



Staff Report Summary

Item # 1-4

Ward #3

Files: B006/21, B007/21, B008/21 and B009/21

Applicant: Carmelo and Milena Calabro

Address: 167 National Drive, Woodbridge

Agent: Lou Pompili

Please note that comments and written public submissions received after the preparation of this Staff Report (up until noon on the last business day prior to the day of the scheduled hearing date) will be provided as an addendum.

Commenting Department	<input checked="" type="checkbox"/> Positive Comment	Condition(s) <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/> Negative Comment	
Committee of Adjustment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Building Standards	<input checked="" type="checkbox"/>	
Development Planning		
Development Engineering	<input checked="" type="checkbox"/> Revised from checkbox	
Parks, Forestry and Horticulture Operations	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
By-law & Compliance	<input checked="" type="checkbox"/>	
Financial Planning & Development	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Real Estate Department	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Fire Department		
TRCA	<input checked="" type="checkbox"/>	
Bell Canada	<input checked="" type="checkbox"/>	
Region of York	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Alectra (Formerly PowerStream)	<input checked="" type="checkbox"/>	
Public Correspondence (see Schedule B)	<input checked="" type="checkbox"/>	

Adjournment History: None.

Background History: None.

Staff Report Prepared By: Lenore Providence
Hearing Date: December 8, 2021

***Please note that additional comments may be received after the publication of the Staff Report. These comments will be processed as an addendum (see website for details).**



Consent Applications
B006/21 - B009/21

Agenda Item: 1-4
Ward: 3

Staff Report Prepared By: Lenore Providence Assistant Secretary Treasurer

Date & Time of Live Stream Hearing: **Wednesday, December 8, 2021, at 6:00 p.m.**

As a result of COVID-19, Vaughan City Hall and all other City facilities are closed to the public at this time.

A live stream of the meeting is available at Vaughan.ca/LiveCouncil

Please submit written comments by mail or email to:

City of Vaughan
Office of the City Clerk – Committee of Adjustment
2141 Major Mackenzie Drive, Vaughan, ON L6A 1T1
cofa@vaughan.ca

To make an electronic deputation at the meeting please contact the Committee of Adjustment at cofa@vaughan.ca or 905-832-8504. Ext. 8332

Written comments or requests to make a deputation must be received by noon on the last business day before the meeting.

Applicant: Carmelo & Milena Calabro

Agent: Lou Pompili

Property: **167 National Drive, Woodbridge ON**

Zoning: The subject lands are zoned RR 9(178) and subject to the provisions of Exception under By-law 1-88 as amended

OP Designation: Vaughan Official Plan 2010 ('VOP 2010'): "Natural Areas"

Related Files: B006/21 – B009/21, inclusive and A117/21 – A121/21, inclusive.

Purpose: Consent Applications B006/21, B007/21, B008/21 & B009/21 propose to sever (create) four (4) new lots for future residential purposes having frontage onto National Drive. The severed and retained parcels are vacant.

The proposed lots require relief from Zoning By-law 1-88, as amended, to permit reduced lot area and frontage on both the severed and retained parcels as applied for through Minor Variance Applications A117/21, A118/21, A119/21, A120/21 and A121/21.

File Nos.	Proposed Lot Area	Proposed Lot Frontage
B006/21 *Severed Land	2259.00 m ² <i>*Variance Required</i>	41.67 metres <i>*Variance Required</i>
B007/21 *Severed Land	2383.00 m ² <i>*Variance Required</i>	35.0 metres <i>*Variance Required</i>
B008/21 *Severed Land	2406.30 m ² <i>**Variance Required</i>	35.0 metres <i>*Variance Required</i>
B009/21 *Severed Land	2087.30 m ² <i>*Variance Required</i>	35.0 metres <i>*Variance Required</i>
B009/21 *Retained Land	1943.20m ² <i>*Variance Required</i>	54.77 metres <i>*No Variance Req'd</i>

Background (previous applications approved by the Committee on the subject land): None.

Adjournment History: None

Staff & Agency Comments

Please note that staff/agency comments received after the preparation of this Report will be provided as an addendum item to the Committee. Addendum items will shall only be received by the Secretary Treasurer until **noon** on the last business day **prior** to the day of the scheduled Meeting.

Committee of Adjustment:

Public notice was mailed on November 23, 2021

Applicant confirmed posting of signage on November 18, 2021

Existing Building or Structures on the subject land: The severed and retained parcels are vacant.

Committee of Adjustment recommended conditions of approval:

File Nos.	Committee of Adjustment Conditions
B006/21	<ol style="list-style-type: none"> 1. That the applicant's solicitor provides the secretary-treasurer with a copy of the prepared draft transfer document to confirm the legal description and PIN of the subject lands. Subject land applies only to the severed parcel, leased land, easement etc. as conditionally approved by the Committee of Adjustment. 2. That the applicant provides two (2) full size copies of the deposited plan of reference of the entire land which conforms substantially with the application as submitted. 3. That Minor Variance Application(s) A117/21 - A121/21 are approved at the same time as the Consent application and becomes final and binding. 4. Payment of the Certificate Fee as provided on the City of Vaughan's Committee of Adjustment Fee Schedule.
B007/21	<ol style="list-style-type: none"> 1. That the applicant's solicitor provides the secretary-treasurer with a copy of the prepared draft transfer document to confirm the legal description and PIN of the subject lands. Subject land applies only to the severed parcel, leased land, easement etc. as conditionally approved by the Committee of Adjustment. 2. That the applicant provides two (2) full size copies of the deposited plan of reference of the entire land which conforms substantially with the application as submitted. 3. That Consent Application B006/21 receive final certification from the Secretary Treasurer and be registered on title. A copy of the registered transfer confirming registration of the Certificate of Official must be provided to the Secretary Treasurer to satisfy this condition. 4. That Minor Variance Application(s) A117/21 - A121/21 are approved at the same time as the Consent application and becomes final and binding. 5. Payment of the Certificate Fee as provided on the City of Vaughan's Committee of Adjustment Fee Schedule.
B008/21	<ol style="list-style-type: none"> 1. That the applicant's solicitor provides the secretary-treasurer with a copy of the prepared draft transfer document to confirm the legal description and PIN of the subject lands. Subject land applies only to the severed parcel, leased land, easement etc. as conditionally approved by the Committee of Adjustment. 2. That the applicant provides two (2) full size copies of the deposited plan of reference of the entire land which conforms substantially with the application as submitted. 3. That Consent Application B007/21 receive final certification from the Secretary Treasurer and be registered on title. A copy of the registered transfer confirming registration of the Certificate of Official must be provided to the Secretary Treasurer to satisfy this condition. 4. That Minor Variance Application(s) A117/21 - A121/21 are approved at the same time as the Consent application and becomes final and binding. 5. Payment of the Certificate Fee as provided on the City of Vaughan's Committee of Adjustment Fee Schedule.
B009/21	<ol style="list-style-type: none"> 1. That the applicant's solicitor provides the secretary-treasurer with a copy of the prepared draft transfer document to confirm the legal description and PIN of the subject lands. Subject land applies only to the severed parcel, leased land, easement etc. as conditionally approved by the Committee of Adjustment. 2. That the applicant provides two (2) full size copies of the deposited plan of reference of the entire land which conforms substantially with the application as submitted. 3. That Consent Application B008/21 receive final certification from the Secretary Treasurer and be registered on title. A copy of the registered transfer confirming registration of the Certificate of Official must be provided to the Secretary Treasurer to satisfy this condition. 4. That Minor Variance Application(s) A117/21 - A121/21 are approved at the same time as the Consent application and becomes final and binding. 5. Payment of the Certificate Fee as provided on the City of Vaughan's Committee of Adjustment Fee Schedule.

Building Standards (Zoning Review):

File Nos.	Zoning Comments
<p>B006/21</p>	<p>Stop Work Order(s) and Order(s) to Comply: There are no outstanding Orders on file</p> <p>A Building Permit has not been issued. The Ontario Building Code requires a building permit for structures that exceed 10m².</p> <p>By-law 1-88 a.a. defines Lot Frontage in Section 2.0 as:</p> <p>‘the horizontal distance between the side lot lines of a lot measured on a line at right angles to the lot centre line at a point 6.4 metres back from the front lot line. The "lot centre line" means the line joining the mid-points of the front and rear lot lines, but in the case of a corner lot, means a line drawn perpendicular from the mid-point of the rear lot line to meet the front lot line. In the case of a corner lot with an abutting sight triangle the lot frontage shall be the distance between the extension of the exterior side lot line and the other side lot line measured on a line at right angles to the lot centre line 6.4 metres back from the front lot line.’</p> <p>The applicant has provided figures for the proposed Lot Frontage and is responsible for ensuring that the method of measurement is in accordance with the by-law. If part of a lot is beyond the rim of a cliff or embankment having a slope of 30 degrees or more from the horizontal, or beyond the toe of such slope; then any required yard shall be measured from the nearest part of any building or structure to the nearest part of such part of the lot. [3.18 b)]</p> <p>Though no building or structure has been proposed, please note that the minimum required yards in a RR – Rural Residential Zone are 15.0 metres Front Yard, 15.0 metres Rear Yard, 4.5 metres Interior Side Yard, and 9.0 metres Exterior Side Yard in accordance with subsection 4.1.9, Schedule A.</p> <p>The lands are subject to regulation by the Toronto Regional Conservation Authority in accordance with Ontario Regulation 166/06.</p> <p>On October 20, 2021 Comprehensive Zoning By-law 01-2021 was enacted by Vaughan City Council. Please note that future development of the lands included in this application must comply with the requirements of this by-law, subject to the Transition provisions included under section 1.6.</p> <p>The applicant shall be advised that additional variances may be required upon review of detailed drawing for building permit/site plan approval.</p>
<p>B007/21</p>	<p>Stop Work Order(s) and Order(s) to Comply:</p> <p>There are no outstanding Orders on file</p> <p>A Building Permit has not been issued. The Ontario Building Code requires a building permit for structures that exceed 10m².</p> <p>By-law 1-88 a.a. defines Lot Frontage in Section 2.0 as:</p> <p>‘the horizontal distance between the side lot lines of a lot measured on a line at right angles to the lot centre line at a point 6.4 metres back from the front lot line. The "lot centre line" means the line joining the mid-points of the front and rear lot lines, but in the case of a corner lot, means a line drawn perpendicular from the mid-point of the rear lot line to meet the front lot line. In the case of a corner lot with an abutting sight triangle the lot frontage shall be the distance between the extension of the exterior side lot line and the other side lot line measured on a line at right angles to the lot centre line 6.4 metres back from the front lot line.’</p> <p>The applicant has provided figures for the proposed Lot Frontage and is responsible for ensuring that the method of measurement is in accordance with the by-law.</p> <p>If part of a lot is beyond the rim of a cliff or embankment having a slope of 30 degrees or more from the horizontal, or beyond the toe of such slope; then any required yard shall be measured from the nearest part of any building or structure to the nearest part of such part of the lot. [3.18 b)]</p> <p>Though no building or structure has been proposed, please note that the minimum required yards in a RR – Rural Residential Zone are 15.0 metres Front Yard, 15.0 metres Rear Yard, 4.5 metres Interior Side Yard, and 9.0 metres Exterior Side Yard in accordance with subsection 4.1.9, Schedule A.</p>

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Building Inspections (Septic):

No comments received to date (B006/21 – B009/21).

Development Planning:

Consent Applications B006/21, B007/21, B008/21, and B009/21 and A117/21, A118/21, A119/21, A120/21, and A121/21 are currently under review.

Development Engineering:

The Development Engineering (DE) Department has reviewed the submitted documents and Functional Servicing Brief dated 07 October 2021 prepared by Valdor Engineering Inc. (Valdor) and is not in a position to support approval of the Consent Applications **B006/21, B007/21, B008/21, and B009/21 based on the following comments/concerns:**

1. The proposed sanitary forcemain is not a standard design solution as per the City's Engineering Design Criteria and Standard Drawings. As it is a non-conventional design solution, the consideration for the forcemain and servicing strategy is more appropriately reviewed through the development planning application process to ensure the appropriate City technical staff can be circulated for their review and comment.
2. The DE department has concerns regarding the 90-degree bends in the proposed sanitary forcemain and uncertain as to whether the grade of the forcemain is a feasible solution to operate and maintain. Given the significant elevation differences; and the extensive lengths of the forcemain (~85m long) and the sanitary extension (~64m long), the proposed servicing strategy is more appropriately reviewed through the development planning application process to ensure the appropriate City technical staff can be circulated for their review and comment.
3. The proposed 64m sanitary extension represents a significant infrastructure installation within the City's right-of-way. The scope of this undertaking is well beyond the minor servicing connections normally associated with consent applications and constructed by the City's contractors. The undertaking of the sanitary sewer extension of the proposed size would typically be coordinated and completed by the Owner's contractor and would require a development agreement between the Owner and the City to ensure appropriate conditions, clauses, fees, securities, insurance, maintenance responsibilities, etc. are accounted for prior to City assumption. This infrastructure work will also likely require the Owner obtain Ministry of the Environment, Conservation, and Parks (MECP) Environmental Compliance Approval (ECA) from York Region as part of transfer of review program. The preparation and execution of this type of development agreement is more appropriately drafted and created through the development planning application process to ensure the appropriate City technical staff are circulated for their review and comment.
4. Valdor Engineering's Site Servicing Brief did not explore any other design solutions for sanitary servicing. Given the complexities of their non-conventional design solution, Valdor Engineering should discuss with City technical staff other design solutions to be considered that may be acceptable to the City. This consideration is more appropriately explored through the development planning application process to ensure the appropriate technical staff and stakeholders are involved for input.
5. The sanitary sewer extension and sanitary forcemains are proposed to service the five single residential lots created as part of this consent application. Given that there are other existing privately serviced lots in the area, consideration should be made to provide opportunities to include existing lots in the servicing strategy and explore the potential for cost sharing of infrastructure works. This consideration is more appropriately explored through the development planning application process to ensure the appropriate technical staff and stakeholders are involved for input.
6. The availability of servicing capacity allocation will have to be assessed at the appropriate time in consultation with York Region.

The Minor Variance Application A117/21, A118/21, A119/21, A120/21, and A121/21 shall be read in conjunction with Consent Applications B006/21, B007/21, B008/21, and B009/21. Therefore, the Development Engineering (DE) Department is not in a position to support the approval of Minor Variance Applications A117/21, A118/21, A119/21, A120/21, and A121/21.

Parks Development – Forestry/Horticulture:

The following Forestry comments pertain to Consent Applications B006/21 – B009/21 and A117/21, A118/21, A119/21, A120/21, and A121/21:

The Oct 2021 EIS study by Dougan & Associates / Noica 2021 Tree Inventory does not accurately reflect current site conditions. An updated tree inventory/tree protection plan is required that takes into account all the past removals and future required removals to accommodate future development.

Arborist Report Requirements:

An Arborist Report must be completed by an ISA or MTCU certified Arborist. This report is to include the following:

- Percentage of total property canopy cover being removed
- Species of tree(s) being removed
- Diameter size of the tree(s), in centimeters, measured at the base of the tree and at breast height (DBH).
- Health/Condition of trees being removed
- Reason for removal
- For trees being preserved - hoarding requirement and lay out
- Replacement recommendations - if non-hazard tree(s) are planned for removal - please refer to the Tree Replacement Requirement guidelines found in the Tree Protection Protocol

By-Law and Compliance, Licensing and Permit Services:

No comment no concerns (B006/21 – B009/21)

Development Finance:

Recommended conditions of approval B006/21 – B009/21:

File Nos.	Finance Conditions
B006/21	<ol style="list-style-type: none"> 1. The owner shall pay of a Tree Fee, approved by Council as of the date of granting the consent. Payment is to be made by certified cheque, to the satisfaction of the City of Vaughan Financial Planning and Development Finance Department (contact Nelson Pereira to have this condition cleared). 2. The owner shall pay all property taxes as levied. Payment is to be made by certified cheque, to the satisfaction of the City of Vaughan Financial Planning and Development Finance Department (contact Nelson Pereira to have this condition cleared).
B007/21	<ol style="list-style-type: none"> 1. The owner shall pay of a Tree Fee, approved by Council as of the date of granting the consent. Payment is to be made by certified cheque, to the satisfaction of the City of Vaughan Financial Planning and Development Finance Department (contact Nelson Pereira to have this condition cleared). 2. The owner shall pay all property taxes as levied. Payment is to be made by certified cheque, to the satisfaction of the City of Vaughan Financial Planning and Development Finance Department (contact Nelson Pereira to have this condition cleared).
B008/21	<ol style="list-style-type: none"> 1. The owner shall pay of a Tree Fee, approved by Council as of the date of granting the consent. Payment is to be made by certified cheque, to the satisfaction of the City of Vaughan Financial Planning and Development Finance Department (contact Nelson Pereira to have this condition cleared). 2. The owner shall pay all property taxes as levied. Payment is to be made by certified cheque, to the satisfaction of the City of Vaughan Financial Planning and Development Finance Department (contact Nelson Pereira to have this condition cleared).
B009/21	<ol style="list-style-type: none"> 1. The owner shall pay of a Tree Fee, approved by Council as of the date of granting the consent. Payment is to be made by certified cheque, to the satisfaction of the City of Vaughan Financial Planning and Development Finance Department (contact Nelson Pereira to have this condition cleared). 2. The owner shall pay all property taxes as levied. Payment is to be made by certified cheque, to the satisfaction of the City of Vaughan Financial Planning and Development Finance Department (contact Nelson Pereira to have this condition cleared).

Real Estate:

Recommended conditions of approval B006/21 – B009/21:

File Nos.	Real Estate Conditions
B006/21	The applicant shall provide the City with an appraisal report and valuation of the subject land (land only) to be prepared by an accredited appraiser. Payment of a Parkland levy to the City in lieu of the deeding of land for park purposes shall be made if a new lot is being created. Said levy is to be 5% of the appraised market value of the subject land as of the date of the Committee of Adjustment giving notice to the Applicant of the herein decision. Said levy shall be approved by the Director of Real Estate. Payment shall be made by certified cheque only.
B007/21	The applicant shall provide the City with an appraisal report and valuation of the subject land (land only) to be prepared by an accredited appraiser. Payment of a Parkland levy to the City in lieu of the deeding of land for park purposes shall be made if a new lot is being created. Said levy is to be 5% of the appraised market value of the subject land as of the date of the Committee of Adjustment giving notice to the Applicant of the herein decision. Said levy shall be approved by the Director of Real Estate. Payment shall be made by certified cheque only.
B008/21	The applicant shall provide the City with an appraisal report and valuation of the subject land (land only) to be prepared by an accredited appraiser. Payment of a Parkland levy to the City in lieu of the deeding of land for park purposes shall be made if a new lot is being created. Said levy is to be 5% of the appraised market value of the subject land as of the date of the Committee of Adjustment giving notice to the Applicant of the herein decision. Said levy shall be approved by the Director of Real Estate. Payment shall be made by certified cheque only.
B009/21	The applicant shall provide the City with an appraisal report and valuation of the subject land (land only) to be prepared by an accredited appraiser. Payment of a Parkland levy to the City in lieu of the deeding of land for park purposes shall be made if a new lot is being created. Said levy is to be 5% of the appraised market value of the subject land as of the date of the Committee of Adjustment giving notice to the Applicant of the herein decision. Said levy shall be approved by the Director of Real Estate. Payment shall be made by certified cheque only.

Fire Department:

No comments received to date.

Schedule A – Plans & Sketches**Schedule B – Correspondence (Public) B006/21 – B009/21 & Minor Variance Applications A117/21-A121/21:**

Name	Address	Date Received	Summary
Ken & Elinore Wragge	182 National Drive	November 28, 2021	Letter of Opposition
Roy & Joan Hintsa	198 National Drive	November 29, 2021	Letter of Opposition
Sylvia Kada	215 National Drive	November 30, 2021	Letter of Opposition

Schedule C - Development Planning & Agency Comments B006/21 – B009/21 & Minor Variance Applications A117/21-A121/21:

Agency	Recommendation
Alectra - B006/21 – B009/21	No concerns or objections
Region of York - B006/21 – B009/21	No concerns with recommended conditions
TRCA - B006/21 – B009/21	Recommending Refusal
Bell Canada - B006/21 – B009/21	No concerns or objections

Development Planning: Consent Applications B006/21, B007/21, B008/21, and B009/21 and A117/21, A118/21, A119/21, A120/21, and A121/21 are currently under review.

Schedule D - Previous Approvals (Notice of Decision)

None

Schedule E – Studies & Reports

The following studies and reports were submitted by the applicant for B006/21, B007/21, B008/21, and B009/21 and A117/21, A118/21, A119/21, A120/21, and A121/21 and circulated to staff and agencies for review:

Study/Report	Consultant	Date of Study/Report
Environmental Impact Study	Dougan & Associates	October 2021
Land Use Planning Justification Report	GWD	October 2021
Site Servicing Brief	Valdor Engineering Inc.	October 7, 2021
Topographic Map	Noica Consulting	February 2021
Tree Inventory Table	Noica Consulting	January 29 and February 1, 2021
Tree Inventory Report	Noica Consulting	February 16, 2021

Staff Recommendations:

Staff and outside agencies (i.e. TRCA) act as advisory bodies to the Committee of Adjustment. Comments received are provided in the form of recommendations to assist the Committee.

The Planning Act sets the standard to which provincial interests, provincial and local policies and goals are implemented. Accordingly, review of the application considers the following:

- ✓ Conform to Section 51(24) as required by Section 53(12) of the Planning Act.
- ✓ Conform to the City of Vaughan Official Plan.
- ✓ Conform to the Provincial Policy Statements as required by Section 3(1) of the Planning Act.

Should the Committee find it appropriate to approve Consent Applications B006/21 – B009/21 the following conditions of approval have been recommended as part of this report:

Recommended Conditions of Approval Consent Application B006/21:

	Department/Agency	Condition
1	Committee of Adjustment Christine Vigneault 905-832-8585 x 8332 Christine.vigneault@vaughan.ca	<ol style="list-style-type: none"> 1. That the applicant's solicitor provides the secretary-treasurer with a copy of the prepared draft transfer document to confirm the legal description and PIN of the subject lands. Subject land applies only to the severed parcel, leased land, easement etc. as conditionally approved by the Committee of Adjustment. 2. That the applicant provides two (2) full size copies of the deposited plan of reference of the entire land which conforms substantially with the application as submitted. 3. That Minor Variance Application(s) A117/21 - A121/21 are approved at the same time as the Consent application and becomes final and binding. 4. Payment of the Certificate Fee as provided on the City of Vaughan's Committee of Adjustment Fee Schedule. 5. That a Surveyors Certificate confirming lot area, frontage and lot depth is submitted.
2	Development Finance Nelson Pereira 905-832-8585 x 8393 nelson.pereira@vaughan.ca	<ol style="list-style-type: none"> 1. The owner shall pay of a Tree Fee, approved by Council as of the date of granting the consent. Payment is to be made by certified cheque, to the satisfaction of the City of Vaughan Financial Planning and Development Finance Department (contact Nelson Pereira to have this condition cleared). 2. The owner shall pay all property taxes as levied. Payment is to be made by certified cheque, to the satisfaction of the City of Vaughan Financial Planning and Development Finance Department (contact Nelson Pereira to have this condition cleared).
3	Real Estate Ashley Ben-Lolo 905-832-8585 x 8474 ashley.ben-lolo@vaughan.ca	The applicant shall provide the City with an appraisal report and valuation of the subject land (land only) to be prepared by an accredited appraiser. Payment of a Parkland levy to the City in lieu of the deeding of land for park purposes shall be made if a new lot is being created. Said levy is to be 5% of the appraised market value of the subject land as of the date of the Committee of Adjustment giving notice to the Applicant of the herein decision. Said levy shall be approved by the Director of Real Estate. Payment shall be made by certified cheque only.
4	York Region Gabrielle Hurst 1-877 464 9675 ext 71538 gabrielle.hurst@york.ca	Prior to final approval, the City of Vaughan shall confirm to the Region that water and wastewater services are available to the subject development and have been allocated by the City of Vaughan
5	Parks, Forestry and Horticulture Operations Zachary Guizzetti 905-832-8585 x3614 Zachary.Guizzetti@vaughan.ca	An updated Arborist Report specifically tree inventory & tree protection plan is required for review.

Recommended Conditions of Approval Consent Application B007/21:

	Department/Agency	Condition
1	Committee of Adjustment Christine Vigneault 905-832-8585 x 8332 Christine.vigneault@vaughan.ca	<ol style="list-style-type: none"> 1. That the applicant's solicitor provides the secretary-treasurer with a copy of the prepared draft transfer document to confirm the legal description and PIN of the subject lands. Subject land applies only to the severed parcel, leased land, easement etc. as conditionally approved by the Committee of Adjustment. 2. That the applicant provides two (2) full size copies of the deposited plan of reference of the entire land which conforms substantially with the application as submitted. 3. That Consent Application B006/21 receive final certification from the Secretary Treasurer and be registered on title. A copy of the registered transfer confirming registration of the Certificate of Official must be provided to the Secretary Treasurer to satisfy this condition. 4. That Minor Variance Application(s) A117/21 - A121/21 are approved at the same time as the Consent application and becomes final and binding. 5. Payment of the Certificate Fee as provided on the City of Vaughan's Committee of Adjustment Fee Schedule.
2	Development Finance Nelson Pereira 905-832-8585 x 8393 nelson.pereira@vaughan.ca	<ol style="list-style-type: none"> 1. The owner shall pay of a Tree Fee, approved by Council as of the date of granting the consent. Payment is to be made by certified cheque, to the satisfaction of the City of Vaughan Financial Planning and Development Finance Department (contact Nelson Pereira to have this condition cleared). 2. The owner shall pay all property taxes as levied. Payment is to be made by certified cheque, to the satisfaction of the City of Vaughan Financial Planning and Development Finance Department (contact Nelson Pereira to have this condition cleared).
3	Real Estate Ashley Ben-Lolo 905-832-8585 x 8474 ashley.ben-lolo@vaughan.ca	<p>The applicant shall provide the City with an appraisal report and valuation of the subject land (land only) to be prepared by an accredited appraiser. Payment of a Parkland levy to the City in lieu of the deeding of land for park purposes shall be made if a new lot is being created. Said levy is to be 5% of the appraised market value of the subject land as of the date of the Committee of Adjustment giving notice to the Applicant of the herein decision. Said levy shall be approved by the Director of Real Estate. Payment shall be made by certified cheque only.</p>
4	York Region Gabrielle Hurst 1-877 464 9675 ext 71538 gabrielle.hurst@york.ca	<p>Prior to final approval, the City of Vaughan shall confirm to the Region that water and wastewater services are available to the subject development and have been allocated by the City of Vaughan</p>
5	Parks, Forestry and Horticulture Operations Zachary Guizzetti 905-832-8585 x3614 Zachary.Guizzetti@vaughan.ca	<p>An updated Arborist Report specifically tree inventory & tree protection plan is required for review.</p>

Recommended Conditions of Approval Consent Application B008/21:

	Department/Agency	Condition
1	Committee of Adjustment Christine Vigneault 905-832-8585 x 8332 Christine.vigneault@vaughan.ca	<ol style="list-style-type: none"> 1. That the applicant's solicitor provides the secretary-treasurer with a copy of the prepared draft transfer document to confirm the legal description and PIN of the subject lands. Subject land applies only to the severed parcel, leased land, easement etc. as conditionally approved by the Committee of Adjustment. 2. That the applicant provides two (2) full size copies of the deposited plan of reference of the entire land which conforms substantially with the application as submitted. 3. That Consent Application B007/21 receive final certification from the Secretary Treasurer and be registered on title. A copy of the registered transfer confirming registration of the Certificate of Official must be provided to the Secretary Treasurer to satisfy this condition.

