Agenda
London Housing Advisory Committee

3rd Meeting of the London Housing Advisory Committee

March 13, 2019, 12:15 PM

Committee Room #4

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Pages

1. Call to Order

    1.1 Disclosures of Pecuniary Interest

2. Organizational Matters

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

3. Scheduled Items

4. Consent

    4.1 2nd Report of the London Housing Advisory Committee 2

    4.2 Public Meeting Notice - Official Plan Amendment - Draft Old East Village Dundas Street Corridor Secondary Plan 4

        a. Draft Old East Village Dundas Street Corridor Secondary Plan 8

    4.3 Notice of Application - Zoning By-law Amendment - 348 Sunningdale Road East 72

5. Sub-Committees and Working Groups

6. Items for Discussion

    6.1 Work Plan

    6.2 Invite Stakeholders in Real Estate and Development Industries to Discuss Affordable Housing

    6.3 Housing Mediation Report - G. Matthews

7. Deferred Matters/Additional Business

8. Adjournment

London Housing Advisory Committee

Report

2nd Meeting of the London Housing Advisory Committee
January 9, 2019
Committee Room #4

Attendance

PRESENT: J. Coley Phillips, A. Galloway, J. Malkin, D. Nemeth, B. Odegaard, D. Peckham, J. Stickling; and P. Shack (Secretary)

ALSO PRESENT: J. Binder, D. Calderwood-Smith, S. Giustizia, G. Matthews, and B. Turcotte

REGRETS: M. Inthavong, J. Peaire, and N. Reeves

The meeting was called to order at 12:25 PM.

1. Call to Order

1.1 Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

2. Organizational Matters

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

That consideration of the London Housing Advisory Committee election of chair and vice chair for term ending June 1, 2019 BE DEFERRED until next meeting.

3. Scheduled Items

None.

4. Consent

4.1 1st Report of the London Housing Advisory Committee

That it BE NOTED that the 1st Report of the London Housing Advisory Committee, from its meeting held on December 12, 2018, was received.

5. Sub-Committees and Working Groups

None.

6. Items for Discussion

6.1 ReThink Zoning Draft Terms of Reference

That it BE NOTED that the London Housing Advisory Committee held a general discussion with respect to the ReThink Zoning Draft Terms of Reference.

7. Deferred Matters/Additional Business

7.1 (ADDED) Provincial Consultation on "Increasing Housing Supply in Ontario"

That it BE NOTED the London Housing Advisory Committee held a general discussion with respect to the Provincial Consultation on "Increasing Housing Supply in Ontario";

it being noted that members of the committee are encouraged to complete the on-line survey at www.ontario.ca/housingsupply before January 25, 2019, with respect to the Provincial Consultation on "Increasing Housing Supply in Ontario".

8. Adjournment

The meeting adjourned at 1:05 PM.

PUBLIC MEETING NOTICE

Official Plan Amendment

Draft Old East Village Dundas Street Corridor Secondary Plan

File: O-8879
Applicant: The Corporation of the City of London

What is Proposed?

The draft Old East Village Dundas Street Corridor Secondary Plan will be presented. The draft Secondary Plan contains:

- A long term vision for the Secondary Plan area.
- Detailed policies to guide the future character of development, including policies regarding land use, built form, public realm design and heritage.

There will be further opportunities to review the draft Secondary Plan and provide comment after this meeting.

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YOU ARE INVITED!

Further to the Notice of Application you received on March 12, 2018, you are invited to a public meeting of the Planning and Environment Committee to be held:

Meeting Date and Time: Tuesday, February 19, 2019, no earlier than 5:00 p.m.

Meeting Location: City Hall, 300 Dufferin Avenue, 3rd Floor

For more information contact:

Kerri Killen
kkillen@london.ca
519-661-CITY (2489) ext. 2659
City Planning, City of London,
206 Dundas St., London ON N6A 1G7
File: O-8879

getinvolved.london.ca

To speak to your Ward Councillors:

Jesse Helmer
jhelmer@london.ca
519-661-CITY (2489) ext. 4004

Arielle Kayabaga
akayabaga@london.ca
519-661-CITY (2489) ext. 4013

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 Future Amendment to the Current Official Plan

To add the Old East Village Dundas Street Corridor Secondary Plan to the list of adopted Secondary Plans in Section 20.2 and 20.3 of the Official Plan. To add the Old East Village Dundas Street Corridor Secondary Plan to Schedule D of the Official Plan.

Requested Future Amendment to The London Plan (New Official Plan)

To add the Old East Village Dundas Street Corridor Secondary Plan to the list of adopted Secondary Plans in Policy 1565 of The London Plan. To add the Old East Village Dundas Street Corridor Secondary Plan to Map 7.

How Can You Participate in the Planning Process?

You have received this Notice because someone has applied to change the Official Plan designation 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*. If you previously provided written or verbal comments about this application, we have considered your comments as part of our review of the application and in the preparation of the planning report and recommendation to the Planning and Environment Committee. The additional 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 City Planning at 206 Dundas Street, 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.

Attend This Public Participation Meeting

The Planning and Environment Committee will consider the requested Official Plan changes at this meeting, which is required by the *Planning Act.* You will be invited to provide your comments at this public participation meeting. A neighbourhood or community association may exist in your area. If it reflects your views on this application, you may wish to select a representative of the association to speak on your behalf at the 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 official plan 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 proposed official plan amendment is adopted, 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 proposed official plan amendment is adopted, 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 add the person or public body as a party.

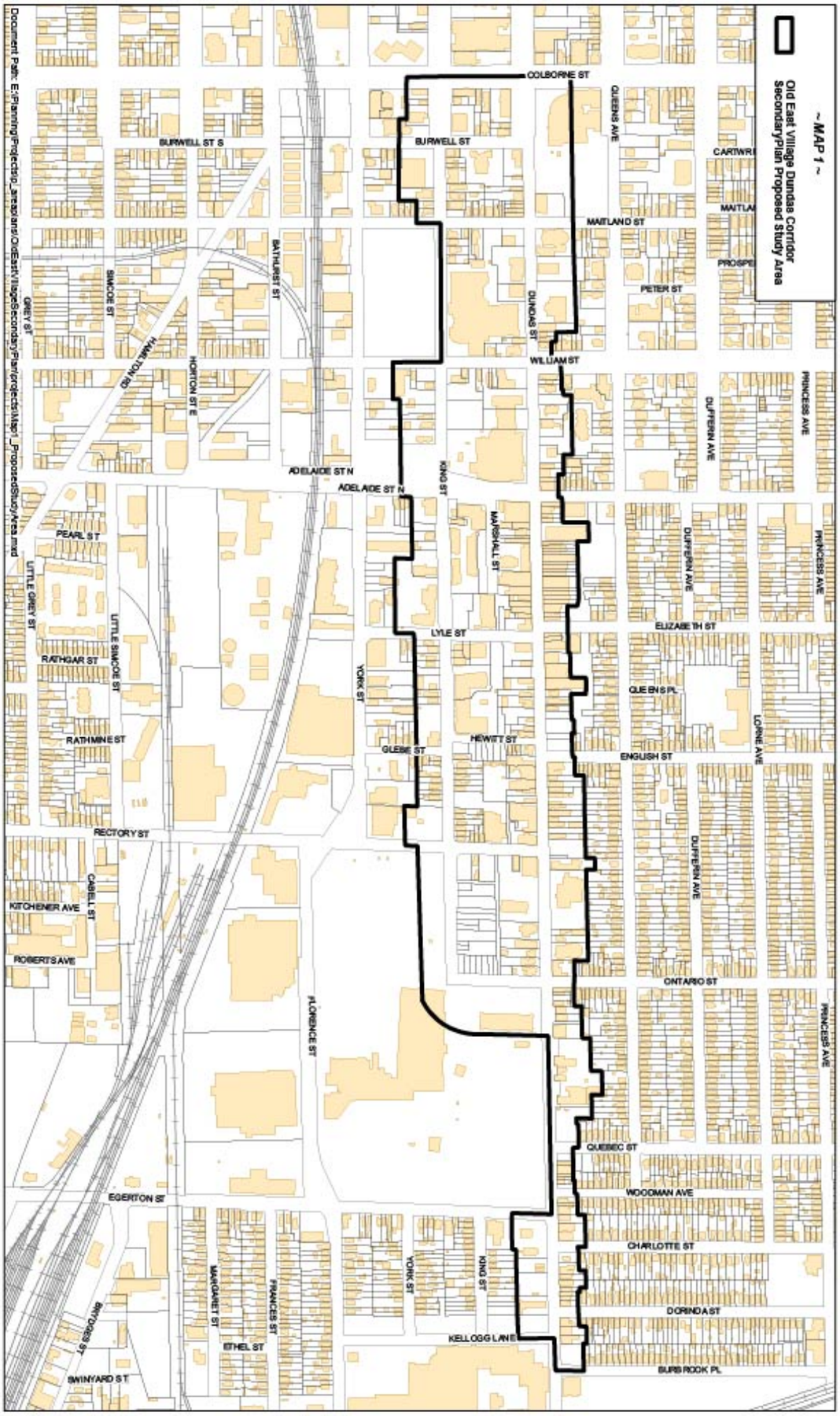
For more information go to http://elto.gov.on.ca/tribunals/lpat/about-lpat/.

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.

Secondary Plan Area Boundary



The Old East Village Dundas Street Corridor Secondary Plan area boundary.

File: O-8879
Planner: K. Killen

Report to Planning and Environment Committee

To: **Chair and Members**
Planning & Environment Committee
From: **John M. Fleming**
Managing Director, Planning and City Planner
Subject: **Draft Old East Village Dundas Street Corridor Secondary Plan**
Public Participation Meeting on: February 19, 2019

Recommendation

That, on the recommendation of the Managing Director, Planning and City Planner, the draft *Old East Village Dundas Street Corridor Secondary Plan*, attached as Appendix "B" **BE RECEIVED** for information purposes; it being noted that:

(a) The draft Secondary Plan will serve as the basis for further consultation with the community and stakeholders;

(b) The feedback received through this consultation process and the outcomes of supporting and informing studies will feed into a revised Secondary Plan and implementing Official Plan amendment that will be prepared for the consideration and approval of the Planning and Environment Committee at a future Public Participation Meeting in the second quarter of 2019.

Executive Summary

The purpose and effect of the recommended action is for Municipal Council to receive the draft *Old East Village Dundas Street Secondary Plan* and for it to be subsequently circulated for public review and for staff to return with a revised Secondary Plan in the second quarter of 2019.

Analysis

1.0 Pertinent Reports

- Old East Village Dundas Street Corridor Secondary Plan Draft Terms of Reference; Planning and Environment Committee – April 30, 2018
- Downtown OEV East-West Bikeway Corridor Evaluation; Civic Works Committee – February 20, 2019

2.0 Background

2.1 Purpose of the Secondary Plan

Secondary Plans provide more detailed guidance by establishing policies which build on the parent policies of the Official Plan. In cases where the policies of the two plans are inconsistent, the Secondary Plan policies prevail. Where the Secondary Plan is silent on a matter that is addressed within the Official Plan, the Official Plan policies apply. In the case of the *Old East Village Dundas Street Corridor Secondary Plan*, the intent is to provide more detailed guidance for future development within the identified area building on the general policies of *The London Plan*.

2.2 Terms of Reference

The Terms of Reference was endorsed by Municipal Council on May 9, 2018. Outlined in the Terms of Reference were the following ongoing and upcoming initiatives:

- The future implementation of rapid transit service along King Street from the downtown to Ontario Street and continuing east along Dundas Street.

- The evaluation and implementation of cycling infrastructure to establish an east-west corridor connecting east London with the downtown.

- A planned infrastructure renewal project, which will include upgrades to underground services and streetscape reconstruction along Dundas Street between Adelaide Street North and Ontario Street.

- The planned construction of the Adelaide Street/CP Rail underpass.

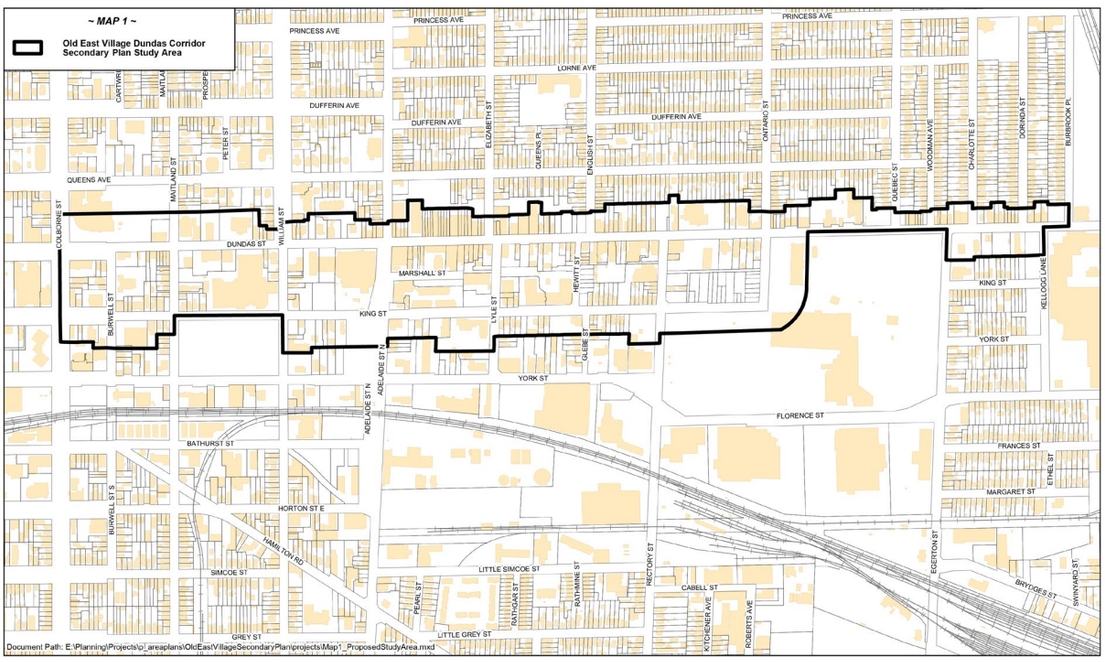
- Proposed redevelopment of a portion of the Western Fair grounds, as well as multiple development applications along both Dundas Street and King Street.

- Ongoing investment in heritage building conservation and adaptive reuse.

2.3 Secondary Plan Study Area

The *Old East Village Dundas Street Corridor Secondary Plan* study area generally includes properties fronting onto Dundas Street, between Colborne Street and Burbrook Place/Kellogg Lane, properties fronting onto King Street, between Colborne Street and Ontario Street, and properties fronting onto Ontario Street.

2.4 Secondary Plan Boundary Map



3.0 Overview of the Draft Secondary Plan

The draft *Old East Village Dundas Street Corridor Secondary Plan* policies were prepared by Urban Strategies Inc. and the City of London City Planning service area.

3.1 Vision and Principles

The *Old East Village Dundas Street Corridor Secondary Plan* vision statement is:

A vibrant commercial core with a unique heritage character that serves as a community hub for local residents and draws visitors as a distinct destination.

The guiding principles outlined in the Secondary Plan are:

- Foster the local and creative entrepreneurial spirit and support community economic development;
- Respect and reinvest in heritage resources to enhance the unique character of the area;

- Provide a distinct retail offer with a wide range of commercial uses including restaurants and cafes;
- Create a safe and welcoming environment to pedestrians and cyclists of all ages and abilities;
- Establish safe connections to the local transit system and surface parking lots; and,
- Support properly scaled residential growth.

3.2 Character Areas

Four distinct character areas are identified within the Secondary Plan area, including:

- Dundas Street – Midtown;
- Dundas Street – Old East Village Core;
- Dundas Street – Old East Village East; and,
- King Street.

These character areas define the existing context of the Secondary Plan area. In some instances they are used to determine the applicability of specific policies within the Secondary Plan area.

3.3 Policies

The policies of the draft Secondary Plan provide guidance on land use, the design of the public realm and mobility framework, heritage, and built form.

The land use policies within the draft Secondary Plan promote a mixed-use community focussing on active ground-floor uses. A broad range of residential, retail, service, office, cultural, recreational and institutional uses are proposed, consistent with the vision for the Rapid Transit Corridor Place Type, and Main Street segment policies in *The London Plan*.

The public realm policies of the draft Secondary Plan focus on creating an environment that is pedestrian-oriented to enhance the mainstreet atmosphere of the Dundas Street corridor and to cater to future rapid-transit users on King Street. In addition, policies aim to enhance the pedestrian experience along north-south linkages, connecting the residential populations north and south of Dundas Street to the corridor to support local business. As well, emphasis is placed on creating safe connections between the Municipal parking lots and Dundas Street with the overall intent of making the Secondary Plan area safe and walkable.

Also central to the public realm policies is the integration of new and/or upgraded cycling infrastructure and facilities into the Secondary Plan area. The Downtown OEV East-West Bikeway Corridor Evaluation identifies Dundas Street as a key location for future cycling infrastructure and cycling infrastructure upgrades. The policies reflect the route identified by this evaluation and integrate the dedicated cycling lanes into the streetscape design.

The heritage policies were guided by the recommendations of the Cultural Heritage Assessment Background Report. The policies focus on approaches for mitigating impacts from new developments on or adjacent to listed, designated and potential cultural heritage resources. The policies also indicate that a Heritage Impact Assessment will be required in certain instances to ensure that significant cultural heritage resources are conserved.

The built form policies of the Secondary Plan also include consideration for the nearby established heritage conservation districts and the historical streetscape of the Dundas Street corridor. Height policies within the draft Secondary Plan require new developments to provide a height transition when adjacent to residential properties and/or properties within a heritage conservation district. Acknowledging the character of the Dundas Street corridor, the built form policies direct new development to provide step backs to retain the established mainstreet scale.

Built form policies also provide direction to new high-rise development, nine storeys in

height and taller. For these developments, policies provide direction on podium design, step backs as well as tower design and location to support a pedestrian-scaled environment and protect sunlight access.

4.0 Relevant Background

4.1 Community Engagement (see more detail in Appendix C)

To assist in the preparation of the draft Secondary Plan, two community information meetings were jointly held by City Planning with Transportation Planning and Design to engage the community on both the *Old East Village Dundas Street Corridor Secondary Plan* and the Downtown OEV East-West Bikeway Corridor Evaluation. The timelines and study areas for these projects overlapped significantly and the results of the Downtown OEV East-West Bikeway Corridor Evaluation were intended from the onset of the process to be integrated into the policies of the *Old East Village Dundas Street Corridor Secondary Plan*.

The first community information meeting was held on June 27, 2018. This meeting was organized to collect the community members' feedback regarding high-level concepts such as the overall vision for the Secondary Plan area and their preferences for the initial east-west cycling route options. Approximately 70 community members were in attendance. A presentation was made by City staff and members of the consultant teams from Urban Strategies Inc. and WSP. The detailed report of the feedback received from this meeting was prepared by Urban Strategies Inc. and can be found in Appendix C.

A project webpage for the *Old East Village Dundas Street Corridor Secondary Plan* was created on the Get Involved website to allow those unable to attend the June 27, 2018 community information meeting the opportunity to view the presentation and submit comments.

Comments were primarily suggestions for the study area, which generally included:

- Improving walkability
- Removing crosswalk buttons to change the light
- Improving bikeability
- Providing wide and/or separated bicycle lanes on Dundas Street
- Removing bicycling lanes from Dundas Street
- Redesigning the King Street and Adelaide Street North intersection to be less intimidating to pedestrians and cyclists
- Removing on-street parking in favour of wider sidewalks and protected cycling lanes
- Retaining on-street parking for delivery trucks
- Improving access to parking lots
- Increasing the number of parking spaces through parking lots and/or parking garages
- Removing vehicular traffic on Dundas Street, between the core and Quebec Street
- Increasing the spacing of bus stops in the area to save time from loading/unloading passengers
- Filling in the gaps in the commercial corridor
- Preserving the mainstreet feel; restoring old buildings
- Locating high-rise buildings along King Street and low- to mid-rise on Dundas Street
- Improving the perception of safety
- Helping those at risk on the street
- Increasing the number of street trees, benches, and garbage receptacles
- Providing low planters instead of street trees, as trees block signs
- Creating a cohesive streetscape and distinct character; artistic or themed street furniture
- Burying electrical wires
- Keeping the sidewalk clean

- Providing bike lockers in parking lots; more bicycle parking generally
- Preserving existing trees
- Creating clear signage for landmark locations in the area
- Reducing the impact of or eliminating construction
- Increasing “eyes on the street”

Comments also included suggestions on how the key connections between the King Street and Dundas Street should be designed, which generally included:

- De-emphasizing the car
- Widening sidewalks or other connections
- Planting trees
- Creating new pedestrian-only connections
- Improving lighting
- Providing signage, including directional signage and maps
- Creating a smoke-free environment

A second community information meeting was held on November 1, 2018. This meeting was also jointly held with Transportation Planning and Design to coordinate the Downtown OEV East-West Bikeway Corridor Evaluation with the Secondary Plan. This meeting was organized to present the draft policy direction of the Secondary Plan, which was developed from the feedback received at the initial community information meeting and web submissions. The preferred bikeway option was also presented. The meeting provided an open-house component to allow community members to engage City staff and staff from the consultant teams in discussions and to ask questions and provide feedback in a less structured way.

Approximately 50 community members were in attendance at this second community information meeting. Comments cards were distributed to attendees as an additional means of providing feedback. Each attendee was provided one comment card specific to the Secondary Plan and one for the Bikeway Evaluation; 19 comment cards specific to the Secondary Plan were filled out and returned to City staff.

Comments relating to the Secondary Plan generally included:

Support for:

- Prioritizing existing and emerging cultural and creative businesses
- De-emphasizing vehicle priority
- Creating an accessible space for pedestrians and cyclists
- Retail only at ground floor frontages

Concerns for:

- The increase in pedestrian and vehicle traffic
- The impact of construction on businesses
- The impact of transit stops on Dundas Street creating car traffic congestion
- The loss of customers due to loss of on-street parking

Suggestions or consideration, including:

- Provide more benches along the corridor
- Improve lighting
- Preference for cycling lanes in both directions continuously along Dundas Street
- Inconvenience to commuters; loss of “drive by” advertising for local businesses if fewer cars travel along Dundas Street
- Include incentive programs to create a unified appearance to facades
- Reference the McCormick Area Secondary Plan
- Protect heritage buildings through sensitive design of new adjacent buildings
- Keep tall buildings off of Dundas Street; if tall buildings are proposed, set them back north and south of Dundas Street

- Require more policing
- Specific bonusing policies for the area; do not allow bonusing to increase the 8-storey maximum proposed
- Connectivity of Municipal parking lots 1, 2, 4 and 7 to Dundas Street
- Provide funding for connections between parking and Dundas Street
- Provide shelters for those sitting on the sidewalk
- Preference for a bike lane on King Street

Several additional meetings were held at the request of the Manager of the Old East Village Business Improvement Area (BIA) relating to the *Old East Village Dundas Street Corridor Secondary Plan*, including:

- October 17, 2018: City staff from City Planning and Transportation Planning and Design attended and presented at the Old East Village BIA board meeting

- November 13, 2018: City staff from City Planning and Transportation Planning and Design met with Old East Village BIA board members and additional community stakeholders invited by the Old East Village BIA; BIA members gave a presentation to City staff

- December 13, 2018: Old East Village BIA members held a walking tour of the Dundas Street corridor and subsequent meeting with City staff from City Planning and Transportation Planning and Design as well as representatives from the consultants teams from Urban Strategies Inc. (Secondary Plan), WSP (Bikeway Evaluation), and Dillon (infrastructure renewal).

- January 7, 2019: City staff from City Planning met with Old East Village BIA members

It is important to note that since the Downtown OEV East-West Bikeway Corridor Evaluation was undertaken in parallel with the Secondary Plan process, City staff from City Planning and Transportation Planning and Design shared comments received with both project teams to ensure that the feedback could be addressed through the appropriate project and process. Additional feedback specific to the Downtown OEV East-West Bikeway Corridor Evaluation that was collected by City Planning was provided to Transportation Planning and Design staff and may not be reflected in detail above.

4.2 Policy Context (see more detail in Appendix D)

Old East Village and the surrounding area has been the focus of revitalization efforts through numerous plans and studies, including the Mayor's Task Force on Old East London Report in 1998 and the *Re-establishing Value: A Plan for the Old East Village* report in 2003. In 2004, the Old East Village Community Improvement Plan Area was established. The *Old East Village Commercial Corridor Urban Design Manua*l was adopted in 2016.

Re-establishing Value: A Plan for the Old East Village, 2003

Re-establishing Value: A Plan for the Old East Village was prepared by the Planners Action Team (PACT), a team of members from the Ontario Professional Planners' Institute (OPPI). This provided a detailed analysis of the corridor and identified issues facing the area as well as strategies for improvement and revitalization.

Old East Village Community Improvement Plan, 2004

One recommended strategy of the *Re-establishing Value: A Plan for the Old East Village* report was the creation of a community improvement area, which was established in 2004. The purpose of the *Old East Village Community Improvement Plan* is to provide context for a coordinated municipal effort to improve the physical, economic, and social conditions of Old East Village and to stimulate private investment and property maintenance and renewal.

Old East Village Commercial Corridor Urban Design Manual, 2016

The *Old East Village Commercial Corridor Urban Design Manual* was prepared by the

City of London and adopted in 2016. The purpose of this design manual is to provide design guidance in the review of all planning and development applications. It promotes high-quality design that responds to the area's unique context and overall vision.

The London Plan

Policy 1556 of *The London Plan* provides the direction to prepare a Secondary Plan to elaborate on the policies of *The London Plan*. Policy 1557 identifies instances that may warrant the preparation and adoption of a Secondary Plan, this includes areas within the Rapid Transit Corridor Type that may require vision and more specific policy guidance for transitioning from their existing form to the form envisioned by *The London Plan*.

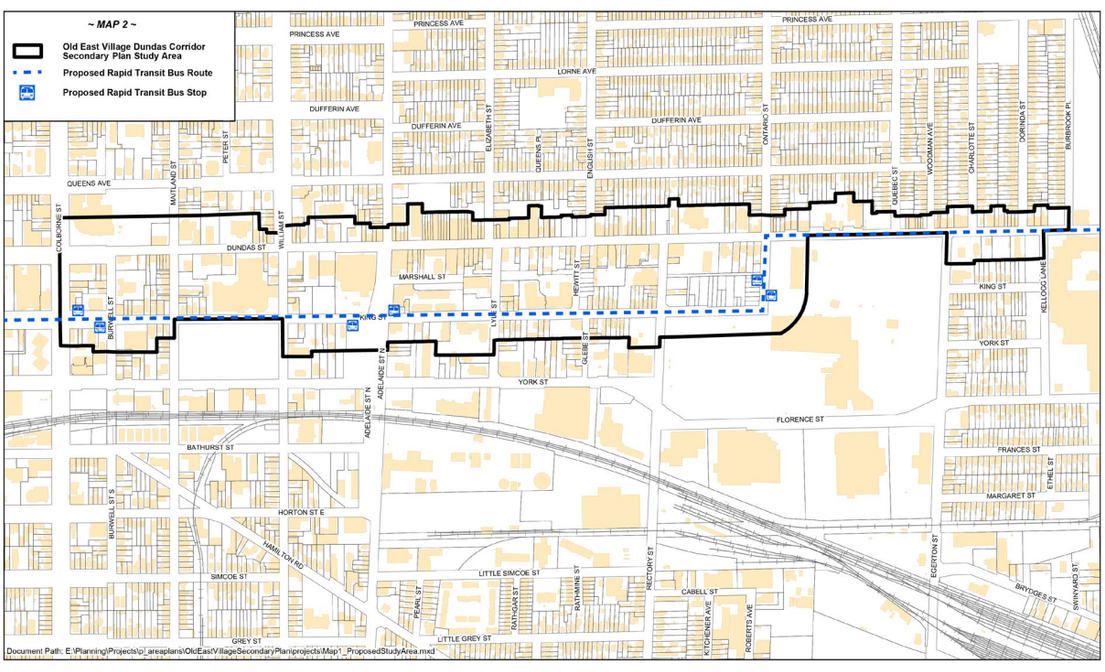
The Secondary Plan area is predominantly located within the Rapid Transit Corridor Place Type. Dundas Street, between Colborne Street and Quebec Street, is a Main Street segment of the Rapid Transit Corridor. A few properties within the Secondary Plan area are Institutional. The Dundas Street and King Street segments within the Secondary Plan area are both classified as Rapid Transit Boulevards by *The London Plan*. It should be noted that the Rapid Transit Environmental Assessment (EA) is still underway at this time and *The London Plan* recognizes potential alignments. The Place Types and street classifications will be modified to align with the results of the EA process for the final version of *The London Plan*.

Provincial Policy Statement, 2014

The *Provincial Policy Statement, 2014* (PPS) provides policy direction on matters of provincial interest related to land use planning and development. The policies support efficient and resilient development patterns within settlement areas through the promotion of opportunities for intensification and redevelopment where this can be accommodated by the existing context. It also promotes the long term economic prosperity by enhancing the vitality and viability of mainstreets as well as encouraging a sense of place by promoting well-designed built form and cultural planning, and by conserving features that help define character, including built heritage resources and cultural heritage landscapes. The PPS also directs transportation and land use consideration to be integrated at all stages of the planning process.

4.3 Bus Rapid Transit

The Draft Environmental Project Report for London's Bus Rapid Transit project was approved by Municipal Council on May 8, 2018. This report identified the north-east route as running through the Secondary Plan area along King Street, Ontario Street, and Dundas Street as illustrated below. Proposed rapid transit stop locations within the Secondary Plan area include King Street at Colborne Street, King Street at Adelaide Street North, and King Street at Ontario Street.



4.4 Downtown OEV East-West Bikeway Corridor Evaluation

Transportation Planning and Design retained WSP to undertake an evaluation of east-west cycling corridors to identify a safe and continuous connection between the downtown and east London. This evaluation has been coordinated with the Secondary Plan process and the results of the feasibility study will be presented at the Civic Works Committee on February 20, 2019.

4.5 Cultural Heritage Assessment

City Planning retained ASI to conduct a Cultural Heritage Assessment of the Old East Village Dundas Street Corridor Secondary Plan area. The Cultural Heritage Assessment was submitted on January 14, 2019.

5.0 Key Issues and Considerations

5.1 Use

The London Plan contemplates a range of residential, retail, service, office, cultural, recreational and institutional uses (Policy 837.1) and encourages mixed-use buildings (Policy 837.2) within Rapid Transit Corridors. Retail and services uses are encouraged to front the street at grade within mixed-use buildings (Policy 837.4). The Old East Village Main Street segment contemplates a broad range of uses at a walkable neighbourhood scale to support local shopping and commercial options (Policy 845). The uses proposed within the draft Secondary Plan area are consistent with the vision for the Old East Village Main Street segment and will support future rapid transit services within the Rapid Transit Corridor.

5.2 Intensity

Within the Old East Village Main Street segment (Dundas Street, between Colborne Street and Quebec Street), *The London Plan* contemplates buildings that are a minimum of two storeys (or eight metres) and a maximum of 12 storeys in height (Policy 847.1 and 847.2). Bonusing up to a maximum height of 16 storeys is contemplated (Policy 847.2). *The London Plan* also directs us to carefully manage the interface between corridors and the adjacent lands within less intense neighbourhoods (Policy 830.6). This is achieved through the draft Secondary Plan policies requiring building heights in close proximity to existing established low-rise residential neighbourhoods, predominantly north of the Secondary Plan area, to be stepped back from the low-rise residential properties to provide a sensitive height transition and by limiting opportunities to obtain increased height through a bounsing.

The London Plan contemplates a wide range of uses and greater intensities of development along Rapid Transit Corridors close to transit stations (830.5). The policies contemplate a minimum of two storeys (or eight metres) and a maximum height of 12 storeys with bonusing (Table 9). Greater residential intensity may be permitted within the Rapid Transit Corridor Place Type on sites that are located within 100 metres of a rapid transit station (Policy 840.6) up to a maximum of 16 storeys with bonusing (Table 9).

Within the draft Secondary Plan, high-rise development is directed along the King Street corridor and the south side of Dundas Street, consistent with general intent of the aforementioned policies. Rapid transit stations are planned at the King Street and Adelaide Street North intersection, the King Street and Ontario Street intersection, and the King Street and Colborne Street intersection. Increasing the residential intensity south of Dundas Street and along King Street, to permit bonusing for a height beyond 12 storeys is proposed within the policies of the Secondary Plan. This residential intensity is intended to support the functions of the future rapid transit service and further promote the revitalization of the Dundas Street corridor.

5.3 Form

The London Plan's vision for Rapid Transit Corridors includes transit-oriented and pedestrian-oriented development forms (Policy 830.7), creating a strong building edge (Policy 841.2) and breaking down the mass of large buildings (Policy 841.3). Buildings and the public realm will be designed to be pedestrian, cycling and transit-supportive through building orientation, location of entrances, clearly marked pedestrian pathways, widened sidewalks, cycling infrastructure and general site layout that reinforces pedestrian safety and easy navigation (Policy 841.5). The policies of the draft Secondary Plan are consistent with this approach to building form and mode priority in the design of new development.

5.4 Reduction of On-street Parking

The Downtown OEV East-West Bikeway Corridor Evaluation results identify Dundas Street as the primary cycling corridor connecting the downtown with east London. As the right-of-way provides limited space to fully accommodate all modes of transportation, the approach taken seeks to balance the needs of all users. The proposed cycling network aims to reduce the impact of the added cycling lanes through the core of Old East Village by shifting the dedicated west-bound cycling lane to Queens Avenue, between William Street and Quebec Street. At this same segment, a single east-bound cycling lane will be integrated into the right-of-way design of Dundas Street. Vehicle travel lanes widths will be reduced and sidewalks widened to redistribute modal priority.

To accommodate the additional cycling lane as well as widened sidewalks and street trees, the existing on-street parking on the south side of Dundas Street will be removed. Concern has been raised from the business community along the corridor that this loss of parking may negatively impact business. Within this core area, there are three underutilized Municipally-owned parking lots. Policies within the draft Secondary Plan address strengthening the connection between the Dundas Street corridor and these parking lots both physically and through a co-ordinated signage program to address the loss of on-street parking through changing drivers' habits.

5.5 Heritage

The *Old East Village Dundas Street Corridor Secondary Plan* area is located in close proximity to three heritage conservation districts: the East Woodfield Heritage Conservation District, the West Woodfield Heritage Conservation District, and the Old East Heritage Conservation District. Furthermore, there are a number of listed and individually designated properties within the Secondary Plan area. Recognizing this, a Cultural Heritage Assessment was undertaken for the area in parallel to the Secondary Plan process. The *Cultural Heritage Assessment Background Report* has been considered in the policies of the draft Secondary Plan. This background report will also be provided to the London Advisory Committee on Heritage for further consideration and for recommendations that may further refine the heritage policies of the Secondary Plan.

6.0 Next Steps

The draft *Old East Village Dundas Street Corridor Secondary Plan* will be circulated to the community and stakeholders. Feedback received will be considered through revisions to the Secondary Plan. The revised Secondary Plan will be brought forward to the Planning and Environment Committee in the second quarter of 2019.

7.0 Conclusion

The draft *Old East Village Dundas Street Corridor Secondary Plan* was guided by the policies of *The London Plan* in combination with community and stakeholder input as well as expert knowledge from Urban Strategies Inc. staff.

Prepared by:	**Kerri Killen, MCIP, RPP** **Senior Planner, Urban Regeneration**
Submitted by:	**Britt O'Hagan, MCIP, RPP** **Manager, Urban Regeneration**
Recommended by:	**John M. Fleming, MCIP, RPP** **Managing Director, Planning and City Planner**
Note: The opinions contained herein are offered by a person or persons qualified to provide expert opinion. Further detail with respect to qualifications can be obtained from Planning Services	

February 12, 2019
KK/kk

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Appendix A

Bill No. (number to be inserted by Clerk's Office)
2019

By-law No. C.P.-XXXX-___

A by-law to amend The London Plan for the City of London, 2016 relating to the Old East Village Dundas Street Corridor Secondary Plan area.

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

1. Amendment No. (to be inserted by Clerk's Office) to The London Plan for the City of London Planning Area – 2016, as contained in the text attached hereto and forming part of this by-law, is adopted.

2. This by-law shall come into effect in accordance with subsection 17(38) of the *Planning Act, R.S.O. 1990*, c.P.13.

PASSED in Open Council on XXXX.

Ed Holder
Mayor

Catharine Saunders
City Clerk

First Reading –
Second Reading –
Third Reading –

File: O-8879
Planner: K. Killen

AMENDMENT NO.
to the

THE LONDON PLAN FOR THE CITY OF LONDON

A. PURPOSE OF THIS AMENDMENT

The purpose of this Amendment is:

To add the Old East Village Dundas Street Corridor Secondary Plan to the list of adopted Secondary Plans in policy 1565 of The London Plan for the City of London.

B. LOCATION OF THIS AMENDMENT

This Amendment applies to lands generally fronting Dundas Street, between Colborne Street and Burbrook Place/Kellogg Lane, lands fronting King Street, between Colborne Street and Ontario Street, and lands fronting Ontario Street in the City of London.

C. BASIS OF THE AMENDMENT

The preparation of the Old East Village Dundas Street Corridor Secondary Plan was undertaken to coordinate a number of ongoing and upcoming initiatives in the area, including: (1) the future implementation of rapid transit service along King Street from the downtown to Ontario Street and continuing east along Dundas Street; (2) the evaluation and implementation of cycling infrastructure to establish an east-west corridor connecting east London with the downtown; (3) a planned infrastructure renewal project, which will include upgrades to underground services and streetscape reconstruction along Dundas Street between Adelaide Street North and Ontario Street; (4) the planned construction of the Adelaide Street/CP Rail underpass; (5) proposed redevelopment of a portion of the Western Fair grounds, as well as multiple development applications along both Dundas Street and King Street; and, (6) ongoing investment in heritage building conservation and adaptive reuse .

The City of London was responsible undertaking public consultation through community meetings and satisfying certain planning requirements and criteria as set out in the Terms of Reference adopted by Council. The background studies, community and agency input, and proposed policies were, in turn, reviewed and assessed by municipal staff in the context of the Provincial Policy Statement and The London Plan, and used in the finalization of the Secondary Plan. This background work forms the basis and rationale for amendments to The London Plan.

The Secondary Plan will be used in the consideration of all applications including Official Plan amendments, zoning by-law amendments, site plans, consents, minor variances and condominiums within the Planning Area.

D. THE AMENDMENT

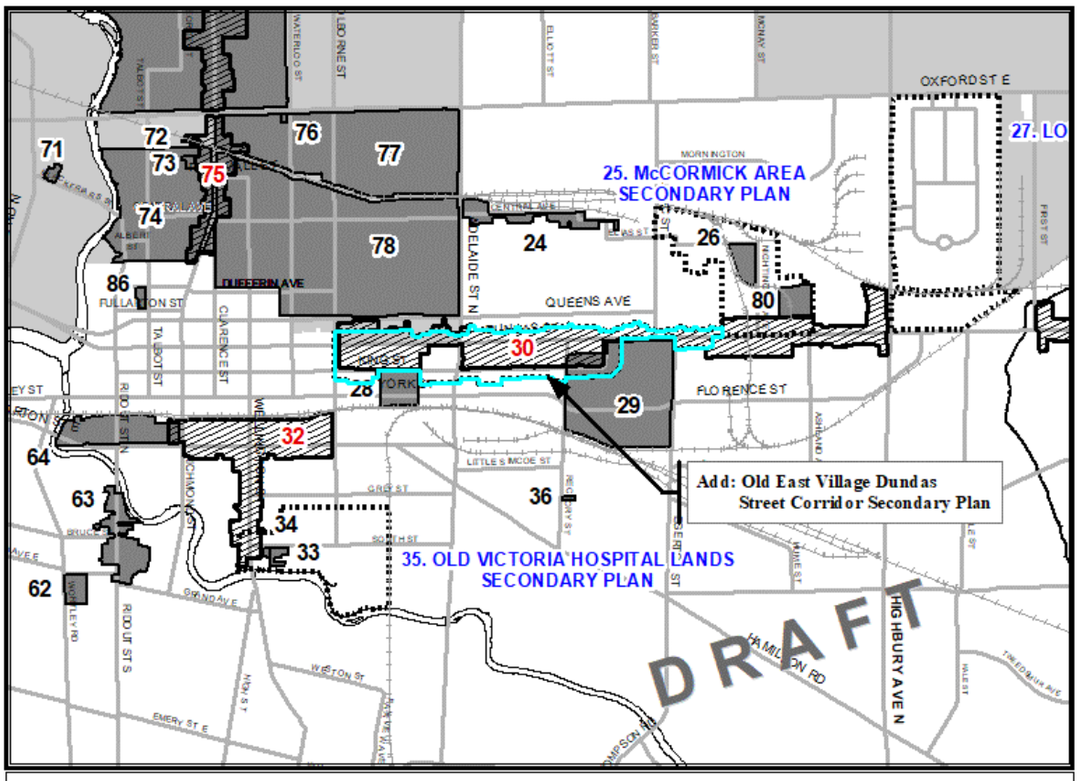
The London Plan is hereby amended as follows:

1. Policy 1565 – List of Secondary Plans of The London Plan for the City of London is amended by adding the following:

   ( ). Old East Village Dundas Street Corridor Secondary Plan

2. Map 7 – Special Policy Areas to The London Plan for the City of London Planning Area is amended by the boundary of the Old East Village Dundas Street Corridor Secondary Plan area in the City of London, as indicated on “Schedule 1” attached hereto.

AMENDMENT NO:



LEGEND

- Specific Policies
- Rapid Transit and Urban Corridor Specific-Segment Policies
- Near Campus Neighbourhood
- Secondary Plans

BASE MAP FEATURES

- Streets (See Map 3)
- Railways
- Urban Growth Boundary
- Water Courses/Ponds

This is an excerpt from the Planning Division's working consolidation of Map 7 - Special Policy Areas of the London Plan, with added notations.

SCHEDULE # TO THE LONDON PLAN **AMENDMENT NO. _____** PREPARED BY: Planning Services	Scale 1:30,000 Meters	**FILE NUMBER:** O-8879 **PLANNER:** KK **TECHNICIAN:** MB **DATE:** 2/7/2019

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Appendix B – Draft Old East Village Dundas Street Corridor Secondary Plan

Old East Village Dundas Street Corridor

Secondary Plan

DRAFT February 2019

London CANADA

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1.0 Introduction

1.1 BACKGROUND

Important regeneration efforts have been carried out in Old East Village and the surrounding area for more than three decades. In 2003, the Ontario Professional Planners Institute's Planners Action Team came together to undertake a detailed analysis of the corridor. Their report, *Re-establishing Value: A Plan for the Old East Village*, included a number of strategies for improvement and revitalization. Guided by these recommendations, the Community Improvement Plan area was established in 2004. The associated *Old East Village Community Improvement Plan* was created to provide context for a coordinated municipal effort to improve the physical, economic, and social conditions of Old East Village and to stimulate private investment and property maintenance and renewal.

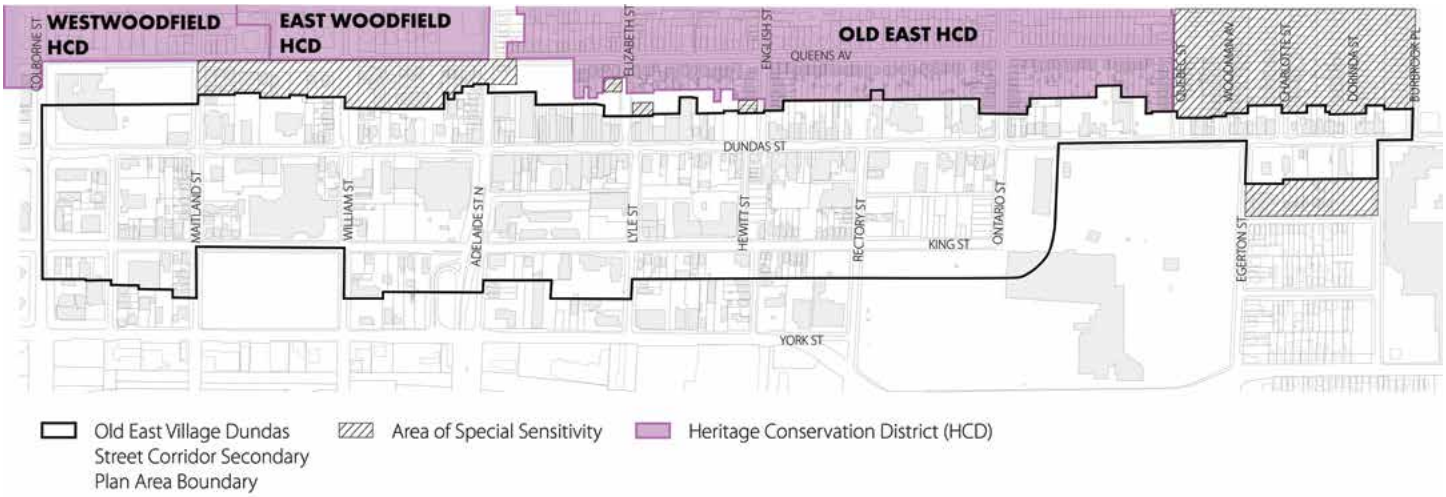
Following this, the *Old East Village Commercial Corridor Urban Design Manual* was prepared by the City of London and adopted in 2016. The purpose of this design manual is to promote high-quality design that responds to the area's unique context and overall vision. Throughout all of these projects and initiatives, the neighbourhood and business community has been instrumental, working closely with staff to ensure the project outcomes are appropriate for the local context.

The area faces future challenges and opportunities that come with rapid transit service, infrastructure upgrades, cycling infrastructure and development. This Secondary Plan aims to build on the ongoing efforts to revitalize the community, knitting together planned transit and cycling infrastructure upgrades with development pressures and public realm design priorities.

1.2 LOCATION

The Old East Village Dundas Street Corridor Secondary Plan applies to the general area along Dundas Street between Colborne Street and Burbrook Place, and King Street between Colborne Street and Ontario Street. The Secondary Plan boundary is illustrated in Schedule 1. This Secondary Plan incorporates the area that extends beyond the boundaries of what is traditionally considered Old East Village to ensure that appropriate connections are created to the downtown to the west as well as to the McCormick Area Secondary Plan area and former Kellogg's property to the east.

The East Woodfield Heritage Conservation District, the West Woodfield Heritage Conservation District, and the Old East Heritage Conservation District are in close proximity to the Secondary Plan area. In addition, there are areas located adjacent to the Secondary Plan boundary, identified as 'Areas of Special Sensitivity' (illustrated in Schedule 1), where development guidance would help prevent conflicts with the existing built form and uses.



Schedule 1: Secondary Plan Area

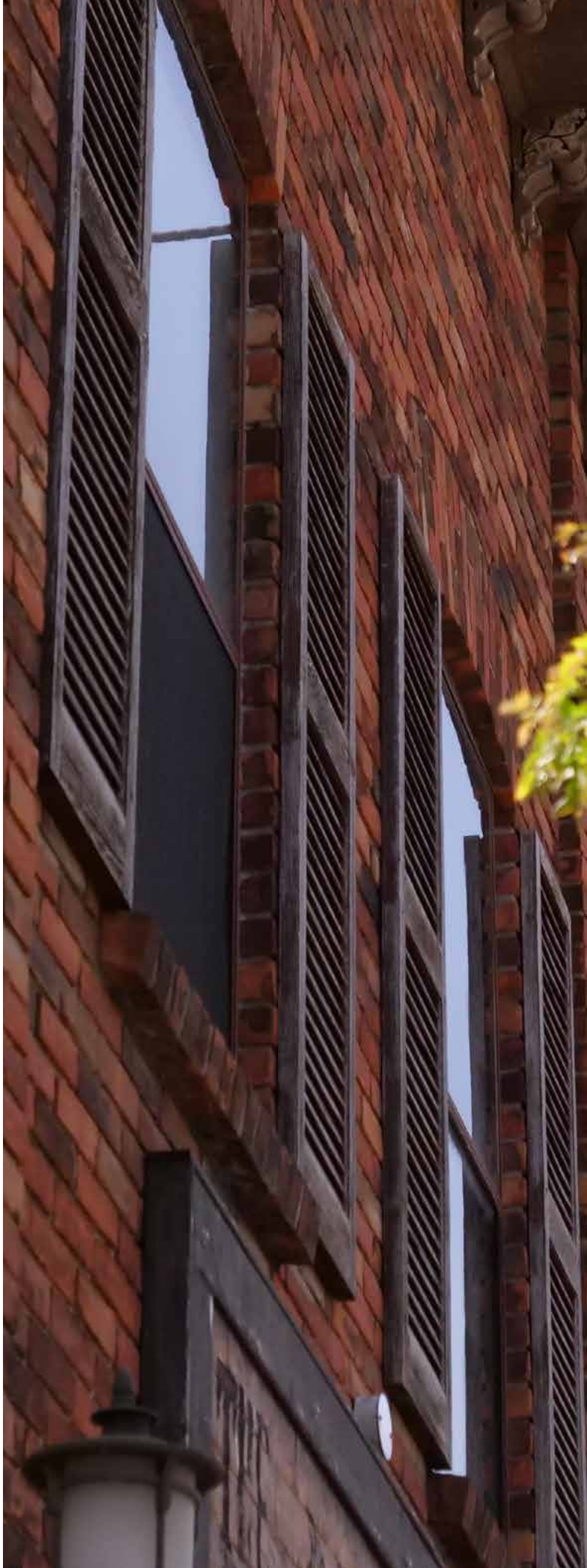
1.3 PURPOSE AND USE

The purpose of this Secondary Plan is to establish the vision, principles, and detailed policies for the Old East Village and surrounding areas and to continue the neighbourhood's evolution into a unique destination and a vibrant community core. This Secondary Plan provides a policy framework for future developments and for public realm improvements within the Old East Village Dundas Street Corridor Secondary Plan area. The intent of the policies is to ensure that the Secondary Plan area finds continuing uses for its cultural heritage resources and provides a rich, diverse, and balanced street life for residents, shoppers, pedestrians, cyclists, transit users, vehicles, and other modes of transportation.

This Secondary Plan provides a greater level of detail than the general policies in *The London Plan* and is guided by the policies of the *Provincial Policy Statement*. This Secondary Plan shall be used for the review of planning applications. This Secondary Plan is further intended to be used in conjunction with other policies of *The London Plan*. In instances where the overall policies of *The London Plan* and the *Old East Village Dundas Street Corridor Secondary Plan* are inconsistent, the Secondary Plan shall prevail.

The text and schedules of the *Old East Village Dundas Street Corridor Secondary Plan* will be added to Policy 1565 of *The London Plan*. The schedules form part of this Secondary Plan and have policy status whereas other figures and photographs included in this Secondary Plan are provided for graphic reference, illustration, and information.

Any required funding associated with the recommendations in the Secondary Plan are subject to the availability and approval of funding through the Corporation's multi-year budget process.



1.4 VISION AND PRINCIPLES

The Old East Village Dundas Street Corridor Secondary Plan area is envisioned as a vibrant commercial core with a unique heritage character that serves as a community hub for local residents and draws visitors as a distinct destination. The vision for this area has been developed to continue the momentum of three decades of revitalization efforts, the ongoing evolution and the current success of Old East Village and the surrounding areas.

The development of this Secondary Plan has been guided by the following principles:

- Foster the local and creative entrepreneurial spirit and support community economic development;
- Respect and reinvest in heritage resources to enhance the unique character of the area;
- Provide a distinct retail offer with a wide range of commercial uses including restaurants and cafes;
- Create a safe and welcoming environment to pedestrians and cyclists of all ages and abilities;
- Establish safe connections to the local transit system and surface parking lots; and,
- Support properly scaled residential growth.

2.0 Character Areas

2.1 OVERVIEW

The Old East Village Dundas Street Corridor Secondary Plan area is broadly made up of four character areas: Dundas Street – Midtown, Dundas Street – Old East Village Core, Dundas Street – Old East Village East, and King Street. Each character area has distinct characteristics that together create a unique identity for the Secondary Plan area.

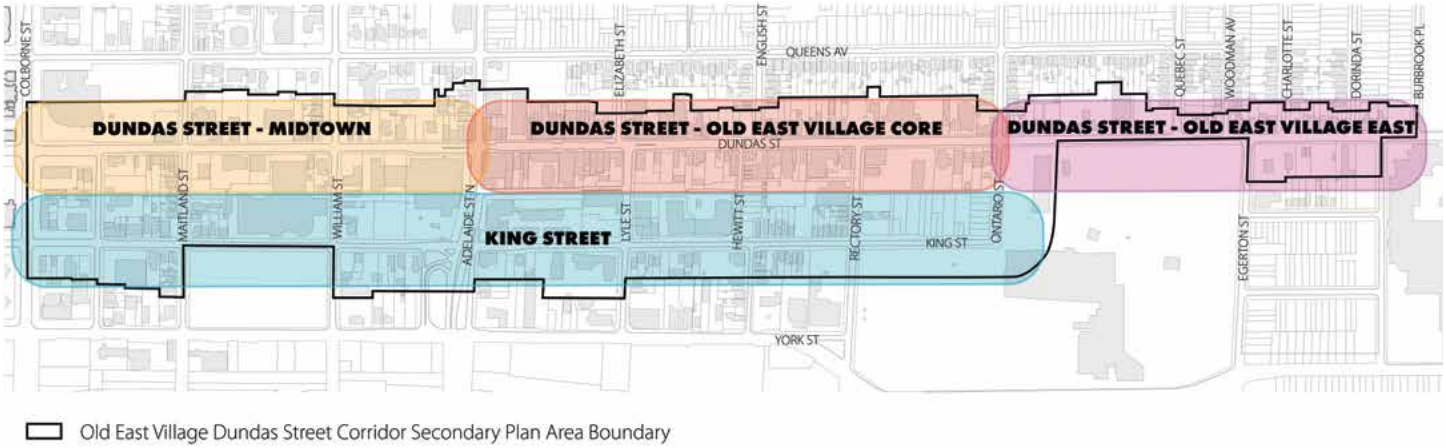


Figure 1: Character Areas

2.2 DUNDAS STREET – MIDTOWN CHARACTER AREA

Midtown is characterized by low-rise buildings with institutional and commercial uses fronting Dundas Street. High-quality cultural heritage resrources line both sides of the street. The area provides a transition between the downtown to the west, and the core of Old East Village to the east.

