT<0.2 m

CVR CODES 0= NONE 1= 0% < CVR 10% 2= 10 < CVR 25% 3= 25 < CVR 60% 4= CVR > 60%

STAND COMPOSITION:	BA:

SIZE CLASS ANALYSIS:		< 10		10 - 24		25 - 50		> 50
STANDING SNAGS:		< 10		10 - 24		25 - 50		> 50
DEADFALL / LOGS:		< 10		10 - 24		25 - 50		> 50

ABUNDANCE CODES: N = NONE R = RARE O = OCCASIONAL A = ABUNDANT

COMM. AGE :		PIONEER		YOUNG		MID-AGE		MATURE		OLD GROWTH

SOIL ANALYSIS:

TEXTURE:	DEPTH TO MOTTLES / GLEY	g =	G=
MOISTURE:	DEPTH OF ORGANICS:		(cm)
HOMOGENEOUS / VARIABLE	DEPTH TO BEDROCK:		(cm)

COMMUNITY CLASSIFICATION:

		ELC CODE
COMMUNITY CLASS:	CULTURAL	CU
COMMUNITY SERIES:	WOODLAND	CUW
ECOSITE:	MINERAL	CUW1
VEGETATION TYPE:		
INCLUSION		
COMPLEX		

Notes: FORMER RESIDENTIAL SITE, POTENTIAL BAT TREES ON SITE. ANTHROPOGENIC

ELC
MANAGEMENT / DISTURBANCE

SITE: 348 Sunningdale
POLYGON: 1
DATE: Oct 18, 2017
SURVEYOR(S): WH

DISTURBANCE EXTENT	0	1	2	3	SCORE †
TIME SINCE LOGGING	> 30 YRS	15 - 30 YRS	5 - 15 YRS	0 - 5 YEARS	3
INTENSITY OF LOGGING	NONE	FUEL WOOD	SELECTIVE	DIAMETER LIMIT	1
EXTENT OF LOGGING	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
SUGAR BUSH OPERATIONS	NONE	LIGHT	MODERATE	HEAVY	0
EXTENT OF OPERATIONS	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
GAPS IN FOREST CANOPY	NONE	SMALL	INTERMEDIATE	LARGE	9
EXTENT OF GAPS	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
LIVESTOCK (GRAZING)	NONE	LIGHT	MODERATE	HEAVY	0
EXTENT OF LIVESTOCK	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
ALIEN SPECIES	NONE	OCCASIONAL	ABUNDANT	DOMINANT	6
EXTENT OF ALIEN SPECIES	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
PLANTING (PLANTATION)	NONE	OCCASIONAL	ABUNDANT	DOMINANT	6
EXTENT OF PLANTING	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
TRACKS AND TRAILS	NONE	FAINT TRAILS	WELL MARKED	TRACKS OR	6
EXTENT OF TRACKS/TRAILS	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
DUMPING (RUBBISH)	NONE	LIGHT	MODERATE	HEAVY	0
EXTENT OF DUMPING	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
EARTH DISPLACEMENT	NONE	LIGHT	MODERATE	HEAVY	0
EXTENT OF DISPLACEMENT	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
RECREATIONAL USE	NONE	LIGHT	MODERATE	HEAVY	0
EXTENT OF RECR. USE	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
NOISE	NONE	SLIGHT	MODERATE	INTENSE	4
EXTENT OF NOISE	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
DISEASE/DEATH OF TREES	NONE	LIGHT	MODERATE	HEAVY	0
EXTENT OF DISEASE / DEATH	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
WIND THROW (BLOW DOWN)	NONE	LIGHT	MODERATE	HEAVY	0
EXTENT OF WIND THROW	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
BROWSE (e.g. DEER)	NONE	LIGHT	MODERATE	HEAVY	0
EXTENT OF BROWSE	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
BEAVER ACTIVITY	NONE	LIGHT	MODERATE	HEAVY	0
EXTENT OF BEAVER	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
FLOODING (pools & puddling)	NONE	LIGHT	MODERATE	HEAVY	0
EXTENT OF FLOODING	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
FIRE	NONE	LIGHT	MODERATE	HEAVY	0
EXTENT OF FIRE	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
ICE DAMAGE	NONE	LIGHT	MODERATE	HEAVY	0
EXTENT OF ICE DAMAGE	NONE	LOCAL	WIDESPREAD	EXTENSIVE	
OTHER	NONE	LIGHT	MODERATE	HEAVY	0
EXTENT	NONE	LOCAL	WIDESPREAD	EXTENSIVE	

† INTENSITY x EXTENT = SCORE

ELC
PLANT SPECIES LIST

SITE: 348 Sunningdale
POLYGON: 1
DATE: Oct 18, 2017, May 22, June 5, Jun 20, July 10
SURVEYOR(S): WN

LAYERS: 1 = CANOPY 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER
ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COL.
ACEsasa					
PICabie					
ACEplat					
PINresi					
LIRtuli					
PRUavin					
THUocci					
ACEsacc					
CIRarve					
CICinty					
AGRgiga					
POAprat					
SYMpilo					
ARCmin					
SOLcana					
CONcana					
ECHcrus					
TAROffi					
DACglom					
RUMcris					
VERthap					
LONtata					
IRI spp.					
FRAalni					
CORrace					
CORseri					
ULMpumi					
SYRvulg					
VITripa					
VERurti					
RHAcath					

SPECIES CODE	LAYER 1	2	3	4	COL.
RUBacci					
MUHmexi					
RHUtyph					
PRUvirg					
PLAlanc					
BLEhode					
SOLalti					
PICglau					
ERIannu					
ELYrepe					
ALLpeti					
SETfabe					
LAPcomm					
SECcarun					
DAUcaro					
TUSfarf					
CONmaja					
WEMfulv					
JUGnigr		R			
TILamer		R			
NEPcata					
RIBamer					
GERrobe					
CARblan					
VIOsaro					
BARvulg					
VIOsept					
SPIxxxxx					
ACSrubr				O	
ASCsyri					
TRIpra					

ELC
PLANT SPECIES LIST

SITE: 348 Sunningdale
POLYGON: 1
DATE: July 10
SURVEYOR(S): WN

LAYERS: 1 = CANOPY 2 = SUB-CANOPY 3 = UNDERSTOREY 4 = GROUND (GRD.) LAYER
ABUNDANCE CODES: R = RARE O = OCCASIONAL A = ABUNDANT D = DOMINANT

SPECIES CODE	LAYER 1	2	3	4	COL.
TRIarve					
CARspar					
GALodor					
PRUvulg					
CLIvulg					
DIAarme					
STEGMORT					
HEMfulv					
LEUvulg					
OVAstr					
HYPpunc					
COTcorn					
PENdigi					
ACHmil					
JUNtenu					

SPECIES CODE	LAYER 1	2	3	4	COL.

ELC

WILDLIFE

SITE: 348 Sunningdale
POLYGON: 1
DATE: Jn 5, 2018
SURVEYOR(S): EB, WH
START TIME: 6:45 END TIME: 7:12

TEMP (°C): 11 CLOUD (10th): 0 WIND: 1 PRECIPITATION: N

CONDITIONS: clear, cool, still

POTENTIAL WILDLIFE HABITAT:

	VERNAL POOLS		SNAGS
	HIBERNACULA		FALLEN LOGS

SPECIES LIST:

TY	SP. CODE	EV	NOTES	#
B	DOWO	P	11	2
B	BACR	P	11	2
B	RWBL	P	11	2
B	AMCR	VO	1	1
B	YWAR	SM	1	1
B	GCFL	VO	1	1
B	NOCA	SM	1	1
B	AMRO	P	11	2
B	BHCO	P	11	2

TY	SP. CODE	EV	NOTES	#

FAUNAL TYPE CODES (TY):
B = BIRD M = MAMMAL H = HERPETOFAUNA L = LEPIDOPTERA F = FISH O = OTHER

EVIDENCE CODES (EV):

BREEDING BIRD - POSSIBLE:
SH = SUITABLE HABITAT SM = SINGING MALE

BREEDING BIRD - PROBABLE:
T = TERRITORY D = DISPLAY P = PAIR
A = ANXIETY BEHAVIOUR N = NEST BUILDING V = VISITING NEST

BREEDING BIRD - CONFIRMED:
DD = DISTRACTION NU = USED NEST FY = FLEDGED YOUNG
NE = EGGS NY = YOUNG FS = FOOD/FAECAL SACK
AE = NEST ENTRY

OTHER WILDLIFE EVIDENCE:
OB = OBSERVED VO = VOCALIZATION CA = CARCASS
DP = DISTINCTIVE PARTS HO = HOUSE/DEN FY = EGGS OR YOUNG
TK = TRACKS FE = FEEDING EVIDENCE SC = SCAT
SI = OTHER SIGNS (specify)

ELC

WILDLIFE

SITE: 348 Sunningdale
POLYGON: 1
DATE: June 25 2018
SURVEYOR(S): WH
START TIME: 7:30 END TIME: 8:30

TEMP (°C): 18 CLOUD (10th): 10 WIND: 1 PRECIPITATION: very light

CONDITIONS: overcast, cool still

POTENTIAL WILDLIFE HABITAT:

	VERNAL POOLS		SNAGS
	HIBERNACULA		FALLEN LOGS

SPECIES LIST:

TY	SP. CODE	EV	NOTES	#
B	AMRO	FY	HHT	5
B	RWBL	P	11	2
B	BCCH	P	11	2
B	TUST	FY	11	2
B	NOCA	P	11	2
B	BAOR	P	11	2
B	COSP	SM	11	2
B	GRCA	P	111	3
B	CSWA	P	111	3
B	AMCR	FY	111	3

TY	SP. CODE	EV	NOTES	#

FAUNAL TYPE CODES (TY):
B = BIRD M = MAMMAL H = HERPETOFAUNA L = LEPIDOPTERA F = FISH O = OTHER

EVIDENCE CODES (EV):

BREEDING BIRD - POSSIBLE:
SH = SUITABLE HABITAT SM = SINGING MALE

BREEDING BIRD - PROBABLE:
T = TERRITORY D = DISPLAY P = PAIR
A = ANXIETY BEHAVIOUR N = NEST BUILDING V = VISITING NEST

BREEDING BIRD - CONFIRMED:
DD = DISTRACTION NU = USED NEST FY = FLEDGED YOUNG
NE = EGGS NY = YOUNG FS = FOOD/FAECAL SACK
AE = NEST ENTRY

OTHER WILDLIFE EVIDENCE:
OB = OBSERVED VO = VOCALIZATION CA = CARCASS
DP = DISTINCTIVE PARTS HO = HOUSE/DEN FY = EGGS OR YOUNG
TK = TRACKS FE = FEEDING EVIDENCE SC = SCAT
SI = OTHER SIGNS (specify)

Appendix D
RKLA Tree Report

RKLA JOB # 17-176

Date of inspection: June 19, 2017

348 SUNNINGDALE ROAD, LONDON ONTARIO

DRAFT

GENERAL INFORMATION		SIZE			BIOLOGICAL HEALTH			PRELIMINARY RECOMMENDATIONS BASED ON TREE SPECIES VALUE AND VIGOUR	
TAG#	TREE SPECIES	DBH	CANOPY RADIUS	STRUCTURE MS=multistem	CROWN CONDITION	DEFECT CODE	COMMENTS	PROPOSED ACTION	RATIONALE
		(cm)	(m)		1=Dead			First Priority	
					5=Healthy			Second Priority	
								Remove - hazard	
737	*Acer saccharum*	55	8		5	S1	City ROW along east edge of existing driveway, wide trunk flare, basal scar, minor dieback, codominant stems		
738	*Acer saccharum*	55	5		5		along east edge of existing driveway, no trespassing sign nailed to tree, several nails in trunk, bulging due to damage from abutting fence, low branching	Second Priority Preservation	Valuable species, good health and condition
739	*Prunus spp.*	51	6		3		along east edge of existing driveway, recently pruned, no trespassing sign nailed to tree, crooked upper stem, large exposed/damaged roots, girdling roots, damage from abutting fence		
740	*Acer saccharum*	33	5		5		along east edge of existing driveway, recently pruned, limbed up, grade change at base, along edge of existing driveway	Second Priority Preservation	Valuable species, good health and condition
741	*Acer platanoides*	22	5		5		along east edge of existing driveway, sealing pruning cuts, supressed, exposed/damaged roots, girdling roots		
742	*Acer platanoides*	32	5.5		5		along east edge of existing driveway, sealing pruning cuts, codominant stems, exposed/damaged roots, grade change at base		
743	*Acer saccharum*	79	7		5	S1	along east edge of existing driveway, loose bark, lateral branch larger than main stem, internal rot at base, burly main stem, instects at base	Remove	poor/weak branch structure, in decline
744	*Pinus nigra*	78	9		5		along west edge of existing driveway, unbalanced crown - heavy towards SW, insect holes in trunk, limbed up to approx. 50'		
745	*Picea abies*	78	4		4		along west edge of existing driveway, grade change at tunk due to driveway, codominant stems, included bark, butressing from branches to base, limbed up to approx. 30'		
746	*Pinus nigra*	64	6		4	R3	along west edge of existing driveway, no root flare, codominant leaders, fused leaders, included bark, butressing on west side of base, uneven crown - heavy to the W, limbed up to approx. 30'		
747	*Pinus sylvestris*	43	3		4	R3	along west edge of existing driveway, grade change at trunk due to driveway, insect holes in trunk, no root flare, limbed up to approx. 30'		
748	*Picea abies*	51	3		5	S1	along west edge of existing driveway, supressed, droopy habit, grade change at base due to driveway		
749	*Pinus nigra*	46	7		3	R3, S1	along west edge of existing driveway, bowed trunk, thin crown, supressed, no root flare		

Date of inspection: June 19, 2017

348 SUNNINGDALE ROAD, LONDON ONTARIO

GENERAL INFORMATION		SIZE			BIOLOGICAL HEALTH			PRELIMINARY RECOMMENDATIONS BASED ON TREE SPECIES VALUE AND VIGOUR	
TAG#	TREE SPECIES	DBH	CANOPY RADIUS	STRUCTURE MS=multistem	CROWN CONDITION	DEFECT CODE	COMMENTS	PROPOSED ACTION	RATIONALE
750	*Acer saccharum*	58	7		5	R3, S1	along west edge of existing driveway, girdling/exposed/damaged roots alond driveway edge, limbed up, no root flare on S side, damage from abutting fence		
751	*Thuja occidentalis*	42, 42	2.5	ms2	5		exposed roots, minor interior dieback, low branched		
752	*Thuja occidentalis*	18	3		5		supressed, low branched, minor dieback, uneven crown		
753	*Prunus spp.*	15, 8	4	ms2	5	S1, C8	curling leaves, epicormic growth, scrubby habit, S1 in small stem		
754	*Picea pungens*	24	2		3		supressed, dieback, limbed up to approx. 20'		
755	*Picea abies*	9	2		5		hedge row, thin crown, low branched		
756	*Picea abies*	16	2.5		5		hedge row, thin lower branches, low branched, Adelges abietis (pineapple spruce gall)		
757	*Picea abies*	16	2.5		5		hedge row, thin lower branches, low branched, Adelges abietis (pineapple spruce gall)		
758	*Picea abies*	13	2.5		4		hedge row, thin lower branches, low branched		
759	*Picea abies*	20	2.5		5		hedge row, thin lower branches, low branched		
760	*Picea abies*	13	2		5		hedge row, low branched		
761	*Picea abies*	8	2		5		hedge row, low branched		
762	*Liriodendron tulipefera*	55	8		5		uneven crown - heavy to SE due to a torn off scaffold branch in crown	First Priority Preservation	Carolinian species, good health and condition
763	*Acer saccharum*	19, 13	7	ms2	5		exposed roots, partial root rot, remnants of previous third stem, excellent condition	First Priority Preservation	Valuable species, excellent health and condition
764	*Acer saccharum*	38	7		5		codominant stems, included bark, butressing, supressed on NW side, dead branches	First Priority Preservation	Valuable species, good health and condition
765	*Acer saccharum*	34	7		5	S1	vertical S1, sealing wounds, discolouration at base, minor dead branches		
766	*Acer saccharum*	43	7		5		low branches on E side, minor dead branches, excellent condition	First Priority Preservation	Valuable species, excellent health and condition
767	*Acer saccharum*	19	6		5		open crown, supressed, minor dead branches	Second Priority Preservation	Valuable species, good health and condition
768	*Picea abies*	45	3		4		large vertical wound on N side, basal scar, previously supressed, limbed up to approx. 30'		
769	*Picea abies*	47	3		5		wide root flare		
770	*Acer saccharum*	17	3.5		5		minor dead wood, abutting large stump	Second Priority Preservation	Valuable species, good health and condition
771	*Acer saccharum*	15	4		5		excellent condition	First Priority Preservation	Valuable species, excellent health and condition
772	*Prunus serotina*	13	2		5		crooked at base - self corrected, high crown	Second Priority Preservation	Valuable species, good health and condition
773	*Acer saccharum*	10	2.5		5		high crown, supressed on NW	Second Priority Preservation	Valuable species, good health and condition
774	*Acer saccharum*	13	3		5		supressed	Second Priority Preservation	Valuable species, good health and condition
775	*Acer platanoides*	17	4.5		5		crook at base, clustered upper crown, supressed		
776	*Acer saccharum*	10	2		5	C8	supressed, high crown, epicormic along trunk		