	Department/Agency	Condition
		<p>4. That Minor Variance Application(s) A117/21 - A121/21 are approved at the same time as the Consent application and becomes final and binding.</p> <p>5. Payment of the Certificate Fee as provided on the City of Vaughan's Committee of Adjustment Fee Schedule.</p>
2	<p>Development Finance Nelson Pereira</p> <p>905-832-8585 x 8393 nelson.pereira@vaughan.ca</p>	<p>1. The owner shall pay of a Tree Fee, approved by Council as of the date of granting the consent. Payment is to be made by certified cheque, to the satisfaction of the City of Vaughan Financial Planning and Development Finance Department (contact Nelson Pereira to have this condition cleared).</p> <p>2. The owner shall pay all property taxes as levied. Payment is to be made by certified cheque, to the satisfaction of the City of Vaughan Financial Planning and Development Finance Department (contact Nelson Pereira to have this condition cleared).</p>
3	<p>Real Estate Ashley Ben-Lolo</p> <p>905-832-8585 x 8474 ashley.ben-lolo@vaughan.ca</p>	<p>The applicant shall provide the City with an appraisal report and valuation of the subject land (land only) to be prepared by an accredited appraiser. Payment of a Parkland levy to the City in lieu of the deeding of land for park purposes shall be made if a new lot is being created. Said levy is to be 5% of the appraised market value of the subject land as of the date of the Committee of Adjustment giving notice to the Applicant of the herein decision. Said levy shall be approved by the Director of Real Estate. Payment shall be made by certified cheque only.</p>
4	<p>York Region Gabrielle Hurst</p> <p>1-877 464 9675 ext 71538 gabrielle.hurst@york.ca</p>	<p>Prior to final approval, the City of Vaughan shall confirm to the Region that water and wastewater services are available to the subject development and have been allocated by the City of Vaughan</p>
5	<p>Parks, Forestry and Horticulture Operations Zachary Guizzetti</p> <p>905-832-8585 x3614 Zachary.Guizzetti@vaughan.ca</p>	<p>An updated Arborist Report specifically tree inventory & tree protection plan is required for review.</p>

Recommended Conditions of Approval Consent Application B009/21:

	Department/Agency	Condition
1	<p>Committee of Adjustment Christine Vigneault</p> <p>905-832-8585 x 8332 Christine.vigneault@vaughan.ca</p>	<p>1. That the applicant's solicitor provides the secretary-treasurer with a copy of the prepared draft transfer document to confirm the legal description and PIN of the subject lands. Subject land applies only to the severed parcel, leased land, easement etc. as conditionally approved by the Committee of Adjustment.</p> <p>2. That the applicant provides two (2) full size copies of the deposited plan of reference of the entire land which conforms substantially with the application as submitted.</p> <p>3. That Consent Application B008/21 receive final certification from the Secretary Treasurer and be registered on title. A copy of the registered transfer confirming registration of the Certificate of Official must be provided to the Secretary Treasurer to satisfy this condition.</p> <p>4. That Minor Variance Application(s) A117/21 - A121/21 are approved at the same time as the Consent application and becomes final and binding.</p> <p>5. Payment of the Certificate Fee as provided on the City of Vaughan's Committee of Adjustment Fee Schedule.</p>
2	<p>Development Finance Nelson Pereira</p> <p>905-832-8585 x 8393 nelson.pereira@vaughan.ca</p>	<p>1. The owner shall pay of a Tree Fee, approved by Council as of the date of granting the consent. Payment is to be made by certified cheque, to the satisfaction of the City of Vaughan Financial Planning and Development Finance Department (contact Nelson Pereira to have this condition cleared).</p> <p>2. The owner shall pay all property taxes as levied. Payment is to be made by certified cheque, to the satisfaction of the City of Vaughan Financial Planning and Development Finance Department (contact Nelson Pereira to have this condition cleared).</p>
3	<p>Real Estate Ashley Ben-Lolo</p>	<p>The applicant shall provide the City with an appraisal report and valuation of the subject land (land only) to be prepared by an accredited appraiser. Payment of a Parkland levy to the City in</p>

	Department/Agency	Condition
	905-832-8585 x 8474 ashley.ben-lolo@vaughan.ca	lieu of the deeding of land for park purposes shall be made if a new lot is being created. Said levy is to be 5% of the appraised market value of the subject land as of the date of the Committee of Adjustment giving notice to the Applicant of the herein decision. Said levy shall be approved by the Director of Real Estate. Payment shall be made by certified cheque only.
4	York Region Gabrielle Hurst 1-877 464 9675 ext 71538 gabrielle.hurst@york.ca	Prior to final approval, the City of Vaughan shall confirm to the Region that water and wastewater services are available to the subject development and have been allocated by the City of Vaughan
5	Parks, Forestry and Horticulture Operations Zachary Guizzetti 905-832-8585 x3614 Zachary.Guizzetti@vaughan.ca	An updated Arborist Report specifically tree inventory & tree protection plan is required for review.

Warning:

Conditions must be fulfilled within one year from the date of the giving of the Notice of Decision, failing which this application shall thereupon be deemed to be refused. No extension to the last day for fulfilling conditions is permissible.

Notice to the Applicant – Development Charges

That the payment of the Regional Development Charge, if required, is payable to the City of Vaughan before issuance of a building permit in accordance with the Development Charges Act and the Regional Development Charges By-law in effect at the time of payment.

That the payment of the City Development Charge, if required, is payable to the City of Vaughan before issuance of a building permit in accordance with the Development Charges Act and the City's Development Charges By-law in effect at the time of payment.

That the payment of the Education Development Charge if required, is payable to the City of Vaughan before issuance of a building permit in accordance with the Development Charges Act and the Boards of Education By-laws in effect at the time of payment

That the payment of Special Area Development charge, if required, is payable to the City of Vaughan before issuance of a building permit in accordance with the Development Charges Act and The City's Development Charge By-law in effect at the time of Building permit issuance to the satisfaction of the Reserves/Capital Department.

Notice to Public

PLEASE NOTE: As a result of COVID-19, Vaughan City Hall and all other City facilities are closed to the public at this time.

PUBLIC CONSULTATION DURING OFFICE CLOSURE: Any person who supports or opposes this application, but is unable to attend the hearing, may make a written submission, together with reasons for support or opposition. Written submissions on an Application shall only be received until **noon** on the last business day **prior** to the day of the scheduled hearing. Written submissions can be mailed and/or emailed to:

City of Vaughan
Office of the City Clerk – Committee of Adjustment
2141 Major Mackenzie Drive, Vaughan, ON L6A 1T1
cofa@vaughan.ca

ELECTRONIC PARTICIPATION: During the COVID-19 emergency, residents can view a live stream of the meeting [Vaughan.ca/LiveCouncil](https://vaughan.ca/LiveCouncil). To make an electronic deputation, residents must complete and submit a [Public Deputation Form](#) no later than **noon** on the last business day prior to the scheduled hearing. To obtain a Public Deputation Form please contact our office or visit www.vaughan.ca

Presentations to the Committee are generally limited to 5 minutes in length. Please note that Committee of Adjustment meetings may be audio/video recorded. Your name, address comments and any other personal information will form part of the public record pertaining to this application.

PUBLIC RECORD: Personal information is collected under the authority of the Municipal Act, the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA), the Planning Act and all other relevant legislation, and will be used to assist in deciding on this matter. All personal information (as defined by MFIPPA), including (but not limited to) names, addresses, opinions and comments collected will become property of the City of Vaughan, will be made available for public disclosure (including being posted on the internet) and will be used to assist the Committee of Adjustment and staff to process this application.

NOTICE OF DECISION: If you wish to be notified of the decision in respect to this application or a related Ontario Land Tribunal (OLT) hearing you must complete a Request for Decision form and submit to the Secretary Treasurer (ask staff for details). In the absence of a written request to be notified of the Committee's decision you will **not** receive notice.

For more information please contact the City of Vaughan, Committee of Adjustment

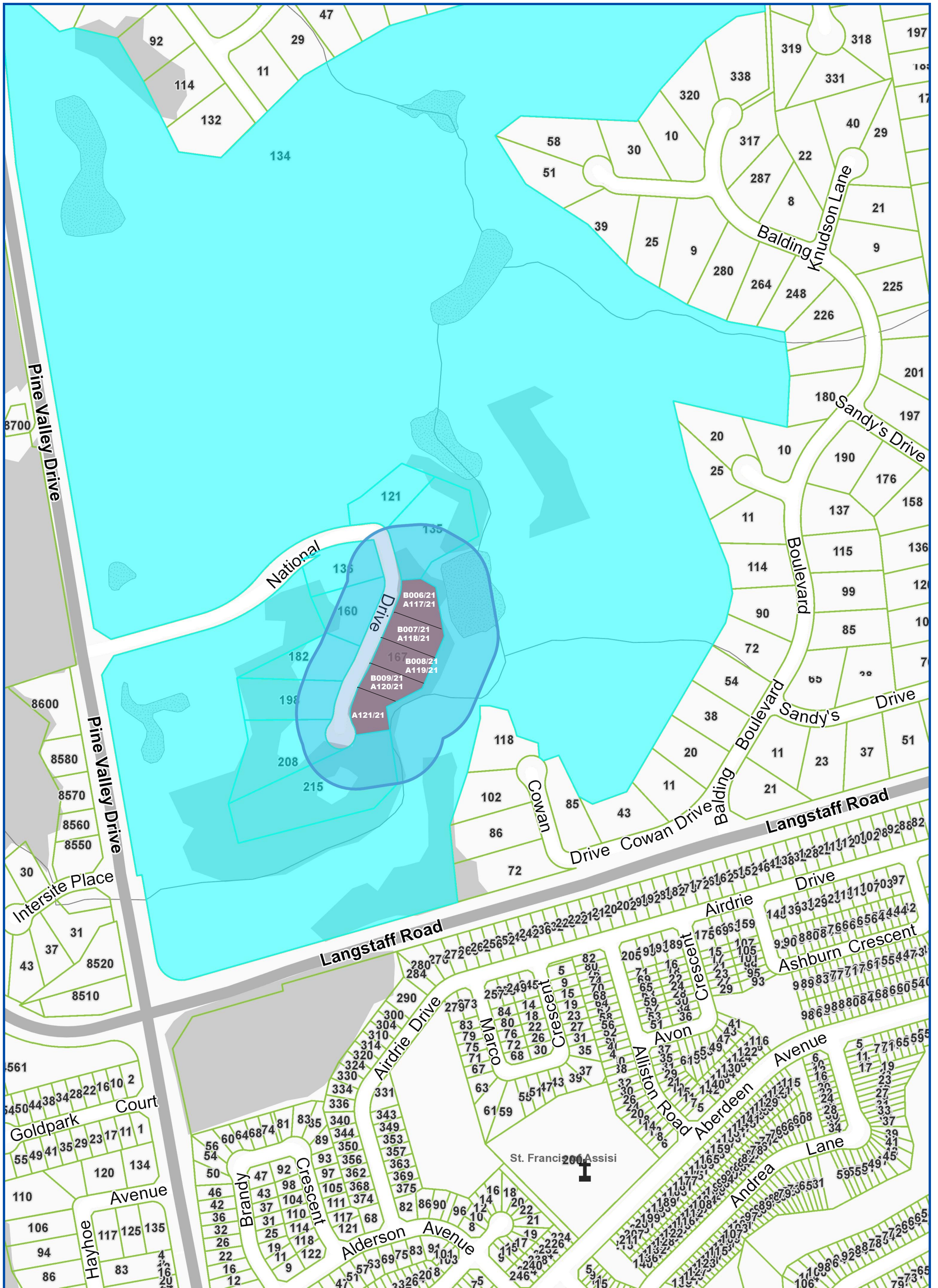
T 905 832 8585 Extension 8394
E CofA@vaughan.ca

Schedule A: Plans & Sketches

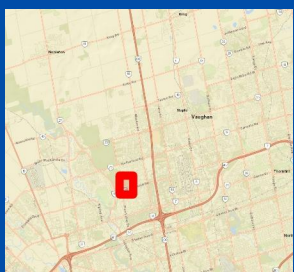
Please note that the correspondence listed in Schedule A is not comprehensive. Plans & sketches received after the preparation of this staff report will be provided as an addendum.

Location Map

Site Plan & Sketches



Map Information:



Title: NOTIFICATION MAP - B006/21 - B009/21, A117/21 - A121/21

167 NATIONAL DRIVE, WOODBRIDGE

Disclaimer:

Every reasonable effort has been made to ensure that the information appearing on this map is accurate and current. We believe the information to be reliable, however the City of Vaughan assumes no responsibility or liability due to errors or omissions. Please report any discrepancies to Infrastructure Programming.

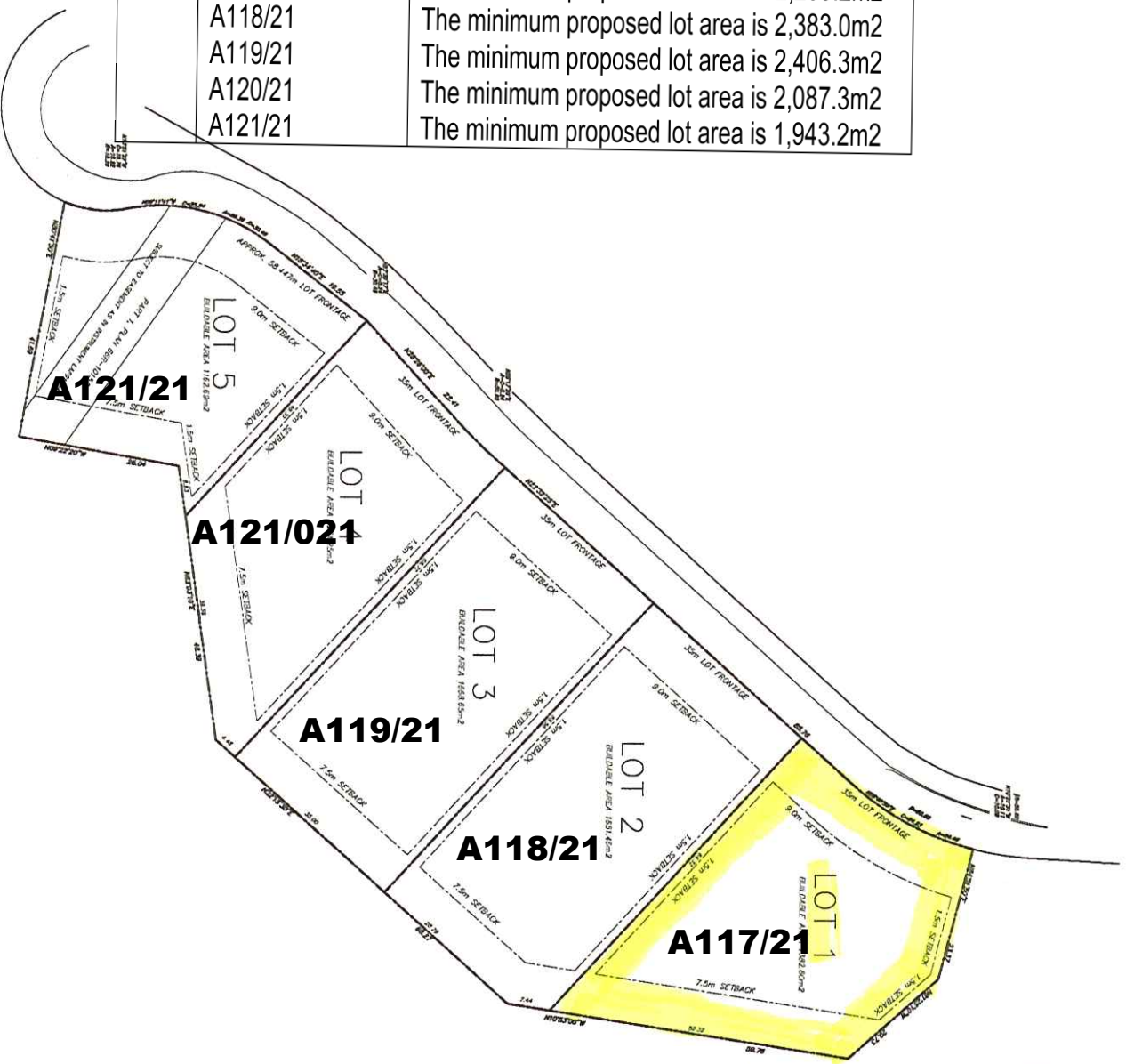


Scale: 1 : 5,883
 0 0.09 km

Created By:
 Infrastructure Delivery Department
 November 12, 2021 9:11 AM

Projection:
 NAD 83
 UTM Zone 17N

#1	A117/21	The minimum proposed lot frontage is 41.67m
#1	A118/21-A120/21	The minimum proposed lot frontage is 35.0m
#2	A117/21	The minimum proposed lot area is 2,259.2m ²
	A118/21	The minimum proposed lot area is 2,383.0m ²
	A119/21	The minimum proposed lot area is 2,406.3m ²
	A120/21	The minimum proposed lot area is 2,087.3m ²
	A121/21	The minimum proposed lot area is 1,943.2m ²



1 SITE PLAN
SCALE 1:400

SITE STATISTICS	
SITE AREA:	2.734 ACRES (11064.24M ²)
LOT 1 (AREA)	2230.05M ²
LOT 2 (AREA)	2394.11M ²
LOT 3 (AREA)	2402.85M ²
LOT 4 (AREA)	2087.30M ²
LOT 5 (AREA)	1943.20M ²

No	Revision	Date

01 Planner / Zoning April 13, 2021
 No Issued For Date

aldimo
architecture
 inc.

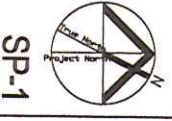
2A-27 ROTTIG ROAD
 WOODBRIDGE, ONTARIO, L4L 6E9
 F: (905) 852-2840
 F: (905) 852-5912
 info@aldimoarchitecture.com
 www.aldimoarchitect.com

Opening Title
 SITE PLAN - LOTS 1, 2, 3, 4 & 5

Project
NATIONAL DRIVE
DEVELOPMENT

187 NATIONAL DRIVE, WOODBRIDGE, ON

AS NOTED
 Scale
 F.A. Issued By
 2020-023 F.R.N.
 2021-04-13 Proj. Date



Contractor Must Check And Verify All Dimensions On The Job.
 Do Not Scale This Drawing.
 All Drawings, Specifications And Related Documents Are The Property Of The Architect And Shall Be Returned Upon Request.
 Reproduction Of Drawings, Specifications And Related Documents Without The Written Permission Of The Architect Is Prohibited.
 This Drawing Is Not To Be Used For Construction Until Signed By The Architect.

Schedule B: Public Correspondence Received

Please note that the correspondence listed in Schedule B is not comprehensive. Written submissions received after the preparation of this staff report will be provided as an addendum.

Correspondence (Public) B006/21 – B009/21 & Minor Variance Applications A117/21-A121/21:

Name	Address	Date Received	Summary
Ken & Elinore Wragge	182 National Drive	November 28, 2021	Letter of Opposition
Roy & Joan Hintsa	198 National Drive	November 29, 2021	Letter of Opposition
Sylvia Kada	215 National Drive	November 30, 2021	Letter of Opposition

Received

December 1, 2021

SYLVIA KADA
215 NATIONAL DRIVE
WOODBIDGE ON L4L 3R2



November 29th, 2021

COMMITTEE OF ADJUSTMENT CITY OF VAUGHAN
Re Files: B-006/21-B009/21 A117/21-A121/21 167 National Drive Woodbridge, ON

I am the owner of 215 National Drive, a 3.45 acre single family home property at the southeast end of the cul de sac on National Drive. I share a property line with 167 National Drive. The slopes and stream on both these properties are regulated by Toronto Region Conservation Authority. I believe that much of both these lots are designated as non development to allow for the conservation of slopes, natural vegetation and mature trees. In my opinion development at 167 National Drive should remain as zoned (single family dwelling) to protect the environment and the natural beauty of the area.

I do not consent to this proposal.

The application for 5 lots is not compatible and does not respect the established character of the street. The density that is being proposed destabilizes the character of the neighbourhood. It is out of scale and this will be a break in pattern and continuity on the street.

Another concern is sewage systems for these lots. There is no sanitary connection to the undeveloped land. The proposed lots are not large enough to qualify for septic system permits. If retaining walls and fill are to be used to gain land for development, the damage to the many mature trees on the protected slopes will be immense.

Motivation to purchase on National Drive is greatly due to the open spaces and natural settings. The development of 167 National Drive as proposed will impact the value of existing homes on the street.

Regards,

Sylvia Kada

Received

November 28, 2021

COMMITTEE OF ADJUSTMENT CITY OF VAUGHAN

Re Files: B-006/21-B-009/21 A117/21-A121/21 167 National Dr Woodbridge

Submission to the Committee respecting the above application by:

Ken and Elinore Wragge 182 National Drive

We are the owners of one of the houses directly across the street from the subject property.

Existing Conditions

- National Drive is a dead-end street which extends off Pine Valley Drive and is surrounded on all sides by the National Golf Course of Canada lands
- There are 7 developed residential lots on this street plus the undeveloped subject lot. Each lot has an area of 4000m² or more and all except one have frontage of 45m or more. The lot with the smallest frontage is in excess of 8000 m². There is consistency between all eight lots and the bylaws in question
- The developed lots have large estate type homes on them
- The subject property contour is very irregular and slopes steeply downwards from the street towards a watercourse which borders with the golf course at the bottom of the lot
- We understand that the conservation authority has jurisdiction over the rear of several of the properties on the street including the water course behind the subject property. This line of jurisdiction is not defined on the survey submitted as part of the application
- The City's sanitary sewer system only extends to the peak of National Drive. Addresses 160, 182, 198, 208 and 215 are all downstream of this sewer main and are on private septic systems. There is no available sanitary connection to the undeveloped land
- There is extensive mature tree canopy on the subject property

Recommendations

We wish to submit the following recommendations to the committee:

1. This application proposes lot sizes and frontages which are 40-50% less than the minimum required by the bylaws. The proposed lot sizes and frontages are much too small to be considered minor variances. They are not compatible with the existing lots, nor the intent of the relevant bylaws. We request the committee reject the application on this basis

Pending a revised application for severance, we recommend the committee attach conditions of severance as follows:

2. That no subdivision of the present lot is permitted without an agreement with the City to extend sanitary sewer connections to service the proposed lot(s). Alternatively, a review be undertaken to ensure the proposed lot(s) will be large enough and suitable to be granted an onsite septic system permit. This is to ensure there is no pollution of the watercourse. It is our understanding that Vaughan lots smaller than 4000m² are not permitted to be developed using septic systems
3. The difficult contours of the undeveloped land may require extensive retaining walls and fill to make this property useful for future development. We suggest that a site plan and elevation

view for each proposed lot be approved by the City prior to any severance being granted. This is to ensure that any prospective purchaser of a subdivided lot has some assurance it is suitable for further development

4. That the site plan(s) approval process take into account the following points:
 - a. Sewage management plan
 - b. Mature tree cover on the property and how much will need to be removed to incorporate the proposed development(s)
 - c. Setback requirements from the street and from the conservation boundary line
 - d. Elevation and footprint of any proposed dwelling with required changes to existing topography

We are not anti-development and believe the above suggestions represent a reasonable and logical approach to this application. We understand the lot is presently approved for one house. We would not object to two lots, subject to evaluation of the above points. By approving an application to subdivide this lot without a detailed review of the above points, the City could be legally interpreted as providing deFacto consent to develop the lots in a way not currently envisioned or permitted.

Respectfully

Ken and Elinore Wragge

182 National Drive

Lenore Providence

Subject: FW: [External] Consent Applications B006/21-B009/21

From: [REDACTED]

Sent: Monday, November 29, 2021 2:55 PM

To: Committee of Adjustment <CofA@vaughan.ca>

Subject: [External] Consent Applications B006/21-B009/21

City of Vaughan

November 29, 2021

Office of the City Clerk-Committee of Adjustment

2141 Major Mackenzie Drive

Vaughan, Ontario

L6A 1T1

Re: Notice of Hearing

Files: B-006/21-B009/21, A-II7/21-A121/21

We are owners and residents of 198 National Drive built by us in 1981.

Be advised that we are opposed to the severing of 167 National Dr. as requested or any other proposed lot severing that may be subsequently requested.

National Drive was developed pursuant to a sight plan agreement and urban design guidelines which recognized the uniqueness of these lots with one house per lot.

The arrangement of lots on National Drive was and is of interest to the Conservation Authority. This includes the removal of trees for which the proponent may have already exceeded.

Sincerely

Roy and Joan Hints

[REDACTED]

Schedule C: Development Planning & Agency Comments

Please note that the correspondence listed in Schedule C is not comprehensive. Comments received after the preparation of this staff report will be provided as an addendum.

Schedule C - Development Planning & Agency Comments B006/21 – B009/21 & Minor Variance Applications A117/21-A121/21:

Agency	Recommendation
Alectra - B006/21 – B009/21	No concerns or objections
Region of York - B006/21 – B009/21	No concerns with recommended conditions
TRCA - B006/21 – B009/21	Recommending Refusal
Bell Canada - B006/21 – B009/21	No concerns or objections

Development Planning: Consent Applications B006/21, B007/21, B008/21, and B009/21 and A117/21, A118/21, A119/21, A120/21, and A121/21 are currently under review (to follow as an addendum).



Discover the possibilities

COMMENTS:

- We have reviewed the proposed Variance Application and have no comments or objections to its approval.
- We have reviewed the proposed Variance Application and have no objections to its approval, subject to the following comments (attached below).
- We have reviewed the proposed Variance Application and have the following concerns (attached below).

Alectra Utilities (formerly PowerStream) has received and reviewed the proposed Variance Application. This review, however, does not imply any approval of the project or plan.

All proposed billboards, signs, and other structures associated with the project or plan must maintain minimum clearances to the existing overhead or underground electrical distribution system as specified by the applicable standards, codes and acts referenced.

In the event that construction commences, and the clearance between any component of the work/structure and the adjacent existing overhead and underground electrical distribution system violates the Occupational Health and Safety Act, the customer will be responsible for 100% of the costs associated with Alectra making the work area safe. All construction work will be required to stop until the safe limits of approach can be established.

In the event construction is completed, and the clearance between the constructed structure and the adjacent existing overhead and underground electrical distribution system violates the any of applicable standards, acts or codes referenced, the customer will be responsible for 100% of Alectra's cost for any relocation work.