The vision for Midtown is for the area to be a vibrant and pedestrian-oriented connection between the downtown and Old East Village. Supporting the continued retail health is a priority for this character area. New development is envisioned, especially on the south side of the corridor, in a form that is well-integrated into the existing context and is respectful of the cultural heritage resources in the area. This portion of Dundas Street is identified as a Main Street within the Rapid Transit Corridor Place Type in *The London Plan*, where street-oriented built form is supported, meaning that buildings are close to the street and parking is generally located to the rear of the building, underground, or within the architectural mass of the building. A broad range of uses and intensification is envisioned to take place at a walkable neighbourhood scale.

2.3 DUNDAS STREET – OLD EAST VILLAGE CORE CHARACTER AREA

The Old East Village Core is located along Dundas Street, between Adelaide Street and Ontario Street, and is the heart of Old East Village anchoring the overall Secondary Plan area. Today, this segment of Dundas Street is lined with independent shops and restaurants. This area has a history of grassroots revitalization efforts that have created a distinct and attractive character. The momentum of revitalization needs to be maintained and fostered for the area's continued success.

The vision for the Old East Village Core is a vibrant pedestrian-oriented district with a broad range of commercial uses. In *The London Plan*, this segment of Dundas Street is identified as a Main Street within the Rapid Transit Corridor Place Type, where continuous street-oriented built form is supported, with a broad range of uses and intensification designed at a walkable neighbourhood scale.

Retaining and enhancing the character of the Old East Village Core to achieve a continuous streetscape is a key strategy of this Secondary Plan. New development should be harmonious with the existing character, rhythm, and massing of the current built form, and have building materials that are sympathetic to the character of the existing structures, cultural heritage resources, and the street.

2.4 DUNDAS STREET – OLD EAST VILLAGE EAST CHARACTER AREA

Old East Village East is located along Dundas Street, between Ontario Street and Burbrook Place, and is characterized by the Western Fair Grounds and Queens Park to the south and fine-grained retail uses on the north side of the street. The Western Fair Farmer and Artisan Market anchors the character area, and has been an incubator for independent local businesses, some of which have opened storefront locations along Dundas Street. This segment of Dundas Street connects the Old East Village Core to the McCormick Area Secondary Plan area and the former Kellogg's property, two industrial neighbourhoods with distinct heritage character undergoing significant transformation and revitalization.

The vision for Old East Village East is to strengthen the walkability of the area with strong retail and restaurant presence to sustain year-round activity, in addition to supporting its marquee events like the Western Fair. Significant change is anticipated on this segment of Dundas Street with future rapid transit service and the associated streetscape redesign. Strengthening the physical connection to the Old East Village Core will be a priority for this character area.

2.5 KING STREET CHARACTER AREA

King Street is characterized by varying land uses ranging from residential to light industrial and institutional. The built form is also varied with low-rise single-detached dwellings alongside high-rise apartment buildings. Today along King Street, there are a number of large surface parking lots offering excellent opportunities for transit-oriented intensification. The area between Dundas Street and King Street is characterised by deep lots which offer good high-rise development opportunities.

Rapid transit service is anticipated along King Street, from the downtown through to Ontario Street. King Street is identified as a Rapid Transit Boulevard within the Rapid Transit Corridor Place Type in *The London Plan*. The Plan encourages intensification here, especially around future rapid transit stations planned along King Street at Colborne Street, Adelaide Street North and Ontario Street.

High-rise residential and office uses are appropriate along King Street, and have recently been introduced to the corridor. It is envisioned that the highest residential intensity will be accommodated in the King Street Character Area to strengthen the market for Old East Village businesses, especially within walking distance to the future rapid transit stations.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3.0 Policies

3.1 OVERVIEW

The intent of this Secondary Plan is to provide a policy framework to guide future development and public projects in the Old East Village Dundas Street Corridor Secondary Plan area. Policies in this Secondary Plan support the vision by providing guidance on:

- land uses;
- built form;
- public realm design and the mobility framework; and,
- heritage.

The policies of this Secondary Plan generally provide a greater level of detail than the general policies of *The London Plan*. Where the policies of *The London Plan* provided sufficient guidance to implement the vision of this Secondary Plan, these policies were not repeated in this Secondary Plan. As such, the policies of this Secondary Plan should be read in conjuncture with *The London Plan*. In instances where the overall policies of *The London Plan* and the *Old East Village Dundas Street Corridor Secondary Plan* are inconsistent, the Secondary Plan shall prevail.

The policies of this Secondary Plan that use the words "will" or "shall" express a mandatory course of action. Where the word "should" is used, suitable alternative approaches to meet the intent of the policy may be considered.

The policies of this Secondary Plan will be implemented through mechanisms set out in this Secondary Plan, Municipal investments in infrastructure and public realm improvements, as well as other tools available to the City

including the Zoning By-law, the Site Plan Control By-law, and urban design review.

3.2 LAND USE

Today, Old East Village, Midtown, and King Street feature a diverse mix of land uses and an artisanal spirit which contribute to its positioning as an active urban node and an area of entrepreneurial activity. The intent of the following land use policies is to allow for the Secondary Plan area to continue to evolve as a thriving mixed-use community and a cultural hub. The Zoning By-law will provide more detail on individual permitted uses; this may not include the full range of uses identified in this Secondary Plan.

The following land use policies apply to the entire Secondary Plan area, unless otherwise specified within the individual policy:

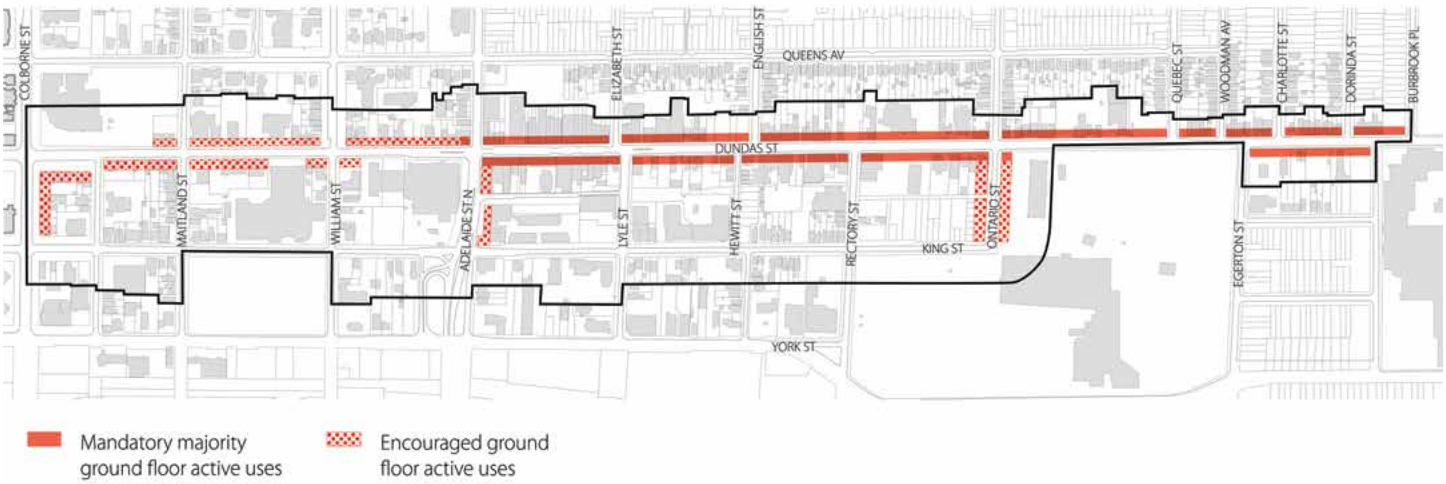
a) Mixed-use buildings are encouraged as the preferred form of development within the Secondary Plan area.

b) A broad range of residential, retail, service, office, cultural, recreational, and institutional uses may be permitted.

c) Dundas Street properties, between Adelaide Street North and Burbrook Place, shall provide street-oriented active uses on the ground floor for the majority of the Dundas Street frontage. Street-oriented active uses include, but are not limited to:

- Retail;
- Service;
- Recreational;
- Cultural; and,
- Institutional.

Street-oriented non-active uses, such as residential lobbies and office uses, may be permitted if they comprise less than the majority of the Dundas Street frontage of



Schedule 2: Ground-Floor Uses

an individual property. The segment where this policy is applicable is illustrated in Schedule 2: Ground-floor Uses.

d) Street-oriented active uses are encouraged at the ground floor of properties fronting Dundas Street, between Colborne Street and Adelaide Street North, as well as properties on Colborne Street, Adelaide Street North and Ontario Street between Dundas Street and King Street.

e) Residential uses are encouraged above the ground floor to increase the residential population and provide a variety of housing options.

f) Primary access to residential units above the ground floor should be located on a street-facing facade.

g) Artisanal workshops and craft breweries may be permitted to support the emerging businesses.

h) Community facilities and institutional uses may be permitted for the continued provision of neighbourhood services. The ground floor of these uses will be designed to contribute to the vibrancy and animation of the street.

i) Drive-through facilities may be permitted where it can be clearly demonstrated that they will not detract from the vision and role of the Place Type and the quality and character of the pedestrian-oriented street environment. Proposals for new drive through facilities will be subject to a zoning by-law amendment and site plan approval, in conformity with the policies of this Secondary Plan and The London Plan.

3.3 BUILT FORM

One of the Secondary Plan area's strongest assets is its rich and complex built environment with various building forms and types that contribute to a unique sense of place. From the historic low-rise houses and retail buildings fronting on Dundas Street to the high-density podium-tower condominiums emerging along King Street, the variety of building types that allow diverse uses to flourish will be key to the area's continued evolution and vibrancy. The purpose of this Secondary Plan is to provide guidelines to coordinate and guide future developments while celebrating the continued diversity in the urban fabric.

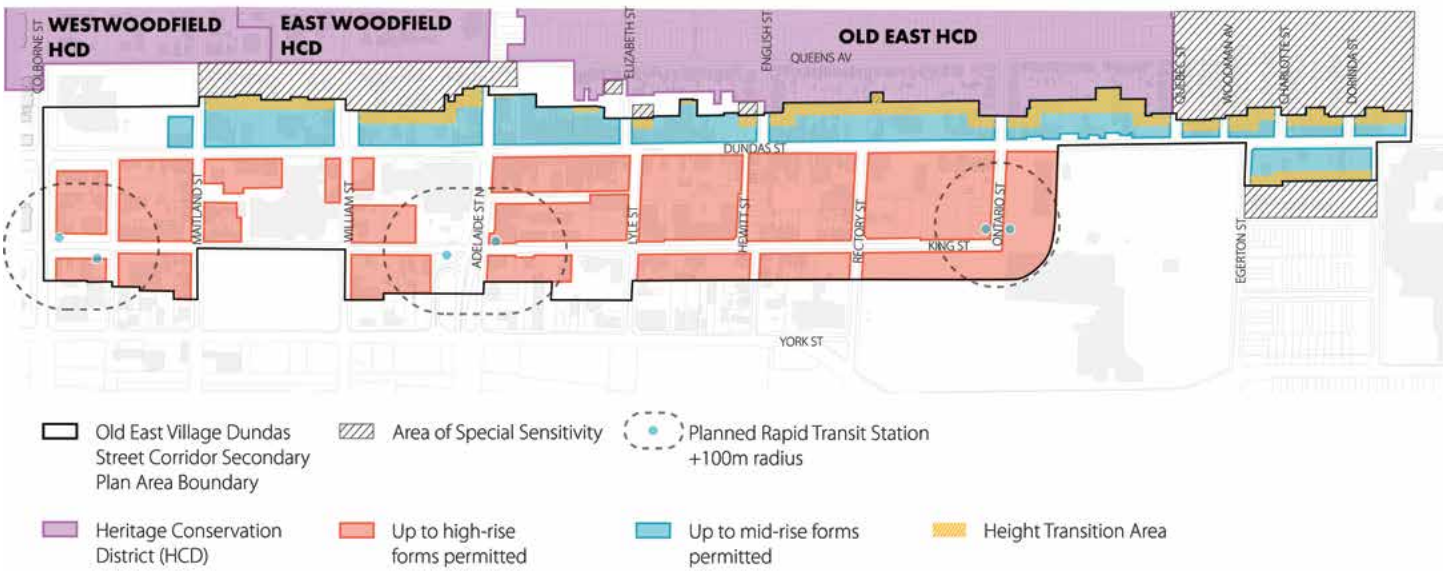
3.3.1 PERMITTED HEIGHTS

a) For the purposes of this Secondary Plan, low-rise will describe buildings up to, and including, three storeys in height. Within the entirety of the Secondary Plan area, low-rise buildings will be permitted, with a required minimum of height of two storeys or eight metres.

b) For the purposes of this Secondary Plan, mid-rise will describe buildings four storeys and up to and including eight storeys in height.

c) Low-rise and mid-rise buildings are generally permitted on the north side of Dundas Street and on the south side of Dundas Street between Egerton Street and Kellogg Lane. Refer to Schedule 3: Permitted Heights. Maximum building heights may be less than eight storeys as determined through the policies in Section 3.3.3 Mid-Rise Form.

d) For the purposes of this Secondary Plan, high-rise will describe buildings nine storeys in height and taller.



Schedule 3: Permitted Heights

e) Low-rise, mid-rise, and high-rise buildings up to 12 storeys are generally permitted on the south side of Dundas Street, on both sides of King Street, and on both sides of Ontario Street. Refer to Schedule 3: Permitted Heights.

f) Within a 100 metre radius of a rapid transit station and within the boundary of the Secondary Plan area, permitted building height shall be up to 16 storeys to promote transit-oriented development.

g) Where high-rise forms are permitted (refer to Schedule 3), height exceeding the established maximum, up to 24 storeys, may be permitted through a site-specific bonus zone, where it can be demonstrated that significant measures are put in place to support or mitigate this additional height or density, subject to the policies of Section 3.4 Bonusing.

h) Development proposals for residential intensification may require studies to determine servicing capacity and necessary upgrades. The results of these studies may influence the maximum permitted height and density that is permitted through zoning.

3.3.2 GENERAL BUILT FORM

a) The Old East Village Core and Old East Village East character areas have an existing relatively consistent built form which establishes a continuous street wall. The placement of buildings within these character areas should support this continuous street wall, and exceptions for small plazas, courtyards or patios spaces should be designed to carefully integrate into this established streetscape.

b) The Midtown character area has an existing built form condition which is highly diverse. The placement of buildings will respond to the immediately adjacent built form context.

c) The King Street character area is planned to accommodate rapid transit service and high-rise development. To create a comfortable pedestrian environment along King Street, new buildings in this character area will be set back from the right-of-way to provide space for landscaping.

d) Portions of buildings at intersections may be setback for small plazas, courtyards, patios spaces, or to accommodate enhanced sidewalk treatments.

e) Parking shall not be located between the building front and public right-of-way.

f) Landscape treatment should be provided along the edge of parking lots and within parking lots to mitigate water runoff, heat island effect and enhance the user experience.

g) Access for parking and service areas should be located away from main streets and on side streets and laneways where possible. Where it is not possible, parking access will be minimized to reduce pedestrian conflict and will be integrated in a way that does not detract from the character of the street.

h) Corner buildings should be designed with the primary building entrances fronting onto the higher order street.

i) High- and mid-rise buildings should be designed to express three defined components: a base, middle, and top. Alternative design solutions that address the following intentions may be permitted:

- The base should establish a humanscale façade with active frontages including, where appropriate, windows with transparent glass, forecourts, patios, awnings, lighting, and the use of materials that reinforce a human scale.
- The middle should be visually cohesive with, but distinct from, the base and top.
- The top should provide a finishing treatment, such as a roof or a cornice treatment, and will serve to hide and integrate mechanical penthouses.

j) Buildings should have articulated façades that complement the façade rhythm of the existing streetscape and no large blank walls should be visible from the street.

k) Building façades should address and frame the public street at grade.

l) Façade elements of infill development or new construction fronting onto Dundas Street will be designed to support the existing character along the Dundas Corridor. These elements may include:

- Entryways and doors;
- Windows;
- Window base;
- Sign band and signage;
- Awnings; and,
- Lighting.

m) Regardless of the intended use, the ground floor of new buildings should be designed with the flexibility to accommodate future conversion to non-residential uses in the future. Strategies could be considered, such as providing a raised floor over the slab that can be removed to provide additional ground floor height in the future.

n) All development fronting onto Dundas Street should be consistent with the *Old East Village Commercial Corridor Urban Design Manual* to coordinate the façade and built form with the existing character of Dundas Street.

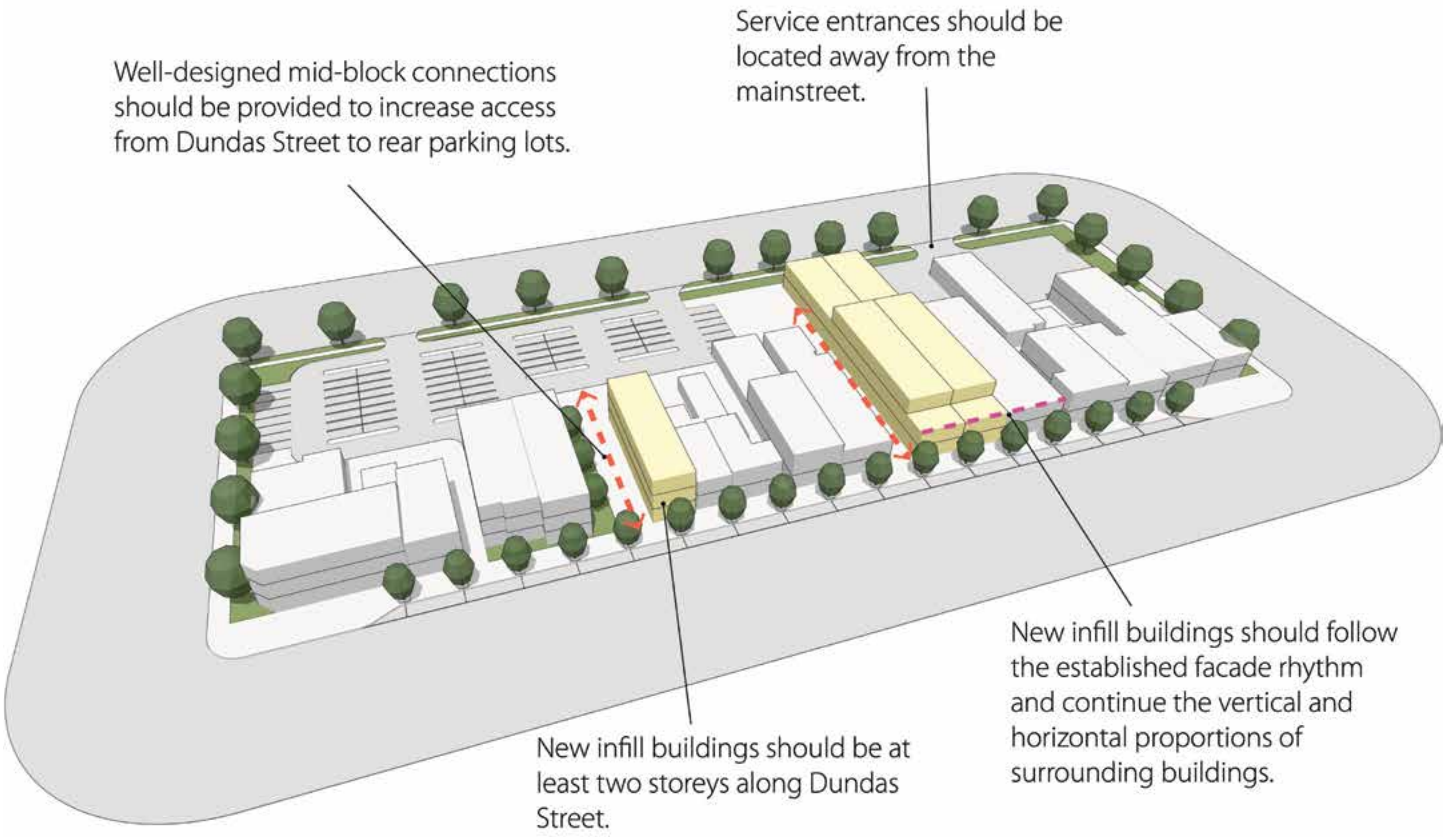


Figure 2: Illustration of New Low-Rise Buildings

3.3.3 MID-RISE FORM

a) To provide an appropriate transition of building scale to the adjacent low-rise neighbourhood areas, transition policies will apply in Height Transition Areas illustrated in Schedule 3: Permitted Heights.

b) A 45-degree angular plane beginning from the rear of the low-rise properties fronting Queens Avenue will set the limit to the height of new buildings located on the north side of Dundas Street. A 45-degree angular plane beginning from the rear of the low-rise properties fronting King Street will set the limit to the height of new buildings on the south side of Dundas Street east of Burbrook Street, to ensure an appropriate transition to the low-rise neighbourhoods as illustrated in Figure 3 and 4.

c) Mid-rise buildings should stepback a minimum of five metres at the third or fourth storey, depending on the built form context, to mitigate downward wind shear and support the existing street character at street level.

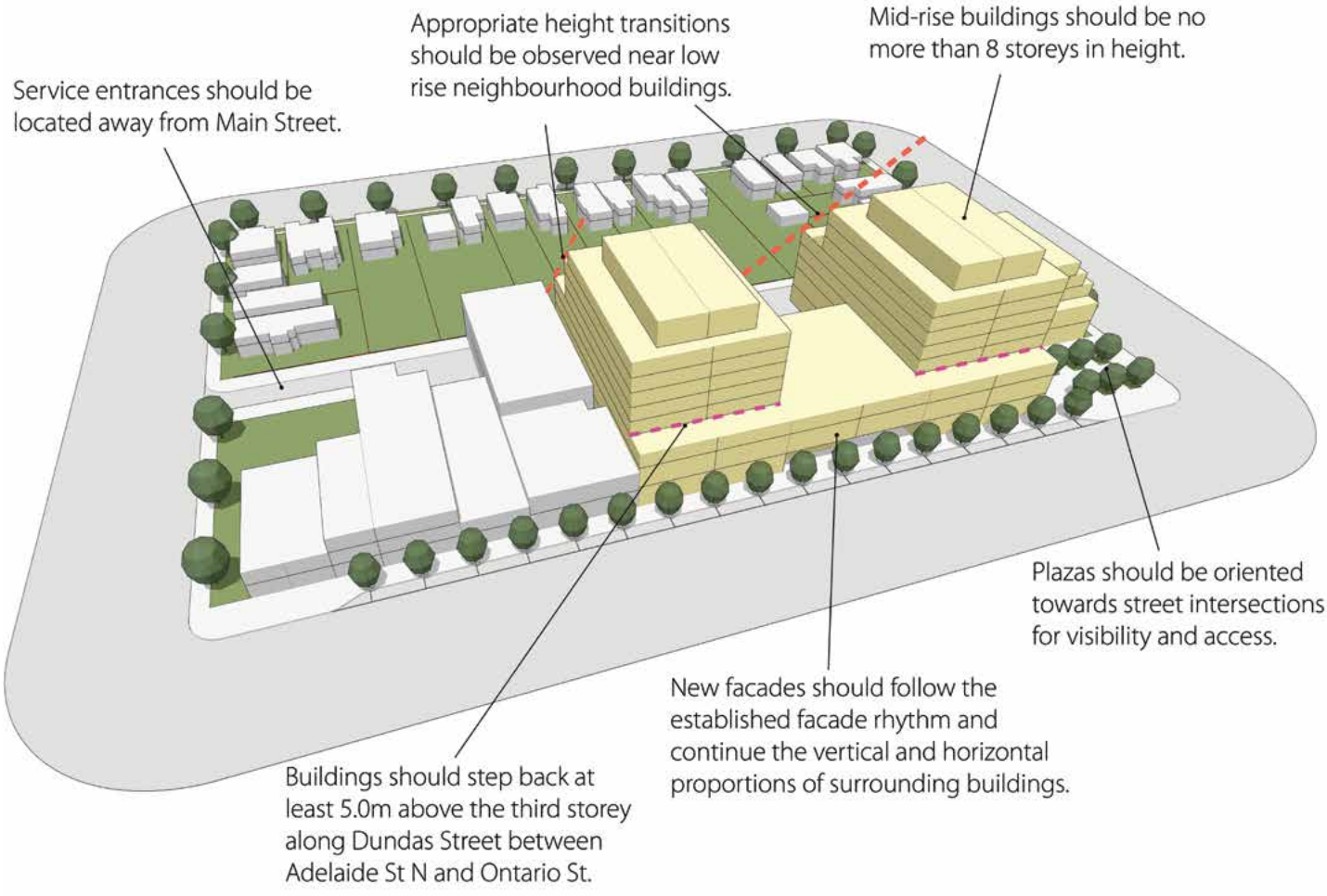


Figure 3: Illustration of New Mid-Rise Buildings

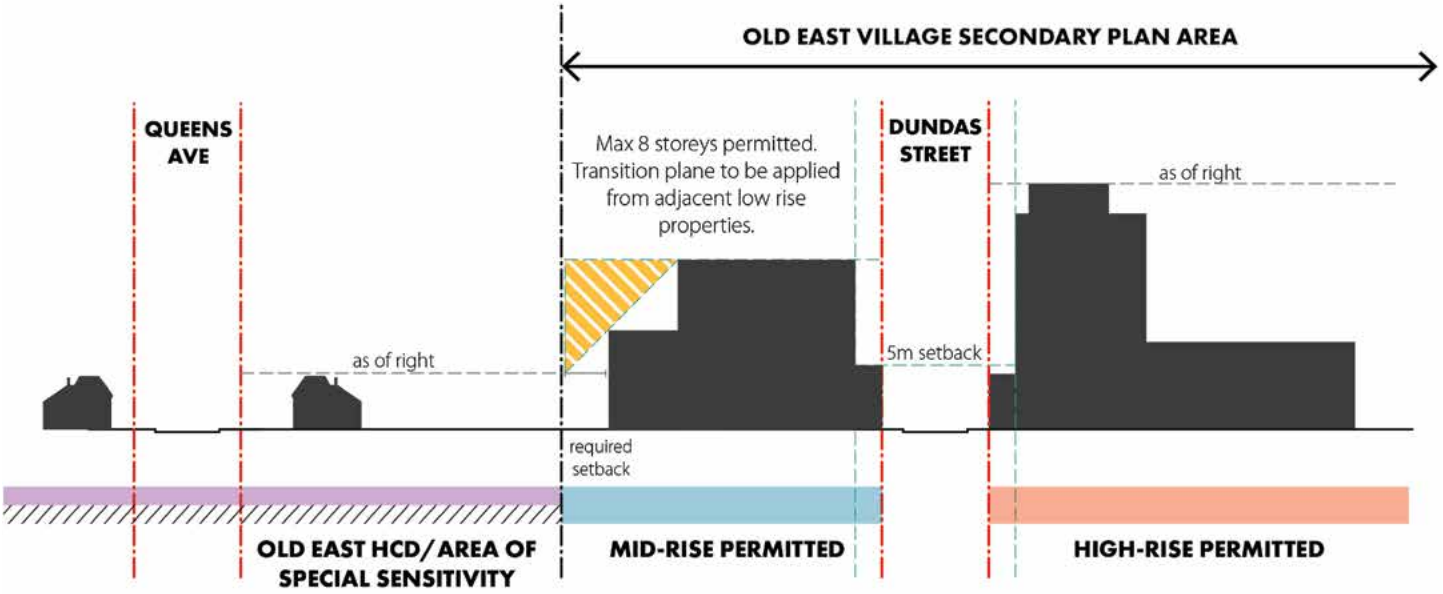


Figure 4: 45-degree Angular Plane Transition

3.3.4 HIGH-RISE FORM

a) The podium shall be designed to support a pedestrian-scaled environment at street level.

b) The tower portion should be stepped back above the podium along all public rights-of-way, at the third or fourth storey, to mitigate downward wind shear and limit the visual impact of the building at street level.

c) High-rise buildings should be designed with slender towers that reduce shadow impact, minimize the obstruction of views, and are less massive to neighbouring properties. A typical floor plate of approximately 1,000 square metres is a reasonable target to achieve this goal.

d) Separation distance between towers should generally be not less than 30 metres to ensure adequate privacy.

e) Where possible, towers should be offset to provide maximum access to sunlight and views. In cases where towers can be offset, reduction of tower separation distance may be considered to approximately 25 metres.

f) Towers shall not have any blank façades.

g) The top portions of the tower shall be articulated through the use of a small setback, difference in articulation, or the use of an architectural feature. The mechanical penthouse shall be integrated into the design of the tower.

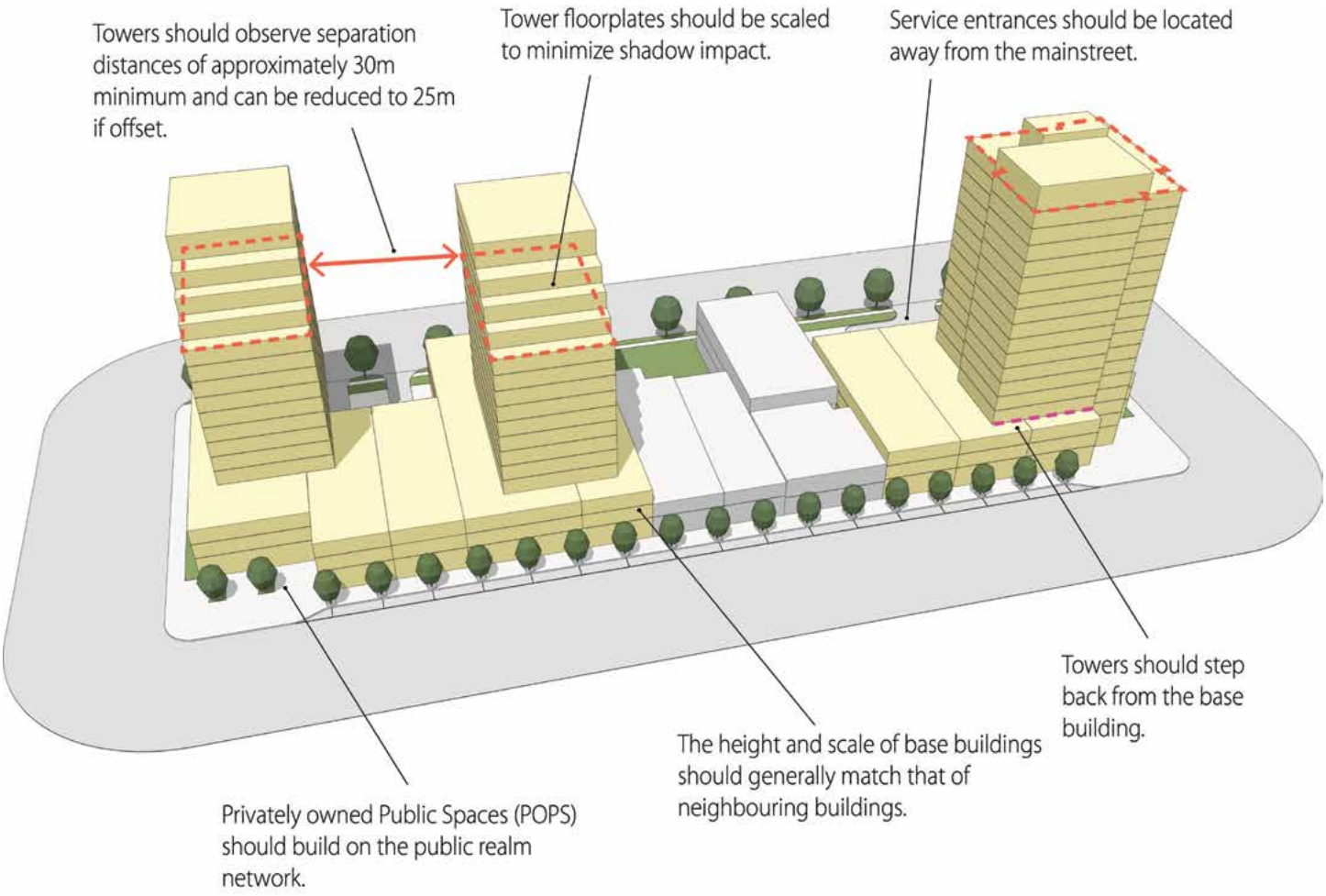


Figure 5: Illustration of New High-Rise Buildings

3.4 BONUSING

a) Where high-rise forms are permitted and where it can be demonstrated that significant measures are put in place to support or mitigate additional height or density, City Council may pass a by-law, known as a bonus zone, to authorize increases in the height and density of development beyond what is otherwise permitted by the *Zoning By-Law*, in return for the provision of such facilities, services, or matters as are set out in the bonus zone.

b) In accordance with the permitted heights identified in Section 3.3.1 Permitted Heights, additional height or density may be permitted in favour of facilities, services, or matters such as:

- Cultural heritage resources designation and conservation.
- Affordable housing.
- Public art.
- Provision of off-site community amenities, such as parks, plazas, civic spaces, or community facilities.
- Publicly-accessible mid-block connections and laneways, or widening of existing mid-block connections that provide access from Dundas Street to municipal parking lots.
- Generous front yard setbacks along King Street to widen the public right-of-way, provide landscaping and noise buffer, and act as a spatial relief for high-rise building forms.
- Contribution to the development of transit amenities, features and facilities, available to the public during transit operating hours.
- Substantial contribution to publicly accessible secure bicycle parking, and cycling infrastructure such as lockers and change rooms.
- Contribution to façade restoration and other heritage investments within the Secondary Plan area.
- Other facilities, services, or matters that provide substantive public benefit.

c) The facilities, services and matters to be provided in return for greater height or density do not necessarily have to be provided on the same site as the proposed development. City Council may want to have such benefits directed to another property within the Secondary Plan area.

d) Each proposal for bonus zoning will be considered on its own merits. The allowance for greater height and density on one site in return for certain facilities, services and matters will not be considered to establish a precedent for similar height and density on any other site.

3.5 PUBLIC REALM

A well-designed public realm will contribute to the success of the Old East Village Dundas Street Corridor Secondary Plan area as a safe and attractive place for people to live and visit. An excellent pedestrian environment, lively public spaces, a coordinated streetscaping approach, and safe and convenient connections to transit and parking will help to achieve this. In addition to enhancing the pedestrian thoroughfares of the Secondary Plan area, there is a need to build up a network of public spaces that will provide places to gather and act as focal points for the community. There is also a need to safeguard landscape areas which will help act as a buffer between the pedestrian zones and the proposed rapid transit infrastructure along King Street.

The design of the public realm within Old East Village and the surrounding areas should provide a safe, comfortable, and attractive environment. The public realm and streetscape will be designed in a way that allows flexibility and the ability for adaptation over time as resources become available and as the area evolves. The following policies apply to the public realm, including all public streets and mid-block connections to municipal parking lots within the Old East Village Dundas Street Corridor Secondary Plan area:

a) Pedestrian comfort, connectivity, and safety will be prioritized in the design of the public realm.

b) Main building entrances, terraces, and gathering spaces will be oriented towards public rights-of-way to support safety and provide direct access from the sidewalk.

c) All north-south streets connecting Queens Avenue, Dundas Street, and King Street are essential pedestrian and cycling connections, and will be enhanced through:

- Ensuring generous sidewalk width;
- Adding integrated and coordinated directional signage;
- Incorporating pedestrian-scaled lighting;
- Creating safe cycling conditions on north-south streets that connect the existing and future cycling infrastructure;
- Providing bicycle parking facilities; and,
- Designing attractive and high-quality landscaping, planted in conditions that support a future mature landscape.

d) Safety and accessibility of connections to municipal parking lots from public rights-of-way will be enhanced with appropriate sightlines, pedestrian-scaled lighting, and signage.

e) A coordinated wayfinding approach should be developed for the Secondary Plan area, which includes municipal parking lots.

f) Existing street trees will be retained where possible, and new trees with potential for large canopy will be planted in landscape zones with adequate soil volume to provide shade.

g) The integration of open spaces, such as plazas or parkettes, are encouraged with new development, especially at street intersections for visibility and accessibility.

h) Opportunities to incorporate gateway features should be considered at key intersections.

i) Coordinated street furniture, including bicycle parking, benches, planters, waste receptacles, and lighting will be incorporated into the street design.

j) Opportunities to add walkways and/or widen and extend laneways to provide safe midblock connections and connections to municipal parking lots should be explored.

k) Opportunities to accommodate outdoor restaurant patios within the sidewalk and in on-street parking spaces should be considered.

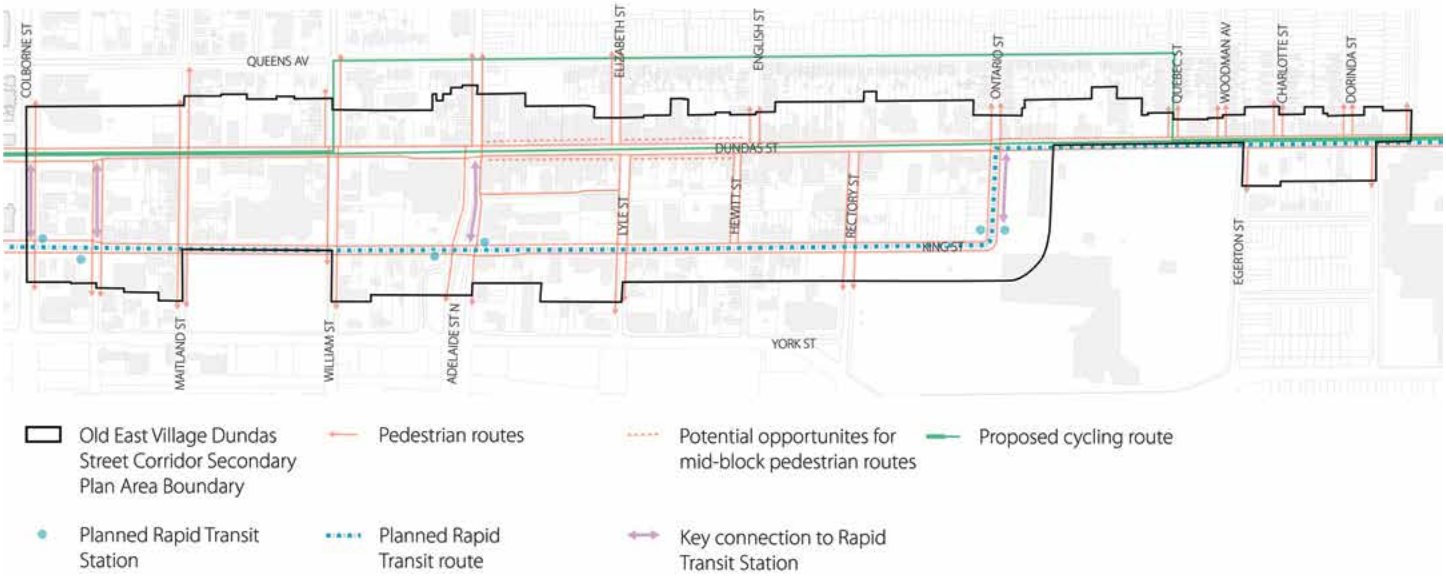
l) Dundas Street will be designed with the flexibility to accommodate events of different scales and sizes; consideration should be given to electrical outlet access and capacity as well as moveable features.

3.6 CONNECTIVITY AND MOBILITY

The Old East Village Dundas Street Corridor Secondary Plan area is located in close proximity to established residential neighbourhoods, new high-rise residential development, the downtown, the evolving industrial areas of the McCormick Area Secondary Plan area and the former Kellogg's property, and at the juncture of four heritage conservation districts. The area is anticipating cycling infrastructure improvements on Dundas Street and Queens Avenue, as well as rapid transit service along King Street, Ontario Street, and Dundas Street. To serve residents, attract visitors, and support the local businesses in the area, establishing safe access by various modes of transportation is vital to ensure the Secondary Plan area functions for everyone.

Schedule 4: Connectivity Framework provides an overview of the current pedestrian routes and future areas for mid-block connections as well as the planned Rapid Transit routes and the proposed cycling network.

The following section outlines policies that provide directions for pedestrian, cycling, transit, and automobile connections. The intent of these policies is to improve existing connectivity, and to identify potential opportunities for new connections to be established as the area evolves.



Schedule 4: Connectivity Framework

3.6.1 PEDESTRIAN PRIORITY

The core of Old East Village is a pedestrian supportive environment today with landscaping and street furniture. With anticipated improvement to the cycling infrastructure and introduction of rapid transit service, the walking environment requires special attention and upgraded treatments. Well-designed streetscapes with opportunities to incorporate street furniture and patio space will also encourage visitors to linger and patronise the local businesses, enhancing Old East Village's appeal as an urban destination.

The design of Dundas Street, King Street, connections to municipal parking lots, and all intersecting north-south streets will be designed to prioritize pedestrian connectivity, safety, comfort, and enjoyment by:

a) Ensuring a generous sidewalk width;

b) Incorporating attractive paving, plantings, and lighting;

c) Seeking opportunities to create safe new connections to provide public access to municipal parking lots, public space or public streets. This will include exploring opportunities to create new mid-block connections where appropriate, through acquisition of property as it becomes available, or through redevelopment as it occurs;

d) Installing coordinated directional signage at key locations, particularly on north-south streets that provide connections between commercial uses, residential neighbourhoods rapid transit service, and municipal parking lots; and,

e) Ensuring that rights-of-way, mid-block connections, and laneways that provide access to municipal parking lots are safe and well lit with pedestrian-scale lighting.

3.6.2 CYCLING

Cycling infrastructure upgrades are planned for Dundas Street and Queens Avenue. Eastbound and westbound cycling lanes will be provided on Dundas Street between the downtown and William Street. At William Street the network will split, with the eastbound cycling lane continuing along Dundas Street and the westbound cycling lane along Queens Avenue. At Quebec Street, the cycling lanes will merge again onto Dundas Street, as illustrated in Schedule 4: Connectivity Framework. This arrangement accommodates the limited right-of-way width through the core of Old East Village and allows for the retention of on-street parking and widened sidewalks as well as opportunities for bicycle parking facilities on Dundas Street.

Cycling within the Secondary Plan area will be further supported by:

a) Integrating cycling infrastructure, such as separated cycling lanes and route signage, into the design of the rights-of-way; and,

b) Providing cycling facilities, such as bicycle parking and repair stations, in accessible and highly visible locations.

3.6.3 TRANSIT

Local bus routes along Dundas Street, Adelaide Street North, and Quebec Street currently service the Secondary Plan area. Rapid transit service is anticipated to run along King Street from the downtown to Ontario Street, then proceed along Dundas Street from Ontario Street eastward, as illustrated in Schedule 4: Connectivity Framework.

As the Secondary Plan area is and will continue to be highly accessible by transit, considerations for transit-oriented intensification informed the built form policies and streetscape design throughout the Secondary Plan area.

a) Pedestrian connections between Dundas Street and planned rapid transit stations on King Street at Colborne Street, Adelaide Street North, and Ontario Street will be prioritized for future enhancements to the pedestrian environment.

b) Where possible, local transit stops will be designed and located to minimize the impact to vehicular traffic.

3.6.4 PARKING AND VEHICLE ACCESS

a) Considering the needs of the existing commercial uses as well as new businesses emerging in the area, loading spaces and on-street parking will continue to be provided and considered in the design of the rights-of-way within the Secondary Plan area. Loading spaces will be provided in the rear of buildings where possible.

b) Pedestrian and vehicle access to existing municipal parking lots will be improved through securing new access points through redevelopment, extending existing laneways, and enhancing existing public laneways with improved lighting and design treatment.

c) Pedestrian access to existing municipal parking lots should be delineated and separated from vehicle access whenever possible for pedestrian safety.

3.6.5 RIGHTS-OF-WAY DESIGN

The following section illustrates the design of rights-of-way within the Secondary Plan area alongside applicable policies for the following segments:

- Dundas Street, between Colborne and William Streets
- Dundas Street, between William and Ontario Streets
- Dundas Street, between Ontario and Quebec Streets
- Dundas Street, between Quebec and Egerton Streets
- King Street, between Colborne and Ontario Streets
- Connectors street, between Dundas and King Streets

3.6.5.1 Dundas Street, between Colborne Street and William Street

The design of Dundas Street between Colborne Street and William Street will include:

a) Widened sidewalks on both sides of the road to create a comfortable pedestrian condition;

b) Landscape zones on both sides of the road with large canopy trees with appropriate soil volume, and spaces for street furniture;

c) Pedestrian-scaled lighting with coordinated design throughout the Secondary Plan area;

d) Separated cycling lanes travelling in both directions;

e) Loading zones on the north side of the street to support institutional functions; and,

f) Two traffic lanes, travelling in both directions.

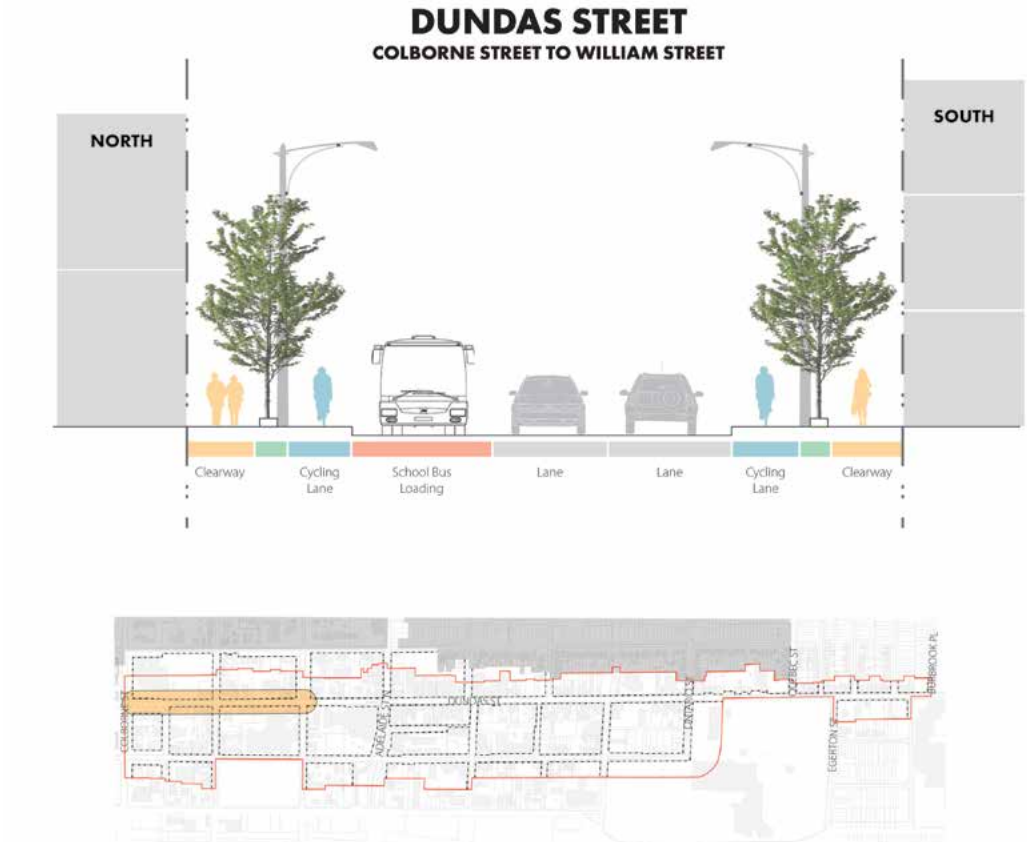


Figure 6: Dundas Street, Colborne Street to William Street

3.6.5.2 Dundas Street, between William Street and Ontario Street

The design of Dundas Street between William Street and Ontario Street will include:

a) Widened sidewalks on both sides of the road to create a comfortable and safe pedestrian environment;

b) Generous landscape zones on both sides of the road with large canopy trees with appropriate soil volume, and spaces for street furniture;

c) Pedestrian-scaled lighting with coordinated design throughout the Secondary Plan area;

d) A separated cycling lane travelling eastbound;

e) On-street parking on the north side of the street to support retail and commercial functions on both sides of the street;

f) Two traffic lanes, travelling in both directions; and,

g) Opportunities for restaurant patios between transit stops and loading areas on the south side of the street.

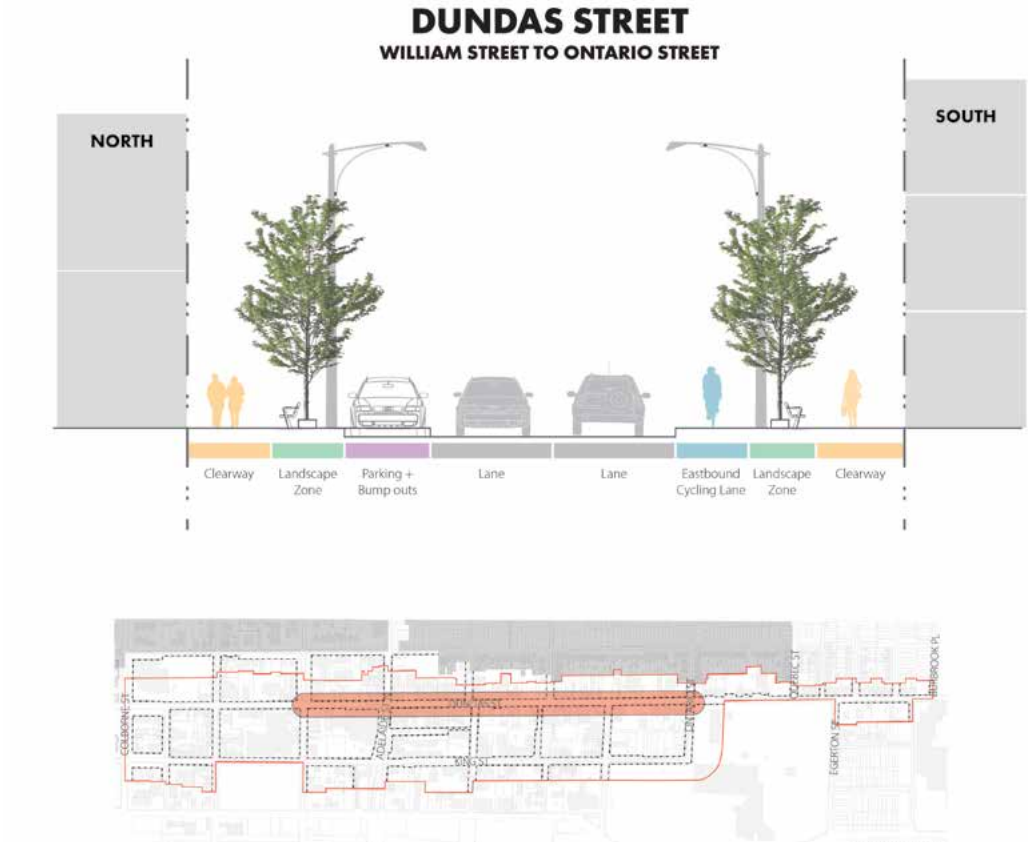


Figure 7: Dundas Street, William Street to Ontario Street

3.6.5.3 Dundas Street, between Ontario Street and Quebec Street

The design of Dundas Street between Ontario Street and Quebec Street will include:

a) A widened sidewalk on the north side of the road with generous landscape zones for large canopy trees with appropriate soil volume, and street furniture;

b) A widened south sidewalk to accommodates street furniture;

c) Pedestrian-scaled lighting with coordinated design throughout the Plan area;

d) A separated cycling lane travelling eastbound;

e) Two dedicated rapid transit lanes, travelling both directions, subject to the results of the Bus Rapid Transit Environment Assessment; and,

f) Two traffic lanes, travelling both directions.

3.6.5.4 Dundas Street, between Quebec Street and Egerton Street

The design of Dundas Street between Quebec Street and Egerton Street will include:

a) A widened sidewalk on the north side of the road with generous landscape zones for large canopy trees with appropriate soil volume, and street;

b) A widened south sidewalk to accommodates street furniture;

c) Pedestrian-scaled lighting with coordinated design throughout the Plan area;

d) Separated cycling lanes travelling both directions;

e) Two dedicated rapid transit lanes, travelling both directions, subject to the results of the Bus Rapid Transit Environment Assessment; and,

f) Two traffic lanes, travelling both directions.