Date of inspection: June 19, 2017

348 SUNNINGDALE ROAD, LONDON ONTARIO

GENERAL INFORMATION		SIZE			BIOLOGICAL HEALTH			PRELIMINARY RECOMMENDATIONS BASED ON TREE SPECIES VALUE AND VIGOUR	
TAG#	TREE SPECIES	DBH	CANOPY RADIUS	STRUCTURE MS=multistem	CROWN CONDITION	DEFECT CODE	COMMENTS	PROPOSED ACTION	RATIONALE
777	*Pinus nigra*	71	5.5		4	L	lean E, dead branches, natural limb drop, codominant stems, included bark with dead stem, high/small crown, small fungal fruiting body at root flare		
778	*Acer saccharum*	10	3		5	C8	supressed, epicormic		
779	*Juglans nigra*	14	3.5		5		high crown, dead branches, supressed		
780	*Juglans nigra*	16	3.5		4	S1	S1 at 7' from grade, several major wounds/burls, ants	Remove	Health and condition - may pose a hazard
781	Tilia americana	21	3		5		crook in upper stem, insect damage to leaves, 1 mature epicormic sprout from base, minor dieback, supressed on N, young virginia creeper on trunk		
782	*Juglans nigra*	29	6.5		5		supressed, uneven crown - heavy to the S, young virginia creeper on trunk		
783	*Acer saccharum*	10	2.5		5		low branched, vertical crack in bark, supressed		
784	*Acer saccharum*	11	2.5		5	C8	rodent protection present, minor dieback, supressed, epicormic growth		
785	*Pinus sylvestris*	40	3		4		insect holes, dead/drooping branches, thin crown, bulbous root flare		
786	*Acer saccharum*	95	10		4	S1	S1 - MAJOR cavity, codominant stems, dieback in upper crown, thin crown, buckthorn understory	Remove	Health and condition - may pose a hazard
787	*no tag - no tree*								
788	*Acer saccharum*	28	6		4	C8	large lower dead branches, supressed, dieback, epicormic growth		
789	*Pinus nigra*	75	5		4		elevated root plate, high crown, thin crown, 3 codominant stems, major dead branches		
790	*Acer saccharum*	12	3		4		supressed, abutting tree no. 789, leaf spot, dieback in lower branches		
791	*Prunus spp.*	14	4		3		supressed, dead lower branches		
792	*Acer saccharum*	10	4		5		supressed, minor die back		
793	*Prunus spp.*	18	4		4	S1	vertical wound below crown, dead lower branches, supressed, crooked - self corrected		
794	*Tilia americana*	14	5		5	L	insect damage to leaves, lean SW, supressed, included bark	Second Priority Preservation	Valuable species, good health and condition
795	*Tilia americana*	18	5		5		insect damage to leaves	Second Priority Preservation	Valuable species, good health and condition
796	*Tilia americana*	23	5		5		insect damage to leaves	Second Priority Preservation	Valuable species, good health and condition
797	*Tilia americana*	23, 22	7	ms2	5	S1	major wound on one stem, included bark, insect damage to leaves, buckthorn understory		
798	*Prunus spp.*	12	3		5	S1, L	wound 2' from grade, supressed, lean SW		
799	*Prunus spp.*	10	3		5	L	supressed, minor die back, lean SW		
800	Prunus spp.	9	2		5		supressed, large epicormic sprout from base		
801	*Tilia americana*	85	6		5	S1	several large wounds at 5' from grade and at unions, wide spreading root flare, 3 codominant stems, large dead limbs, minor dieback, burls, basal wound/rot	Remove	Health and condition
802	*Prunus spp.*	12	2		5		dead lower branches, supressed		
803	*Acer saccharum*	74	9		5	S1	exposed/damaged roots, minor root girdling, one large low branch, uneven crown-heavy on SW, previously supressed	Second Priority Preservation	Valuable species, mature specimen, good health and condition

Date of inspection: June 19, 2017

348 SUNNINGDALE ROAD, LONDON ONTARIO

GENERAL INFORMATION		SIZE			BIOLOGICAL HEALTH			PRELIMINARY RECOMMENDATIONS BASED ON TREE SPECIES VALUE AND VIGOUR	
TAG#	TREE SPECIES	DBH	CANOPY RADIUS	STRUCTURE MS=multistem	CROWN CONDITION	DEFECT CODE	COMMENTS	PROPOSED ACTION	RATIONALE
804	*Prunus spp.*	18	3		5		supressed, canopy heavy to SW, dead lower branches		
805	*Prunus spp.*	18	3		5		supressed, canopy heavy to W, dead lower branches		
806	*Prunus spp.*	16	2		5		supressed, canopy heavy to N, dead lower branches		
807	*Prunus spp.*	40	4		4		burly growth at 20' from grade, dead lower branches, butressing		
808	*Prunus spp.*	33	4		4		large butress root on N side, dead lower branches, supressed		
809	*Prunus spp.*	20	4		4	L	Lean to SE, lower canopy dieback		
810	*Prunus spp.*	22	4		5	L	Boundary tree between subject site and Lot 15, Lean to SW, lower canopy dieback		
811	*Acer saccharum*	77	10		5	S1	Boundary tree between subject site and Lot 15, weeping wound, minor interior dieback, low union, clothesline hardware attached to trunk	Second Priority Preservation	Valuable species, mature specimen, good health and condition
812	*Thuja occidentalis*	24	3		5	L	supressed, lean N, previous codominant stem removed at 1' from grade		
813	*Picea abies*	53	5		5		dead interior canopy, supressed, drooping habit, exposed/damaged roots, limbed up to approx.15'		
814	*Picea abies*	48	5		5		dead interior canopy, supressed, drooping habit, exposed/damaged roots, limbed up to approx.15', Adelges abietis (pineapple spruce gall), soil/debris piled against base		
815	*Picea abies*	51	5		5		dead interior canopy, supressed, drooping habit, exposed/damaged roots, limbed up to approx.15', Adelges abietis (pineapple spruce gall), soil/debris piled against base		
816	*Ulmus pumila*	70	7		3		on slope, codominant stems, dead wood		
817	*Ulmus pumila*	34	3		2		on slope, supressed, dieback		
818	*Ulmus pumila*	45	4		1		fully dead		Dead
819	*Ulmus pumila*	55, 35	11	ms2	4	L, S1, C7, C8	on slope, significant lean NE, significant cavity at base, codominant stem, major dead limbs, epicormic growth, one major limb to the W, virginia creeper on trunk		Health and condition - may pose a hazard
820	*Ulmus pumila*	65	10		3	S1, C7, L	Hazard, major dead limbs, major vertical scar at base, supressed, lean, codominant stems		Health and condition - may pose a hazard
821	*Thuja occidentalis*	28, 21, 18, 1	4	ms4	3		hedgerow, dead interior		
822	*Thuja occidentalis*	32, 28, 15,	3.5	ms4	4		hedgerow, dead interior, included bark		
823	*Ulmus pumila*	15	3.5		4	L	Property of Lot 15 dead lower branches, supressed, lean N		
824	*Ulmus pumila*	21	2.5		4	C8	Property of Lot 15 dead lower branches, supressed, girdling roots, epicormic growth		
825	*Ulmus pumila*	28, 19	3	ms2	4		Property of Lot 15 uneven crown - heavy to W, dieback of lower branches		
826	*Acer platanoides*	30	6		5		low scaffold branches, exposed roots, minor dieback		
827	*Acer saccharinum*	18, 13	4.5	ms2	5	S1	butressing at union, cavity halfway up smaller stem		

RKLA JOB # 17-176

Date of inspection: June 19, 2017

348 SUNNINGDALE ROAD, LONDON ONTARIO

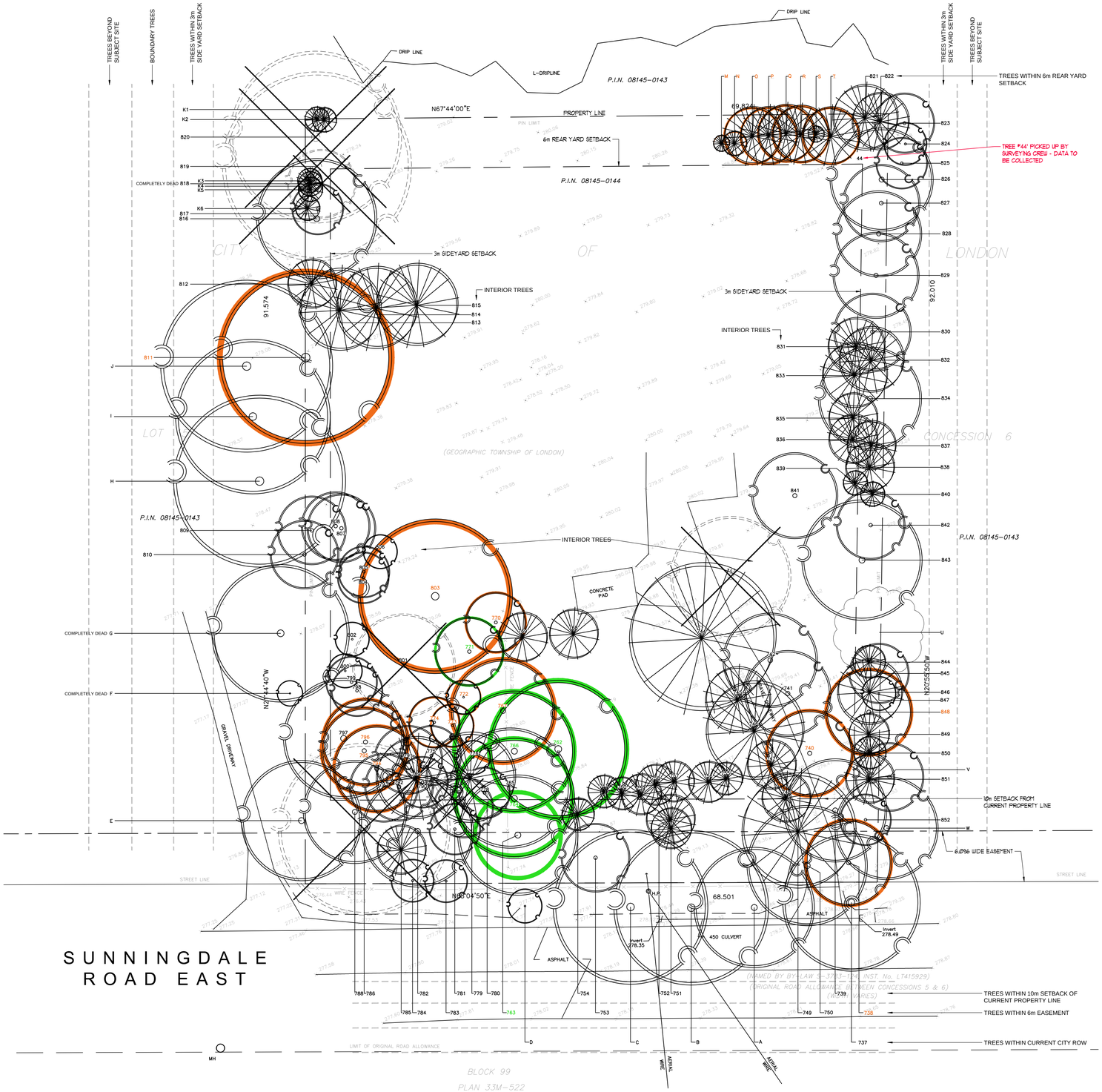
GENERAL INFORMATION		SIZE			BIOLOGICAL HEALTH			PRELIMINARY RECOMMENDATIONS BASED ON TREE SPECIES VALUE AND VIGOUR	
TAG#	TREE SPECIES	DBH	CANOPY RADIUS	STRUCTURE MS=multistem	CROWN CONDITION	DEFECT CODE	COMMENTS	PROPOSED ACTION	RATIONALE
828	*Acer platanoides*	28	5		5		low branching, minor interior dieback		
829	*Acer platanoides*	46	5		5		multiple branch union cluster at 4' from grade, fused branches at union, minor interior dieback		
830	*Acer platanoides*	31	4.5		3		significant interior dieback, thin crown, low branches, low vigor		
831	*Picea abies*	22	3.5		3		supressed, thin crown, branched to grade		
832	*Acer saccharum*	18	4		2		highly supressed, low vigor		
833	*Picea abies*	16	4		4		supressed, thin crown, branched to grade		
834	*Acer platanoides*	38	6		4		included bark, exposed roots, low union, double codominant stems, low branched		
835	*Picea abies*	12	3		5		lower dead branches, minor Adelges abietis (pineapple spruce gall)		
836	*Picea abies*	22	3		5		lower dead branches		
837	*Pinus nigra*	25	3		3	L	lean NE, natural limb drop - remianint stubs up to approx. 10', codominant stems		
838	*Pinus nigra*	25	3		3		browning foliage, dead lower limbs, codominant stems, low union, included bark		
839	*Picea abies*	12	1.5		5		supressed, branched to grade, minor Adelges abietis (pineapple spruce gall)		
840	*Picea abies*	15	1.5		2		only upper 30' of canopy is living		
841	*Malus spp.*	62	5		4	S1	wood pecker damage, twisting trunk, bark splitting, thin crown, major dead limbs, cavity		
842	*Acer saccharum*	18	4		5		supressed, uneven crown - heavy to NE, low union, low branched		
843	*Acer saccharum nigru*	50	7		5	C1, C2	low scaffold branches, cupped/discolourd leaves, woodpecker damage, exposed/girdling roots, butressing		
844	*Pinus nigra*	10	2		4		twisted/crooked trunk, supressed, low branched, browning needles		
845	*Prunus spp.*	20	3.5		5		exposed roots, low branched, supressed		
846	*Pinus sylvestris*	25	4		4		dead lower branches, thin canopy		
847	*Prunus spp.*	11	2		5	L	lean NE, supressed		
848	*Acer x freemanii*	16, 11	5	ms2	5		uneven crown - heavy to W, root flare butressing	Second Priority Preservation	Valuable species, good health and condition
849	*Thuja occidentalis*	30, 12	2.5	ms2	5		hedgerow, dead lower branches		
850	*Thuja occidentalis*	13, 10	2	ms2	5		hedgerow, dead lower branches		
851	*Thuja occidentalis*	32, 15	3	ms2	5		hedgerow, dead lower branches		
852	*Prunus spp.*	9	3		5	L	crook in trunk, supressed, lean E, minor dieback		
Trees not tagged during tree inventory - beyond subject site or inaccessible									
A	*Acer saccharum*	70	7		5	S1	City ROW major root damage along road side, epicormic growth, large burl, large exposed/girdling root, on slope, pruned		
B	*Acer saccharum*	65	8		5	S1	City ROW severed roots on street side, pruned, major dead wood, adjacent to hydro line		

RKLA JOB # 17-176

Date of inspection: June 19, 2017

348 SUNNINGDALE ROAD, LONDON ONTARIO

GENERAL INFORMATION		SIZE			BIOLOGICAL HEALTH			PRELIMINARY RECOMMENDATIONS BASED ON TREE SPECIES VALUE AND VIGOUR	
TAG#	TREE SPECIES	DBH	CANOPY RADIUS	STRUCTURE MS=multistem	CROWN CONDITION	DEFECT CODE	COMMENTS	PROPOSED ACTION	RATIONALE
C	*Acer saccharum*	65	8		5	S1, L	City ROW slight lean N, lilac shrub growing from roots, girdling roots, large dead branches, minor dieback		
D	*Crataegus spp.*	12	2		4	L	City ROW insect damage to leaves, supressed, uneven crown, scrubby habit, slight lean S		
E	*Acer saccharum*	85	7		3	S1	cavities in branches, weeping wound, crown dieback, major dead limbs, fused leaders, clustered branching, girdling roots		
F	*Tilia americana*	75	na		1		Property of Lot 15 completely dead		
G	*Acer saccharum*	85	8		1		Property of Lot 15 completely dead		
H	*Acer saccharum*	86	10		5	S1	Property of Lot 15 low crotch, cavity at base, minor dead branching, cavity in upper crown		
I	*Acer saccharum*	80	9		5	S1	Property of Lot 15 burls on roots, low crotch, ants present, butressing, near existing pile of debris		
J	*Acer saccharum*	80	10		5		Property of Lot 15 girdling roots, low scaffold branches, dieback to main branches		
K	*Thuja occidentalis group*	+-15	+-2		4		Subject site property good condition, low area		
L	*Vegetation unit - Ulmus pumila*	+-15			4		Property of Lot 15 stand of trees along entire north property line - beyond subject site boundary		
M	*Picea pungens*	7	1		5		Subject site property hedgerow, branched to ground	Second Priority Preservation	healthy hedgerow
N	*Picea pungens var. glauca*	8	1.5		5		Subject site property hedgerow, branched to ground	Second Priority Preservation	healthy hedgerow
O	*Picea abies*	25	4.5		5		Subject site property hedgerow, low branched	Second Priority Preservation	healthy hedgerow
P	*Picea abies*	21	4.5		5		Subject site property hedgerow, branched to ground	Second Priority Preservation	healthy hedgerow
Q	*Picea abies*	21	4.5		5		Subject site property hedgerow, branched to ground	Second Priority Preservation	healthy hedgerow
R	*Picea abies*	32	4.5		5		Subject site property hedgerow, branched to ground	Second Priority Preservation	healthy hedgerow
S	*Picea abies*	12	1		5		Subject site property hedgerow, branched to ground, supressed	Second Priority Preservation	healthy hedgerow
T	*Picea abies*	25	4.5		5		Subject site property hedgerow, branched to ground	Second Priority Preservation	healthy hedgerow
U	*Lonicera spp.*	na	4		4		Subject site property large shrub		
V	*Prunus spp.*	23, 20, 15	4	ms3	4		Property of Lot 15 large cavity in 20cmDBH stem, gall, open crown, dieback		
W	*Prunus spp.*	52	6		5	L	Property of Lot 15 lower canopy dieback, supressed, lean E		



TREE PRESERVATION PLAN

SCALE = 1:250

PRELIMINARY RECOMMENDATIONS - FOR CONCEPTUAL SITE LAYOUT ONLY

LEGEND

- 5 — FIRST PRIORITY TREES - VALUABLE SPECIES/HEALTHY/SOLID STRUCTURE (TREE NUMBER)
- 5 — SECOND PRIORITY TREES - VALUABLE SPECIES/HEALTHY/SOLID STRUCTURE (TREE NUMBER)
- 5 — EXISTING DECIDUOUS TREES TO REMAIN (TREE NUMBER)
- 8 — EXISTING DECIDUOUS TREES RECOMMENDED FOR REMOVAL - HEALTH/STRUCTURE (TREE NUMBER)
- 6 — EXISTING CONIFEROUS TREES TO REMAIN (TREE NUMBER)
- 9 — EXISTING CONIFEROUS TREES RECOMMENDED FOR REMOVAL - HEALTH/STRUCTURE (TREE NUMBER)
- EXISTING PLANTINGS TO REMAIN
- EXISTING PLANTINGS TO BE REMOVED