References:

- Ontario Electrical Safety Code, latest edition (Clearance of Conductors from Buildings)
- Ontario Health and Safety Act, latest edition (Construction Protection)
- Ontario Building Code, latest edition (Clearance to Buildings)
- PowerStream (Construction Standard 03-1, 03-4), attached
- Canadian Standards Association, latest edition (Basic Clearances)

If more information is required, please contact either of the following:

Mr. Stephen Cranley, C.E.T
Supervisor, Distribution Design, ICI & Layouts (North)
Phone: 1-877-963-6900 ext. 31297

Mr. Tony D'Onofrio
Supervisor, Subdivisions (Alectra East)
Phone: 1-877-963-6900 ext. 24419

E-mail: stephen.cranley@alectrautilities.com

Email: tony.donofrio@alectrautilities.com

Lenore Providence

Subject: FW: REQUEST FOR COMMENTS - Carmelo and Milena Calabro - Minor Variances

From: Hurst, Gabrielle <Gabrielle.Hurst@york.ca>

Sent: November-15-21 10:08 AM

To: Lenore Providence <Lenore.Providence@vaughan.ca>

Cc: Committee of Adjustment <CofA@vaughan.ca>

Subject: [External] RE: REQUEST FOR COMMENTS - Carmelo and Milena Calabro - Minor Variances

Good morning Lenore,
The Regional Municipality of York has completed its review of minor variances A117/21 through A121/21 and has **no comment**.

Gabrielle

Gabrielle Hurst mcip rpp | Community Planning and Development Services | The Regional Municipality of York | 1-877 464 9675 ext 71538 | gabrielle.hurst@york.ca | www.york.ca

Lenore Providence

Subject: FW: B006-21 - B009-21 A117-21 - A121-21 - REQUEST FOR COMMENTS - 905-21-478

From: Gordon, Carrie <carrie.gordon@bell.ca>

Sent: November-29-21 3:18 PM

To: Lenore Providence <Lenore.Providence@vaughan.ca>

Subject: [External] RE: B006-21 - B009-21 A117-21 - A121-21 - REQUEST FOR COMMENTS - 905-21-478

Hi Lenore,

Re: B006-21 - B009-21

Subsequent to review of the abovementioned Consent Application at 167 National Dr Woodbridge ON, Bell Canada's engineering department have determined that there are no concerns or comments at this time.

Kind regards,

Carrie Gordon



Associate, External Liaison
Right of Way Control Centre
140 Bayfield St, Fl 2
Barrie ON, L4M 3B1
T: 705-722-2244/844-857-7942
F :705-726-4600



November 29, 2021

CFN 64150.04
Ex-Ref CFN 64135.03

SENT BY E-MAIL: Christine.Vigneault@vaughan.ca

Ms. Christine Vigneault, Secretary Treasurer
Committee of Adjustment
City of Vaughan
2141 Major Mackenzie Drive
Vaughan, Ontario L6A 1T1

**Re: Consent Applications B006.21, B007.21, B008.21, B009.21
Minor Variance Applications A117.21, A118.21, A119.21, A120.21, A121.21
Part of Lot 11, Concession 6; Lot 65, Registered Plan M1800
167 National Drive, City of Vaughan, Region of York
Carmelo Calabro and Milena Calabro (Agent: Lou Pompili)**

This letter acknowledges receipt of the above-noted applications circulated by the City of Vaughan. The materials were received by Toronto and Region Conservation Authority (TRCA) on November 3, 2021. TRCA staff has reviewed the above noted applications, and as per the "Living City Policies for Planning and Development within the Watersheds of the TRCA" (LCP), provides the following comments as part of TRCA's commenting role under the *Planning Act*; the Authority's delegated responsibility of representing the provincial interest on natural hazards encompassed by Section 3.1 of the *Provincial Policy Statement, 2020*; TRCA's Regulatory Authority under Ontario Regulation 166/06, *Development, Interference with Wetlands and Alterations to Shorelines and Watercourses*; and, our Memorandum of Understanding (MOU) with the Region of York, wherein we provide technical environmental advice related to provincial plans.

Purpose of the Applications

B006.21 – B009.21: It is our understanding that the purpose of the above noted applications is to request the consent of the Committee of Adjustment to convey four lots marked Lot 1, 2, 3 & 4 on the circulated sketch for the creation of four (4) new residential lots and to retain a 0.19 ha parcel. Based on a review of the circulated materials, TRCA staff understand the proposed severance of lots to be as follows:

- Lot 1 - 0.22 ha;
- Lot 2 - 0.24 ha;
- Lot 3 - 0.24 ha;
- Lot 4 - 0.21 ha.

A117.21: It is our understanding the purpose of this application is to request the following variances for the lands identified as Lot 1:

1. The minimum proposed lot frontage is 41.67 metres, whereas the minimum required lot frontage is 45.0 metres.
2. The minimum proposed lot area is 2,259.2 square metres, whereas the minimum required lot area is 4,000.0 square metres.

A118.21: It is our understanding the purpose of this application is to request the following variances for the lands identified as Lot 2:

1. The minimum proposed lot frontage is 35.0 metres, whereas the minimum required lot frontage is 45.0 metres.
2. The minimum proposed lot area is 2,383.0 square metres, whereas the minimum required lot area is 4,000.0 square metres.

A119.21: It is our understanding the purpose of this application is to request the following variances for lands identified as Lot 3:

1. The minimum proposed lot frontage is 35.0 metres, whereas the minimum required lot frontage is 45.0 metres.
2. The minimum proposed lot area is 2,406.3 square metres, whereas the minimum required lot area is 4,000.0 square metres.

A120.21: It is our understanding the purpose of this application is to request the following variances for the lands identified as Lot 4:

1. The minimum proposed lot frontage is 35.0 metres, whereas the minimum required lot frontage is 45.0 metres.
2. The minimum proposed lot area is 2,087.3 square metres, whereas the minimum required lot area is 4,000.0 square metres.

A121.21: It is our understanding the purpose of this application is to request the following variances for the retained lands:

1. The minimum proposed lot area is 1,943.2 square metres, whereas the minimum required lot area is 4,000.0 square metres.

Background

TRCA staff have been involved in discussions with the landowner and their agent regarding a proposal to subdivide the subject property since February 22, 2021. Specifically, a request to review a consent proposal and a tree removal permit was submitted to TRCA. TRCA and City staff met with the proponent on March 9, 2021, to discuss the proposal and the policy framework affecting the site. TRCA and City of Vaughan staff identified that severance of this property would not be supported. After the meeting with the owner's representative, the noted applications were returned to the proponent accompanied by a formal letter dated March 16, 2021.

Ontario Regulation 166/06

The subject property is located within TRCA's Regulated Area because of the valley corridor associated with the Humber River that traverses the eastern portion of the property. In accordance with *Ontario Regulation 166/06 (Regulation of Development, interference with Wetlands and Alterations to Shorelines and Watercourses)*, any development or site alteration within the Regulated Area of this property would require a permit from TRCA.

Application-Specific Comments

The subject property is a single vacant lot of record that is almost entirely located within a valley corridor (tributary of the Humber River). Based on available digital elevation information, the valley slope within the property ranges in height from 13 metres to 20 metres. The inclination (i.e., steepness) of the slope ranges from 2:1 (horizontal to vertical) on the northern portion to 3:1 (horizontal to vertical)

on the southern portion. There is a small, flat, tableland area located at the central portion of the lot. The site is in a naturalized condition with mature trees and associated undergrowth. It has been brought to TRCA's attention that the owner has been clearing vegetation on portions of the site. TRCA staff have performed several site visits to the property to assess the conditions and delineate the limits of the natural features and hazards. The physical top of bank was confirmed by TRCA on April 17, 2019. The limit of the top of bank represents the limit of the hazardous lands on the property.

The Living City Policies for Planning and Development in the Watersheds of the Toronto and Region Conservation Authority (LCP) describes a '*Natural System*' made up of natural features and areas, water resources, natural hazards, potential natural cover and/or buffers. The LCP recommends that development not be permitted within the *Natural System* and that it be conveyed into public ownership for its long-term protection and enhancement.

Given that the subject property is located entirely within the *Natural System* due to the valley corridor and associated vegetation, TRCA staff would not be supportive of further subdivision of the property to facilitate new residential development. Section 7.5.2.4 (a) of TRCA's Living City Policies identifies:

That lands containing the Natural System (natural features, natural hazards, buffers, and any potential natural cover) are not be zoned for development, and not form part of the lots to be created or developed, but rather, be zoned for environmental protection and be set aside for dedication into public ownership in accordance with Section 7.3.2 Conveyance of the Natural System into Public Ownership.

Furthermore, Section 7.5.2.4 (b) outlines that:

The creation of a new lot(s) not be supported unless a suitable building envelope exists outside the Natural System in accordance with the policies in Sections 7 and 8 and municipal requirements. This would include sufficient space within the building envelope for required municipal setbacks and infrastructure including, but not limited to, private septic systems, wells, driveways, and parking and outdoor amenity areas.

TRCA staff recognize that (one) lot of record exists at 167 National Drive, on which there is currently no development. However, it should be noted, that amongst other matters, the agreement for the registered plan of subdivision as executed December 16, 1976, between 310218 Ontario Limited and the Corporation of the Town of Vaughan states within Section B Environmental Protection that:

The Owner shall not construct any buildings or structure of any kind, other than those necessary for erosion control, within the steeply sloping treed area of lots numbered 28 to 30 and 63 to 69 inclusive, i.e., beyond the "no development line" referred to in paragraph A.#.1.(a). The Owner shall neither place nor remove fill of any kind, whether originating on the site or elsewhere, not alter any existing vegetation without the written consent of the Metropolitan Toronto and Region Conservation Authority.

Given the above noted clause, it is evident at that during negotiation and registration of the subdivision that the Conservation Authority and the Municipality recognized the hazard presented by the steep slope within the subject property and saw fit to restrict the location of development on the constrained single lot. TRCA continues to support the restriction of development on the subject lands acknowledging the hazard that was recognized during the registration of the plan of subdivision and remains on site today.

As a portion of the property is zoned “RR – Rural Residential” pursuant to City of Vaughan Zoning By-Law 1-88 and given there is a modest development envelope that is located above the top of bank, staff continue to support the development of one (1) single detached dwelling and ancillary uses on the property.

TRCA’s recent correspondence to the applicant has been included in Appendix ‘A’ of this letter for the committee’s reference.

Fees

By copy of this letter, the applicant is advised that the application is subject to a \$2,310.00 (Consent - Residential-Standard) review fee. The applicant is responsible for fee payment and should forward the application fee to this office as soon as possible.

Recommendation

The proposed consent applications would sever the Natural System within the erosion hazard. TRCA staff have worked extensively with owners of this property over the years to assess development potential and have been consistent in identifying that the property is only suitable for one modest single detached dwelling, This was conveyed to the applicant prior to their filing of this application. Based on the above, TRCA staff recommend **denial** of the above-noted applications.

We trust these comments are of assistance. Should you have any questions, please contact the undersigned at extension 5269 or at mark.howard@trca.ca.

Sincerely,

Mark Howard, MCIP, RPP
Senior Planner, Vaughan Review Area
Development Planning and Permits | Development and Engineering Services

HR/mh

Appendix 'A' Previous TRCA Correspondence Related to Severance Proposal



March 16, 2021

BY E-MAIL ONLY <l.pompili@hotmail.com>

Mr. Lou Pompili
BelCap Management Inc.
8750 Jane Street, Unit 16
Vaughan, ON, L4K 2M9

**Re: Return of Permit Application dated February 22, 2021 requesting consent to sever lands and permission for tree removal
167 National Drive (Part of Lot 11, Concession 6), Vaughan
Owner: Mr. Carmelo Calabro**

This letter acknowledges the receipt of your February 22, 2021 application for a permit pursuant to the Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses (Ontario Regulation 166/06).

It is the understanding of TRCA staff that the purpose of the permit application was to (i) sever the property into three lots for the purposes of developing detached dwellings, and (ii) to facilitate the removal of trees from the subject lands.

In accordance with Ontario Regulation 166/06 a permit is required from TRCA prior to any of the following types of development or site alteration taking place within TRCA's Regulated Area:

- a) straightening, changing, diverting, or interfering in any way with the existing channel of a river, creek, stream, or watercourse, or for changing or interfering in any way with a wetland.
- b) development, if in the opinion of the Authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development.

Please be advised that "development" as related to the regulation is defined as:

- i. the construction, reconstruction, erection or placing of a building or structure of any kind,
- ii. any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building/structure, or increasing the number of dwelling units in the building/structure,
- iii. site grading,
- iv. the temporary or permanent placing, dumping or removal of any material originating on the site or elsewhere.

Further to our discussion in which TRCA staff, City of Vaughan staff and you were involved on March 9, 2021, consent (to sever lands) applications are Planning Act applications and require submission to City of Vaughan - Committee of Adjustment. Moreover, the removal of individual trees is regulated by York Region and the City of Vaughan, requiring application to their respective Forestry Departments. While TRCA provides technical environmental advice and comments to our municipal partners in these matters, we are not the decision makers with respect to Planning Act applications.

As TRCA does not have authority in these matters, this letter serves to officially return your Ontario Regulation 166/06 permit application. Furthermore, please be advised that no fees are owed, and no fees have been billed to the provided credit card

Mr. Lou Pompili

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March 16, 2021

Preliminary Comments on a Potential Consent Application

While TRCA will be formally circulated for comment if a formal consent application is submitted to the City, we are taking this opportunity to re-iterate the initial comments that we have provided to you verbally in our above-mentioned meeting, to ensure that you are clear on the position of TRCA staff prior to filing any further applications with respect to this property. In this regard, TRCA staff reiterates that based upon the extensive review of the property to date, and the policies that are applicable to proposed development, Authority staff **cannot** support the severance of the subject lands into multiple lots.

To assist the agent and owner, staff offer the following as a summary of TRCA comments discussed during the meeting of March 9, 2021. The information should not be considered an exhaustive record but rather an overview of the general policy concerns that do not support the severance of the property into multiple lots.

- **Provincial Policy Statement, 2020:** The *Planning Act* dictates that agencies engaged in planning, including the TRCA, "shall be consistent with" the Provincial Policy Statement (PPS) when reviewing development applications. In accordance with Section 3.1 of the PPS, development, including lot creation, shall generally be directed to areas outside of natural hazards unless the effects and risk to public safety are minor, can be mitigated in accordance with provincial standards and where the four (4) tests of Section 3.1.7 can be met. Furthermore, Sections 2.1.5 & 2.1.8 of the PPS identify that development and site alteration shall not be permitted within or on adjacent lands to natural heritage features, including significant valleyland, woodlands, wetlands, and wildlife habituate in Ecoregion 6E and 7E, unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological function.
- **The Living City Policies:** Through the application of The Living City Policies for Planning and Development in the Watersheds of the Toronto and Region Conservation Authority (LCP) TRCA has an interest in conserving, protecting, and enhancing natural features and functions and discouraging the fragmentation of ownership of valley corridor and/or hazard lands within our jurisdiction. Given that the subject property is located almost entirely within the *Natural System*, TRCA staff would not be supportive of further subdivision of the property or rezoning of the site to facilitate additional residential development. Moreover,

Section 7.5.2.4 (a) of TRCA's Living City Policies identifies that *lands containing the Natural System (natural features, natural hazards, buffers, and any potential natural cover) not be zoned for development, and not form part of the lots to be created or developed, but rather, be zoned for environmental protection and be set aside for dedication into public ownership in accordance with Section 7.3.2 Conveyance of the Natural System into Public Ownership.*

Furthermore, Section 7.5.2.4 (b) outlines that *the creation of a new lot(s) not be supported unless a suitable building envelope exists outside the Natural System in accordance with the policies in Sections 7 and 8 and municipal requirements. This would include sufficient space within the building envelope for required municipal setbacks and infrastructure including, but not limited to, private septic systems, wells, driveways, and parking and outdoor amenity areas.*

TRCA staff recognize that a lot of record exists at 167 National Drive, on which there is currently no development. However, It should be noted, that amongst other matters, the agreement for the registered plan of subdivision as executed December 18, 1976 between 310218 Ontario Limited and the Corporation of the Town of Vaughan states within Section B Environmental Protection that states...*The Owner shall not construct any buildings or structure of any kind, other than those necessary for erosion control, within the steeply sloping treed area of lots numbered 28 to 30 and 63 to 69 inclusive, i.e., beyond the "no development line" referred to in paragraph A.#.1.(a). The Owner shall neither place nor remove fill of any kind, whether originating on the site or elsewhere, not alter any existing vegetation without the written consent of the Metropolitan Toronto and Region Conservation Authority.*

As a portion of the property is zoned "RR – Rural Residential" per the City of Vaughan Zoning By-Law 1-88, and as there is a small development envelope on the property that is located above top of bank on the property, staff can support the development a one (1) single-family detached dwelling and ancillary uses,

Mr. Lou Pompili

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March 16, 2021

subject to the proposal meeting the applicable policies of The Living City Policies (2014), City of Vaughan Official Plan and Zoning By-Law 1-88, and subject to all development and site alteration being located inland from the staked top of bank, and applicable buffers.

To further assist the agent and owner, TRCA has attached the final correspondence between the Authority and the previous owner dated July 10, 2020 (figure 1). The letter details a development concept which is located entirely above the top of bank, and it identifies the minimum setbacks supportable by TRCA.

Please be advised, that this letter does not include comments from the City of Vaughan. The agent and/or owner is advised to speak with them directly at (905) 832-2281.

Please be advised that this letter is based on current TRCA policy. . Any future development proposal would be subject to the policies in effect at the time of application.

We trust these comments are of assistance.



Quentin Hanchard, RPP
Associate Director
Development Planning and Permit
quentin.hanchard@trca.ca
(416) 661-6600 ext. 5324

Mr. Lou Pompili

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March 16, 2021

Figure 1 – Letter to Former Landowner of 167 National Drive (3 pages)



CFN: 56994.13

July 10, 2020

Steve Hengsperger
President
Tersano
By Email Only

Dear Mr. Hengsperger:

**Re: TRCA Concept Development Application
167 National Drive
City of Vaughan**

Over the past several months we have discussed the potential for development on the subject property, and the extent of development that may be supported by the TRCA. As you are aware, the property is located adjacent to a tributary of the Humber River, and portions of the subject property are located within the associated valley corridor. In earlier stages of this concept development process, TRCA staff staked the top of the valley bank on the subject property, and provided a further refinement to this staking, as reflected in our correspondence of 2017 and June 4, 2019). In that correspondence, TRCA staff identified the environmental constraints on the property, and provided additional guidance with respect to studies that would need to be completed, as well as the area of the property in which development (construction of a single-family residential home) could be considered.

Through our conversations, we have discussed several development concepts, and have worked together to refine the concepts to address TRCA's concerns. On June 24, 2020, you provided me with a refined concept that provides for a single-family dwelling footprint, which is located entirely within the area above the staked top of bank, and which provides a minimum setback of 10 feet to the top of bank on the north side of the property, with the majority of the proposed building achieving a greater setback. The concept also provides for a 40 foot setback from the National Drive right-of-way. In this concept the total lot coverage is 5%, and the total footprint of all structures (including garage and covered porches) is 6,005 sq ft. This concept is attached to this letter, for ease of reference.

TRCA staff are prepared to support this concept in principle. I do wish to note, however, that the setbacks provided in this concept constitute the bare minimum setbacks that can be supported by TRCA staff. As this concept is refined, please ensure that the total

Tel: 416.661.6600, 1.888.872.2344 | Fax: 416.661.6608 | info@trca.on.ca | 5 Sheppard Drive, Downsview, ON M3N 1S4

Member of Conservation Ontario

www.trca.on.ca

T: 416.661.6600 | F: 416.661.6898 | info@trca.on.ca | 101 Exchange Avenue, Vaughan, ON L4K 5R6 | www.trca.ca

S. Hengsperger

- 2 -

July 17, 2020

footprint does not expand beyond that which is shown on this drawing, and that the setbacks are not further reduced. Additionally, if the proposed building is a multi-storey building, please note that no further encroachment of upper floors, decks, patios or garages, or any cantilevering of these into the setback will be supported by TRCA staff.

As you are aware, a TRCA permit will be required for development on this property. Once development concepts are further refined, TRCA staff would recommend that a TRCA permit application be submitted with the requisite additional details and studies. These are likely to include a scoped natural heritage evaluation and an updated geotechnical report, which specifically addresses the proposed concept.

It is also our understanding that your proposed concept may not comply with the City of Vaughan Zoning By-law, and should this application be advanced, a minor variance application may be required. We would encourage you to discuss these requirements further with City staff.

This letter does not provide formal comments or clearance with respect to TRCA's position on any planning or permit application relating to the subject site. This information is provided to assist in the formulation of a development concept for the property. Please ensure all future proposals for works on the subject property are circulated to TRCA for our review and approval prior to commencement of any works. Our full submission requirements for planning and permit applications can be accessed by contacting the undersigned or visiting our website at: <http://www.trca.on.ca/planning-services-permits/>.

We trust that this is of assistance.

Sincerely,

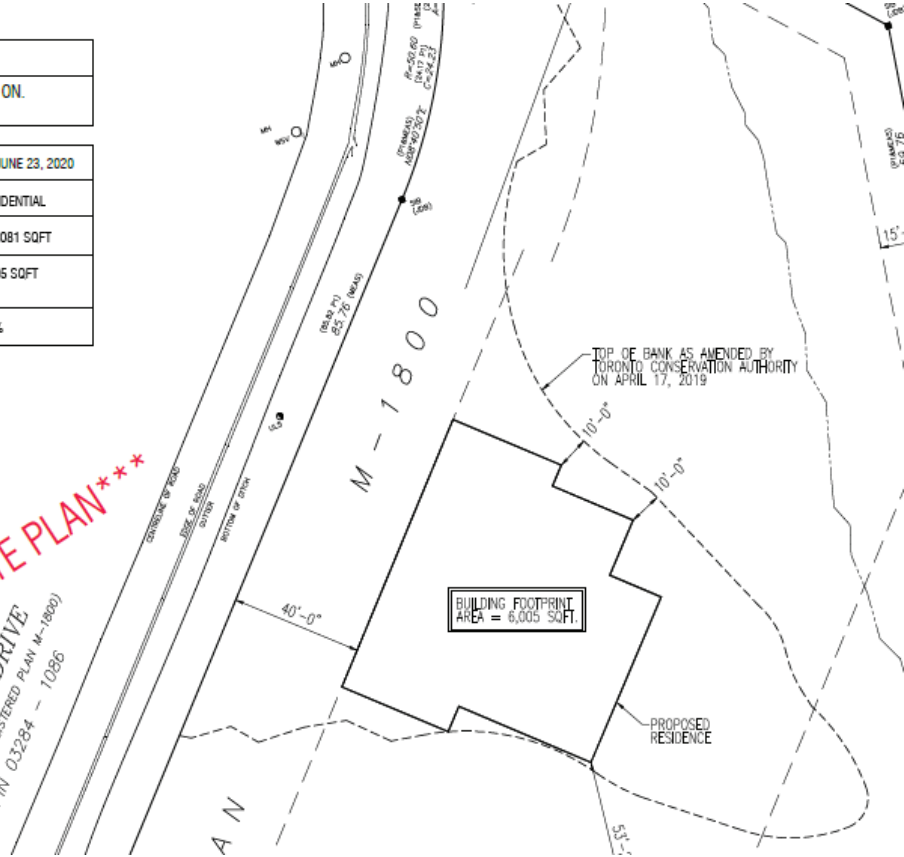
Quentin Hanchard, RPP
Associate Director
Development Planning and Permits
Extension 5324

SITE DESCRIPTION:	
Lot 65 of Reg. Plan M-1800 in the City of Vaughn ON.	

SITE INFORMATION:		UPDATED : JUNE 23, 2020
ZONED	RESIDENTIAL	
TOTAL AREA OF LOT:	119,081 SQFT	
TOTAL FOOTPRINT OF ALL STRUCTURES: (INCLUDING GARAGE AND COVER PORCHES)	6,005 SQFT	
LOT COVERAGE ALL STRUCTURES (MAX. 10%):	5.0%	

*****PRELIMINARY SITE PLAN*****

NATIONAL DRIVE
 (DEDICATED BY REGISTERED PLAN M-1800)
 PIN 0-3284 - 1086



Schedule D: Previous Approvals (Notice of Decision)

N/A

SCHEDULE E: STUDIES & REPORTS

Studies & Reports

The following studies and reports were submitted by the applicant for B006/21, B007/21, B008/21, and B009/21 and A117/21, A118/21, A119/21, A120/21, and A121/21 and circulated to staff and agencies for review:

Study/Report	Consultant	Date of Study/Report
Environmental Impact Study	Dougan & Associates	October 2021
Land Use Planning Justification Report	GWD	October 2021
Site Servicing Brief	Valdor Engineering Inc.	October 7, 2021
Topographic Map	Noica Consulting	February 2021
Tree Inventory Table	Noica Consulting	January 29 and February 1, 2021
Tree Inventory Report	Noica Consulting	February 16, 2021

167 National Drive, Vaughan

Environmental Impact Study



October 2021



77 Wyndham Street South • Guelph ON N1E 5R3
T 519.822.1609 • F 519.822.5389 • www.dougan.ca

PREPARED FOR:

BelCap Management Inc.
5000 Yonge St., Unit 1901
Toronto ON M2N 7E9
P (905) 532-9767
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PREPARED BY:

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77 Wyndham Street South
Guelph, ON N1E 5R3

Contributing Authors: Christina Myrdal, Ecologist
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GIS & Mapping: Janel Sauder, GIS Manager
Nicole White, CAD & GIS Technician

Senior Review: Todd Fell, Director & Senior Landscape Architect

ASSOCIATES:

PLANNING

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L6W 3P1
P (905) 796-5790

ENGINEERING

Valdor Engineering Inc.
741 Rowntree Dairy Road, Suite 2
Woodbridge, Ontario, L4L 5T9
P 905-264-0054 x223

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EXECUTIVE SUMMARY

Dougan & Associates (D&A) was retained by BelCap Management Inc. to conduct an Environmental Impact Study (EIS) in support of a proposed five-lot residential development on lands located at 167 National Drive in Vaughan ON. The accompanying Planning Justification Report prepared by Gagnon Walker Domes (GWD) Ltd. concludes development is permissible on the subject lands.

An EIS was triggered due to the presence of TRCA regulated features present within the subject lands. Investigations that were completed as part of this study include:

- Background and policy review;
- Ecological Land Classification (ELC);
- Tree inventory (completed by Noica Consulting, 2021);
- Spring and summer botanical inventory;
- Two breeding bird surveys;
- Species at Risk (SAR) screening;
- Significant Wildlife Habitat (SWH) screening; and
- Incidental wildlife.

Natural heritage constraints present on and adjacent to the subject lands include: Migratory birds; deciduous forest and tree canopy; valleylands; fish habitat; confirmed and candidate SWH; and potential SAR habitat. Current natural heritage policy designations can be found in Appendix E.

Key avoidance, mitigation and enhancement recommendations include:

1. Clearing of natural vegetation as part of site preparation should be conducted in the late fall or winter months (i.e. October 1 to March 31) to avoid the active seasons of migratory birds and Endangered bats.
2. Prior to construction activities, Tree Preservation Zones (TPZ) should be established to protect trees identified as “injure or “preserve” (Map 4).
3. An erosion and sediment control (ESC) plan should be prepared in accordance with local requirements. All disturbed vegetated areas left for 30 days or longer will be stabilized and restored with native, non-invasive species following completion of the work.
4. Determine water balance requirements at detailed design (Valdor, 2021).
5. An environmental stewardship resource should be developed for distribution to the new homeowners.
6. To demonstrate no negative impacts, a restoration area of at least 0.37 ha is recommended with a target community of deciduous forest. Species planted should be entirely native species and should include a mixture of suitable groundcover, shrubs and trees. The restored area should be monitored for a minimum of three years.
7. At least 3 bat boxes should be installed in accordance with MECP and Bat Conservation International requirements.
8. To demonstrate net gain in tree canopy, trees should be replaced at a 2:1 ratio (totaling 244 trees). Replacement trees should be comprised of native species and function to meet the target community of deciduous forest.