3.6.5.5 Dundas Street, between Egerton Street and Burbrook Place

The design of Dundas Street between Egerton Street and Burbrook Place will include:

a) Widened sidewalks on the north side of the road with generous landscape zones for large canopy trees with appropriate soil volume, and street;

b) A widened south sidewalk to accommodates street furniture;

c) Pedestrian-scaled lighting with coordinated design throughout the Plan area;

d) On-street parking on the north side of the street to support the emerging retail and commercial functions;

e) Two dedicated rapid transit lanes, travelling both directions, subject to the results of the Bus Rapid Transit Environment Assessment; and,

f) Two traffic lanes, travelling both directions.

3.6.5.6 King Street, between Colborne Street and Ontario Street

The streetscape design for King Street will include:

a) Generous sidewalks on both sides of the road to accommodate the rapid transit function of the corridor and ensure adequate room for pedestrians and transit riders;

b) Generous landscape zones on the both sides of the road with large canopy trees

with appropriate soil volume, and space for street furniture including benches, waste receptacles, and rapid transit stations;

c) General front-yard setback for landscaping between the sidewalk and the private realm to be secured through development;

d) Pedestrian-scaled lighting with coordinated design throughout the Plan area;

e) Two dedicated rapid transit lanes, travelling both directions, subject to the results of the Bus Rapid Transit Environment Assessment; and,

f) One traffic lane, travelling eastbound.

3.6.5.7 North-South Connector Streets

North-south streets within the Secondary Plan area have an important role of connecting people between Dundas Street, King Street, and Queens Avenue. With future planned cycling infrastructure upgrades on Queens Avenue and Dundas Street, there is an imperative to create safe cycling connections between these two streets. Furthermore, the north-south connections between King Street and Dundas Street will play an important role in facilitating pedestrian movement, particularly near transit stations on King Street.

To enhance pedestrian and cycling connections, the design of connector streets will include:

a) Wide sidewalks on both sides of the street to create comfortable pedestrian conditions;

b) Cycling infrastructure and/or on-street parking where possible;

c) Directional signage for pedestrians and cyclists;

d) Generous landscape zones with large canopy trees with appropriate soil volume; and,

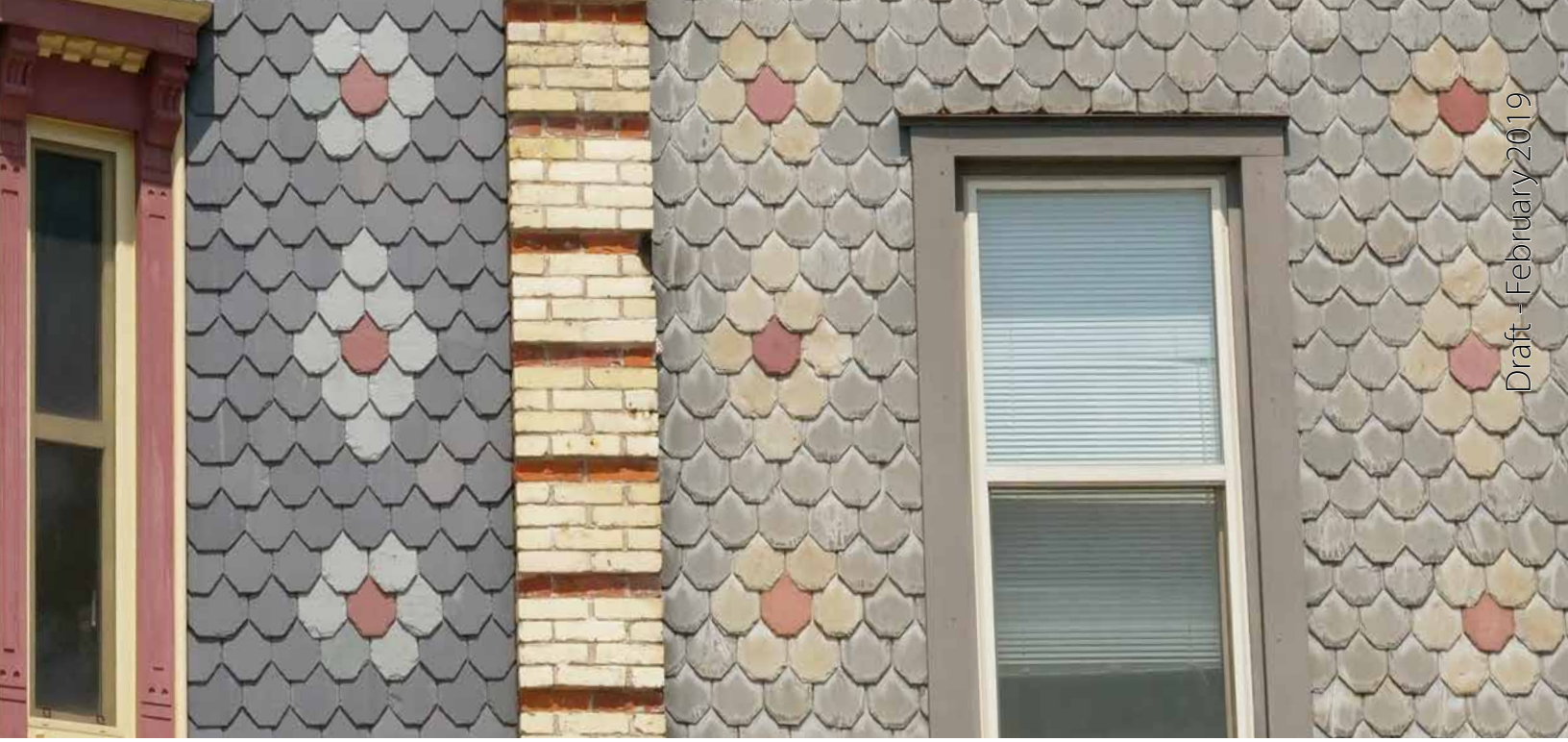
e) Pedestrian-scaled lighting with coordinated design.

3.7 CULTURAL HERITAGE

The Old East Village Dundas Street Corridor Secondary Plan area has a substantial number of cultural heritage resources. It is the intent of the Secondary Plan to promote the restoration and enhancement of heritage properties. Significant cultural heritage resources shall be integrated with new development and public realm improvements in respectful and creative ways.

The City of London maintains a Register (Inventory of Heritage Resources). Any proposed development on or adjacent to a property designated under the *Ontario Heritage Act* or a property listed in City of London's Register shall:

a) Require a Heritage Impact Assessment (HIA) to ensure that significant cultural heritage resources are conserved. Any assessment must include consideration of its historical and natural context within the City of London, and should include a comprehensive evaluation of the design, historical, and contextual values of the property.



The following potential mitigation approaches may be suitable for consideration and application for minimizing impacts from proposed developments on or adjacent to listed, designated, and potential cultural heritage resources within the Secondary Plan area:

b) Avoidance and mitigation to allow development to proceed while retaining the cultural heritage resources in situ and intact;

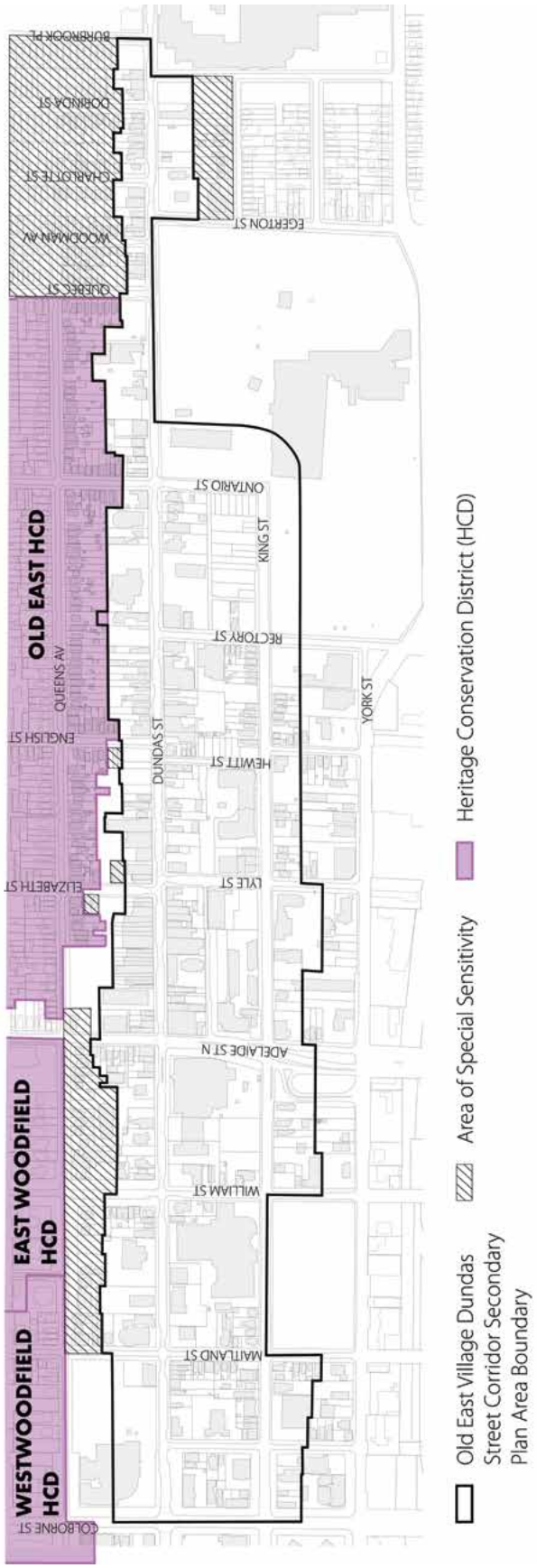
c) Adaptive re-use of a built heritage structure or cultural heritage resources;

d) Commemoration of the cultural heritage of a property/structure/area, historical commemoration means such as plaques or cultural heritage interpretive signs; and,

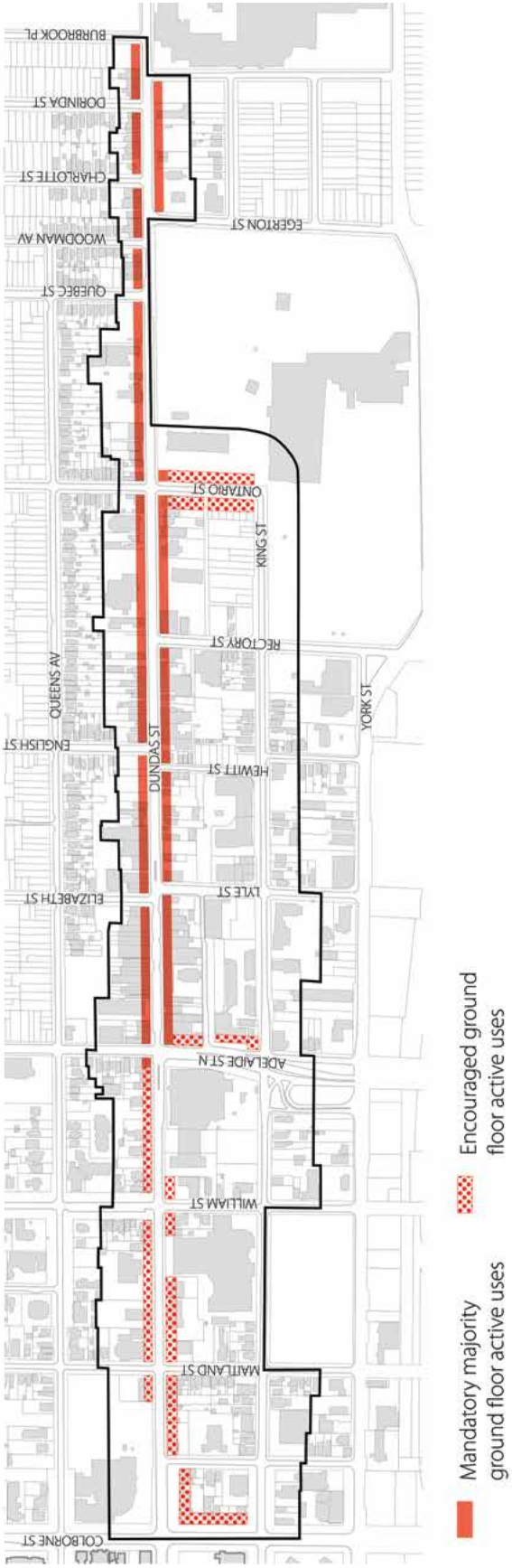
e) Urban design policies and guidelines for building on, adjacent, and nearby to heritage designated and heritage listed properties, and properties with potential cultural heritage resources to ensure compatibility by integrating and harmonizing mass, setback, setting, and materials.

4.0 Schedules

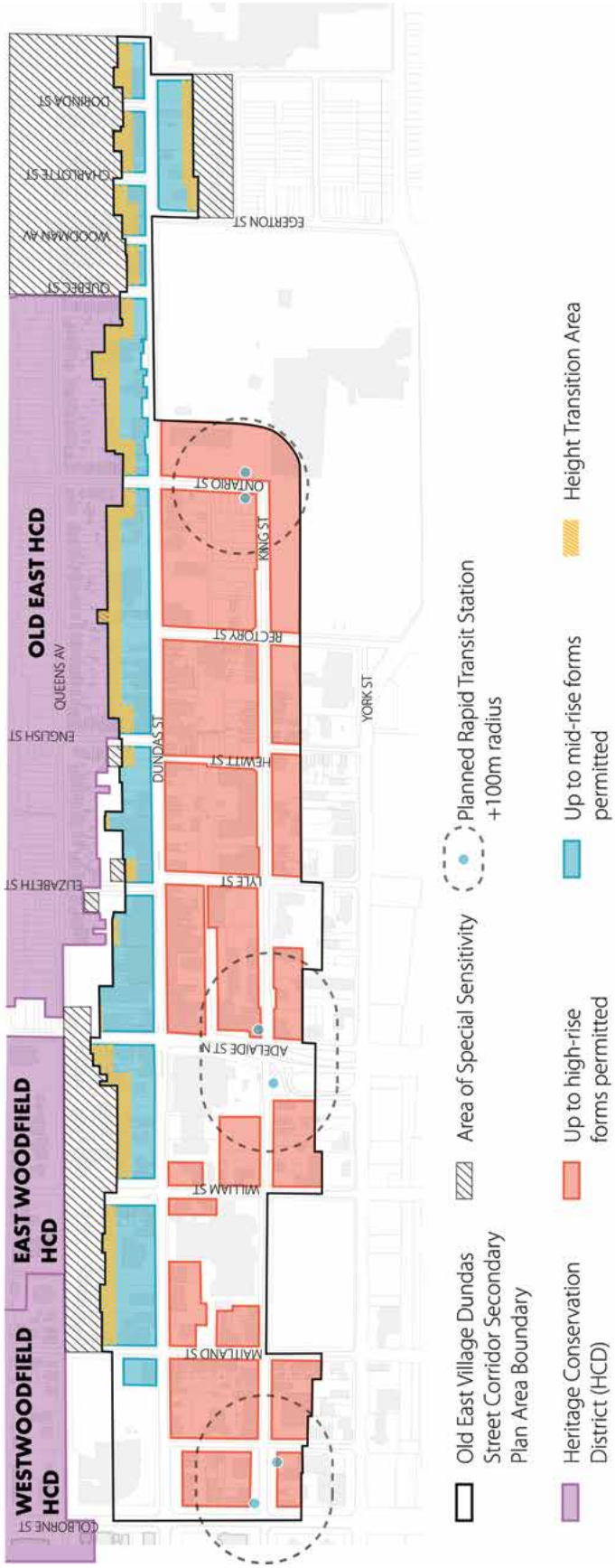
SCHEDULE 1: SECONDARY PLAN AREA



SCHEDULE 2: GROUND-FLOOR USES



SCHEDULE 3: PERMITTED HEIGHTS



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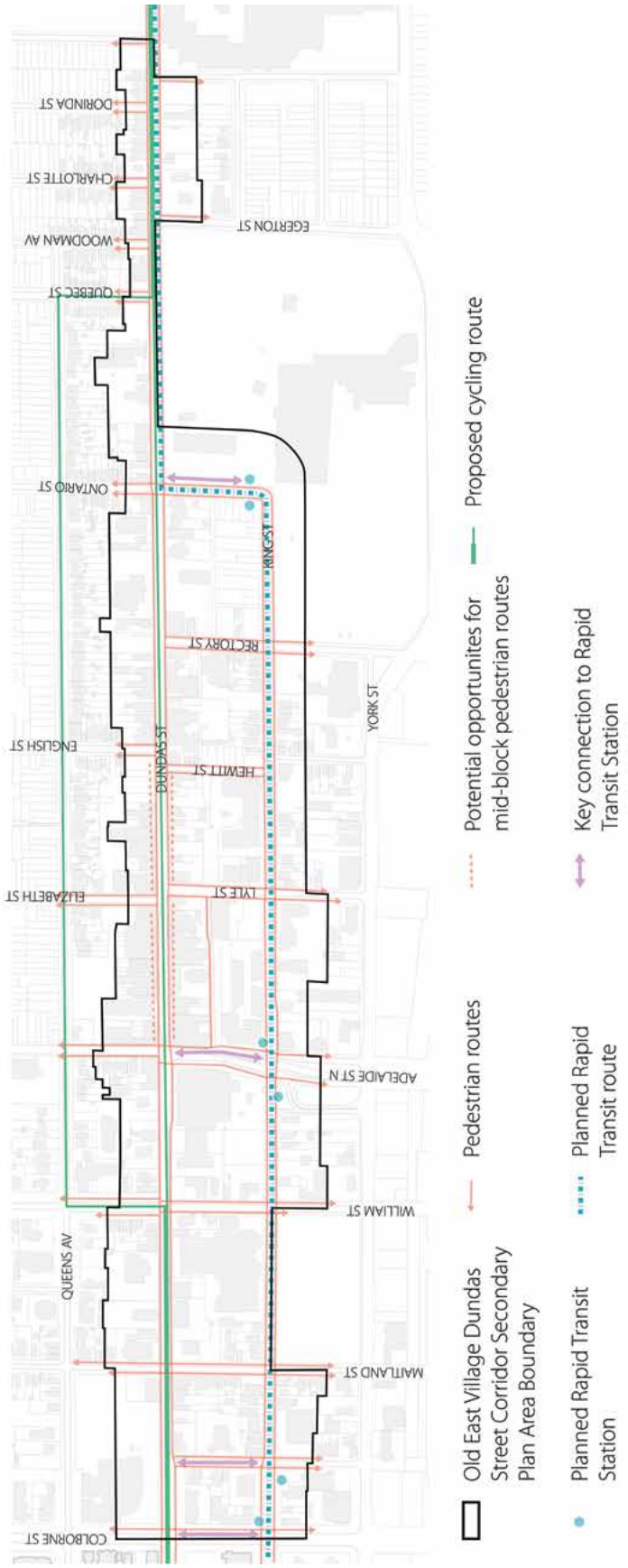
SCHEDULE 4: CONNECTIVITY FRAMEWORK



Appendix C – Public Engagement

Notice of Application

Public liaison: Notice of Application was published in the *Public Notices and Bidding Opportunities* section of *The Londoner* on March 15, 2018.

No replies were received.

Nature of Liaison: The need for an Old East Village Dundas Street Corridor Secondary Plan was identified through discussions on the implementation of the Bus Rapid Transit System. The east-west bus rapid transit route is proposed to run eastward from the Downtown along King Street onto Ontario Street and then eastward along Dundas Street within the study area (see attached Map).

The purpose of the Secondary Plan is to establish a long term vision for the area and guide the future character of development through more specific policies than those contained in the Rapid Transit and Urban Corridors Section of the London Plan. The Secondary Plan can also be used to implement a vision or design concept, specifically, an urban design framework to connect the King Street rapid transit corridor and the Old East Village business district to the north. The Plan will provide a framework for the evaluation of future planning applications and public and private investment in the area.

Possible amendments to Sections 20.2 and 20.3 and Schedule D of the existing Official Plan and Policy 1565 and Map 7 of The London Plan to add the Old East Village Dundas Street Corridor Secondary Plan as a new Secondary Plan.

Community Information Meeting – June 27, 2018

Public liaison: Notice of the Community Information Meeting was sent to 1,527 property owners in the Secondary Plan area.

Approximately 70 people were in attendance at the Community Information Meeting.

Meeting Summary:

The following meeting summary was provided by Urban Strategies Inc.:

On June 27th, 2018, the City of London hosted a Public Information Meeting for the Old East Village Dundas Street Corridor Secondary Plan Study. At this meeting, participants were also consulted for their opinion on preferred cycle lane options for an ongoing Bikeway study. The consultation was held at Aeolian Hall on 795 Dundas Street between 6:30 – 8:30 pm and consisted of a presentation and facilitated table-based discussions. Approximately 70 community members attended the meeting. Participants provided feedback by writing directly or placing notes and place markers on boards, providing feedback on comment sheets, and by speaking directly with staff and consultants. This report provides a high-level summary of participant feedback and is not intended to provide a verbatim transcript of the meeting.

The purpose of the consultation was to:

- consult community members on identifying a vision for the study area
- discuss preferred land uses and building heights along Dundas and King Streets
- focus the discussion on the character and design of Dundas Street; and
- receive feedback on East-West Bikeway options.

Presentation and Activities:

The public meeting consisted of two parts. First, a presentation was given by staff and consultants to provide an overview and context for the Secondary Plan Study as well as

the Bikeway study. The second part involved a series of facilitated table discussions based on the following questions:

1. What are the key characteristics of Dundas Street, King Street and the surrounding area? What would you like to see preserved? What is missing? What would you like to see change?
2. How should Dundas Street be designed? What would you like to see included in the streetscape? (i.e. trees, patios, benches, etc.)
3. How would you rank the proposed Bikeway corridors?
4. Where are the key connections between the Dundas corridor and the future BRT stops on King Street? How would you like them designed?
5. Where would intensification (mid-to high-rise buildings) be best suited within the study area?

Working with a staff facilitator at each desk, participants at 10 tables were encouraged to discuss and provide input to the questions. Report-back period followed, where tables took turns to share a summary of their discussion with the rest of the participants. Diagrams, images, and maps of the study area and Bikeway options were provided for the discussion.

Response Summary:

Question 1

What are the key characteristics of Dundas Street, King Street and the surrounding area? What would you like to see preserved?

Participants at most tables mentioned heritage buildings and attributes as key characteristics that they would like to see preserved. Some participants identified specific landmark buildings and destinations that they felt were important, including Aeolian Hall, Farmer's Market, and the Western Fairgrounds. Preserving independent businesses was also frequently mentioned, as well as the importance of the artisan culture and the artistic character of the area. Pubs and restaurants were mentioned as important anchors along Dundas Street.

What would you like to see more on Dundas Street and the surrounding area?
Having more trees and other landscaping elements such as planters were frequently mentioned, as well as integrating more public art to the area. Some participants mentioned a long-standing need in the community for a coherent identity for the area. A couple tables suggested that adding a gateway feature to the Western Fairgrounds could help reinforce the identity of the area. Some participants mentioned the importance of accessibility and inclusivity. Wanting to feel a sense of community was also mentioned several times. At the same time, other participants mentioned a desire to see more intensification and human-scale development. Participants also expressed that they would like to see a more diverse mix of uses along Dundas Street that include retail and services that can support their everyday needs and give them more reasons to visit the area. Safety was also one of the main concerns for many participants.
What would you like to see changed on Dundas Street and the surrounding area?
Several comments were made about gaps in the street wall and empty sites. Concerns were expressed about the concentration of social services in two blocks on Dundas Street in close proximity to businesses. Some participants mentioned a desire to see Dundas Street cater to all ages and offer a more family-friendly environment. A need for safer crossings was also mentioned.

What is missing from Dundas Street and the surrounding area?

A few comments were made about the missing visual and physical connections from Dundas Street to the existing parking behind buildings. There was a general agreement on the missing rhythm and pedestrian activities on Dundas Street. A need for gathering places were also mentioned. Some participants expressed that Dundas Street lacks multi-modal travel options, although there were conflicting opinions on whether Dundas Street should have cycle lanes.

Question 2

How should Dundas Street be designed? What would you like to see included in the streetscape?

Elements that residents would like to see in the design of Dundas Street include:

- Trees
- Public art and identity markers including signs and wayfinding elements
- Parkette or square
- Improved lighting
- Road diet
- Pedestrian amenities including benches, flexible seating, and chess-board tables
- Garbage cans
- Traffic calming measures
- Patios (possibly flexible/seasonal patio in parking spaces)
- Maximizing sidewalk width
- On street parking
- Outdoor power outlet for events and buskers
- Cycle lanes
- Cycle parking
- Improvements to traffic flow and safety at intersections (particularly at Elizabeth Street and Dundas Street)

Question 3

What do you think of the four proposed East-West Bikeway route candidates?

Tables equally ranked Dundas Street and the Queens and King Street Couplet option as the top choice among the four Bikeway route candidates. Dufferin Street was deemed less preferable mainly due to being too far away from destinations, although some participants expressed that the section in downtown may be suitable. All tables universally expressed negativity towards the York Street option as they felt that the street is unsafe due to high traffic volume and speed.

Question 4

Where would intensification (mid-to high-rise buildings) be best suited within the study area?

Participants were asked to mark where they thought intensification would be best suited using place markers, with red markers for where mid-rise buildings may be appropriate and green markers for where high-rise buildings may be appropriate.

Generally, participants thought that high-rise buildings are appropriate to the south side of the study area near King Street. Some participants also marked the east end of Dundas Street near the fairgrounds and the west end of Dundas Street towards the downtown as being appropriate for high-rise development. Participants thought that mid-rise buildings are appropriate along Dundas Street, mostly on the north side of the street. On Dundas Street, participants emphasized the importance of appropriate integration of heritage buildings. Many participants also added that new developments to step down towards the existing low-rise neighbourhood.

Community Information Meeting – November 1, 2018

Public liaison: Notice of the Community Information Meeting was sent out by Transportation Planning and Design to property owners adjacent to the cycling route options.

Approximately 50 people were in attendance at the Community Information Meeting.

Comment cards were provided to submit comments regarding the Secondary Plan; 19 comment cards were filled out and returned.

Response Summary:

Land uses:

- Support for prioritizing the existing/emerging cultural and artistic presence/businesses in the Old East Village, as well as of creative entrepreneurial businesses.
- Please reference the McCormick Secondary Plan. There are positive exciting activities happening in that area already which need to and are already connecting to the OEV Corridor. There are two craft brewers, a climbing gym, the redevelopment of Kellogg's that needs to be supported and integrated.
- Need to ensure mandated commercial areas are thoroughly thought out.
- Ensure new building along Dundas Street have retail only at the ground floor frontage.
-

Intensity:

- Concern that the area cannot handle the increase in pedestrians and traffic.

Building heights and bonusing:

- Support for the stepped building massing.
- Tall buildings aren't required along Dundas Street. The heights now there (original) are to scale. Stepback further north and south of Dundas if high-rise buildings are proposed.
- Suggestion that bonusing may need to be different in Old East Village than elsewhere in the city.
- Concern for bonusing that turns eight storeys into 10 and 12.
-

Modal priority:

- Support a vision that integrates a more inclusive and accessible space for cyclists/pedestrians and a de-emphasizing of motorways/parking. Businesses need the business that east/west traffic will provide via a protected bike lane. Remove 10 parking spaces to provide the additional bike lane on Dundas Street. Reduce speed limit to 30km/hr.
- Dundas Street business owner relies on commuters driving past their store and needs the area to remain a convenient location for people to commute in their personal vehicles.
- Preference for two bike lanes continuously on Dundas Street.
- Have the bike lane going east on King Street.

Parking:

- Elaborate on connectivity of available parking in municipal lots to Dundas Street.
- Determine how many businesses on the south side of Dundas Street where parking will be lost have rear access.
- Provide funding for enhanced parking connections between the parking lots and Dundas Street. Complete enhancements in conjuncture with other improvements.
- Reducing parking spaces to half would hurt all the businesses in this area. Ease of access to reach to us is of utmost importance to our customers.
- Maintain good parking for businesses – especially professional businesses.

Streetscape:

- The area needs more benches.
- Connections to BRT from Dundas Street need to be well lit.

- Glad to see plans that include more bike paths, pedestrian space, public space, green space, patios etc.
- Would like to see Dundas Place continued in Old East Village.

Heritage:

- Protect heritage facades. Blend new buildings with surrounding heritage buildings.
- Any high-rise on the south side of Dundas Street, Adelaide to Ontario, should not be allowed to reduce heritage properties to visual insignificance.
- Protect heritage buildings. Keep the structures intact.

Other:

- Business owner disapproves of any further construction for at least three years.
- Incentive programs need to both provide financial resources to help renovate facades (in particular) but through the provision as well of design guidelines & principles that specify a unified “appearance” that is welcoming without being wholly contrived.
- Not in favour of BRT.
- Suggestion to demolish the former dive locker building to improve access to Dundas Street at that point from the parking lot north of Dundas Street. It is currently a very narrow passage tightly hemmed in by buildings on either side – no amount of lighting can compensate that.
- Provide a space for those waiting for the food shelters can wait around – shelter our park.

Appendix D – Policy Context

The following policy and regulatory documents were considered in their entirety as part of the evaluation of this requested land use change. The most relevant policies, by-laws, and legislation are identified as follows:

The Provincial Policy Statement, 2014

1.1.3.3 Planning authorities shall identify appropriate locations and promote opportunities for intensification and redevelopment where this can be accommodated taking into account existing building stock or areas, including brownfield sites, and the availability of suitable existing or planned infrastructure and public service facilities required to accommodate projected needs. Intensification and redevelopment shall be directed in accordance with the policies of Section 2: Wise Use and Management of Resources and Section 3: Protecting Public Health and Safety.

1.1.3.4 Appropriate development standards should be promoted which facilitate intensification, redevelopment and compact form, while avoiding or mitigating risks to public health and safety.

1.1.3.6 New development taking place in designated growth areas should occur adjacent to the existing built-up area and shall have a compact form, mix of uses and densities that allow for the efficient use of land, infrastructure and public service facilities.

1.5.1 Healthy, active communities should be promoted by a) planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity.

1.6.7.5 Transportation and land use considerations shall be integrated at all stages of the planning process.

1.7.1 Long-term economic prosperity should be supported by:

c) maintaining and, where possible, enhancing the vitality and viability of downtowns and mainstreets.
d) encouraging a sense of place, by promoting well-designed built form and cultural planning, and by conserving features that help define character, including built heritage resources and cultural heritage landscapes.

The London Plan

830_ Where the term “corridor” is used, without the “rapid transit” or “urban” modifier, it is meant to apply to both of these types of corridors. We will realize our vision for our corridors by implementing the following in all the planning we do and the public works we undertake:

5) Allow for a wide range of permitted uses and greater intensities of development along Rapid Transit Corridors close to transit stations
6) Carefully manage the interface between our corridors and the adjacent lands within less intense neighbourhoods.

837_ The following uses may be permitted within the Rapid Transit Corridor and Urban Corridor Place Types, unless otherwise identified by the Specific-Segment policies in this chapter:

1) A range of residential, retail, service, office, cultural, recreational, and institutional uses may be permitted within the Corridor Place Type.
4) Where there is a mix of uses within an individual building, retail and service uses will be encouraged to front the street at grade.

840_ The following intensity policies apply within the Rapid Transit and Urban Corridor Place Types unless otherwise identified:

6) As shown on Table 9, greater residential intensity may be permitted within the Rapid Transit Corridor Place Type on sites that are located within 100 metres of a rapid transit station.

841_ The following form policies apply within the Rapid Transit and Urban Corridor Place Types:

2) Buildings should be sited close to the front lot line, and be of sufficient height, to create a strong street wall along Corridors and to create separation distance between new development and properties that are adjacent to the rear lot line.
3) The mass of large buildings fronting the street should be broken down and articulated at grade so that they support a pleasant and interesting pedestrian environment. Large expanses of blank wall will not be permitted to front the street, and windows, entrances, and other building features that add interest and animation to the street will be encouraged.
5) Buildings and the public realm will be designed to be pedestrian, cycling and transit-supportive through building orientation, location of entrances, clearly marked pedestrian pathways, widened sidewalks, cycling infrastructure and general site layout that reinforces pedestrian safety and easy navigation.

845_ Main Street segments are streets that have been developed, historically, for pedestrian oriented shopping or commercial activity in the older neighbourhoods of the city. In an effort to provide local shopping and commercial options so that residents can walk to meet their daily needs, this Plan will support main streets within specific segments of the Rapid Transit Corridor and Urban Corridor Place Types. These areas will be in a linear configuration and street-oriented, meaning buildings will be close to the street with parking generally located to the rear of the site, underground, or integrated into the mass of the building. A broad range of uses at a walkable neighbourhood scale will be permitted within these areas.

847_ The Intensity policies for the Rapid Transit Corridor Place Type will apply, in addition to the following policies:

1) Within the Old East Village, Richmond Row, and SoHo segments, buildings will be a minimum of either two storeys or eight metres in height. Podiums for taller buildings will be a minimum of either two storeys or eight metres in height.
2) Buildings in these three Main Street segments will be a maximum of 12 storeys in height. Type 2 Bonus Zoning beyond this limit, up to 16 storeys, may be permitted in conformity with the Our Tools part of this Plan.

1556_ Where there is a need to elaborate on the parent policies of *The London Plan*, or where it is important to coordinate the development of multiple properties, a secondary plan may be prepared by the City of London. Secondary plans will allow for a comprehensive study of a secondary planning area, considering all of the City Building and Environmental Policies of this Plan. It will also allow for a coordinated planning approach for the secondary planning area and the opportunity to provide more detailed policy guidance for the area that goes beyond the general policies of *The London Plan.*

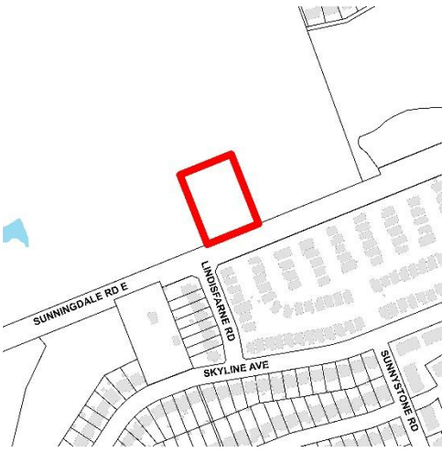
1557_ Secondary Plans may be applied to areas of varying sizes – from large planning districts and neighbourhoods to small stretches of streetscape or even large individual sites. Areas that may warrant the preparation and adoption of a secondary plan include:

11) Areas, in whole or in part, within the Transit Village, Rapid Transit Corridor, or Urban Corridor Place Types that may require vision and more specific policy guidance for transition from their existing form to the form envisioned by this Plan.

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.

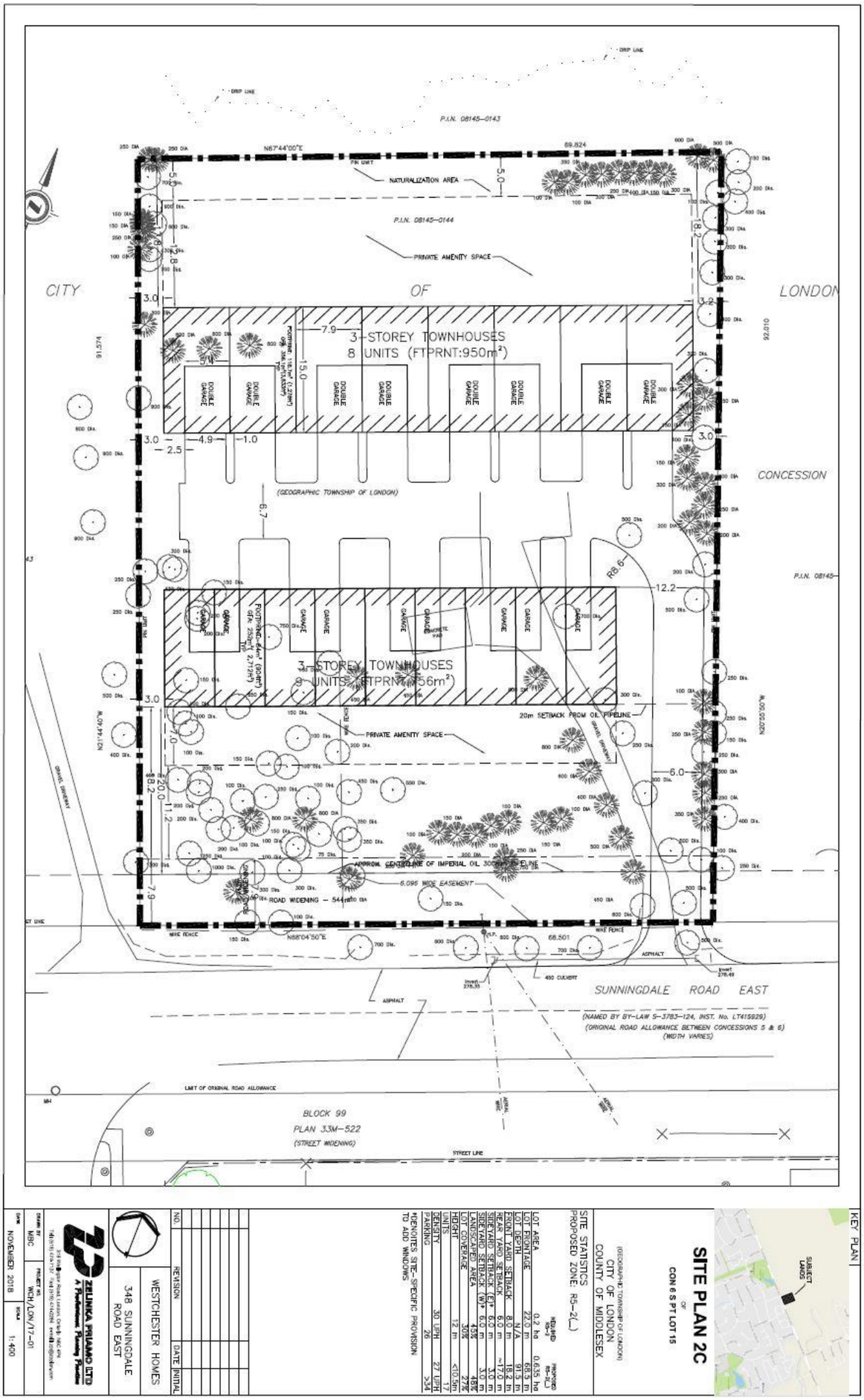
For more information go to http://elto.gov.on.ca/tribunals/lpat/about-lpat/.

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.

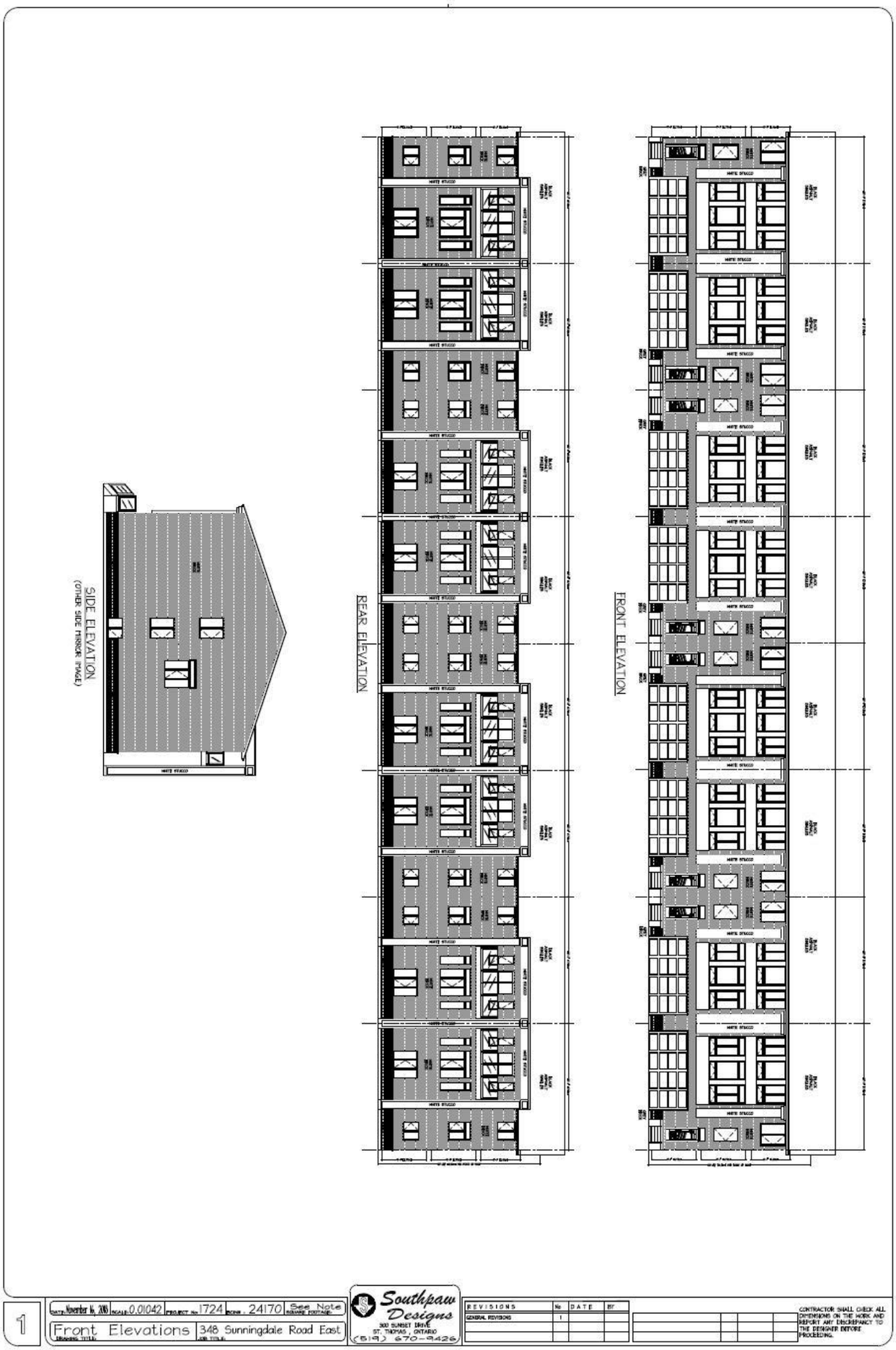
Accessibility – Alternative accessible formats or communication supports are available upon request. Please contact accessibility@london.ca or 519-661-CITY(2489) extension 2425 for more information.

Site Concept

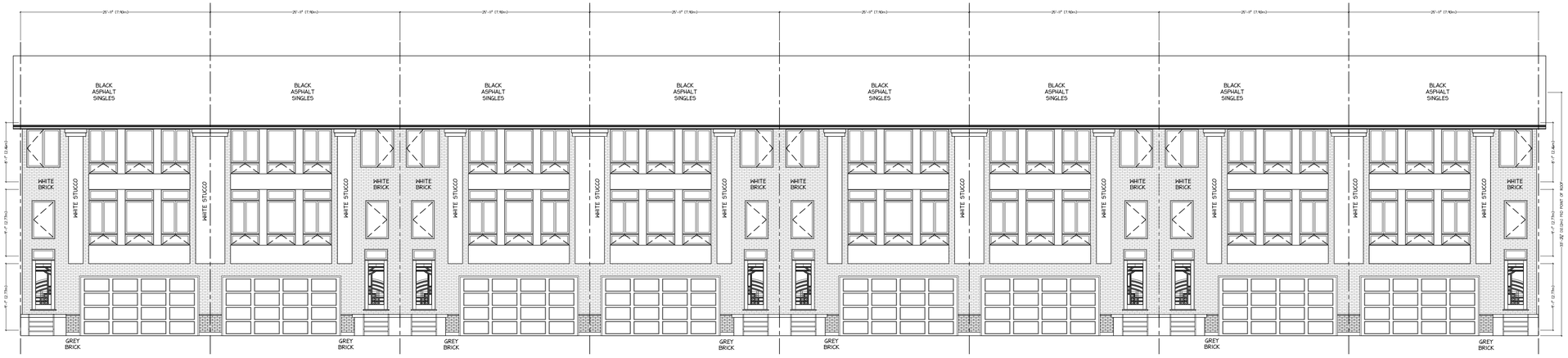


The above image represents the applicant's proposal as submitted and may change.

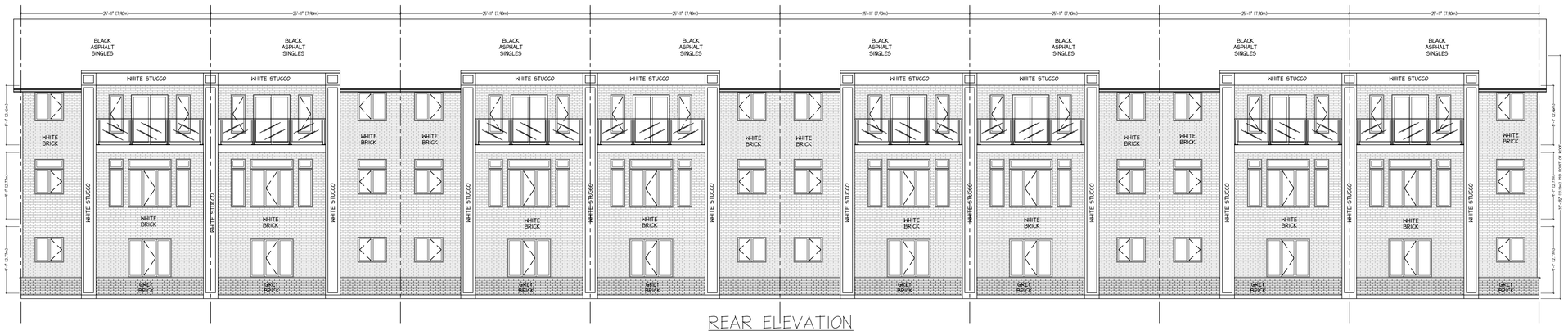
Building Elevations



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



FRONT ELEVATION



REAR ELEVATION

SIDE ELEVATION
(OTHER SIDE MIRROR IMAGE)

CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE DESIGNER BEFORE PROCEEDING.