KEY MAP

RON KOUDYS LANDSCAPE ARCHITECTS INC

Ronald H. Koudys, O.A.L.A. C.S.L.A. DATE

DATE	DESCRIPTION	No.
2017.07.11	ISSUED FOR TREE COORDINATION	1

PLOTTING INFORMATION:
PLOTTED DATE = JULY 11, 2017
PLOTTED SCALE = 1:1

ONTARIO ASSOCIATION OF LANDSCAPE ARCHITECTS — RONALD H. KOUDYS — OALA — MEMBER

PROJECT TITLE:
348 SUNNINGDALE ROAD EAST
LONDON, ONTARIO

DRAWING TITLE:
TREE PRESERVATION PLAN
DRAFT

DATE:	SCALE:	DRAWING No.
JULY 2017	AS NOTED	T-1
DRAWN: RKLA Inc.	CHECKED BY: RHK	
PROJECT No. 17-176Lb		

Appendix E
Candidate Significant Wildlife Habitat

Seasonal Concentration of Animals

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH
Waterfowl Stopover and Staging Areas (Terrestrial)	none present	- no fields with sheet water during spring present	No
Waterfowl Stopover and Staging Areas (Aquatic)	none present	- habitat - ponds, marshes, lakes, bays - not available	No
Shorebird Migratory Stopover Area	none present	- habitat - shorelines of lakes, rivers and wetlands - not available	No
Raptor Wintering Area	combination of forest and upland needed	- combination of forest and meadow is not large enough (need to be >20ha); nearby field is not idle/fallow, it is active agriculture, subject lands are small (0.6ha) with landscape trees	No
Bat Hibernacula	none present	- none present	No
Bat Maternity Colonies		- standing snags on the subject lands - not enough (>10/ha, >25cm DBH) to be SWH, but possible habitat for SAR	No
Turtle Wintering Areas	none present	- no water on the subject lands	No
Reptile Hibernaculum	all other than really wet	- no rock piles, stone fences, crumbling foundations, or rock crevices, no active animal burrows	No
Colonially-Nesting Bird Breeding Habitat (Bank / Cliff)	none present	- no steep slopes of exposed banks or cliff faces present	No
Colonially-Nesting Bird Breeding Habitat (Trees/Shrubs)	none present	- nests in live or dead standing trees	No
Colonially-Nesting Bird Breeding Habitat (Ground)	none present	- no rocky islands or peninsulas present or watercourses in open fields with scatted trees present	No
Migratory Butterfly Stopover Areas	combination of field and forest needed	- less than the required 10ha in size; not located with 5km of Lake Erie	No
Land Bird Migratory Stopover Areas	none present	- not within 5km of Lake shore	No
Deer Winter Congregation Areas	none present	- deer movement during winter in Ecoregion 7E is not constrained by snow depth	No

Rare Vegetation Communities

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH
Cliffs and Talus Slopes	not present		No
Sand Barren	not present		No
Alvar	not present		No
Old Growth Forest	not present		No
Savannah	not present		No
Tallgrass Prairie	not present		No
Other Rare Vegetation	not present		No

Specialized Habitats of Wildlife considered SWH

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH
Waterfowl Nesting Area	none present	- suitable upland communities are not present on site within 120m of adjacent wetlands	No
Bald Eagle and Osprey Nesting, Foraging, Perching	none present	- no lakes, ponds, rivers, wetlands along forest shorelines, islands or structures over water	No
Woodland Raptor Nesting Habitat	none present	-no forest communities >30ha, or with >4ha interior habitat	No
Turtle Nesting Areas	none present	- no exposed mineral soil adjacent to wetlands	No
Springs and Seeps	none present	- no headwater forested areas present	No
Amphibian Breeding Habitat (Woodland)	none present	- no forest, wetland, pond or woodland pool on site, wetland is within 120m on adjacent lands	No
Amphibian Breeding Habitat (Wetlands)	none present	- wetlands >120m from woodland ecosites; wetlands >500m^2	No
Woodland Area-Sensitive Bird Breeding Habitat	none present	-habitats where interior forest breeding birds are breeding; large mature (>60yrs old) forest stands or woodlots >30ha	No

Habitats of Species of Conservation Concern considered SWH

Wildlife Habitat	ELC Codes Triggers	Additional Habitat Criteria	Candidate SWH
Marsh Breeding Bird Habitat	none present	- all wetland habitat is to be considered as long as there is shallow water with emergent aquatic vegetation	No
Open Country Bird Breeding Habitat	none present	- natural and cultural fields >30ha are not present	No
Shrub/Early Successional Bird Breeding Habitat	CUW1	- no large fields succeeding to shrub and thicket habitats > 10ha in size	No
Terrestrial Crayfish	none present	- no wet meadow and edges of shallow marshes	no
Special Concern and Rare Wildlife Species (NHIC and MNRF pre-consultation)		- Snapping Turtle (SC); Branching Burreed (SH) habitat for Snapping Turtle not found on the subject lands habitat for Branching Burreed not found on the subject lands October 18, 2017 site investigation	no

Wildlife Habitat	ELC Codes Triggers*	Additional Habitat Criteria	Candidate SWH
Amphibian Movement Corridors	based on identifying SWH	Movement corridors are determined when there is confirmed amphibian breeding habitat - wetland.	No

Wildlife Habitat	Ecosites	Habitat Criteria and Information	Candidate SWH
Bat Migratory Stopover Area	no triggers	- site is not near Long Point	No

Appendix F
NHIC List

[Francais]

Ministry of Natural Resources and Forestry

Make A Map: Natural Heritage Areas

Looking for a Park, Reserve or Wetland? Enter the name

About | Bookmarks | Map Layers | Find Information | Markup & Printing | Measure

Search By Location | Find … | Pan | Zoom In | Zoom Out | Initial View | Previous Extent | Next Extent | Help

About

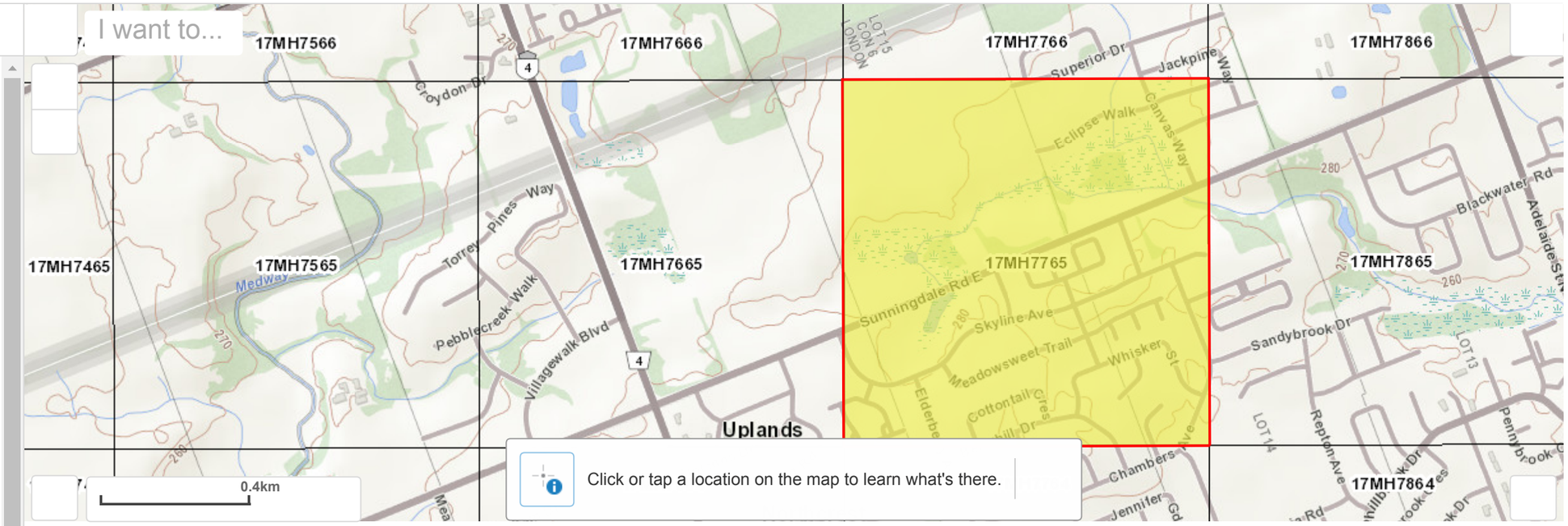
Make a Map: Natural Heritage Areas

Please note: The NHIC functionality can be found in the “Find Information” tab, “Find” button. All attributes for a location can be retrieved using this tool. Once you have retrieved NHIC data, click on a row to view species, natural areas and plant communities.

The Make a Map: Natural Heritage Areas mapping application displays some of Ontario’s natural heritage information, such as wetlands, woodlands, provincial parks, and Natural Heritage Information Centre data. The application can show planning areas and designations for provincial plans such as the Niagara Escarpment Plan. It also displays topographic base information such as roads, rivers and municipal boundaries. You can zoom in and out, turn information on and off, identify features, and print a map of the displayed information along with your own added text. For more information about this application and the data used to support it, please view the following link http://www.ontario.ca/environment-and-energy/make-natural-heritage-area-map

If your question has not been covered by the information in this link, please send us an email at naturalheritage@ontario.ca

The information provided in the Make a Map: Natural Heritage Areas application is illustrative only. Users should not rely on its



NHIC Data -- Grid ID = 870309

Element Type	Common Name	Scientific Name	SRank	SARO Status	COSEWIC Status	Last Obs Date	EO ID	Details URL
SPECIES	Branching Burreed	Sparganium androcladum	SH			1882-09-23	3555	http://nhic.mnr.gov.on.ca/reports/public_de
SPECIES	Snapping Turtle	Chelydra serpentina	S3	SC	SC	1997-06-29	96013	http://nhic.mnr.gov.on.ca/reports/public_de

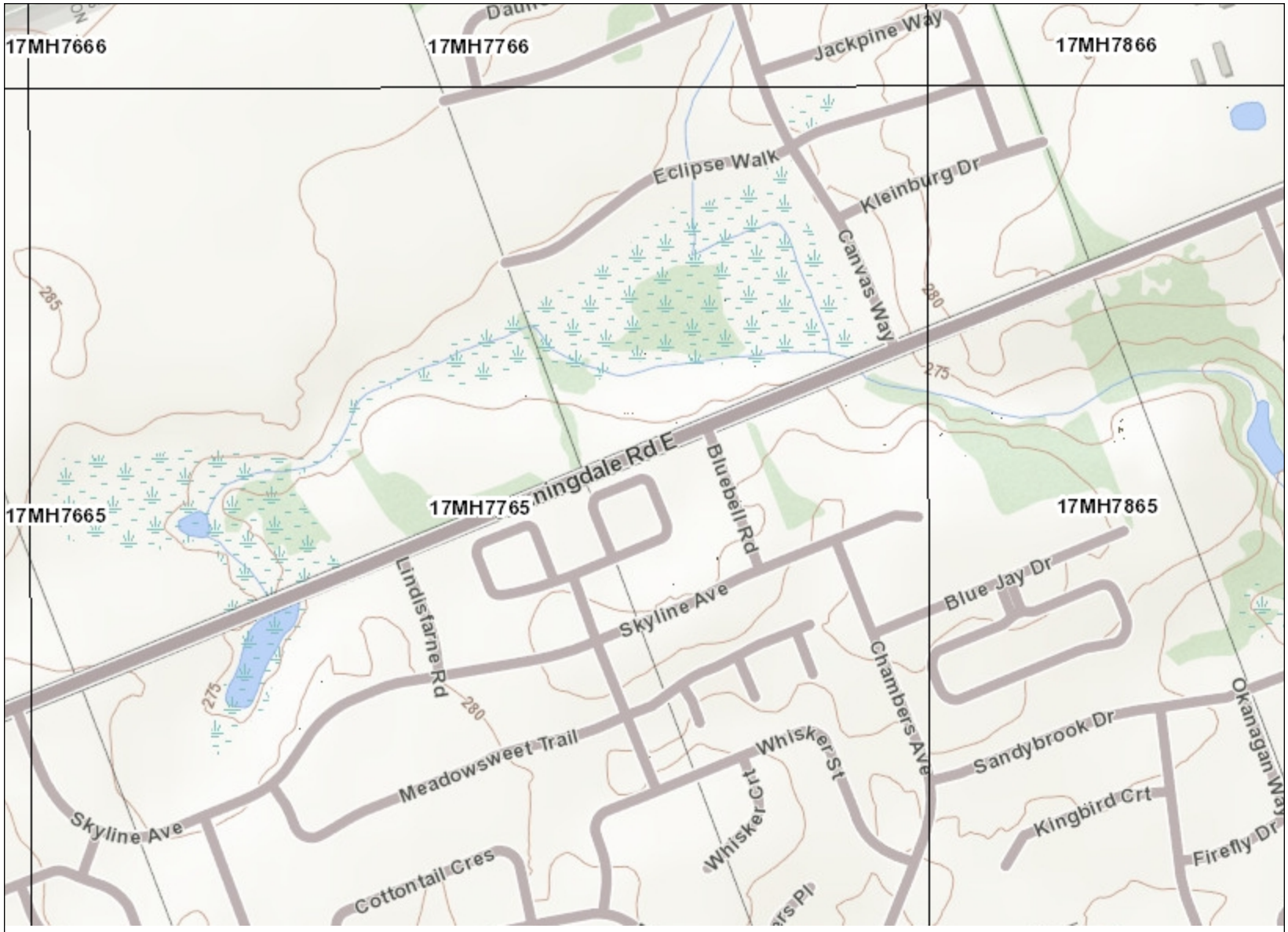
Ontario

Ministry of Natural Resources and Forestry

Make-a-Map: Natural Heritage Areas

Enter map title

Notes: Enter map notes



Legend

- Assessment Parcel
- Woodland
- Conservation Reserve
- Provincial Park
- Natural Heritage System
- Ecoregion

Wetland

- Provincially Significant Wetland Evaluated
- Non - Provincially Significant Wetland Evaluated
- Unevaluated Wetland

Area of Natural Heritage & Scientific Interest (ANSI)

- Provincially Significant Life Science ANSI
- Provincially Significant Earth Science ANSI

Greenbelt Plan

- Boundary
- River Valley Connections

Land Use Designations

- Protected Countryside
- Towns and Villages
- Hamlets
- Urban River Valley
- Specialty Crop Area

Niagara Escarpment Plan (NEP)

- Boundary
- Parks and Open Space System

Land Use Designations

- Escarpment Natural Area
- Escarpment Protection Area
- Escarpment Rural Area
- Mineral Resource Extraction Area
- Escarpment Recreation Area
- Urban Area
- Minor Urban Centre

Oak Ridges Moraine Conservation Plan (ORM)

- Boundary

Land Use Designations

- Natural Core Area
- Natural Linkage Area
- Countryside Area
- Rural Settlement
- Palgrave Estates Residential Community
- Settlement Area

0.5 0 0.23 0.5 Kilometers

Scale: 1 : 9,027

This map should not be relied on as a precise indicator of routes or locations, nor as a guide to navigation. The Ontario Ministry of Natural Resources and Forestry(OMNRF) shall not be liable in any way for the use of, or reliance upon, this map or any information on this map.

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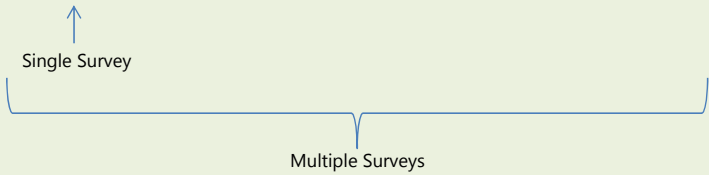
Appendix G
Floral Inventory

Survey Information (Please fill in all information)						
Surveyor(s) Contact Information		**Date(s) of Survey(s):**				
Observer Name:	William Huys		**Survey 1**	**Survey 2**	**Survey 3**	**Survey 4**	**Survey 5**
Title:		**Date (YYYY-MM-DD):**	2017/10/18	2018/05/22	2018/06/05	2018/06/20	2018/07/10
Company:	BioLogic						
Street Address 1:	201-110 Riverside Drive						
Street Address 2:							
City/Town:	London						
Province:	Ontario						
Postal Code:	N6H 4S5						
Phone:	519-434-1516						
Fax:	51-434-0575						
E-mail:	whuys@biologic.ca						
Other Observers:	Erin Boynton						
Natural Feature Information						
Natural Feature ID (Name/Location):	Cultural Woodland						
Upper Tier Municipality:	City of London						
Lower Tier Municipality:							
Property Ownership/Owner:	Westchester Homes						
Detailed Directions to the Site:							
ARN:							
PIN:							
Lat/Long:		*decimal degrees separated by a comma (eg. 42.0415, -82.5137)*					
UTM x:							
UTM y:							



Floral Inventory							
Scientific Name	**Common Name**	**CW**	**OSEW**	**SARO**	**MD**	**Type**	**Invasive**
Acer platanoides	Norway Maple	5.0			IU	TR	Y
Acer rubrum	Red Maple	0.0			C	TR	
Acer saccharinum	Silver Maple	-3.0			C	TR	
Acer saccharum	Sugar Maple	3.0			C	TR	
Achillea millefolium	Common Yarrow	3.0				FO	
Agrostis gigantea	Redtop	-3.0			IC	GR	Y
Alliaria petiolata	Garlic Mustard	0.0			IC	FO	Y
Arctium minus	Common Burdock	3.0			IC	FO	
Asclepias syriaca	Common Milkweed	5.0			C	FO	
Barbarea vulgaris	Bitter Wintercress	0.0			IC	FO	
Carex blanda	Woodland Sedge	0.0			C	SE	
Carex sparganioides	Burreed Sedge	3.0			U	SE	
Cichorium intybus	Chicory	3.0			IC	FO	
Cirsium arvense	Canada Thistle	3.0			IC	FO	Y
Clinopodium vulgare	Field Basil	5.0			X	FO	
Convallaria majalis	European Lily-of-the-valley	5.0			IR	FO	Y
Cornus racemosa	Gray Dogwood	0.0			X	SH	
Cornus sericea	Red-osier Dogwood	-3.0			C	SH	
Dactylis glomerata	Orchard Grass	3.0			IC	GR	
Daucus carota	Wild Carrot	5.0			IC	FO	
Dianthus armeria	Deptford Pink	5.0			IX	FO	
Echinochloa crus-galli	Large Barnyard Grass	-3.0			IC	GR	
Elymus repens	Creeping Wildrye	3.0			IC	GR	
Erigeron annuus	Annual Fleabane	3.0			C	FO	
Erigeron canadensis	Canada Horseweed	3.0			C	FO	
Frangula alnus	Glossy Buckthorn	0.0			IU	SH	Y
Galium odoratum	Sweet Bedstraw	5.0			IR	FO	
Geranium robertianum	Herb-Robert	3.0			C	FO	
Glechoma hederacea	Ground Ivy	3.0			IX	FO	
Hemerocallis fulva	Orange Daylily	5.0			IX	FO	Y
Hypericum punctatum	Spotted St. John's-wort	0.0			X	FO	
Iris x germanica	(Iris pallida X Iris variegata)	5.0			hyb	FO	
Juglans nigra	Black Walnut	3.0			X	TR	
Juncus tenuis	Path Rush	0.0			X	RU	
Lapsana communis	Common Nipplewort	3.0			IR	FO	
Leucanthemum vulgare	Oxeye Daisy	5.0			IC	FO	
Liriodendron tulipifera	Tulip Tree	3.0			U	TR	
Lolium arundinaceum	Tall Fescue	3.0			IC	GR	
Lonicera tatarica	Tartarian Honeysuckle	3.0			IX	SH	Y
Lotus corniculatus	Garden Bird's-foot Trefoil	3.0			IX	FO	Y
Mollugo verticillata	Green Carpet-weed	0.0			IR	FO	
Muhlenbergia mexicana	Mexican Muhly	-3.0			C	GR	
Nepeta cataria	Catnip	3.0			IC	FO	
Oxalis stricta	Upright Yellow Wood-sorrel	3.0			X	FO	
Penstemon digitalis	Foxglove Beardtongue	0.0			X	FO	