This proposed development will result in impacts to the existing natural heritage features and functions. Contingent upon implementation of the recommendations provided in this EIS, the long-term net result will achieve no negative impacts.

1. INTRODUCTION

1.0. STUDY AREA AND ECOLOGICAL CONTEXT

Dougan & Associates (D&A) has been retained to undertake an EIS in support of a proposed residential development of five (5) single-family dwellings located at 167 National Drive. The subject property is located on the east side of National Drive in the Pine Grove neighborhood of Woodbridge, abutting the National Golf Club of Canada. The site is entirely forested and is part of a contiguous woodland that is approximately 1.1 ha in size. Applicable natural heritage policy and land use designations can be found on Map 2 and Appendix E.

The site is located along a slope, with a tributary of the East Humber River flowing east and south of the site on the Golf Club property. There is a large golf course storm water management pond mapped as a Waterbody by York Region, associated with the SWM pond outfall east of the property.



Figure 1 Approximate study area including property boundary (orange) and 120 m adjacent lands (red).

1.1. PROPOSED WORK

The proposed development involves severing and developing the current property into five (5) residential lots ranging from 0.12 to 0.24 ha in size (Appendix F). Details on the proposed activities are found in section 6.

2. METHODS

2.0. BACKGROUND REVIEW

A review of available background documents, mapping, and policy was conducted in order to inform the field studies required based on existing natural heritage features present within 120m of the subject property:

- Natural Heritage Information Centre (NHIC) online query;
- The Physiography of Southern Ontario (Chapman and Putnam, 1984);
- TRCA regulation mapping.

2.1. ECOLOGICAL LAND CLASSIFICATION

Three seasonal visits were completed in 2021 (January 28, May 17 and July 5) to confirm ELC communities and inventory of vascular plants. Vegetation communities were characterized according to the ELC protocol for Southern Ontario, 1st approximation (Lee et al., 1998) and mapped following field verification.

2.2. TREE INVENTORY

A Tree Inventory Report for the site was completed by Noica Consulting Inc in February 2021. The following attributes were recorded for each tree:

- Species
- DBH (diameter at breast height) - cm
- Trunk Integrity (TI) – Good, Fair, Poor
- Crown Structure (CS) – Good, Fair, Poor
- Crown Vigor (CV) – Good, Fair, Poor
- Crown Dieback (CDB) - %
- Dripline in radius (DL) - m
- mTPZ (minimum Tree Protection Zone) - m
- Owner – Private, City, Neighbour

The tree data are summarized in section 3.3 of this report.

2.3. BOTANICAL INVENTORY

Botanical inventories were conducted on January 28, May 17 and July 5, 2021. All vascular plant species encountered within the canopy, sub-canopy, understory, and ground layers were recorded with relative abundance. The taxonomy, nomenclature and provincial ranks for plant species is consistent with the most recent available data from the Natural Heritage Information Centre (NHIC). Plant rarity status was assessed using COSEWIC rankings for federal status, SARO ranks for Species at Risk in Ontario, Srank for rarity in Ontario, and TRCA L-rankings.

2.4. BREEDING BIRD SURVEYS

Two (2) breeding bird surveys were completed on June 16 and June 23 2021, using an area search technique (Cadman et al., 2007). Surveys were conducted between sunrise and 10:00 a.m., between May 24 and July 12, during appropriate weather conditions (i.e., light winds, no heavy rains; ref. Appendix C).

2.5. SPECIES AT RISK (SAR) SCREENING

Screening for Species at Risk (SAR) species and habitat included review of SAR records in the NHIC database and field investigations conducted for this study. Where species occurred only via the NHIC database, but were not observed on site, habitat suitability for these SAR was evaluated based on the results of field investigations.

2.6. SIGNIFICANT WILDLIFE HABITAT (SWH) SCREENING

An SWH screening was completed for the subject lands and adjacent 120 m using the MNRF's (2015) SWH Criteria for Ecoregion 7E, based on ELC habitat types and species records.

2.7. INCIDENTAL WILDLIFE

All wildlife observed or heard during field visits were documented.

3. FINDINGS

3.0. BACKGROUND REVIEW

3.0.0. NHIC DATABASE QUERY

The NHIC database was queried in July 2021 to acquire provincially tracked species records within approximately 1km of the study area (Table 1).

Table 1 NHIC records within approx. 1km of 167 National Drive

Scientific Name	Common Name	Srank	COSEWIC (Federal)	SARO (Provincial)	Detected during 2021 Field Surveys
<i>Bombus affinis</i>	Rusty-patched Bumble Bee	S1	END	END	
<i>Hirundo rustica</i>	Barn Swallow	S4B	THR	THR	
<i>Clinostomus elongatus</i>	Redside Dace	S2	END	END	
<i>Sturnella magna</i>	Eastern Meadowlark	S4B	THR	THR	
<i>Dolichonyx oryzivorus</i>	Bobolink	S4B	THR	THR	
<i>Juglans cinerea</i>	Butternut	S2?	END	END	

<i>Hylocichla mustelina</i>	Wood Thrush	S4B	THR	SC	
<i>Riparia riparia</i>	Bank Swallow	S4B	THR	THR	
<i>Contopus virens</i>	Eastern Wood-pewee	S4B	SC	SC	x
<i>Fraxinus nigra</i>	Black Ash	S3	THR		
<i>Ambystoma hybrid pop.</i> 1	Unisexual Ambystoma (Jefferson Salamander dependent population)	S2	END	END	

END = Endangered

THR = Threatened

SC = Special Concern

S1 = Critically Imperiled in Ontario; often 5 or fewer occurrences; especially vulnerable to extirpation

3.0.1. THE PHYSIOGRAPHY OF SOUTHERN ONTARIO (CHAPMAN AND PUTNAM, 1984)

The subject lands are within the Peel Plain physiographic region; the prominent physiographic landform in this area is Bevelled Till Plains (Chapman and Putnam, 1985). Surficial geology for most of the site is Till characterized by clay to silt-textured till derived from glaciolacustrine deposits or shale, whereas the bottom of slope and adjacent golf course lands are comprised of modern alluvial deposits characterized by clay, silt, sand, gravel and possible organic remains (OGS, 2010).

3.0.2. TRCA REGULATION MAPPING

The subject lands are partially within TRCA's approximate regulation limit. The outfall and SWM pond on the adjacent golf course are regulated features (Figure 2).



Figure 2 TRCA Regulation Mapping (2020)

3.1. ECOLOGICAL LAND CLASSIFICATION (ELC) & BOTANICAL INVENTORY

The property is entirely forested and the ELC community was assessed as a mid-age **Dry-Fresh Sugar Maple Deciduous Forest (FOD5-1)**. The overall canopy cover was over 60% and canopy height was estimated to be 20-25 m. The majority of trees were in the range of 20-50 cm DBH (diameter at breast height). Within the canopy layer, Sugar Maple (*Acer saccharum*) was the most dominant species, with associates including American Beech (*Fagus grandifolia*), Black Cherry (*Prunus serotina*), Ironwood (*Ostrya virginiana*), White Pine (*Pinus strobus*) Red Oak (*Quercus rubra*), White Ash (*Fraxinus americana*). The sub-canopy cover was approximated at 25-60%, and was also dominated by Sugar Maple, with Ironwood (*Ostrya virginiana*) also quite prevalent. Other associates included Manitoba Maple (*Acer negundo*), American Beech and Black Cherry. During the May site visit it was evident that recent clearing had removed nearly all vegetation from the ground and shrub layers across most of the site (ref. Map 1). Some regeneration in the cleared areas was observed during the July visit. Within the shrub layer, Sugar Maple saplings were most abundant species, with Choke Cherry (*Prunus virginiana*) also quite abundant.

Garlic Mustard (*Alliaria petiolata*), an invasive herbaceous species, was quite abundant in disturbed areas particularly close to the road. Much of the site, including the regenerating cleared area contained native groundcover species dominated by Sugar Maple seedlings, with occasional White Ash seedlings, Jack-in-the-pulpit (*Arisaema triphyllum*), Mayapple (*Podophyllum peltatum*), Bloodroot (*Sanguinaria canadensis*), Running Strawberry-bush (*Euonymus obovatus*), Elecampane (*Inula helenium*), Black Nightshade (*Solanum nigrum*), and Zigzag Goldenrod (*Solidago flexicaulis*).

ELC communities adjacent to the subject lands include **Open Aquatic** (Map 1, Polygon 2), **Anthropogenic** (Polygons 3, 4, 5, 7), **Road** (Polygon 8), and **Cultural Woodland** (Polygon 6). These communities were observed from a distance and not investigated in detail during site investigations.

None of the ELC communities identified on the property or adjacent lands are provincially or locally significant.

3.2. TREE INVENTORY

Noica Consulting Inc (Noica, 2021) inventoried and assessed a total of 431 trees, including 14 species, summarized in Table 1 below.

Table 2 Tree Inventory Summary

Species	Number of Trees
Sugar Maple	257
Ironwood	70
Eastern Hemlock	23
Black Cherry	22
White Pine	14
Poplar	13
Manitoba Maple	11
Basswood	9
Red Oak	5
American Beech	2
White Oak	2
Apple	1
White Birch	1
Yellow Birch	1

In terms of size, the dbh of trees surveyed ranged from 11 to 74 cm, with most trees were within DBH range of 20-30 cm; The smallest tree (#75, Sugar Maple) is 11 cm dbh, and the largest is a multi-stem White Pine (#387) with dbh of 74 and 23 cm.

Table 3 summarizes the assessed condition of the trees inventoried.

Table 3 Summary of Assessed Condition of Trees Inventoried

Criteria	Good	Fair-Good	Fair	Poor-Fair	Poor
Trunk Integrity	237	110	39	25	22
Crown Structure	314	60	42	6	11
Crown Vigor	303	49	58	13	10

The majority of trees were assessed as being in Good condition for Trunk Integrity, Crown Structure and Crown Vigor. A total of 18 trees were assessed as Hazardous.

3.3. BOTANICAL INVENTORY

A total of 77 vascular plants were observed during the botanical inventories (Appendix A). Of the 68 plants identified to species level, 43 (63%) are native to Ontario and 25 (37%) are introduced. Nine (9)

species could only be identified to genus level due to immaturity or lack of identifiable features at the time of the surveys.

One (1) species is potentially significant at the federal level:

- Spotted Lady's Thumb (*Persicaria maculosa*)

This species is federally ranked as G3G5, meaning the rank is uncertain but ranges from Vulnerable to Secure. It is not considered a Species at Risk despite the uncertainty surrounding its federal significance, it is not designated Species at Risk at the federal or provincial level. It is also considered locally common.

At the local level, three (3) are considered to be of regional conservation concern, with TRCA ranking of L3. This ranking means that these species are of regional concern when naturally occurring, with distribution which is restricted in occurrence and/or requires specific site conditions (TRCA, 2017). Species ranked as L3 include:

- Cut-leaved Toothwort (*Candamine concatenata*)
- Running Strawberry Bush (*Euonymus obovatus*)
- Common Wood-sorrel (*Oxalis montana*)

All these species have provincial rankings of S4 or S5, indicating that they are provincially secure (MNRF, 2017).

3.4. BREEDING BIRD SURVEYS

Two (2) breeding bird surveys were completed using an area search technique, per guidelines provided by OBBA (Cadman et al., 2007). A total of 105 individuals were detected, comprised of 26 species (see Appendix B for species list). The most commonly encountered species were American Robin (*Turdus migratorius*; 15 observations), Red-winged Blackbird (*Agelaius phoeniceus*, 12 observations), Song Sparrow (*Melospiza melodia*, 11 observations), and Eastern Wood-Pewee (*Contopus virens*, 9 observations).

Of the species documented, two (2) are provincial Species at Risk (SAR):

- Chimney Swift (*Chaetura pelagica*) – Threatened
- Eastern Wood-Pewee (*Contopus virens*) – Special Concern

Chimney Swift were observed as flyovers only; There is no suitable habitat for this species on site, and they are not considered to be breeding on location.

Eastern Wood-Pewee was documented on 9 occasions during breeding bird surveys. Based on these observations, it is inferred that at most 3 individuals are residing in the surveyed area, including 1 breeding pair on the subject lands.

Four (4) species are considered to be Area Sensitive (OMNR, 2000) meaning that they require large habitat patches to carry out critical life processes and may be more sensitive to habitat fragmentation. These species include:

- Hairy Woodpecker (*Dryobates villosus*)

- Pine Warbler (*Setophaga pinus*)
- Red-breasted Nuthatch (*Sitta canadensis*)
- White-breasted Nuthatch (*Sitta carolinensis*)

At the local level, one (1) species is considered to be of regional conservation concern (L3, TRCA):

- Great Blue Heron (*Ardea herodias*)

However, this species is not considered to be breeding on site since no large stick nests were observed in any of the trees: a single bird was observed foraging along the margins of the golf course pond.

3.5. SPECIES AT RISK (SAR) SCREENING

A desktop SAR screening was conducted in spring 2021 including review of the NHIC database results (sec. 3.1.1) and other known species to occur in the Vaughan area. These species and their required habitats were cross-examined with habitat present on the subject lands to determine likelihood of presence. Potential habitat for SAR was further evaluated based on the results from field investigations.

Table 3 provides a summary of species that are likely to occur within 120 m of the subject property. A more detailed SAR screening and rationale has been provided in Appendix C.

Table 4 SAR Screening, 167 National Drive

Scientific Name	Common Name	Srank	COSEWIC (Federal)	SARO (Provincial)	Likely to Occur within 120 m of Subject Property
<i>Clinostomus elongatus</i>	Redside Dace	S2	END	END	X
<i>Contopus virens</i>	Eastern Wood-Pewee	S4B	SC	SC	X
<i>Myotis lucifugus</i>	Little Brown Myotis	S3	END	END	X
<i>Myotis leibii</i>	Eastern Small-footed Myotis	S2S3	END	END	X
<i>Myotis septentrionalis</i>	Northern Myotis	S3	END	END	X
<i>Perimyotis subflavus</i>	Tri-colored Bat	S3?	END	END	X

END = Endangered

THR = Threatened

SC = Special Concern

S1 = Critically Imperiled in Ontario; often 5 or fewer occurrences; especially vulnerable to extirpation

S2 = Very rare in Ontario; usually between 5 and 20 occurrences in the province or with many individuals in fewer occurrences; often susceptible to extirpation

S4B = Common and apparently secure in Ontario; usually with more than 100 occurrences in the province.

Redside Dace was reported by NHIC within 1 km of the subject lands, and may inhabit the East Humber River and its tributaries, including the watercourse immediately east of the property at toe-of-slope. No targeted fish or aquatic habitat surveys were undertaken as part of this study.

Eastern Wood-Pewee was documented from the subject property during field investigations (see Sec. 3.5 for details). This species is provincially listed as Special Concern and receives habitat protection under the Significant Wildlife Habitat provisions of the PPS (OMMAH, 2020). It does not receive protection under the Endangered Species Act (2007).

Habitat for **Myotis bats (Little Brown Myotis, Eastern Small-footed Myotis, Northern Myotis and Tri-colored Bat)** is present on the subject lands. While these species were not reported in background

sources or during site investigations, the FOD5-1 provides highly suitable maternity roosting habitat for these species and thus they have been considered as potentially present within the study area. Note that no targeted surveys for bats were conducted as part of this study.

3.6. SIGNIFICANT WILDLIFE HABITAT (SWH) SCREENING

A desktop SWH screening was completed for the subject lands and adjacent 120 m using the MNR's (2015) SWH Criteria for Ecoregion 7E, based on ELC habitat types and species records gathered during 2021 field investigations. A summary of potential or candidate SWH categories present within the subject lands and adjacent 120 m is provided in Table 2 below (also see Appendix D).

Table 5 SWH Screening Summary

SWH Category	SWH Status	Present within Subject Property (ref. Map 1)	Present on Adjacent 120 m Lands (ref. Map 1)
Bat Maternity Colonies	Candidate	X (Polygon 1)	
Turtle Wintering Areas	Candidate		X (Polygon 2)
Amphibian Breeding Habitat (Woodland)	Candidate	X (Polygon 1)	X (Polygon 2)
Special Concern and Rare Wildlife Species	Confirmed	X (Polygon 1) Eastern Wood-Pewee (SC)	

3.7. INCIDENTAL WILDLIFE

Six (6) species were observed incidentally:

- Eastern Chipmunk (*Tamias striatus*)
- Ebony Jewelwing (*Calopteryx maculata*)
- Gray Squirrel (*Sciurus carolinensis*)
- Green Frog (*Lithobates clamitans*)
- Striped Skunk (*Mephitis mephitis*)
- White-tailed Deer (*Odocoileus virginianus*)

All of the species listed above are common and widespread in Ontario (NHIC, 2020) and Toronto Region (TRCA, 2020).

4. PLANNING & POLICY FRAMEWORK

Existing federal, provincial, regional and local natural heritage policy relevant to the subject lands were reviewed and are summarized in Appendix E, including the following:

Federal:

- *Migratory Birds Convention Act* (Government of Canada, 1994a,b)
- *Fisheries Act* (1985)

Provincial:

- *Provincial Policy Statement (OMMAH, 2020)*
- *Endangered Species Act (Government of Ontario, 2007)*
- *Conservation Authorities Act and O. Reg. 166/06*

Local:

- *York Region Official Plan (2019)*
- *The Regional Municipality of York Forest Conservation Bylaw (#2013-68)*
- *City of Vaughan Official Plan (2010)*

Notwithstanding existing natural heritage policy, the EIS defers to the planning framework established in the Planning Justification Report prepared by Gagnon Walker Domes (GWD) Ltd (2021). Below is a summary of GWD's findings:

The greater residential plan of subdivision which includes the nine (9) lots fronting onto National Drive and the lots east of the National Golf Club of Canada, north of Langstaff Road, was registered on February 23, 1978. The subdivision was assumed by the City of Vaughan on January 14, 1985 via By-law 05-1985.

The subject site is known legally as Lot 65 of Registered Plan M-1800, City of Vaughan Regional Municipality of York. Its southeastern limit is subject to a storm sewer easement in favor of the City of Vaughan (LA691254), Part 1 of Plan 66R-10152.

National Drive is characterized by large irregular shaped lots with varying areas and frontages, mature trees, and significant landscaping. The housing stock consists of an eclectic mix of custom homes with large footprints. Dwellings are predominately 2-storeys in height, some of which are multi-leveled on account of changing topography. Roof styles include a mix of hip and flat roofs. A number of lots consist of accessory detached structures and private amenities (i.e. in-ground pools, tennis courts, manicured lawns). Vehicular access to each lot is provided by meandering and curvilinear driveways.

Each lot is serviced by municipal water service situated within the road right-of-way. At the time of development municipal sanitary service was not available to the subdivision and as such each lot was serviced by private septic systems. A sanitary sewer was later installed and currently terminates at the northeastern limits of the subject site.

Having been registered 30+ years the subject site represents the last remaining vacant lot to be developed on National Drive. To the best of our knowledge the City of Vaughan does not have an ecological analysis confirming the extent of the woodland on the subject site at the time of the subdivision's approval therefore it is difficult to ascertain the original edge of the woodlot. It is assumed that during the planning approvals process the woodlot was confined to the south and eastern limits of the subject site otherwise it would have been placed in the appropriate natural heritage/open space designation and/or zoning. The approval authority would have evaluated the merits of the subdivision against criteria such as: conformity with the Official Plan in force at the time, compatibility with neighbouring uses of land, suitability of the land for the proposed purpose, vehicular access, water supply, sewage disposal, the need to ensure protection from natural hazards.

A registered lot, the current in force planning documents do not reflect the subject site's legal status or its historical designation/zoning. The subject site in its entirety is zoned for residential purposes and as such does have an as-of-right permission to construct one (1) single detached residential dwelling. A single dwelling that conforms to the zoning standards, as well as other applicable codes, rules and regulations, should by right qualify for a permit to build.

As demonstrated throughout the Planning Justification Report the subject site is an ideal candidate for residential infill development on account of its location, access to existing and/or planned infrastructure, and the opportunity it presents to complete the residential subdivision. The proposal as conceived capitalizes on the site and local area opportunities, while responding to and overcoming constraints not typically found on conventional lots.

5. SUMMARY OF NATURAL HERITAGE CONSTRAINTS

Based on the desktop assessment, field investigations, and review of the proposed work, natural heritage and policy constraints within the study area include:

- Migratory birds;
- Deciduous forest and tree canopy;
- Valleylands;
- Fish habitat;
- Confirmed SWH:
 - Special Concern and Rare Wildlife Species: Eastern Wood-Pewee
- Candidate SWH:
 - Bat Maternity Colonies
 - Amphibian Breeding Habitat (Woodland)
 - Turtle Wintering Areas (adjacent lands only)
- Potential SAR habitat:
 - Eastern Wood-Pewee – SPECIAL CONCERN
 - Myotis Bats - ENDANGERED
 - Redside Dace – ENDANGERED

6. DESCRIPTION OF PROPOSED ACTIVITIES

6.0. GRADING & SERVICING

A preliminary grading & servicing plan was prepared by Valdor Engineering Inc. (Appendix G). The subject lands currently are tree covered and sloped in an easterly direction to an existing watercourse which is a tributary to the East Humber River located within the adjacent Nation Golf Club of Canada lands. The proposed grading plan which indicates some possible building envelopes follows the existing drainage pattern. A small portion of each lot including driveways and front yards will drain to an existing ditch on National Drive which ultimately drains to the same watercourse through an easement indicated as Part 6 on the plans. Driveway culverts will likely be required in order to maintain the ditch flow from the lots as well as the drainage from the paved portion of National Drive. Roof drainage and foundation drainage will generally be directed towards the rear of the lots and to soak away pits to meet water balance requirements. The lot grading will be designed for sheet drainage flow in order to avoid any erosion issues that are generally caused by concentrated flows. Flow splitters will be utilized in such situations. The preliminary grading plan is designed to conserve as much of the land

as possible for tree preservation. It is proposed to only disturb areas within the building footprints and areas required for grading and construction access.

Water servicing will be through an existing 150mm watermain on National Drive that runs right along the frontage of the lots with water service connections to each lot.

Similarly, a 200mm sanitary sewer also exists on National Drive which will be extended to the south to service the lots. Sewage ejector pumps will be installed within the homes that cannot be serviced by gravity, discharging to the 200mm sanitary sewer on National Drive.

Appropriate slope stabilization methods will be specified and incorporated into the house design at the detailed design phase.

6.1. CONSTRUCTION & PAVED SURFACES

Five (5) residential lots are proposed, which comprise 1.03 ha (94% of the study area). Within the lots, a total of 0.37 ha is proposed for grading/disturbance. The proposed building footprints are each between 0.04 and 0.05 ha. Table 6 summarizes the disturbed area and building envelope per lot, based on the preliminary grading plan (Appendix F).

Table 6 Summary of Disturbed Area Per Lot

Lot	Lot Area (Ha)	Disturbed Area (Ha)	% Disturbed	Building Area (Ha)
1	0.23	0.07	33%	0.04
2	0.24	0.08	33%	0.05
3	0.24	0.09	38%	0.05
4	0.21	0.07	31%	0.04
5	0.12	0.06	48%	0.04
Total	1.03	0.37	n/a	0.22

6.2. STORMWATER MANAGEMENT

The site is located within an area of the Humber River watershed where quantity control of stormwater runoff is not required as per TRCA guidelines.

Water quality control will not be required since storm runoff consists of clean roof runoff and runoff from the existing vegetated lands.

The water balance will need to be addressed as per TRCA requirements. Infiltration will be achieved by directing roof runoff into soak away pits located at the rear of the lots. The exact sizing will be determined at site plan stage once building sizes and roof areas have been established.

7. IMPACT ASSESSMENT

The following is a textual summary of each potential impact; additional attributes are assessed and summarized in Table 7 in section 9.

7.0. DIRECT IMPACTS

7.0.0. VEGETATION & TREE REMOVAL

Based on the preliminary grading plan (Valdor, 2021), 0.37 ha of deciduous forest (FOD5-1, Polygon 1) is proposed for removal. This includes 126 trees proposed for removal (including 4 hazardous trees) and 50 identified as injure (including 3 hazardous trees) due to grading within critical root zones. 255 trees are proposed for preservation (i.e. will not be injured or removed based on the current grading plan).

Anticipated grading and construction impacts to trees proposed to be injured or preserved may include:

- Severance of roots due to excavation;
- Root exposure to air and sunlight;
- Broken branches;
- Soil Compaction;
- Trunk damage;
- Wildlife impacts; and
- Decreased infiltration.

7.0.1. INTERFERENCE WITH MIGRATORY BIRDS

Vegetation clearing may interfere with migratory nesting birds (protected under the Migratory Bird Convention Act, 1994) if carried out during their active season (approximately April 1st - August 15th).

7.0.2. IMPACTS TO SAR AND SAR HABITAT

As discussed in section 7.1.1, 0.37 ha of Polygon 1 (FOD5-1) is proposed to be impacted, including removal of 126 trees. This forested community provides suitable habitat for Eastern Wood-Pewee (Special Concern) and is likely to provide suitable maternity roosting habitat for Endangered Bats (ref. sec. 3.6)

7.0.3. IMPACTS TO SWH

Polygon 1 contains three (2) categories of candidate SWH and one (1) category of confirmed SWH that will be impacted by the proposed removal of 0.37 ha of forested habitat:

- Special Concern and Rare Wildlife Species - Eastern Wood-Pewee (Confirmed)
- Bat Maternity Colonies (Candidate)
- Amphibian Breeding Habitat (Woodland) (Candidate)

7.0.4. SEDIMENTATION & EROSION

Vegetation clearing and grading activities will make portions of the site temporarily more susceptible to erosion. Increased susceptibility to erosion may result in increased sediment runoff, thereby affecting the quantity and quality of runoff contributions to the adjacent waterbody and watercourse.

7.1. INDIRECT IMPACTS

7.1.0. STORMWATER RUNOFF

The addition of 5 residential lots will cause an increase in stormwater runoff due to the increase in impervious areas since roof areas are now being incorporated. The quantity of discharge however will not be an issue at this location since quantity control is not required. Erosion protection will need to be addressed to ensure that there is no increase in sediment runoff.

7.1.1. HUMAN ENCROACHMENT

The proposed development may result in any of the following impacts associated with increased human activity on the subject lands:

- Increased dumping within the natural area;
- Noise and light pollution; interference with forest-dwelling species;
- Informal trails or access into natural areas.

8. AVOIDANCE, MITIGATION AND ENHANCEMENT STRATEGIES

The potential impacts described in section 7 are being addressed through a hierarchy of avoidance, mitigation, and enhancement.

8.0. AVOIDANCE STRATEGIES

8.0.0. TIMING WINDOWS FOR CONSTRUCTION

Clearing of natural vegetation as part of site preparation should be conducted in the late fall or winter months (i.e. October 1 to March 31) to avoid the active seasons of birds protected under the Migratory Birds Convention Act (April 1 to August 15) (Government of Canada, 1994a,b) and Endangered bats (April 1 to September 30) protected under the ESA (Government of Ontario, 2007).