REVISIONS	No	DATE	BY
GENERAL REVISIONS	1		

Southpaw Designs
300 SUNSET DRIVE
ST. THOMAS, ONTARIO
(519) 670-9426

DATE: November 16, 2016 | SCALE: 0.01042 | PROJECT No: 1724 | BCIN#: 24170 | See Note SQUARE FOOTAGE

DRAWING TITLE: Front Elevations | JOB TITLE: 348 Sunningdale Road East

1

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

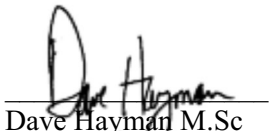
Recommendation 16: Develop an information package to educate residents and the condominium corporation on appropriate ways to dispose of landscaping and lawn maintenance waste and protect the natural heritage components beyond the property boundaries. This is important for preservation of the vegetation 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

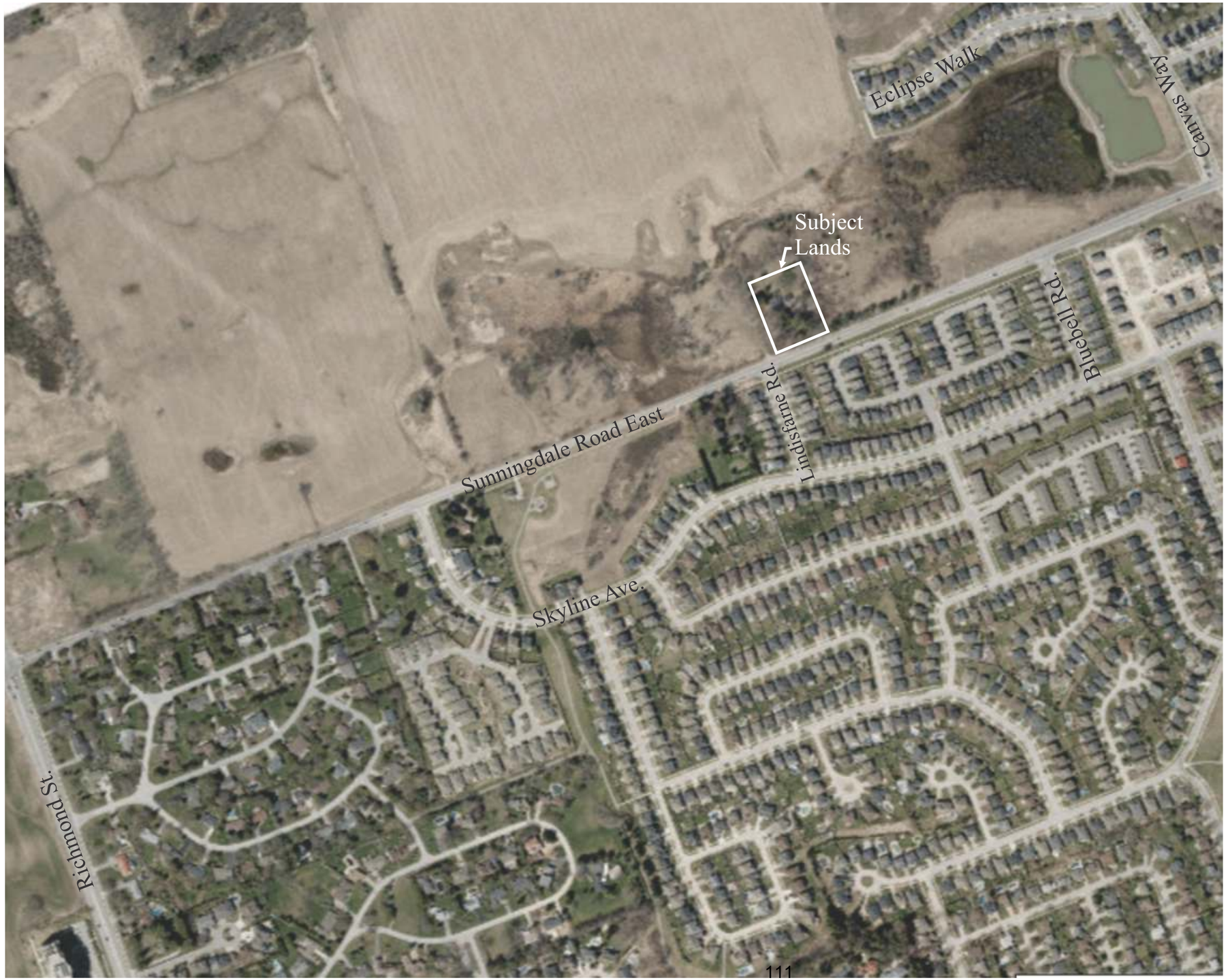
Source of Impact	Affected Feature, Function or Linkage	Predictions of physical impact and effect on features, functions and linkages	Mitigation Strategy	Net Effects Summary	Recommendations for Management and Monitoring
Artificial lighting	Adjacent Powell Drain wetland, residential/cultural woodland -common 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

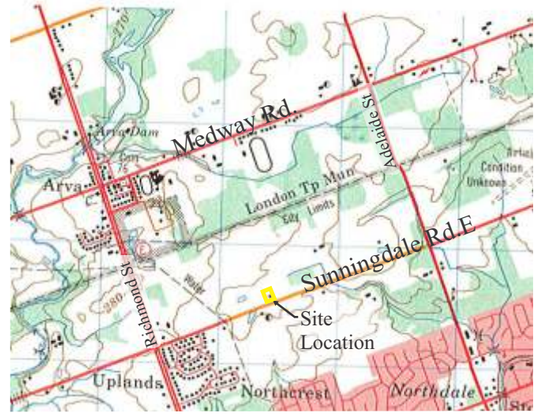
Tree damage	Adjacent Powell Drain wetland, residential/cultural woodland -common birds and plants	medium impacts expected - limb removal, tree forts	Educational brochure, web based resources	no net effects	condo board to monitor for tree forts, and dismantle
Increased noise	Adjacent Powell Drain wetland, 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

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Scale 1:5000
November 2018

BioLogic
AQUATIC AND TERRESTRIAL ECOSYSTEM PLANNERS

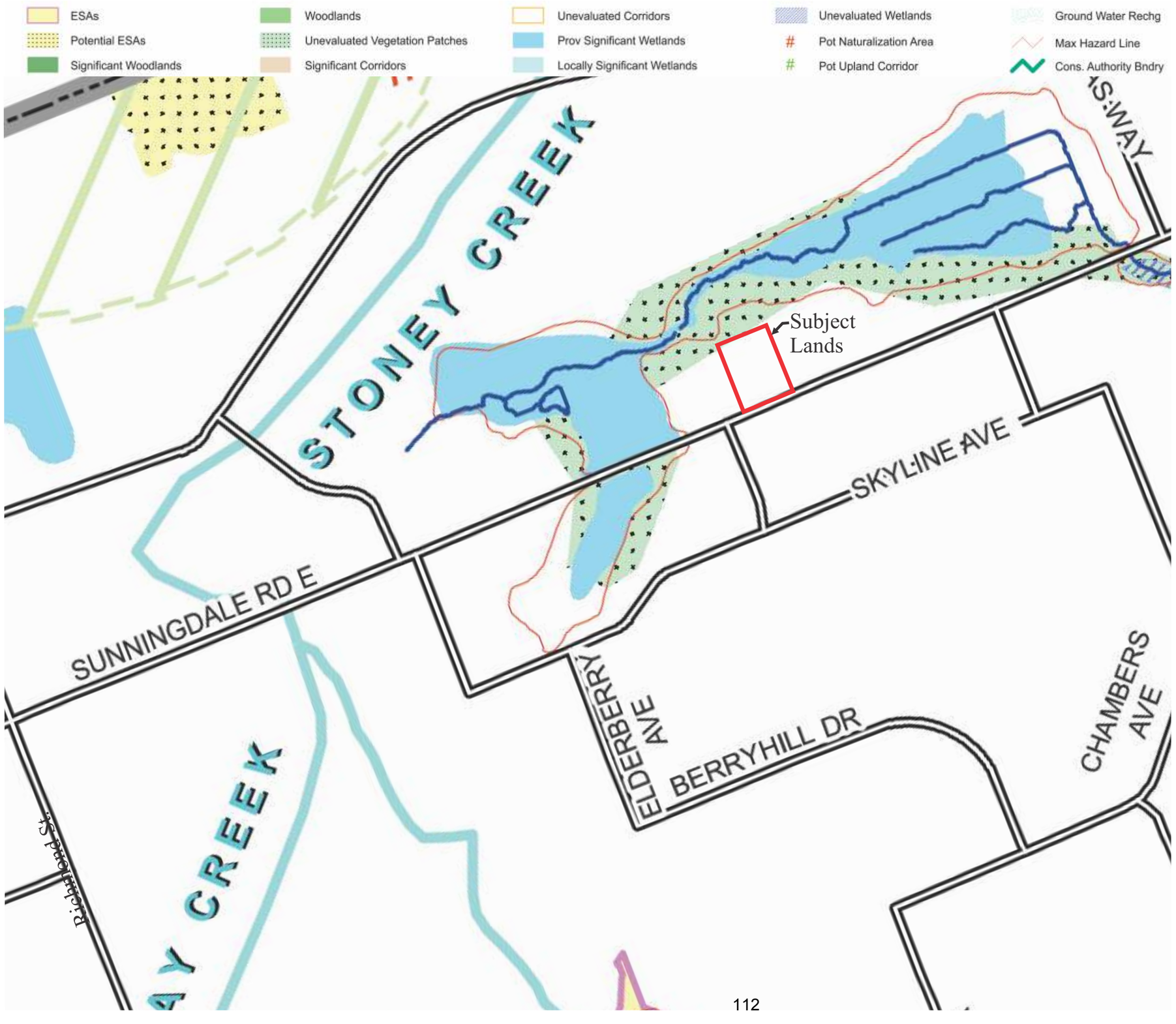
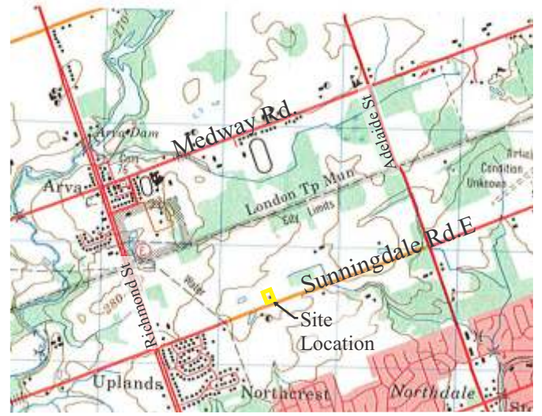


Figure 2: Natural Heritage Features

(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

November 2018

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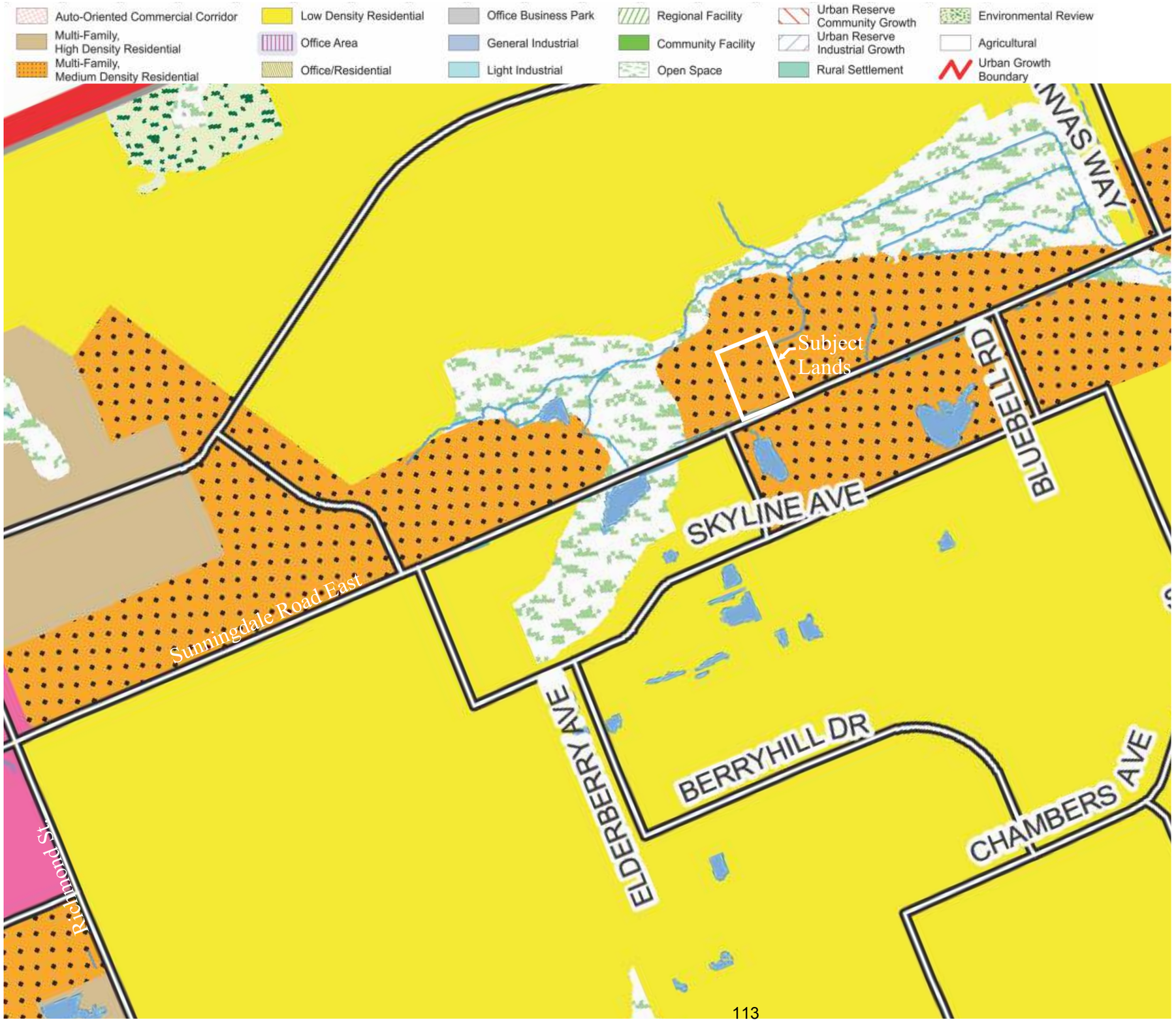
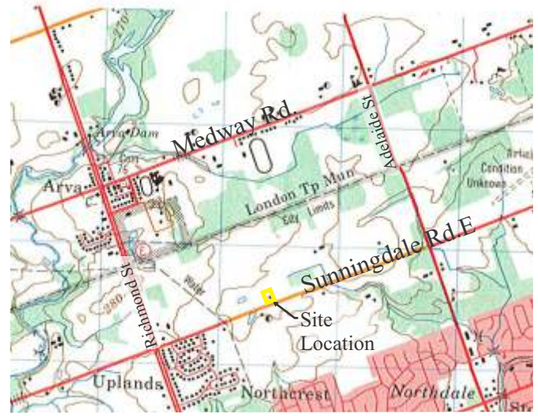
AQUATIC AND TERRESTRIAL ECOSYSTEM PLANNERS

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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Scale 1:5000
November 2018

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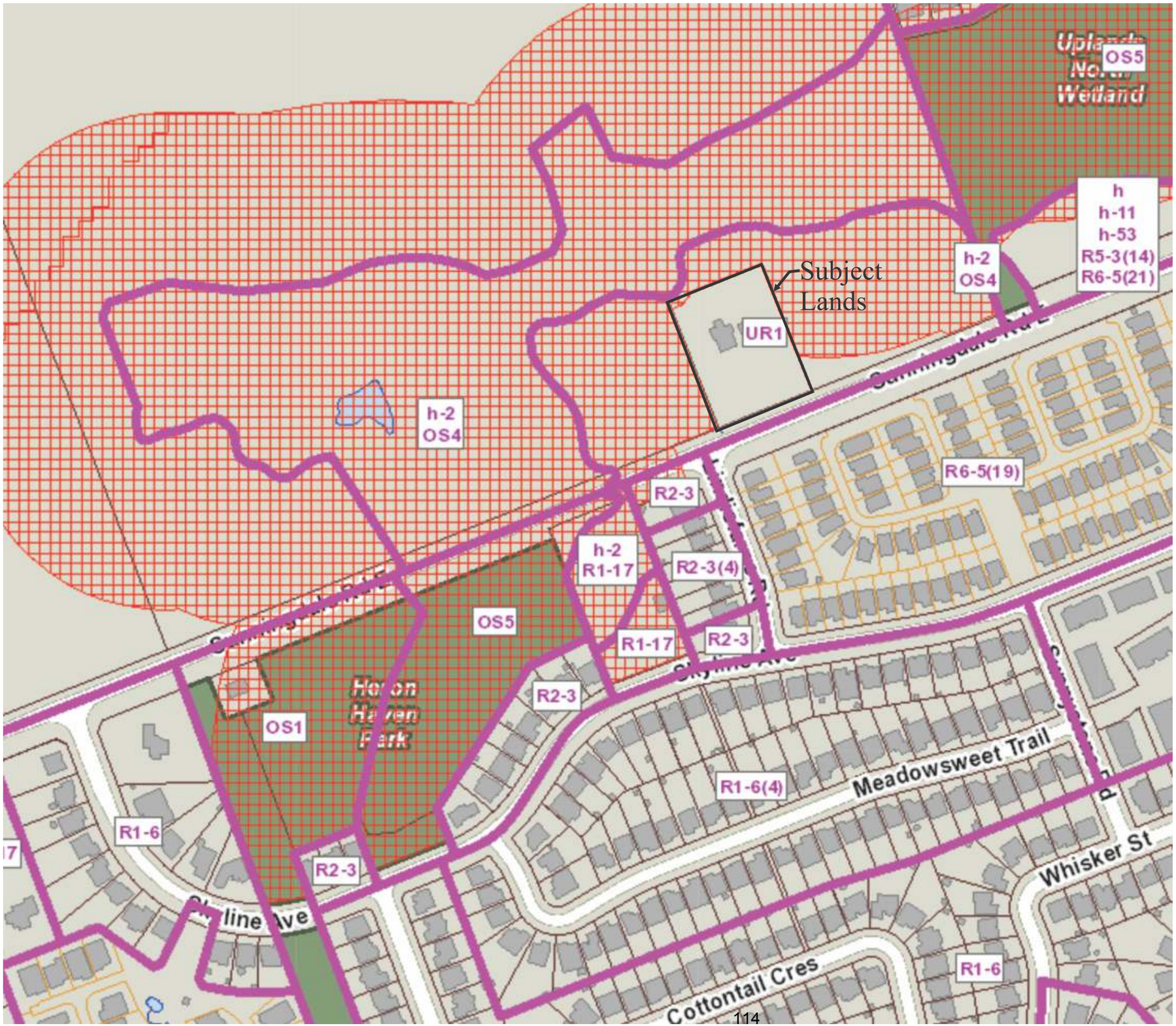
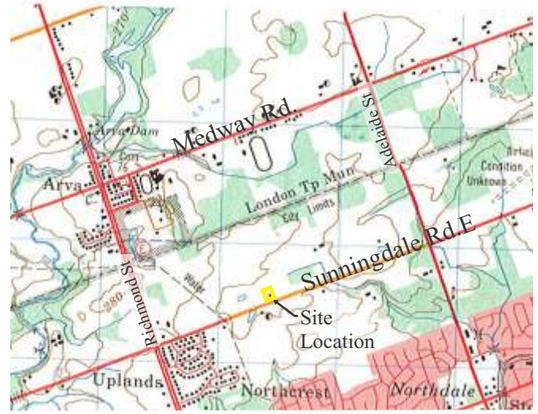
AQUATIC AND TERRESTRIAL ECOSYSTEM PLANNERS

Figure 4: Zoning
(City of London Zoning Bylaw)





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Key Plan

UTRCA Regulated

Print on 11X17, Landscape Orientation
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November 2018

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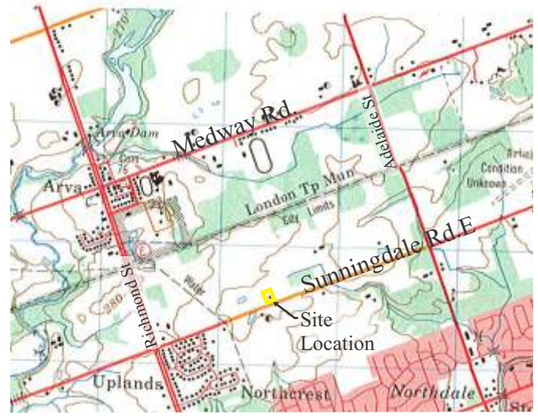
AQUATIC AND TERRESTRIAL ECOSYSTEM PLANNERS

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



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Key Plan

Print on 11X17, Landscape Orientation
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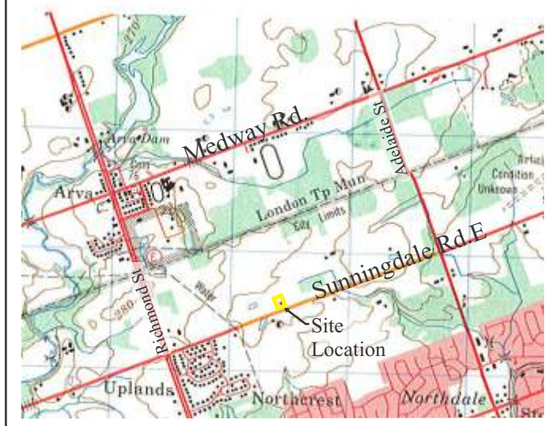
Scale 1:750
November 2018

BioLogic
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

November 2018

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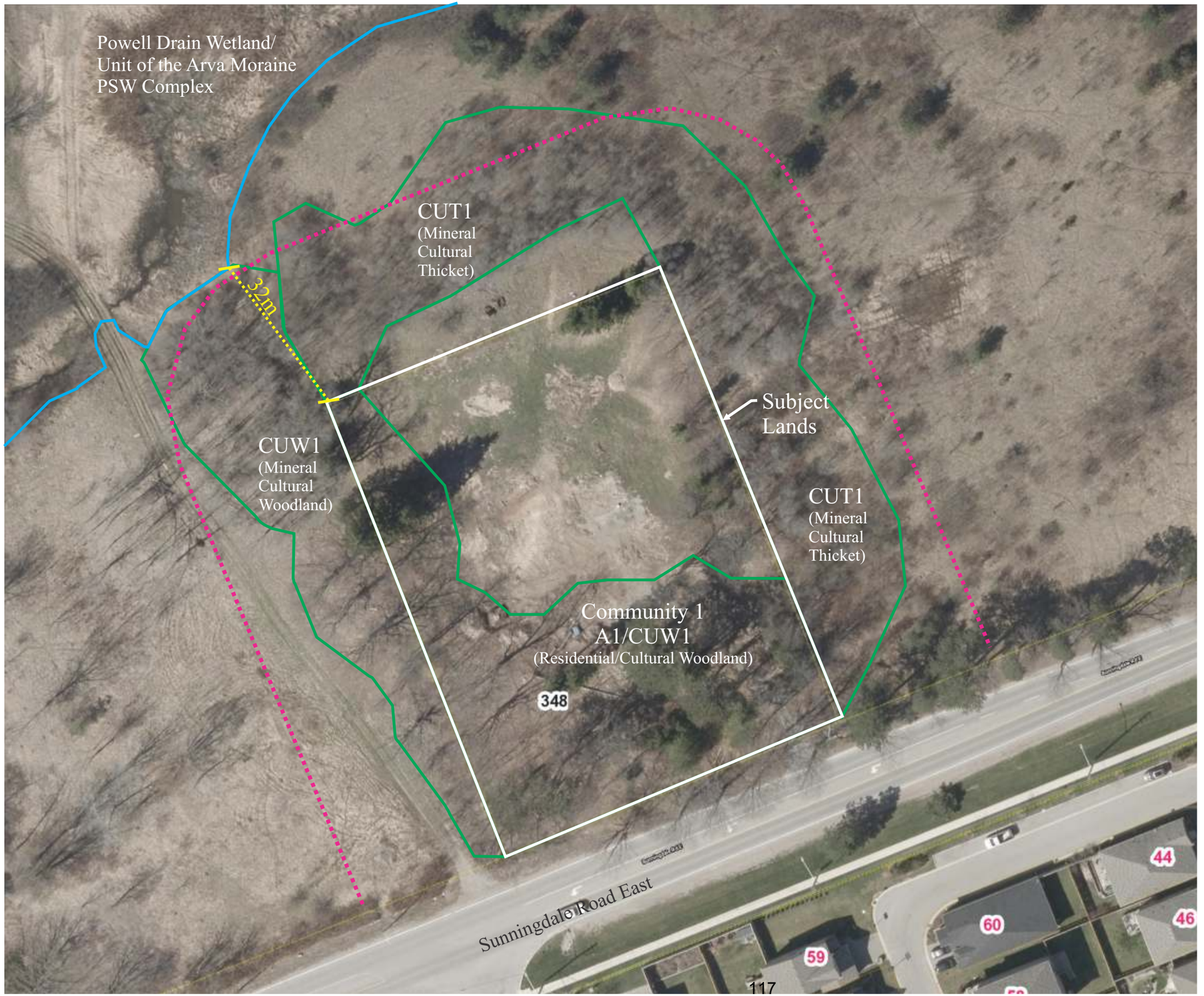
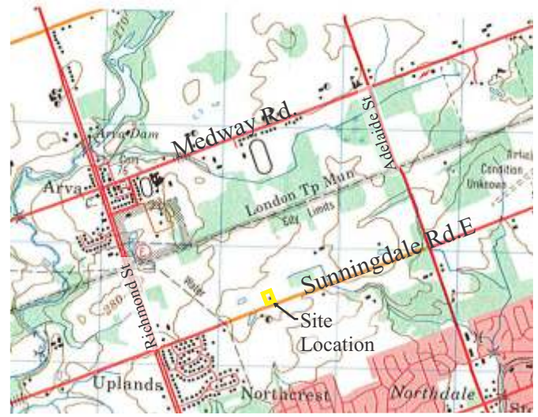
AQUATIC AND TERRESTRIAL ECOSYSTEM PLANNERS

Figure 6: Environmental Management Strategy

(City of London Air Photo 2017)





0 1,000

Scale 1:50,000

Key Plan

30m Setback Distance

Print on 11X17, Landscape Orientation

0 15

Scale 1:750

November 2018

BioLogic

AQUATIC AND TERRESTRIAL ECOSYSTEM PLANNERS

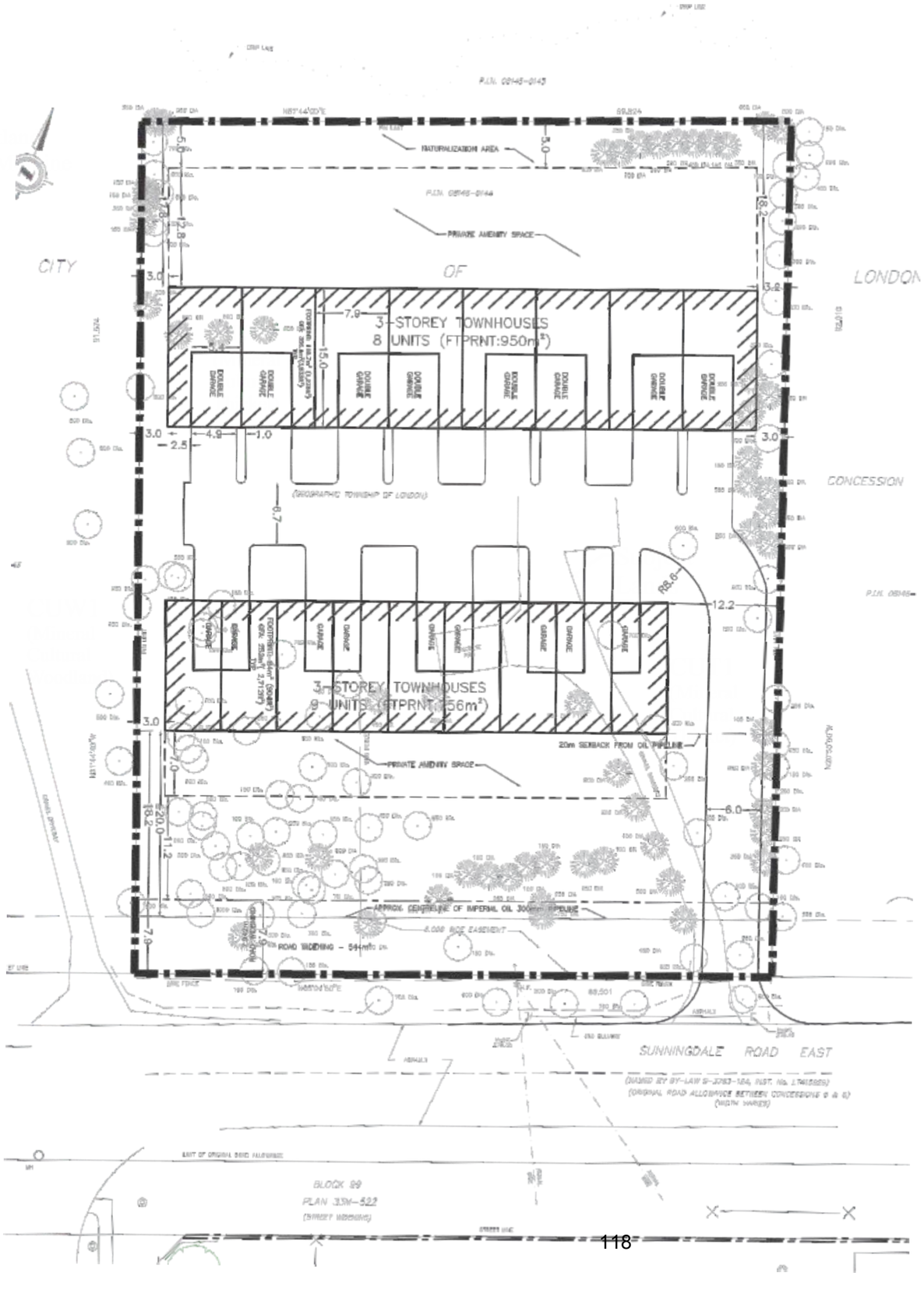
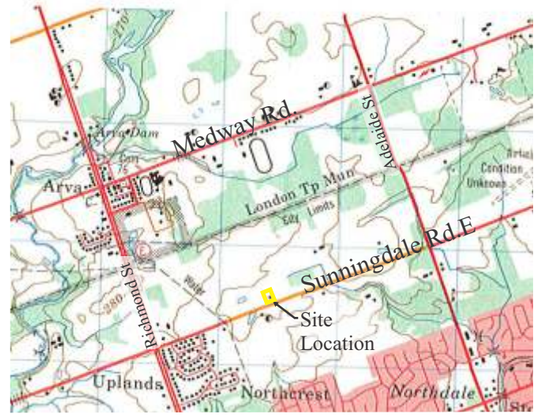


Figure 7: Development Proposal



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Scale 1:50,000
Key Plan

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

BioLogic
AQUATIC AND TERRESTRIAL ECOSYSTEM PLANNERS

Figure 8: Development Proposal Overlay

(City of London Air Photo 2017)

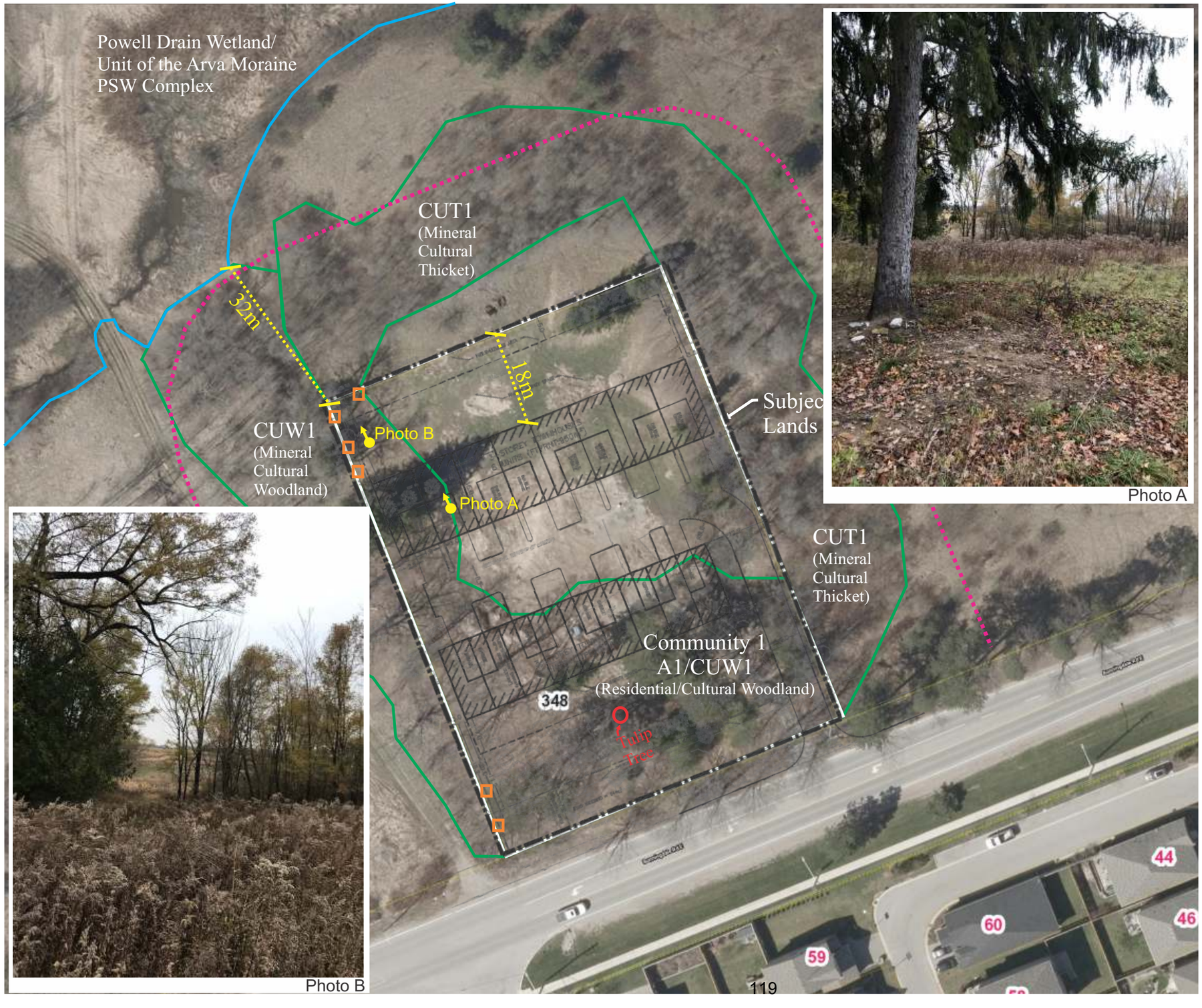
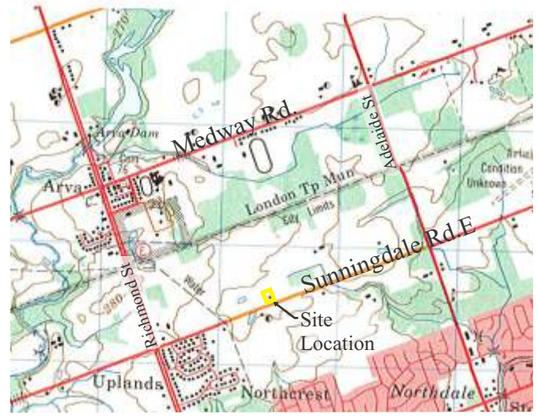


Photo A

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

0 15

Scale 1:750

November 2018

BioLogic

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
5R4765320 N
Elev. 04 R 50930

The Ontario Water Resources Commission Act

WATER WELL RECORD

0 41 No. 2112

Basin 2SD Middlesex
County or District

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

Casing and Screen Record

Inside diameter of casing 5"
Total length of casing 110
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 1.5 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

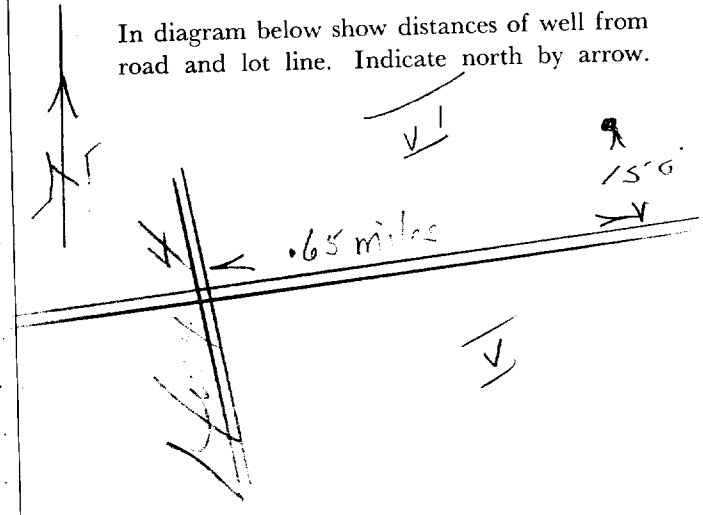
Well Log

Overburden and Bedrock Record	From ft.	To ft.	Water Record: Depth(s) at which water(s) found	Water Record: 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 [illegible] Comfield
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

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 > RHUtyph
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.					
FRAaln					
CORrace					
CORseri					
ULMpumi					
SYRvulg					
VITripa					
VERurti					
RNAcath					

SPECIES CODE	LAYER 1	2	3	4	COL.
RUBacci					
MUHmexi					
RHUtyph					
PRUvirg					
PLAlanc					
GLEhede					
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					
WEMfulv					
LEUvulg					
OVAstri					
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):	CLOUD (10th):	WIND:	PRECIPITATION:
11	0	1	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
- A = ANXIETY BEHAVIOUR
- D = DISPLAY
- N = NEST BUILDING
- P = PAIR
- V = VISITING NEST

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

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

ELC

WILDLIFE

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

TEMP (°C):	CLOUD (10th):	WIND:	PRECIPITATION:
18	10	1	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
- A = ANXIETY BEHAVIOUR
- D = DISPLAY
- N = NEST BUILDING
- P = PAIR
- V = VISITING NEST

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

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

Appendix D
RKLA Tree Report

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		

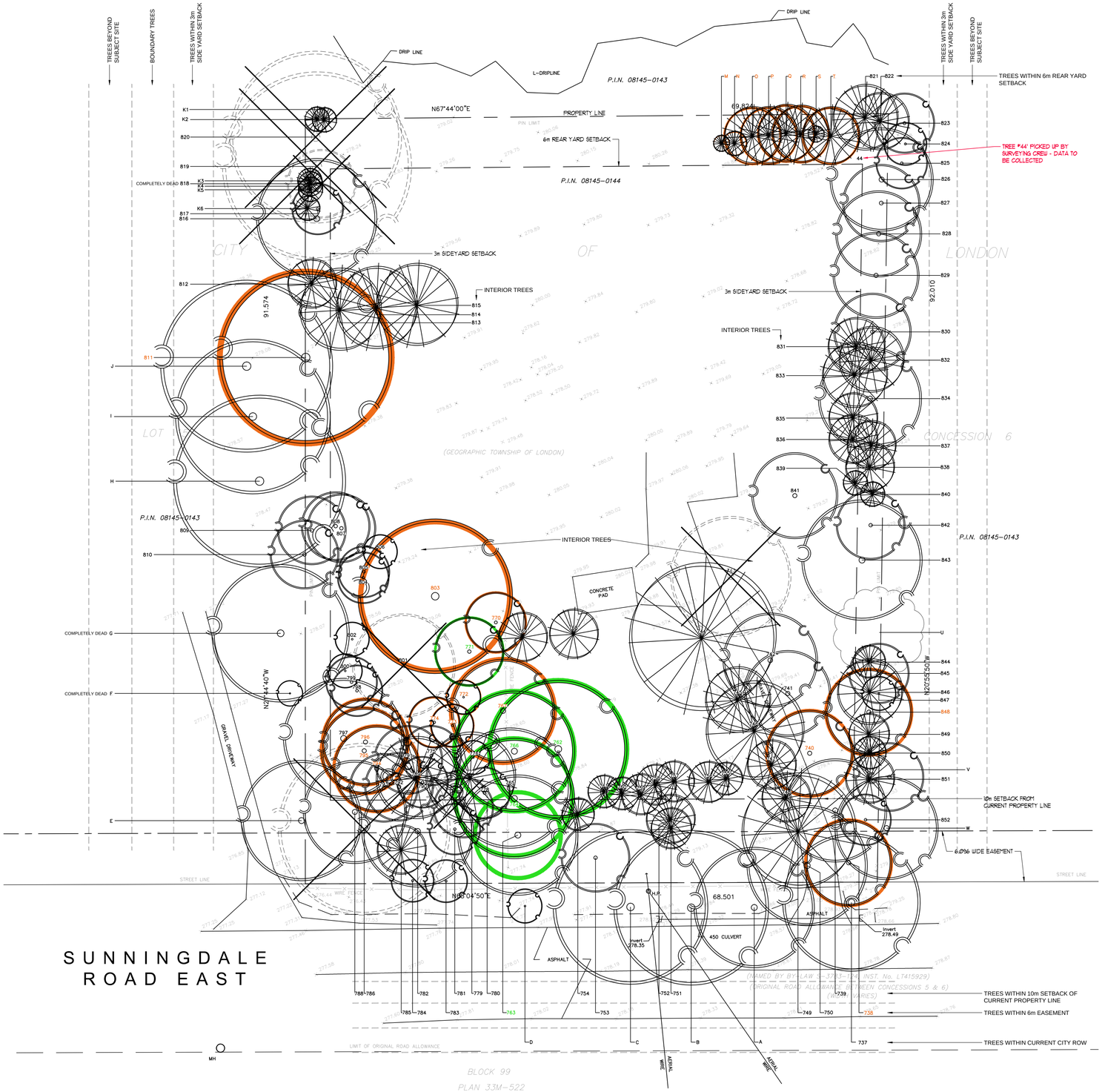
348 SUNNINGDALE ROAD, LONDON ONTARIO

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		

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

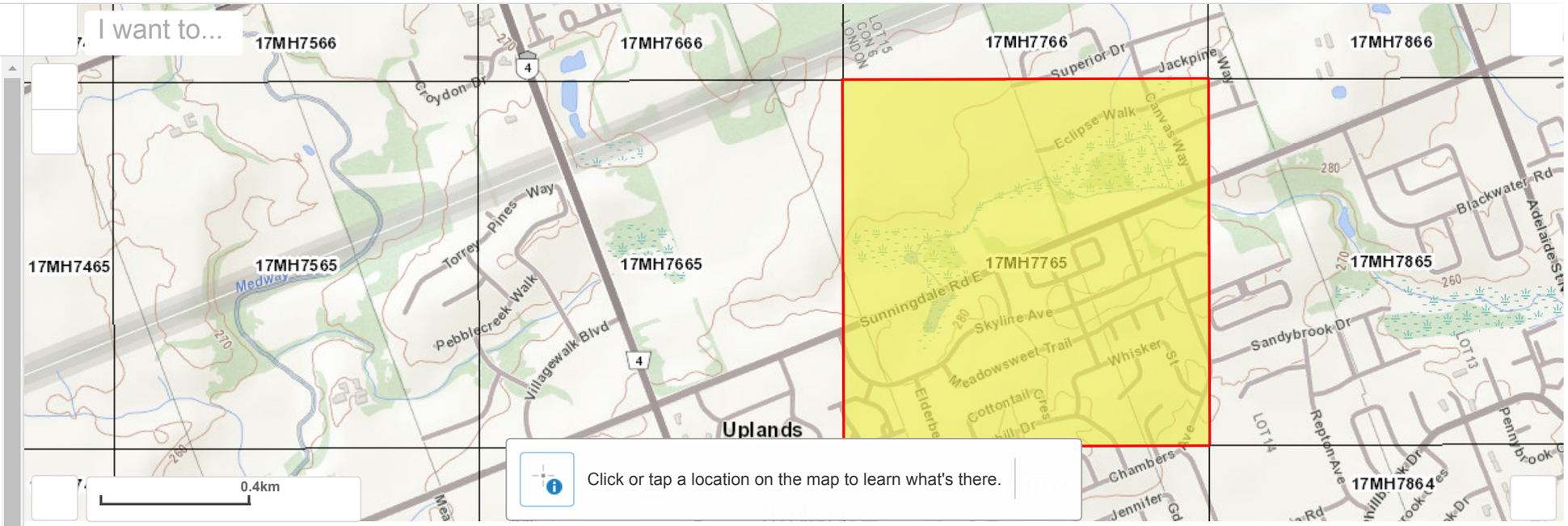
Make a Map: Natural Heritage Areas

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

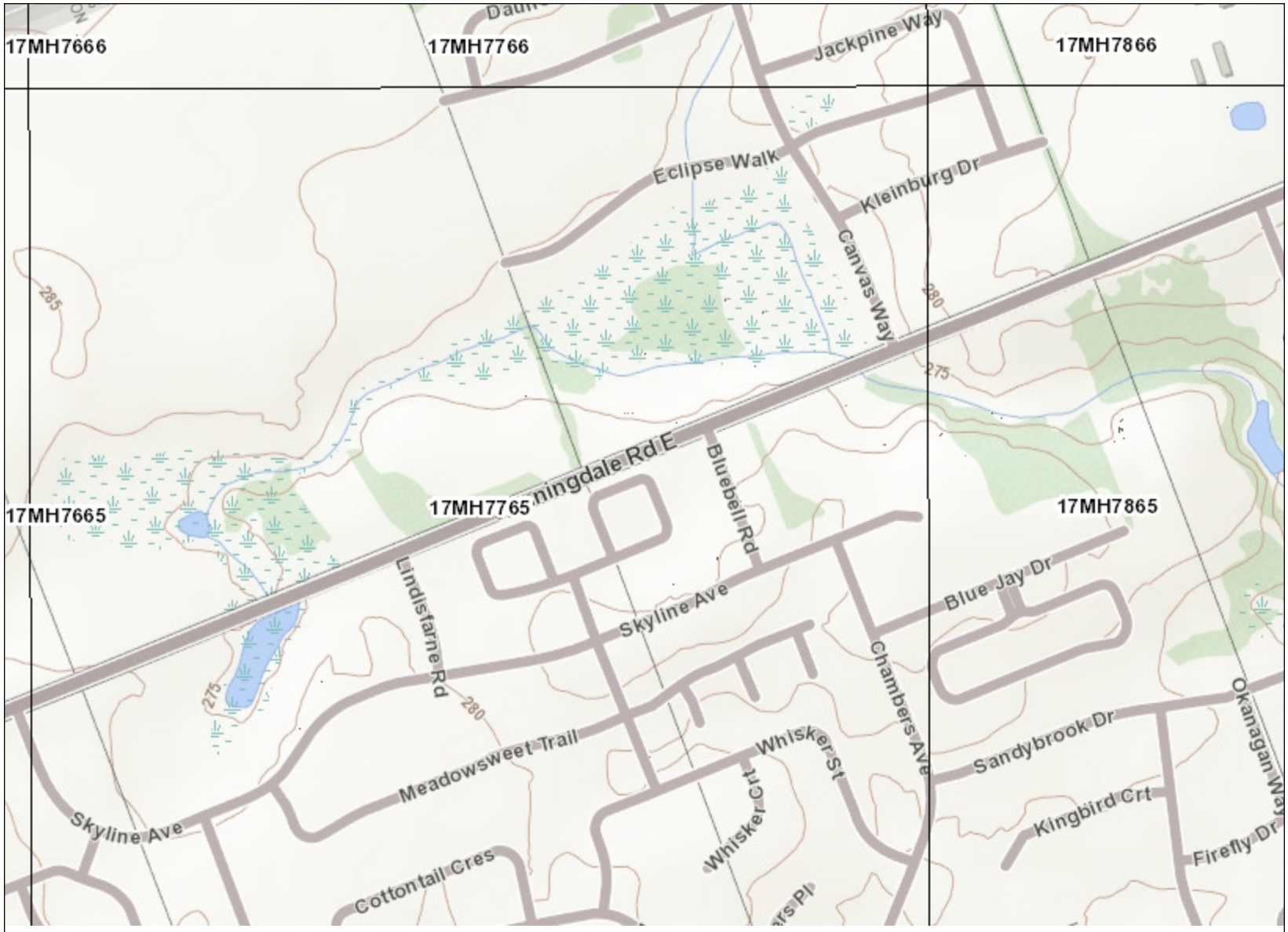
Ontario

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.

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:							

Single Survey

Multiple Surveys

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

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 UTM	Follow-up Req'd 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

X	Birds 1__ 2__ Mig X	☐	ELC's	☐	Dripline/Tree Survey
☐	Mammals	X	Floral V X 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					
☐ X	Barns/Footings/Wells/other(list) Well and footings removed				
☐ X	Rock Piles				
☐ X	Garbage				
Natural Vegetation:	☐ None observed				
☐ X	Fallen Logs outside woods (#'s)				
☐ X	Brush Piles				
☐ X	Snags (raptor perch)				
X ☐	Tree Cavities (nesting)				
☐ X	Sentinel Trees				
☐ X	Butternut Identified				
☐ X	Mast Trees (6E) ☐ Berry Shrubs (6E)				
Wildlife Features:	☐ None observed				
☐ X	Waterfowl nesting (large #'s, # of species)				
☐ X	Exposed Banks (nesting swallows)				
☐ X	Stick Nests				
☐ X	Animal Burrows (>10cm)				
☐ X	Heronry				
☐ X	Crayfish mounds				
☐ X	Sand/gravel on site				
☐ X	Marsh/open country/shrub				
☐ X	Winter Deer yards				
☐ X	Corridor from pond to woods (ampibian movement)				
☐ X	Bat corridor (shorelines, escarpments)				
☐ X	Bat hibernacula (caves, mines, crevices, etc.)				
Aquatic Features:					
☐ X	Perm. pond in woodland ☐ emergents/submergents/logs ☐ temp.				
☐ X	Perm. pond in open ☐ emergents/submergents/logs ☐ temp.				
☐ X	Water in woodland ☐ pools ☐ flowing ☐ dry				
☐ X	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				
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)				
☐ ☒ 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): MM 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
Air °C:	13.5°C	Cloud%:	20%		
Control Site: Y/N		Were Frogs Calling: (Y)/N		Where:	Drainwetland + Swm Pond treat

Today- Rain: 0 — Max °C: 23°c
Yesterday- Rain: 6 — Max °C:
Collector(s): LM

Amphibian Data: No frogs on site

Field Note Community:		Uplands N		Powell		on-site											
ELC Community:		wetland/swm		Drainwetland													
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
Air °C:	12	Cloud%:	100		
Control Site: Y/N		Were Frogs Calling: Y/N		Where:	

Today- Rain: ~2mm — Max °C: 18c
Yesterday- Rain: 0 — Max °C: 21°c
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
Air °C:	24°c	Cloud%:	90%		
Control Site: (Y)/N		Were Frogs Calling: (Y)/N		Where:	Nissouri Rd wetland Uplands N wetland Swm

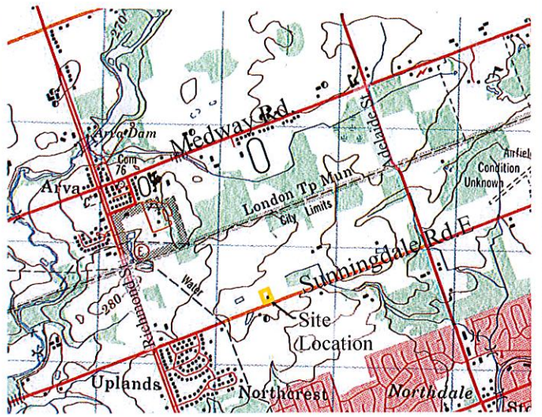
Today- Rain: 3mm — Max °C: 35
Yesterday- Rain: 0 — Max °C: 35
Collector(s): LM

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				
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)				
☐ ☐	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
161
400 ft
N

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**

Planning Justification Report

348 Sunningdale Road East

City of London

Westchester Homes Ltd.

ZELINKA PRIAMO LTD
A Professional Planning Practice

December 4, 2018

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1.0 INTRODUCTION

Westchester Homes Ltd. has submitted an application to amend the City of London Zoning By-Law for the lands known municipally as 348 Sunningdale Road East (the "subject lands"). The purpose of the proposed amendment is to re-zone the subject lands from the current *"Urban Reserve (UR1) Zone*" to a site specific, special provision *"Residential 5 (R5-2(_))Zone*" to permit a townhouse development.

The purpose of the following land use Planning Justification Report is to evaluate the proposed Zoning By-Law Amendment (ZBA) within the context of the 2014 Provincial Policy Statement, the City of London Official Plan (1989), the new Official Plan (*The London Plan)*, and the City of London Z.-1 Zoning By-Law.

2.0 THE SUBJECT LANDS

The subject lands are located on the north side of Sunningdale Road East, between Lindisfarne Road and Bluebell Road (Figures 1).

Figure 1 – Subject lands and surrounding context

Figure 2 – Subject lands

The subject lands are comprised of a single, rectangular-shaped parcel with an area of approximately 0.635ha (1.57ac), a frontage of approximately 68.5m (224.7ft) along the north side of Sunningdale Road East, and a depth of approximately 92.0m (301.8ft). The lands were formerly occupied by a single-detached dwelling that has since been removed. A number of trees are present on the lands, consisting primarily of planted ornamental trees associated with the former residential use. The lands are currently accessed by a gravel driveway on Sunningdale Road East, close to the easterly lot line.

The subject lands are generally flat but also contain gentle and moderate slopes. Generally, the lands slope away from the centre of the property, with steeper slopes in the northwest and southwest corners. An Imperial Oil pipeline is located along the frontage of the subject lands and has an associated easement over the front portion of the lands. Any new buildings on the subject lands are required to be set back a minimum of 20.0m from the centreline of the underground pipeline.

Figure 3 – Subject Lands from Sunningdale Road (looking North)

The subject lands are within the *"Multi-Family, Medium Density Residential"* (MFMDR) land use designation in the 1989 City of London Official Plan; are within the *"Neighbourhoods"* place type on a *"Civic Boulevard"* road type classification in *The London Plan*; and, are currently zoned *"Urban Reserve (UR1) Zone"* in the City of London Z.-1 Zoning By-Law.

3.0 SURROUNDING LAND USES

Surrounding land uses consist of low-density residential in the form of single-detached dwellings (east and south), open space (Powell Drain Wetland adjacent to the north, Uplands North Wetland and Heron Haven Park) (east and southwest respectively), and vacant lands designated for future low- and medium-density residential development (north and west). Building heights in the immediate vicinity range between 1- to 2-storeys in height (Figures 4-7). The subject lands are physically isolated from developable lands to the west and north due to Powell Drain Wetland and associated natural heritage features.

Figure 4: Low Density Residential to the Southwest, beyond Heron Haven Park

Figure 5: Low Density opposite the Subject Lands to the South (Lindisfarne Road)

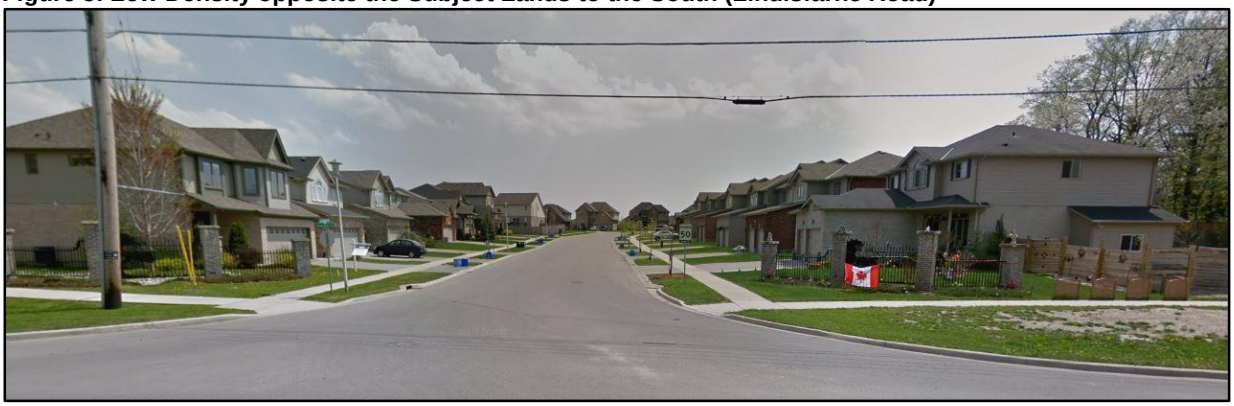


Figure 6: Low Density Residential along south side of Sunningdale Road (subject lands at left)

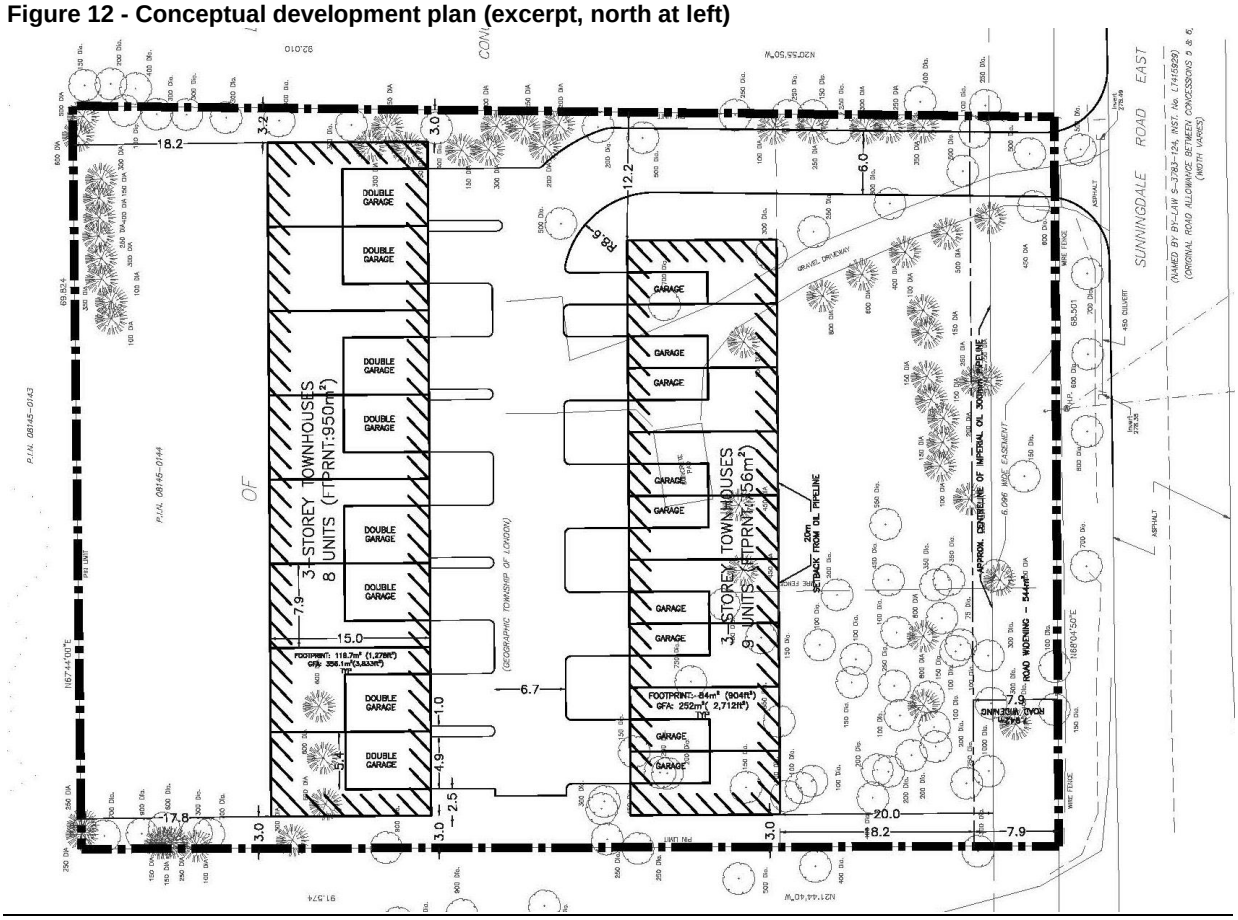
Sunningdale Road East is an arterial road according to Schedule “C” – Transportation Corridors in the 1989 Official Plan. The subject lands are approximately 300m (4 minute walk) from the nearest transit stop (for bus Route 38), which provides transit access to Masonville Mall and its associated transit hub. Public sidewalks along the south side of Sunningdale Road provide pedestrian connections to proximate parks and open space to the east and west. Further, pedestrian and cycling infrastructure is anticipated to be improved with the future widening and improvement of Sunningdale Road, including sidewalks and bike lanes, as set out in the Sunningdale Road Environmental Assessment. Given the context of the surrounding residential densities, location along an arterial road, and access to public open space (Figure 7) and public transit, the subject lands are considered a good candidate for residential intensification.