Picea abies	Norway Spruce	5.0			IX	TR	
Picea glauca	White Spruce	3.0			IR	TR	
Pinus resinosa	Red Pine	3.0			IR	TR	
Plantago lanceolata	English Plantain	3.0			IC	FO	
Poa pratensis	Kentucky Bluegrass	3.0				GR	
Prunella vulgaris ssp. vulgaris	Common Self-heal	0.0				FO	
Prunus avium	Sweet Cherry	5.0			IR	TR	
Rhamnus cathartica	Common Buckthorn	0.0			IC	SH	Y
Rhus typhina	Staghorn Sumac	3.0			C	SH	
Ribes americanum	Wild Black Currant	-3.0			C	SH	
Rubus occidentalis	Black Raspberry	5.0			C	SH	
Rumex crispus	Curly Dock	0.0			IC	FO	
Setaria faberi	Giant Foxtail	3.0			IC	GR	
Solidago altissima	Tall Goldenrod	3.0				FO	
Solidago canadensis	Canada Goldenrod	3.0				FO	
Spiraea x vanhouttei	(Spiraea cantoniensis X Spiraea trilobata)	5.0				SH	
Symphyotrichum pilosum var. pilosum	Old Field Aster	3.0			U	FO	
Syringa vulgaris	Common Lilac	5.0			IX	SH	Y
Taraxacum officinale	Common Dandelion	3.0			IC	FO	
Thuja occidentalis	Eastern White Cedar	-3.0			X	TR	
Tilia americana	American Basswood	3.0			C	TR	
Trifolium arvense	Rabbit-foot Clover	5.0				FO	
Trifolium pratense	Red Clover	3.0			IX	FO	
Tussilago farfara	Colt's-foot	3.0			IC	FO	Y
Ulmus pumila	Siberian Elm	3.0			IR	TR	Y
Verbascum thapsus	Common Mullein	5.0			IC	FO	
Verbena urticifolia	White Vervain	0.0			X	FO	
Viola sororia	Woolly Blue Violet	0.0			X	FO	
Viola tricolor	Johnny-jump-up	5.0			IR	FO	
Vitis riparia	Riverbank Grape	0.0			C	VW	

GENERAL SITE INFORMATION FIELD SHEET

Project: Auburn - 348 Sunningdale
Date: Oct. 18, 2017 Project Manager:
Collector(s): WN Visit #: 1
Time started: 11:30 Time finished: 12:13 Combined collectors' hours: 0.75
☐ NHIC List ☐ MNR EO's ☐ none ☐ not provided to collector

WEATHER CONDITIONS				
Temp.	Wind:	3	Cloud Cover (%)	Precipitation
18	Direction:	SW	0	Today: no Yesterday: no

DATA FOCUS					
☐	Birds 1__ 2__ Mig__	☐	ELC's	☐	Dripline/Tree Survey
☐	Mammals	☒	Floral V__ S__ A☒	☐	Aquatic - Physical
☐	Amphibians 1_ 2_ 3_	☐	Wetland	☐	Aquatic - Biological
☐	Reptiles	☐	Butternut (BHA)	☐	Faunal Habitat
☐	Inverterbrates	☐	other SAR	☐	Other - see notes

WIND SCALE	
0	Calm
1	Smoke Drifts
2	Wind Felt on Face
3	Leaves in constant motion
4	Wind raises dust and paper
5	Small trees sway
6	Large branches sway
7	Lots of resistance when walking into
8	Limbs breaking off trees

FEATURES (with GPS co-ordinates where applicable)	Mapped	Follow-up Req'd		
	UTM	Yes	No	Who
Man-made Structures: ☐ None observed				
Yes No				
☒ ☐ Barns/Footings/Wells/other(list)				
☐ ☒ Rock Piles				
☐ ☒ Garbage				
Natural Vegetation: ☐ None observed				
☒ ☐ Fallen Logs outside woods (#'s)				
☐ ☒ Brush Piles				
☐ ☒ Snags (raptor perch)				
☒ ☐ Tree Cavities (nesting) potential bat				
☐ ☒ Sentinel Trees				
☐ ☒ Butternut Identified				
☐ ☒ Mast Trees (6E) ☐ Berry Shrubs (6E)				
Wildlife Features: ☐ None observed				
☐ ☒ Waterfowl nesting (large #'s, # of species)				
☐ ☒ Exposed Banks (nesting swallows)				
☐ ☒ Stick Nests				
☐ ☒ Animal Burrows (>10cm)				
☐ ☒ Heronry				
☐ ☒ Crayfish mounds				
☐ ☒ Sand/gravel on site				
☐ ☒ Marsh/open country/shrub				
☐ ☒ Winter Deer yards				
☐ ☒ Corridor from pond to woods (ampibian movement)				
☐ ☒ Bat corridor (shorelines, escarpments)				
☐ ☒ Bat hibernacula (caves, mines, crevices, etc.)				
Aquatic Features:				
☐ ☒ Perm. pond in woodland ☐ emergents/submergents/logs ☐ temp.				
☐ ☒ Perm. pond in open ☐ emergents/submergents/logs ☐ temp.				
☐ ☒ Water in woodland ☐ pools ☐ flowing ☐ dry				
☐ ☒ Waterways flowing dry pools				
☐ natural stream ☐ ☐ ☐				
☐ swale ☐ ☐ ☐ ☐ None observed				
☐ open drain ☐ ☐ ☐				
Seeps/Springs ☐ ☐ ☐				
Incidental Observations/Notes: stage 1 data.				

Graphic ☐ Attached or Name N:\Templates\Other Templates\Field Sheets\BioLogic_General Field Sheet Checked by Project Manager ☐ Date:

GENERAL SITE INFORMATION FIELD SHEET

Project: Westchester - Sunningdale
Date: May 22, 2018 Project Manager: LM
Collector(s): WN Visit #: 2
Time started: 3:30 Time finished: 4:15 Combined collectors' hours: ____
☐ NHIC List ☐ MNR EO's ☐ none ☐ not provided to collector

WEATHER CONDITIONS

Temp.	Wind:	2	Cloud Cover (%)	Precipitation
18	Direction:	E	95%	Today: no Yesterday: no

WIND SCALE

0	Calm
1	Smoke Drifts
2	Wind Felt on Face
3	Leaves in constant motion
4	Wind raises dust and paper
5	Small trees sway
6	Large branches sway
7	Lots of resistance when walking into
8	Limbs breaking off trees

DATA FOCUS

☒	Birds 1__ 2__ Mig☒	☐	ELC's	☐	Dripline/Tree Survey
☐	Mammals	☒	Floral V☒_ S__ A_	☐	Aquatic - Physical
☐	Amphibians 1_ 2_ 3_	☐	Wetland	☐	Aquatic - Biological
☐	Reptiles	☐	Butternut (BHA)	☐	Faunal Habitat
☐	Inverterbrates	☐	other SAR	☐	Other - see notes

FEATURES (with GPS co-ordinates where applicable)

		Mapped	Follow-up Req'd		
		UTM	Yes	No	Who
Man-made Structures: ☐ None observed					
Yes No					
☐ ☒	Barns/Footings/Wells/other(list) Well and footings removed				
☐ ☒	Rock Piles				
☐ ☒	Garbage				
Natural Vegetation: ☐ None observed					
☐ ☒	Fallen Logs outside woods (#'s)				
☐ ☒	Brush Piles				
☐ ☒	Snags (raptor perch)				
☒ ☐	Tree Cavities (nesting)				
☐ ☒	Sentinel Trees				
☐ ☒	Butternut Identified				
☐ ☒	Mast Trees (6E) ☐ Berry Shrubs (6E)				
Wildlife Features: ☐ None observed					
☐ ☒	Waterfowl nesting (large #'s, # of species)				
☐ ☒	Exposed Banks (nesting swallows)				
☐ ☒	Stick Nests				
☐ ☒	Animal Burrows (>10cm)				
☐ ☒	Heronry				
☐ ☒	Crayfish mounds				
☐ ☒	Sand/gravel on site				
☐ ☒	Marsh/open country/shrub				
☐ ☒	Winter Deer yards				
☐ ☒	Corridor from pond to woods (ampibian movement)				
☐ ☒	Bat corridor (shorelines, escarpments)				
☐ ☒	Bat hibernacula (caves, mines, crevices, etc.)				
Aquatic Features:					
☐ ☒	Perm. pond in woodland ☐ emergents/submergents/logs ☐ temp.				
☐ ☒	Perm. pond in open ☐ emergents/submergents/logs ☐ temp.				
☐ ☒	Water in woodland ☐ pools ☐ flowing ☐ dry				
☐ ☒	Waterways flowing dry pools				
	☐ natural stream ☐ ☐ ☐				
	☐ swale ☐ ☐ ☐ ☐ None observed				
	☐ open drain ☐ ☐ ☐				
	Seeps/Springs ☐ ☐ ☐				

Incidental Observations/Notes:

Graphic ☐ Attached or Name N:\Templates\Other Templates\Field Sheets\BioLogic_General Field Sheet Checked by Project Manager ☐ Date: ____

GENERAL SITE INFORMATION FIELD SHEET

Project: Westbrooke Homes
Date: Jan 5 2018 Project Manager: LM
Collector(s): WH, EB Visit #: 3
Time started: 6:43 Time finished: 7:15 Combined collectors' hours: 0.5
☐ NHIC List ☐ MNR EO's ☐ none ☐ not provided to collector

WEATHER CONDITIONS				
Temp.	Wind:	1	Cloud Cover (%)	Precipitation
11	Direction:	—	60	Today: no Yesterday: no

WIND SCALE	
0	Calm
1	Smoke Drifts
2	Wind Felt on Face
3	Leaves in constant motion
4	Wind raises dust and paper
5	Small trees sway
6	Large branches sway
7	Lots of resistance when walking into
8	Limbs breaking off trees

DATA FOCUS

☒	Birds 1☒ 2☐ Mig☐	☒	ELC's	☐	Dripline/Tree Survey
☐	Mammals	☒	Floral V☐ ☒S☐☐ A☐	☐	Aquatic - Physical
☐	Amphibians 1☐ 2☐ 3☐	☐	Wetland	☐	Aquatic - Biological
☐	Reptiles	☐	Butternut (BHA)	☐	Faunal Habitat
☐	Inverterbrates	☐	other SAR	☐	Other - see notes

FEATURES (with GPS co-ordinates where applicable)	Mapped	Follow-up Req'd		
	UTM	Yes	No	Who
Man-made Structures: ☐ None observed				
☐ ☒ Barns/Footings/Wells/other(list)				
☐ ☒ Rock Piles				
☒ ☐ Garbage				
Natural Vegetation: ☐ None observed				
☐ ☒ Fallen Logs outside woods (#'s)				
☐ ☒ Brush Piles				
☐ ☒ Snags (raptor perch)				
☒ ☐ Tree Cavities (nesting)				
☐ ☒ Sentinel Trees				
☐ ☒ Butternut Identified				
☐ ☒ Mast Trees (6E) ☐ Berry Shrubs (6E)				
Wildlife Features: ☐ None observed				
☐ ☒ Waterfowl nesting (large #'s, # of species)				
☐ ☒ Exposed Banks (nesting swallows)				
☐ ☒ Stick Nests				
☐ ☒ Animal Burrows (>10cm)				
☐ ☒ Heronry				
☐ ☒ Crayfish mounds				
☐ ☒ Sand/gravel on site				
☐ ☒ Marsh/open country/shrub				
☐ ☒ Winter Deer yards				
☐ ☒ Corridor from pond to woods (ampibian movement)				
☐ ☒ Bat corridor (shorelines, escarpments)				
☐ ☒ Bat hibernacula (caves, mines, crevices, etc.)				
Aquatic Features:				
☐ ☒ Perm. pond in woodland ☐ emergents/submergents/logs ☐ temp.				
☐ ☒ Perm. pond in open ☐ emergents/submergents/logs ☐ temp.				
☐ ☒ Water in woodland ☐ pools ☐ flowing ☐ dry				
☐ ☒ Waterways flowing dry pools				
☐ natural stream ☐ ☐ ☐				
☐ swale ☐ ☐ ☐ ☐ None observed				
☐ open drain ☐ ☐ ☐				
Seeps/Springs ☐ ☐ ☐				
Incidental Observations/Notes:				

Graphic ☐ Attached or Name N:\Templates\Other Templates\Field Sheets\BioLogic_General Field Sheet Checked by Project Manager ☐ Date:

GENERAL SITE INFORMATION FIELD SHEET

Project: Westchester Homes
Date: June 20, 2018 Project Manager: LM
Collector(s): WM Visit #: 4 of 5
Time started: 7:30 Time finished: 8:30 Combined collectors' hours: 1
☐ NHIC List ☐ MNR EO's ☐ none ☐ not provided to collector

WEATHER CONDITIONS				
Temp.	Wind:		Cloud Cover (%)	Precipitation
16	Direction:	E	100	Today: very light rain Yesterday:

WIND SCALE	
0	Calm
1	Smoke Drifts
2	Wind Felt on Face
3	Leaves in constant motion
4	Wind raises dust and paper
5	Small trees sway
6	Large branches sway
7	Lots of resistance when walking into
8	Limbs breaking off trees

DATA FOCUS

☒	Birds 1__ 2_X Mig__	☐	ELC's	☐	Dripline/Tree Survey
☐	Mammals	☐	Floral V_ _ S_ _ A_	☐	Aquatic - Physical
☐	Amphibians 1_ 2_ 3_	☐	Wetland	☐	Aquatic - Biological
☐	Reptiles	☐	Butternut (BHA)	☐	Faunal Habitat
☐	Inverterbrates	☐	other SAR	☐	Other - see notes

FEATURES (with GPS co-ordinates where applicable)	Mapped	Follow-up Req'd		
	UTM	Yes	No	Who
Man-made Structures: ☐ None observed				
☐ ☒ Barns/Footings/Wells/other(list)				
☐ ☒ Rock Piles				
☐ ☒ Garbage				
Natural Vegetation: ☐ None observed				
☐ ☒ Fallen Logs outside woods (#'s)				
☐ ☒ Brush Piles				
☐ ☒ Snags (raptor perch)				
☒ ☐ Tree Cavities (nesting)				
☐ ☒ Sentinel Trees				
☐ ☒ Butternut Identified				
☐ ☒ Mast Trees (6E) ☐ Berry Shrubs (6E)				
Wildlife Features: ☐ None observed				
☐ ☒ Waterfowl nesting (large #'s, # of species)				
☐ ☒ Exposed Banks (nesting swallows)				
☐ ☒ Stick Nests				
☐ ☒ Animal Burrows (>10cm)				
☐ ☒ Heronry				
☐ ☒ Crayfish mounds				
☐ ☒ Sand/gravel on site				
☐ ☒ Marsh/open country/shrub				
☐ ☒ Winter Deer yards				
☐ ☒ Corridor from pond to woods (ampibian movement)				
☐ ☒ Bat corridor (shorelines, escarpments)				
☐ ☒ Bat hibernacula (caves, mines, crevices, etc.)				
Aquatic Features:				
☐ ☒ Perm. pond in woodland ☐ emergents/submergents/logs ☐ temp.				
☐ ☒ Perm. pond in open ☐ emergents/submergents/logs ☐ temp.				
☐ ☒ Water in woodland ☐ pools ☐ flowing ☐ dry				
☐ ☒ Waterways flowing dry pools				
☐ natural stream ☐ ☐ ☐				
☐ swale ☐ ☐ ☐ ☐ None observed				
☐ open drain ☐ ☐ ☐				
Seeps/Springs ☐ ☐ ☐				
Incidental Observations/Notes:				

Graphic ☐ Attached or Name N:\Templates\Other Templates\Field Sheets\BioLogic_General Field Sheet Checked by Project Manager ☐ Date:

GENERAL SITE INFORMATION FIELD SHEET

Project: Westchester
Date: July 10, 2018 Project Manager:
Collector(s): WH Visit #: 5
Time started: 11:15 Time finished: 11:45 Combined collectors' hours: 0.5
☐ NHIC List ☐ MNR EO's ☐ none ☐ not provided to collector

WEATHER CONDITIONS				
Temp.	Wind:	2	Cloud Cover (%)	Precipitation
27	Direction:	W	0	Today: no Yesterday: no

WIND SCALE	
0	Calm
1	Smoke Drifts
2	Wind Felt on Face
3	Leaves in constant motion
4	Wind raises dust and paper
5	Small trees sway
6	Large branches sway
7	Lots of resistance when walking into
8	Limbs breaking off trees

DATA FOCUS

☐	Birds 1__ 2__ Mig__	☐	ELC's	☐	Dripline/Tree Survey
☐	Mammals	☒	Floral V_ _ S_X_A_	☐	Aquatic - Physical
☐	Amphibians 1_ 2_ 3_	☐	Wetland	☐	Aquatic - Biological
☐	Reptiles	☐	Butternut (BHA)	☐	Faunal Habitat
☐	Inverterbrates	☐	other SAR	☐	Other - see notes

FEATURES (with GPS co-ordinates where applicable)	Mapped	Follow-up Req'd		
	UTM	Yes	No	Who
Man-made Structures: ☐ None observed				
☐ ☒ Barns/Footings/Wells/other(list)				
☐ ☒ Rock Piles				
☐ ☒ Garbage				
Natural Vegetation: ☐ None observed				
☐ ☒ Fallen Logs outside woods (#'s)				
☐ ☒ Brush Piles				
☐ ☒ Snags (raptor perch)				
☒ ☐ Tree Cavities (nesting)				
☐ ☒ Sentinel Trees				
☐ ☒ Butternut Identified				
☐ ☒ Mast Trees (6E) ☐ Berry Shrubs (6E)				
Wildlife Features: ☐ None observed				
☐ ☒ Waterfowl nesting (large #'s, # of species)				
☐ ☒ Exposed Banks (nesting swallows)				
☐ ☒ Stick Nests				
☒ ☐ Animal Burrows (>10cm) Groundhog				
☐ ☒ Heronry				
☐ ☒ Crayfish mounds				
☐ ☒ Sand/gravel on site				
☐ ☒ Marsh/open country/shrub				
☐ ☒ Winter Deer yards				
☐ ☒ Corridor from pond to woods (ampibian movement)				
☐ ☒ Bat corridor (shorelines, escarpments)				
☐ ☒ Bat hibernacula (caves, mines, crevices, etc.)				
Aquatic Features:				
☐ ☒ Perm. pond in woodland ☐ emergents/submergents/logs ☐ temp.				
☐ ☒ Perm. pond in open ☐ emergents/submergents/logs ☐ temp.				
☐ ☒ Water in woodland ☐ pools ☐ flowing ☐ dry				
☐ ☒ Waterways flowing dry pools				
☐ natural stream ☐ ☐ ☐				
☐ swale ☐ ☐ ☐ ☐ None observed				
☐ open drain ☐ ☐ ☐				
Seeps/Springs ☐ ☐ ☐				
Incidental Observations/Notes:				