If this timing cannot be accommodated, further study may be required, including a nest sweep by an avian biologist to confirm absence of bird nesting. If the areas proposed for clearing are thoroughly checked during the active breeding season for bird nests by a qualified biologist during the construction phase, and no nests are found, then construction may be permitted. Bat acoustic surveys to confirm species absence and/or further consultation with MECP may be required with regard to Endangered bats.

Timing windows will address impacts associated with migratory birds (7.1.2) and SAR bats (7.1.3).

8.1. MITIGATION STRATEGIES

Mitigation can be described as actions taken during the planning, design, construction and operation of works and undertakings to alleviate (reduce/minimize) potential adverse effects on features and functions.

8.1.0. TREE PROTECTION

The grading plan has been designed to only disturb areas where the house envelopes are proposed to minimize disturbance to the rest of the site and maximize tree preservation. Impacts to trees proposed for preservation or injury can be mitigated as follows:

- Prior to construction activities, Tree Preservation Zones (TPZ) should be established to protect trees identified as “injure or “preserve” (Map 4)
- Trees proposed as “preserve” or “injure” must be surrounded by a continuous barrier (TPF), which shall be installed prior to site clearing, grading and demolition, and maintained through construction and landscaping.

Tree protection will address impacts to trees (7.1.1).

8.1.1. SEDIMENT & EROSION CONTROL

An erosion and sediment control (ESC) plan will be prepared at detailed design and during preparation of individual sitings for each lot once the building footprint locations and grading limits have been established in more detail. Silt fencing will be installed during the building construction and tree removal stage to the east of each lot at the construction limit and around tree preservation areas to protect trees and to prevent sediment runoff into the watercourse. Double silt fencing with straw bales along with other measures such as rock check dams will be used if required in areas that are experiencing higher flows, concentrated flows and are more susceptible to erosion. Silt fencing and other ESC measures are to be inspected and repaired regularly, particularly after storm events.

Silt and erosion control devices are to be in place prior to construction and shall remain until construction is complete and vegetation has established. All disturbed vegetated areas left for 30 days or longer will be stabilized and restored with native, non-invasive species following completion of the work.

The proposed ESC strategies will address impacts associated with sedimentation and erosion (7.1.5).

8.1.2. WATER BALANCE

Maintaining the existing water balance either through annual water balance or 5mm retention is a general requirement of the TRCA. This is achieved best by connecting roof leaders to soak away pits at the rear of the lots. Detailed calculations and sizing of soak away pits will follow at detailed design for each individual lot once the building coverage and other parameters for each lot have been established in more detail.

Water balance will address impacts associated with stormwater runoff (7.2.1).

8.1.3. HOMEOWNER EDUCATION

A stewardship brochure or online resource should be developed for distribution to the new homeowners. This will contain information explaining the significance of the adjacent natural heritage features, and how to act as environmental stewards. The resource should include a summary of potential impacts associated with ornamental plantings (invasive species), littering, pets, and other encroachment issues.

Homeowner education will address impacts associated with human encroachment (7.2.2).

8.2. ENHANCEMENT STRATEGIES

Enhancement is distinct from mitigation in that it addresses the 'residual' impacts that remain after mitigation measures have been implemented. Enhancement can take different forms, however the ultimate objective is to ensure that the project will not result in negative impacts to natural heritage resources, by replacing and/or restoring the quantity or quality of the existing features and functions.

The main principles behind enhancement are:

1. To plan for the recovery from residual impacts with effective restoration; and,
2. To identify opportunities for enhancements to improve ecosystem function and overall biodiversity.

Enhancement strategies are summarized below.

8.2.0. NATIVE SPECIES RESTORATION

To demonstrate no negative impacts to existing natural features and functions, a restoration area of at least 0.37 ha is recommended. Species planted should be entirely native species and should include a mixture of suitable groundcover, shrubs and trees to establish a target community of deciduous forest. The restored area should be monitored for a minimum of three years to ensure plantings have survived, manage any invasive species or disturbance, and ensure the target community is being met.

Native species restoration will address impacts associated with vegetation and SWH removal (7.1.1, 7.1.4).

8.2.1. BAT BOX INSTALLATION

The loss of potential bat maternity roosting habitat represents an impact to candidate SWH and potential SAR habitat, thus enhancement actions are recommended to offset this impact. The Significant Wildlife Habitat Mitigation Support Tool suggests that a loss of bat maternity roosting habitat may be mitigated through installation of bat houses. Bat houses should be carefully selected and installed to successfully accommodate female bats and their pups (OMNRF, 2014). Bat houses can be purchased from a variety of sources but should meet the following specifications as recommended by Bat Conservation International:

- Be at least 24" high x 16" wide (must be large enough to offer adequate thermal stability)
- Roosting boards and landing pads should be made of roughened wood, containing no fabric or mesh materials

- Painted dark brown/black

Bat house location and installation specifications should also follow the guidance of Bat Conservation International. In general, optimal bat house locations receive at least six hours of daily sun exposure and have a nearby water source. They should be mounted at least 4 to 7 m above the ground. For optimal roosting success bat houses should be multi-chambered or mounted in groups of 3 or more.

Bat boxes will address residual impacts associated with SWH and SAR bats (7.1.3 and 7.1.4).

8.2.2. TREE REPLACEMENT

To demonstrate a net gain in tree canopy, a 2:1 replacement of the 122 non-hazardous trees proposed for removal is recommended, totaling 244 trees. Replacement trees should be comprised of native species and function to meet the target community of deciduous forest.

Tree replacement will address residual impacts associated with tree removal, SWH and SAR habitat removal (7.1.1, 7.1.3, 7.1.4).

9. NET RESULTS

A summary of the anticipated impacts, proposed mitigation and enhancement strategies to achieve a net result of no negative impacts is provided below in Table 7.

Table 7 Summary of net results

IMPACT	MAGNITUDE	IMPACT TYPE	DURATION	MITIGATION STRATEGY	RESIDUAL IMPACT	ENHANCEMENT STRATEGY	NET RESULT
Tree removal and injury	122 - remove 50 - injure	Direct	Permanent	Tree Protection Zones for trees marked injure or preserve	Loss of 122 trees	2:1 replacement of trees (244 trees; all native species)	Gain
Vegetation removal	0.37 ha (FOD5-1)	Direct	Permanent		Loss of 0.37 ha of natural vegetation	Minimum 0.37 ha habitat restoration (targeting FOD community)	Neutral
Interference with Migratory Birds	122 trees (remove) 0.37 ha	Direct	Temporary	Avoid construction activities between April 1 and Aug 15	Loss of 122 trees and 0.37 ha of habitat	2:1 replacement of trees; Minimum 0.37 ha habitat restoration (targeting FOD community)	Gain
Impacts to SAR and SAR Habitat	122 trees (remove) 0.37 ha	Direct	Permanent	Avoid construction activities between April 1 and Sept 30	Loss of 122 trees and 0.37 ha of habitat	Installation of 3 MECP-approved bat boxes post-construction; 2:1 replacement of trees; Minimum 0.37 ha habitat restoration (targeting FOD community)	Gain

IMPACT	MAGNITUDE	IMPACT TYPE	DURATION	MITIGATION STRATEGY	RESIDUAL IMPACT	ENHANCEMENT STRATEGY	NET RESULT
Impacts to SWH <ul style="list-style-type: none"> • Eastern Wood-Pewee • Woodland Amphibian Breeding Habitat • Bat Maternity Colonies 	0.37 ha	Direct	Permanent	Avoid construction activities between April 1 and Sept 30	Loss of 122 trees and 0.37 ha of habitat	2:1 replacement of trees; 0.37 ha habitat restoration (targeting FOD community)	Gain
Sedimentation and erosion	0.37 ha to be graded	Direct	Temporary	Develop and undertake an approved ESC plan	None	Temporary native seed mix to be applied on disturbed areas immediately upon completion of works.	Neutral
Stormwater runoff	Quantity/Quality control not required. Water balance to be determined at detailed design stage	Indirect	Temporary	Maintain water balance using roof leaders connected to soak away pits	None	n/a	Neutral
Human encroachment	5 new residential lots	Indirect	Permanent	Homeowner education	None	n/a	Neutral

10. RECOMMENDATIONS

D&A has prepared this EIS to characterize the natural heritage features, functions, and policy designations present at 167 National Drive. Natural heritage impacts have been assessed based on the proposed activities and corresponding mitigation and enhancement strategies have been proposed.

Natural heritage constraints present on and adjacent to the subject lands include:

- Migratory Birds;
- Deciduous forest;
- Valleylands;
- Fish habitat;
- Confirmed SWH:
 - Special Concern and Rare Wildlife Species: Eastern Wood-Pewee
- Candidate SWH:
 - Bat Maternity Colonies
 - Amphibian Breeding Habitat (Woodland)
 - Turtle Wintering Areas (adjacent lands only)
- Potential SAR habitat:
 - Bats (Little Brown Myotis, Eastern Small-footed Myotis, Northern Myotis, Tri-colored Bat) - ENDANGERED
 - Redside Dace – ENDANGERED

To address the potential direct and indirect impacts to the features and functions listed above, the following avoidance, mitigation and enhancement strategies are proposed:

1. Clearing of natural vegetation as part of site preparation should be conducted in the late fall or winter months (i.e. October 1 to March 31) to avoid the active seasons of migratory birds and Endangered bats.
2. Prior to construction activities, Tree Preservation Zones (TPZ) should be established to protect trees identified as “injure or “preserve” (Map 4). Trees proposed as “preserve” or “injure” must be surrounded by a continuous barrier (TPF), which shall be installed prior to site clearing, grading and demolition, and maintained through construction and landscaping.
3. An erosion and sediment control (ESC) plan should be prepared in accordance with local requirements. ESC is proposed to be installed at the grading limits in the back of the lots hugging the same contour elevation where possible. Silt and erosion control devices are to be in place prior to construction and shall remain under construction is complete and vegetation has established. All disturbed vegetated areas left for 30 days or longer will be stabilized and restored with native, non-invasive species following completion of the work.
4. Determine water balance requirements at detailed design; Maintain water balance through roof leaders connected to soak away pits (Valdor, 2021).
5. An environmental stewardship resource should be developed for distribution to the new homeowners.
6. To demonstrate no negative impacts, a restoration area of at least 0.37 ha is recommended with a target community of deciduous forest. Species planted should be entirely native species and should include a mixture of suitable groundcover, shrubs and trees. The restored area should be monitored for a minimum of three years to ensure plantings have survived, manage any invasive species or disturbance, and ensure the target community is being met.

7. At least 3 bat boxes should be installed in accordance with MECP and Bat Conservation International requirements.
8. To demonstrate net gain in tree canopy, trees should be replaced at a 2:1 ratio (totaling 244 trees). Replacement trees should be comprised of native species and function to meet the target community of deciduous forest.

11. CONCLUSION






The findings of GWD's Planning Justification Report conclude that development is permissible as-of-right on the subject lands. This proposed development will result in impacts to the existing natural heritage features and functions. Contingent upon implementation of the recommendations provided in this EIS, the long-term net result will achieve no negative impacts.

12. REFERENCES




- Cadman, M.D., D.A. Sutherland, G.G. Beck, D. Lepage, and A.R. Couturier (eds.) 2007.** Atlas of the Breeding Birds of Ontario, 2001 – 2005. Bird Studies Canada, Environment Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, and Ontario Nature, Toronto. xxii + 706 pp..
- Chapman, L.J. and D.F. Putnam. 1984.** The Physiography of Southern Ontario, 3rd Edition. Ontario Geological Survey, Special Volume 2. Government of Ontario, Ontario. 270p.
- Government of Canada. 1994a.** Migratory Birds Convention Act, Statutes of Canada (1994, c. 22). Retrieved from the Department of Justice Laws Website: <http://laws-lois.justice.gc.ca/eng/acts/M-7.01/FullText.html>
- Government of Canada. 1994b.** Migratory Birds Regulations, Consolidated Regulations of Canada (1994, c. 1035). Retrieved from the Department of Justice Laws Website: http://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._1035/FullText.html
- Government of Ontario. 2007.** Endangered Species Act, Statutes of Ontario (2007, c. 6). Retrieved from the ServiceOntario e-Laws website: http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_07e06_e.htm
- GWD (Gagnon Walker Domes) Ltd. 2021.** 167 National Drive Land Use Planning Justification Report. September 2021.
- Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Ulhig, and S. McMurray. 1998.** Ecological Land Classification for Southern Ontario: First Approximation and its Application. Ontario Ministry of Natural Resources, Southcentral Science Section, Science Development and Transfer Branch. SCSS Field Guide FG-02.)
- MECP (Ministry of Environment, Conservation and Parks). 2021.** Maternity Roost Surveys. April 2021.
- NHIC (Natural Heritage Information Centre). 2021.** Make a Natural Heritage Map online database. <http://nhic.mnr.gov.on.ca/MNR/nhic/queries/nhic.mwf>
- OGS (Ontario Geological Survey). 2010.** Surficial geology of Southern Ontario.
- OMMAH (Ontario Ministry of Municipal Affairs & Housing). 2020.** Provincial Policy Statement. 53 pp. Available at: <https://files.ontario.ca/mmah-provincial-policy-statement-2020-accessible-final-en-2020-02-14.pdf>
- OMNRF (Ontario Ministry of Natural Resources and Forestry). 2015.** Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E, January, 2015. Available at: <https://www.ontario.ca/document/significant-wildlife-habitat-ecoregional-criteria-schedules-ecoregion-7e>
- OMNRF (Ontario Ministry of Natural Resources and Forestry). 2014.** Significant Wildlife Habitat Mitigation Support Tool.
- SARA (Species at Risk Act). 2002.** Available at: <http://laws-lois.justice.gc.ca/eng/acts/S-15.3/index.html>
- TRCA (Toronto and Region Conservation Authority). 2017.** Annual local occurrence score and local rank update for 2017: terrestrial species and vegetation communities. July 2017.
- Valdor (Valdor Engineering Ltd). 2021.** Preliminary Servicing and Grading Plan: 167 National Drive. October 5 2021.

Map 1: Ecological Characterization

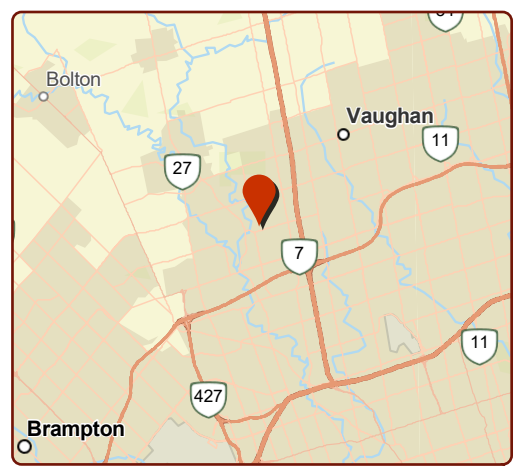
National Drive Estates EIS

-  Property Boundary
-  Adjacent Lands (120m)
-  Vegetation Communities ¹
-  Watercourse ²
-  Waterbody ²

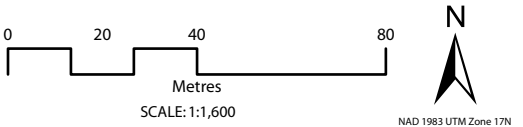
Significant Species Observations ¹

-  Chimney Swift
-  Eastern Wood-Pewee
-  Great Blue Heron

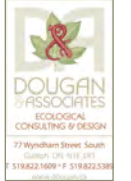
Notes:
 1) Dougan and Associates, 2021
 2) Toronto Region Conservation Authority, 2021



Base data source: City of Toronto, Province of Ontario, York Region, Esri Canada, Esri, HERE, Garmin, FAO, METI/NASA, USGS, EPA, NPS, NRCAN, Parks Canada, City of Toronto, Maxar, Microsoft



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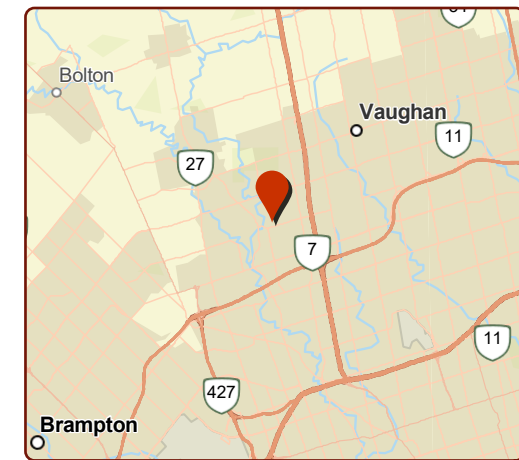


Map 2: Natural Heritage Constraints

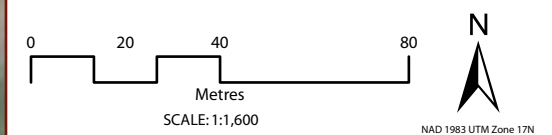
National Drive Estates EIS

- Property Boundary
- Adjacent Lands (120m)
- Watercourse ¹
- Waterbody ¹
- Woodland Cover ²
- MNR Wooded Area ³
- Conceptual Regulated Area ^{1, 5}
- Natural Heritage System ¹
- Confirmed SWH: Special Concern and Rare Wildlife ⁴

Notes:
 1) Toronto Region Conservation Authority
 2) York Region, 2021
 3) Ministry of Natural Resources and Forestry, 2021
 4) Dougan and Associates, 2021
 5) Not all regulated areas may be mapped. Boundary lines are a conceptual representation of TRCA's Regulation limit and should not be relied upon as a precise delineation. A feature does not have to be mapped to be regulated.



Base data source: City of Toronto, Province of Ontario, York Region, Esri Canada, Esri, HERE, Garmin, FAO, METI/NASA, USGS, EPA, NPS, NRCAN, Parks Canada, City of Toronto, Maxar, Microsoft



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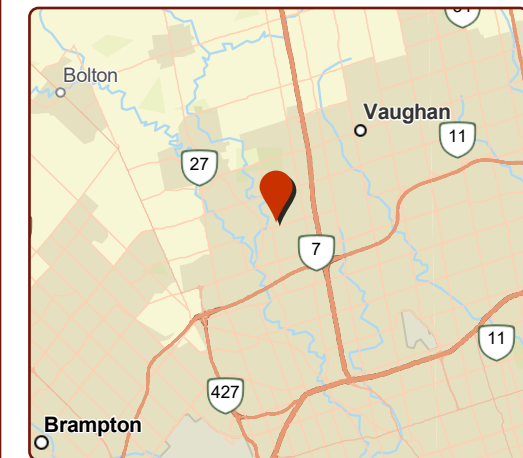




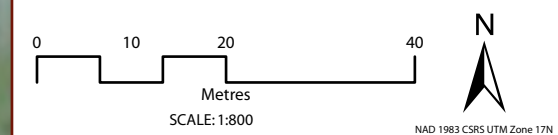
Map 3: Impact Assessment National Drive Estates EIS

- Property Boundary
- Vegetation Communities ¹
- Site Plan ²
- Site Grading ²

Notes:
 1) Dougan and Associates, 2021
 2) Valdor Engineering Inc., September 2021



Base data source: City of Toronto, Province of Ontario, York Region, Esri Canada, Esri, HERE, Garmin, FAO, METI/NASA, USGS, EPA, NPS, NRCan, Parks Canada, City of Toronto, Maxar, Microsoft



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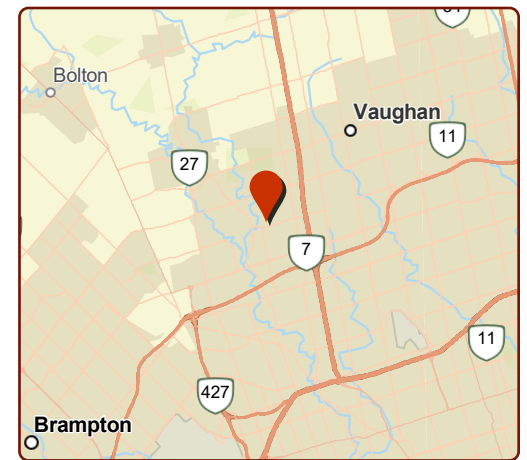




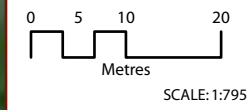
Map 4: Tree Preservation Plan
 Overview
 National Drive Estates EIS

- Property Boundary
- Site Grading ¹
- Site Plan ¹
- Limit of Disturbance ¹
- Tree Action ² (Crowns shown to scale)**
- Preserve
- Injure
- Remove

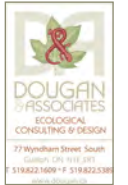
Notes:
 1) Valdor Engineering Inc., September 2021
 2) Noica Consulting Inc, September 2021



Base data source: City of Toronto, Province of Ontario, York Region, Esri Canada, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, NRCan, Parks Canada, City of Toronto, Maxar, Microsoft










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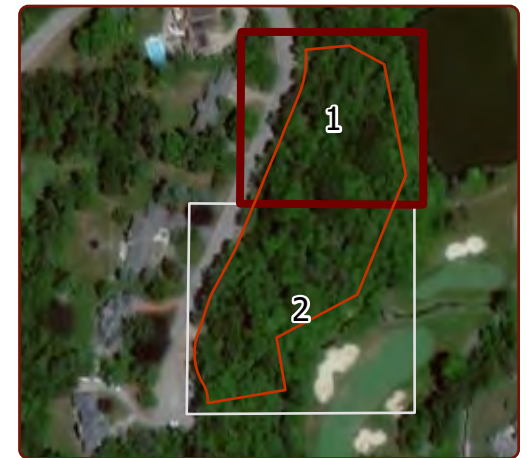


Map 4 - 1: Tree Preservation Plan

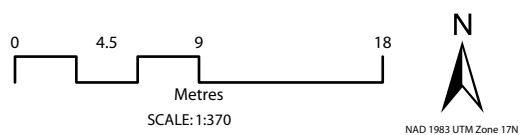
National Drive Estates EIS

-  Property Boundary
 -  Site Grading ¹
 -  Site Plan ¹
 -  Limit of Disturbance ¹
- Tree Action ² (Crowns shown to scale)**
-  Preserve
 -  Injure
 -  Remove

Notes:
 1) Valdor Engineering Inc., September 2021
 2) Noica Consulting Inc, September 2021



Base data source: City of Toronto, Maxar, City of Toronto, Maxar, Microsoft



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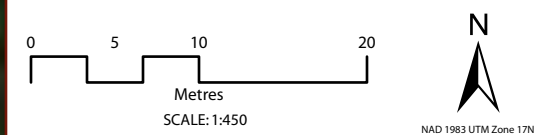
Map 4 - 2: Tree Preservation Plan
National Drive Estates EIS

- Property Boundary
- Site Grading ¹
- Site Plan ¹
- Limit of Disturbance ¹
- Tree Action ² (Crowns shown to scale)**
 - Preserve
 - Injure
 - Remove

Notes:
 1) Valdor Engineering Inc., September 2021
 2) Noica Consulting Inc, September 2021



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Appendix A: Vascular Plant List

Appendix A. Vascular Plant List

167 National Drive, Vaughan

Scientific Name ¹	Common Name ²	G_RANK ³	COSEWIC ⁴	SARO ⁵	S_RANK ₆	TRCA ₇	CC ⁸	CW ⁹	Native Status ¹⁰
American Basswood	<i>Tilia americana</i>	G5			S5	L5	4	3	N
American Beech	<i>Fagus grandifolia</i>	G5			S4	L4	6	3	N
Annual Ragweed	<i>Ambrosia artemisiifolia</i>	G5			S5	L5	0	3	N
Avens Species	<i>Geum sp</i>						0	0	
Bachelor's Button	<i>Centaurea cyanus</i>	GNR			SNA	L+	0	5	I
Black Cherry	<i>Prunus serotina</i>	G5			S5	L5	3	3	N
Black Mustard	<i>Brassica nigra</i>	GNR			SNA	L+	0	5	I
Black Nightshade	<i>Solanum nigrum</i>	GNR			SNA	L+	0	0	I
Bloodroot	<i>Sanguinaria canadensis</i>	G5			S5	L5	5	4	N
Bristly Black Currant	<i>Ribes lacustre</i>	G5			S5		7	-3	N
Broad-leaved Enchanter's Nightshade	<i>Circaea canadensis</i>	G5T5			S5	L5	3	3	N
Bull Thistle	<i>Cirsium vulgare</i>	GNR			SNA	L+	0	4	I
Canada Thistle	<i>Cirsium arvense</i>	GNR			SNA	L+	0	3	I
Choke Cherry	<i>Prunus virginiana</i>	G5			S5	L5	2	1	N
Christmas Fern	<i>Polystichum acrostichoides</i>	G5			S5	L4	5	5	N
Climbing Nightshade	<i>Solanum dulcamara</i>	GNR			SNA	L+	0	0	I
Common Buckthorn	<i>Rhamnus cathartica</i>	GNR			SNA	L+	0	3	I
Common Burdock	<i>Arctium minus</i>	GNR			SNA	L+	0	5	I
Common Dandelion	<i>Taraxacum officinale</i>	G5			SNA	L+	0	3	I
Common Mouse-ear Chickweed	<i>Cerastium fontanum</i>	GNR			SNA	L+	0	3	I
Common Mullein	<i>Verbascum thapsus</i>	GNR			SNA	L+	0	5	I
Common Red Raspberry	<i>Rubus idaeus</i>	G5			S5				N
Common Sow-thistle	<i>Sonchus oleraceus</i>	GNR			SNA	L+	0	3	I
Common St. John's- wort	<i>Hypericum perforatum</i>	GNR			SNA	L+	0	5	I
Common Wood-sorrel	<i>Oxalis montana</i>	G5			S5	L3	8	3	N

Appendix A. Vascular Plant List

167 National Drive, Vaughan

Scientific Name ¹	Common Name ²	G_RANK ³	COSEWIC ⁴	SARO ⁵	S_RANK ₆	TRCA ₇	CC ⁸	CW ⁹	Native Status ¹⁰
Corn Chamomile	<i>Anthemis arvensis</i>	GNR			SNA	L+	0	5	I
Cut-leaved Toothwort	<i>Cardamine concatenata</i>	G5			S5	L3	6	3	N
Dame's Rocket	<i>Hesperis matronalis</i>	G4G5			SNA	L+	0	5	I
Devil's Beggarticks	<i>Bidens frondosa</i>	G5			S5	L5	3	-3	N
Eastern Hemlock	<i>Tsuga canadensis</i>	G5			S5	L4	7	3	N
Eastern Hop-hornbeam	<i>Ostrya virginiana</i>	G5			S5	L5	4	4	N
Eastern White Pine	<i>Pinus strobus</i>	G5			S5	L4	4	3	N
Elecampane	<i>Inula helenium</i>	GNR			SNA	L+	0	5	I
European Swallow-wort	<i>Vincetoxicum rossicum</i>	GNR			SNA	L+	0	5	I
False Solomon's-seal	<i>Maianthemum racemosum</i>	G5			S5	L5	4	3	N
Field Bindweed	<i>Convolvulus arvensis</i>	GNR			SNA	L+	0	5	I
Garlic Mustard	<i>Alliaria petiolata</i>	GNR			SNA	L+	0	0	I
Goldenrod Species	<i>Solidago sp</i>								
Grass-leaved Goldenrod	<i>Euthamia graminifolia</i>	G5			S5	L5	2	-2	N
Great Ragweed	<i>Ambrosia trifida</i>	G5			S5	L5	0	-1	N
Hawthorn Species	<i>Crataegus sp</i>						0	0	
Herb-Robert	<i>Geranium robertianum</i>	G5			S5	L+?	0	5	N
Honeysuckle Species	<i>Lonicera sp</i>								
Jack-in-the-pulpit	<i>Arisaema triphyllum</i>	G5			S5	L5	5	-2	N
Manitoba Maple	<i>Acer negundo</i>	G5			S5	L+?	0	-2	N
Marginal Wood Fern	<i>Dryopteris marginalis</i>	G5			S5	L4	5	3	N
May-apple	<i>Podophyllum peltatum</i>	G5			S5	L5	5	3	N
Narrow-leaved Cattail	<i>Typha angustifolia</i>	G5			SNA	L+	3	-5	I
New England Aster	<i>Symphyotrichum novae-angliae</i>	G5			S5	L5	2	-3	N
Nightshade Species	<i>Solanum sp</i>						0	0	
Northern Red Oak	<i>Quercus rubra</i>	G5			S5	L4	6	3	N
Paper Birch	<i>Betula papyrifera</i>	G5			S5	L4	2	2	N