Figure 7: Heron Haven Park and connection to Uplands Trail (Approximately 140m west of subject lands)

4.0 PROPOSED DEVELOPMENT

The subject lands are proposed to be redeveloped for two, three-storey, townhouse buildings; one nine-unit building located on the south side of an internal driveway and a larger, eight-unit building on the north side of the driveway (Figure 12). The front building is located at a 20.0m setback from the oil pipeline.

Figure 12 - Conceptual development plan (excerpt, north at left)



Due to the large setback between the oil pipeline and the front townhouse building, it is anticipated that a large amount of trees and vegetation at the front of the property can be retained, providing a significant visual screen from Sunningdale Road.

Shared vehicular access is provided by a single, 6.0m wide driveway close to the easterly lot line, in a similar location as the current driveway. Each townhouse unit is provided with an individual parking area and attached garage, accessed from the common driveway. Parking areas will not be visible from the public realm due to their location behind the front building.

The front townhouse units, facing Sunningdale Road, will be designed to address the street. Given the large distance between the units and the street, direct pedestrian connections have not been provided, which also allows for further retention of trees.

Each unit is provided with generous yards, with both the front and rear buildings being provided with approximately 18.2m (60ft) yards.

The 17 units correspond to a residential density of 27 units per hectare (UPH) (pre-road widening).

Conceptual building elevations of the proposed single-detached dwellings and townhouses are shown in Figures 13-14.

Figure 13 – Conceptual Front Elevations

Figure 14 – Conceptual Rear Elevations

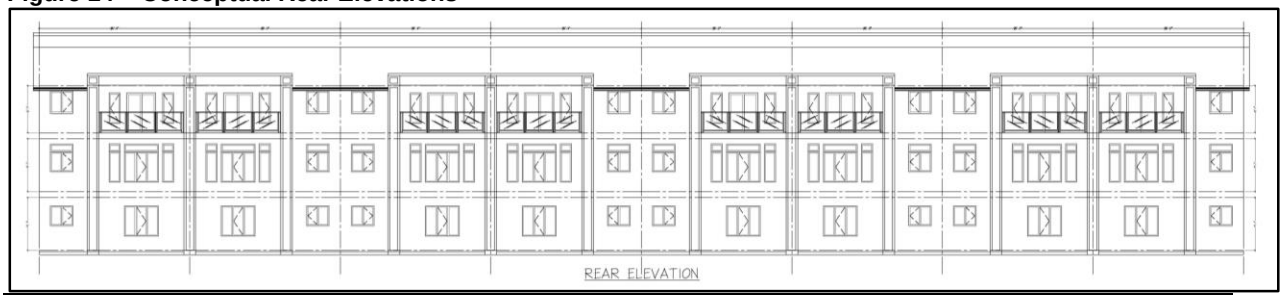


Figure 15 – Larger scale elevations (front at left, rear at right)

Although cladding materials will be refined through the Site Plan Approval process, white brick and stone are anticipated for all faces of the buildings.

5.0 PROPOSED ZONING BY-LAW AMENDMENT

The current *"Urban Reserve (UR1) Zone"* does not permit the proposed townhouse development. As such, the subject lands are proposed to be rezoned through a Zoning By-Law Amendment (ZBA) to a site specific *"Residential 5 (R5-2(_)) Zone"* with a special regulation to permit side yard setbacks of 3.0m for units with windows on side elevations.

6.0 PLANNING DOCUMENTS AND ANALYSIS

This section of the Planning Justification Report reviews applicable land use policies and regulations and provides analysis as to how the proposed development and Zoning By-law Amendment are consistent with these policies and regulations.

6.1 2014 PROVINCIAL POLICY STATEMENT (PPS)

The 2014 Provincial Policy Statement (PPS), issued under the authority of Section 3 of the Planning Act, *"provides policy direction on matters of provincial interest related to land use planning"* in order to ensure efficient and feasible development and the protection of resources. All planning applications, including ZBA applications, are required to be consistent with these policies.

In this analysis section, relevant policies are bordered and *in italics*, with discussion on how the proposed development and application are consistent with that policy immediately after:

Section 1.1.1

Healthy, liveable and safe communities are sustained by:

a. promoting efficient development and land use patterns which sustain the financial well-being of the Province and municipalities over the long term;

b. accommodating an appropriate range and mix of residential (including second units, affordable housing and housing for older persons), employment (including industrial and commercial), institutional (including places of worship, cemeteries and long-term care homes), recreation, park and open space, and other uses to meet long-term needs;

c. avoiding development and land use patterns which may cause environmental or public health and safety concerns;

e. promoting cost-effective development patterns and standards to minimize land consumption and servicing costs;

h. promoting development and land use patterns that conserve biodiversity and consider the impacts of a changing climate.

The proposed development intensifies vacant, underutilized lands, for an efficient built form that provides an appropriate form of housing to meet the housing needs in this area of

London. The subject lands are well suited for increased density given their location along an arterial road and their planned function for medium density residential uses. As discussed in Section 8.3 of this report (Environmental), the proposed development has been designed to be compatible with proximate natural heritage features and maintain their function. The site has been evaluated by an ecologist (Biologic Inc.) which identified that no species at risk are present, and recommend the addition of bat boxes to the site to ensure bat habitat is preserved. Furthermore, significant building setbacks are provided from proximate, off-site environmental features. The proposed development promotes cost-effective development patterns by providing compact, efficient form of development that will make use of existing and planned services along Sunningdale Road East. A *Functional Servicing Report* (SBM Engineering) provides additional details on how the development will be serviced by full municipal services.

Section 1.1.3.1

> *Settlement areas shall be the focus of growth and development, and their vitality and regeneration shall be promoted.*

The subject lands are within the City of London Urban Growth Boundary, an urban settlement area, and are proposed to be redeveloped, thereby promoting regeneration for an intensified residential use.

Section 1.1.3.2

Land use patterns within settlement areas shall be based on:

a. densities and a mix of land uses which:

1. *efficiently use land and resources;*
2. *are appropriate for, and efficiently use, the infrastructure and public service facilities which are planned or available, and avoid the need for their unjustified and/or uneconomical expansion;*
4. *support active transportation;*
5. *are transit-supportive, where transit is planned, exists or may be developed; and*

b. a range of uses and opportunities for intensification and redevelopment in accordance with the criteria in policy 1.1.3.3, where this can be accommodated.

The proposed development contributes to the range of residential densities in the area that can efficiently use land, resources, infrastructure, and existing transportation networks (including the LTC bus network). The subject lands are proximate to open space and recreational resources (Uplands North Wetlands, Heron Haven Park and Uplands Trail) and a major commercial node (Masonville Mall). Masonville Mall is a transportation hub that

contributes to the overall transit network of North London and the rest of the city and is accessible by active transportation via the Uplands Trail. Energy saving construction methods and materials will also be used where feasible in order to promote energy efficiency. As further discussed in this report, the proposed development is an appropriate form of intensification.

Section 1.1.3.3

Planning authorities shall identify appropriate locations and promote opportunities for intensification and redevelopment where this can be accommodated taking into account existing building stock or areas, including brownfield sites, and the availability of suitable existing or planned infrastructure and public service facilities required to accommodate projected needs.

Intensification and redevelopment shall be directed in accordance with the policies of Section 2: Wise Use and Management of Resources and Section 3: Protecting Public Health and Safety.

As discussed throughout this report, the subject lands are an appropriate location for intensification and the proposed development is an appropriate form of intensification.

Section 1.1.3.4

Appropriate development standards should be promoted which facilitate intensification, redevelopment and compact form, while avoiding or mitigating risks to public health and safety.

The proposed development is considered appropriate intensification as it makes efficient use of vacant, underutilizedland for a compact urban form that is compatible with adjacent land uses.

Section 1.1.3.6

New development taking place in designated growth areas should occur adjacent to the existing built-up area and shall have a compact form, mix of uses and densities that allow for the efficient use of land, infrastructure and public service facilities.

The proposed development is located within the City of London's Urban Growth Boundary, across the street from the existing built up area. The proposed townhouses are an inherently compact form of development, and, given the site's constraints (environmental, oil pipeline), land is used efficiently.

Section 1.2.1

A coordinated, integrated and comprehensive approach should be used when dealing with planning matters within municipalities, across lower, single and/or upper-tier municipal boundaries, and with other orders of government, agencies and boards including:

a. managing and/or promoting growth and development;

c. managing natural heritage, water, agricultural, mineral, and cultural heritage and archaeological resources;

d. infrastructure, electricity generation facilities and transmission and distribution systems, multimodal transportation systems, public service facilities and waste management systems

Supporting reports for the redevelopment of the subject lands have been prepared in consultation with the City of London, Upper Thames River Conservation Authority, Ministry of Natural Resources and Forestry, and the Ministry of Tourism, Culture and Sport.

Section 1.4.3

Planning authorities shall provide for an appropriate range and mix of housing types and densities to meet projected requirements of current and future residents of the regional market area by:

b. permitting and facilitating:

2. all forms of residential intensification, including second units, and redevelopment in accordance with policy 1.1.3.3;

c. directing the development of new housing towards locations where appropriate levels of infrastructure and public service facilities are or will be available to support current and projected needs;

d. promoting densities for new housing which efficiently use land, resources, infrastructure and public service facilities, and support the use of active transportation and transit in areas where it exists or is to be developed; and

e. establishing development standards for residential intensification, redevelopment and new residential development which minimize the cost of housing and facilitate compact form, while maintaining appropriate levels of public health and safety.

The proposed development contributes to an appropriate range and mix of housing types, being townhouses in an area that is dominated by single-detached dwellings, to accommodate residential growth in the City of London. The existing area has appropriate levels of infrastructure and public service facilities to support the development's needs as examined in the attached *Functional Servicing Report*. The proposed density of 27 UPH contributes to the efficient use of infrastructure and public service facilities, and also supports

the use of active transportation and public transit along the Sunningdale Road East. The proposed development minimizes the cost of housing and facilitates a compact form of development. There are no public health and safety concerns.

Section 1.6.6.1

Planning for sewage and water services shall:

a. direct and accommodate expected growth or development in a manner that promotes the efficient use and optimization of existing:
1. municipal sewage and municipal water services;

d. integrate servicing and land use considerations at all stages of the planning process.

The proposed development will connect to existing sanitary servicing from Lindisfarne Road to the west and water servicing from Sunningdale Road. Sanitary servicing will utilize gravity feed to the Lindisfarne system. The proposed density can be accommodated by current servicing levels efficiently. Extensive discussions between City of London staff and SBM Engineering have taken place to ensure servicing feasibility. See the attached *Functional Servicing Report* for further details.

Section 1.6.6.7

Planning for stormwater management shall:

a) minimize, or where possible, prevent increases in contaminant loads;
b) minimize changes in water balance and erosion;
c) not increase risks to human health and safety and property damage;
d) maximize the extent and function of vegetative and pervious surfaces; and
e) Promote stormwater management best practices, including stormwater attenuation and re-use, and low impact development.

The *Functional Servicing Report* has identified preliminary stormwater management solutions that will be further detailed at the Site Plan Approval phase, including a water balance report demonstrating maintenance of flows from the subject lands to adjacent lands. Water quality and quantity controls will be implemented as required. Due to the large setbacks provided by the buildings, impervious areas are minimized.

Section 2.1.2

The diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and ground water features.

As provided in the *Environmental Impact Statement* (EIS) prepared by Biologic Inc., the subject lands do not contain any species at risk (SAR) or significant habitat. Provided that the development is consistent with the recommendations set out in the EIS, including maintaining

a sufficient rear yard setback and integration of bat boxes, the development will maintain the natural heritage features and functions in the immediate area.

Section 2.2.1

Planning authorities shall protect, improve, or restore the quality and quantity of water by:

c) identifying water resource systems consisting of ground water features, hydrologic functions, natural heritage features and areas, and surface water features including shoreline areas, which are necessary for the ecological and hydrological integrity of the watershed;

d) maintaining linkages and related functions among ground water features, hydrologic functions, natural heritage features and areas, and surface water features including shoreline areas;

e) implementing necessary restrictions on development and site alteration to:

2. protect, improve or restore vulnerable surface and ground water, sensitive surface water features and sensitive ground water features, and their hydrologic functions.

The proposed development has been designed to provide appropriate water quality and quantity management, including matching pre- and post-development flows through a water balance analysis to be completed at the Site Plan Approval phase. This approach will ensure maintenance of existing storm water flows to proximate natural heritage features.

For the reasons noted above, the proposed Zoning By-Law Amendment is consistent with the policies of the 2014 Provincial Policy Statement.

6.2 1989 CITY OF LONDON OFFICIAL PLAN

The subject lands are within the "*Multi-Family Medium Density Residential*" (*MFMDR)* land use designation according to Schedule "A" – Land Use in the City of London Official Plan (Figure 16), and are subject to the policies of Section 3.3. The *MFMDR* designation permits a wide range of medium density residential uses, including townhouses, as well as a limited range of commercial uses. Schedule "B-1" - Natural Heritage Features, of the Official Plan shows subject lands proximate to "Unevaluated Vegetation" (Figure 17) but does not identify any natural heritage features within the boundary of the subject lands. Detailed discussion on environmental features related to the subject lands, adjacent lands, and the proposed development, is provided in Section 8.3 of this report, and the accompanying *EIS* from BioLogic Inc.

The subject lands are also identified as being within an area with specific Official Plan policies, being the Uplands North planning area. This area was established through the

Uplands North Secondary Plan (2004) which has subsequently been incorporated into the Official Plan.

Figure 16 – City of London Official Plan – Schedule 'A' – Land Use (excerpt Map 2)

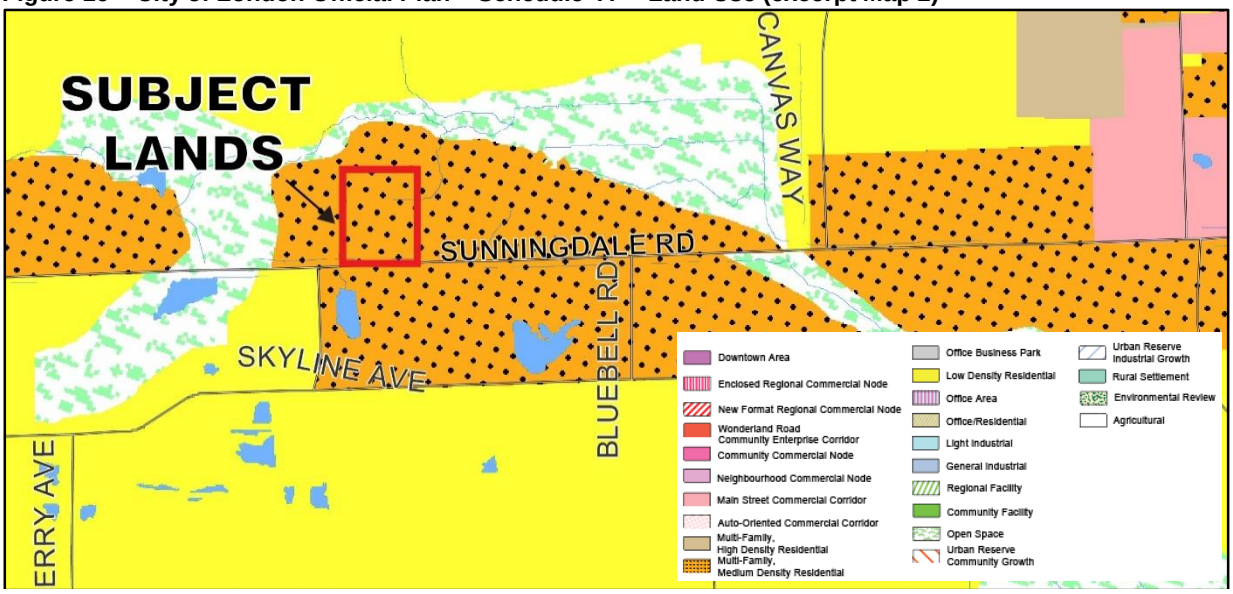
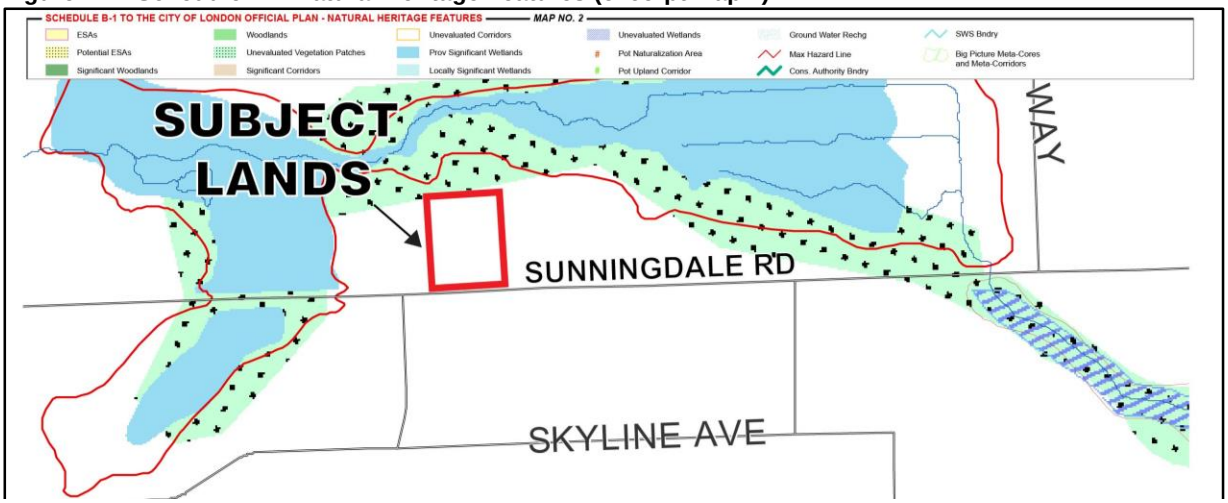


Figure 17 – Schedule B-1 Natural Heritage Features (excerpt Map 2)



The *MFMDR* land use designation objectives are to support the development of *MFMDR* uses including cluster townhouses and single detached dwellings in locations which may enhance the character and amenity of a residential area. This designation aims to encourage the development of well-designed and visually attractive forms of housing and promote the retention of desirable natural features, while providing for residential densities typically greater than low density housing.

The subject lands are appropriately located to accommodate the proposed townhouse development, being located along an arterial road and proximate to public open space. The

buildings have been designed to provide an aesthetically appealing image, and, are proposed to be located to best retain existing vegetation and to maintain the natural heritage qualities and functions of the lands to the north.

As per **Section 3.3.1**, permitted uses in the *MFMDR* designation include multiple-attached dwellings, such as row houses (townhouses); low-rise apartment buildings and single-detached dwellings with a maximum residential density of 75 UPH. The proposed development for cluster townhouse dwellings at a density of 27 UPH is consistent with the range of permitted uses and residential density within the *MFMDR* designation.

Section 3.3.2 of the MFMDR land use designation highlights criteria for medium density in the City of London. Compatibility between the proposed development and surrounding uses shall take into account surrounding land uses in terms of height, scale and setbacks and shall not adversely impact the amenities and character of the surrounding area (Section 3.3.2i)). The proposed development is three storeys in height, modestly higher than the single-detached dwellings across Sunningdale Road to the south; this height relationship is compatible, especially considering the separation of the subject lands from adjacent residential uses by an arterial road. Adequate municipal services are required to accommodate the needs of the development (Section 3.3.2ii)). As further detailed in the *Functional Servicing Report,* servicing will require minor extension of sanitary services, while water service is available along Sunningdale Road.

Section 3.3.3 provides policies for the scale of development in the *MFMDR* designation, in that building heights shall generally not exceed four storeys in height, and shall be compatible with adjacent uses. The proposed development is three storeys in height, and is compatible with the residential uses on the south side of Sunningdale Road. There are no buildings to the east, west, or north of the subject lands that require compatibility considerations. The Official Plan also provides that residential densities shall not exceed 75 UPH. The proposed development is 27 UPH, well under the maximum density permitted.

While typically residential intensification and redevelopments locate buildings at minimal setbacks to the street, the presence of the Imperial Oil underground pipeline approximately 6m from the front lot line, and its required 20m building setback, requires that the southerly tier of townhouse buildings be located well back from the street. As such, a number of mature trees and vegetation are to be retained along the frontage, providing a visual screen from the public realm. Depending on the ultimate configuration of the development through the Site Plan Approval process, the buildings may not be easily visible from the street.

The subject lands are identified as within the Uplands North Community Planning Area and have specific policies found in Section 3.5.15 of the Official Plan that arise out of the Uplands North Secondary Plan. These policies set out a framework for establishing a natural heritage

corridor along the Powell Drain, north of the subject lands. As the subject lands do not contain any natural heritage features associated with the Powell Drain, and are located approximately 50m south of the feature, the policies of Section 3.5.15 do not directly apply to the development of the subject lands, but rather would be more applicable to the parcel of land abutting the subject lands to the north.

Policies for archaeological resources are provided in Section 13.4 of the Official Plan. The proposed development is consistent with these policies as archaeological resources on the subject lands have been identified and conserved through three (3) archaeological assessments conducted by Golder Associates: a Stage 1-2, Stage 3, and Stage 4. Upon completion of the Stage 4 archaeological assessment, it has been determined that there are no further archaeological resources on the subject lands.

Natural Heritage Objectives (**Section 15.1.1**) are provided in the Official Plan. While there are no natural heritage features identified on the property, there are natural heritage features proximate to the north. These proximate features have been taken into account in planning the proposed development, including maintaining a significant amount of vegetation and trees, and locating buildings well away from natural heritage features. City staff and UTRCA staff have provided comments throughout the initial planning process to refine the requirements of an *Environmental Impact Study* (EIS). The EIS prepared Biologic Inc. Provides a number of recommendations to be implemented through the Site Plan Approval process, including building setbacks and the provision of bat boxes (artificial bat habitat). Given the extensive consultation with City and UTRCA staff, and the recommendations of the EIS, the proposed development has been designed to maintain the function and viability of proximate, off-site natural heritage features. As such, the proposed development is consistent with Section 15 of the Official Plan.

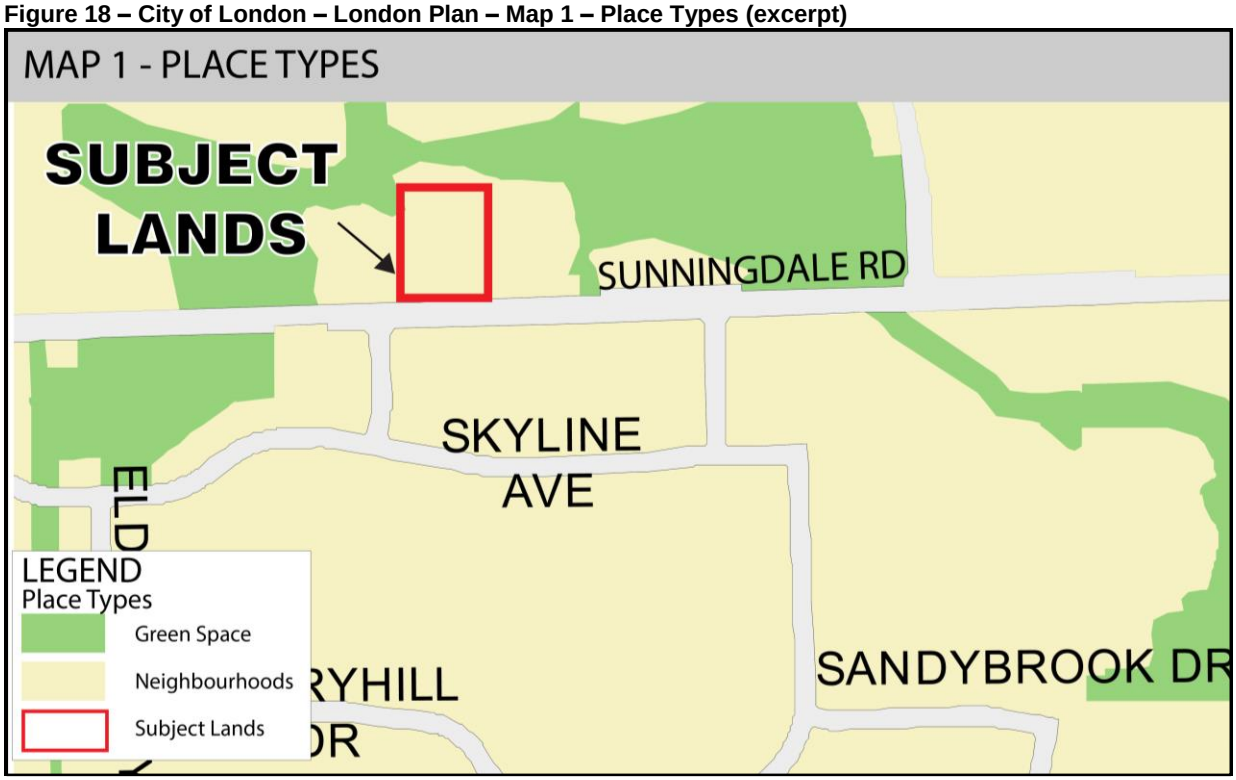
The proposed development provides an opportunity for efficient use of land for a compact form of residential development consistent with the planned function of the lands and the policies and intent of the Official Plan. The subject lands are well located and are appropriate to accommodate the proposed residential intensification, and have taken into account site constraints, including the 20m setback from the Imperial Oil underground pipeline, natural heritage features to the north, and retention of existing trees. The scale and intensity of the proposed development is compatible with adjacent land uses and is appropriate for the subject lands.

6.3 NEW OFFICIAL PLAN – *THE LONDON PLAN*

The new Official Plan, *The London Plan,* was adopted by the City of London Council June 23rd, 2016 and approved by the Ministry of Municipal Affairs December 28th, 2016. However, as portions of *The London Plan* have been appealed to the Local Planning Appeals Tribunal, many policies, including the "*Neighbourhoods*" place type, are not yet in force and effect. Although not in force and effect, planning decisions should have regard for the policies of *The London Plan*

The London Plan shows the subject lands within the *"Neighbourhoods"* place type (Figure 18) along a "*Civic Boulevard"* road type. As per Tables 10-12 of *The London Plan*, this combination of place type and road type classification permits a variety of residential uses including townhouses and low-rise apartments. The maximum height for these permitted uses along a "*Civic Boulevard*" is four (4) storeys, or six (6) storeys with bonusing.

Figure 18 – City of London – London Plan – Map 1 – Place Types (excerpt)



Section 937 of *The London Plan* states that residential intensification, in the form of redevelopment, and the removal of existing buildings in favour of one or more new buildings, is encouraged. The proposed development is considered residential intensification as it proposes a greater number of dwelling units than the former single-detached dwelling.

Sections 940 and 953 of *The London Plan* provide that intensification projects should be appropriately located to fit well within the surrounding context. The subject lands are unique in their context as they do not abut development to the east, west, or north. The proposal is compatible with existing low-density residential uses on the south side of Sunningdale Road East, and, as lands to the east are planned to develop for the same range of uses as the proposed development, the proposed development is compatible with anticipated future development to the west.

The proposed development supports the City's Design policies in Section 193. The proposed development is compatible within its neighbourhoodas it is of similar height (3-storeys) to proximate existing buildings (Section 193.2). The buildings are to be setback 20.0m from the oil pipeline thereby promoting the preservation of existing mature treesalong the street's edge. With frontage on Sunningdale Road, the proposed development enhances the streetscape with individual unit driveways to the rear for convenient vehicle access. The proposed development proposes a housing type that is an appropriate form of residential intensification (Section 193.7).

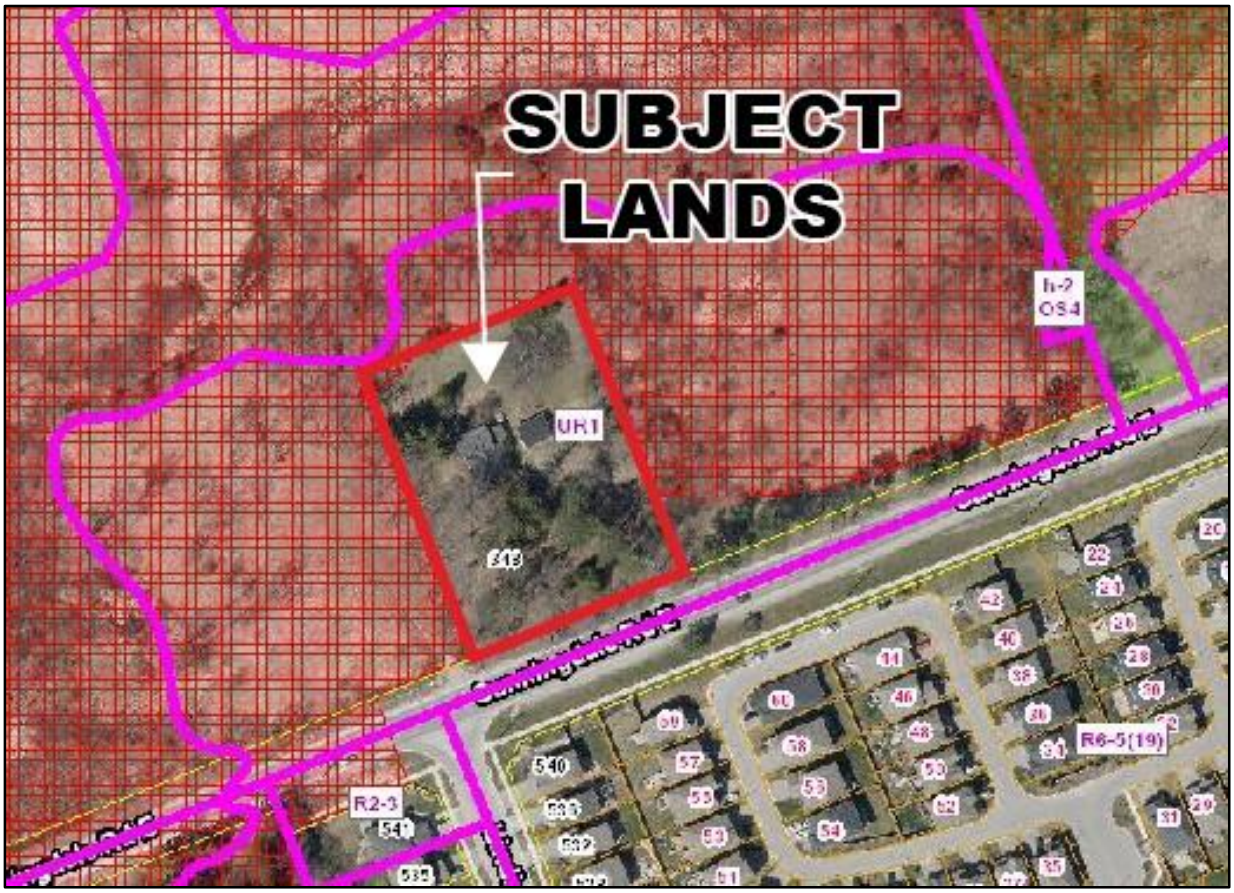
Given that the the proposed development is consistent with the policies in the 1989 Official Plan, and that the policies of *The London Plan* applicable to the subject lands are similar, the proposed development is consistent with the policies and intent of *The London Plan.*

6.4 CITY OF LONDON Z.-1 ZONING BY-LAW

The subject lands are zoned *"Urban Reserve (UR1)"* in the City of London Zoning By-law No. Z-1 (Figure 19). The *UR1* zone permits existing dwellings, agricultural uses, commercial greenhouses, livestock facilities, conservation lands, managed woodlot, wayside pit, and passive recreation use. The *UR1* zone variation is intended to be applied to undeveloped areas within the former City boundaries and to areas which have been reviewed through the Community Plan Process. The Upper Thames River Conservation Authority (UTRCA) regulated area abuts the lands to the north, east, and west, and extends into a small portion of the northwest corner of the subject lands.

Lands to the east and west, and a small area of land to the north are zoned *"Urban Reserve (UR4)"* for potential future residential development (Figure 11). Initial discussions with the owner of the abutting lands indicate they are not intending to develop these lands in the near future. Beyond the *UR4* lands are lands zoned *OS4,* associated with the Powell Drain and wetland feature.

Figure 19 – UTRCA Regulated Area (red hatching) and zoning



The proposed ZBA seeks to rezone the subject lands to a site-specific *"Residential 5 (R5-2-(_)) Zone"* zone to permit the proposed townhouse development. The *R5-2* zone permits townhouses and stacked townhouses with a maximum residential density of 30 UPH. One special provision is requested to permit an interior side yard setback of 3.0m for a building with habitable windows, whereas 6.0m is typically required.

The *R5-2* zone is intended to be applied to medium density developments proximate to low-density uses, such as the adjacent single-detached dwellings to the south, and is an appropriate implementing zone of the *MFMDF* land use designation. The maximum permitted density of 30 UPH and maximum height of 12.0m ensures compatibility between the proposed development and existing and future adjacent uses.

All standard R5-2 zone regulations are complied with on the proposed site plan, save and except for the interior side yard setbacks; it is proposed that a 3.0m setback be permitted for windows to a habitable room. This provision allows for an appropriate building setback and access to the sides of the buildings into the front and rear yards. Given that there are currenty no existing or proposed buildings to the east or west, and that development of the abutting

lands may be impacted by natural heritage features which may limit the locations of future buildings, the proposed side yard setback has no undue negative impacts on abutting lands or uses. As such, the proposed 3.0m side yard setback is considered appropriate.

The proposed development has been designed to comply with the policies of the Official Plan and provide for a compact development that retains a significant amount of trees and vegetation. The proposed site specific *R5-2-(_)* zone is compatible with proximate and abutting land uses and is appropriate for the development of the subject lands.

7.0 ADDITIONAL CONSIDERATIONS

7.1 SERVICING

As set out in the *Functional Servicing Report,* servicing for the proposed development is to be serviced by full municipal services. Water service is to be obtained by existing water infrastructure along Sunningdale Road East. Sanitary service will make use of a gravity feed system from the subject lands to sanitary services extended from the current limit of sanitary service at Lindisfarne Road. A preliminary design detail has been prepared for sanitary servicing demonstrating the need for new infrastructure (pipes and manholes) to access the existing sanitary service system. As there is no stormwater service along Sunningdale Road East, on-site quality and quantity controls will be implemented through the Site Plan Approval process. It is also understood that a water balance budget will also be required to ensure that overland stormwater flows are maintained to abutting lands.

7.2 ARCHAEOLOGY

An Archaeological Assessment consisting of Stages 1, 2, 3, and 4, has been completed to fully assess the subject lands for archaeological resources and artifacts.Upon completion of Stage 4, all archaeological significance has been reviewed and artifacts excavated and examined.

7.3 ENVIRONMENTAL

The subject lands contain a number of large trees and are proximate to natural heritage features associated with the Powell Drain, including a provincially significant wetland. As such, City staff and UTRCA staff were consulted early in the planning process for the proposed development to provide guidance on the preparation of an *Environmental Impact Statement* (EIS). The EIS prepared by Biologic Inc. has evaluated the proposed development for potential impacts on proximate natural heritage features and provides recommendations for the development of the lands, including minimal building setbacks and provisions for bat boxes.

8.0 CONCLUSIONS

Based on the above, the proposed Zoning By-law Amendment is consistent with the policies of the 2014 PPS and complies with the policies of the 1989 Official Plan and *The London Plan*. The proposed Zoning By-Law Amendment is considered appropriate for the subject lands as this type of medium density intensification is permitted and intended under both Official Plans in the City of London and is compatible with adjacent land uses. As such, the proposed Zoning By-Law Amendment is appropriate and is considered good land use planning practice.

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ARVA LOCATION
CIVIL / STRUCTURAL DIVISION
14361 Medway Rd., P.O. Box 29
Arva, Ont, N0M 1C0
P: 519.471.6667

NORTH LONDON LOCATION
MECHANICAL / ELECTRICAL DIVISION
1510 Woodcock St., Unit #7
London, Ont, N6H 5S1
P: 519.641.3040

KITCHENER LOCATION
1415 Huron Rd., Unit 225
Kitchener, Ont, N2R 0L3
P: 519.725.8093

www.sbmltd.ca sbm@sbmltd.ca

Westchester Homes
416 Ridout Street South
London, Ontario, N6C 4A1

November 2, 2018
SBM-17-2235

Attn: Mr. Peter Drexler

Re: Servicing Feasibility Study
Proposed Residential Development
348 Sunningdale Rd E, London, Ontario

1. INTRODUCTION

This Servicing Feasibility Study (Study) has been prepared by Strik, Baldinelli, Moniz Ltd. (SBM) for Westchester Homes to address the servicing feasibility for the proposed residential development located at 348 Sunningdale Rd E, London, Ontario. It is our understanding that the existing single family dwelling (Municipal No. 348) and driveways have been demolished. Two (2) townhouse blocks (for a total of seventeen (17) units) are proposed for the site. The total site area is approximately 0.63 ha and is located on the north side of Sunningdale Rd E.

The site abuts vacant land for future development on its east and west sides, open space on its north side, and the Sunningdale Rd E Right-Of-Way on its south side. Single family dwellings are located across the street. An oil pipeline easement 6.096m wide runs along the north side of Sunningdale Rd E.

This Study is to determine the adequacy of the existing City of London (City) services in support of an Zoning By-Law Amendment (ZBA) application for the proposed redevelopment.

2. WATER SERVICING

There is an existing 1,200mm concrete watermain on the north side of Sunningdale Rd E and a 400mm PVC watermain on the south side of Sunningdale Rd E. The development will be serviced by the 400mm PVC watermain. The fire hydrant flow test provided by the City is attached to this study. A new 150mm diameter water service is proposed for the development.

2.1 Water Supply for Fire Protection

The new 150mm diameter water service will provide firefighting flows to a new site hydrant. Firefighting flows were determined using Section 3.2.5.7 of the 2012 Ontario Building Code. A building area of 600 m^2 (largest building area permitted under Part 9 of the OBC) was assumed, of combustible construction and 11 m in height. Upon review of the fire flow test results (attached to this study) as tested on April 6, 2017, and using linear extrapolation of the pressure readings at the provided flow rates from the hydrant, there is sufficient residual pressure within the system. At the required fire flow + maximum day demand rate of 9,032 L/min, the residual pressure in the system would be approximately 25 psi which exceeds the minimum required 20 psi in fire-flow scenarios. Please refer to the calculations attached to this Study.

Based on the above, the existing 400mm PVC watermain fronting this property has sufficient capacity fire-fighting for this development. Based on 2012 OBC requirements, a fire hydrant should be located 90 m from the fire-fighters entrances to all units. As no fire hydrants are located in the right-of-way nearby, new private or municipal hydrant(s) are proposed.

2.3 Domestic Water Supply

Since the anticipated average day and peak hour domestic demands would be far less than the maximum day + fire-fighting demand, and the municipal water distribution system is adequate for the maximum day + fire protection demand, it can be concluded that adequate water supply for domestic demand is available for the proposed development.

3. SANITARY SERVICING

As indicated in the Record of Pre-Application Consultation date August 22, 2017, there is currently no municipal sanitary sewer fronting the subject property on Sunningdale Rd E. As per the City's Drawings 25,716 and 25,718, the subject site is part of Area A42 External Area – Medium Density Residential (75 units/ha, 2.4 ppu). The proposed seventeen (17) townhouse units on the 0.63 ha site result in a population density of approximately 27 units/ha.

Since the proposed sanitary sewer fronting Sunningdale Rd E is not expected to be constructed for over 10 years, it is proposed to outlet the development to the sanitary sewer in the Lindisfarne Rd R.O.W.

The proposed flows from the subject property are shown on the Sanitary Sewer Design Sheet appended to this Study. The Lindisfarne Road and Skyline Avenue sanitary flows were recalculated using the design criteria of 230 L/capita/day as per the City of London DS&RM 2018, updated to include the flows from the subject site (called EXT.4 in the design sheet) as well as the proposed flows from area on Sunningdale Rd E, immediately west of Lindisfarne Rd, shown on the City's drawing 25,716 (called EXT.3 in the design sheet). These two areas (EXT.3 and EXT.4) are shown on the attached marked up Sheet 8 in red text. The calculations show that the existing sewers have capacity for the proposed development, and that flows actually decrease from the flows shown on the City's drawing 25,718 and 18,994.

The municipal sewer in the Lindisfarne Road R.O.W. is proposed to be extended up to and along Sunningdale Rd E such that it will front the subject site. Refer to the attached Conceptual Sanitary Servicing, Drawing SK-1. As illustrated in the drawing, it is feasible to extend the municipal sewer as shown and install a shallow gravity service to the subject site.

4. STORM SERVICING AND STORMWATER MANAGEMENT

There is no municipal stormwater sewer available for the subject property. Based on the survey provided and the City's Drawing 25,712, it appears that stormwater generally flows overland to the west edge of the property.

As per the City's Drawing 25,712, the subject site outlets directly to the wetland to the north of the subject property. This outlet will be maintained under post-development conditions. Quality and quantity controls will be provided in accordance with the requirements identified in the Stoney Creek Subwatershed Study to ensure post-development runoff matches pre-development levels.

5. SUMMARY

Based on the above, the existing City services seem to have sufficient capacity to accommodate the proposed redevelopment of the 0.63 ha subject site located at 348 Sunningdale Rd E, London.

6. LIMITATIONS

This Study was prepared by Strik, Baldinelli, Moniz Ltd. for Zelinka Priamo, Westchester Homes (owner) and the City of London. Use of this report by any third party, or any reliance upon its findings, is solely the responsibility of that party. Strik, Baldinelli, Moniz Ltd. accepts no responsibility for damages, if any, suffered by a third party as a result of decisions made or actions undertaken as a result of this report. Third party use of this report, without the express written consent of the Consultant, denies any claims, whether in contract, tort, and/or any other cause of action in law, against the Consultant.

All findings and conclusions presented in this design brief are based on site conditions as they appeared during the period of the investigation. This report is not intended to be exhaustive in scope, or to imply a risk-free development. It should be recognized that the passage of time may alter the opinions, conclusions, and recommendations provided herein.

The design was limited to the documents referenced herein and SBM Ltd. accepts no responsibility for the accuracy of the information provided by others. All designs and recommendations presented in this brief are based on the information available at the time of the review.

7. CLOSURE

We trust this Study meets your satisfaction. Should you have any questions or require further information, please do not hesitate to contact us.

Respectfully submitted,

Strik, Baldinelli, Moniz Ltd.
Civil • Structural • Mechanical • Electrical

Kevin Moniz, P.Eng.
Principal, Civil Engineering

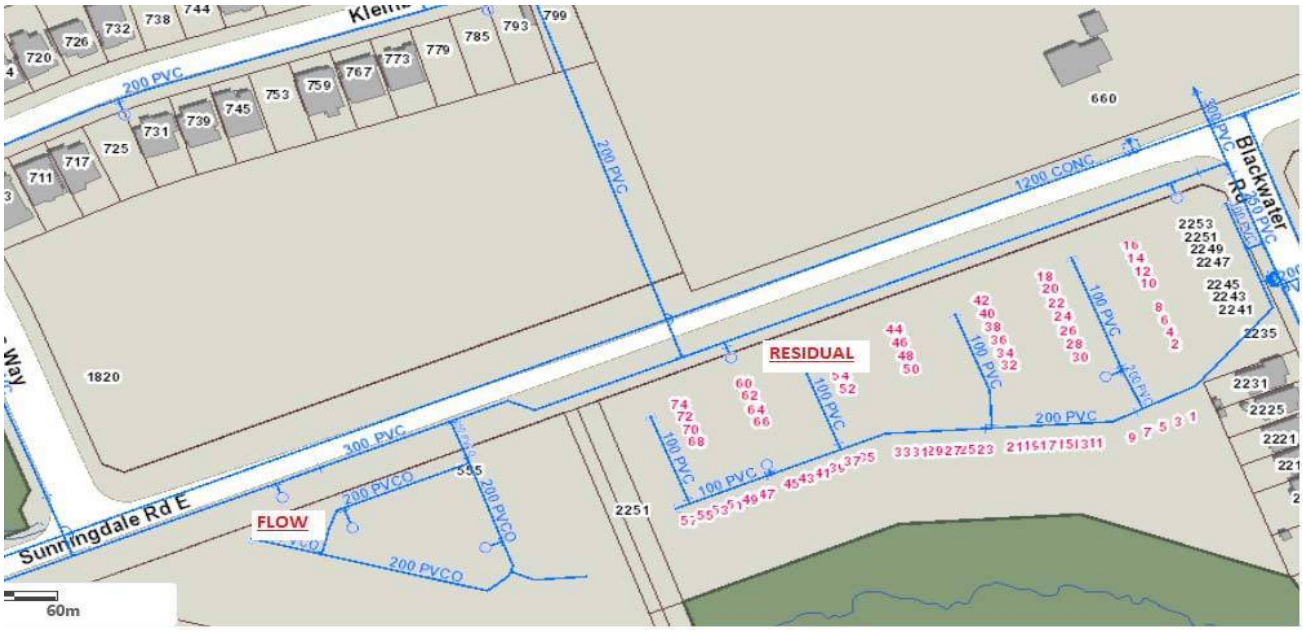
Ben Hyland, EIT
Engineer in Training

Encl: Fire Flow Calculations (as per OBC)
Fire Hydrant Flow Test
Sanitary Sewer Design Sheet
Conceptual Sanitary Servicing, Drawing SK-1
Site Survey/ Tree Inventory Plan
Concept Plan
City As-Built Drawings 18,990; 18,994; 25,716; 25,718

CITY OF LONDON
WATER OPERATIONS FLOW TEST

DATE:	Thursday, April 6, 2017	FLOW TEST No.			**17-20**
TIME:	9:00 AM	HYDRANT ID			H12526
OPERATOR:	Frank Zoula	CHLORINE RESIDUAL mg/L			1.06
OPERATOR:	Ian McCann	WATER QUALITY AFTER TEST	POOR	GOOD	EXCELLENT
REQUESTED BY:	Western Fire Protection - Todd Van De Peer				✔
LOCATION:	Sunningdale at Blackwater - high level	TIME USED FOR FLUSHING			0 min

	FLOW HYDRANT					RESIDUAL HYDRANT	
TEST NUMBER	STATIC PRESSURE P.S.I.	OUTLET SIZE IN.	PITOT READING P.S.I.	INDIVIDUAL FLOW U.S.G.P.M	TOTAL FLOW U.S.G.P.M.	RESIDUAL PRESSURE P.S.I.	STATIC PRESSURE P.S.I.
1	47	2 1/2	39	1050	1050	43	48
2		2 1/2	18	710	1420	38	
		2 1/2	18	710			



Information contained in this report is representative of flows and pressure losses at the time of the test and depends on reservoir levels, pump operation and customer water demand. Results will vary throughout the day and time of year. Available pressure at other times should be based on a design hydraulic grade line for the pressure zone in which the hydrants are located. By issuing this information report, neither the City nor any of its employees makes any warranty, express or implied, concerning the location, type or extent of services described in this report. Furthermore, neither the City nor any of its employees shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this information or incomplete information.

STRIK BALDINELLI MONIZ
CIVIL • STRUCTURAL ENGINEERS

14361 Medway Rd, PO Box 29
Arva, Ontario, N0M 1C0
P: 519 471 6667 F: 519 471 0034

370 University Ave E, Unit 203a
Waterloo, Ontario, N2K 3N2
P: 519 725 8093

www.sbmltd.ca

sbm@sbmltd.ca

Fire-Fighting Flow (OBC A-3.2.5.7.)