Graphic ☐ Attached or Name N:\Templates\Other Templates\Field Sheets\BioLogic_General Field Sheet Checked by Project Manager ☐ Date:

Appendix H
Breeding Bird List

AVIFAUNAL SURVEY INFORMATION SUMMARY SHEET

Project: 348 Sunningdale Collector(s): WH

Visit 1: 5-Jun-18 Visit 2: 20-Jun-18

Start: 6:45 End: 7:12 Start: 7:30 End: 8:30

Weather: 11°C clear, cool, still Weather: 18°C overcast, light precipitation, cool, still

Species Code	Species Name	Evidence Code		No.		S Rank	ESA Status	PIF Status	Community	Notes	
		vis 1	vis 2	vis 1	vis 2						
DOWO	Downy Woodpecker	P		2		S5					108
GCFL	Great Crested Flycatcher	VO		1		S4					118
AMCR	American Crow	VO	FY	1	3	S5					126
BCCH	Black-capped Chickadee		P		2	S5					134
AMRO	American Robin		FY		5	S5					152
GRCA	Gray Catbird		P		3	S4					153
EUST	European Starling		FY		2	SNA					156
CEDW	Cedar Waxwing		P		3	S5					157
YWAR	Yellow Warbler	SM		1		S5					163
SOSP	Song Sparrow		SM		2	S5					198
NOCA	Northern Cardinal	SM	P	1	2	S5					203
RWBL	Red-winged Blackbird	P	P	2	2	S4					207
BHCO	Brown-headed Cowbird	P		2		S4					211
BAOR	Baltimore Oriole	P	P	2	2	S4					213
AMGO	American Goldfinch	P		2		S5					215

Evidence Codes:

Breeding Bird - Possible

SH=Suitable Habitat SM=Singing Male S7=Singing Male present >7days

Breeding Bird - Probable

T=Territory A=Anxiety Behaviour D=Display N=Nest Building P=Pair V=Visiting Nest P7=Pair present >7days

Breeding Bird - Confirmed

DD=Distraction NE=Eggs AE=Nest Entry NU=Nest Used NY=Nest Young FY=Fledged Young FS=Food/Faecal Sack

Other Wildlife Evidence

OB=Observed DP=Distinctive Parts TK=Tracks VO=Vocalization HO=House/Den FE=Feeding Evidence CA=Carcass

Fy=Eggs or Young SC=Scat SI=Other Signs (specify) FO=Flyover

Appendix I
Frog Monitoring Field Sheets

AMPHIBIAN BREEDING SURVEY INFORMATION FIELD SHEET

Project: Westchester Homes — Page ___ of ___
Station Name: Gunnisdale — Watercourse Name: Powell Drain
Darinage Sys.: — GPS Coordinates:

Visit 1 Date: April 23/18 — Start: 9:30 — End: 9:45
Weather: clear

Water °C:		Wind:	0	Noise:	3	Today- Rain:	0
Air °C:	13.5°C	Cloud%:	20%			Yesterday- Rain:	6

Max °C: 23°C
Max °C:
Control Site: Y/N — Were Frogs Calling: (Y)/N — Where: Drainwetland + Swm Pond treast — Collector(s): LM

Amphibian Data: No frogs on site

Field Note Community:		Uplands N		Powell		on-											
ELC Community:		wetland/swm		Drainwetland		site											
Species	Season	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#
Wood Frog	e. spring																
Spring Peeper	e. spring	2		2													
Western Chorus Frog	e. spring																
Boreal Chorus Frog	e. spring																
American Toad	spring																
Northern Leopard Frog	spring																
Pickerel Frog	spring																
Gray Treefrog	spring																
Fowler's Toad	spring																
Mink Frog	summer																
Green Frog	summer																
Bullfrog	summer																

Visit 2 Date: May 22, 2018 — Start: 11:30 — End: 11:45 pm
Weather: cloudy

Water °C:		Wind:	2	Noise:	2	Today- Rain:	~2mm
Air °C:	12	Cloud%:	100			Yesterday- Rain:	0

Max °C: 18°
Max °C: 21°C
Control Site: Y/N — Were Frogs Calling: Y/N — Where: — Collector(s): LM

Amphibian Data:

Species	Season	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#
Wood Frog	e. spring																
Spring Peeper	e. spring	1		1													
Western Chorus Frog	e. spring																
Boreal Chorus Frog	e. spring																
American Toad	spring																
Northern Leopard Frog	spring																
Pickerel Frog	spring																
Gray Treefrog	spring	1															
Fowler's Toad	spring																
Mink Frog	summer																
Green Frog	summer																
Bullfrog	summer																

Visit 3 Date: June 18 — Start: 940 — End: 9:50
Weather: humid cloudy

Water °C:		Wind:	1	Noise:	2	Today- Rain:	3mm
Air °C:	24°C	Cloud%:	90%			Yesterday- Rain:	0

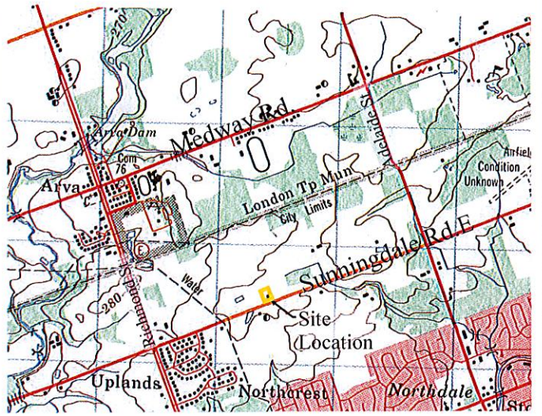
Max °C: 35
Max °C: 35
Control Site: (Y)/N — Were Frogs Calling: (Y)/N — Where: Nissouri Rd wetland Uplands N wetland Swm — Collector(s): LM

Amphibian Data:

Species	Season	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#	CC	#
Wood Frog	e. spring																
Spring Peeper	e. spring																
Western Chorus Frog	e. spring																
Boreal Chorus Frog	e. spring																
American Toad	spring																
Northern Leopard Frog	spring																
Pickerel Frog	spring																
Gray Treefrog	spring																
Fowler's Toad	spring																
Mink Frog	summer																
Green Frog	summer	1		1													
Bullfrog	summer																

Figure 1: Site Location

(City of London Air Photo 2016)



0 1,000

Scale 1:50,000

Key Plan

Print on 11X17, Landscape Orientation

0 90

Scale 1:4500

February 2018

BioLogic

AQUATIC AND TERRESTRIAL ECOSYSTEM PLANNERS

Appendix J
Candidate SAR Bat Maternity Roosting Habitat Field Sheets

GENERAL SITE INFORMATION FIELD SHEET

Project: Westchester Homes
Date: April 25, 2018 Project Manager: LM
Collector(s): LM Visit #:
Time started: 3:00pm Time finished: 4:15pm Combined collectors' hours:
☐ NHIC List ☐ MNR EO's ☐ none ☐ not provided to collector

WEATHER CONDITIONS

Temp.	Wind:		Cloud Cover (%)	Precipitation
25	Direction:	NW	100%	Today: ~2mm Yesterday: ~1mm

WIND SCALE

0	Calm
1	Smoke Drifts
2	Wind Felt on Face
3	Leaves in constant motion
4	Wind raises dust and paper
5	Small trees sway
6	Large branches sway
7	Lots of resistance when walking into
8	Limbs breaking off trees

DATA FOCUS

☐ Birds 1__ 2__ Mig__	☐ ELC's	☐ Dripline/Tree Survey	
☐ Mammals	☐ Floral V__ S__ A_	☐ Aquatic - Physical	
☐ Amphibians 1_ 2_ 3_	☐ Wetland	☐ Aquatic - Biological	
☐ Reptiles	☐ Butternut (BHA)	✓ Faunal Habitat	
☐ Inverterbrates	✓ other SAR ~~bat habitat~~ trees	☐ Other - see notes	

FEATURES (with GPS co-ordinates where applicable)

		Mapped	Follow-up Req'd		
		UTM	Yes	No	Who
Man-made Structures:	☐ None observed				
☐ ☐	Barns/Footings/Wells/other(list)				
☐ ☐	Rock Piles				
☐ ☐	Garbage				
Natural Vegetation:	☐ None observed				
☐ ☐	Fallen Logs outside woods (#'s)				
☐ ☐	Brush Piles				
✓ ☐	Snags (raptor perch)				
✓ ☐	Tree Cavities (nesting)				
☐ ☐	Sentinel Trees				
☐ ☐	Butternut Identified				
☐ ☐	Mast Trees (6E) ☐ Berry Shrubs (6E)				
Wildlife Features:	☐ None observed				
☐ ☐	Waterfowl nesting (large #'s, # of species)				
☐ ☐	Exposed Banks (nesting swallows)				
☐ ☐	Stick Nests				
☐ ☐	Animal Burrows (>10cm)				
☐ ☐	Heronry				
☐ ☐	Crayfish mounds				
☐ ☐	Sand/gravel on site				
☐ ☐	Marsh/open country/shrub				
☐ ☐	Winter Deer yards				
☐ ☐	Corridor from pond to woods (ampibian movement)				
☐ ✓	Bat corridor (shorelines, escarpments)				
☐ ✓	Bat hibernacula (caves, mines, crevices, etc.)				
Aquatic Features:					
☐ ☐	Perm. pond in woodland ☐ emergents/submergents/logs ☐ temp.				
☐ ☐	Perm. pond in open ☐ emergents/submergents/logs ☐ temp.				
☐ ☐	Water in woodland ☐ pools ☐ flowing ☐ dry				
☐ ☐	Waterways flowing dry pools				
	☐ natural stream ☐ ☐ ☐				
	☐ swale ☐ ☐ ☐ ☐ None observed				
	☐ open drain ☐ ☐ ☐				
	Seeps/Springs ☐ ☐ ☐				

Incidental Observations/Notes:

Site investigation to look for potential Bat maternity roosting trees

Graphic ☐ Attached or Name: N:\Templates\Other Templates\Field Sheets\BioLogic_General Field Sheet Checked by Project Manager ☐ Date:

Appendix B – Suitable Maternity Roost Trees for Little Brown Myotis/Northern Myotis

Include all live and dead standing trees ≥10cm dbh with loose or naturally exfoliating bark, cavities, hollows or cracks.

Project Name: Westchester

Survey Date(s): April 25, 2018

Site Name: Sunningdale Rd

Observers(s): LM

ELC Ecosite:

Snag Density (snags/ha):

Tree #	Tree Species ID	dbh (cm)	Height Class[2]	Snag attributes (check all that apply)	Easting	Northing	Notes
1	poplar or black locust	60	2	☐ cavity[3] ☑ loose bark ☐ crack ☑ knot hole ☐ other snag within 10m? ☑ Decay Class 1-3?[4]			outside South Boundary @ road
2	cottonwood ?	60	3	☐ cavity ☑ loose bark ☑ crack ☐ knot hole ☐ other snag within 10m? ☑ Decay Class 1-3?			"
3	sugar maple	75	3	☑ cavity ☑ loose bark ☐ crack ☐ knot hole ☐ other snag within 10m? ☑ Decay Class 1-3?			SW corner
4	Oak ?	60	3	☑ cavity ☐ loose bark ☐ crack ☐ knot hole ☐ other snag within 10m? ☑ Decay Class 1-3?			Broken top
5	Cottonwood	65	3	☐ cavity ☑ loose bark ☐ crack ☐ knot hole ☐ other snag within 10m? ☑ Decay Class 1-3?			
6	sugar maple	60	2	☐ cavity ☑ loose bark ☐ crack ☑ knot hole ☐ other snag within 10m? ☑ Decay Class 1-3?			
7	elm	60	3	☐ cavity ☐ loose bark ☐ crack ☐ knot hole ☑ other snag within 10m? ☐ Decay Class 1-3?	w/10m		
8	elm	40	3	☐ cavity ☐ loose bark ☐ crack ☐ knot hole ☑ other snag within 10m? ☐ Decay Class 1-3?	w/in		dead
9	elm	48	2	☐ cavity ☐ loose bark ☐ crack ☐ knot hole ☐ other snag within 10m? ☐ Decay Class 1-3?	10m		dead limbs
10	elm	65	3	☐ cavity ☐ loose bark ☐ crack ☐ knot hole ☐ other snag within 10m? ☐ Decay Class 1-3?			dead limbs

[2] **Height Class**: 1 = Dominant (above canopy); 2 = Co-dominant (canopy height); 3 = Intermediate (just below canopy); 4 = suppressed (well below canopy)

[3] The approx. height of the cavity should be noted. Note that cavities with an entrance near the ground may also be used by bats if they are "chimney-like".

[4] **Decay Class**: 1 = Healthy, live tree; 2 = Declining live tree, part of canopy lost; 3 = Very recently dead, bark intact, branches intact


9
10
8
7
6
5
4
3
2 - offsite
1 - offsite
Sunningdale Rd E
Google Earth
Image © 2018 DigitalGlobe
N
400 ft

Appendix K
MNRF Letter to Proponent

Ministry of Natural Resources and Forestry
615 John Street North
Aylmer ON N5H 2S8
Tel: 519-773-9241
Fax: 519-773-9014

Ministère des Richesses naturelles et des Forêts
615, rue John Nord
Aylmer ON N5H 2S8
Tél: 519-773-9241
Téléc: 519-773-9014

Ontario

October 30, 2018

AYL-L-183-18

Westchester Homes
416 Ridout St
London ON
N6C 4A1

Dear Westchester Homes:

RE: Westchester Homes - 348 Sunningdale and the *Endangered Species Act, 2007*

The Ministry of Natural Resources and Forestry (MNRF) has reviewed the information that was provided on the proposed [project name] project to assess the potential impacts of the proposal on endangered or threatened species and their habitats. From the information provided, it is our understanding that the proposed project falls within these parameters:

a) The project is located at 348 Sunningdale Road, London, Ontario
b) The proposed project involves the construct cluster single-detached and townhouse dwelling units in a condominium format.
c) The proposed project will begin on October, 2018.
d) MNRF has reviewed species at risk (SAR) occurrence information on file and determined that there are known occurrences of Little Brown Myotis - Endangered in the general area of the project location with potential to occur in the project location.

Based on a review of the above information, MNRF has determined that the activities associated with the project, as currently proposed, **will likely not contravene** section 9 (species protection) and/or section 10 (habitat protection) of the *Endangered Species Act, 2007* (ESA 2007) for SAR **provided the following recommendations are implemented:**

1) To protect bat species and their habitat, please follow the attached documents outlining MNRF's approved survey methodology for SAR bats, as well as a guidance document from MNRF Guelph District that we accept being used within Aylmer District.

2) If suitable maternity roost trees are identified and are planned for removal, MNRF (contact information below) should be contacted immediately for further advice

OR

3) Tree removal activities should avoid the bat active season, i.e. the time period when bats are likely to be using treed habitat to support foraging and roosting (generally corresponds to May 1 to September 1 in a given year).

4) If maternity roost sites are found within the proposed project site and are planned for removal, MNRF recommends the installation of bat boxes at a 2:1 ratio (i.e. 8 bat boxes installed for the 4 cavity trees removed) in suitable habitat.

If the above recommendations are implemented, the activity will likely not contravene section 9 (species protection) and/or section 10 (habitat protection) of the ESA 2007.

This Letter to Proponent (AYL-L-183-18) is valid until December 31st, 2019. MNRF should be contacted for a new review if the project activities have not been completed by this date, or if land ownership has changed.

Should any of the project parameters change, or if it is not possible to comply with all the above recommendations, please notify the MNRF Aylmer District office (ESA.Aylmer@ontario.ca) immediately to obtain guidance on whether additional actions will need to be taken to remain in compliance with the ESA 2007. Also, if any SAR species and/or habitats are observed on the property, please contact the MNRF Aylmer District office as soon as possible to report the observation.

It is important to note that changes may occur in both species and habitat protection which could affect whether proposed projects may have adverse effects on SAR. The ESA 2007 applies to endangered and threatened species listed on the Species at Risk in Ontario (SARO) List (http://www.ontario.ca/environment-and-energy/species-risk-ontario-list). The Committee on the Status of Species at Risk in Ontario (COSSARO) meets regularly to evaluate new species for listing and/or re-evaluate species already on the SARO List. As a result, species designations may change, which could in turn change the level of protection they receive under the ESA 2007. Also, habitat protection provisions for a species may change if a species-specific habitat regulation comes into effect.

Please be advised that it is your responsibility to be aware of and comply with all other relevant provincial or federal legislation, municipal by-laws or required approvals from other agencies.

If you have any concerns or questions regarding this letter, please contact me by email at ESA.Aylmer@ontario.ca.