Appendix A. Vascular Plant List

167 National Drive, Vaughan

Scientific Name ¹	Common Name ²	G_RANK ³	COSEWIC ⁴	SARO ⁵	S_RANK ₆	TRCA ₇	CC ⁸	CW ⁹	Native Status ¹⁰
Philadelphia Fleabane	<i>Erigeron philadelphicus</i>	G5			S5	L5	1	-3	N
Prickly Gooseberry	<i>Ribes cynosbati</i>	G5			S5	L5	4	5	N
Riverbank Grape	<i>Vitis riparia</i>	G5			S5	L5	0	-2	N
Rose Species	<i>Rosa sp</i>								
Running Strawberry Bush	<i>Euonymus obovatus</i>	G5			S4	L3	6	5	N
Serviceberry Species	<i>Amelanchier sp</i>						0	0	
Smooth Bedstraw	<i>Galium mollugo</i>	GNR			SNA	L+	0	5	I
Solomon's Seal Species	<i>Polygonatum sp</i>						0	0	
Spinulose Wood Fern	<i>Dryopteris carthusiana</i>	G5			S5	L5	5	-2	N
Spotted Lady's-thumb	<i>Persicaria maculosa</i>	G3G5			SNA	L+	0	-3	I
Stinging Nettle	<i>Urtica dioica</i>	G5			S5				N
Sugar Maple	<i>Acer saccharum</i>	G5			S5	L5	4	3	N
Tall Goldenrod	<i>Solidago altissima</i>	G5			S5				N
Thicket Creeper	<i>Parthenocissus vitacea</i>	G5			S5	L5	3	3	N
Tufted Vetch	<i>Vicia cracca</i>	GNR			SNA	L+	0	5	I
Violet Species	<i>Viola sp</i>						0	0	
Virginia Waterleaf	<i>Hydrophyllum virginianum</i>	G5			S5	L5	6	-2	N
White Ash	<i>Fraxinus americana</i>	G5			S4	L5	4	3	N
White Goosefoot	<i>Chenopodium album</i>	G5			SNA	L+	0	1	I
Wild Black Currant	<i>Ribes americanum</i>	G5			S5	L5	4	-3	N
Wild Carrot	<i>Daucus carota</i>	GNR			SNA	L+	0	5	I
Wild Strawberry	<i>Fragaria virginiana</i>	G5			S5	L5	2	1	N
Yellow Birch	<i>Betula alleghaniensis</i>	G5			S5	L4	6	0	N
Yellow Trout-lily	<i>Erythronium americanum</i>	G5			S5	L5	5	5	N
Zigzag Goldenrod	<i>Solidago flexicaulis</i>	G5			S5	L5	6	3	N

Appendix A. Vascular Plant List

167 National Drive, Vaughan

1. NHIC (Natural Heritage Information Centre). 2017. Ontario Vascular Plant Species List. February 2017. Ontario Ministry of Natural Resources. <https://www.ontario.ca/page/get-natural-heritage-information>
2. NHIC (Natural Heritage Information Centre). 2017. Ontario Vascular Plant Species List. February 2017. Ontario Ministry of Natural Resources. <https://www.ontario.ca/page/get-natural-heritage-information>
3. NHIC (Natural Heritage Information Centre). 2017. Ontario Vascular Plant Species List. February 2017. Ontario Ministry of Natural Resources. <https://www.ontario.ca/page/get-natural-heritage-information>. **G1** critically imperiled on a global scale; **G2** imperiled on a global scale; **G3** vulnerable on a global scale; **G4** apparently secure on a global scale; **G5** secure on a global scale; **GX** Presumed Extinct, Not located despite intensive searches and virtually no likelihood of rediscovery; **GH** Possibly Extinct, Missing; known from only historical occurrences but still some hope of rediscovery; **G#G#** Range Rank—A numeric range rank (e.g., G2G3) is used to indicate the range of uncertainty in the status of a species or community; **GU** Unrankable—Currently unrankable due to lack of information or due to substantially conflicting information about status or trends. Whenever possible, the most likely rank is assigned and the question mark qualifier is added (e.g., G2?) to express uncertainty, or a range rank (e.g., G2G3) is used to delineate the limits (range) of uncertainty; **GNR** Unranked—Global rank not yet assessed; **GNA** Not Applicable—A conservation status rank is not applicable because the species is not a suitable target for conservation activities; **?** Inexact Numeric Rank—Denotes inexact numeric rank (e.g., G2?).
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7. TRCA (Toronto and Region Conservation Authority). 2016. April 2014 TRCA Flora Species and Ranks.
8. Oldham, M.J., W.D. Bakowsky and D.A. Sutherland. 1995. Floristic Quality Assessment System for Southern Ontario., ONTdex. Natural Heritage Information Centre, Ontario Ministry of Natural Resources. Peterborough, Ontario. **Coefficient of Conservatism** is a value (0 to 10) assigned to native species in Ontario based on its degree of fidelity to a specific vegetation community type. The lower this value, the more likely the plant is to be found in a wide variety of plant community types including disturbed sites. The presence of plants with a coefficient of conservatism of 9 or 10 indicates later-successional native plants that have undergone only minor disturbance.
9. Oldham, M.J., W.D. Bakowsky and D.A. Sutherland. 1995. Floristic Quality Assessment System for Southern Ontario., ONTdex. Natural Heritage Information Centre, Ontario Ministry of Natural Resources. Peterborough, Ontario. **Coefficient of Wetness** is a value (-5 to +5) assigned to species in Ontario based on how often it is to occur in wetland habitat. -5 Obligate Wetland; -3 Facultative Wetland; 0 Facultative; +3 Facultative Upland; +5 Obligate Upland
10. NHIC (Natural Heritage Information Centre). 2014. Ontario Vascular Plant Species List. April 2014. Ontario Ministry of Natural Resources. <https://contrib.ontario.ca/environment-and-energy/get-natural-heritage-information>; Brouillet, L., F. Coursol, S.J. Meades, M. Favreau, M. Anions, P. Bélisle & P. Desmet. 2010+. VASCAN, the Database of Vascular Plants of Canada. <http://data.canadensys.net/vscan/> (consulted on 2017-06-22). **N** native; **I** introduced



Appendix B: Wildlife List

Appendix B. Wildlife List

167 National Drive, Vaughan

Common Name ¹	Scientific Name ²	GRank ³	SARA Status ⁴	COSEWIC ⁵	ESA Status ⁶	SRank ⁷	Area Sensitivity ⁸	TRCA ⁹
American Crow	<i>Corvus brachyrhynchos</i>	G5		---	---	S5B	---	L5
American Goldfinch	<i>Spinus tristis</i>	G5		---	---	S5B	---	L5
American Robin	<i>Turdus migratorius</i>	G5		---	---	S5B	---	L5
Black-capped Chickadee	<i>Poecile atricapillus</i>	G5		---	---	S5	---	L5
Blue Jay	<i>Cyanocitta cristata</i>	G5		---	---	S5	---	L5
Brown-headed Cowbird	<i>Molothrus ater</i>	G5		---	---	S4B	---	L5
Cedar Waxwing	<i>Bombycilla cedrorum</i>	G5		---	---	S5B	---	L5
Chimney Swift	<i>Chaetura pelagica</i>	G5	THR	THR	THR	S4B,S4N	---	L4
Chipping Sparrow	<i>Spizella passerina</i>	G5		---	---	S5B	---	L5
Common Grackle	<i>Quiscalus quiscula</i>	G5		---	---	S5B	---	L5
Downy Woodpecker	<i>Dryobates pubescens</i>	G5		---	---	S5	---	L5
Eastern Chipmunk	<i>Tamias striatus</i>	G5		---	---	S5	---	L4
Eastern Kingbird	<i>Tyrannus tyrannus</i>	G5		---	---	S4B	---	L4
Eastern Wood-Pewee	<i>Contopus virens</i>	G5	SC	SC	SC	S4B	---	L4
Ebony Jewelwing	<i>Calopteryx maculata</i>	G5		---	---	S5	n/a	
Gray Squirrel	<i>Sciurus carolinensis</i>	G5		---	---	S5	---	L5
Great Blue Heron	<i>Ardea herodias</i>	G5		---	---	S4	---	L3
Green Frog	<i>Lithobates clamitans</i>	G5		---	---	S5	---	L4
Hairy Woodpecker	<i>Dryobates villosus</i>	G5		---	---	S5	AS	L4
Mourning Dove	<i>Zenaida macroura</i>	G5		---	---	S5	---	L5
Northern Cardinal	<i>Cardinalis cardinalis</i>	G5		---	---	S5	---	L5
Northern Flicker	<i>Colaptes auratus</i>	G5		---	---	S4B	---	L4
Pine Warbler	<i>Setophaga pinus</i>	G5		---	---	S5B	AS	L4
Red-breasted Nuthatch	<i>Sitta canadensis</i>	G5		---	---	S5	AS	L4
Red-eyed Vireo	<i>Vireo olivaceus</i>	G5		---	---	S5B	---	L4
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	G5		---	---	S4	---	L5
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	G5		---	---	S4B	---	L4
Song Sparrow	<i>Melospiza melodia</i>	G5		---	---	S5B	---	L5
Striped Skunk	<i>Mephitis mephitis</i>	G5		---	---	S5	---	L5
Trumpeter Swan	<i>Cygnus buccinator</i>	G4		NAR	NAR	S4	---	L+
White-breasted Nuthatch	<i>Sitta carolinensis</i>	G5		---	---	S5	AS	L4

Appendix B. Wildlife List

167 National Drive, Vaughan

Common Name ¹	Scientific Name ²	GRank ³	SARA Status ⁴	COSEWIC ⁵	ESA Status ⁶	SRank ⁷	Area Sensitivity ⁸	TRCA ⁹
White-tailed Deer	<i>Odocoileus virginianus</i>	G5		---	---	S5	---	L4

- NHIC (Natural Heritage Information Centre). 2017. Ontario Vascular Plant Species List. February 2017. Ontario Ministry of Natural Resources. <https://www.ontario.ca/page/get-natural-heritage-information>
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- OMNR (Ontario Ministry of Natural Resources). 2010.
- TRCA (Toronto and Region Conservation Authority). 2016. April 2014 TRCA Flora Species and Ranks.



Appendix C: Species at Risk (SAR) Screening

Appendix C. Species at Risk Screening - 167 National Drive, Vaughan

SPECIES LIST	SAR Designation (if different = federal / provincial)	Status in Ontario	Key Habitats Used By Species	Status at 167 National Drive (within 120 metres)
AMPHIBIANS				
Jefferson Salamander (<i>Ambystoma jeffersonianum</i>)	Endangered	Southern Ontario, mainly along the Niagara Escarpment	Inhabits deciduous and mixed deciduous forests with suitable breeding areas which generally consist of ephemeral (temporary) bodies of water that are fed by spring runoff, groundwater, or springs.	No suitable habitat found on site or in adjacent lands.
Unisexual Ambystoma - Jefferson-dominated (<i>Ambystoma laterale-jeffersonianum</i>)	Endangered	Southern Ontario, mainly along the Niagara Escarpment	Inhabits deciduous and mixed deciduous forests with suitable breeding areas which generally consist of ephemeral (temporary) bodies of water that are fed by spring runoff, groundwater, or springs.	No suitable habitat found on site or in adjacent lands.
BIRDS				
Bank Swallow (<i>Riparia riparia</i>)	Threatened	Widespread in southern Ontario	Low areas along rivers, streams, coasts or reservoirs; nest in natural bluffs and eroding streamside banks, also sand and gravel quarries and road cuts	No suitable habitat found on site or in adjacent lands.
Barn Swallow (<i>Hirundo rustica</i>)	Threatened	Widespread in southern Ontario	Prefers farmland, lake/river shorelines, wooded clearings, urban populated areas, rocky cliffs, and wetlands. They nest inside or outside buildings; under bridges and in road culverts; on rock faces and in caves, etc.	No suitable breeding habitat found on site or in adjacent lands. Patterson creek no evidence found of previous nesting activity (e.g. old nests).
Bobolink (<i>Dolichonyx oryzivorus</i>)	Threatened	Widespread in southern Ontario	Generally prefers open grasslands and hay fields. In migration and in winter uses freshwater marshes and grasslands.	No suitable habitat found on site or in adjacent lands.
Canada Warbler (<i>Wilsonia canadensis</i>)	Threatened / Special Concern	Absent in southwestern Ontario; primarily breeds in Southern Shield	Generally prefers wet coniferous, deciduous and mixed forest types, with a dense shrub layer. Nests on the ground, on logs or hummocks, and uses dense shrub layer to conceal the nest.	No suitable habitat found on site or in adjacent lands.
Chimney Swift (<i>Chaetura pelagica</i>)	Threatened	Widespread in southern Ontario	Historically found in deciduous and coniferous, usually wet forest types, all with a well developed, dense shrub layer; now most are found in urban areas in large uncapped chimneys.	Species detected as flyovers during breeding bird surveys. No suitable breeding habitat in ravine/woodland but may breed in adjacent buildings.
Eastern Meadowlark (<i>Sturnella Magna</i>)	Threatened	Widespread in southern Ontario	Generally prefers grassy pastures, meadows and hay fields. Nests are always on the ground and usually hidden in or under grass clumps.	No suitable habitat found on site or in adjacent lands.
Eastern Whip-poor-will (<i>Caprimulgus vociferus</i>)	Threatened	Scattered in southwestern Ontario; primarily north of Toronto	Generally prefers semi-open deciduous forests or patchy forests with clearings; areas with little ground cover are also preferred. In winter they occupy primarily mixed woods near open areas.	No suitable habitat found on site or in adjacent lands.
Eastern Wood-Pewee (<i>Contopus virens</i>)	Special Concern	Widespread in southern Ontario	Found in deciduous, mixed woods, or pine plantations; also found in mature woodlands, urban shade trees, roadsides, and orchards; usually found in clearings and forest edges.	Breeding habitat present on site. Ten (10) occurrences documented during 2021 surveys and one (1) pair assumed to be residing on subject lands.
Loggerhead Shrike (<i>Lanius ludovicianus</i>)	Endangered	Very local in southern Ontario	Prefers open country with short vegetation and well-spaced shrubs or low trees, particularly ones with thorns (<i>Crataegus</i> spp.) They inhabit agricultural fields, pastures, old orchards, riparian areas, desert scrubland, savannas, prairies, golf courses and cemeteries	No suitable habitat found on site or in adjacent lands.
Olive-sided Flycatcher (<i>Contopus cooperi</i>)	Threatened / Special Concern	Widespread in central and northern Ontario	Olive-sided Flycatchers breed mostly in the boreal forest and in western coniferous forests. In all nesting areas, they use openings or edges in the forest and are rarely found in deep, closed forest. In their range they can be in meadows, rivers and streams, partially logged areas, recent burns, beaver ponds, bogs, and muskegs.	No suitable habitat found on site or in adjacent lands.
Peregrine Falcon (<i>Falco peregrinus</i>)	Special Concern	Nests in large cities in southern Ontario; primarily found in northwestern Ontario	Mountain ranges, coastlines, river valleys, and increasingly in cities.	No suitable habitat found on site or in adjacent lands.
Short-eared Owl (<i>Asio flammeus</i>)	Special Concern	Very local in southern Ontario	Generally prefers a wide variety of open habitats, including grasslands, peat bogs, marshes, sand-sage concentrations, old pastures and agricultural fields.	No suitable habitat found on site or in adjacent lands.
Wood Thrush (<i>Hylocichla mustelina</i>)	Threatened / Special Concern	Widespread in southern Ontario	Breeds in mature deciduous and mixed forests, most commonly those with American beech, sweet gum, red maple, black gum, eastern hemlock, flowering dogwood, American hornbeam, oaks, or pines; nests less successfully in fragmented forests and suburban parks with enough large trees for a territory; ideal habitat includes trees over 50 feet tall, a moderate understory of saplings/shrubs, an open floor with moist soil and decaying leaf litter, and water nearby.	Potential breeding habitat found on site and in adjacent lands. Species not detected during breeding bird surveys.
INSECTS				
Monarch (<i>Danaus plexippus</i>)	Endangered / Special Concern	Widespread in southern Ontario	Exist primarily wherever milkweed and wildflowers exist, such as abandoned farmland, along roadsides, and other open spaces.	Potential habitat found on adjacent lands only.
Gypsy Cuckoo Bumble Bee (<i>Bombus bohemicus</i>)	Endangered	Historically widespread in Ontario but has only been found recently in Pinery Provincial Park	In Canada, the Gypsy Cuckoo Bumble Bee has been recorded in every province and territory except Nunavut and occurs in diverse habitats such as open meadows, agricultural and urban areas, boreal forest and woodlands.	Could potentially occur anywhere within range but surveys within the last decade have been unproductive

Rusty-patched bumble bee (<i>Bombus affinis</i>)	Endangered	Historically widespread in Ontario but has only been found recently in Pinery Provincial Park	This species, like other bumble bees, can be found in open habitat such as mixed farmland, urban settings, savannah, open woods and sand dunes. The most recent sightings have been in oak savannah, which contains both woodland and grassland flora and fauna.	Recently this species had only been detected in southwestern Ontario. It is therefore unlikely to be detected.
Yellow-banded Bumble bee (<i>Bombus terricola</i>)	Special Concern	Widespread in Ontario	This species is a forage and habitat generalist, able to use a variety of nectaring plants and environmental conditions. The Yellow-banded Bumble Bee has a large range throughout much of Canada and parts of the United States. It can be found in mixed woodlands, particularly for nesting and overwintering, as well as a variety of open habitat such as native grasslands, farmlands and urban areas.	Potential habitat found on site and in adjacent lands. Species not observed incidentally during 2021 field investigations.
Nine-spotted Ladybird Beetle (<i>Coccinella novemnotata</i>)	Endangered	Widespread in southern Canada. In Ontario reaches the north shore of Lake Huron and Superior	The Nine-spotted Lady Beetle is a habitat generalist recorded within agricultural areas, suburban gardens, parks, coniferous forests, deciduous forests, prairie grasslands, meadows, riparian areas and other natural open areas	Once a common species in Ontario, it has not been detected in the last 20 years and is thought to be exterminated. Potential habitat found on site and in adjacent lands.
Transverse lady beetle (<i>Coccinella transversoguttata</i>)	Endangered	Formerly widespread in Ontario, all records are considered to be historical. There have been no new records of the Transverse Lady Beetle since 1990.	The Transverse Lady Beetle is a habitat generalist, meaning it is able to live in a wide range of habitats, including agricultural areas, suburban gardens, parks, coniferous forests, deciduous forests, prairie grasslands, meadows and riparian areas.	Species had not been detected in Ontario since 1990
MAMMALS				
Eastern Small-footed Myotis (<i>Myotis leibii</i>)	Endangered (provincial only)	Widespread in southern Ontario	Overwintering habitat: caves and mines that remain above 0 degrees Celsius; Maternal roosts: primarily under loose rocks on exposed rock outcrops, crevices and cliffs, and occasionally in buildings, under bridges and highway overpasses, and under tree bark.	Potential maternity roost habitat present on subject lands due to species composition of forest and proximity to foraging habitat. Myotis often prefer Sugar Maple for roosting (April to October).
Little Brown Myotis (<i>Myotis lucifugus</i>)	Endangered	Widespread in southern Ontario	Overwintering habitat: caves and mines that remain above 0 C; Maternal roosts: Often associated with buildings (attics, barns, etc.). Occasionally found in trees (25-44 cm dbh).	See Eastern Small-footed Myotis.
Northern Myotis (<i>Myotis septentrionalis</i>)	Endangered	Widespread in southern Ontario	Overwintering habitat: caves and mines that remain above 0 C; Maternal roosts: often associated with cavities of large diameter trees (25-44 cm dbh). Occasionally found in structures (attics, barns, etc.)	See Eastern Small-footed Myotis.
Tri-colored Bat (<i>Perimyotis subflavus</i>)	Endangered	Very rare; widespread but scattered in southern Ontario	Overwintering habitat: caves and mines that remain above 0 degrees Celsius; Maternal roosts: can be in trees or dead clusters of leaves or arboreal lichens on trees. May also use barns or similar structures.	See Eastern Small-footed Myotis.
REPTILES				
Blanding's Turtle (<i>Emydoidea blandingii</i>)	Threatened	Widespread in south, central, and eastern Ontario	Generally occurs in freshwater lakes, permanent or temporary pools, slow-flowing streams, marshes and swamps. Prefers shallow water that is rich in nutrients, organic soil and dense vegetation. Adults are generally found in open or partially vegetated sites, and juveniles prefer areas that contain thick aquatic vegetation including sphagnum, water lilies and algae. They dig their nest in a variety of loose substrates, including sand, organic soil, gravel and cobblestone. Overwintering occurs in permanent pools that average about one metre in depth, or in slow-flowing streams.	No suitable habitat found on site or in adjacent lands.
Northern Map Turtle (<i>Graptemys geographica</i>)	Special Concern	Widespread along shores of Georgian Bay and lakes Erie, Ontario, and St. Clair	Found in large rivers and lakes with slow-moving currents and soft bottoms	Don River is potentially suitable for this species but unlikely to occur in study area.
Snapping Turtle (<i>Chelydra serpentina</i>)	Special Concern	Very widespread and common in southern Ontario	Generally inhabit shallow waters where they can hide under the soft mud and leaf litter. Nesting sites usually occur on gravelly or sandy areas along streams. Snapping Turtles often take advantage of man-made structures for nest sites, including roads (especially gravel shoulders), dams and aggregate pits.	Potential breeding habitat found on adjacent lands (Polygon 2).
FISH				
American Eel (<i>Anguilla rostrata</i>)	Endangered	12-mile Creek watershed and Lake Ontario.	All fresh water, estuaries and coastal marine waters that are accessible to the Atlantic Ocean.	Potential to occur in any creek that enters Lake Ontario; may occur in East Humber river. Fish surveys and/or fish habitat assessments were not completed as part of this assignment.
Redside Dace (<i>Clinostomus elongatus</i>)	Endangered	Found in a few tributaries of Lake Huron, in streams flowing into western Lake Ontario, the Holland River (flows into Lake Simcoe), and Irvine Creek of the Grand River system.	Generally found in pools and slow-moving areas of small headwater streams with a moderate to high gradient.	Species is relatively common in the Rouge River Watershed. Fish surveys and/or fish habitat assessments were not completed as part of this assignment, however it is possible that this species exists in the East Humber tributary located on the adjacent Golf Course lands.
VASCULAR PLANTS				
American Ginseng (<i>Panax quinquefolius</i>)	Endangered	Southern Ontario	Grows in rich, moist, undisturbed and relatively mature deciduous woods (dominated by Sugar Maple, White Ash, and American Basswood) in areas of neutral soil (such as over limestone or marble bedrock).	Potential habitat in deciduous forest at northeast and southwest portions of study area. No records in NHIC, MECP, or HCA databases. Not detected during botanical inventory.
Broad Beech Fern (<i>Phegopteris hexagonoptera</i>)	Special Concern	Found in forest remnants in southern Muskoka, along Lake Erie, and in the eastern Lake Ontario-St. Lawrence River region.	Generally inhabits shady areas of beech and maple forests where the soil is moist or wet.	Potential habitat in deciduous forest at northeast and southwest portions of study area. No records in NHIC, MECP, or HCA databases. Not detected during botanical inventory.
Butternut (<i>Juglans cinerea</i>)	Endangered	Found throughout the southwest, north to the Bruce Peninsula, and south of the Canadian Shield.	Generally grows in rich, moist, and well-drained soils often found along streams. It may also be found on well-drained gravel sites, especially those made up of limestone. It is also found, though seldomly, on dry, rocky and sterile soils. In Ontario, the Butternut generally grows alone or in small groups in deciduous forests as well as in hedgerows.	Potential suitable habitat but none detected during botanical inventory.