	For data entry
	Calculated, not for data entry

DATE:	October 5, 2017
JOB N0.:	SBM-17-2235

Client:	**Westchester Homes**
Project:	**Residential Development**
Location:	**348 Sunningdale Rd E, London ON**

$Q=K*V*S_{Tot}$

Building Classification (3.1.2.1):	C
Type of Construction:	Combustible
K (Table 1):	**23**
Building Area, m^2:	600.00
Building Height, m:	11.00
Building Volume, m^3:	**6600.00**

$S_{Tot} = 1.0 + (S_{side1} + S_{side2} + S_{side3} + S_{side4})$

S_{side1} (Figure 1) =	0.50	(North)
S_{side2} (Figure 1) =	0.50	(East)
S_{side3} (Figure 1) =	0.00	(South)
S_{side4} (Figure 1) =	0.00	(West)
S_{Tot} =	2.00	
S_{Tot} < or = 2, therefore S_{Tot} =	**2.00**	
Q, L =	**303600**	

Required Supply Flow Rate, L/min (Table 2) = 9000

Domestic Flow as per City of London Guidelines

No. of Units	Population per Unit	Total Population	Daily Flow per Capita (L/cap.day)	Average Day (L/min)	Maximum Day (L/min) Peaking Factor = 3.5	Maximum Hour (L/min) Peaking Factor = 7.8
17	3	51	255	9.03125	**31.61**	70.44

Required Supply Fire Flow + Maximum Day Demand, L/min = **9031.61**

Provided Supply Flow Rate @	**43.00**	psi* =	**3975**	L/min*
	38.00	psi* =	**5375**	L/min*
Using linear extrapolation, residual pressure at hydrant =	**24.94**	psi @	**9032**	L/min

*Refer to the Provided Hydrant Flow Test

STRIK BALDINELLI MONIZ
sbm
CIVIL • STRUCTURAL • MECHANICAL • ELECTRICAL

ARVA LOCATION
CIVIL / STRUCTURAL DIVISION
14361 Medway Rd., P.O. Box 29
Arva, Ont, N0M 1C0
P: 519.471.6667

NORTH LONDON LOCATION
MECHANICAL / ELECTRICAL DIVISION
1510 Woodcock St., Unit #7
London, Ont, N6H 5S1
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KITCHENER LOCATION
1415 Huron Rd., Unit 225
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P: 519.725.8093

www.sbmltd.ca sbm@sbmltd.ca

Sanitary Sewer Design Sheet

City of London

Date: November 2, 2018
Job Number: SBM-17-2235
Client: Westchester Homes
Project: 348 Sunningdale Rd E
Designed By: BH
Reviewed By: KM
Project File No.: SBM-17-2235

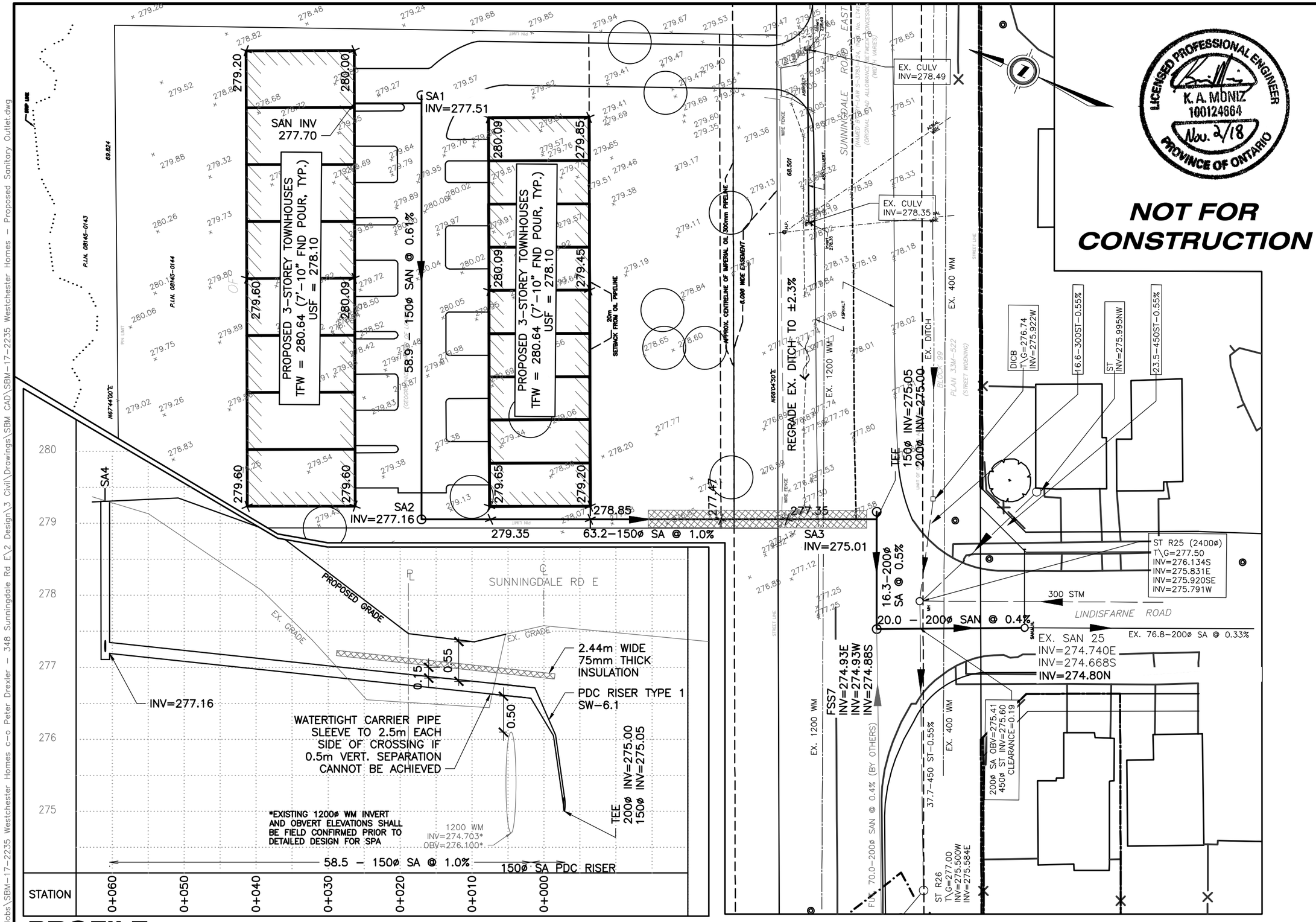
Residential Population Densities
Area Basis
Low Density (Single Family/Semi-Detached) = 30 Units/hectare @ 3 people/unit
Medium Density (Multi-Family/Townhouse) = 75 Units/hectare @ 2.4 people/unit
High Density (Apartment Buildings) = 150-300 Units/hectare @ 1.6 people/unit

Design Critera (Litres/capita/day) 230
Sewage Infiltration (Litres/hectare/day) 8640
Harmon Formula (Peaking Factor)
M = (1 + 14/(4+P^0.5))
Uncertain Development Factor of 1.1 applied to sewage peak flow

Location				Area		Sewage Flows								Sewer design						Profile Design					
Area No.	Street Name	From MH	To MH	Delta Hectare	Total Hectare	People Per Hectare	People Per Lot or Unit	No. of Lots, units or ha	Delta Pop.	Total Pop.	Harmon Peaking Factor	Infilt L/S	Sewage L/S	Total L/S	n	Pipe Slope %	Calc'd Dia. mm	Dia. mm	Capacity L/S	Velocity m/s	Length m	Fall in Sewer	Headloss	Drop in U.S. MH	U.S. Invert	D.S. Invert
*Upstream Areas		S21	S22		13.01	3	3			834	3.8494	1.30	9.40	10.70	0.013	0.40%	156.04	200	20.76	0.66	46.6	0.186	0.00000	-	275.753	275.567
EXT.3	Sunningdale Rd E	FSS6	FSS7	0.7	0.7	180		0.7	126	126	4.2147	0.07	1.56	1.63	0.013	0.40%	76.96	200	20.76	0.66	70	0.280	0.00000		275.190	274.910
EXT.4	**Sunningdale Rd E**	SA2	Main	0.63	0.63		2.4	17	41	41	4.3314	0.06	0.52	0.58	0.013	1.00%	44.13	150	15.24	0.86	63.2	0.632				
		SA3	FSS7											0.58	0.013	0.50%	50.25	200	23.21	0.74	16.3	0.082			275.012	274.930
		FSS7	S25											0.58	0.013	0.40%	52.40	200	20.76	0.66	20	0.080	0.02227	0.05	274.880	274.800
A28	Lindisfarne Road	STUB	S25	2.91	2.91	75	2.4	2.91	524	524	3.9637	0.29	6.08	6.37	0.013	0.33%	133.20	200	18.85	0.60	12.8	0.042	-	-	274.740	274.698
A29	Lindisfarne Road	S25	S26	0.55	4.79		3	6	18	709	3.8914	0.48	8.08	8.56	0.013	0.33%	148.77	200	18.85	0.60	76.2	0.251	0.01268	0.03	274.668	274.416
A30	Lindisfarne Road	S26	S22	0.23	5.02		3	2	6	715	3.8892	0.50	8.14	8.64	0.013	0.33%	149.33	200	18.85	0.60	45.5	0.150	0.01268	0.03	274.386	274.236
A31	Skyline Avenue	S22	S23	0.38	18.41		3	4	12	1561	3.6670	1.84	16.76	18.60	0.013	0.25%	209.68	250	29.75	0.61	74.8	0.187		0.05	274.186	273.999

*As per Storm & Sanitary Design Sheets (Sheet 8) by Stantec Consultant Ltd (accepted by City) the Upstream Lands consist of areas A1-A27, EXT1, EXT2, and Existing areas on the noted design sheet. Areas EXT.3 AND EXT.4 have been sketched onto the Sanitary Drainage Area Plan No. 2 attached to this Report.
*The sanitary design sheet used a sewage design criteria of 295 L/capita/day. This value has been revised to 230 L/capita/day in the 2018 City of London DS&RM

S:\2017 Jobs\SBM-17-2235 Westchester Homes c-o Peter Drexler - 348 Sunningdale Rd E\2 Design\3 Civil\Drawings\SBM CAD\SBM-17-2235 Westchester Homes - Proposed Sanitary Outlet.dwg



PROFILE
SCALE: 1:500H, 1:50V

LICENSED PROFESSIONAL ENGINEER
K. A. MONIZ
100124664
Nov. 2/18
PROVINCE OF ONTARIO

NOT FOR CONSTRUCTION

TITLE
CONCEPTUAL SANITARY SERVICING

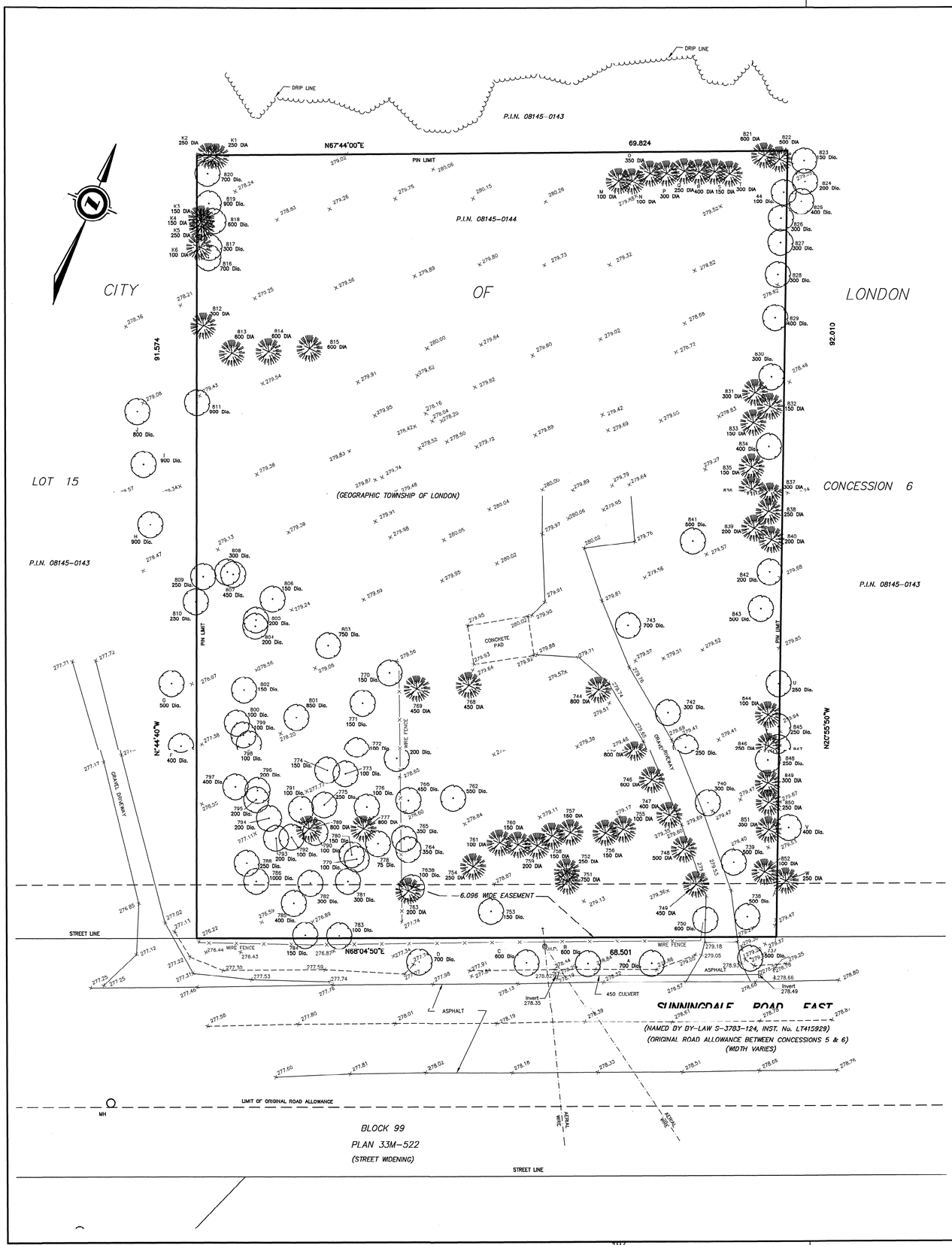
PROJECT
PROPOSED TOWNHOUSES
348 SUNNINGDALE RD E
LONDON, ON.

CONSULTANT
STRIK BALDINELLI MONIZ
CIVIL • STRUCTURAL • MECHANICAL • ELECTRICAL
14361 Medway Rd. PO Box #29 Arva, Ontario
Tel: (519) 471-6667 Fax: (519) 471-0034
Email: sbm@sbmltd.ca

No.	REVISIONS	D/M/Y
1	FOR MEETING	3/10/18
2	FOR ZBA	2/11/18

DRAWN BY BH
CHECKED BY KAM
DATE 02/10/2018
SCALE 1:500
PROJECT No. SBM-17-2235

DRAWING No.
SK-1



TREE INVENTORY PLAN

OF PART OF

LOT 15, CONCESSION 6

(GEOGRAPHIC TOWNSHIP OF LONDON)

MUNICIPAL NUMBER 348

IN THE

CITY OF LONDON

COUNTY OF MIDDLESEX

SCALE 1:250

5 4 3 2 1 0 5 10 15

SCALE IN METRES

2017

ARCHIBALD, GRAY & McKAY LTD.
ONTARIO LAND SURVEYORS

SURVEYOR'S CERTIFICATE:

I CERTIFY THAT:

THE FIELD SURVEY REPRESENTED ON THIS PLAN WAS COMPLETED ON THE 28th DAY OF JUNE, 2017.

July 7th, 2017

JUAN D. ZAPATA
ONTARIO LAND SURVEYOR

NOTE RE: TOPOGRAPHIC DETAIL

GROUND ELEVATIONS AND SURFACE FEATURES SAVE AND EXCEPT THE TRESS ARE TAKEN FROM A TOPOGRAPHIC SURVEY BY AGM, DATED AUGUST 10, 2016 (AGM FILE LT-06-15-1).

TOPOGRAPHIC LEGEND

DIA DENOTES DIAMETER IN mm
HP DENOTES HYDRO POLE
MH DENOTES MANHOLE
DENOTES POLE ANCHOR
DENOTES SIGN
DENOTES CONIFEROUS TREE
DENOTES DECIDUOUS TREE

TYPICAL TREE

100 TAG NUMBER
400 Dia. TRUNK DIAMETER

ELEVATION NOTE

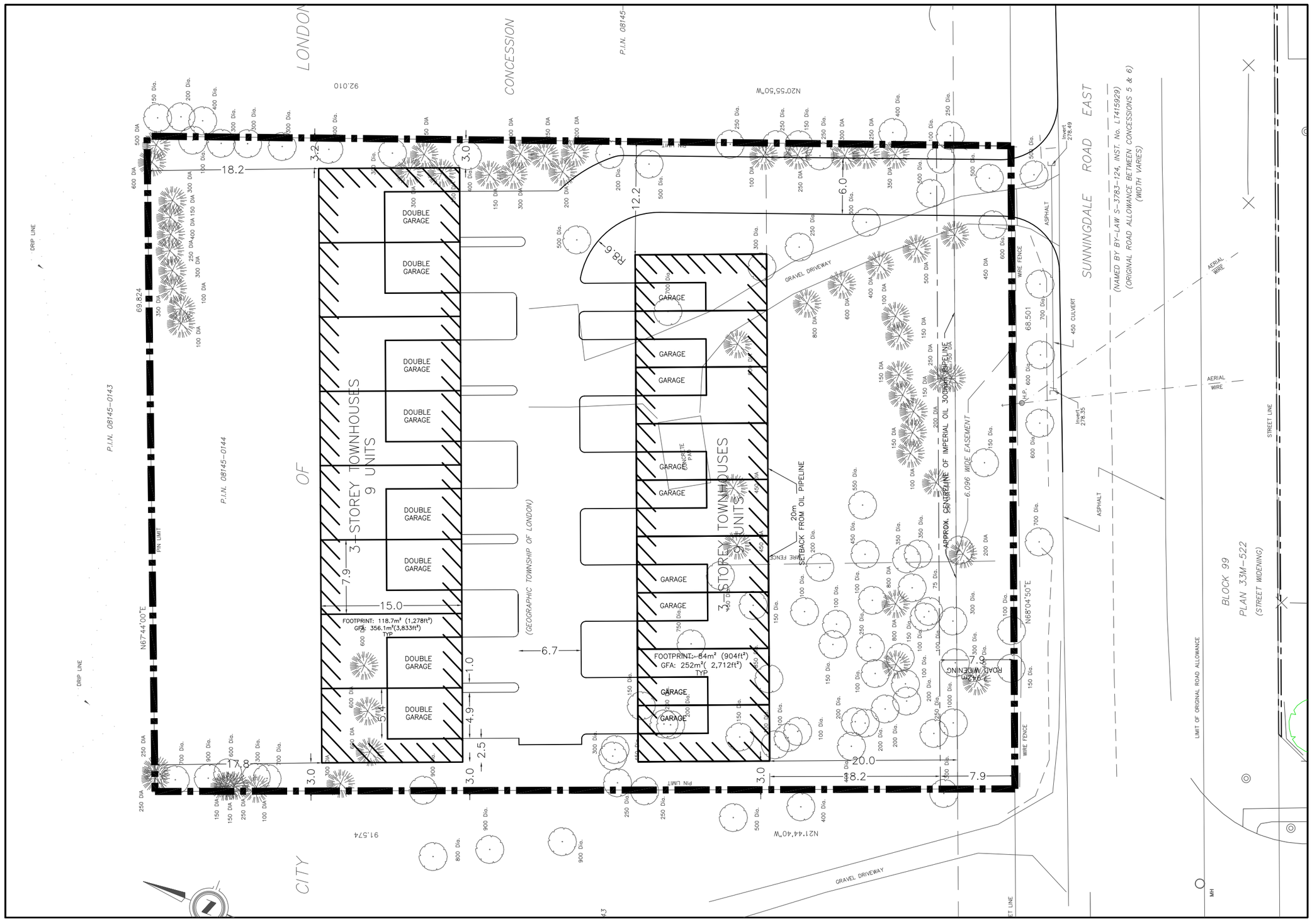
ELEVATIONS ARE GEODETIC CGVD 28 (HTV2.0), DERIVED FROM G.P.S. OBSERVATIONS AND THE CAN-NET BASE STATION NETWORK

METRIC - DISTANCES AND ELEVATIONS SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

AGM PLAN • SURVEY • ENGINEER
ARCHIBALD, GRAY & McKAY LTD.
3514 WHITE OAK ROAD, LONDON, ON, N6E 2Z9
PHONE 519-685-5300 FAX 519-685-5303
EMAIL info@agm.on.ca WEB www.agm.on.ca

DRAWN BY: CRC	DIGITAL FILE: LT1711TP1C13.dwg	PLAN No: 4-A-4687
CHECKED BY: RTW		
Plot date: Jul 07, 2017	FILE No: LT-06-15-2	

F:\Projects\L\london twp\LT\LT-06\LT-06-15\LT-06-15-2\CAD\LT1711TP1C13.dwg



KEY PLAN

SITE PLAN 2C

OF

CON 6 S PT LOT 15

(GEOGRAPHIC TOWNSHIP OF LONDON)
CITY OF LONDON
COUNTY OF MIDDLESEX

SITE STATISTICS
PROPOSED ZONE: R6-4(_)

	REQUIRED R6-4	PROPOSED R6-4(_)
LOT AREA	0.2 ha	0.635 ha
LOT FRONTAGE	22.0 m	68.5 m
LOT DEPTH	N/A	91.5 m
FRONT YARD SETBACK	8.0 m	18.2 m
REAR YARD SETBACK	6.0 m	~17.0 m
SIDEYARD SETBACK (E)*	6.0 m	3.0 m
SIDEYARD SETBACK (W)*	6.0 m	3.0 m
LANDSCAPED AREA	30%	>30%
LOT COVERAGE	45%	27%
HEIGHT	10.5 m	<10.5m
UNITS		7
DENSITY	30 UPH	27 UPH
PARKING	27	>34

*DENOITES SITE-SPECIFIC PROVISION

NO.	REVISION	DATE	INITIAL

WESTCHESTER HOMES

348 SUNNINGDALE ROAD EAST

ZELINKA PRIAMO LTD
A Professional Planning Practice
318 Wellington Road, London, Ontario N6C 4P4
Tel: (519) 474-7137 Fax: (519) 474-2284 e-mail: zp@zpplan.com

DRAWN BY	PROJECT NO.
MBC	WCH/LON/17-01
DATE	SCALE
OCTOBER 2018	1:400

LOT 15, CONCESSION 6

ROAD ALLOWANCE BETWEEN CONCESSIONS 5 AND 6

SUBJECT LANDS
EXT. 4

EXT.3

BLOCK 90
AREA = 0.001 Ha.

BLOCK 98
(STREET WIDENING)

BLOCK 97
(STREET WIDENING)

BLOCK 89
AREA = 1.260 Ha.

BLOCK 88
AREA = 1.475 Ha.

BLOCK 9
AREA = 0.448 Ha.

BLOCK 92
AREA = 1.410 Ha.

BLOCK 102
(0.300 RESERVE)

BLOCK 101
(0.3 RESERVE)

BLOCK 100
(0.3 RESERVE)

BLOCK 99
(STREET WIDENING)

BLOCK 48
(WALKWAY)

BLOCK 47
(WALKWAY)

BLOCK 29

BLOCK 49
(0.300 RESERVE)

BLOCK 46
(WALKWAY)

BLOCK 30

BLOCK 103
(0.300 RESERVE)

BLOCK 96
(WALKWAY)

BLOCK 85
AREA = 4.852 Ha.

MEDIUM DENSITY RESIDENTIAL
2.91x75x2.4=524

MEDIUM DENSITY RESIDENTIAL
1.95x75x2.4=351

Part 1
Plan 33R-12891
P.I.N. 08084-1135

Part 8
Plan 33R-15236

LOT 14
CONCESSION 5

A 15 A=0.07ha 0LOTS X 3 =0P
A 16 A=0.23ha 3 LOTS X 3 =9P
A 17 A=0.09ha 0 LOTS X 3 =0P
A 18 A=0.16ha 1 LOTS X 3 =3P
A 19 A=0.41ha 5 LOTS X 3 =15P
A 20 A=0.36ha 3 LOTS X 3 =9P
A 21 A=0.34ha 4 LOTS X 3 =12P
A 22 A=0.17ha 2 LOTS X 3 =6P
A 23 A=0.12ha 1 LOTS X 3 =3P
A 24 A=0.48ha 6 LOTS X 3 =18P
A 25 A=0.37ha 4 LOTS X 3 =12P
A 26 A=0.67ha 7 LOTS X 3 =21P
A 27 A=0.31ha 3 LOTS X 3 =9P
A 28 A=2.91ha P=524
A 29 A=0.55ha 6 LOTS X 3 =18P
A 30 A=0.23ha 2 LOTS X 3 =6P
A 31 A=0.38ha 4 LOTS X 3 =12P
A 32 A=0.47ha 5 LOTS X 3 =15P
A 33 A=0.11ha 1 LOTS X 3 =3P
A 34 A=0.96ha 11 LOTS X 3 =33P
A 35 A=0.91ha 10 LOTS X 3 =30P
A 36 A=1.02ha 13 LOTS X 3 =39P
A 37 A=0.30ha 4 LOTS X 3 =12P
A 38 A=1.95ha P=351
A 12 A=0.76ha 9LOTS X 3 =27P
A 13 A=0.67ha 8LOTS X 3 =24P
A 14 A=0.67ha 8LOTS X 3 =24P

LINDISFARNE ROAD
SKYLINE AVENUE
MEADOWSWEET TRAIL
FUTURE PHASE
PHASE 5B (33M-527)
PHASE 5A (33M-522)
ELDERBERRY AVENUE
COTTONTAIL CRESCENT
WHISKER
BLUEBELL ROAD
BERRYHILL DRIVE

PHASE 4, PLAN 33M-479
PHASE 3, PLAN 33M-463

BLOCK 111
MULTI-FAMILY LOW DENSITY

SEE DWG #7 FOR EXTERNAL INFORMATION

LIMIT OF PLAN 33M-463
LIMIT OF PLAN 33M-479
Limit of Plan 33R-12891
Limit of RP 733
Limit Between Lots 14 and 15
Northwest Corner Lot 14, Con. 5

LEGEND

- LIMIT OF SUBDIVISION
- DRAINAGE AREA
- EX. SANITARY SEWER
- PROPOSED SANITARY SEWER
- FUTURE SANITARY SEWER (F86.0-200 SAN-1.00%)
- PROPOSED MANHOLE
- EX. MANHOLE
- FUTURE MANHOLE
- B.O. BY OTHERS
- 151 DENOTES EXISTING REGISTERED PLAN LOT/BLOCK NUMBERS
- (4) DENOTES PHASE V REGISTERED PLAN LOT/BLOCK NUMBERS
- (#) PLAN & PROFILE DRAWING No.

18,990

AS CONSTRUCTED NOTES	AS CONSTRUCTED SERVICES	COMPLETION
1. SEE DRAWING FOR FURTHER DETAILS.	SAN SEWERS, PDC's & M.H.'s	JULY 05
2. SEWER DESIGN: TRANSITION WIDTH OR AS NOTED.	STM SEWERS, PDC's & M.H.'s	JULY 05
3. REFERENCE B.M. MTO No.11-67 ELEVATION: 256.636m.	W.M. & W.S	JULY 05
	GRANULAR BASE	NOV 05
	CURB & GUTTERS & SIDEWALKS	DEC 05
	PAVING - I BASE	DEC 05
	II SURFACE	

DESIGN DJL | DRAWN DJL | CHECKED AH | APPROVED JBP | DATE SEPT '04

No.	REVISIONS	DATE	BY
1	AS PER CITY COMMENTS (S&D)	FEB 01/05	DJL
2	AS PER CITY COMMENTS (S&D)	MAR 08/05	DJL
3	AS-CONSTRUCTED	MARCH 06	PS

CONSULTANT OR DIVISION

Stantec Consulting Ltd.
171 Queens Avenue, 8th Floor
London ON Canada N6A 5J7
Phone: (519) 645-2007
Fax: (519) 645-6575
E-mail:london@stantec.com

ENGINEER'S STAMP: LICENSED PROFESSIONAL ENGINEER, Nov 30/04, J. B. PAUL, PROVINCE OF ONTARIO

CORPORATION OF THE CITY OF LONDON

SCALE 1 : 1000 (10 0 20m)

TITLE: UPLAND HILLS SUBDIVISION - PHASE 5A & 5B
SIFTON PROPERTIES LIMITED

SANITARY DRAINAGE AREAS PLAN No. 2

1-614-02155

PROJECT No. 33M-522 & 33M-527

SHEET No. 4

PLAN FILE No. 18,990

SANITARY SEWER DESIGN SHEET
CITY OF LONDON

RESIDENTIAL COMMERCIAL AND INSTITUTIONAL POPULATION DENSITIES

THE FOLLOWING POPULATION ALLOWANCES WILL APPLY WHEN DESIGNING SANITARY SEWERS:
LOW DENSITY (SINGLE-FAMILY / SEMI-DETACHED) = 30 UNITS/HECTARE @ 3 PEOPLE / UNIT
MEDIUM DENSITY (MULTI-FAMILY / TOWNHOUSE / ROWHOUSE) = 75 UNITS/HECTARE @ 2.4 PEOPLE / UNIT
HIGH DENSITY (APARTMENTS) = 150 - 300 UNIT / HECTARE @ 1.6 PEOPLE / UNIT
COMMERCIAL / INSTITUTIONAL = 100 PEOPLE / HECTARE
SECONDARY SCHOOL = 1500 PEOPLE
ELEMENTARY SCHOOL = 400 PEOPLE

DESIGN CRITERIA
SEWAGE = 295 LITRE / CAPITA/DAY
INFILTRATION = 8640 LITRES /HECTARE / DAY
PEAKING FACTOR: 14 / (4 + P ^ 0.5)

DATE: Aug-04
DESIGNED BY: DJL

PROJECT NAME: UPLAND HILLS SUBDIVISION - PHASE V

PROJECT FILE NO. 1614-02155

LOCATION				AREA			POPULATION						SEWAGE FLOWS			SEWER DESIGN						PROFILE			INVERT ELEVATION	
AREA No.	STREET	FROM MANHOLE	TO MANHOLE	NET OR GROSS	DELTA HECTARES	TOTAL HECTARES	PER HECTARE	PER LOT	NO. OF LOTS	DELTA POP.	TOTAL POP.	PEAKING FACTOR	INFILT L/s	SEWAGE L/s	TOTAL L/s	PIPE SIZE mm	n	SLOPE %	CAP L/s	VELOCITY m/s	LENGTH m	FALL IN SEWER	HEADLOSS IN U.S. MH	DROP IN MANHOLE	U.S.	D.S.
A1	Elderberry Avenue	S1	S2	N	0.77	0.77		3	9	27	27	4.36	0.08	0.44	0.52	200	0.013	0.43	21.51	0.68	80.3	0.345	-	-	278.200	277.855
A2	Elderberry Avenue	S2	S3	N	0.40	1.17		3	3	9	36	4.34	0.12	0.59	0.70	200	0.013	0.33	18.84	0.60	17.9	0.059	0.000	0.030	277.825	277.766
A3	Elderberry Avenue	S3	S9	N	0.44	1.61		3	4	12	48	4.32	0.16	0.78	0.94	200	0.013	1.20	35.93	1.14	79.5	0.954	0.000	0.030	277.736	276.782
A4	Elderberry Avenue	S1	S4	N	0.38	0.38		3	3	9	9	4.42	0.04	0.15	0.19	200	0.013	0.61	25.62	0.82	17.9	0.109	-	-	278.300	278.191
A5	Elderberry Avenue	S4	S5	N	0.50	0.88		3	4	12	21	4.38	0.09	0.35	0.43	200	0.013	0.52	23.65	0.75	61.6	0.320	0.000	0.030	278.151	277.840
A6	Elderberry Avenue	S5	S6	N	0.22	1.10		3	2	6	27	4.36	0.11	0.44	0.56	200	0.013	0.43	21.51	0.68	19.5	0.084	0.000	0.030	277.810	277.727
A7	Elderberry Avenue	S6	S7	N	0.41	1.51		3	5	15	42	4.33	0.15	0.68	0.83	200	0.013	1.50	40.17	1.28	40.3	0.605	0.000	0.030	277.697	277.092
EXT 1	Easement	S10	S7	N	14.10	14.10	30	3	0	1269	1269	3.73	1.41	17.78	19.19	250	0.013	0.25	29.73	0.61	56.1	0.140	0.000	-	276.745	276.605
A8	Elderberry Avenue	S7	S8	N	0.18	15.79		3	2	6	1317	3.72	1.58	18.40	19.98	250	0.013	0.25	29.73	0.61	26.9	0.067	0.000	0.050	276.555	276.488
A9	Elderberry Avenue	S8	S9	N	0.25	16.04		3	3	9	1326	3.72	1.60	18.51	20.12	250	0.013	0.25	29.73	0.61	25.1	0.063	0.000	0.030	276.458	276.395
A10	Elderberry Avenue	S9	EX MH 109	N	0.49	18.14		3	5	15	1389	3.70	1.81	19.32	21.13	250	0.013	0.25	29.73	0.61	95.3	0.238	0.000	0.050	276.345	276.107
Existing	Berryhill Drive	EX MH 109	EX MH 110	N	0.51	18.65		3	5	15	1404	3.70	1.87	19.51	21.38	250	0.013	0.25	29.73	0.61	92.7	0.232	-	0.083	276.024	275.792
A12	Elderberry Avenue	EX MH 109	S11	N	0.76	0.76		3	9	27	27	4.36	0.08	0.44	0.52	200	0.013	0.50	23.19	0.74	84.4	0.422	-	-	281.300	280.878
A13	Elderberry Avenue	S11	S12	N	0.67	1.43		3	8	24	51	4.31	0.14	0.83	0.97	200	0.013	2.50	51.86	1.65	80.1	2.003	0.000	0.030	280.848	278.846
A14	Elderberry Avenue	S12	S13	N	0.67	2.10		3	8	24	75	4.28	0.21	1.20	1.41	200	0.013	3.00	56.81	1.81	79.8	2.394	0.000	0.030	278.816	276.422
EXT 2	Skyline Avenue		S14	G	7.13	7.13	30	3	0	642	642	3.92	0.71	9.44	10.15											
A15	Skyline Avenue	S14	S15	N	0.07	7.20		3	0	0	642	3.92	0.72	9.44	10.16	200	0.013	0.33	18.84	0.60	30.7	0.101	-	-	276.400	276.299
A16	Skyline Avenue	S15	S13	N	0.23	7.43		3	3	9	651	3.91	0.74	9.56	10.31	200	0.013	0.61	25.62	0.82	47.3	0.289	0.000	0.030	276.269	275.980
A17	Skyline Avenue	S13	S16	N	0.09	9.62		3	0	0	726	3.89	0.96	10.59	11.55	200	0.013	0.33	18.84	0.60	40.7	0.134	0.000	0.030	275.950	275.816
A18	Skyline Avenue	S16	S17	N	0.16	9.78		3	1	3	729	3.88	0.98	10.63	11.61	200	0.013	0.33	18.84	0.60	39.3	0.130	0.000	0.030	275.786	275.656
A19	Meadowsweet Drive	S27	S28	N	0.41	0.41		3	5	15	15	4.40	0.04	0.25	0.29	200	0.013	1.50	40.17	1.28	57.2	0.858	0.000	0.030	280.200	279.342
A20	Meadowsweet Drive	S28	S29	N	0.36	0.77		3	3	9	24	4.37	0.08	0.39	0.47	200	0.013	2.30	49.74	1.58	22.6	0.520	0.138	0.138	279.204	278.684
A21	Meadowsweet Drive	S29	S30	N	0.34	1.11		3	4	12	36	4.34	0.11	0.59	0.70	200	0.013	2.30	49.74	1.58	31.6	0.727	0.137	0.137	278.547	277.821
A22	Meadowsweet Drive	S30	S17	N	0.17	1.28		3	2	6	42	4.33	0.13	0.68	0.81	200	0.013	1.50	40.17	1.28	28.0	0.420	0.037	0.037	277.783	277.363
A23	Skyline Avenue	S17	S18	N	0.12	11.18		3	1	3	774	3.87	1.12	11.24	12.36	200	0.013	0.40	20.74	0.66	32.2	0.129	0.000	0.030	275.826	275.497
A24	Skyline Avenue	S18	S19	N	0.48	11.66		3	6	18	792	3.86	1.17	11.49	12.65	200	0.013	0.40	20.74	0.66	50.6	0.202	0.000	0.030	275.467	275.265
A25	Skyline Avenue	S19	S20	N	0.37	12.03		3	4	12	804	3.86	1.20	11.85	12.85	200	0.013	0.40	20.74	0.66	40.9	0.164	0.000	0.030	275.235	275.071
A26	Skyline Avenue	S20	S21	N	0.67	12.70		3	7	21	825	3.85	1.27	11.93	13.20	200	0.013	0.40	20.74	0.66	64.5	0.258	0.000	0.030	275.041	274.783
A27	Skyline Avenue	S21	S22	N	0.31	13.01		3	3	9	834	3.85	1.30	12.05	13.35	200	0.013	0.40	20.74	0.66	46.6	0.186	0.000	0.030	274.753	274.567
A28	Lindisfarne Road	STUB	S25	G	2.91	2.91	75	2.4	0	524	524	3.96	0.29	7.80	8.09	200	0.013	0.33	18.84	0.60	12.8	0.042	-	-	274.740	274.698
A29	Lindisfarne Road	S25	S26	N	0.55	3.46		3	6	18	542	3.96	0.35	8.05	8.40	200	0.013	0.33	18.84	0.60	76.2	0.251	0.000	0.030	274.666	274.416
A30	Lindisfarne Road	S26	S22	N	0.23	3.69		3	2	6	548	3.95	0.37	8.13	8.50	200	0.013	0.33	18.84	0.60	45.5	0.150	0.000	0.030	274.386	274.236
A31	Skyline Avenue	S22	S23	N	0.38	17.08		3	4	12	1394	3.70	1.71	19.38	21.09	250	0.013	0.25	29.73	0.61	74.8	0.187	0.000	0.060	274.186	273.999
A32	Skyline Avenue	S23	S24	N	0.47	17.55		3	5	15	1409	3.70	1.76	19.57	21.32	250	0.013	0.25	29.73	0.61	75.0	0.188	0.000	0.030	273.969	273.732
A33	Skyline Avenue	S24	EX MH 180	N	0.11	17.66		3	1	3	1412	3.70	1.77	19.61	21.37	250	0.013	0.25	29.73	0.61	31.5	0.079	0.000	0.130	273.652	273.573
Existing	Sunnystone Road	EX MH 180	EX MH 179	N	0.44	18.10		3	0	0	1412	3.70	1.81	19.61	21.42	250	0.013	0.25	29.73	0.61	91.0	-	-	-	-	-
A34	Meadowsweet Drive	S27	S31	N	0.96	0.96		3	11	33	33	4.35	0.10	0.54	0.63	200	0.013	2.50	51.86	0.60	85.8	2.145	-	-	280.200	278.055
A35	Meadowsweet Drive	S31	S32	N	0.91	1.87		3	10	30	63	4.29	0.19	1.02	1.20	200	0.013	1.50	40.17	1.28	85.8	1.287	0.000	0.510	277.475	276.188
A36	Meadowsweet Drive	S32	S33	N	1.02	2.89		3	13	39	102	4.24	0.29	[illegible]2	1.91	200	0.013	0.35	19.40	0.62	99.0	0.347	0.000	0.010	276.158	275.812
A37	Meadowsweet Drive	S33	S34	N	0.30	3.19		3	4	12	114	4.23	0.32	1.81	2.13	200	0.013	0.35	19.40	0.62	36.4	0.127	0.000	0.030	275.782	275.654
Existing	Meadowsweet Drive	S34	EX MH 179	N	0.00	3.19		3	0	0	114	4.23	0.32	1.81	2.13	200	0.013	1.00	32.80	1.04	11.5	0.115	0.000	2.156	273.498	273.383
Existing	Block 111	EX. STUB	EX MH 179	G	2.96	2.96	75	2.4	0	533	533	3.96	0.30	7.92	8.22	200	0.013	1.00	32.80	1.04	8.5	-	-	-	-	-
Existing	Sunnystone Road	EX MH 179	EX MH 170	N	0.17	24.42		3	0	0	2158	3.58	2.44	27.64	30.09	250	0.013	0.58	45.29	0.92	90.7	-	-	-	-	-
A38	Block 85	EX. STUB	EX MH 165	G	1.95	1.95	75	2.4	0	351	351	4.05	0.20	5.34	5.53	200	0.013	1.00	32.80	0.60	12.8	0.128	-	-	275.488	275.360

STORM SEWER DESIGN SHEET
CITY OF LONDON

RUNOFF COEFFICIENT 'C' VALUES

THE FOLLOWING 'C' VALUES WILL APPLY WHEN DESIGNING STORM SEWERS:
PARKS, OPEN SPACE 0.20
SINGLE FAMILY / SEMI DETACHED 0.50 - 0.55
TOWNHOUSE / ROWHOUSE 0.65
APARTMENTS 0.65 - 0.70
COMMERCIAL, INSTITUTIONAL & INDUSTRIAL 0.70 - 0.90
DENSELY BUILT, PAVED 0.90

FLOW Q = 2.78 x C x A x I
WHERE Q=PEAK FLOW IN LITRES PER SECOND (L/s)
A=AREA IN HECTARES (Ha)
C=RUNOFF COEFFICIENT
I=RAINFALL INTENSITY (mm / hr)
RETURN PERIOD = 2 YEARS

DATE: Aug-04
DESIGNED BY: DJL

PROJECT NAME: UPLAND HILLS SUBDIVISION - PHASE V

PROJECT FILE NO. 1614-02155

LOCATION				AREA			TOTAL (A x C)					RAINFALL INTENSITY			Q	SEWER DESIGN							PROFILE			INVERT ELEVATION	
												TIME ENTRY mm															
AREA No.	STREET	FROM MANHOLE	TO MANHOLE	DELTA HECTARE	TOTAL HECTARES	C	AxC	TOTAL SECTION	TOTAL LATERAL	TOTAL SEWER	TOTAL 2.78AxC	SECTION	ACCUM.	INTENSITY mm/hr	L/s	PIPE SIZE mm	n	SLOPE %	CAP L/s	VELOCITY m/s	LENGTH m	TIME OF FLOW	FALL IN SEWER	HEADLOSS IN U.S. MH	DROP IN MANHOLE	U.S.	D.S.
A1	Elderberry Avenue	R1	R2	0.87	0.87	050	0.435	0.000	0.000	0.435	1.209	0.0	19.0	76.0	91.9	375	0.013	0.40	110.9	1.00	81.9	1.4	0.328	-	-	279.000	278.672
A2	Elderberry Avenue	R2	R3	0.39	1.26	050	0.195	0.435	0.000	0.630	1.751	1.4	20.4	72.4	126.8	375	0.013	0.55	130.0	1.18	17.3	0.2	0.095	0.000	0.030	278.642	278.547
A3	Elderberry Avenue	R3	R9	0.45	1.71	050	0.225	0.630	0.000	0.855	2.377	0.2	20.6	71.9	170.9	450	0.013	0.40	180.3	1.13	90.0	1.3	0.360	0.000	0.075	278.472	278.112
												1.3	21.9														
A4	Elderberry Avenue	R1	R4	0.28	0.28	050	0.140	0.000	0.000	0.140	0.389	0.0	19.0	76.0	29.6	300	0.013	0.55	71.7	1.01	20.4	0.3	0.112	-	-	279.000	278.888
A5	Elderberry Avenue	R4	R5	0.50	0.78	050	0.250	0.140	0.000	0.390	1.084	0.3	19.3	75.2	81.5	375	0.013	0.40	110.9	1.00	64.0	1.1	0.256	0.000	0.075	278.813	278.557
A6	Elderberry Avenue	R5	R6	0.22	1.00	050	0.110	0.390	0.000	0.500	1.390	1.1	20.4	72.4	100.6	375	0.013	0.40	110.9	1.00	22.0	0.4	0.088	0.000	0.030	278.527	278.439
A7	Elderberry Avenue	R6	R7	0.33	1.33	050	0.165	0.500	0.000	0.665	1.849	0.4	20.8	71.6	132.4	375	0.013	0.65	141.4	1.28	37.4	0.5	0.243	0.086	0.086	278.352	278.109
A8	Elderberry Avenue	R7	R8	0.33	1.66	050	0.165	0.665	0.000	0.830	2.307	0.5	21.2	70.4	162.4	450	0.013	0.40	180.3	1.13	30.8	0.5	0.123	0.000	0.075	278.034	277.911
A9	Elderberry Avenue	R8	R9	0.18	1.84	050	0.090	0.830	0.000	0.920	2.558	0.5	21.7	69.3	177.2	525	0.013	0.30	235.5	1.09	28.3	0.4	0.085	0.000	0.075	277.836	277.751
												0.4	22.1														
A10	Elderberry Avenue	R9	EX. STMH 10	0.49	4.04	050	0.245	0.920	0.855	2.020	5.616	*	22.0	68.6	385.2	675	0.013	0.25	420.3	1.17	95.3	1.4	0.238	0.000	0.150	277.601	277.363
Existing	Berryhill Drive	EX. STMH 10	EX. STMH 11	0.45	4.49	050	0.225	0.000	2.020	2.245	6.241	1.4	23.4	65.8	410.7	600	0.013	0.55	455.3	1.61	92.6	1.0	0.509	0.000	0.085	277.278	276.769
A11	Elderberry Avenue	EX. STMH 10	R11	0.75	0.75	050	0.375	0.000	0.000	0.375	1.043	0.0	19.0	76.0	79.2	300	0.013	0.70	80.9	1.14	78.5	1.1	0.550	-	-	282.250	281.701
A12	Elderberry Avenue	R11	R12	0.68	1.43	050	0.340	0.375	0.000	0.715	1.988	1.1	20.1	72.9	144.9	300	0.013	2.50	152.9	2.16	80.1	0.6	2.003	0.000	0.030	281.671	279.668
A13	Elderberry Avenue	R12	R13	0.68	2.11	050	0.340	0.715	0.000	1.055	2.933	0.6	20.8	71.6	210.0	450	0.013	0.75	246.9	1.55	85.8	0.9	0.644	0.000	0.730	278.938	278.295
												0.9	21.7														
A14	Skyline Avenue	R14	R13	0.30	0.30	050	0.150	0.000	0.000	0.150	0.417	0.0	19.0	76.0	31.7	300	0.013	0.55	71.7	1.01	44.3	0.7	0.244	-	-	278.544	278.301
												0.7	19.7														
A15	Skyline Avenue	R13	R15	0.09	2.50	050	0.045	0.150	1.055	1.250	3.475	0.9	21.7	69.6	241.3	525	0.013	0.33	247.0	1.14	43.5	0.6	0.144	0.000	0.219	278.076	277.932
A16	[illegible]ine Avenue	R15	R16	0.16	2.56	050	0.080	1250	0.000	1.330	3.697	0.6	22.3	67.8	250.7	525	0.013	0.35	254.4	1.18	41.6	0.6	0.146	0.000	0.030	277.902	277.7[illegible]
												0.6	22.9														
A17	Meadowsweet Drive	R27	R28	0.41	0.41	050	0.205	0.000	0.000	0.205	0.570	0.0	19.0	76.0	43.3	300	0.013	1.50	118.4	1.68	56.1	0.6	0.842	-	-	281.000	280.159
A18	Meadowsweet Drive	R28	R29	0.36	0.77	050	0.180	0.205	0.000	0.385	1.070	0.6	19.6	74.7	80.0	300	0.013	2.30	146.6	2.07	19.8	0.2	0.455	0.237	0.237	279.922	279.486
A19	Meadowsweet Drive	R29	R30	0.33	1.10	050	0.165	0.385	0.000	0.550	1.529	0.2	19.7	74.0	113.1	300	0.013	2.30	146.6	2.07	30.6	0.2	0.704	0.235	0.235	279.231	278.527
A20	Meadowsweet Drive	R30	R16	0.17	1.27	050	0.085	0.550	0.000	0.635	1.765	0.2	20.0	73.4	129.3	375	0.013	0.75	151.8	1.37	32.0	0.4	0.240	0.043	0.390	278.137	277.897
												0.4	20.4														
A21	Skyline Avenue	R16	R17	0.13	4.06	050	0.065	1330	0.635	2.030	5.643	*	22.0	68.6	387.1	675	0.013	0.25	420.3	1.17	30.5	0.4	0.076	0.100	0.150	277.606	277.530
A22	Skyline Avenue	R17	R18	0.40	4.46	050	0.200	2030	0.000	2.230	6.199	0.4	22.5	67.6	419.1	675	0.013	0.25	420.3	1.17	48.0	0.7	0.120	0.035	0.035	277.495	277.375
A23	Skyline Avenue	R18	R19	0.53	4.99	050	0.265	2230	0.000	2.495	6.936	0.7	23.1	66.0	457.8	675	0.013	0.30	460.4	1.29	41.9	0.5	0.126	0.042	0.042	277.334	277.208
A24	Skyline Avenue	R19	R20	0.59	5.58	050	0.295	2495	0.000	2.790	7.756	0.5	23.7	65.0	504.2	675	0.013	0.37	511.3	1.43	65.3	0.8	0.242	0.034	0.034	277.174	276.932
A25	Skyline Avenue	R20	R21	0.32	5.90	050	0.160	2790	0.000	2.950	8.201	0.8	24.5	63.5	520.8	675	0.013	0.39	524.9	1.47	49.9	0.6	0.195	0.000	0.030	276.902	276.707
A29	Skyline Avenue	R21	R22	0.38	6.28	050	0.190	2950	0.000	3.140	8.729	0.6	25.0	62.3	543.8	750	0.013	0.26	567.6	1.28	71.8	0.9	0.187	0.000	0.075	276.632	276.446
A30	Skyline Avenue	R22	R23	0.47	6.75	050	0.235	3140	0.000	3.375	9.383	0.9	26.0	60.7	569.5	750	0.013	0.27	578.5	1.31	74.4	0.9	0.201	0.000	0.030	276.416	276.215
A31	Skyline Avenue	R23	EX. STMH 74	0.11	6.86	050	0.055	3375	0.000	3.430	9.535	0.9	26.9	59.4	566.4	825	0.013	0.50	1015.0	1.90	28.5	0.3	0.143	0.000	0.075	276.140	275.997
Existing	Skyline Avenue	EX. STMH 85	EX. STMH 74	0.25	7.11	050	0.125	0.000	0.000	0.125	0.348	0.3	27.1	56.9	20.5	375	0.013	0.90	166.3	1.51	25.0	0.3	-	-	-	-	-
												0.3	27.4														
Existing	Sunnystone Road	EX. STMH 74	EX. STMH 73	0.16	14.13	050	0.080	3430	0.125	3.635	10.105	0.3	27.1	58.9	5952	825	0.013	0.31	799.2	1.50	91.0	1.0	-	-	-	-	-
												1.0	28.2														
A26	Lindisfarne Road	R21	R24	0.22	0.22	050	0.110	0.000	0.000	0.110	0.306	0.0	19.0	76.0	23.2	300	0.013	2.80	161.8	2.29	42.8	0.3	1.198	-	-	278.500	277.302
A27	Lindisfarne Road	R24	R25	0.58	0.80	050	0.290	0.110	0.000	0.400	1.112	0.3	19.3	75.2	83.6	300	0.013	0.80	86.5	1.22	91.7	1.2	0.734	0.027	0.434	276.868	276.134
												1.2	20.6														
A28	Lindisfarne Road	STUB	R25	4.35	4.85										1250	450	0.013	0.32	161.3	1.01	23.5	0.4	0.075	-	-	275.995	275.920
	Sunningdale Road	R25	R26	0.00	5.65										2086	450	0.013	0.55	211.4	1.33	37.7	0.5	0.207	0.129	0.129	275.791	275.584
	Sunningdale Road	R26	OUTLET	0.00	5.65										2086	450	0.013	0.55	211.4	1.33	26.8	0.3	0.147	0.084	0.084	275.500	275.352
A32	Meadowsweet Drive	R27	R31	0.96	0.96	050	0.480	0.000	0.000	0.480	1.334	0.0	19.0	76.0	1014	300	0.013	3.00	167.5	2.37	86.0	0.6	2.580	-	-	281.000	278.420
A33	Meadowsweet Drive	R31	R32	0.91	1.87	050	0.455	0.480	0.000	0.935	2.599	0.6	19.6	74.4	1934	450	0.013	1.00	285.1	1.79	86.0	0.8	0.860	0.000	0.480	277.940	277.080
A34	Meadowsweet Drive	R32	R33	0.34	2.21	050	0.170	0.935	0.000	1.105	3.072	0.8	20.4	72.4	2224	450	0.013	0.70	238.5	1.50	34.5	0.4	0.242	0.017	0.030	277.050	276.809
A35	Meadowsweet Drive	R33	R34	0.52	2.83	050	0.310	1.105	0.000	1.415	3.934	0.4	20.8	71.6	2817	525	0.013	0.50	304.1	1.40	64.3	0.8	0.322	0.000	0.075	276.734	276.412
A36	Meadowsweet Drive	R34	R35	0.36	3.19	050	0.180	1.415	0.000	1.595	4.434	0.8	21.6	69.9	3099	525	0.013	0.60	333.1	1.54	36.4	0.4	0.218	0.018	0.030	276.382	276.164
Existing	Meadowsweet Drive	R35	EX. STMH 73	0.00	3.19	050	0.000	1.595	0.000	1.595	4.434	0.4	21.9	68.8	305.1	600	0.013	0.70	513.7	1.82	8.5	0.1	0.060	0.000	0.371	275.793	275.731
												0.1	22.0														
Existing	Block 111	Stub	EX. STMH 73	2.97	2.97	065	1.931	0.000	0.000	1.931	5.367	16.3	16.3	83.1	4460	600	0.013	0.70	513.7	1.82	11.5	0.1	-	-	-	-	-
												0.1	16.4														
Existing	Sunnystone Road	EX. STMH 73	EX. STMH 62	0.16	20.45	050	0.080	3.635	3.526	7.241	20.129	*	22.9	66.8	1344.6	900	0.013	0.82	1639.2	2.58	90.1	0.6	-	-	-	-	-

*Tc=(21.9*170.9+22.1*177.2)/(170.9+177.2)=22.0 (beside row A10)

*Tc=(22.9*250.7+20.4*129.6)/(250.7+129.6)=22.0 (beside row A21)

*Tc=(28.2*595.2+22.0*305.1+16.4*446.0)/(595.2+305.1+446)=22.9 (beside the last row, Sunnystone Road)

18994

AS CONSTRUCTED NOTES	AS CONSTRUCTED SERVICES	COMPLETION
1. SEE DRAWING FOR FURTHER DETAILS.	SAN SEWERS, PDC's & M.H.'s	JULY 05
2. SEWER DESIGN: TRANSITION WIDTH OR AS NOTED.	STM SEWERS, PDC's & M.H.'s	JULY 05
3. REFERENCE B.M. MTO No.11-67 ELEVATION: 256.636m.	W.M. & W.S	JULY 05
	GRANULAR BASE	NOV 05
	CURB & GUTTERS & SIDEWALKS	DEC 05
	PAVING - I BASE	DEC 05
	II SURFACE	

DESIGN	DJL
DRAWN	AH
CHECKED	AH
APPROVED	JBP
DATE	Sept '04

No.	REVISIONS	DATE	BY
1	AS PER CITY COMMENTS (S&D)	FEB 01/05	DJL
2	AS PER CITY COMMENTS (S&D)	FEB 08/05	DJL
3	REVISED SANITARY EASEMENT (S10-S7)	FEB 17/05	DJL
4	AS PER CITY COMMENTS (S&D)	MAR 08/05	DJL
5	AS-CONSTRUCTED	MARCH 06	PS

CONSULTANT OR DIVISION

Stantec Consulting Ltd.
171 Queens Avenue, 8th Floor
London ON Canada N6A 5J7
Phone: (519) 645-2007
Fax: (519) 645-6575
E-mail:london@stantec.com

Stantec

ENGINEER'S STAMP: LICENSED PROFESSIONAL ENGINEER, J. B. PAUL, PROVINCE OF ONTARIO (Nov 30/06)

CORPORATION OF THE CITY OF LONDON

London CANADA

SCALE

TITLE: UPLAND HILLS SUBDIVISION - PHASE 5A & 5B DEVELOPER

STORM & SANITARY DESIGN SHEETS

1-614-02155

PROJECT No. 33M-522 & 33M-527

SHEET No. 8

PLAN FILE No. 18,994

EXISTING SERVICES	DRAWING #, SOURCE	DATE	AS CONSTRUCTED SERVICES	COMPLETION

DETAILS		No.	REVISIONS	DATE	CONSULTANT
DESIGN	CW	1	AS SUBMITTED FOR APPROVAL	APR 29/10	DELL
DRAWN BY	CW	2	PHASE 1 LIMITS	JUN 22/10	DELL
CHECKED	JT	3	AS SUBMITTED FOR APPROVAL	MAR 10/11	DELL
APPROVED		4	2nd SUBMISSION	MAY 20/11	DELL
DATE	APR 29/10	5	3rd SUBMISSION	AUG 23/11	DELL
F.BK.	814, 862, 923	6	4th SUBMISSION	OCT 14/11	DELL
	980, 985, 988, 989	7	AS DESIGNED	SEPT 2015	DELL

D2059–AREAPLANS – ASBUILT.DWG

CONSULTANT OR DIVISION

Consulting Civil Engineers
41 Adelaide St. N., Unit 71
London, Ontario N6B 3P4
Phone (519) 672–8310
Fax (519) 672–4182
e–mail: deveng@deveng.net

development engineering (London) Limited
CONSULTING CIVIL ENGINEERS

ENGINEER'S STAMP
LICENSED PROFESSIONAL ENGINEER
E.B. WSZOL
PROVINCE OF ONTARIO

CORPORATION OF THE CITY OF LONDON

London CANADA

SCALE
SCALE – 1 : 2000
20 0 40m

TITLE
Powell Farm Subdivision Phase 1
2047790 Ontario Inc. – 33M–643

External Sanitary Sewer Area Plan

PROJECT No. D2059
SHEET No. 8
PLAN FILE No. 25,716

RESIDENTIAL POPULATIONS DENSITIES

(A) - HECTARE BASIS
LOW DENSITY - 30 UNITS PER HECTARE @ 3 PEOPLE / UNIT
MEDIUM DENSITY - 75 UNITS PER HECTARE @ 2.4 PEOPLE / UNIT
HIGH DENSITY - 150 TO 300 UNITS PER HECTARE @ 1.8 PEOPLE / UNIT