Sincerely,

Jason Webb
Management Biologist, Aylmer District
Ministry of Natural Resources and Forestry

Appendix L
City of London Woodland Guidelines

Table 1: Woodland Evaluation – Westerchester Homes 348 Sunningdale Rd

Vegetation Communities: unevaluated patch not mapped on Schedules

Criterion	Evaluation	Factors for Evalution	Patch Attributes	Patch Standard	Standard	Highest Standard
15.4.5 -i Important Features	1.1 Site Protection	Presence of Hydrological Features within or contiguous with the patch	ephemeral water at east edge connecting to a pocket of reed canary grass 0.02ha in area; no swale or watercourse on the Subject Lands; water may sheet flow to the east	The patch is not cat1/groundwater recharge or in a large wetland; the patch does not contain a wetland, although there is one to the east. There is a small swale within the patch but it is often dry and should not be considered important to the intregrity of the Natural Heritage system	Low	**Low**
		Erosion and Slope Protection	slopes nearly level	slopes <10%	Low	
	1.2 Landscape Integrity	Landscape Richness	96 ha witin 2 km^2	7-10% local vegetation cover	Medium	**Medium**
		Landscape Connectivity	separated by culltural meadow; the patch is connected to the Powell Drain Wetland by contiguous cultural meadow that surounds the property (between the wetland and Sunningdale Rd). The trees on site were not considered part of the patch when evaluated in SWStudies or Area Plan	woodland habitat gaps <40m	Medium	
		Patch Distribution	patch cluster north of Sunningdale is 15ha	patch cluster <20ha	Low	
15.4.5 -ii important functions	2.1 Age and Site Quality	Community Successional Stage	Trees on the subject lands are generally mature trees - mix of Sugar Maple, White Spruce, Red Pine Adjacent lands - thicket is pioneer to young and woodland is young to midage	mature trees, but not a mature community; there are no woodland or forest layers present; maintained grounds on the property save and except for 10m at the road.	medium	**Medium**
		Mean Coefficient of Conversatism of Communities	MCC = 2.95 with a Fall plant list	all communities with MCC<4.2 and patch <4	Low	
		Distrubances related to human activity	The Subject Lands are a former residential lot with maintained grounds	poor	Low	
	2.2 Size and Shape	Patch Size - Air photo interpretation used	City requested patch to evaluate is 0.9ha; trees on Subject Lands are contiguous with vegetation connected to the Powell Drain wetland	patch is >9ha	High	**HIGH**
		Patch Shape/Interior	patch has no interior	no interior with P:A>3m/100m^2	Low	
		Conservative Bird Species	this system has been replaced	not included in evaluation *** don't use PIF birds to replace CP birds		
	2.3 Diversity of Natural Communities and Associated Species	ELC Community Diversity	2 community series	Patch contains 1-2 Community Series	Low	
		ELC Vegetation Type and Topographic Diversity	patch is two ecosite - CUW1 and CUT1 - NO vegetation types	patch relatively homogenous; 1 Ecosite OR one to two Vegetation Types on one topographic feature - this patch is two ecosites on tableland	Low	
		Diversity & Critical Habitat Components for Amphibians	no data collected		unknown	
		Presence of Conifer Cover	Planted conifers in front yard of former residence	No coniferous communities	Low	
		Fish Habitat Quality	no defined channels	not applicable	Low	
15.4.5-iv	3.0 Endangered or Threatened Species Present		Not Applicable			**MNRF process to be followed**
15.4.5 -v distinctive or unusual	4.1 Distinctive, Unusual or High Quality Natural Communities	ELC Community SRANK	CUW	Rank is S5	Low	**Medium**
		Specialized or Rare Species Presence/Absence	No rare plants	no rare plants	Low	
		Size and Distribution of Large Trees	in the front yard of the former residence there are large trees	trees with >50cm dbh are occassional	Meduim	
		Basal Area	some large trees in the front yard of the former residence	the average basal area is <12m^2/ha for trees >10cm DBH	Low	
	4.2 Distinctive, Unusual, or High Quality Landforms	Distinctive Landforms	Eroded Channel - Till Morraine	Till Plain or Till Morraine	Medium	**Medium**

Advisory Committee Work Plan – 2018

January 2018

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

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

P.O. Box 5035
300 Dufferin Avenue
London, ON
N6A 4L9

January 30, 2019

G. Kotsifas
Managing Director, Development and Compliance Services and Chief Building Official

I hereby certify that the Municipal Council, at its meeting held on January 29, 2019 resolved:

That, on the recommendation of the Director, Development Services, the following actions be taken with respect to potential changes to the Site Plan Control By-law with respect to bird-friendly development:

a) the staff report dated January 21, 2019 entitled “Bird-Friendly Development” BE RECEIVED for information;

b) the Civic Administration BE DIRECTED to circulate the draft by-law appended to the staff report dated January 21, 2019 for review and comment on potential changes to the Site Plan Control By-law with respect to bird-friendly development; and,

c) the Civic Administration BE DIRECTED to report back on the possibility of instituting a limited lit period of high-rise buildings during an identified migratory bird season including any possible mechanism(s) for enforcement. (2019-T01) (2.2/3/PEC)

C. Saunders
City Clerk
/lm

cc. P. Yeoman, Director, Development Services
H. McNeely, Manager, Development Services
M. Pease, Manager, Development Planning
L. Maitland, Site Development Planner
M. Vivinetto, Executive Assistant to the Managing Director, Development and Compliance Services and Chief Building Official
PEC Deferred List
Chair and Members, Environmental and Ecological Planning Advisory Committee
Chair and Members, Advisory Committee on the Environment
Chair and Members, Animal Welfare Advisory Committee

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Report to Planning and Environment Committee

To: **Chair and Members**
Planning & Environment Committee
From: **George Kotsifas, P.Eng.**
Managing Director, Development and Compliance Services and Chief Building Official
Subject: **Bird-Friendly Development**
Meeting on: **January 21, 2019**

Recommendation

That, on the recommendation of the Director, Development Services, the following actions be taken:

(a) with respect to the provisions for bird-friendly development the staff report **BE RECEIVED** for information; and,

(b) Civic Administration **BE DIRECTED** to circulate the attached draft by-law for review and comment for potential changes to the Site Plan Control By-law with respect to bird-friendly development; and,

(c) Civic Administration **BE DIRECTED** to report back on the possibility of instituting a limited lit period of high-rise buildings during an identified migratory bird season including any possible mechanism(s) for enforcement.

Background and Analysis

1.0 Background

1.1 Council Resolution

On April 10, 2018 Municipal Council resolved that:

> *the fourth draft of the Green Standards for Light Pollution and Bird-Friendly Development BE REFERRED to the Manager, Development Services, to review and to prepare a version for the Municipal Council's consideration; it being noted that three Advisory Committees have made this recommendation; it being further noted that Section 4.1 of the Guidelines contemplates a light curfew for London; the specific times have been left blank; a suggested light curfew would be from 1:00 AM to 7:00 AM; and*
>
> *the fourth draft of the Green Standards for Light Pollution and Bird-Friendly Development BE REFERRED to all City of London Advisory Committees for their consideration*

This report is in response to The Green Standards for Light Pollution and Bird-Friendly Development prepared as a joint initiative of several City advisory committees. The purpose of this report is to identify a proposed approach to ensure that bird-friendly development and reduced light pollution can be achieved through the existing site plan development process. The intent is to circulate the proposed changes to the Site Plan Control By-law for public input, and consult with the three identified Advisory Committees that initiated the review and the Development Industry regarding the proposed changes.

1.2 Bird-Friendly Design

Bird strikes occur from birds' inability to comprehend glass. Birds strike windows and die from the impact or from the subsequent fall while attempting to fly towards perceived vegetation reflected in a glass window pane or to the perceived vegetated space on the other side of clear glass.

Bird deaths as a result of bird strikes in Canada are estimated at 25 million annually. The majority of these deaths occur in urban areas as the light from urban areas interferes with cues they rely on from the night sky. Lighting of the sky at night has the

effect of drawing birds into urban areas where they then seek spaces to rest. “Light pollution” can also produce spaces which are confusing to birds through reflection and glare related to electric light.

Bird-friendly design is intended to achieve an approach to lighting and glass façade design which reduces the light pollution that interrupts birds’ natural movement patterns and creates bird strike probable situations, respectively.

1.3 Bird-Friendly Practice in Other Jurisdictions

Within North America, a number of policy and regulatory approachs have been undertaken to address bird safety in the design of urban areas. In 2011, a United States Congressman from Illinois' 5th District brought forward a Bill to ensure Bird-Safe Buildings. The proposed Bill recognized the work done in three cities: Chicago, Toronto and New York. Both Chicago and New York have building design guidelines which provide guidance on design elements which will reduce bird strikes, such as the application of patterns to glass to make it clear to birds that the glass presents a barrier thereby allowing birds to see the glass and avoid strikes to the glass .

The City of Toronto has established Bird-Friendly Development Guidelines as part of the Toronto Green Standard applied during the site plan process. This includes best practices on lighting and glass to prevent bird strikes and reduce light pollution. In practice, the City of Toronto requires applicants to demonstrate how they meet the Toronto Green Standard in submitted applications. Common site plan requirements include “IDA – Dark Sky Approved” fixtures, and application of a limited light period between 11PM to 6AM on site plan during the bird migratory season (defined as April - May and Mid-August – Mid-October in Toronto).

2.0 Existing Policy and Regulatory Framework

2.1 The London Plan Policy

Policies are already in place that provide direction to reduce light pollution and prevent bird strikes. Within *The London Plan,* the City Design chapter directs building design and materials be chosen to reduce the potential for bird strikes. Specifically, Policy 304 (under appeal) reads: “*Efforts should be made to design buildings and use materials that minimize bird strikes on high-rise buildings*.” This policy supports efforts to ensure bird-friendly development through the site plan process. The Green and Healthy City chapter of *The London Plan* promotes dark skies through Policy 745 (in force and effect) which reads: “*We will support initiatives to reduce glare, light trespass, and skyglow to promote energy conservation, reduce impacts on wildlife, and support healthy neighbourhoods*.” These two policy references provide the policy support for initiatives to reduce, or prevent light pollution and address bird strikes through the site design and development process.

2.2 Site Plan Design Manual

Lighting, a primary concern in bird-friendly design, is currently addressed through the site plan process. Although portions of the *Site Plan Design Manual* speak to various aspects of lighting for pedestrian safety, transit access and fire routes, Section 8 speaks specifically to the provision of facilities for lighting, including floodlighting. Section 8 “Facilities for Lighting, Including Floodlighting,” of the *Site Plan Design Manual* is available in its entirety in Appendix A.

Section 8 identifies the objectives for lighting facilities – specifically, objective (d) directs that illumination of a site be designed to “*reduce or eliminate the potential of any adverse effect of artificial light such as: glare, light trespass, light clutter, energy waste*.” Section 8 continues, directing that:

> *The type, location, height, intensity and direction of lighting shall ensure that glare or light is not cast onto adjacent residential properties or natural areas adversely affecting living environment, or onto adjacent public streets which would pose a vehicular safety hazard. Moreover, energy conservation measures must be considered to ensure that the site is not illuminated more than it need be. In some cases, the extent of lighting may be required to be reduced after normal business hours.*

This regulation provides the framework for requiring lighting design that does not result in adverse impacts from lighting including spillage and wastage. There is an opportunity to further identify bird-friendly development as an objective in this portion of the *Site Plan Design Manual*.

Section 8 of the *Site Plan Design Manual* also provides specific requirements for lighting. Section 8.2 (b) Height, limits the maximum height of all yard lighting fixtures to 15m (50 ft.) for non-residential uses and 6m (20 ft.) for multi-family residential uses. Limiting the height of fixtures is a part of ensuring that lighting provided is directed solely to those locations where it is required, thereby preventing light pollution. As applicable, the *Site Plan Design Manual* 8.2 (d) allows staff to require a Light Study where "*a qualified engineer will prepare and provide a report demonstrating how the lighting is contained on the site and that the selection/style of light will not create glare and/or broadcast light onto adjacent properties or roadways, by the adjustment of refractors and/or the placement of Shields*." To ensure bird-friendly development, this tool can be used for larger developments which have the potential for significant light pollution.

Section 8.3 of the *Site Plan Design Manual* provides a definition for "Fascia Lighting and Floodlighting of Building" allowing staff to provide direction on its applicability and prevent or control its use as necessary to reduce light pollution and prevent bird strikes. As an example, it would be anticipated that fascia lighting and floodlighting would not be supportable for glass buildings where the glare produces light pollution and creates conditions which amplify the probability of bird strikes.

The diagrams associated with Section 8, available in Appendix A, provide exemplars of proper lighting design, which re-iterate and clarify that lighting should not illuminate adjacent properties and that the lighting system should be designed to broadcast light downward so as to reduce glare and light pollution.

It is worthy of note that the provision of lighting, including orientation and intensity, is controlled in the final development agreement required to allow for development. The standard lighting facilities clause of the template development agreement reads:

> *16. Lighting Facilities: All lighting of the site shall be oriented and its intensity controlled so as to prevent glare on adjacent roadways and residential properties to the satisfaction of the Managing Director*

Enforcement of this clause, including modifications where necessary to address identified light pollution impacts, will ensure that the policy goals related to dark skies and bird strikes are met in any finalized and approved development. The existing standard language already speaks to orientation and intensities that provide safety for pedestrians without resulting in glare or other light pollution through improper lighting facilities design.

3.0 Implementing a Bird-Friendly Approach

3.1 Application of Bird-Friendly Development Criteria

The application of bird-friendly development standards is best done at the site plan approval stage. Under *The Planning Act (1990)* developers are to "*provide to the satisfaction of and at no expense to the municipality …facilities for the lighting, including floodlighting, of the land or of any buildings or structures thereon*." Using site plan control is the approach taken by the City of Toronto and reflects the opportunity the municipality has to control lighting and design at the site plan approval stage. All submitted site plan applications should be reviewed to ensure bird-friendly design as part of the review to address lighting.

3.2 Circulation in the Site Plan Process

Circulation of proposed site plans provides the mechanism to ensure that developments meet all applicable regulatory and policy requirements. Site Development Planning staff presently lack the specific training to ensure buildings can be considered 'Bird-Friendly' but can rely on other professional staff and advisory groups to provide the ecological expertise to direct bird-friendly development. The site plan circulation process will ensure site-specific approaches required to reduce bird strikes and light pollution are provided to the site plan staff to implement bird-friendly development comprehensively across all applications.

Possible exceptions to circulation would be made for residential development less than six storeys in height, unless the development abuts a property designated Green Space within *The London Plan.* This standard is in keeping with the approach taken by the City of Toronto, recognizing that smaller residential developments away from environmental areas create less issues with regards to bird strikes and light pollution.

The City's Ecologist is currently circulated on site plan proposals that potential impact Natural Heritage areas. Comments on bird-friendly development required beyond the standards set out within the *Site Plan Design Manual* would be provided by the Ecologist Planner at time of circulation. The Ecologist may provide comment on any design elements to be added to glass facades to prevent bird strikes, if warranted.

It is proposed that developments greater than four storeys and those involving primarily glass facades would be circulated additionally to the applicable Advisory Committees to allow for comment on more high-risk developments from a bird-friendly perspective. The draft guidelines developed by EEPAC in conjunction with the Advisory Committee on the Environment and the Animal Welfare Advisory Committee can form the basis of their review and comment on site plans with respect to bird friendly development.

In implementing the approach, it is the intent that site plan staff would consider the consulting Architect's recommendations for bird-friendly glass and lighting design on mid and high-rise developments. Additional circulation for bird-friendly review would occur as follows:

- The City's Ecologist Planner would be circulated when:
    - A proposed residential development proposes buildings greater than 6 storeys or abuts the Green Space Place Type; or,
    - All proposed non-residential development utilizing reflective material.

- Environmental and Ecological Planning Advisory Committee, Advisory Committee on the Environment, and the Animal Welfare Advisory Committee would be circulated when:
    - A proposed development is greater than 6 storeys; and/or
    - A proposed non-residential development utilizing reflective material.

3.3 Standard for Lighting

The implementation of an official standard for lighting is proposed to ensure consistency and objectivity in implementation of dark sky and bird-friendly lighting design. This standard can be achieved through establishing a requirement for any installed lights to be full cut-off and have zero up light. Full cutoff fixtures have a cap to direct all light downward to the surface intended for illumination. The cap prevents glare and light trespass which result from undirected light. Undirected upward light is the greatest source of light pollution which alters the natural patterns of birdlife.

3.4 Accessibility

The established standards, identified above, do not compromise the accessibility of spaces for those with visual impairment The standards, and the proposed City of London approach seek to reduce lighting which creates glare or which is not directed to produce necessary illumination. Neither glare nor light trespass provide assistance to those with visual impairment. The City of London's existing 2007 Facility Accessibility Design Standards also align with bird-friendly requirements by applying glazing to windows to ensure that broad expanse of glass are visible to those with visual impairment.

3.5 Recommended Changes to the Site Plan Design Manual

To ensure that bird-friendly design is fully implemented, there is the need to establish it as a requirement through a Council-approved by-law. As stated above, the appropriate location to make this addition is to amend the Site Plan Control By-law to direct that bird-friendly design is a specific objective in lighting design.

Proposed amendments would include amendments to Section 8 of the *Site Plan Design Manual* to:

- Provide additional language in in the Objectives (Section 8.2) of the Facilities for Lighting, Including Floodlighting, to establish bird-friendly design as a goal of

lighting design through Site Plan Control.

- Provide a new requirement that light fixture provided be full cut-off and have zero up light.

The combination of these changes will, in association with the revised circulation process, ensure that bird-friendly design requirements are reviewed for, and ultimately implemented, in the development process.

The proposed changes are available in Appendix B as a draft amendment to the Site Plan Control By-law.

3.6 Limited Light Period

The draft Green Standards for Light Pollution and Bird-Friendly Development presented the possibility of a period where lighting would be required to be limited or turned off. The benefits of reduced light pollution at night, particularly during migratory bird season are documented. The challenge for implementation is determing a mechanism to measure, determine and enforce compliance. Site Plan Control does not implement or control regulations with regards to hours of operation. Addressing a limited light period falls outside the site plan process.

Establishing a limited light period would require two additional steps outside of those implementable through the site plan process. First, the local migratory bird season would need to be established to determine when the limited light period would be applied. Second, a compliance mechanism needs to be evaluated and established to ensure lighting conforms to temporal operation requirements in addition to addressing any requirements set out through the development agreement, which follows the site plan process.

3.7 New Requirements for Development

The impact of the proposed changes will, for most new developments, be limited to ensuring that the lighting fixtures purchased and installed for their site are full cut-off and have zero up light. Any proposed designs which would previously have required changes to reduce the adverse effects of artifical light will continue to require those changes only to meet the additional objective of bird-friendly design. The potential establishment of a limited light period during an identified migratory bird season would require any lights be extinguishable during the night.

Developments with primarily glass facades will expect that comments received at the site plan approval stage will direct the applicant to provide glass treatments that prevent bird strikes.

4.0 Conclusion

Bird-friendly development can be achieved through the existing site plan process with only minor modifications. Policy support exists within *The London Plan* to promote dark skies and reduce bird strikes through effective lighting and site design. The existing site plan circulation process can be used to ensure that professional staff and advisory committee comments on bird-friendly design are implemented through the site development process. Minor changes to the Site Plan Control By-law, specifically to Section 8 of the *Site Plan Design Manual* will ensure that standards are applied to ensure bird-friendly development on all sites in accordance with exisitng objectives which seeks the elimination of unecessary and/or adverse lighting.

Prepared by:	**Leif Maitland,** **Site Development Planner, Development Services**
Reviewed by:	**Michael Pease, MCIP, RPP** **Manager, Development Planning**
Concurred in by:	**Heather McNeely, MCIP, RPP** **Manager, Development Services (Site Plan)**
Recommended by :	**Paul Yeoman, RPP, PLE** **Director, Development Services**
Submitted by:	**George Kotsifas, P.ENG** **Managing Director, Development and Compliance Services and Chief Building Official**

January 7, 2018

Cc: Environmental and Ecological Planning Advisory Committee (EEPAC)
Advisory Committee on the Environment (ACE)
Animal Welfare Advisory Committee (AWAC)

LM/

Appendix A – Site Plan Control By-law – Section 8

8. FACILITIES FOR LIGHTING, INCLUDING FLOODLIGHTING

8.1. Objectives

To provide sufficient illumination of the site for:

(a) pedestrian security and safety;

(b) functional vehicular movement;

(c) enhancement of external building design and landscaped open space;

(d) reduce or eliminate the potential of any adverse effect of artificial light such as: glare, light trespass, light clutter, energy waste.

The type, location, height, intensity and direction of lighting shall ensure that glare or light is not cast onto adjacent residential properties or natural areas adversely affecting living environment, or onto adjacent public streets which would pose a vehicular safety hazard. Moreover, energy conservation measures must be considered to ensure that the site is not illuminated more than it need be. In some cases, the extent of lighting may be required to be reduced after normal business hours.