Appendix D: Significant Wildlife Habitat (SWH) Screening

Appendix D. SWH Screening – 167 National Drive, Vaughan

Ref: Ecoregion 6E Criteria Schedule (Final version: OMNRF, January 2015)

July 2021

Significant Wildlife Habitat (SWH) Type	Qualifying ELC communities/species and/or other recommended criteria for SWH identification	SWH on site or within 120 m?	Assessment Rationale (Habitat Presence or Absence)	Additional field studies required?
Seasonal Concentration Areas of Animals				
Waterfowl Stopover and Staging Areas (Terrestrial)	CUM1; CUT1; plus evidence of spring flooding (mid-Mar – May); does not include agricultural fields unless sheet water present. Eight indicator species; any mixed species groups of 100+ birds.	No	No suitable habitat present.	No
Waterfowl Stopover and Staging Areas (Aquatic)	MAS1–3; SAS1; SAM1; SAF1; SWD1–7. 26 indicator species; 100+ of listed species for 7 days; areas with annual staging of Canvasback, Redhead, and Ruddy Duck.	No	No suitable habitat present.	No
Shorebird Migratory Stopover Area	BB01–2; BBS1–2; BBT1–2; SDO1; SDS2; SDT1; MAM1–5. Shorelines of lakes, rivers & wetlands. SWM ponds not included. 22 indicator species; 3+ species & 1000+ shorebird use days in spring or fall, or 100+ Whimbrel for 3+ years. Habitat extremely rare, long history of use.	No	No suitable habitat present.	No
Raptor Wintering Area	One of FOD, FOM, FOC & one of CUM, CUT, CUS, CUW (20+ ha); least disturbed sites: 15+ ha with adjacent woodlands; Bald Eagle: FOD, FOM, FOC, SWD or SWC on shoreline areas adjacent to large rivers or adjacent to lakes with open water. 7 indicator species. Confirmed SWH: 1+ Short-eared Owl or Bald Eagle; 10+ of 2+ indicator species for at least 20 days. <u>Note:</u> site must be used regularly (3 in 5 years).	No	No suitable habitat present.	No
Bat Hibernacula	Big Brown Bat/Tri-colored Bat only; CCR1; CCR2; CCA1; CCA2; does not include buildings.	No	No suitable habitat present.	No
Bat Maternity Colonies	Big Brown Bat/Silver-Haired Bat only; all FOD, FOM, SWD, SWM; does not include buildings. 10+ large diameter (25+ cm dbh) snag trees per hectare. 10+ BBBA or 5+ SHBA	Candidate	Suitable habitat present on subject lands (polygon 1).	Potential bat acoustic surveys.
Bat Migratory Stopover Area	No specific ELC types. Eastern Red, Hoary, and Silver-haired Bats only. For 7E-2 only. Long Point is only area with this habitat identified to date; check with MNR.	No	No suitable habitat present.	No
Turtle Wintering Areas	Snapping/Midland Painted Turtles: SW, MA, OA, SA; FEO and BOO; Northern Map Turtle: open water areas (e.g. deeper rivers, streams) and lakes with current can be used. Must be permanent water. Does not include man-made ponds.	Candidate	Suitable habitat present on adjacent lands in golf course pond (polygon 2). No turtles observed during 2021 field investigations.	No

Appendix D. SWH Screening – 167 National Drive, Vaughan

Ref: Ecoregion 6E Criteria Schedule (Final version: OMNRF, January 2015)

July 2021

Significant Wildlife Habitat (SWH) Type	Qualifying ELC communities/species and/or other recommended criteria for SWH identification	SWH on site or within 120 m?	Assessment Rationale (Habitat Presence or Absence)	Additional field studies required?
Reptile Hibernaculum	Snakes: any ecosite except very wet ones; talus, rock barren, crevice, cave, and alvar site may be directly related. 8 indicator species. 5+ individuals or 2+ species, or 1+ Eastern Ribbonsnake.	No	Potential hibernacula may be present in Berczy Creek corridor, but no ideal habitats present (e.g. karst);	No
Colonially - Nesting Bird Breeding Habitat (Bank and Cliff)	CUM1, CUS1, BLS1, CLO1, CLT1; CUT1; BLO1; BLT1; CLS1. Cliff and Northern Rough-winged Swallows. Does not include bridges, berms, soil piles, aggregate pits, etc. 8+ pairs (combined).	No	No suitable habitat present..	No
Colonially - Nesting Bird Breeding Habitat (Tree/Shrubs)	SWM2; SWM3; SWM5; SWM6; SWD1; SWD2; SWD3; SWD4; SWD5; SWD6; SWD7; FET1. Great Blue, Green, and Black-crowned Night-Herons, Great Egret. 2+ active nests of listed species.	No	No suitable habitat present.	No
Colonially - Nesting Bird Breeding Habitat (Ground)	MAM1–6; MAS1–3; CUM; CUS; CUT. 7 indicator species (4 gulls, 2 terns, Brewer’s Blackbird). Nests: 25+ Herring and Ring-billed gulls; 1+ Great Black-backed and Little gulls; 5+ Common Tern; 2+ Caspian Tern; 5+ Brewer’s Blackbird.	No	No suitable habitat present.	No
Migratory Butterfly Stopover Areas	Field: CUM, CUS, CUT; Forest: FOC, FOD, FOM, CUT; Candidate sites 10+ ha, within 5 km of Lake Ontario/Erie. 3 indicator species. 5000+ “Monarch Use Days” or 3000 with Painted Lady/Red Admiral.	No	Site not within 5 km of Lake Ontario.	No
Landbird Migratory Stopover Areas	FOC, FOM, FOD, SWC, SWM, SWD; 5+ ha, within 5 km of Lake Ontario. If woodlots are rare in an area of shoreline, then woodlots 2–5 ha can be considered SWH.	No	Site not within 5 km of Lake Ontario	No
Deer Yarding Areas	ELC Community Series providing a thermal cover component for a deer yard would include; FOM, FOC, SWM and SWC. Or these ELC Ecosites;CUP2, CUP3, FOD3, CUT	No	No suitable habitat present; not identified by MECP as Deer Yarding Area.	No
Deer Winter Congregation Areas	FOC; FOM; FOD; SWC; SWM; SWD; typically 100+ ha or 50+ if woodlots rare; conifer plantations less than 50 ha may be used. Identified by MNRF.	No	No suitable habitat present; not identified by MECP as Deer Wintering Area.	No
Rare Vegetation Communities				
Cliffs and Talus Slopes	TAO; TAS; TAT; CLO; CLS; CLT. Vertical cliff 3+ metres. Most occur along the Niagara Escarpment.	No	No indicator ELC communities detected during field investigations.	No

Appendix D. SWH Screening – 167 National Drive, Vaughan

Ref: Ecoregion 6E Criteria Schedule (Final version: OMNRF, January 2015)

July 2021

Significant Wildlife Habitat (SWH) Type	Qualifying ELC communities/species and/or other recommended criteria for SWH identification	SWH on site or within 120 m?	Assessment Rationale (Habitat Presence or Absence)	Additional field studies required?
Sand Barren	SBO1; SBS1; SBT1. Tree cover ≤ 60%; 0.5+ ha.	No	No indicator ELC communities detected during field investigations.	No
Alvar	ALO1; ALS1; ALT1; FOC1; FOC2; CUM2; CUS2; CUT2-1; CUW2; 0.5+ ha. Site support 4 of 5 indicator species, and not dominated (< 50%) by exotic or introduced species.	No	No indicator ELC communities detected during field investigations.	No
Old Growth Forest	FOD; FOC; FOM; SWC; SWD; SWM; 0.5+ ha.	No	No indicator ELC communities detected during field investigations.	No
Savannah	TPS1; TPS2; TPW1; TPW2; CUS2. Tree cover 25–60%. No min. size; does not include remnant sites. 1+ indicator sp.	No	No indicator ELC communities detected during field investigations.	No
Tallgrass Prairie	TPO1 or TPO2. Tree cover < 25%. No min. size; does not include remnant sites. 1+ indicator sp.	No	No indicator ELC communities detected during field investigations.	No
Other Rare Vegetation Communities	S1, S2, or S3 vegetation communities. May include beaches, fens, forest, marsh, barrens, dunes and swamps.	No	No S1 to S3 vegetation communities detected during field investigations.	No
<i>Specialized Habitat for Wildlife</i>				
Waterfowl Nesting Area	MAS1–3; SAS1; SAM1; SAF1; MAM1–6; SWT1–2; SWD1–4. Nine indicator species. Wetland size and numbers/diversity thresholds.	No	No suitable habitat present.	No
Bald Eagle and Osprey Nesting, Foraging, and Perching Habitat	FOD; FOM; FOC; SWD; SWM; SWC; adjacent to riparian areas (rivers, lakes, ponds and wetlands). 1+ nests; includes 300 m radius for OSPR, 400–800 m for BAEA.	No	Suitable habitat present, but indicator species not identified during 2021 field investigations.	No
Woodland Raptor Nesting Habitat	All forested ELC ecosites; also SWC, SWM, SWD, CUP3; 30+ ha with 4+ ha Interior Forest (200m buffer). Six indicator species. 1+ nests; specific radius around nest for each species.	No	Woodland size requirement not met.	No
Turtle Nesting Areas	MAS1; MAS2; MAS3; SAS1; SAM1; SAF1; BOO1; FEO1. Midland Painted, Snapping, and N. Map Turtles only. 5+ Painted, 1+ Snapping/N. Map.	No	No suitable habitat present based on ELC communities identified. Turtles could potentially nest on golf course lands (Polygon 3) but this wouldn't be considered SWH.	No
Seeps and Springs	Any forested ecosite (with < 25% meadow/field/pasture). Often found within headwater areas. Confirmed site: 2+ seeps/springs.	No	No evidence of seeps or springs identified during 2021 field investigations.	No
Amphibian Breeding Habitat (Woodland)	FOC; FOM; FOD; SWC; SWM; SWD. 500+ m ² wetland, pond or woodland (incl. vernal) pool within or adjacent (within	Candidate	Forested subject lands are within 120 m of golf course wetlands.	No

Appendix D. SWH Screening – 167 National Drive, Vaughan

Ref: Ecoregion 6E Criteria Schedule (Final version: OMNRF, January 2015)

July 2021

Significant Wildlife Habitat (SWH) Type	Qualifying ELC communities/species and/or other recommended criteria for SWH identification	SWH on site or within 120 m?	Assessment Rationale (Habitat Presence or Absence)	Additional field studies required?
	120 m) to woodland (any size). 7 indicator sp. Combination of observational study and call count surveys required.			
Amphibian Breeding Habitat (Wetlands)	SW, MA, FE, BO, OA, SA; typically 120+ m from woodlands 500+ m ² . 12 indicator species. Combination of observational study and call count surveys required.	Candidate	Golf course ponds (Polygon 2) on adjacent lands may provide suitable habitat.	No
Woodland Area-Sensitive Bird Breeding Habitat	All FOC, FOM, FOD, SWC, SWM, SWD ecosites; Habitats where interior forest birds are breeding; typically mature (60+ years), or 30+ ha; Interior habitat 200+ m from forest edge. Note: gaps < 20 m in width not typically considered breaks in the forest. 14 indicator sp.	No	Woodland does not meet size requirements.	No
Habitats for Species of Conservation Concern (not including END or THR species)				
Marsh Breeding Bird Habitat	MAM1–6; SAS1; SAM1; SAF1; FEO1; BOO1; Green Heron: all SW, MA, CUM1 sites. 13 indicator sp.	No	No suitable habitat present.	No
Open Country Bird Breeding Habitat	CUM1; CUM2; 30+ ha; not Class 1 or 2 agricultural lands and not actively used for farming in last 5 years. 6 indicator sp.	No	Two indicator species detected: Savannah Sparrow and Vesper Sparrow however no suitable habitat is present. Fields have continually been cropped and CUM communities are very small and isolated.	No
Shrub/Early Successional Bird Breeding Habitat	CUT1; CUT2; CUS1; CUS2; CUW1; CUW2; 10+ ha; not Class 1 or 2 agricultural lands and not actively farmed in last 5 years. 2 “Indicator: sp., 4 “Common” sp., and 2 SC sp. listed.	No	No suitable habitat present.	No
Terrestrial Crayfish	MAM1–6; MAS1–3; SWT; SWD; SWM; CUM1 with inclusions of above MAM ecosites. 2 indicator species: Chimney (Digger) Crayfish (<i>Fallicambarus fodiens</i>) and Devil (Meadow) Crayfish (<i>Creaserinus diogenes</i>). No minimum size. Habitats very rare.	No	No suitable habitat present.	No
Special Concern and Rare Wildlife Species	All SC, S1, S2, S3, and SC species. Includes all <u>plant</u> and <u>animal</u> species.	Confirmed	Eastern Wood-Pewee (Special Concern) confirmed breeding on subject lands during 2021 field investigations.	No
Animal Movement Corridors				

Appendix D. SWH Screening – 167 National Drive, Vaughan

Ref: Ecoregion 6E Criteria Schedule (Final version: OMNRF, January 2015)

July 2021

Significant Wildlife Habitat (SWH) Type	Qualifying ELC communities/species and/or other recommended criteria for SWH identification	SWH on site or within 120 m?	Assessment Rationale (Habitat Presence or Absence)	Additional field studies required?
Amphibian Movement Corridors	All ecosites associated with water. 12 indicator sp. No thresholds for numbers/diversity have been determined by MNRF. Check if relevant Region has developed thresholds.	No	Valleylands may provide suitable habitat.	No
Deer Movement Corridors	Corridors that lead to a deer wintering habitat should be unbroken by roads and residential areas. Corridors should be at least 200m wide with gaps	No	Forest width does not meet size threshold.	No

References:

OMNRF (Ontario Ministry of Natural Resources and Forestry). 2014. Significant Wildlife Habitat Mitigation Support Tool. Version 2014. 533 pp

OMNRF (Ontario Ministry of Natural Resources and Forestry). 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E. January, 2015. 41 pp



Appendix E: Legislation & Policy Summary

FEDERAL LEGISLATION

Species at Risk Act (2002)

Enacted in 2002, the Species at Risk Act (SARA) provides legal protection for Species at Risk (Government of Canada, 2002). This act also helps to protect species identified as sensitive from becoming extinct and secure the actions for their recovery. This may include protecting critical habitat, and rehabilitation of impacted critical habitat. Note that this Act applies primarily to federal (Crown) land; On private lands, SARA only applies to listed aquatic species and listed migratory birds that are also listed in the *Migratory Birds Convention Act, 1994*. Critical habitat for these species is also protected.

Site Implications: Aquatic SAR (e.g. Redside Dace) may occur in the East Humber River as reported by NHIC and online DFO mapping. Migratory birds and their protection are addressed under the MBCA (1994) below.

Migratory Birds Convention Act (1994)

This federal legislation protects the nests, eggs and offspring of listed migratory bird species from destruction or disturbance (Government of Canada 1994a, b). In its application, it requires best management practices to detect and avoid disturbance to active nests during development activities.

Site Implications: Incidental take of migratory birds, nests or eggs must be avoided by limiting activities during sensitive periods and mitigation measures to ensure appropriate nesting areas are re-established in the site. Tree and vegetation clearing should not take place within the active nesting season between approximately April 1st and August 15th. If the areas proposed for removal are thoroughly checked during the active breeding season for bird nests by a qualified biologist during the construction phase, and no nests are found, then construction may be permitted.

Fisheries Act (1985, amended 2019)

The Fisheries Act provides a legal basis for conserving and protecting fish and fish habitat. This includes the two core prohibitions against persons carrying on works, undertakings or activities that result in the “death of fish by means other than fishing” (generally referred to as the death of fish) (subsection 34.4(1)), and the “harmful alteration, disruption or destruction of fish habitat” (subsection 35(1)). The Fisheries Act also prohibits the obstruction of fish movement (Section 29) and prohibits the deposit of deleterious substances in water frequented by fish or in any place under any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water (Section 36).

Site Implications: The proposed development may require a review under the Fisheries Act, to ensure that it conforms with the prohibitions of the Act. In the event that harmful alteration, disruption or destruction of fish habitat cannot be avoided, offsetting may be required. Guidance on the preparation of requests for review can be found at <https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/request-review-demande-d-examen-004-eng.html>.

PROVINCIAL POLICY & LEGISLATION

Provincial Policy statement (2020)

The Provincial Policy Statement (PPS) is issued under the authority of Section 3 of the Planning Act. Section 3 requires that decisions affecting planning matters “shall be consistent with” policy statements under the Act. It should also be noted that Page 2 of the PPS establishes that the PPS is to be read in its entirety and all relevant policies are to be applied to each situation.

Section 2.1 of the Provincial Policy Statement relates specifically to natural heritage. , establishes clear direction on the adoption of an ecosystem approach, and the protection of resources that have been identified as ‘significant’: wetlands, woodlands, valleylands, wildlife habitat, areas of natural and scientific interest, and coastal wetlands.

Natural heritage systems are currently defined under the Provincial Policy Statement (PPS) as follows:

“...a system made up of natural heritage features and areas, and linkages intended to provide connectivity (at the regional or site level) and support natural processes which are necessary to maintain biological and geological diversity, natural functions, viable populations of indigenous species, and ecosystems. These systems can include natural heritage features and areas, federal and provincial parks and conservation reserves, other natural heritage features, lands that have been restored or have the potential to be restored to a natural state, areas that support hydrologic functions, and working landscapes that enable ecological functions to continue. The Province has a recommended approach for identifying natural heritage systems, but municipal approaches that achieve or exceed the same objective may also be used.”

Section 2.1.4 of the PPS states that development and site alteration shall not be permitted in *significant wetlands* of Ecoregions 5E, 6E and 7E, or in *significant coastal wetlands*; Section 2.1.7 *habitat of endangered species and threatened species shall be protected, except in accordance with provincial and federal requirements.*

Section 2.1.5 of the PPS states that development and site alteration of the following features is not permitted unless it has been demonstrated that there will be *no negative impacts* on the natural features or their ecological functions:

- a) *significant wetlands in the Canadian Shield north of Ecoregions 5E, 6E and 7E;*
- b) *significant woodlands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);*
- c) *significant valleylands in Ecoregions 6E and 7E (excluding islands in Lake Huron and the St. Marys River);*
- d) *significant wildlife habitat;*
- e) *significant areas of natural and scientific interest; and*
- f) *coastal wetlands in Ecoregions 5E, 6E and 7E that are not subject to policy 2.1.4(b)*

Per section 2.1.6 and 2.1.7, development and site alterations within the following features are not permitted, except in accordance with provincial and federal requirements:

- a. *Fish habitat; and*
- b. *Habitat of Endangered and Threatened species.*

In accordance with section 2.1.8, development and site alteration on *adjacent lands* to natural heritage features identified in Section 2.1.4, 2.1.5 and 2.1.6 are not permitted unless there has been an evaluation

Appendix E. Natural Heritage Legislation & Policy Summaries, 167 National Dr

of the ecological function of the adjacent lands and it has been demonstrated that there will be *no negative impacts* on the natural features or on their ecological functions (OMMAH, 2005).

In March 2010, the Province released the finalized Second Edition of the Natural Reference Manual (NHRM), which is intended to guide the implementation of the 2020 PPS (MNRF, 2010). This update explicitly recognizes linkages "*between & among natural heritage features & areas, surface water features & ground water features, & hydrological functions*" which are necessary for the ecological and hydrological integrity of watersheds.

Site Implications: The study area and adjacent 120 m lands contains significant natural heritage features that receive protection under the PPS (2020) section 2.1, including:

- Significant Woodlands;
- Significant Valleylands;
- Significant Wildlife Habitat (candidate & confirmed);
- Fish habitat (East Humber River); and
- Habitat of Endangered & Threatened species (4 Myotis bat species).

Development and site alterations are not permitted within or adjacent to the above-noted features and areas, unless it has been demonstrated that there will be no negative impacts to the features or their ecological functions.

Endangered Species Act (2007)

This legislation provides the provincial mandate for the protection of species identified as Endangered or Threatened in Ontario.

Site Implications: The subject property provides suitable habitat for four (4) Endangered bat species that receive protection under the ESA (2007): Little Brown Myotis, Northern Myotis, Tricolored Bat and Eastern Small-footed Myotis.

The ESA has not yet prescribed specific regulated habitat for Ontario's Endangered bat species, but foraging habitat, hibernacula and swarming sites, and maternity roosts are recommended to be protected (Humphrey, 2017). Humphrey (2017) and Humphrey and Fotherby (2019) recommend the following criteria be used to identify regulated habitat:

- Maternity sites should be identified based on any observation of roosting Eastern Small-footed Myotis between May 15 and July 31, linked to a suitable roosting feature such as a building or rock feature.
- Potential foraging resources, including forests, wetlands and waterbodies should be protected within this 100 ha area.
- Maternity sites are used by females of these species in the spring and early summer, not long after hibernation. Sites should be identified by areas where an observation of a roosting pregnant/lactating female, or juvenile female or male has been made between May 15 and July 31.
- For anthropogenic sites (e.g. buildings) the contiguous area providing the same type of roosting habitat for any species should be protected as maternity habitat site. Alternate roost site should also be identified.

**Conservation Authorities Act (1990) and O.reg. 166/06: Toronto and Region Conservation Authority
Regulation of development, interference with wetlands and alterations to shorelines and
watercourses**

TRCA is authorized under Section 28 of the Conservation Authorities Act (Government of Ontario, 1990b) to implement and enforce the Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses (Ontario Regulation 166/06). Permits are required for development or site alteration within the Regional and 100-year storm floodplain, within 15 m of the stable top of bank of the Lake Ontario shoreline and confined valleys, hazards lands, 120 meters around all Provincially Significant Wetlands and ELC wetlands greater than 2 hectares, and 30 meters around all ELC wetlands greater than 0.5 hectares.

Site Implications: The subject lands contain TRCA-regulated areas; thus a permit from TRCA is required prior to undertaking site alteration(s).

REGIONAL POLICY

York Region Official Plan (2019)

The Regional Official Plan is a document that outlines the policies of The Regional Municipality of York to guide economic, environmental and community building decisions.

Natural features that are specifically protected in York Region include:

- A. significant habitat of endangered and threatened species;
- B. fish habitat;
- C. wetlands;
- D. Life Science Areas and Earth Science Areas of Natural and Scientific Interest;
- E. Environmentally Significant Areas;
- F. significant valleylands;
- G. significant woodlands;
- H. significant wildlife habitat;
- I. sand barrens, savannahs and tallgrass prairies;
- J. lakes and their littoral zones;
- K. permanent and intermittent streams;
- L. kettle lakes;
- M. seepage areas and springs deemed vulnerable or sensitive surface water features and,
- N. Lake Simcoe Shoreline.

Policy 2.2.4 of the ROP prohibits development and site alterations within these features and adjacent lands, unless an EIS (or similar study) demonstrates that the proposed work will not negatively impact the feature(s) or their ecological function(s), or as authorized through an Environmental Assessment.

Site Implications: Key Natural Heritage and Key Hydrologic Features are defined in section 2.2.1 of the Regional Official Plan (ROP), including the following which are present on the subject property and adjacent 120 m lands:

- *significant habitat of endangered and threatened species;*
- *fish habitat;*

Appendix E. Natural Heritage Legislation & Policy Summaries, 167 National Dr

- *significant valleylands;*
- *significant woodlands;*
- *significant wildlife habitat;*
- *permanent and intermittent streams.*

Development and site alterations within or adjacent to Key Natural Heritage and Key Hydrologic Features is prohibited, unless:

- a. it is demonstrated through a natural heritage evaluation, hydrological evaluation, or environmental impact study that the development or site alteration will not result in a negative impact on the natural feature or its ecological functions; or,*
- b. authorized through an Environmental Assessment.*

It is the policy of council that removal, in whole or in part, of a key natural heritage feature or a key hydrologic feature by unauthorized development or site alteration is prohibited. Areas where an unauthorized removal has occurred shall continue to be subject to the policies of this Plan as if the feature was still in place. Impacted areas shall be restored (s.2.2.7).

The woodland on the subject lands meets the criteria for significance defined in section 2.2.45a) iii) of the ROP:

- a. is 0.5 hectares or larger and:*
 - i. directly supports globally or provincially rare plants, animals or communities as assigned by the Natural Heritage Information Centre; or,*
 - ii. directly supports threatened or endangered species, with the exception of specimens deemed not requiring protection by the Province (e.g. as is sometimes the case with Butternut); or,*
 - iii. is within 30 metres of a provincially significant wetland or wetland as identified on Map 4, waterbody, permanent stream or intermittent stream.*

Development and site alteration within Significant Woodlands and their VPZ is prohibited (s.2.2.44); the woodland does not meet the exceptions provided in section 2.2.48. The width of the VPZ shall be determined through an environmental impact study, where the minimum VPZ shall be 10 m measured from the dripline (s.2.2.47).

The Regional Municipality of York Forest Conservation Bylaw (#2013-68)

The Regional Forest Conservation Bylaw prohibits the destruction or injury of trees within the Region's woodlands. Woodlands are defined as land that is 1 ha or greater with at least:

- i. 1000 trees, of any size, per hectare;
- ii. 750 trees, measuring over five (5) centimetres DBH, per hectare;
- iii. 500 trees, measuring over twelve (12) centimetres DBH, per hectare; or
- iv. 250 trees, measuring over twenty (20) centimetres DBH, per hectare;

but does not include a cultivated fruit or nut orchard, or a plantation established and maintained for the purpose of producing Christmas trees or nursery stock.

Site Implications: The subject lands meets the above criteria for significant woodlands. Therefore, a permit under this bylaw is required in order to injure or remove trees within the woodland on the property.

LOCAL POLICY

City of Vaughan Official Plan (2010)

The 2010 City of Vaughan Official Plan (2020 Office Consolidation) is designed to ensure that development within the city is in conformity with provincial and regional land use policy such as the Planning Act & Provincial Policy Statement, Greenbelt Plan, Growth Plan for the Greater Golden Horseshoe, Oak Ridges Moraine Conservation Plan, and the York Region Official Plan. It sets out the municipal vision and details policies intended to guide development within the city. A Natural Heritage System (NHS) made up of *Core Features* and *Enhancement Areas* is presented within the OP, and policies related to development in or near the NHS are detailed in Section 3.

Site Implications: The subject lands are mapped as a Core Feature in Schedule 2 of the City's OP and is identified as Significant Woodland as it meets Regional criteria (YROP, 2019). Development and/or site alteration is not permitted within Core Features (s. 3.2.2) including valley and stream corridors or woodlands and their respective VPZ (vegetation protection zone) in accordance with sections 3.3.3.1-3.3.3.4. The residential development proposed on the subject property does not meet any of the exceptions outlined in sections 3.3.3.4 and 3.2.3.7.

Minimum VPZ for Core Features are defined in section 3.2.3.4:

- Valley and stream corridors: 10 m VPZ measured from the greater extent of the top of stable slope, meander belt, or regulatory floodplain;
- Woodlands: 10 m VPZ (measured from the dripline, per ROP s. 2.2.47).