SANITARY SEWER DESIGN SHEET
CITY OF LONDON

POWELL FARM SUBDIVISON

DESIGN CRITERIA
SEWAGE= $\frac{250 \times M \times POP}{86.400}$
INFILTRATION = 0.100 l/s/ha
PEAKING FACTOR (M) = $1 + \frac{14}{4 + \sqrt{P}}$

INCLUDES 10% UNCERTAIN DEVELOPMENT FACTOR

PROJECT D2059
FILE No. D2059-Sanitary Design-2010
SANITARY AREA
DESIGNED BY CW
DATE: August 18, 2011

SEWER LOCATION				AREA			POPULATION					SEWAGE FLOW				SEWER DESIGN						PROFILE				
AREA NO.	STREET	FROM	TO	NET OR GROSS	Δ HA	TOTAL AREA HA	PER HA	PER LOT	NO. OF LOTS	Δ POP.	TOTAL POP.	INFILTRATION (l/s)	PEAKING FACTOR (M)	SEWAGE (l/s)	TOTAL (l/s)	"n"	SIZE (mm)	CALC. SLOPE %	SLOPE %	CAP. (l/sec)	VELOCITY (m/s)	LENGTH (m)	FALL IN SEWER (m)	HEAD LOSS (m)	INVERT U.S. m	ELEV. D.S. m
A1	External Area			G	9.160	9.160				1012	1012	0.916	3.797	11.118	13.237	0.013	200	0.163	0.40	20.745	0.60					
A2	Superior Drive	STUB	FS1	G	0.090	9.250					1012	0.925	3.797	11.118	13.247	0.013	200	0.163	0.40	20.745	0.60	42.2	0.169		273.817	273.648
A3	Superior Drive	FS1	FS2	G	1.030	10.280				30	1042	1.028	3.788	11.422	13.695	0.013	200	0.174	0.40	20.745	0.60	63.0	0.252		273.618	273.366
A4	Superior Drive	FS2	FS3	G	0.310	10.590				12	1054	1.059	3.785	11.544	13.863	0.013	200	0.179	0.40	20.745	0.60	56.9	0.228		273.336	273.108
A5	Superior Drive	FS3	FS4	G	0.390	10.980				12	1066	1.098	3.782	11.665	14.039	0.013	200	0.183	0.40	20.745	0.60	100.0	0.400		273.078	272.678
A6	Future School Block			G	3.420	3.420				400	400	0.342	4.022	4.655	5.497	0.013	200	0.028	0.40	20.745	0.60					
A7	Superior Drive	FS4	FS5	G	2.150	16.550				93	1559	1.655	3.667	16.544	20.019	0.013	200	0.373	0.40	20.745	0.64	66.6	0.266		272.648	272.382
	Superior Drive	FS5	FS6	G		16.550					1559	1.655	3.667	16.544	20.019	0.013	200	0.373	0.70	27.442	0.64	21.7	0.152		272.352	272.200
A8	External Area			G	(4.91 Ha x 75 units/Ha x 2.4p/unit=884p)																					
	External Area	STUB	FS6	G	5.070	5.070				884	884	0.507	3.834	9.807	11.345	0.013	200	0.120	0.40	20.745	0.60	48.3	0.193		272.393	272.200
A9	Superior Drive	FS7	FS8	G	0.510	0.510		3	7	21	21	0.051	4.378	0.266	0.349	0.013	200	0.000	4.00	65.600	0.60	90.0	3.600		276.671	273.271
A10	Superior Drive			G	(2.95 Ha x 75 units/Ha x 2.4p/unit=531p)																					
A10	Superior Drive	STUB	FS8	G	2.950	3.460				531	552	0.346	3.952	6.312	7.324											
A10a	Superior Drive	FS8	FS9	G	0.520	3.980		3	7	21	573	0.398	3.943	6.538	7.630	0.013	200	0.054	0.60	25.407	0.60	90.0	0.540		273.241	272.701
A11	Superior Drive	FS9	FS10	G	0.350	4.330		3	4	12	585	0.433	3.938	6.666	7.809	0.013	200	0.057	0.50	23.193	0.60	64.2	0.321		272.671	272.350
	Superior Drive	FS10	FS6	G		4.330					585	0.433	3.938	6.666	7.809	0.013	200	0.057	0.50	23.193	0.60	23.9	0.120		272.320	272.200
A12	Canvas Way	FS6	FS11	G	0.400	26.410		3	5	15	3043	2.641	3.437	30.264	36.196	0.013	250	0.370	0.40	37.631	0.74	72.9	0.292		272.150	271.858
A13	Jackpine Way	S1	FS12	G	0.370	0.370		3	5	15	15	0.037	4.396	0.191	0.251	0.013	200	0.000	2.00	46.386	0.60	44.0	0.880		278.483	277.603
A14	Jackpine Way	FS12	FS13	G	0.330	0.700		3	4	12	27	0.070	4.362	0.341	0.452	0.013	200	0.000	5.90	79.671	0.60	31.7	1.870		277.573	275.703
A15	Jackpine Way	FS13	FS14	G	0.240	0.940		3	2	6	33	0.094	4.348	0.415	0.560	0.013	200	0.000	1.50	40.172	0.60	14.0	0.210		275.673	275.463
A16	Jackpine Way	FS14	FS15	G	0.500	1.440		3	8	24	57	0.144	4.303	0.710	0.939	0.013	200	0.001	1.20	35.931	0.60	70.0	0.840		275.433	274.593
A17	Jackpine Way	FS15	FS16	G	0.600	2.040		3	11	33	90	0.204	4.256	1.108	1.443	0.013	200	0.002	1.70	42.766	0.60	69.8	1.187		274.563	273.376
A18	Jackpine Way	FS16	FS11	G	0.510	2.550		3	8	24	114	0.255	4.228	1.395	1.815	0.013	200	0.003	2.10	47.532	0.60	69.9	1.468		273.346	271.878
A19	Canvas Way	FS11	FS17	G	0.190	29.150		3	2	6	3163	2.916	3.423	31.328	37.665	0.013	250	0.401	0.60	46.009	0.77	30.0	0.232		271.020	270.580
A20	Canvas Way	FS17	S2	G	0.230	29.380		3	2	6	3169	2.938	3.422	31.379	37.749	0.013	250	0.403	1.20	65.179	0.77	49.5	0.594		271.566	270.972
A21	Jackpine Way	S3	S1	G	0.490	0.490		3	7	21	21	0.049	4.378	0.266	0.347	0.013	200	0.000	1.70	42.766	0.60	54.4	0.925		279.173	278.248
A22	Eclipse Walk (East)	S1	S4	G	0.070	0.560				0	21	0.056	4.378	0.266	0.354	0.013	200	0.000	4.00	65.600	0.60	46.5	1.860		278.218	276.358
A23	Eclipse Walk (East)	S4	S5	G	0.820	1.380		3	12	36	57	0.138	4.303	0.710	0.933	0.013	200	0.001	3.00	56.811	0.60	90.0	2.700		276.328	273.628
A24	Eclipse Walk (East)	S5	S6	G	0.440	1.820		3	6	18	75	0.182	4.276	0.928	1.221	0.013	200	0.001	2.90	55.856	0.60	47.7	1.383		273.598	272.215
A25	Eclipse Walk (East)	S6	S2	G	0.100	2.000		3	2	6	81	0.200	4.208	1.000	1.320	0.013	200	0.002	3.40	60.480	0.60	34.2	1.163		272.185	271.022
A26	External Area			G	18.840	18.840				2138	2138	1.884	3.563	22.042	26.319	0.013	250	0.198	0.25	29.750	0.60					
A27	Eclipse Walk (West)	S7	S8	G	0.340	19.180		3	4	12	2150	1.918	3.561	22.154	26.479	0.013	250	0.198	0.25	29.750	0.60	30.0	0.075		271.550	271.475
A28	Eclipse Walk (West)	S8	S9	G	0.310	19.490		3	4	12	2162	1.949	3.559	22.266	26.637	0.013	250	0.200	0.25	29.750	0.60	37.6	0.094		271.445	271.351
A29	Eclipse Walk (West)	S9	S10	G	0.720	20.210		3	10	30	2192	2.021	3.554	22.545	27.023	0.013	250	0.206	0.25	29.750	0.60	90.0	0.225		271.321	271.096
A30	Eclipse Walk (West)	S10	S11	G	0.330	20.540		3	4	12	2204	2.054	3.553	22.656	27.181	0.013	250	0.209	0.25	29.750	0.60	36.0	0.090		271.066	270.976
A31	Eclipse Walk (West)	S11	S12	G	0.480	21.020		3	7	21	2225	2.102	3.549	22.851	27.448	0.013	250	0.213	0.25	29.750	0.60	61.1	0.153		270.946	270.793
A32	Eclipse Walk (West)	S12	S13	G	0.370	21.390		3	4	12	2237	2.139	3.547	22.962	27.611	0.013	250	0.215	0.25	29.750	0.60	35.9	0.090		270.763	270.673
A33	Eclipse Walk (West)	S13	S14	G	0.060	21.450					2237	2.145	3.547	22.962	27.618	0.013	250	0.215	0.25	29.750	0.60	30.3	0.076		270.643	270.567
A34	Eclipse Walk (West)	S13	S2	G	0.030	21.480					2237	2.148	3.547	22.962	27.621	0.013	250	0.215	0.25	29.750	0.60	22.0	0.055		270.537	270.482
A35	Canvas Way	S2	S15	G	0.500	53.360		3	5	15	5502	5.336	3.206	51.044	62.018	0.013	300	0.411	0.45	64.868	0.88	97.2	0.437		270.432	269.995
A36	Kleinburg Drive	S16	S17	G	0.780	0.780		3	10	30	30	0.078	4.355	0.378	0.502	0.013	200	0.000	3.30	59.584	0.60	93.9	3.099		279.307	276.208
A37	Kleinburg Drive	S17	S18	G	0.660	1.440		3	10	30	60	0.144	4.298	0.746	0.979	0.013	200	0.001	4.40	68.802	0.60	79.5	3.498		276.178	272.680
A38	Kleinburg Drive	S18	S15	G	0.490	1.930		3	7	21	81	0.193	4.268	1.000	1.312	0.013	200	0.002	1.20	35.931	0.60	65.0	0.780		272.650	271.870
A39	Canvas Way	S15	S19	G	0.120	55.410					5583	5.541	3.200	51.699	62.964	0.013	300	0.424	0.45	64.868	0.89	48.6	0.219		269.965	269.746
A40	Block 104			G	(2.17 Ha x 75 units/Ha x 2.4p/unit=391p)																					
	Block 104	STUB	S19	G	2.170	2.170				391	391	0.217	4.027	4.556	5.250	0.013	200	0.026	0.60	25.407	0.60	18.2	0.109		272.309	272.200
A41	Canvas Way	S19	S20	G	0.240	57.820					5974	5.782	3.173	54.840	66.684	0.013	300	0.476	0.50	68.377	0.94	82.7	0.414		269.716	269.302
A41	Canvas Way	S20	S21	G		57.820					5974	5.782	3.173	54.840	66.684	0.013	300	0.476	0.50	68.377	0.94	28.5	0.143		269.272	269.129
A42	External Area			G	(4.13 Ha x 75 units/Ha x 2.4p/unit=743p)																					
	External Area	STUB	FSS1	G	4.130	4.130				743	743	0.413	3.879	8.340	9.626											
A43	Sunningdale Road East	FSS1	FSS2	G	0.210	4.340					743	0.434	3.879	8.340	9.651	0.013	200	0.087	0.33	18.842	0.60	57.0	0.188		274.500	274.312
A44	Sunningdale Road East	FSS2	FSS3	G	0.310	4.650					743	0.465	3.879	8.340	9.686	0.013	200	0.087	0.33	18.842	0.60	90.0	0.297		274.282	273.985
A45	External Area			G	(0.94 Ha x 75 units/Ha x 2.4p/unit=170p)																					
	External Area	STUB	FSS3	G	0.940	0.940				170	170	0.094	4.173	2.053	2.362											
A46	Sunningdale Road East	FSS3	FSS4	G	0.170	5.700					913	0.576	3.825	10.105	11.749	0.013	200	0.128	0.33	18.842	0.60	43.9	0.145		275.955	275.810
A47	Sunningdale Road East	FSS4	FSS5	G	0.300	6.060					913	0.606	3.825	10.105	11.782	0.013	200	0.129	0.33	18.842	0.60	90.0	0.297		275.780	275.483
A48	Sunningdale Road East	FSS5	S21	G	0.310	6.370					913	0.637	3.825	10.105	11.816	0.013	200	0.130	0.33	18.842	0.60	90.0	0.297		275.483	275.186
	Sanitary Easement	S21	S22	G		64.190					6887	6.419	3.113	62.043	75.308	0.013	375	0.185	0.25	87.650	0.68	54.1	0.135		269.054	268.919
	Sanitary Easement	S22	S23	G		64.190					6887	6.419	3.113	62.043	75.308	0.013	375	0.185	0.25	87.650	0.68	98.1	0.245		268.889	268.644
A49	External Area			G	(1.24 Ha x 75 units/Ha x 2.4p/unit=223p)																					
	External Area	STUB	S23	G	1.240	1.240				223	223	0.124	4.130	2.665	3.068											
	Sanitary Easement	S23	S24	G		65.430					7110	6.543	3.100	63.777	77.352	0.013	375	0.195	0.25	87.650	0.70	45.4	0.114		268.614	268.500
	Sanitary Easement	S24	S25	G		65.430					7110	6.543	3.100	63.777	77.352	0.013	375	0.195	0.25	87.650	0.70	26.5	0.068		268.470	268.404
	Sanitary Easement	S25	S26	G		65.430					7110	6.543	3.100	63.777	77.352	0.013	375	0.195	0.25	87.650	0.70	99.1	0.248		268.374	268.126
	Sanitary Easement	S26	S27	G		65.430					7110	6.543	3.100	63.777	77.352	0.013	375	0.195	0.25	87.650	0.70	67.3	0.168		268.096	267.928
A50	External Area			G	(2.48 Ha x 75 units/Ha x 2.4p/unit=446p)																					
	External Area	STUB	S27	G	2.480	2.480				446	446	0.248	3.999	5.161	5.950											
	Sanitary Easement	S27	EX.MH1	G		67.910						6.791	4.500	0.000	7.470	0.013	375	0.002	1.40	207.418	0.60	64.5	0.003		267.898	266.995
	Sanitary Easement	EX.MH1	EX.MH2	G		67.910					0	6.791	4.500	0.000	7.470	0.013	375	0.002	0.25	87.650	0.60	54.2	0.136		266.943	266.807
	External Area	STUB	FSS6	G	0.700	0.700				128	128	0.070	4.213	1.560	1.793	0.013	200	0.003	0.40	20.745	0.60	6.0	0.024		275.244	275.220
	Sunningdale Road East	FSS6	FSS7	G		0.700					128	0.070	4.213	1.560	1.793	0.013	200	0.003	0.40	20.745	0.60	70.0	0.280		275.190	274.910
	Lindisfarne Road	FSG7	S25	G		0.700					128	0.070	4.213	1.560	1.793	0.013	200	0.003	0.40	20.745	0.60	20.0	0.080		274.880	274.800
	Residential	STUB	S25	G		2.910					524	0.291	3.984	6.010	6.931	0.013	200	0.045	0.33	18.842	0.60		0.000		274.740	274.740
	Lindisfarne Road	S25	S26	G	0.700	4.310				18	670	0.431	3.905	7.571	8.802	0.013	200	0.072	0.33	18.842	0.60	76.8	0.253		274.668	274.415
	Lindisfarne Road	FS4	S1	G	0.230	4.540				6	676	0.454	3.903	7.635	8.898	0.013	200	0.074	0.33	18.842	0.60	45.7	0.151		274.340	274.189

EXISTING SERVICES	DRAWING #, SOURCE	DATE	AS CONSTRUCTED SERVICES	COMPLETION

DETAILS	
DESIGN	CW
DRAWN BY	CW
CHECKED	JT
APPROVED	
DATE	APR 29/10
F.BK.	814, 862, 923
	980, 985, 988, 989
D2059-AREAPLANS - ASBUILT.DWG	

No.	REVISIONS	DATE	CONSULTANT
1	AS SUBMITTED FOR APPROVAL	APR 29/10	DELL
2	AS SUBMITTED FOR APPROVAL	MAR 10/11	DELL
3	2nd SUBMISSION	MAY 20/11	DELL
4	3rd SUBMISSION	AUG 23/11	DELL
5	4th. SUBMISSION	OCT 14/11	DELL
6	AS DESIGNED	SEPT 2015	DELL

CONSULTANT OR DIVISION

Consulting Civil Engineers
41 Adelaide St. N., Unit 71
London, Ontario N6B 3P4
Phone (519) 672-8310
Fax (519) 672-4182
e-mail: deveng@deveng.net

development engineering (London) Limited
CONSULTING CIVIL ENGINEERS

ENGINEER'S STAMP
REVISED PROFESSIONAL ENGINEERS
E.R. WESTON
100174702
10-08-15
PROVINCE OF ONTARIO

London CANADA
CORPORATION OF THE CITY OF LONDON

SCALE

TITLE
Powell Farm Subdivision Phase 1
2047790 Ontario Inc. - 33M-643
Sanitary Sewer Design Sheet

PROJECT No. D2059
SHEET No. 10
PLAN FILE No. 25,718

TREE ASSESSMENT REPORT

348 SUNNINGDALE ROAD, LONDON ONTARIO

Prepared

DECEMBER 2018

Prepared by

MICHELLE PEETERS

ISA CERTIFIED ARBORIST ON-2129A

MICHELLE PEETERS
LANDSCAPE DESIGNER
BLA, DIP. HORT. TECH, OALA ASSOC., ISA CERTIFIED ARBORIST

RON KOUDYS LANDSCAPE ARCHITECTS INC

368 OXFORD STREET EAST, LONDON, ONTARIO, CANADA N6A 1V7 | T: 519-667-3322 | F: 519-645-2474 | E: MAIL@RKLA.CA | W: RKLA.CA

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INTRODUCTION

Ron Koudys Landscape Architects (RKLA) was retained by Zelinka Priamo Ltd to conduct a tree inventory and assessment in conjunction with site plan development of the proposed development at 348 Sunningdale Road East in London, Ontario.

SUBJECT SITE

The subject site is located on the north side of Sunningdale Road East. The site was previously occupied by a single dwelling and out building. All buildings had been torn down and were no longer present at the time of the tree inventory (June 2017). The site is scattered with trees associated with the dwelling, with most of the trees concentrated heavily in the south end of the site, and loosely along the east and west edges.

The site is bound on the north, west, and east sides by 310 Sunningdale Road East. This property has active agricultural use on the northern three quarters, and open grass land with scattered trees on the south end where it surrounds the subject site.

Figure 1: Subject site – from City of London website NTS
Green indicates tree protection area
Red outlines the subject site

Note that the subject site and the land immediately around it is within a tree protection area as defined by the City of London.

LAWS AND BY-LAWS

Municipal By-laws – City of London Tree Protection By-law - 2016

Figure 1 shows the extent of the subject site that is within the City defined 'tree protection area'; however, because this development is under the umbrella of an exemption, the by-law will not apply.

Excerpt from City of London Tree Protection By-law C.P.-1515-228-Enacted August 30, 2016, passed by Council July 25, 2017.

Section 5 - Exemptions

1.1 (d) the Injuring or Destruction of Trees imposed after December 31, 2002, as a condition to the approval of a site plan, a plan of subdivision or a consent under section 41, 51 or 53, respectively, of the Planning Act, or as a requirement of a site plan agreement or subdivision agreement entered into under those sections;

Provincial Laws – Ontario Forestry Act, R.S.O. 1990, c. F.26

Trees whose trunks are located wholly within a property limit can be removed at the owner's discretion. Trees whose trunks are located wholly beyond a property limit cannot be harmed by actions beyond that property limit. Trees whose trunks are shared between two properties are considered boundary trees and require the consent of both property owners to remove or damage them.

Refer to the Ontario Tree Act section 10 for provincial regulations regarding boundary trees.

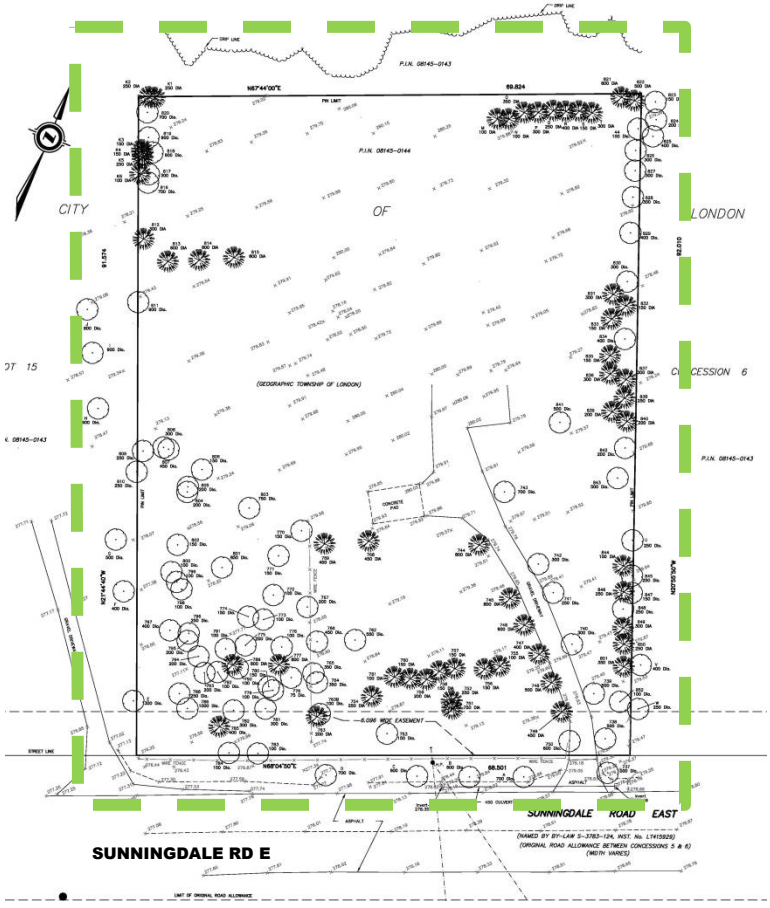
> Excerpt from Ontario Forestry Act regarding boundary trees (shared trees)
>
> *Boundary trees*
>
> *10 (1) An owner of land may, with the consent of the owner of adjoining land, plant trees on the boundary between the two lands. 1998, c. 18, Sched. I, s. 21.*
>
> *Trees common property*
>
> *(2) Every tree whose trunk is growing on the boundary between adjoining lands is the common property of the owners of the adjoining lands. 1998, c. 18, Sched. I, s. 21.*
>
> *Offence*
>
> *(3) Every person who injures or destroys a tree growing on the boundary between adjoining lands without the consent of the land owners is guilty of an offence under this Act. 1998, c. 18, Sched. I, s. 21.*

There are two trees in this inventory that were noted as boundary trees. They are tree 810 and 811 located along the west property line.

SCOPE OF SERVICE

Our firm was instructed to undertake an assessment of the existing trees located within the subject site and 3m beyond the subject site.

An RKLA Inc certified arborist undertook an assessment of the existing trees within the specified scope with respect to tree health and preservation. Assessment of all existing trees with a DBH ≥10cm was undertaken with consideration for the proposed development and associated site work. Inventoried trees include trees within the subject site, trees beyond the subject site, shared trees and trees within the City ROW,



Site survey –The green dashed outline represents the tree inventory scope included in this report. NTS

METHODOLOGY & HEALTH ASSESSMENT CRITERIA

Methodology

Field work was completed by RKLA on June 19, 2017. The topographic survey prepared by AGM Lands Surveyors was used as the base for the field work.

A comprehensive inventory following ISA standard practices of all trees ≥10cm DBH (diameter at breast height) within the scope specified above was completed. Significant hedges were also identified. Accessible trees were tagged in the field with aluminum tags affixed to the tree with a nail. Tree tag numbers 737 - 786, and 788 - 852. Inaccessible trees (due to physical barriers or limit of property) were identified with letters in this report and on the tree preservation drawing and NOT identified in the field. Tree letters A - W.

The following information was recorded for each tree:

Tag number or letter
Species
Diameter at breast height (DBH) (centimeters)
Crown radius (meters)
Crown Condition (overall general vigour of crown)
Structural Condition (good, fair, poor)
General Comments
Location based on survey

The tree data collected was analyzed in conjunction with the proposed site plan. This information was analyzed to make recommendations on which trees to preserve, which trees to remove and recommendations for preconstruction, during construction, and post construction strategies for minimizing damage for trees to be preserved.

Health Assessment Criteria

Crown Condition Classification

5 Healthy: less than 10% crown decline
4 Slight decline: 11% - 30% crown decline
3 Moderate decline: 31% - 60% crown decline
2 Severe decline: 61% - 90% crown decline
1 Dead

Structural Condition Classification

Good: Defects if present are minor (e.g. twig dieback, small wounds); defective tree part is small (e.g. 5-8 cm diameter limb) providing little if any risk.
Fair: Defects are numerous or significant (e.g. dead scaffold limbs); defective parts are moderate in size (e.g. limb greater than 5-8 cm in diameter).
Poor: Defects are severe (trunk cavity in excess of 50%); defective parts are large (e.g. majority of crown).
Dead: Tree exhibits no signs of life.

INVENTORY DATA AND PRESERVATION/REMOVAL RECOMMENDATIONS

See appendix C.
Recommendations are based on a tree data and requirements of the site plan.

TREE PRESERVATION/REMOVAL ANALYSIS

The proposed building construction and required site work may impact existing trees to be preserved with respect to root and canopy zones. Tree Preservation measures will be implemented to mitigate these effects.

No construction, stockpiling, or heavy equipment will be permitted beyond the construction limit (see Tree Preservation Barrier locations on the attached drawings).

Potential impacts on trees to be preserved may include:

2. Physical damage to branches, trunks, and roots of trees to be retained.
3. Local moisture loss which may result from a decline in the water table during and after construction.
4. Contamination of the soil from chemicals.
5. Increased sun/wind exposure which could result in scald or windthrow.
6. Placement of fill material on root zones resulting in stress and damage to the root structure.

The successful survival of the trees to be preserved is largely dependent on adhering to the recommendations that follow.

MITIGATION RECOMMENDATIONS

These recommendations are designed to enhance the survival of trees to be preserved. While it is always desirable to retain as many trees as possible on a site, some trees, because they are in poor condition or are undesirable species, cannot be saved for safety, aesthetic, or sylvicultural reasons.

There is no guarantee, however, that the trees to be preserved will not be impacted by the construction process. The following recommendations are supplied to ensure minimal impact on and to enhance the survival potential of the trees to be preserved:

A) PRE-CONSTRUCTION RECOMMENDATIONS

1. Prior to tree removal operations, the limit of the removals will be clearly marked (i.e. all trees designated for removal are to be marked with spray paint).
2. All removals must take place between September 1st and April 1st to avoid disturbing nesting migratory birds. Trees may be removed outside this window (between April 1st and August 31st) only if a qualified bird specialist/ecologist has determined there are no nesting birds in the trees. All cutting will be done by chain saw. These trees to be identified by the project landscape architect working in conjunction with a qualified arborist and ecologist. This requirement is in accordance with the Migratory Birds Convention Act, 1994.

3. Trees on site to be removed for sylvicultural, safety, or aesthetic reasons should be marked for removal (e.g. spray paint). All cutting will be done by chainsaw. These trees to be identified by the project Landscape Architect working in conjunction with a qualified arborist.
4. Undertake a tree education program for all contractors and put in place enforceable penalties for any damage resulting from neglect.
5. Care should be taken during the felling operation to avoid damaging the branches, stems, trunks, and roots of the trees to be preserved. Where possible, all trees are to be felled towards the construction zone to minimize impacts on adjacent vegetation.
6. Stem damage to trees from skidding operations during the removal process should be avoided. Trunks of trees to be preserved near the construction zone should be wrapped with three layers of snow fencing to provide protection.
7. Heavy equipment should not be allowed under the drip line (limit of branches) of the trees to be preserved.
8. Broken branches on trees to be preserved should be cleanly cut by a qualified arborist/horticulturalist as soon as possible after the damage has occurred. Do not apply wound dressings to the cut areas.
9. Final site grading should ensure that surface water is discharged from the site and that the existing soil moisture conditions are maintained.
10. Some trees may be candidates for pre-construction root pruning to help reduce stress and prepare the tree for nearby construction activity. These trees to be identified on tree preservation plan by landscape architect.
11. It is recommended that the existing ground-layer vegetation remain intact so as not to disturb the soil around the base of the existing trees.

B) RECOMMENDATIONS RELATED TO THE CONSTRUCTION PROCESS

1. Heavy duty protection fencing (see appendix A) is to be maintained until all heavy construction work is complete. No movement of equipment or dumping of solvents, gasoline, etc. is permitted beyond this fence line.
2. Where high-quality specimens exist adjacent to areas subject to intensive construction activity, wooden cribbing (e.g. planks, plywood constructions) should be erected to protect their trunks from damage.
3. During the excavation process, roots that are severed and exposed should be hand pruned to leave a clean-cut surface. This will reduce the opportunity for pests or disease to enter through the wounds. Wound dressing may be used in this process.
4. If grade changes are required in areas adjacent to trees to be preserved, work should be done to minimize the impact on the trees. Tree wells, retaining walls, or other site features should be used.
5. Form concrete sidewalk, if proposed, with fibre expansion material in place of wood forms where roots conflict with existing concrete sidewalks.
6. Avoid running above-ground wires and underground services near trees to be preserved. Avoid open trenching within the tree root zone. Utilize horizontal boring techniques to install utilities below root areas.
7. Regular monitoring of the site by the Landscape Architect will help to ensure proper procedures are followed and protection barriers are maintained.

C) POST-CONSTRUCTION REOMMENDATIONS

1. Avoid discharging rain water leaders adjacent to retained trees. This may result in an overly moist environment which will cause the tree roots to rot.
2. After all work is completed, snow fences and other barriers should be removed.
3. A final review must be undertaken by the Landscape Architect to ensure that all mitigation measures as described above have been met.

EXECUTIVE SUMMARY

General Summary

No rare, endangered, or unusual species were observed on site. No specimen trees in terms of species or quality were observed on site. All trees included in inventory are common to the geographic area and are typical of the previous and current land uses.

Species Breakdown

Tree Species	Tree Count	Percentage of Species
Sugar Maple	35	25.7%
Norway Spruce	26	19.1%
Cherry	20	14.7%
Black Cedar	8	5.9%
Siberian Elm	8	5.9%
Austrian Pine	8	5.9%
Norway Maple	8	5.9%
Basswood	7	5.1%
Scotch Pine	3	2.2%
Black Walnut	3	2.2%
Colorado Spruce	2	1.5%
Freeman Maple	1	0.7%
Apple	1	0.7%
Hawthorne	1	0.7%
Silver Maple	1	0.7%
Black Cherry	1	0.7%
Tulip Tree	1	0.7%
Black Maple	1	0.7%
Colorado Bllue Spruce	1	0.7%
	136	100%

Vegetation Units

Siberian Elm	stand of trees north of subject site
Black Cedar	loose hedge at NW corner of site
Honeysuckle Shrub	large shrub on SE edge of site

Summary of findings

Tree Recommendations	Qty	Tree Identification
Number of trees included in inventory	136	
Number of trees to be preserved	61	751 - 767, 772 - 776, 778, 779, 781 - 785, 788 - 797, 817, 818, 821 - 825, 825B, 826, 827, C, D, M, N, O, P, Q, R, S, T, V, W
Number of trees to be removed from subject site for construction and/or tree health/condition	60	739 - 748, 768 - 771, 777, 780, 798 - 809, 812 - 816, 819, 820, 828 - 852
Number of boundary trees recommended for removal due to poor health/condition and/or construction (CONSENT REQUIRED)	2	810, 811
Number of trees located on private property beyond the subject site recommended for removal due to poor health/condition and/or construction (CONSENT REQUIRED)	6	E, F, G, H, I, J
Number of trees recommended for removal from the CURRENT City ROW (CONSENT REQUIRED)	3	737, A, B
Number of trees recommended for removal within the PROPOSED City ROW (CONSENT REQUIRED)	4	738, 749, 750, 786

Vegetation Unit Recommendations	Qty	Veg Unit Identification
Number of vegetation units included in inventory	3	
Number of vegetation units to be preserved	2	K, L
Number of vegetation units to be removed	1	U

RKLA recommends the following:

1. Removal of trees where there is conflict with the proposed development as indicated within this report and associated tree preservation drawing.
2. Removal of trees in poor condition that pose a potential threat to health and safety during and post construction.
3. Obtain written consent from neighbouring land owner for removal of boundary trees and trees wholly beyond the subject site.
4. Obtain written consent from the City of London for removal of trees within the current and proposed City ROW.
5. Installation and maintenance of tree preservation fencing as per the details and specifications on the tree preservation drawing.
6. Follow the pre, during, and post construction recommendations outlined in this report to prevent damage to trees to be preserved.

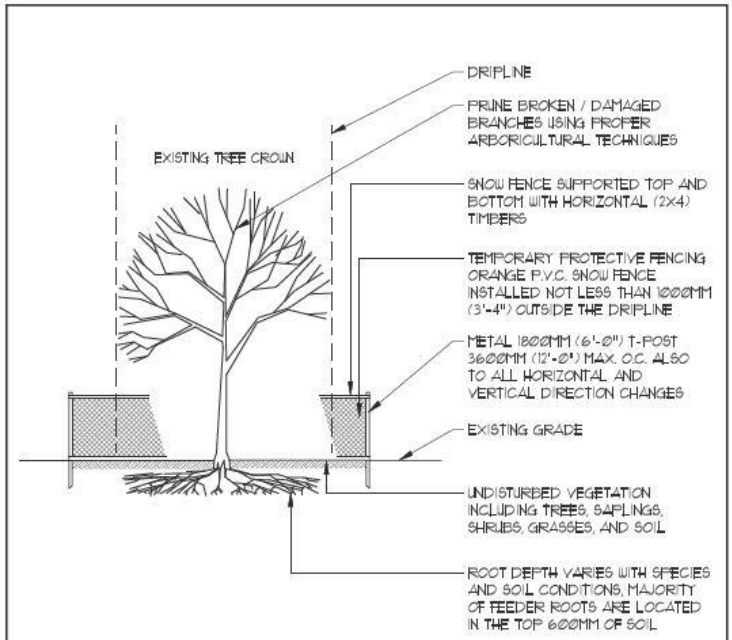
DISCLAIMER

The assessment of the trees presented within this report has been made using accepted arboricultural techniques. These include a visual examination of the above-ground parts of each tree for structural defects, scars, external indications of decay, evidence of insect presence, discoloured foliage, the general condition of the trees and the surrounding site, as well as the proximity of property and people. None of the trees examined were dissected, cored, probed, or climbed, and detailed root crown examinations involving excavation were not undertaken.

Notwithstanding the recommendations and conclusions made in this report, it must be realized that trees are living organisms and their health and vigour is constantly changing. They are not immune to changes in site conditions or seasonal variations in the weather.

While reasonable efforts have been made to ensure the trees recommended for retention are healthy, no guarantees are offered or implied, that these trees or any part of them will remain standing.

APPENDIX A – TREE PROTECTION ZONE FENCE DETAILS

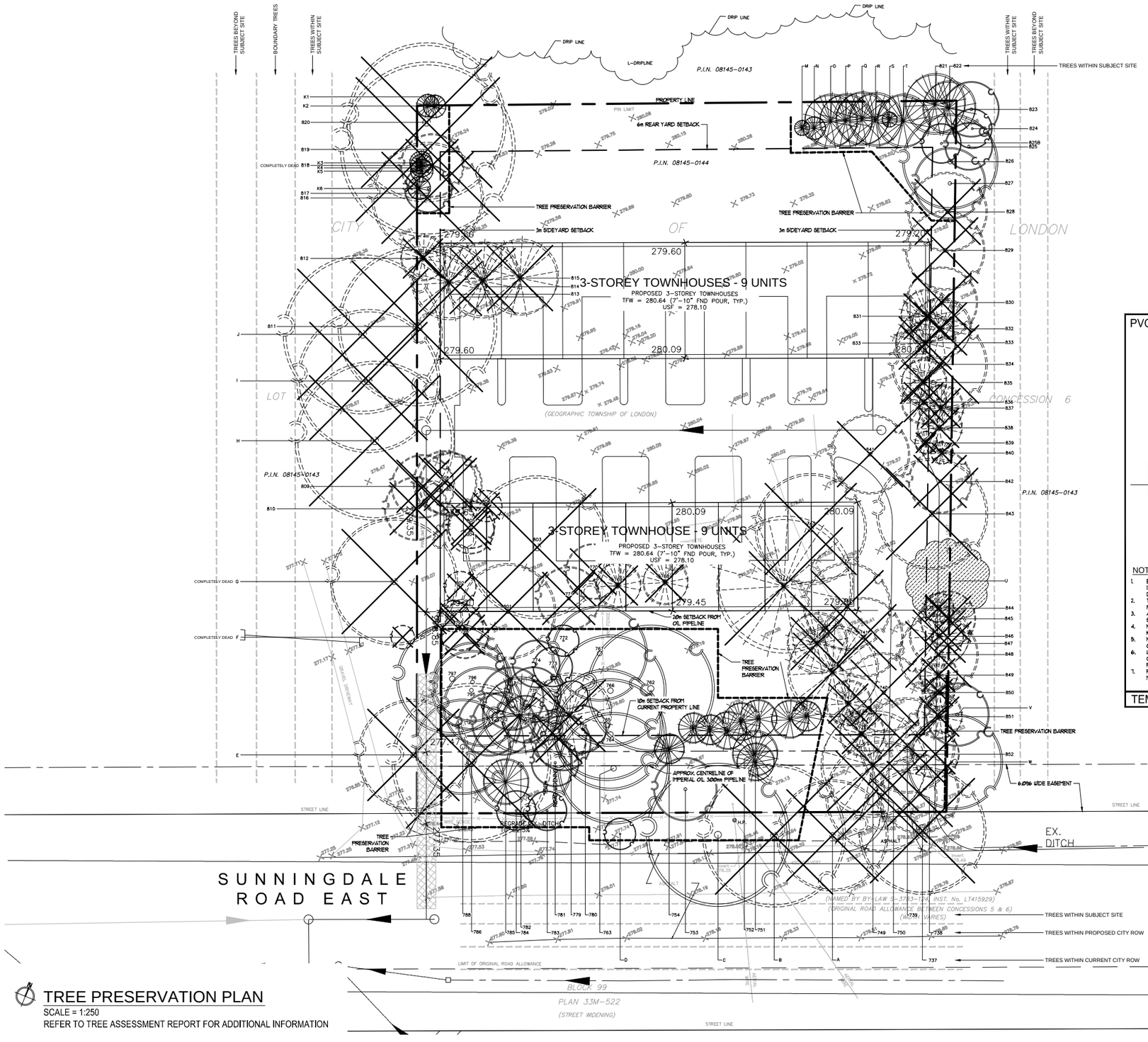


NOTES:

1. EXISTING TREES ARE TO BE PROTECTED FROM CONSTRUCTION WITH THE INSTALLATION OF A 1200MM (4'-0") HIGH SNOW FENCE, AT NOT LESS THEN 1000MM (3'-4") FROM THE EXISTING DRIPLINE, HELD IN PLACE WITH 1800MM (6'-0") 'T-BAR'.
2. THE BARRIER IS TO BE INSTALLED PRIOR TO ANY CONSTRUCTION AND MUST REMAIN IN PLACE UNTIL ALL CONSTRUCTION IS COMPLETED.
3. ALL SUPPORTS AND BRACING SHOULD BE INSIDE THE TREE PROTECTION ZONE. ALL SUCH SUPPORTS SHOULD MINIMIZE DAMAGING ROOTS IN THE TREE PROTECTION ZONE.
4. NO CONSTRUCTION ACTIVITY, GRADE CHANGES, SURFACE TREATMENT, OR EXCAVATION OF ANY KIND IS PERMITTED WITHIN THE TREE PROTECTION ZONE.
5. NO MOVEMENT OF EQUIPMENT, STORAGE OF BUILDING SUPPLIES, CLEANING OR EQUIPMENT, OR DUMPING OF SOLVENTS, GASOLINE, ETC., MAY OCCUR WITHIN THIS FENCE LINE.
6. WHERE HIGH QUALITY SPECIMENS OCCUR ADJACENT TO AREAS SUBJECTED TO INTENSIVE CONSTRUCTION ACTIVITY, WOODEN CRIBBING SHOULD BE INSTALLED TO PROTECT TRUNKS FROM DAMAGE IN THE EVENT THAT HEAVY EQUIPMENT BREAKS DOWN THE SNOW FENCING.
7. FENCE TO BE INSPECTED BY THE CONTRACT ADMINISTRATOR ON A REGULAR BASIS AND BE MAINTAINED BY THE CONTRACTOR.

TEMP. TREE PROTECTION BARRIER - N.T.S.

APPENDIX B – TREE PRESERVATION DRAWING



TREE PRESERVATION PLAN

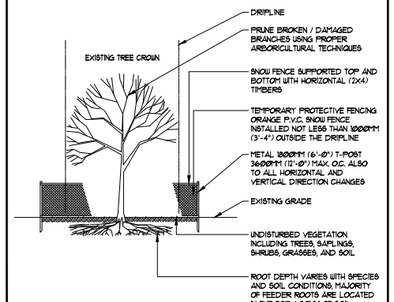
SCALE = 1:250

REFER TO TREE ASSESSMENT REPORT FOR ADDITIONAL INFORMATION

LEGEND

- 5 — EXISTING DECIDUOUS TREES TO REMAIN
- 8 — EXISTING DECIDUOUS TREES TO BE REMOVED
- 6 — EXISTING CONIFEROUS TREES TO REMAIN
- 9 — EXISTING CONIFEROUS TREES TO BE REMOVED
- EXISTING PLANTINGS TO REMAIN
- EXISTING PLANTINGS TO BE REMOVED
- TREE PROTECTION BARRIER

PVC SNOW FENCE



NOTES:

1. EXISTING TREES ARE TO BE PROTECTED FROM CONSTRUCTION WITH THE INSTALLATION OF A 1000mm (4'-0") HIGH SNOW FENCE, AT NOT LESS THEN 1000mm (3'-4") FROM THE EXISTING DRIPLINE, HELD IN PLACE WITH 1800mm (6'-0") T-BAR.
2. THE BARRIER IS TO BE INSTALLED PRIOR TO ANY CONSTRUCTION AND MUST REMAIN IN PLACE UNTIL ALL CONSTRUCTION IS COMPLETED.
3. ALL SUPPORTS AND BRACING SHOULD BE INSIDE THE TREE PROTECTION ZONE. ALL SUCH SUPPORTS SHOULD MINIMIZE DAMAGING ROOTS IN THE TREE PROTECTION ZONE.
4. NO CONSTRUCTION ACTIVITY, GRADE CHANGES, SURFACE TREATMENT, OR EXCAVATION OF ANY KIND IS PERMITTED WITHIN THE TREE PROTECTION ZONE.
5. NO MOVEMENT OF EQUIPMENT, STORAGE OF BUILDING SUPPLIES, CLEANING OR EQUIPMENT, OR DUMPING OF SOIL, VENTS, GASOLINE, ETC. MAY OCCUR WITHIN THIS FENCE LINE.
6. WHERE HIGH QUALITY SPECIMENS OCCUR ADJACENT TO AREAS SUBJECTED TO INTENSIVE CONSTRUCTION ACTIVITY, WOODEN CRIBBING SHOULD BE INSTALLED TO PROTECT TRUNKS FROM DAMAGE IN THE EVENT THAT HEAVY EQUIPMENT BREAKS DOWN THE SNOW FENCING.
7. FENCE TO BE INSPECTED BY ENVIRONMENTAL CONSULTANT ON A REGULAR BASIS AND BE MAINTAINED BY THE SUBDIVIDER / BUILDER.

TEMP. TREE PROTECTION BARRIER - N.T.S.

KEY MAP

RON KOUDYS LANDSCAPE ARCHITECTS INC

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

DATE	DESCRIPTION	No.
2018.12.14	ISSUED FOR ZBA	3.
2018.12.13	ISSUED FOR REVIEW	2.
2017.07.11	ISSUED FOR TREE COORDINATION	1.

PLOTTING INFORMATION:
PLOTTED DATE = DECEMBER 14, 2018
PLOTTED SCALE = 1:1

PROJECT TITLE:
348 SUNNINGDALE ROAD EAST
LONDON, ONTARIO

DRAWING TITLE:
TREE PRESERVATION PLAN

DATE:	SCALE:	DRAWING No.
JULY 2017	AS NOTED	T-1
DRAWN: RKLA Inc.	CHECKED BY: R.H.K.	
PROJECT No. 17-176Lf ZBA		

APPENDIX C – INVENTORY DATA AND PRESERVATION/REMOVAL RECOMMENDATIONS

Date of field work: June 19, 2017

348 SUNNINGDALE ROAD, LONDON ONTARIO

GENERAL INFORMATION				SIZE		BIOLOGICAL HEALTH			RECOMMENDATION		
TAG#	BOTANICAL NAME	COMMON NAME	LOCATION	DBH (cm)	CANOPY RADIUS (m)	CROWN CONDITION	STRUCTURAL CONDITION	COMMENTS	PROPOSED ACTION	RATIONALE	CONSENT REQUIRED?
737	*Acer saccharum*	*Sugar Maple*	within current City ROW	55	8	5	fair	City ROW along east edge of existing driveway, wide trunk flare, basal scar, minor dieback, codominant stems, trunk cavity	remove	construction of driveway	CONSENT REQUIRED FROM CITY
738	*Acer saccharum*	*Sugar Maple*	within proposed road widening	55	5	5	good	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	remove	construction of driveway	CONSENT REQUIRED FROM CITY
739	*Prunus spp.*	*Cherry*	within subject site	51	6	3	fair	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	remove	construction of driveway	no
740	*Acer saccharum*	*Sugar Maple*	within subject site	33		5	good	along east edge of existing driveway, recently pruned, limbed up, grade change at base, along edge of existing driveway	remove	construction of driveway	no
741	*Acer platanoides*	*Norway Maple*	within subject site	22	5	5	fair	along east edge of existing driveway, sealing pruning cuts, supressed, exposed/damaged roots, girdling roots	remove	construction of driveway and south building	no
742	*Acer platanoides*	*Norway Maple*	within subject site	32	5.5	5	fair	along east edge of existing driveway, sealing pruning cuts, codominant stems, exposed/damaged roots, grade change at base	remove	construction of south building	no
743	*Acer saccharum*	*Sugar Maple*	within subject site	79	7	5	poor	along east edge of existing driveway, loose bark, lateral branch larger than main stem, internal rot at base, burly main stem, cavity, instects at base	remove	construction of south building	no
744	*Pinus nigra*	*Austrian Pine*	within subject site	78	9	5	fair	along west edge of existing driveway, unbalanced crown - heavy towards SW, insect holes in trunk, limbed up to approx. 50'	remove	construction of south building	no
745	*Picea abies*	*Norway Spruce*	within subject site	78	4	4	fair	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'	remove	construction of south building and proximity to existing driveway	no
746	*Pinus nigra*	*Austrian Pine*	within subject site	64	6	4	poor	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'	remove	construction impacts proximity to existing driveway	no
747	*Pinus sylvestris*	*Scotch Pine*	within subject site	43	3	4	fair	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'	remove	construction impacts proximity to existing driveway	no
748	*Picea abies*	*Norway Spruce*	within subject site	51	3	5	fair	along west edge of existing driveway, supressed, droopy habit, grade change at base due to driveway	remove	construction impacts proximity to existing driveway	no
749	*Pinus nigra*	*Austrian Pine*	within proposed road widening	46	7	3	poor	along west edge of existing driveway, bowed trunk, trunk cavity, thin crown, supressed, no root flare	remove	construction impacts proximity to existing driveway and proposed driveway	no
750	*Acer saccharum*	*Sugar Maple*	within proposed road widening	58	7	5	poor	along west edge of existing driveway, girdling/exposed/damaged roots along driveway edge, limbed up, cavity, no root flare on S side, damage from abutting fence	remove	construction impacts proximity to existing driveway and proposed driveway	no

Completed by: M Peeters A Hosfeld

Date of field work: June 19, 2017

348 SUNNINGDALE ROAD, LONDON ONTARIO

GENERAL INFORMATION				SIZE		BIOLOGICAL HEALTH			RECOMMENDATION		
TAG#	BOTANICAL NAME	COMMON NAME	LOCATION	DBH (cm)	CANOPY RADIUS (m)	CROWN CONDITION	STRUCTURAL CONDITION	COMMENTS	PROPOSED ACTION	RATIONALE	CONSENT REQUIRED?
751	*Thuja occidentalis*	*Black Cedar*	within proposed road widening	42, 42	2.5	5	fair	Multistem 2, exposed roots, minor interior dieback, low branched	preserve		
752	*Thuja occidentalis*	*Black Cedar*	within proposed road widening	18	3	5	fair	supressed, low branched, minor dieback, uneven crown	preserve		
753	*Prunus spp.*	*Cherry*	within proposed road widening	15, 8	4	5	fair	Multistem 2, curling leaves, epicormic growth, cavity, scrubby habit, S1 in small stem	preserve		
754	*Picea pungens*	*Colorado Spruce*	within subject site	24	2	3	good	supressed, dieback, limbed up to approx. 20'	preserve		
755	*Picea abies*	*Norway Spruce*	within subject site	9	2	5	good	hedge row, thin crown, low branched	preserve		
756	*Picea abies*	*Norway Spruce*	within subject site	16	2.5	5	good	hedge row, thin lower branches, low branched, Adelges abietis (pineapple spruce gall)	preserve		
757	*Picea abies*	*Norway Spruce*	within subject site	16	2.5	5	good	hedge row, thin lower branches, low branched, Adelges abietis (pineapple spruce gall)	preserve		
758	*Picea abies*	*Norway Spruce*	within subject site	13	2.5	4	good	hedge row, thin lower branches, low branched	preserve		
759	*Picea abies*	*Norway Spruce*	within subject site	20	2.5	5	good	hedge row, thin lower branches, low branched	preserve		
760	*Picea abies*	*Norway Spruce*	within subject site	13	2	5	good	hedge row, low branched	preserve		
761	*Picea abies*	*Norway Spruce*	within subject site	8	2	5	good	hedge row, low branched	preserve		
762	*Liriodendron tulipefera*	*Tulip Tree*	within subject site	55	8	5	fair	uneven crown - heavy to SE due to a torn off scaffold branch in crown	preserve		
763	*Acer saccharum*	*Sugar Maple*	within proposed road widening	19, 13	7	5	fair	Multistem 2, exposed roots, partial root rot, remnants of previous third stem, excellent condition	preserve		
764	*Acer saccharum*	*Sugar Maple*	within subject site	38	7	5	fair	codominant stems, included bark, butressing, supressed on NW side, dead	preserve		
765	*Acer saccharum*	*Sugar Maple*	within subject site	34	7	5	fair	vertical cavity, sealing wounds, discolouration at base, minor dead branches	preserve		
766	*Acer saccharum*	*Sugar Maple*	within subject site	43	7	5	good	low branches on E side, minor dead branches, excellent condition	preserve		
767	*Acer saccharum*	*Sugar Maple*	within subject site	19	6	5	good	open crown, supressed, minor dead branches	preserve		
768	*Picea abies*	*Norway Spruce*	within subject site	45	3	4	good	large vertical wound on N side, basal scar, previously supressed, limbed up to approx. 30'	remove	construction of north building	no
769	*Picea abies*	*Norway Spruce*	within subject site	47	3	5	good	wide root flare	remove	construction of north building	no
770	*Acer saccharum*	*Sugar Maple*	within subject site	17	3.5	5	good	minor dead wood, abutting large stump	remove	construction of north building	no
771	*Acer saccharum*	*Sugar Maple*	within subject site	15	4	5	good	excellent condition	remove	construction of north building	no
772	*Prunus serotina*	*Black Cherry*	within subject site	13	2	5	good	crooked at base - self corrected, high crown	preserve		
773	*Acer saccharum*	*Sugar Maple*	within subject site	10	2.5	5	good	high crown, supressed on NW	preserve		
774	*Acer saccharum*	*Sugar Maple*	within subject site	13	3	5	good	supressed	preserve		
775	*Acer platanoides*	*Norway Maple*	within subject site	17	4.5	5	fair	crook at base, clustered upper crown, supressed	preserve		
776	*Acer saccharum*	*Sugar Maple*	within subject site	10	2	5	good	supressed, high crown, epicormic along trunk	preserve		
777	*Pinus nigra*	*Austrian Pine*	within subject site	71	5.5	4	poor	lean E, dead branches, natural limb drop, codominant stems, included bark with dead stem, high/small crown, small fungal fruiting body at root flare	remove	condition of tree	no