8.2. Yard Lighting

(a) Definition - Yard lighting illuminates broad areas such as parking lots, driveways, landscaped and recreational areas. Yard lighting is generally provided from fixtures mounted on poles or building faces.

(b) Height - For non-residential uses, the maximum height of all yard lighting fixtures shall be 15m (50 ft). For multi-family residential uses, the maximum height of all yard lighting fixtures shall be 6m (20 ft.).

(c) Design - Ornamentally designed fixtures shall be encouraged, particularly for residential developments, and developments that include pedestrian walkways, at main entrances of buildings, internal roadways, parking areas and vehicular entrances and exits.

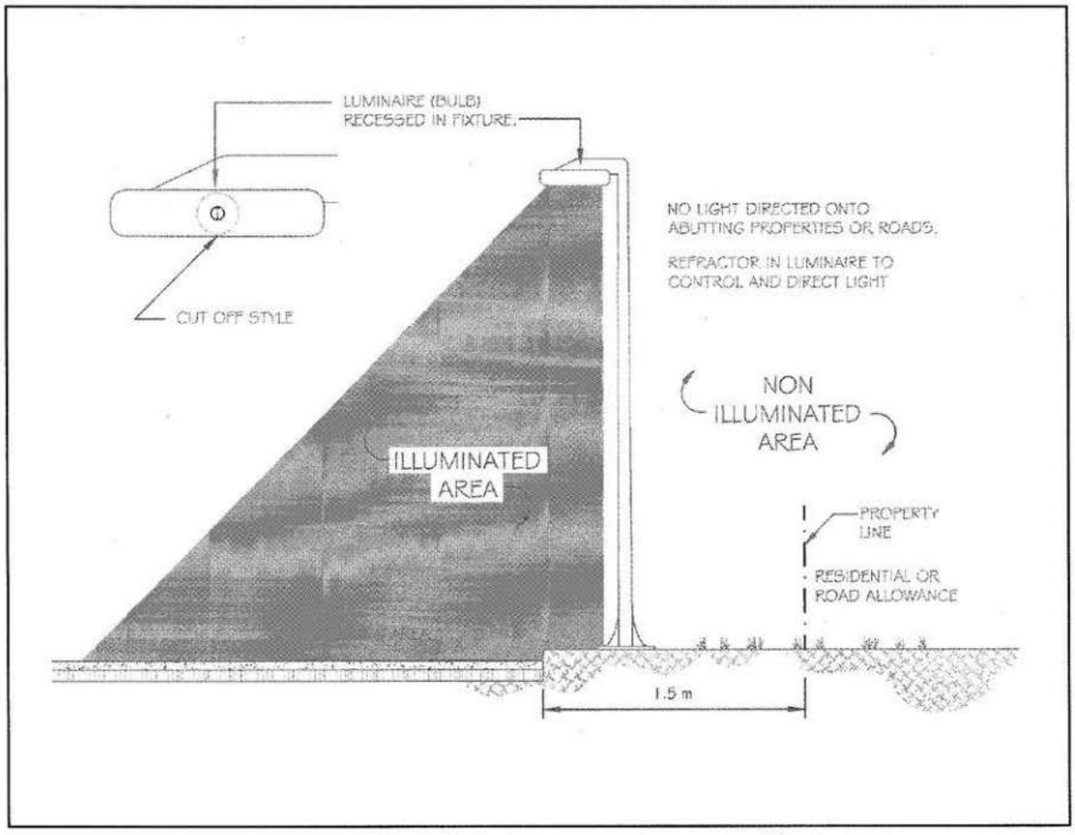
(d) "Light Study – a qualified engineer will prepare and provide a report demonstrating how the lighting is contained on the site and that the selection/style of light will not create glare and/or broadcast light onto adjacent properties or roadways, by the adjustment of refractors and/or the placement of shields (see Figure 8.1)."

8.3. Fascia Lighting and Floodlighting of Building

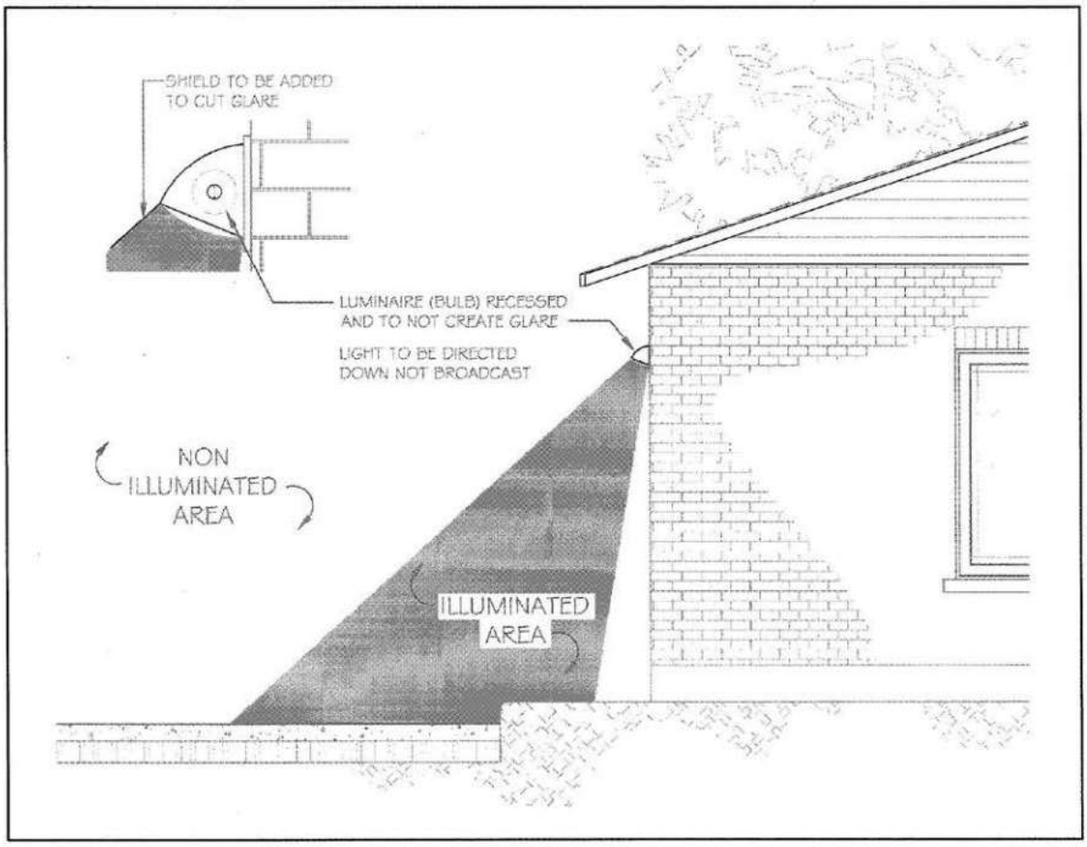
(a) Definition - Fascia lighting and floodlighting of the building illuminates precise areas of the building face(s) generally to compliment the architecture and provide illumination of the grounds adjacent to the building. Fascia lighting is usually provided by fixtures mounted on the building face(s) and/or located at grade in the immediate vicinity of the building.

FIGURE 8.1

LIGHT STANDARD - SAMPLE



WALL MOUNTED LIGHTS - SAMPLE



Appendix B – Draft Amendment to the Site Plan Control By-law

Bill No. XXX

By-law No. C.P.-1455(X)-XX

A by-law to amend By-law C.P.-1455-541, as amended, entitled the “Site Plan Control Area Bylaw”.

WHEREAS Section 41(3) of the Planning Act, R.S.O. 1990, provides that, where in an Official Plan an area is shown or described as a proposed site plan control area, the council of the local municipality may designate a site plan control area;

AND WHEREAS Section 41(7) of the Planning Act, R.S.O. 1990 provides that a municipality may require the owner of land to provide to the satisfaction of and at no expense to the municipality facilities for the lighting, including floodlighting, of the land or of any buildings or structures thereon;

AND WHEREAS Municipal Council of The Corporation of the City of London passed Bylaw C.P.-1455-541 on June 26, 2006 being a by-law to designate a Site Plan Control Area and to delegate Council’s power under Section 41 of the Planning Act, R.S.O. 1990 c.P.13;

AND WHEREAS it is deemed expedient to amend the said By-law;

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

1. By-law C.P.-1455-541, as amended, is hereby further amended as follows:

    i) Section 8 is amended by adding to ‘8.1 Objectives- a new sentence at the end of the concluding paragraph to read: “All lighting should be limited to, and directed towards, the area requiring illumination so as to reduce skyglow and light pollution and thereby promote bird-friendly development.”

    ii) Section 8 is amended by adding to ‘8.2 Yard Lighting’ a new requirement

    (e) Elimination of Skyglow – So as to reduce skyglow, light pollution and related bird fatalities, all light fixtures to be provided are to be full cut-off and have zero up light.

2. This by-law comes into force and effect on the date that it is passed.

PASSED in Open Council on –

Ed Holder
Mayor

Catharine Saunders
City Clerk

First Reading –
Second Reading –
Third Reading –

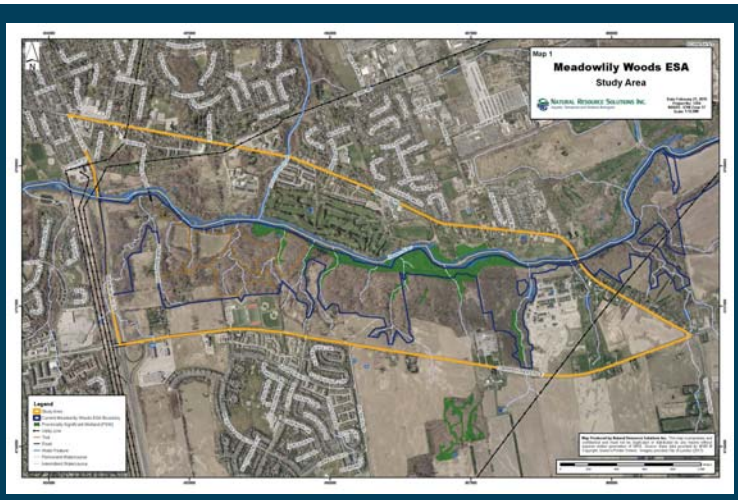
Meadowlily Woods ESA

Conservation Master Plan – Phase 1

Natural Resource Solutions Inc.
Aquatic, Terrestrial and Wetland Biologists

Presented by: Katharina Richter and Daniel Riley

415 Phillip Street, Unit C, Waterloo, ON N2L 3X2 Tel: (519) 725-2227 Web: www.nrsi.on.ca Email: info@nrsi.on.ca



The Study Area

The Meadowlily Woods Environmentally Significant Area

- Natural area in the City of London
- Important habitat for flora and fauna
- Archeology
- City-owned and private properties
- 60 hectares
- Public Trails

NRSI's Role

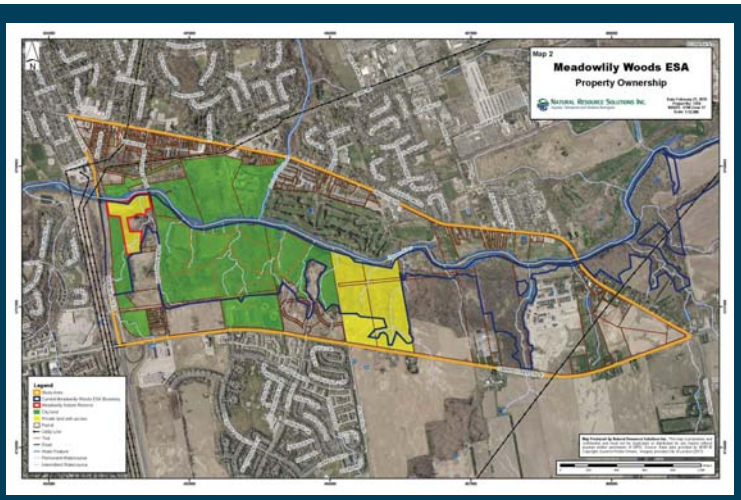
To conduct an ecological inventory of Meadowlily Woods and prepare a Phase 1 Conservation Master Plan for the Meadowlily Woods Environmentally Significant Area.

Comprehensive Inventory:

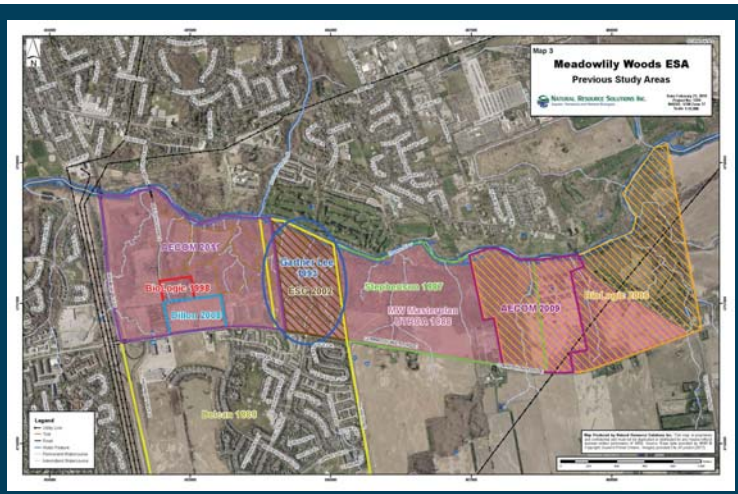
- Background review
- Field visits by NRSI biologists

The Conservation Master Plan:

- Analysis
- Boundary delineation
- Management Zones
- Restoration Areas
- Consultation with City of London



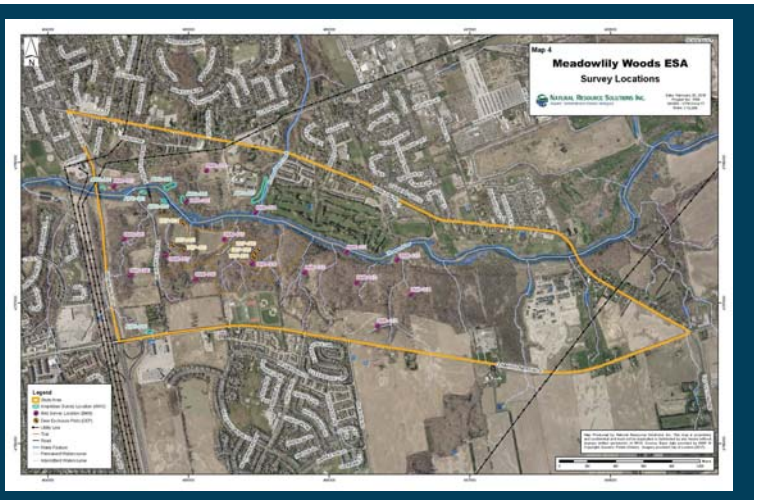
Property Ownership



Previous Study Areas

NRSI Field Studies

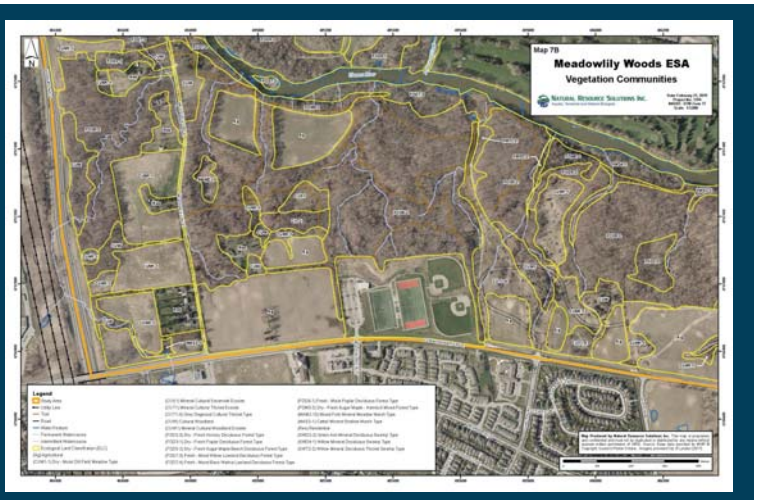
- Vegetation Surveys
- Bird Surveys
- Anuran Surveys
- Snake Surveys
- Turtle Surveys
- Mammal Surveys
- Butterfly Surveys
- Odonate Surveys
- Aquatic Surveys



Survey Locations

Field Study Results – Vascular Plants

- 435 plant species
- Ecological Land Classification
  - 26 vegetation communities
- 3 Species at Risk plants observed
  - Butternut
  - Kentucky Coffee Tree
  - Wood Poppy
- 1 Provincially Rare Species
- 5 Regionally Rare Species
- Invasive species
  - Common Buckthorn
  - Japanese Knotweed



Ecological Land Classification

Field Study Results - Birds

- 178 species identified in background review
- 81 species identified by NRSI
- 3 Species at Risk
  - Barn Swallow
  - Chimney Swift
  - Eastern Meadowlark
- 2 Species of Conservation Concern
  - Wood Thrush
  - Eastern Wood-Pewee
- 4 Woodland-Area Sensitive Species

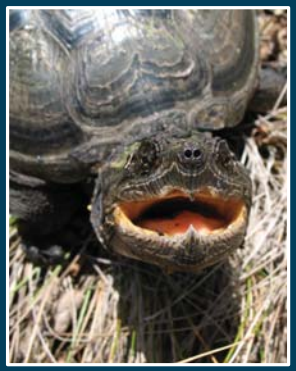
Field Study Results- Herpetofauna and Mammals

Herpetofauna

- 19 species identified in background review
- 9 species observed by NRSI biologists
- 1 Species of Conservation Concern
  - Snapping Turtle

Mammals

- 24 species identified during background review
- 9 species or evidence of their presence observed by NRSI
- Bat SAR assumed to be present



Field Study Results- Butterflies and Odonates

Butterflies

- 29 species observed by NRSI
- 1 Species of Conservation Concern
  - Monarch

Odonates

- 22 species identified by NRSI

Aquatic Features

Aquatic Features

South Thames River

- Largest aquatic feature
- Confined to valleylands
- Warmwater regime
- Carolinian forest
- 77 fish and 31 mussel species

Pottersburgh Creek

- North of Thames River
- Residential and industrial land-uses
- Warmwater system
- Fish barriers
- 12 fish species
- Excellent to suitable fish habitat

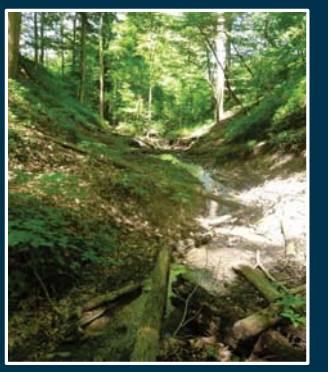
Aquatic Features

Un-named Creek

- Southwest of the study area
- Drains into the Thames River
- Deciduous forest shoreline
- Headwaters north of Commissioners Road East
- Suitable to poor quality fish habitat

Ravine Features

- 11 ravine features
- A to D assessed by AECOM
- E through H assessed by NRSI
- Indirect fish habitat
- Fish barriers
- Fish observed in ravine H



Significant Natural Features

Features and areas, including wetlands, coastal wetlands, fish habitat, woodlands, valleylands, habitat of endangered and threatened species, significant wildlife habitat and areas of scientific and natural interest that are ecologically important in terms of features, functions, representation or amount, and contribute to the quality and diversity of an identifiable geographic area or natural heritage system.

Provincially Significant Wetland

- Located along the edge of the South Thames River

Significant Woodland

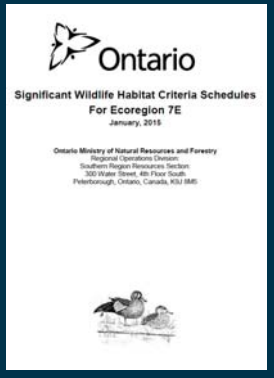
- Woodlands meet all 5 criteria for significance

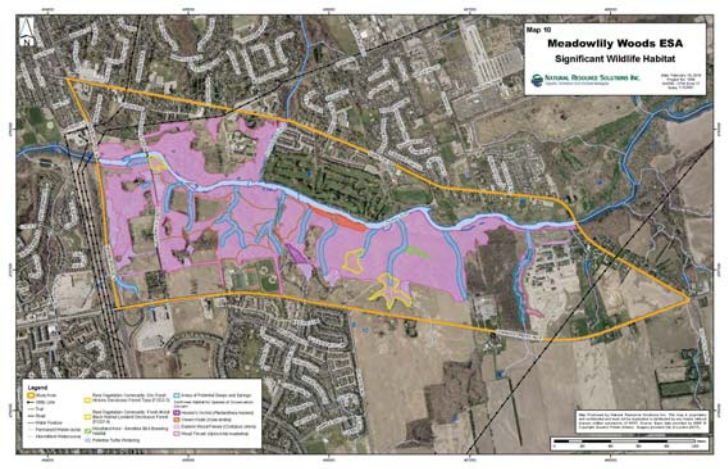
Significant Valleylands

- Thames River Valley considered significant

Significant Wildlife Habitat

Areas where plants, animals, and other organisms live, and find adequate amounts of food, water, shelter and space to sustain their populations, that are ecologically important in terms of features, functions, representation or amount and that contribute to the quality and diversity of an identifiable geographic area or Natural Heritage System.





Significant Wildlife Habitat

Significant Wildlife Habitat

Seasonal Concentration Areas

Turtle Wintering Area: Confirmed

- In the Thames River
- Snapping Turtles observed
- Deep pools are Significant Wildlife Habitat

Bat Maternity Colonies: Candidate

- May be found within Meadowlily Woods
- Suitable cavity trees observed
- Presence of maternity colonies not confirmed

Significant Wildlife Habitat

Rare Vegetation Communities

Other Rare Vegetation Communities: Confirmed

- Two rare vegetation communities identified
- Fresh-Moist Black Walnut Lowland Deciduous Forest
  - Provincially imperiled or vulnerable (S2S3)
- Dry-Fresh Hickory Deciduous Forest
  - Provincially vulnerable or apparently secure (S3S4)

Significant Wildlife Habitat

Specialized Wildlife Habitat

Seeps and Spring: Confirmed

- Identified throughout the study area
- Exact location of seeps not recorded

Woodland Area-Sensitive Bird Breeding Habitat: Confirmed

- Located in the central-east of the study area
- Interior forest >200m from edge

Significant Wildlife Habitat

Specialized Wildlife Habitat

Osprey Nesting, Foraging and Perching Habitat: Candidate

- Undisturbed forest along the Thames River
- Osprey observed by NRSI
- No nests observed

Turtle Nesting Habitat: Candidate

- Sand and gravel areas along the Thames River
- Habitat for Midland Painted Turtle and Snapping Turtle is present
- No nests or nesting activities observed

Significant Wildlife Habitat

Habitats of Species of Conservation Concern

Eastern Wood-Pewee: Confirmed

- Woodland habitats throughout the study area

Wood Thrush: Confirmed

- Forest habitats in the study area

Snapping Turtle: Confirmed

- Observed multiple times, breeding is likely

Monarch: Confirmed

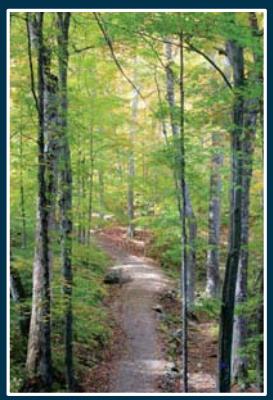
- Observed in meadow habitats with Milkweed
- Apparently secure on breeding grounds

Cream Violet: Confirmed

- Observed along the Thames River

Hooker's Orchid: Confirmed

- Known from the south-central area of the study area



Species at Risk at Meadowlily Woods

6 Species at Risk observed by NRSI biologists

Butternut

- Found throughout the subject site
- Butternut Canker
- No Butternut Health Assessment completed

Kentucky Coffee Tree

- Near Meadowlily Road South and the Thames River
- Likely planted specimens

Wood Poppy

- Small population found in the study area
- First identified by Stephenson in 1987

Species at Risk at Meadowlily Woods

Barn Swallow

- Observed over the subject site
- No nesting activities observed

Chimney Swift

- Observed foraging over the Thames River
- Nesting habitat is chimneys and large hollow trees
- No nesting activities observed

Eastern Meadowlark

- One individual observed
- Small habitat size
- Unlikely to be breeding in study area

Endangered Bat Species

- Assumed to be present

13 additional SAR may be found in or adjacent to the Meadowlily Woods study area

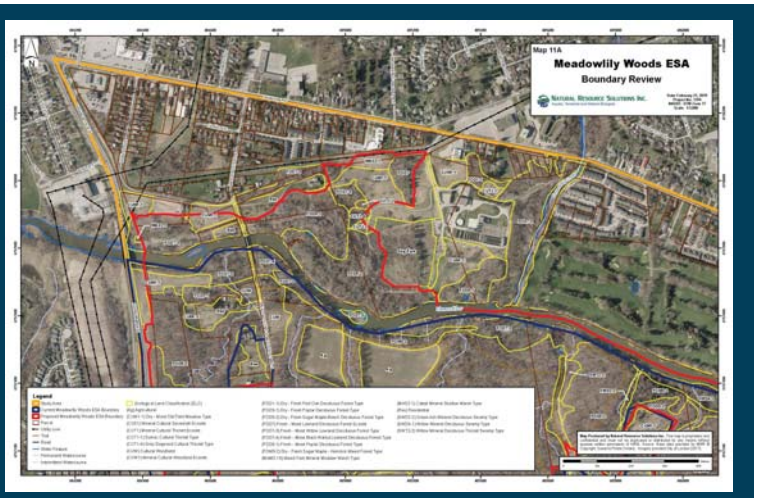
Boundary Review

Objective

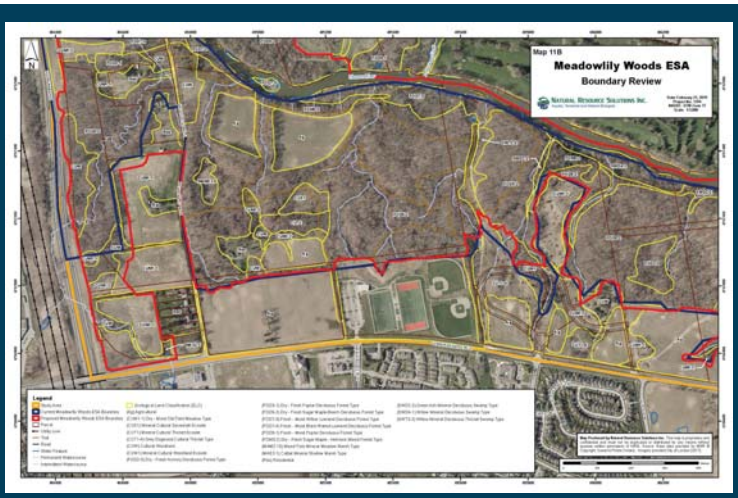
To refine the boundary of the Meadowlily Woods Environmentally Significant Area based on background information, field survey data and analysis using the City of London's *Guideline Documents for Environmentally Significant Areas, Identification, Evaluation and Boundary Delineation (1997) and Guidelines for Assessing Ecological Boundaries of Vegetation Patches.*

Process

- All lands in the study area considered for inclusion
- Qualifying as an Environmentally Significant Area
- Boundary refinement



ESA Boundary Review



ESA Boundary Review

ESA Boundary Review

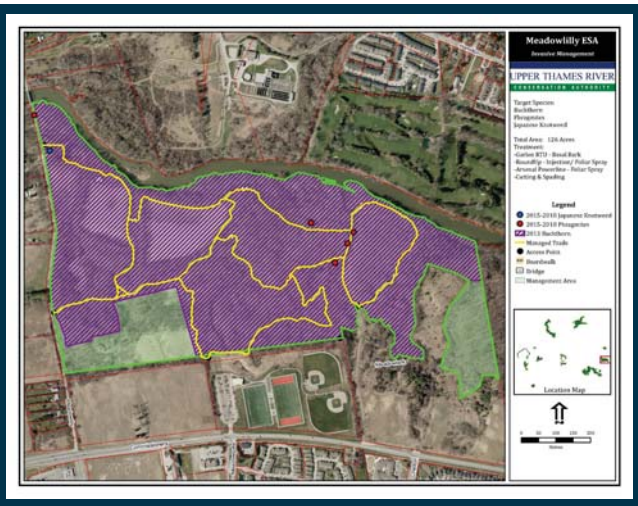
Management Zones

Restoration

Ecological restoration of natural areas which have been degraded through human disturbance and invasive species establishment is critical to improving the overall health, ecological form and ecological function of Environmental Significant Areas in London and across Ontario.

Restoration in City of London

- A leader among Ontario municipalities
- Invasive species management
- *London Invasive Plant Management Strategy* (2017)
- Hierarchical approach to invasive management
- Priority invasive plant species



Invasive Management

Disturbance Areas

Restoration – Recommended Activities

Waste Removal

- Dumping of household trash
- Removal and clean-up of these areas
- No dumping signs and vegetation plantings

Invasive Species Management

- Invasive species at Meadowlily Woods
- Compete with native plants
- Best Management Practices

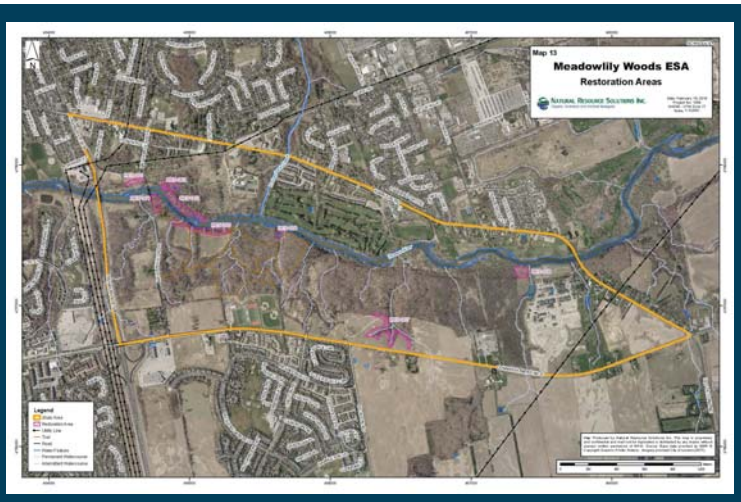
Restoration – Recommended Activities

Vegetation Plantings

- Provide wildlife habitat
- Limit erosion
- Prevent invasive species establishment
- Restrict pedestrian access

Monitoring

- Ensure success of restoration
- Annual monitoring



Restoration Areas

NOTICE OF STUDY COMPLETION

The Upper Thames River Conservation Authority (UTRCA) and the City of London have completed a Schedule B Municipal Class Environmental Assessment (EA) Study through its consultant AECOM. The focus of the study was to review ways to manage the long-term stability of the Broughdale dyke. The alternatives included regular maintenance, erosion protection, re-construction of the dyke, increasing the height of the dyke, and extending the dyke upstream.

The Class EA study was conducted in accordance with the Schedule B requirements of the Municipal Engineers Association 'Municipal Class Environmental Assessment' document (as amended in 2015).

The preferred alternative for this project includes raising the dyke (1.0m to 2.0m depending on the location, plus 0.9m of additional height to account for climate change), constructing a floodwall along Raymond Avenue and extending the dyke upstream to protect against a 250 year flooding event. The existing dyke alignment between Bernard Avenue and Meadowdown Drive will be shifted towards the Thames River and will include the construction of a maintenance path (See Map).

A Project File has been prepared. It describes the problem / opportunity, the evaluation of alternative solutions, an assessment of the effects of the project and mitigation measures to reduce potential impacts. It also includes documentation of public and agency consultation conducted.

This Notice places the Project File on the public record for review and comment. The Project File is available for public review for thirty (30) calendar days from February 14th, 2019 to March 18th, 2019 at the following location during regular business hours:

City of London City Hall – Clerks Office 3rd Floor 300 Dufferin Avenue, London	Hours of Operation Monday – Friday: 8:30 am – 4:30 pm Saturday/Sunday: Closed
London Public Library – Masonville Branch 30 North Centre Road, London	Hours of Operation Tuesday – Thursday: 9:00 am – 9:00 pm Friday: 9:00 am – 6:00 pm Saturday: 9:00 am – 5:00 pm Sunday – Monday: Closed
City of London Website https://www.london.ca/residents/Environment/EAs/Pages/Broughdale-Dyke.aspx	

Interested parties are encouraged to review the document and provide any comments, questions or concerns regarding the information provided to the following team member no later than March 18th, 2019:

Paul Adams, CPT
Environmental Planner
AECOM Canada
250 York Street, Suite 410
London ON, N6A 6K2
Fax: 519 963-5873
Email: Paul.adams2@aecom.com

If concerns regarding this project cannot be resolved in discussion with the UTRCA and City of London, a person may request the Minister of the Environment Conservation and Parks (MECP) to issue an order to comply with Part II of the EA Act. This is known as a 'Part II Order", bumping up the status of this project to a full Individual Environmental Assessment. The procedure for a Part II Order request is as follows:

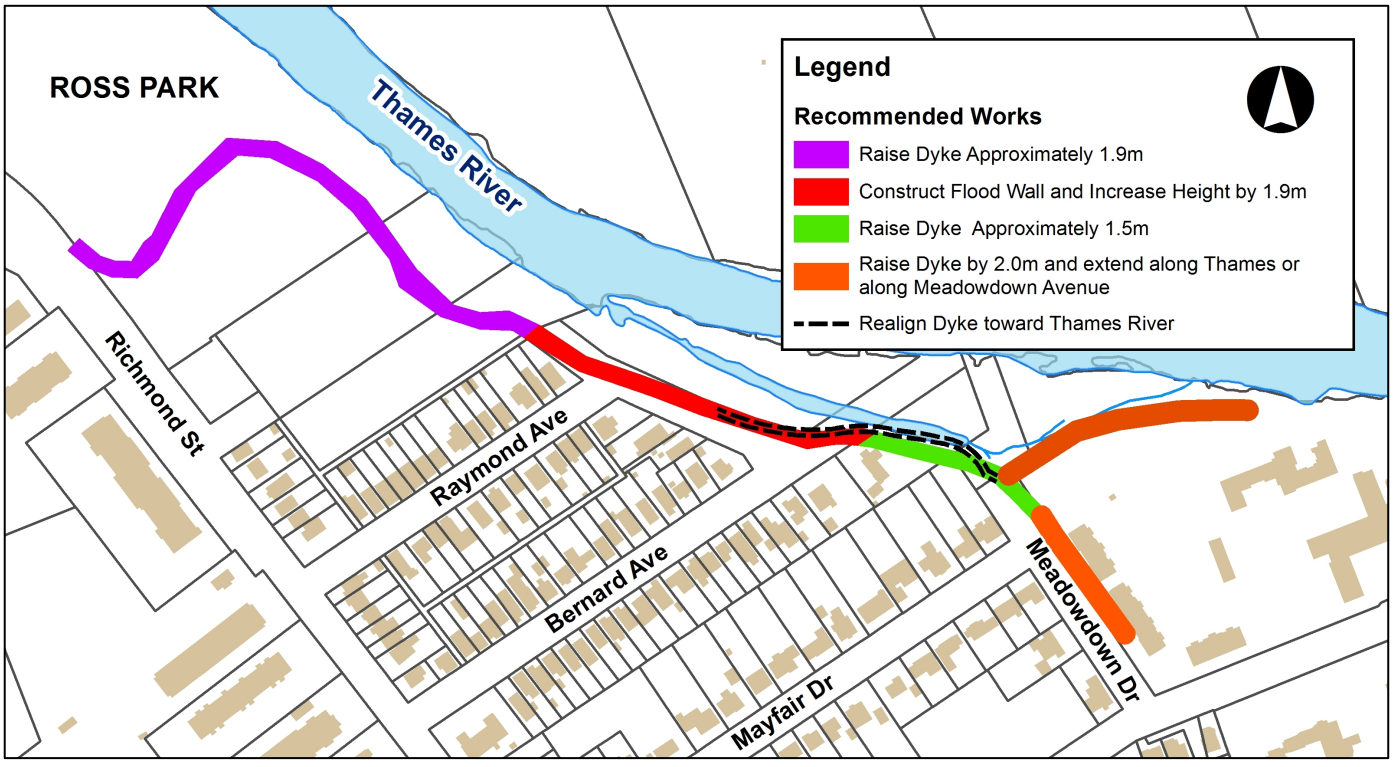
- First, the person with concerns directs them to the UTRCA, City of London and AECOM, during the thirty (30) calendar day review period for consideration and mitigation.

- Second, if the concerns cannot be resolved, the person may submit a Part II Order request to the Minister of Environment Conservation and Parks by submitting the form found at the Ontario government Forms Repository website by March 19th, 2019. Search for "Part II Order" on the main page:

http://www.forms.ssb.gov.on.ca

The completed form and any supporting information must be sent to 77 Wellesley Street West, 11th floor, Toronto ON. M7A 2T5 with a copy of the request being sent to the Director of Environmental Assessment and Permissions Branch, UTRCA, City of London and AECOM. All information required for submitting the Part II order including addresses are found on this form.

If no Part II Order requests are received by March 19th, 2019, the project will be considered to have met the requirements of the Municipal Class EA and may proceed with detailed design, tendering and construction of the recommended works.



This Notice Issued February 14th, 2019