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GENERAL INFORMATION				SIZE		BIOLOGICAL HEALTH			RECOMMENDATION		
TAG#	BOTANICAL NAME	COMMON NAME	LOCATION	DBH (cm)	CANOPY RADIUS (m)	CROWN CONDITION	STRUCTURAL CONDITION	COMMENTS	PROPOSED ACTION	RATIONALE	CONSENT REQUIRED?
778	*Acer saccharum*	*Sugar Maple*	within subject site	10	3	5	good	supressed, epicormic	preserve		
779	*Juglans nigra*	*Black Walnut*	within subject site	14	3.5	5	good	high crown, dead branches, supressed	preserve		
780	*Juglans nigra*	*Black Walnut*	within subject site	16	3.5	4	poor	Cavity at 7' from grade, several major wounds/burls, ants	remove	condition of tree	no
781	Tilia americana	Basswood	within proposed road widening	21	3	5	good	crook in upper stem, insect damage to leaves, 1 mature epicormic sprout from base, minor dieback, supressed on N, young virginia creeper on trunk	preserve		
782	*Juglans nigra*	*Black Walnut*	within proposed road widening	29	6.5	5	good	supressed, uneven crown - heavy to the S, young virginia creeper on trunk	preserve		
783	*Acer saccharum*	*Sugar Maple*	within proposed road widening	10	2.5	5	fair	low branched, vertical crack in bark, supressed	preserve		
784	*Acer saccharum*	*Sugar Maple*	within proposed road widening	11	2.5	5	good	rodent protection present, minor dieback, supressed, epicormic growth	preserve		
785	*Pinus sylvestris*	*Scotch Pine*	within proposed road widening	40	3	4	fair	insect holes, dead/drooping branches, thin crown, bulbous root flare	preserve		
786	*Acer saccharum*	*Sugar Maple*	within proposed road widening	95	10	4	poor	MAJOR cavity, codominant stems, dieback in upper crown, thin crown, buckthorn understory	remove	condition of tree	CONSENT REQUIRED FROM CITY
787	*no tag - no tree*										
788	*Acer saccharum*	*Sugar Maple*	within subject site	28	6	4	fair	large lower dead branches, supressed, dieback, epicormic growth	preserve		
789	*Pinus nigra*	*Austrian Pine*	within subject site	75	5	4	fair	elevated root plate, high crown, thin crown, 3 codominant stems, major dead branches	preserve		
790	*Acer saccharum*	*Sugar Maple*	within subject site	12	3	4	fair	supressed, abutting tree no. 789, leaf spot, dieback in lower branches	preserve		
791	*Prunus spp.*	*Cherry*	within subject site	14	4	3	fair	supressed, dead lower branches	preserve		
792	*Acer saccharum*	*Sugar Maple*	within subject site	10	4	5	good	supressed, minor die back	preserve		
793	*Prunus spp.*	*Cherry*	within subject site	18	4	4	poor	vertical cavity/wound below crown, dead lower branches, supressed, crooked - self corrected	preserve		
794	*Tilia americana*	*Basswood*	within subject site	14	5	5	fair	insect damage to leaves, lean SW, supressed, included bark, lean	preserve		
795	*Tilia americana*	*Basswood*	within subject site	18	5	5	good	insect damage to leaves	preserve		
796	*Tilia americana*	*Basswood*	within subject site	23	5	5	good	insect damage to leaves	preserve		
797	*Tilia americana*	*Basswood*	within subject site	23, 22	7	5	poor	Multistem 2, major cavities on one stem, included bark, insect damage to leaves, buckthorn understory	preserve		
798	*Prunus spp.*	*Cherry*	within subject site	12	3	5	fair	wound 2' from grade, supressed, lean SW	remove	construction of south building	no
799	*Prunus spp.*	*Cherry*	within subject site	10	3	5	fair	supressed, minor die back, lean SW	remove	construction of south building	no
800	Prunus spp.	Cherry	within subject site	9	2	5	fair	supressed, large epicormic sprout from base	remove	construction of south building	no
801	*Tilia americana*	*Basswood*	within subject site	85	6	5	poor	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	construction of south building	no
802	*Prunus spp.*	*Cherry*	within subject site	12	2	5	good	dead lower branches, supressed	remove	construction of south building	no
803	*Acer saccharum*	*Sugar Maple*	within subject site	74	9	5	fair	exposed/damaged roots, minor root girdling, cavity, one large low branch, uneven crown-heavy on SW, previously supressed	remove	construction of south building	no

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348 SUNNINGDALE ROAD, LONDON ONTARIO

GENERAL INFORMATION				SIZE		BIOLOGICAL HEALTH			RECOMMENDATION		
TAG#	BOTANICAL NAME	COMMON NAME	LOCATION	DBH (cm)	CANOPY RADIUS (m)	CROWN CONDITION	STRUCTURAL CONDITION	COMMENTS	PROPOSED ACTION	RATIONALE	CONSENT REQUIRED?
804	*Prunus spp.*	*Cherry*	within subject site	18	3	5	good	supressed, canopy heavy to SW, dead lower branches	remove	construction of south building	no
805	*Prunus spp.*	*Cherry*	within subject site	18	3	5	good	supressed, canopy heavy to W, dead lower branches	remove	construction of south building	no
806	*Prunus spp.*	*Cherry*	within subject site	16	2	5	good	supressed, canopy heavy to N, dead lower branches	remove	construction of south building	no
807	*Prunus spp.*	*Cherry*	within subject site	40	4	4	fair	burly growth at 20' from grade, dead lower branches, butressing	remove	construction of south building	no
808	*Prunus spp.*	*Cherry*	within subject site	33	4	4	fair	large butress root on N side, dead lower branches, supressed	remove	construction of south building	no
809	*Prunus spp.*	*Cherry*	within subject site	20	4	4	fair	Lean to SE, lower canopy dieback	remove	construction of south building	no
810	***Prunus spp.***	***Cherry***	**boundary tree with 310 Sunningdale**	**22**	**4**	**5**	**fair**	**Lean to SW, lower canopy dieback**	**remove**	**construction of south building**	**CONSENT REQUIRED FROM LAND OWNER**
811	***Acer saccharum***	***Sugar Maple***	**boundary tree with 310 Sunningdale**	**77**	**10**	**5**	**good**	**Weeping wound, minor interior dieback, low union, clothesline hardware attached to trunk**	**remove**	**construction of south building**	**CONSENT REQUIRED FROM LAND OWNER**
812	*Thuja occidentalis*	*Black Cedar*	within subject site	24	3	5	fair	supressed, lean N, previous codominant stem removed at 1' from grade	remove	construction of south building	no
813	*Picea abies*	*Norway Spruce*	within subject site	53	5	5	fair	dead interior canopy, supressed, drooping habit, exposed/damaged roots, limbed up to approx.15'	remove	construction of south building	no
814	*Picea abies*	*Norway Spruce*	within subject site	48	5	5	fair	dead interior canopy, supressed, drooping habit, exposed/damaged roots, limbed up to approx.15', Adelges abietis (pineapple spruce gall), soil/debris piled against base	remove	construction of south building	no
815	*Picea abies*	*Norway Spruce*	within subject site	51	5	5	fair	dead interior canopy, supressed, drooping habit, exposed/damaged roots, limbed up to approx.15', Adelges abietis (pineapple spruce gall), soil/debris piled against base	remove	construction of south building	no
816	*Ulmus pumila*	*Siberian Elm*	within subject site	70	7	3	fair	on slope, codominant stems, dead wood	remove	proximity to north building and condition of tree	no
817	*Ulmus pumila*	*Siberian Elm*	within subject site	34	3	2	fair	on slope, supressed, dieback	preserve		
818	*Ulmus pumila*	*Siberian Elm*	within subject site	45	4	1	dead	fully dead	remove	condition of tree (dead)	
819	*Ulmus pumila*	*Siberian Elm*	within subject site	55, 35	11	4	poor	Multistem 2, 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	remove	condition of tree	no
820	*Ulmus pumila*	*Siberian Elm*	within subject site	65	10	3	poor	Hazard, major dead limbs, major vertical scar at base, supressed, lean, codominant stems	remove	condition of tree	no
821	*Thuja occidentalis*	*Black Cedar*	within subject site	28, 21, 18, 14	4	3	fair	Multistem 4, hedgerow, dead interior	preserve		
822	*Thuja occidentalis*	*Black Cedar*	within subject site	32, 28, 15, 9	3.5	4	fair	Multistem 4, hedgerow, dead interior, included bark	preserve		
823	*Ulmus pumila*	*Siberian Elm*	beyond subject site	15	3.5	4	fair	Property of Lot 15 dead lower branches, supressed, lean N	preserve		
824	*Ulmus pumila*	*Siberian Elm*	beyond subject site	21	2.5	4	fair	Property of Lot 15 dead lower branches, supressed, girdling roots, epicormic growth	preserve		
825	*Ulmus pumila*	*Siberian Elm*	beyond subject site	28, 19	3	4	fair	Multistem 2, Property of Lot 15 uneven crown - heavy to W, dieback of lower branches	preserve		

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825B	*Acer saccharum*	*Sugar Maple*	withing subject site	14	2.5	5	good	Codominant leaders with included bark High canopy	preserve		
826	*Acer platanoides*	*Norway Maple*	within subject site	30	6	5	good	low scaffold branches, exposed roots, minor dieback	preserve		
827	*Acer saccharinum*	*Silver Maple*	within subject site	18, 13	4.5	5	fair	Multistem 2, butressing at union, cavity halfway up smaller stem	preserve		
828	*Acer platanoides*	*Norway Maple*	within subject site	28	5	5	good	low branching, minor interior dieback	remove	proximity to north building	no
829	*Acer platanoides*	*Norway Maple*	within subject site	46	5	5	fair	multiple branch union cluster at 4' from grade, fused branches at union, minor interior dieback	remove	construction of north building	no
830	*Acer platanoides*	*Norway Maple*	within subject site	31	4.5	3	good	significant interior dieback, thin crown, low branches, low vigor	remove	construction of north building	no
831	*Picea abies*	*Norway Spruce*	within subject site	22	3.5	3	good	supressed, thin crown, branched to grade	remove	construction of north building	no
832	*Acer saccharum*	*Sugar Maple*	within subject site	18	4	2	good	highly supressed, low vigor	remove	construction of north building	no
833	*Picea abies*	*Norway Spruce*	within subject site	16	4	4	good	supressed, thin crown, branched to grade	remove	construction of north building	no
834	*Acer platanoides*	*Norway Maple*	within subject site	38	6	4	fair	included bark, exposed roots, low union, double codominant stems, low branched	remove	construction of north building	no
835	*Picea abies*	*Norway Spruce*	within subject site	12	3	5	good	lower dead branches, minor Adelges abietis (pineapple spruce gall)	remove	construction of north building	no
836	*Picea abies*	*Norway Spruce*	within subject site	22	3	5	good	lower dead branches	remove	construction of parking lot	no
837	*Pinus nigra*	*Austrian Pine*	within subject site	25	3	3	fair	lean NE, natural limb drop - remnant stubs up to approx. 10', codominant stems	remove	construction of parking lot	no
838	*Pinus nigra*	*Austrian Pine*	within subject site	25	3	3	fair	browning foliage, dead lower limbs, codominant stems, low union, included bark	remove	construction of parking lot	no
839	*Picea abies*	*Norway Spruce*	within subject site	12	1.5	5	fair	supressed, branched to grade, minor Adelges abietis (pineapple spruce gall)	remove	construction of parking lot	no
840	*Picea abies*	*Norway Spruce*	within subject site	15	1.5	2	fair	only upper 30' of canopy is living	remove	construction of parking lot	no
841	*Malus spp.*	*Apple*	within subject site	62	5	4	poor	wood pecker damage, twisting trunk, bark splitting, thin crown, major dead limbs, cavity	remove	construction of parking lot	no
842	*Acer saccharum*	*Sugar Maple*	within subject site	18	4	5	fair	supressed, uneven crown - heavy to NE, low union, low branched	remove	construction of parking lot	no
843	*Acer saccharum nigrum*	*Black Maple*	within subject site	50	7	5	fair	low scaffold branches, cupped/discolourd leaves, woodpecker damage, exposed/girdling roots, butressing	remove	construction of driveway	no
844	*Pinus nigra*	*Austrian Pine*	within subject site	10	2	4	fair	twisted/crooked trunk, supressed, low branched, browning needles	remove	construction of driveway	no
845	*Prunus spp.*	*Cherry*	within subject site	20	3.5	5	good	exposed roots, low branched, supressed	remove	construction of driveway	no
846	*Pinus sylvestris*	*Scotch Pine*	within subject site	25	4	4	good	dead lower branches, thin canopy	remove	construction of driveway	no
847	*Prunus spp.*	*Cherry*	within subject site	11	2	5	fair	lean NE, supressed	remove	construction of driveway	no
848	*Acer x freemanii*	*Freeman Maple*	within subject site	16, 11	5	5	good	Multistem 2, uneven crown - heavy to W, root flare butressing	remove	construction of driveway	no
849	*Thuja occidentalis*	*Black Cedar*	within subject site	30, 12	2.5	5	good	Multistem 2, hedgerow, dead lower branches	remove	construction of driveway	no
850	*Thuja occidentalis*	*Black Cedar*	within subject site	13, 10	2	5	good	Multistem 2, hedgerow, dead lower branches	remove	construction of driveway	no
851	*Thuja occidentalis*	*Black Cedar*	within subject site	32, 15	3	5	good	Multistem 2, hedgerow, dead lower branches	remove	construction of driveway	no
852	*Prunus spp.*	*Cherry*	within subject site	9	3	5	good	crook in trunk, supressed, lean E, minor dieback	remove	construction of driveway	no

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Trees not tagged during tree inventory - beyond subject site or inaccessible											
A	*Acer saccharum*	*Sugar Maple*	within current City ROW	70	7	5	poor	City ROW major root damage along road side, epicormic growth, large burl, large exposed/girdling root, on slope, pruned, cavity	remove	condition of tree and proximity to proposed driveway	CONSENT REQUIRED FROM CITY
B	*Acer saccharum*	*Sugar Maple*	within current City ROW	65	8	5	poor	City ROW severed roots on street side, pruned, major dead wood, adjacent to hydro line	remove	condition of tree and proximity to proposed driveway	CONSENT REQUIRED FROM CITY
C	*Acer saccharum*	*Sugar Maple*	within current City ROW	65	8	5	fair	City ROW slight lean N, lilac shrub growing from roots, girdling roots, large dead branches, minor dieback	preserve		
D	*Crataegus spp.*	*Hawthorne*	within current City ROW	12	2	4	good	City ROW insect damage to leaves, supressed, uneven crown, scrubby habit, slight lean S	preserve		
E	*Acer saccharum*	*Sugar Maple*	310 Sunningdale Rd & proposed road widening	85	7	3	poor	cavities in branches, weeping wound, crown dieback, major dead limbs, fused leaders, clustered branching, girdling roots	remove	poor tree condition	CONSENT REQUIRED FROM LAND OWNER
F	*Tilia americana*	*Basswood*	310 Sunningdale Rd	75	na	1	dead	completely dead	remove	dead tree - potential risk for workers during construction and building/tenants	CONSENT REQUIRED FROM LAND OWNER
G	*Acer saccharum*	*Sugar Maple*	310 Sunningdale Rd	85	8	1	dead	completely dead	remove	dead tree - potential risk for workers during construction and building/tenants	CONSENT REQUIRED FROM LAND OWNER
H	*Acer saccharum*	*Sugar Maple*	310 Sunningdale Rd	86	10	5	poor	low crotch, cavity at base, minor dead branching, cavity in upper crown	remove	poor health - potential risk for workers during construction and building/tenants	CONSENT REQUIRED FROM LAND OWNER
I	*Acer saccharum*	*Sugar Maple*	310 Sunningdale Rd	80	9	5	poor	burls on roots, low crotch, ants present, butressing, near existing pile of debris	remove	poor health - potential risk for workers during construction and building/tenants	CONSENT REQUIRED FROM LAND OWNER
J	*Acer saccharum*	*Sugar Maple*	310 Sunningdale Rd	80	10	5	fair	girdling roots, low scaffold branches, dieback to main branches	remove	poor health - potential risk for workers during construction, nearby tree removal and building/tenants	CONSENT REQUIRED FROM LAND OWNER
K	*Vegetation unit - Thuja occidentalis group*	*Black Cedar*	within subject site	+-15	+-2	4	good	Subject site property good condition, low area	preserve		
L	*Vegetation unit - Ulmus pumila*	*Siberian Elm*	310 Sunningdale Rd	+-15		4	fair	Property of Lot 15 stand of trees along entire north property line - beyond subject site boundary	preserve		
M	*Picea pungens*	*Colorado Spruce*	within subject site	7	1	5	good	Subject site property hedgerow, branched to ground	preserve		

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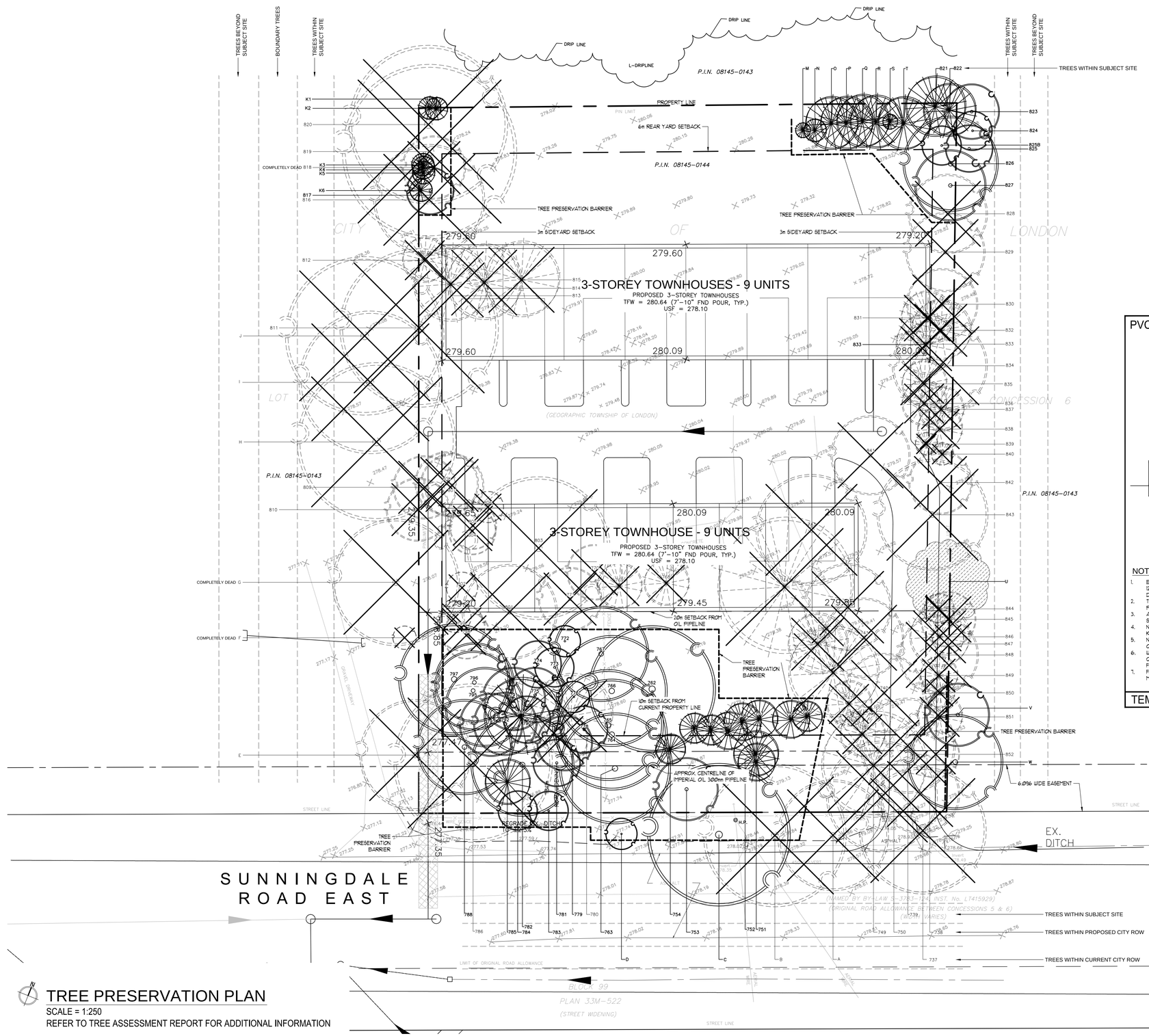
GENERAL INFORMATION				SIZE		BIOLOGICAL HEALTH			RECOMMENDATION		
TAG#	BOTANICAL NAME	COMMON NAME	LOCATION	DBH (cm)	CANOPY RADIUS (m)	CROWN CONDITION	STRUCTURAL CONDITION	COMMENTS	PROPOSED ACTION	RATIONALE	CONSENT REQUIRED?
N	*Picea pungens var. glauca*	*Colorado Bllue Spruce*	within subject site	8	1.5	5	good	Subject site property hedgerow, branched to ground	preserve		
O	*Picea abies*	*Norway Spruce*	within subject site	25	4.5	5	good	Subject site property hedgerow, low branched	preserve		
P	*Picea abies*	*Norway Spruce*	within subject site	21	4.5	5	good	Subject site property hedgerow, branched to ground	preserve		
Q	*Picea abies*	*Norway Spruce*	within subject site	21	4.5	5	good	Subject site property hedgerow, branched to ground	preserve		
R	*Picea abies*	*Norway Spruce*	within subject site	32	4.5	5	good	Subject site property hedgerow, branched to ground	preserve		
S	*Picea abies*	*Norway Spruce*	within subject site	12	1	5	good	Subject site property hedgerow, branched to ground, supressed	preserve		
T	*Picea abies*	*Norway Spruce*	within subject site	25	4.5	5	good	Subject site property hedgerow, branched to ground	preserve		
U	*Vegetation unit - Lonicera spp.*	*Honeysuckle Shrub*	within subject site	na	4	4	good	Subject site property large shrub	remove	construction of driveway	no
V	*Prunus spp.*	*Cherry*	310 Sunningdale Rd	23, 20, 15	4	4	fair	Multiestem 3, large cavity in 20cmDBH stem, gall, open crown, dieback	preserve		
W	*Prunus spp.*	*Cherry*	310 Sunningdale Rd	52	6	5	fair	lower canopy dieback, supressed, lean E	preserve		

Completed by: M Peeters A Hosfeld



TREE PRESERVATION PLAN

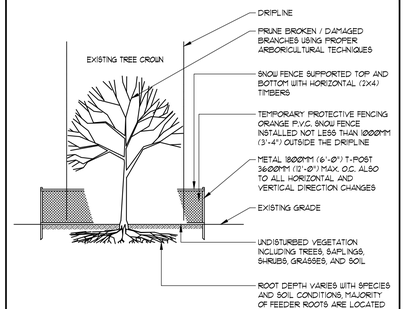
SCALE = 1:250

REFER TO TREE ASSESSMENT REPORT FOR ADDITIONAL INFORMATION

LEGEND

- EXISTING DECIDUOUS TREES TO REMAIN — TREE NUMBER
- EXISTING DECIDUOUS TREES TO BE REMOVED — TREE NUMBER
- EXISTING CONIFEROUS TREES TO REMAIN — TREE NUMBER
- EXISTING CONIFEROUS TREES TO BE REMOVED — TREE NUMBER
- EXISTING PLANTINGS TO REMAIN
- EXISTING PLANTINGS TO BE REMOVED
- TREE PROTECTION BARRIER

PVC SNOW FENCE



NOTES:

1. EXISTING TREES ARE TO BE PROTECTED FROM CONSTRUCTION WITH THE INSTALLATION OF A 1000MM (4'-0") HIGH SNOW FENCE, AT NOT LESS THEN 1000MM (3'-4") FROM THE EXISTING DRIPLINE, HELD IN PLACE WITH 1800MM (6'-0") T-BAR.
2. THE BARRIER IS TO BE INSTALLED PRIOR TO ANY CONSTRUCTION AND MUST REMAIN IN PLACE UNTIL ALL CONSTRUCTION IS COMPLETED.
3. ALL SUPPORTS AND BRACING SHOULD BE INSIDE THE TREE PROTECTION ZONE. ALL SUCH SUPPORTS SHOULD MINIMIZE DAMAGING ROOTS IN THE TREE PROTECTION ZONE.
4. NO CONSTRUCTION ACTIVITY, GRADE CHANGES, SURFACE TREATMENT, OR EXCAVATION OF ANY KIND IS PERMITTED WITHIN THE TREE PROTECTION ZONE.
5. NO MOVEMENT OF EQUIPMENT, STORAGE OF BUILDING SUPPLIES, CLEANING OR EQUIPMENT, OR DUMPING OF SOLVENTS, GASOLINE, ETC., MAY OCCUR WITHIN THIS FENCE LINE.
6. WHERE HIGH QUALITY SPECIMENS OCCUR ADJACENT TO AREAS SUBJECTED TO INTENSIVE CONSTRUCTION ACTIVITY, WOODEN CRIBBING SHOULD BE INSTALLED TO PROTECT TRUNKS FROM DAMAGE IN THE EVENT THAT HEAVY EQUIPMENT BREAKS DOWN THE SNOW FENCING.
7. FENCE TO BE INSPECTED BY ENVIRONMENTAL CONSULTANT ON A REGULAR BASIS AND BE MAINTAINED BY THE SUBDIVIDER / BUILDER.

TEMP. TREE PROTECTION BARRIER - N.T.S.

KEY MAP

RON KOUDYS LANDSCAPE ARCHITECTS INC

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

DATE	DESCRIPTION	No.
2018.12.14	ISSUED FOR ZBA	3.
2018.12.13	ISSUED FOR REVIEW	2.
2017.07.11	ISSUED FOR TREE COORDINATION	1.

PLOTTING INFORMATION:

PLOTTED DATE = DECEMBER 14, 2018

PLOTTED SCALE = 1:1

PROJECT TITLE:

348 SUNNINGDALE ROAD EAST

LONDON, ONTARIO

DRAWING TITLE:

TREE PRESERVATION PLAN

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

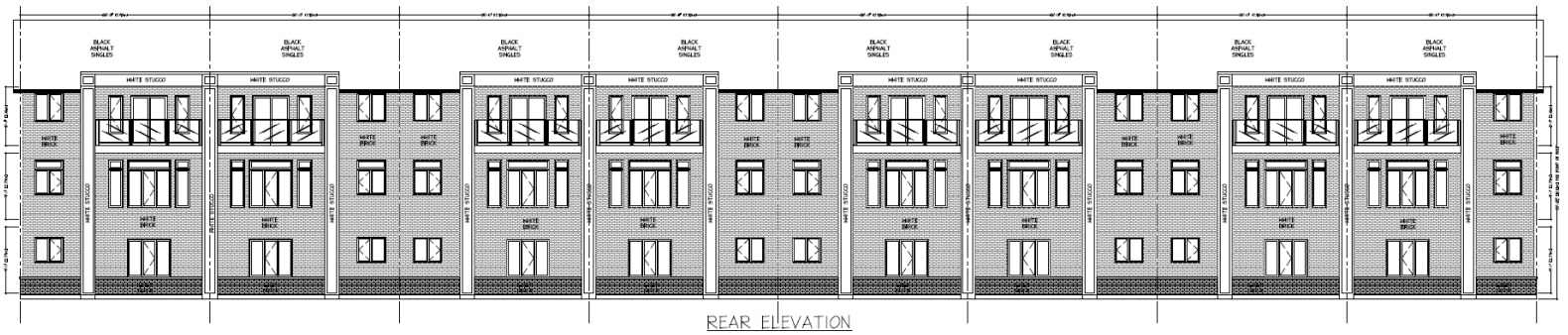
Urban Design Brief

Westchester Homes

348 Sunningdale Road East

City of London

FRONT ELEVATION



REAR ELEVATION

December 14, 2018

ZELINKA PRIAMO LTD
A Professional Planning Practice

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INTRODUCTION

On behalf of Westchester Homes, Zelinka Priamo ltd. has prepared this *Urban Design Brief* in support of a Zoning By-Law Amendment to provide design details of a proposed redevelopment on lands known municipally as 348 Sunningdale Road East (the “subject lands”) consisting of townhouse dwellings. This report is intended to be read in conjunction with the *Planning Justification Report* also submitted in support for the Zoning By-Law Amendment application.

This report is made up of two sections, the contents of which are as follows:

Section 1:

- The Subject Property
- Spatial Analysis
- Design Goals and Objectives
- The Proposaland Conceptual Design
- Design Response to City Documents

Section 2:

- Compatibility Report
- Public Realm

SECTION 1

THE SUBJECT PROPERTY

The subject lands are located on the north side of Sunningdale Road East, between Lindisfarne Road and Bluebell Road (Figure 1). The single, rectangular-shaped parcel has an area of approximately 0.635 hectares (1.57 ac), a frontage of approximately 68.5 metres (224.7 ft), and a depth of approximately 92.0 metres (301.8 ft). The subject lands were formerly occupied by a single detached dwelling that has since been removed. A number of mature trees line the frontage of the subject lands, consisting primarily of ornamental trees associated with the former residential use.

Figure 1 – Subject Lands

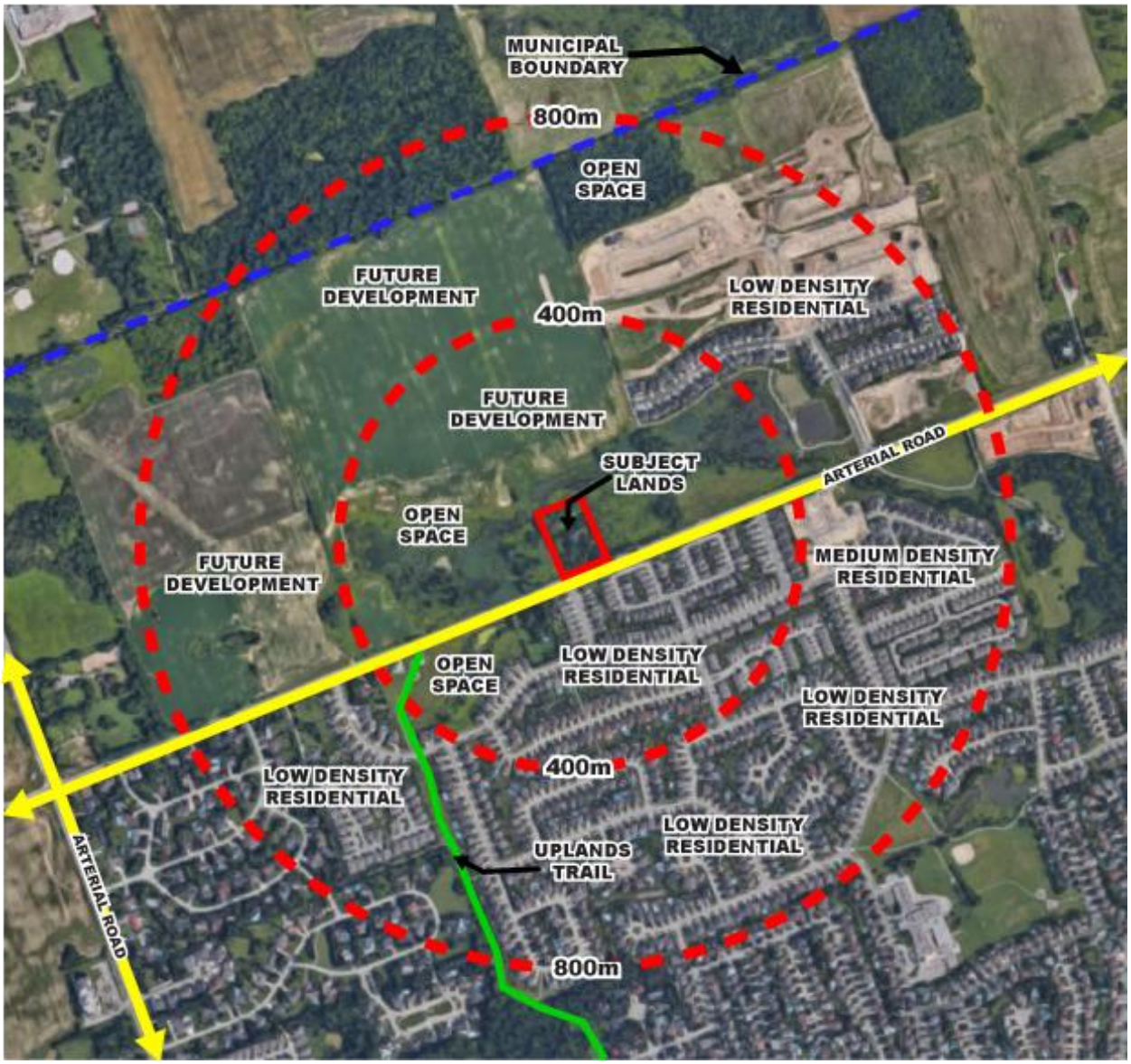
The subject lands abut lands zoned *"Urban Reserve"* to the north, east and west, with open space and provincially significant wetlands (Powell Drain Wetlands) located beyond. Low density and medium density residential uses are adjacent to the subject lands to the south and southeast across Sunningdale Road East in the form of single detached dwellings, with townhouse dwellings beyond.

The subject lands consist of slopes that fall from the centre of the subject lands in all directions, especially towards the northwest and southwest corners. Vehicular access to the subject lands is provided by a single driveway on the east side of the subject lands via Sunningdale Road East. An Imperial Oil pipeline is located along the frontage of the subject lands; a 20.0m building setback from the centreline of the pipeline is required by the Zoning By-Law.

SPATIAL ANALYSIS

Figure 2 shows the subject lands, notable features, and land uses within 400m and 800m radii. The two radii represent the walking distances of approximately 5 and 10 minutes, respectively. The subject lands are located along an arterial road (Sunningdale Road), with a single lane of traffic in each direction. Public sidewalks are located along the south side of Sunningdale Road East, providing connections to Lindisfarne Road and Heron Haven Park to the south. The area is served by public transit (Route 38). Eastbound and westbound transit stops are located approximately 300m east of the subject lands on Bluebell Road.

Figure 2 – Spatial Analysis (400m and 800m)



The 400m area surrounding the subject lands is comprised of low density residential uses in the form single detached dwellings to the south, northeast and southeast; open space uses in the form of wetlands and wooded areas are located to the north, northeast, and northwest, as well as “Heron Haven Park” to the southwest. Lands beyond to the north, east, and west are planned for future development and are currently cultivated fields.

The housing stock within the low density residential areas is primarily larger single detached dwellings, 1 to 2.5-storeys in height, with attached garages and front yard driveways (Figures 3 and 4). The exterior finish of the buildings are typically neutral-coloured masonry and vinyl siding, with a mix of window styles and treatments. Young street trees line many of the residential streets.

Figure 3 – Low Density Residential Built Form (Skyline Avenue)

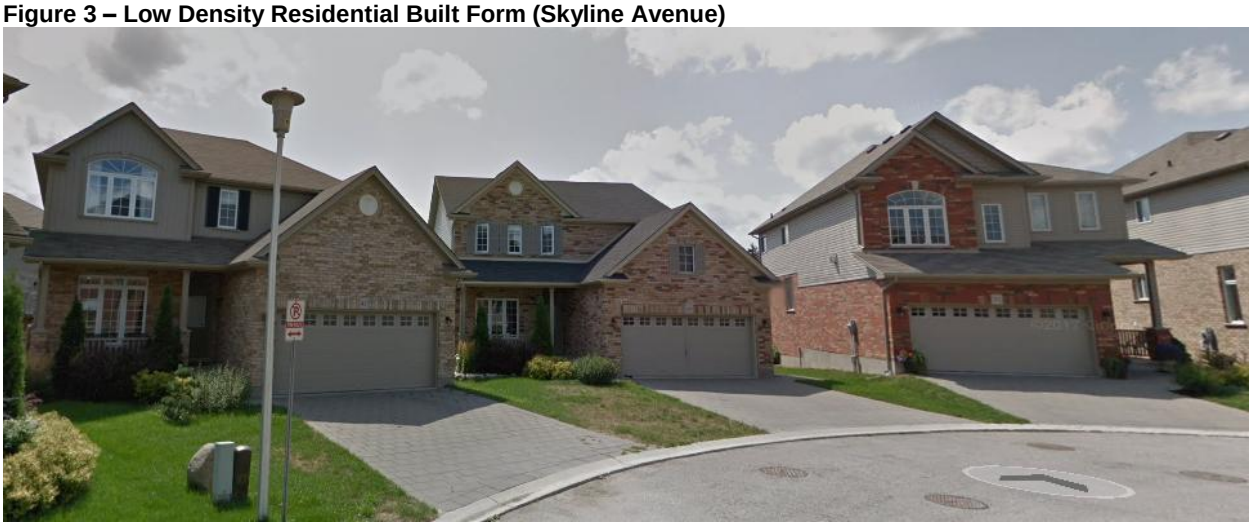


Figure 4 – Low Density Residential Built Form (Meadowsweet Trail)

Lands within an 800m radius are comprised of a wider mix of residential uses, including both low density residential and medium density residential in the form of single detached dwellings and townhouse dwellings.

The medium density residential areas are generally comprised of 1 to 2-storey multiple attached dwellings in the form of townhouses, with attached garages and front yard driveways. Similar exterior finishes, generally in the form of masonry and vinyl siding, are used throughout each respective housing development (Figures 5, 6, and 7).

Figure 5 – Medium Density Residential Built Form (Sunnystone Road)

Figure 6 – Low Density Residential Built Form (Chambers Avenue)

Figure 7 – Low Density Residential Built Form (Elderberry Avenue)

DESIGN GOALS AND OBJECTIVES

Given the surrounding built form and land use context, the goal of the proposed development is to redevelop/intensify the underutilized subject lands for residential uses in a manner that is compatible with surrounding built form; will contribute and fulfill the planned function of the area; and, will provide visually attractive residential buildings. As such, the proposed developed is intended to:

- Provide a development that utilizes high-quality materials in a built form compatible with proximate low-density residential dwellings;
- Preserve as many trees on the site as reasonably possible;
- Appropriately integrate the built form into the existing context, specifically in terms of massing, height, and articulation;
- Ensure the maintenance, and enhancement where possible, of privacy between the subject lands and abutting properties;
- Provide for a redevelopment of the subject lands that will be supportive of investments in public transit, and provides convenient access for pedestrians as well as those arriving by car; and,
- Improve and enhance the Sunningdale Road East streetscape.

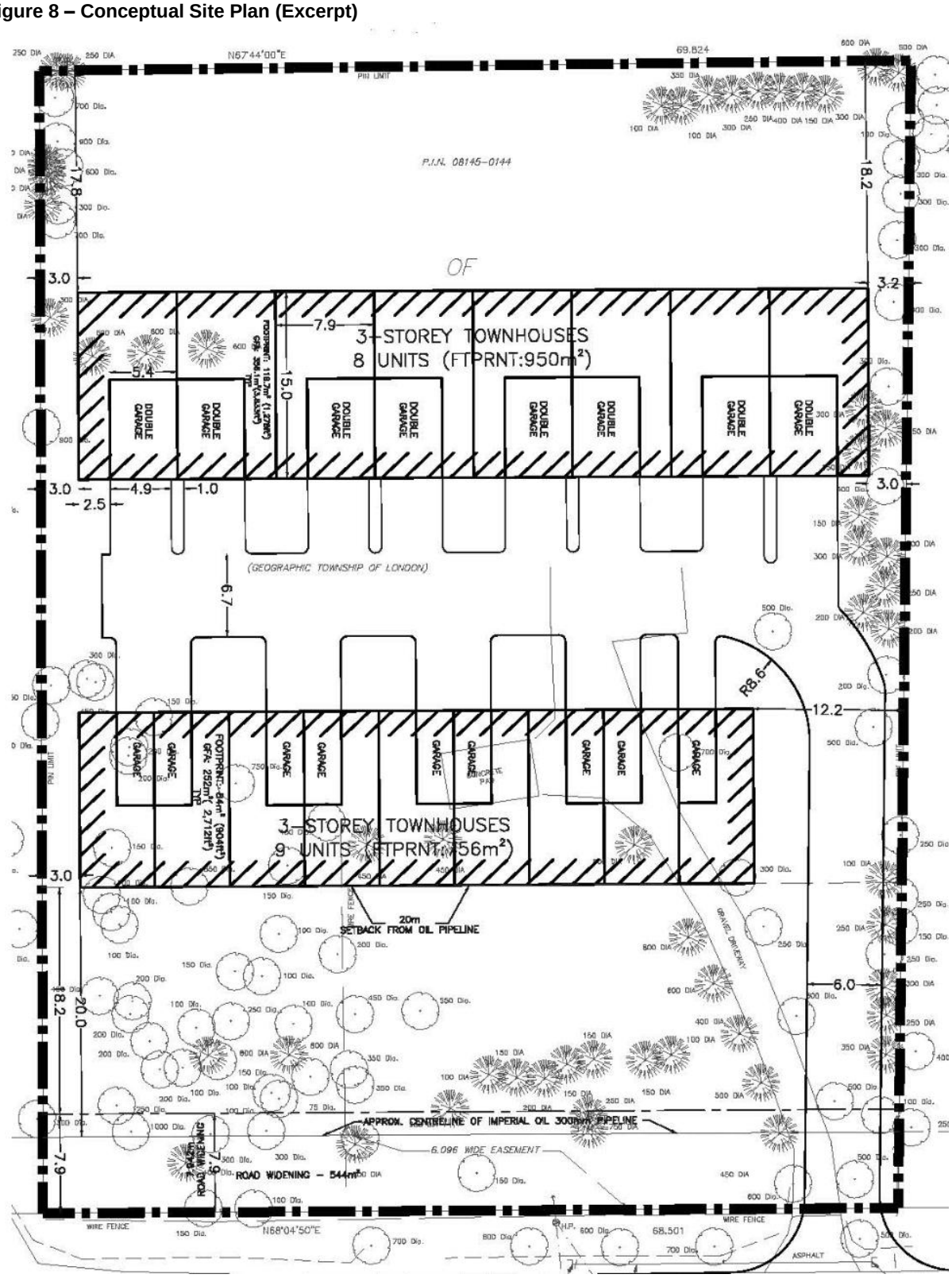
THE PROPOSAL AND CONCEPTUAL DESIGN

Westchester Homes proposes to redevelop the subject lands for a total of seventeen (17) townhouse dwelling units (Figure 8). The proposed site design provides one, 3-storey townhouse block with nine (9) dwelling units on the south side of a mutual driveway and another 3-storey townhouse block with eight (8) dwelling units on the north side of the driveway. An existing oil pipeline with a 6m (20ft) easement in favour of Imperial Oil runs along the front property line of the subject lands. A 20m (65.6ft) setback from the centerline of the oil pipeline is required for any future development. For this reason, the front townhouse block is located 26.1m (85.63 ft) from the current limit of the Sunningdale Road East right-of-way.

Due to the large setback between the oil pipeline and the front townhouse block, it is anticipated that a large amount of trees and vegetation at the front of the property can be retained, providing a significant visual screen from Sunningdale Road East. A Tree Preservation Report and Plan, prepared by Ron Koudys Landscape Architects demonstrates that a significant number of trees will be preserved along the frontage of the development. Given the large

distance between the units and the street, direct pedestrian connections have not been provided.

Figure 8 – Conceptual Site Plan (Excerpt)



Shared vehicular access is provided by a single, 6.0m wide driveway close to the easterly lot line, in a similar location as the current driveway. Each townhouse unit is provided with an individual parking area and attached garage, accessed from the common driveway. Parking areas will not be visible from the public realm due to their location behind the front townhouse block. Units in the front building are provided with a single car garage while units in the rear building are provided with double car garages. The area between the townhouse buildings will be hardscaped with the driveways, patios, and a sidewalk. “Dark Sky” lighting is proposed to illuminate the driveway and parking areas on the subject lands, limiting light cast onto abutting lands.

The buildings are proposed to be approximately 11 metres in height, modestly taller than the predominantly 1- and 2-storey dwellings in the adjacent low density and medium density residential area across Sunningdale Road East to the south. Building entrances are provided on the front elevations of the building (north elevation for front townhouse block; south elevation for rear townhouse block). The rear of each townhouse is proposed to feature a balcony on the third level. The south elevations of the front building, facing Sunningdale Road East, will receive detailed facade treatments to address the street.

Conceptual cladding materials include white and grey brick, white stucco, and black asphalt shingles. Conceptual front, rear, and side elevations are provided in Figures 9, 10, 11, and 12. Each townhouse unit is proposed to have an attached garage at grade, with access to the front entrance from a raised porch. Front elevations are predominantly white brick, with extensive glazing and white stucco pillars. The rear of the townhouse units feature similar exterior finishes, with balconies proposed on the third level and patios at the ground floor. An additional white stucco header above the balconies visually delineate each unit.

Figure 9 – Conceptual Front Elevation, Details(Excerpt)

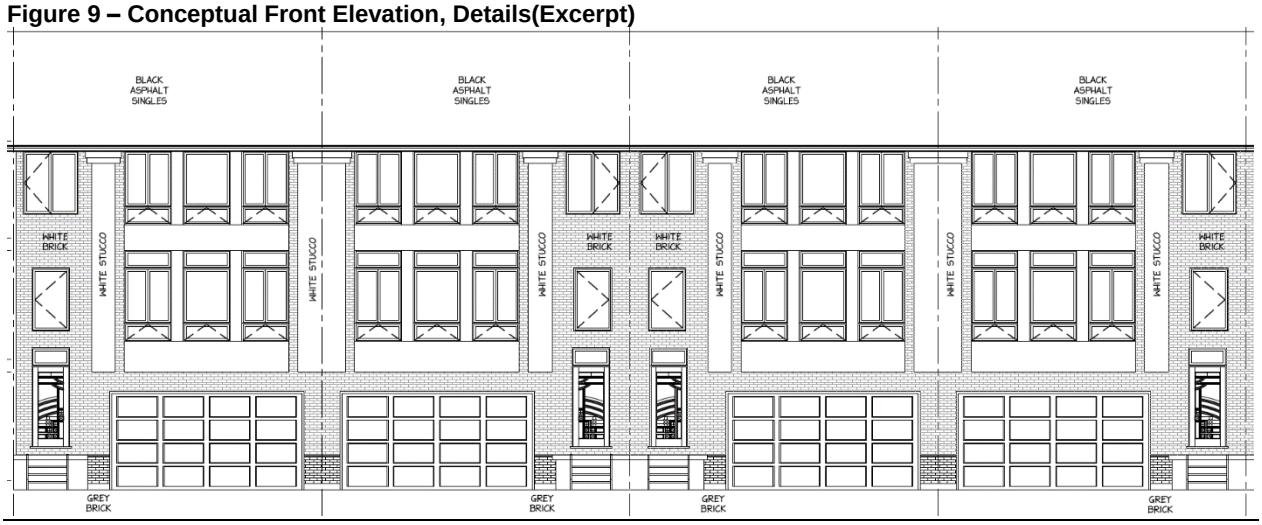


Figure 10 – Conceptual Rear Elevation, Details (Excerpt)

Figure 11 – Conceptual Side Elevation

Windows are proposed on both side elevations of each building. Further detail regarding the architectural treatment is discussed in the "Compatibility Report" section of this *Urban Design Brief*.

Figure 12 – Conceptual Front and Rear Elevations

Design inspiration for the proposed townhouse dwellings was taken from a number of sources, including a conceptual townhouse design shown below in Figure 13.

Figure 13 – Design Inspiration Concept

DESIGN RESPONSE TO CITY DOCUMENTS

Due to the current transition between Official Plans (the 1989 City of London Official Plan and *The London Plan*), this Urban Design Brief address both documents. The 1989 City of London Official Plan is discussed first, and then a discussion on *The London Plan* policies follow.

1989 City of London Official Plan

The City of London Official Plan includes design principles that are to be applied to new developments. Section 11.1 lists the general design principles that are to be promoted in the preparation of development proposals. The individual principles listed do not always apply to each specific development, and are dependent upon the location and characteristics of the proposal.

The design principles relevant to this proposed development and how they are addressed are outlined as follows:

- **Trees** – As there are many trees on the subject lands, existing trees will be maintained wherever possible. See the associated *Tree Preservation Report* for additional details (Section 11.1.1 ii);

- **High Design Standards** –The proposed development provides a contemporary building design that makes use of modern design practices and high quality materials (Section 11.1.1 iv);

- **Redevelopment** - The proposed development will replace the former single detached dwelling with efficient, well designed housing that adds to the mix and range of housing in this area of the City of London (Section 11.1.1 vi);

- **Pedestrian Traffic Areas** – Pedestrian traffic to and from the proposed development is intended to be connected to the future public sidewalk along Sunningdale Road East. The location of the connection will be refined through the Site Plan Approval process. The area between the buildings is proposed to be hardscaped with patios and a sidewalk; this area will facilitate pedestrian traffic entering/exiting the buildings to/from the sidewalk abutting the parking area (Section 11.1.1 viii);

- **Access to Sunlight** – Access to sunlight is evaluated both in terms of potential effects on existing sunlight exposure to abutting lands and natural light penetration to the proposed development. Appropriate glazing is proposed on all north and south elevations, maximizing the amount of natural light that will enter each unit. There will be no significant shadowing on abutting lands, and no shadowing on proximate residential lands (Section 11.1.1 ix);

- **Landscaping** –Existing trees and vegetation will be retained to the maximum amount feasible. Additional plantings and landscaping will be refined through the Site Plan Approval process (Section 11.1.1 x);

- **Privacy** – There are no privacy concerns, given the physical separation of the subject lands from other residential uses by an arterial road and the large front yard setback. Abutting lands to the east and west consist of vacant open space. (Section 11.1.1 xii);

- **Outdoor Space** – Large yards are provided for the proposed units, providing ample outdoor space (Section 11.1.1 xiii); and,

- **Waste Management** – Although a waste management strategy has not yet been finalized, it is anticipated that waste will be collected by a private collection service and pickup areas will be internal to the site (Section 11.1.1 xix).

The London Plan

The London Plan has been adopted by Council, but is not yet in full force and effect. *The London Plan* sets out urban design policies that are applicable to both the city as a whole, and to specific place types. The subject lands are within the *"Neighbourhoods"* Place Type, and fall under the policies of the *City Design* chapter in *The London Plan*, which set out the general urban design policies that apply to the entire city. The proposed development is consistent with these policies as follows:

City Design

The proposed residential buildings are separate and distinct from the adjacent low density residential area. Although the buildings will be largely screened due to trees and vegetation, the proposed built form provides a well-designed, low-rise built form that enhances the visual aesthetics of the area (*Sections 197, 210*). This form is unique in the immediate area and adds variety to the range of existing building types. The design of the proposed development responds to the larger context of the subject lands and the abutting lands, being predominantly single detached dwellings, through a compatible, and aesthetically pleasing development *(Sections 252, 255, 256, 259, 261, 266, 268, 269, 272*). The building maintains a low-rise form and exhibits architectural features which are compatible with proximate low density residential buildings (*Sections 284, 285, 286, 287, 291, 295, 296)*.

SECTION 2

COMPATIBILITY REPORT

Built Form

The low-rise townhouses, being three storeys in height with a sloped roof, are compatible with proximate single detached dwellings.

Building entrances face the common driveway/parking area between the two townhouse blocks. Balconies are proposed on the rear elevation of the front townhouse buildings, which will address the Sunningdale Road East.

Massing and Articulation

The 3-storey massing of the proposed development is typical of new townhome construction and is compatible with proximate uses. Due to existing Imperial Oil easement, the buildings are located close away from the street, and therefore are less apparent when views from the public realm than if a standard setback was used.The height of the proposed development is modestly higher than the single-detached dwellings across Sunningdale Road East to the south; this height relationship is compatible given the separation of the subject lands from adjacent residential uses.

Individual units are articulated through architectural treatment consisting of columns, fenestration, and headers. Individual units are easily distinguishable and break up the massing of the building when viewed from the street. The proposed development provides as much street presence as possible, given the required setback from the oil pipeline.

No shadowing of proximate residential uses will occur due to the subject lands being on the north side of Sunningdale Road East.

Architectural Treatment

The overall style of the proposed development is a contemporary townhouse form with notable vertical elements. This approach allows the buildings to be compatible with the architectural style of the surrounding neighbourhood while providing unique and interesting features, such as white stucco columns. Generally, architectural treatments for the proposed buildings provide for a high quality building design that is visually stimulating and aesthetically pleasing. As noted above, individual units are easily identifiable due to the vertical architectural features to provide a heightened visual interest in the building's presentation to the street and provide a human scale.

The overall design of the building conveys a modern look while being respectful to the more contemporary character of the dwellings to the south.

Summary of Compatibility

The neighborhood character in this area of the City includes a mix of low density residential medium density residential, open space and future development lands. Through high quality urban design and architectural treatments, this development will complement existing and future development within this growing neighbourhood.

PUBLIC REALM

The existing public realm along this section of the north side of Sunningdale Road is made up of primarily the side yards of single detached dwellings that front onto internal roads (Lindisfarne Road and Skyline Avenue). There is no effective activation of the streetscape in this area. Due to the large setback requirement, many mature trees are to be retained, maintaining a naturalized element along this portion of Sunningdale Road East. As a result, the proposed development will be located well back from the street and will not be a significant source of street activation. The public realm is largely maintained with the proposed development.

CONCLUSION

The proposed development consists of two townhouse blocks, with a total of seventeen (17) units, located along the north side of Sunningdale Road East. The built form, scale, and massing of the proposed buildings is compatible with the surrounding neighborhood, which is made up of predominantly low-density residential uses and vacant land. Due to the required 20m setback from the oil pipeline, the first tier of townhouses are located well back from the street, and thereby permit the retention of trees and vegetation at the front of the site. Overall, the proposal introduces attractive, aesthetically pleasing buildings that are appropriate for, and compatible with, with the existing residential context and streetscape.