Further, section 3.3.1.2 states that *"no application for development or site alteration on lands abutting or adjacent to valley and stream corridors will be considered by Council unless the precise limits of valley and stream corridors and appropriate ecological buffers have been established to the satisfaction of the City, in consultation the Toronto and Region Conservation Authority."*

Similarly, section 3.3.3.2 states *"no application for development or site alteration on lands abutting or adjacent to woodlands will be considered by Council unless:*

- a. the precise limits of any woodland within the area of the application have been established to the satisfaction of the City; and,*
- b. an evaluation is carried out to assess whether the minimum vegetation protection zone between the woodland and the proposed development is sufficient to maintain or enhance existing functions, attributes and linkages of the woodland.*

"Unauthorized removal or alteration of natural features or functions within areas identified as Core Features is prohibited and will result in the features and functions being restored to their previous state at no expense to the City of Vaughan and other public agencies. In the case of a development application, the application will not proceed until restoration works have been undertaken to the satisfaction of the City and TRCA and/or Region of York, as needed." (s. 3.2.3.8)

Appendix E. Natural Heritage Legislation & Policy Summaries, 167 National Dr

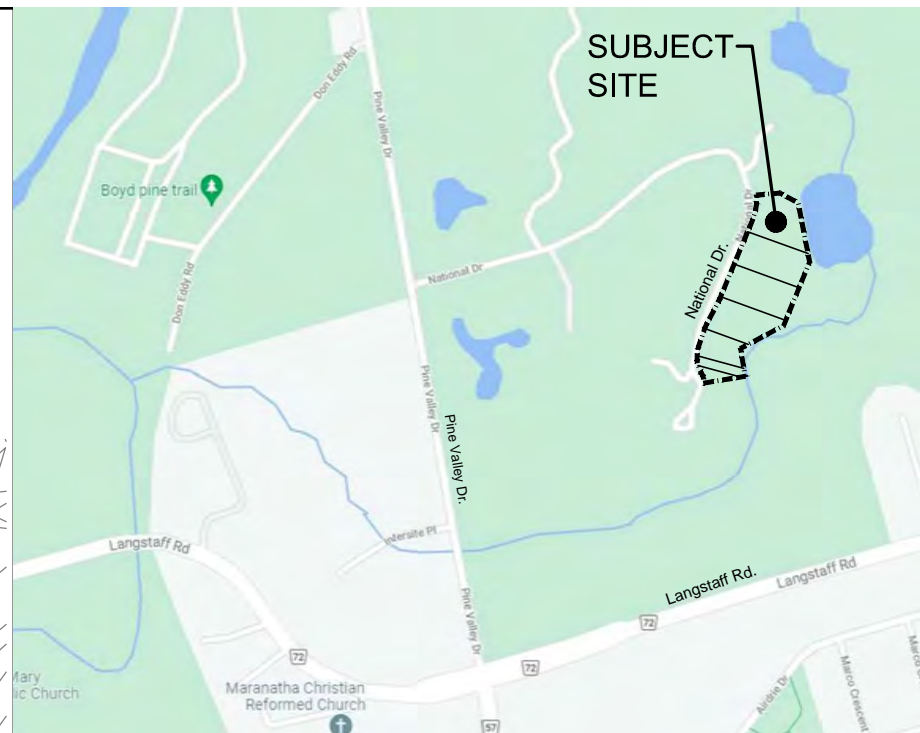
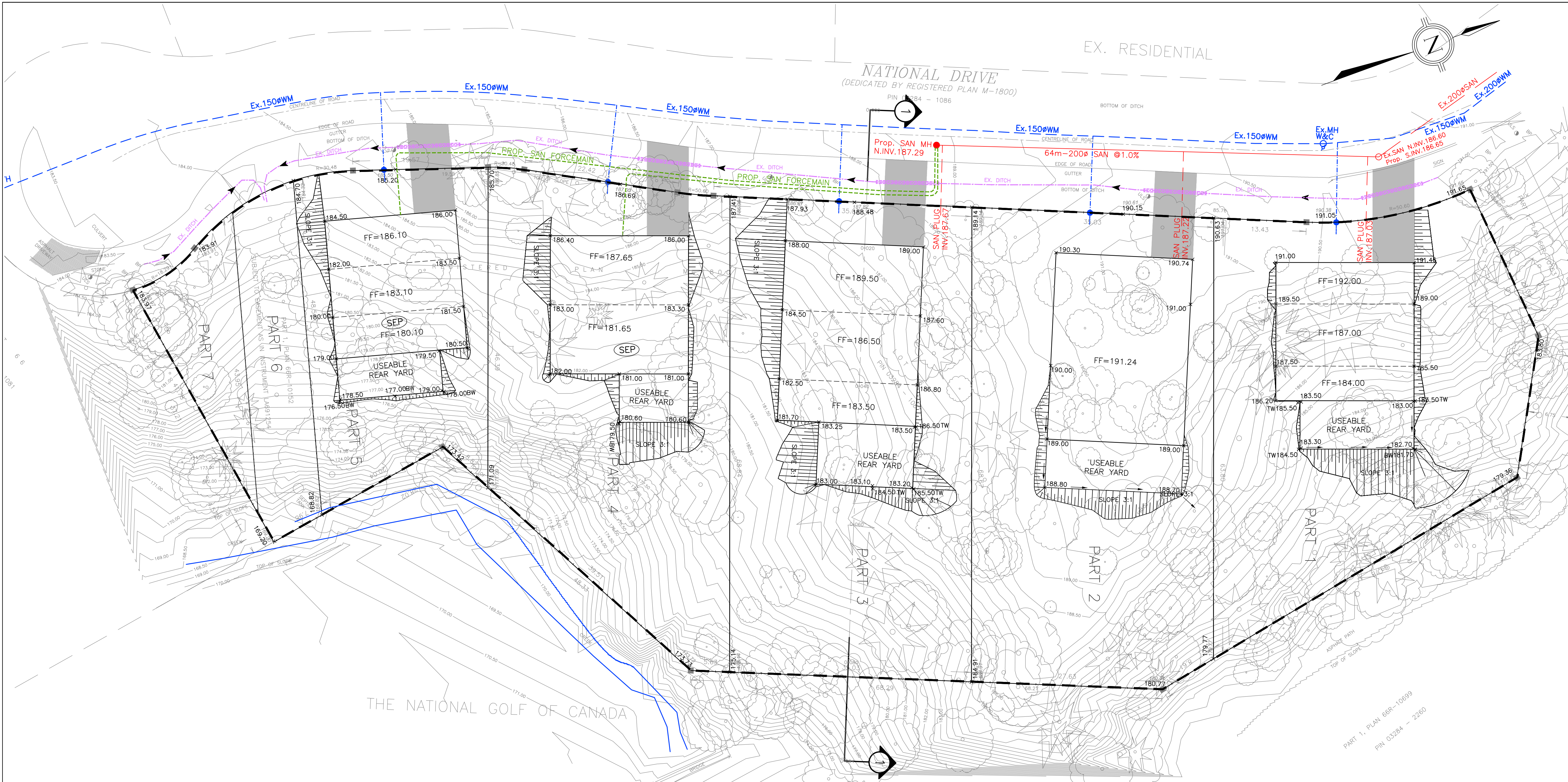
City of Vaughan Tree Protection Bylaw (#052-2018)

The City of Vaughan's Tree Protection Bylaw (#052-2018) prohibits damage and destruction to trees with a basal diameter or DBH of 20 cm or greater unless authorized by a Tree Removal Permit pursuant to this bylaw. The by-law does not apply to any trees that are regulated under Regional by-laws such as the Forest Conservation By-law which takes precedence.

Site Implications: *All trees on the subject lands are regulated under the York Region Forest Conservation By-law which takes precedence; therefore bylaw #052-2018 is not relevant to this property.*



Appendix F: Preliminary Grading & Servicing Plan



KEY PLAN N.T.S.
BEARING NOTES

POINT ID	NORTHING	EASTING

LEGEND

- 188.50 EXISTING ELEVATION
- - - 188.50 EXISTING CONTOUR
- 188.60 PROPOSED ELEVATION
- ⊙ SANITARY MAINTENANCE HOLE
- - - 25mm WATER SERVICE CONNECTION
- - - 125mm SANITARY SERVICE CONNECTION
- FF PROPOSED FINISHED FLOOR ELEVATION
- ⊙ SEP SEWAGE EJECTOR PUMP AND FORCEMAIN REQUIRED
- DRIVEWAY LOCATION - 6.0m WIDE

BENCHMARK:
 No. _____ Elevation: _____ Description:
 YORK REGION BENCHMARK No.84-200 ELEVATION=177.39 METRES
 YORK REGION SPHEROID AT THE WEST SIDE OF FOREST ROAD, 500
 METRES NORTH OF WOODBRIDGE AVENUE. TABLE SET HORIZONTALLY IN
 EAST FACE OF CONCRETE BASE OF SPHEROID, 2.74 METRES SOUTH OF
 ENTRANCE DIRECTLY BELOW SECOND ANCHOR BOLT LEFT OF SOUTH
 ENTRANCE.

CONSULTANT:

SIGNATURE AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF THE CONSULTING ENGINEERS AS TO DESIGN AND SPECIFICATIONS.

 DIRECTOR OF PUBLIC WORKS

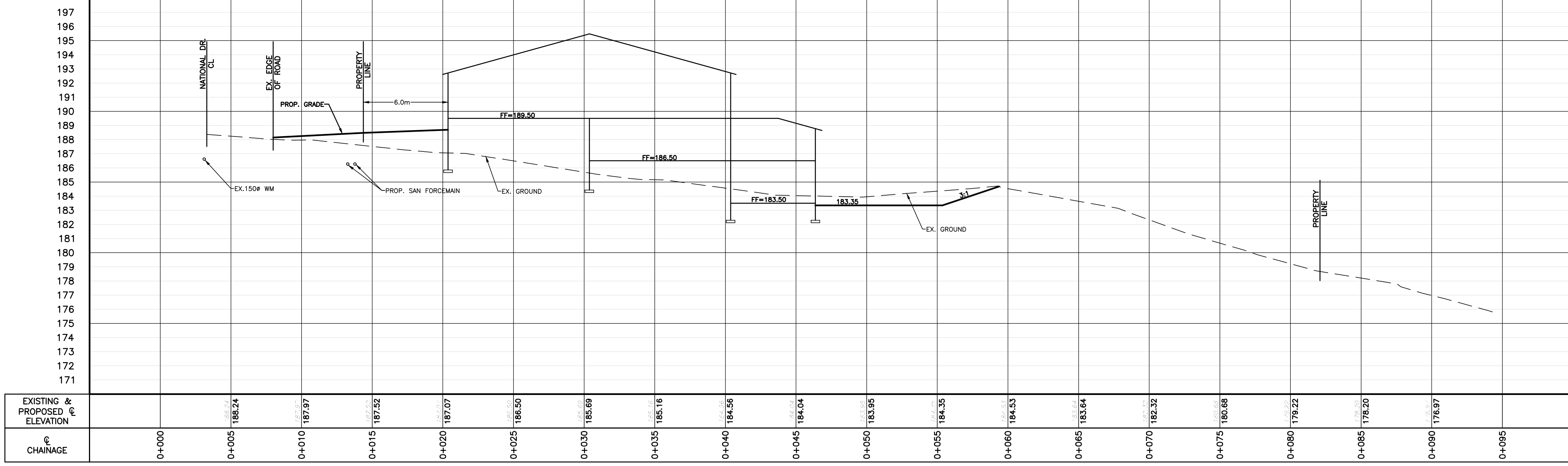
SIGNATURE _____ DATE _____

PROPOSED RESIDENTIAL DEVELOPMENT

VALDOR ENGINEERING INC.
 Consulting Engineers - Project Managers
 741 ROWNTREE DAIRY ROAD, UNIT 2, WOODBRIDGE, ONTARIO, L4L 5T9
 TEL: (905)264-0054, FAX: (905)264-0069 E-MAIL: info@valdor-engineering.com
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VAUGHAN CITY OF VAUGHAN

PRELIMINARY SERVICING AND GRADING PLAN
 167 NATIONAL DRIVE
 WOODBRIDGE, ONTARIO



SECTION 1-1
 SCALE: H 1:200
 V 1:200

Surveyed by: _____	Checked by: P.Z.	Project No. 21148
Drawn by: V.L.	Approved by: P.Z.	
Designed by: V.L.	Date: Sept. 16, 2021	Drawing No. _____
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**167 National Drive
PCL 65-1 SEC M-1800
Lot 65 Plan M-1800
City of Vaughan, Ontario**

BELCAP MANAGEMENT INC.

LAND USE PLANNING JUSTIFICATION REPORT



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Date: October 2021

GWD File: 21.2834.00

CONSENT to SEVER and MINOR VARIANCE APPLICATIONS

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1.0 INTRODUCTION

Gagnon Walker Domes Ltd. (GWD) acts as Planning Consultant to BelCap Management Inc. on behalf of the Registered Owner of 167 National Drive, in the City of Vaughan; hereinafter referred to as the “subject site”. We have been retained to provide land use planning consulting services; including, the preparation of a Planning Justification Report in support of Committee of Adjustment consent to sever and minor variance applications submitted in April 2021 and revised in July 2021. This Report describes the subject site and surrounding area, reviews the proposed development, and outlines the planning rationale in support of the proposal within the context of the current planning policy regime.

The applications are supported by the following technical plans, studies and reports:

- Draft Reference Plan, prepared by Nanfara & Ng Surveyors Inc., dated July 9, 2021;
- Noica Consulting Tree Inventory Report, dated February 16, 2021;
- Functional Servicing Brief prepared by Valdor Engineering Inc., dated October 7, 2021;
- Preliminary Site Servicing and Grading Plan prepared by Valdor Engineering Inc., dated September 16, 2021; and
- Environmental Impact Study, prepared by Dougan & Associates, dated October 7, 2021.

2.0 SITE DESCRIPTION and SURROUNDING LAND USES

The subject site forms part of the Pine Grove neighbourhood which is generally located in the northeastern limits of the Woodbridge community area. By way of background the greater residential plan of subdivision which includes the nine (9) lots fronting onto National Drive and the lots east of the National Golf Club of Canada, north of Langstaff Road, was registered on February 23, 1978 by 310218 Ontario Limited. The subdivision was assumed by the City of Vaughan on January 14, 1985 via By-law 05-1985.

The subject site is known municipally and legally as 167 National Drive, Lot 65 of Registered Plan M-1800, City of Vaughan, Regional Municipality of York. It is irregular in shape having a total area of approximately 1.10 hectares (2.73 acres) with a frontage of 200 metres (656 feet) on the east side of National Drive. It is currently vacant free of any structures or buildings. Its southeastern limit is subject to a storm sewer easement in favor of the City of Vaughan (LA691254), Part 1 of Plan 66R-10152.

Existing vegetation is contiguous to the greater woodland that generally includes all lots having frontage onto National Drive. The property’s terrain slopes from west to the east draining towards a tributary of the East Humber River which runs in a southwesterly direction within the golf course. Abutting lands are characterized as follows:

- North: Two (2) single detached residential dwellings.
- South: One (1) single detached residential dwelling.



- East: Natural heritage feature, golf course and related infrastructure including a large stormwater management pond;
- West: Five (5) single detached residential dwellings.

National Drive is characterized by large irregular shaped lots with varying areas and frontages, mature trees, and significant landscaping. The housing stock consists of an eclectic mix of custom homes with large footprints. Dwellings are predominately 2-storeys in height, some of which are multi-leveled on account of changing topography. Roof styles include a mix of hip and flat roofs. A number of lots consist of accessory detached structures including garages, storage sheds, gazebos/cabanas. Private amenities include in-ground pools, tennis courts, and manicured lawns. Vehicular access to each lot is provided by meandering and curvilinear driveways.

Each lot is serviced by municipal water service situated within the road right-of-way. At the time of development municipal sanitary service was not available to the subdivision and as such each lot was serviced by private septic systems. A sanitary sewer was later installed and currently terminates at the northeastern limits of the subject site.

Regarded as one of the most difficult courses in North America the National Golf Club of Canada is a private 18 hole golf course that first opened in 1976. The landscape character is typical of a golf course where extensive grading and modifications have been made to the topography to create rolling hills, mature tree lined fairways, greens and clusters of vegetation nestled amongst other more concentrated wooded areas. Its main club house is accessed from Clubhouse Road.

The local road network consists of three (3) roadways: National Drive, Pine Valley Drive, and Langstaff Road.

National Drive is local road and is under the carriage of the City of Vaughan. It has a designated right-of-way of 20.11 metres (66 feet).

Pine Valley Drive and Langstaff Road are regional roads and fall under the jurisdiction of the Region of York.

Appendix 1 includes current 2020 aerial photography of the subject site and surrounding area.

Appendix 2 includes aerial photography dated 1954, 1970, 1988, 1995, 2007, 2012, 2017, and 2020. The photos highlight the areas change over the last 60+ years.

Appendix 3 includes a reduced copy of plan of subdivision M-1800 and reference plan 66R-10152.

3.0 DEVELOPMENT PROPOSAL

The Registered Owner requests consent to sever the subject site to create five (5) smaller lots each intended to be developed for one (1) single detached residential



dwelling. The applications will result in all lots maintaining frontage along National Drive.

Table 1 provides a summary of the proposed lot division:

Table 1					
City File	Reference Plan	Lot	Area (m ²)	Frontage (m)	Depth (m)
B006/21	PART 1	1	2,259.20	41.67	50.22
B007/21	PART 2	2	2,383.00	35.00	68.54
B008/21	PART 3	3	2,406.30	35.00	68.76
B009/21	PART 4	4	2,087.30	35.00	57.66
NA	PARTs 5, 6, 7	5	1,943.20	54.77	45.07

Appendix 4 includes a Master Severance Concept Plan and a reduction of a draft reference plan.

Each dwelling's final design will be subject to the City's detailed permitting review process. The subject site is located within the regulatory limits of the TRCA and as such permits from the Authority for any works within the regulated area, including earthworks, site grading, servicing, etc. will be required.

Appendix 5 includes a Preliminary Servicing and Grading Plan. It is based on estimated building envelopes with tiered floor levels. In an effort to limit the amount of site alteration and natural vegetation removal, grading and disturbance is to be limited to the area in the vicinity of the building footprints and construction access. Existing drainage patterns are to be maintained where feasible. A small portion of each lot including driveways and front yards will drain to an existing ditch on National Drive which ultimately drains to the same nearby watercourse through the existing easement at the southwestern limits of the property. Driveway culverts are anticipated in order to maintain the ditch flow from the lots as well as the drainage from the paved portion of National Drive. Roof drainage and foundation drainage will generally be directed towards the rear of the lots and to soak away pits to meet water balance requirements. The lot grading will be designed for sheet drainage flow in order to avoid any erosion issues that are generally caused by concentrated flows. Flow splitters will be utilized in such situations.

Each lot is to be serviced by municipal piped water and sanitary services. An existing 200mm sanitary sewer situated within the National Drive right-of-way is to be extended approximately 64 metres (210 feet) from its current terminus. Lots 1, 2, and 3 are to be serviced by gravity sanitary services connections, whereas Lots 4 and 5 will require sewage ejector pumps with small forcemains discharging to the sanitary sewer. An existing 150mm watermain within the National Drive road right-of-way will provide water service to each Lot.



4.0 LAND USE DESIGNATIONS, ZONING and PLANNING ANALYSIS

The subject site is designated and zoned as follows:

- “Built-Up Area – Conceptual” on Schedule 2: Places to Grow Concept; 2019 Growth Plan;
- “Urban Area” on Map 1: Regional Structure in the Region of York Official Plan;
- “Woodlands” on Map 5: Woodlands in the Region of York Official Plan;
- “Low Density Residential” on Schedule A: Land Use Plan of City of Vaughan Official Plan Amendment No. 240 (Woodbridge Community Plan);
- “Natural Areas and Countryside” on Schedule 1: Urban Structure in the City of Vaughan Official Plan 2010;
- “Core Features” on Schedule 2: Natural Heritage Network in the City of Vaughan Official Plan 2010;
- “Natural Areas” on Schedule 13: Land Use in the City of Vaughan Official Plan 2010;
- “Rural Residential (RR)” in comprehensive Zoning By-law 1-88, as amended.

The proposal has been analyzed in the context of governing provincial, regional and local planning documents, including the following:

- *Planning Act*, R.S.O. 1990, c. P.13, June 3, 2021;
- Provincial Policy Statement (PPS), May 2020;
- Growth Plan for the Greater Golden Horseshoe, August 2020 Consolidation;
- Region of York Official Plan, April 2019 Consolidation;
- City of Vaughan Official Plan Amendment No. 240 (Woodbridge Community Plan);
- City of Vaughan Official Plan 2010, December 2020 Consolidation;
- City of Vaughan Zoning By-law 1-88, as amended.

4.1 Planning Act, R.S.O. 1990, c. P.13, June 3, 2021

The *Planning Act*, R.S.O. 1990, c. P.13 (“The Act”) requires the Council of a municipality in carrying out their responsibilities under The Act to have regard to matters of provincial interest as identified in Section 2. The Act provides 20 broad areas of provincial interest which are to be considered. The following matters are specifically relevant to the division and development of the subject site:

(a) *The protection of ecological systems, including natural areas, features and functions;*

Site alteration is to be confined to the western limits of the subject site. In the long term there is little risk that development will adversely affect the natural heritage features or functions of the abutting natural heritage system. The irregular shape, size, and orientation of all residential lots fronting onto National Drive reflect the delineation of the natural heritage system that was determined when the subdivision



was being planned and developed. The natural heritage system lands were placed in an appropriate environmental zoning category so as to ensure they are protected, maintained, and enhanced in the long term.

- (f) *The adequate provision and efficient use of communication, transportation, sewage and water services, and waste management systems;*

Save and except for the subject site the subdivision has been built-out for nearly 30+ years. It was planned and developed on partial services and later upgraded with full municipal services. Adequate services exist to support the proposed lots.

- (h) *The orderly development of safe and healthy communities;*

A long established plan of subdivision, the subject site represents the last remaining vacant lot to be developed on National Drive. The consent applications support the orderly development and completion of the community in a safe and healthy manner.

- (j) *The adequate provision of a full range of housing; including affordable housing;*

The consent applications provide for the development of five (5) additional single detached residential dwellings which will assist the municipality in meeting projected population growth and demand for housing.

- (p) *The appropriate location of growth and development;*

The subject site is located within a Designated Built-up Area. The site and surrounding lands have long been planned for residential purposes. The subject site is the last remaining undeveloped lot in the subdivision.

- (q) *The promotion of development that is designed to be sustainable, support public transit and be oriented to pedestrians;*

The subject site, while easily accessible by the local road network, is also accessible by public transit operating along Pine Valley Drive and Langstaff Road. It is anticipated that the residential units will most likely incorporate water conserving features, energy conserving lighting and recycled/reclaimed materials as appropriate and feasible.

- (r) *The promotion of built form that,*

(i). *Is well-designed; and*

(ii). *Encourages a sense of place.*

The residential dwellings are anticipated to be well-designed with modern architectural, technologically advanced finishes, materials, and colours that will encourage a strong sense of place and community.



Section 51(24) of The Act provides criteria to be considered for the division of land. The following criteria are specifically relevant to the proposed land severance:

(a) The effect of development of the proposed subdivision on matters of Provincial interest;

The consent applications are for lands intended for residential land use. They are not anticipated to have any adverse impact on matters of Provincial interest.

(b) Whether the proposal is premature or in the public interest;

The consent applications follow a comprehensive planning process and are not premature. The applications are in the public interest and are consistent with the intent of the original plan of subdivision; albeit in the form of four (4) additional lots.

(c) Whether the Draft Plan of Subdivision conforms to the Official Plan and adjacent Plans of Subdivision, if any;

The consent applications generally conform to the policies of the Official Plan and are compatible with the historic residential plan of subdivision.

(d) The suitability of the land for the purposes for which it is to be subdivided;

The subdivided lands are suitable to facilitate residential land use (i.e. single-detached residential dwellings). The lands have long been planned for residential land use. The further division of the subject site represents an optimization of underutilized lands.

(e) The number, width, location and proposed grades and elevations of highways, and the adequacy of them, and the highways linking the highways in the proposed subdivision with the established highway system in the vicinity and the adequacy of them (highways in this context refers to the road network);

The consent applications do not present any concerns with regard to the adequacy of the roadway network. All lots will be accessed via National Drive.

(f) The dimensions and shapes of the proposed lots;

The shape and dimensions of the subdivided lots are appropriate for the intended residential land use. The lots like many of the original subdivision lots are irregular in shape with varying degrees of structural setbacks. The subdivision was planned on partial services requiring sufficient land area for private services. Smaller lots can now be achieved on account of the availability of full municipal services.

(g) The restrictions or proposed restrictions, if any, on the land proposed to be subdivided; or the buildings or structures proposed to be erected on it and the restrictions, if any, on adjoining land(s);



Future applications (i.e. custom home architectural review, buildings and conservation permits) will ensure that the proposed dwellings are appropriate in the local context.

(h) The conservation of natural resources and flood control;

The consent applications do not propose any concerns with regard to flood control and the conservation of natural resources. The subject site is located outside of lands subject to flooding. The final limits of development and site alteration will be determined as part of a future detailed design exercise.

(i) The adequacy of utilities and municipal services;

The consent applications do not present any concerns with regard to the adequacy of utilities and municipal services (be they existing or proposed). All works associated with site servicing of the proposed lots will be at the Owner's expense.

(j) The adequacy of school sites;

The consent applications do not present any concerns with regard to school sites as the project pupil yield will be minimal.

(k) The area of land, if any, within the proposed Draft Plan of Subdivision that, exclusive of highways, is to be conveyed or dedicated for public purposes;

The consent applications do not present any concerns related to conveyances for public purposes; National Drive will not be extended or widened, the ultimate right-of-way has been achieved.

(l) The extent to which the Plan's design optimizes the available supply, means of supplying, efficient use and conservation of energy;

The consent applications have no impact on matters of energy conservation.

(m) The interrelationship between the design of the proposed Draft Plan of Subdivision and Site Plan control matters relating to any development on the land.

The consent applications will facilitate development of the subject site for planned residential land use. Future detailed design applications will ensure that the proposed structures (dwellings) are appropriate in the local context.

4.2 Provincial Policy Statement (PPS) May 2020

Section 3 of the *Planning Act* requires that decisions affecting planning matters “*shall be consistent with*” policy statements issued under The Act. The Provincial Policy Statement (PPS) provides direction on matters of Provincial interest related to planning and development. The PPS is focused on improving land use planning, with a goal of contributing to a more effective and efficient land use planning system.



Part I: Preamble of the PPS provides for appropriate development of land while protecting resources of Provincial interest, public health and safety, as well as the quality of the natural environment.

In accordance with Part IV: Vision for Ontario's Land Use Planning System of the PPS, the consent applications:

- Focus residential development within the Built Boundary;
- Accommodate an appropriate mix of housing through development which will contribute to meeting the needs of current and future residents;
- Contribute to achieving an efficient development pattern which serves to optimize the use of land, resources, public investment and public service facilities;
- Protect natural features and areas;
- Serve to support the financial wellbeing of the Province, Region and the City over the long term, through increased property assessment.

In accordance with Part V: Policies, Section 1.0, the consent applications serve to promote efficient land use and development patterns which will contribute to making the City of Vaughan a strong, liveable and healthy community. The proposal will help to minimize urban sprawl by proposing additional residential units in an area of the City that has been long planned and developed for residential purposes.

The PPS includes policies which deal with sustainability. In particular, Section 1.1 includes several subsections which deal with liveable and healthy communities; including:

- Section 1.1.1: The consent applications will add to the City's housing supply and built form diversity; enriching the host neighbourhood. The proposal's layout is cost-effective, efficient, and minimizes land consumption and servicing costs. All necessary infrastructure and public service facilities exist and are available to meet current and projected needs of residents.
- Section 1.1.2: This Section of the PPS requires that land shall be made available to accommodate and provide an appropriate range and mix of land uses to meet projected needs for a time frame of up to 20-years. The immediate area has been comprehensively planned and when the consent applications are considered within the host neighbourhood, collectively they contribute to the land available to meet demand.
- Section 1.1.3: Settlement Areas shall be the focus of growth and development, and their vitality and regeneration shall be promoted. The subject site is located in an established Settlement Area and its development will contribute to the range of housing opportunities, serving both the local community and others who may wish to live in the area.
- Section 1.1.3.2: Land use patterns within settlement areas shall be based on densities and a mix of land uses which:
 - (a) Efficiently use land and resources;



- (b) 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;
- (c) Minimize negative impacts to air quality and climate change, and promote energy efficiency;
- (d) Prepare for the impacts of a changing climate;
- (e) Support active transportation;
- (f) Are transit-supportive, where transit is planned, exists or may be developed; and
- (g) Are freight-supportive.

The consent applications represent an efficient form of development which will utilize existing infrastructure and public service facilities to meet current and projected needs.

- Section 1.1.3.3: Planning authorities shall identify appropriate locations and promote opportunities for transit-supportive development, accommodating a significant supply and range of housing options through 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.

The subject site is easily accessible by the existing local road network. Public transit is also available along Pine Valley Drive and Langstaff Road.

- 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 lots are reasonably sized. Their development will implement current best practices mitigating risks to public health and safety.

The proposal supports Section 1.4 of the PPS, and in particular Sections 1.4.1 and 1.4.3 which seek to provide for an appropriate range of housing types and densities required to meet residential growth projections in the regional market area. The consent applications will contribute to residential infill/intensification in an area which has appropriate infrastructure to support additional development.

In accordance with Sections 1.6.6.1 and 1.6.6.2, the proposed lots will make efficient use of existing municipal sewage and water services, all of which serve to protect human health and safety, as well as the natural environment.

In accordance with Section 1.7 the proposal will assist in the long-term economic prosperity of the City by optimizing the availability and use of land, resources, infrastructure, and public service facilities.

Section 2.1 of the PPS addresses Natural Features. Section 2.1.5 in particular states that development and site alteration shall not be permitted in natural heritage features unless it has been demonstrated that there will be no negative impacts on the features,



or their ecological functions. Furthermore Section 2.1.8 states that development and site alternation are not permitted on adjacent lands to the natural heritage features and areas unless the ecological function of the adjacent lands has been evaluated.

An Environmental Impact Study (EIS) prepared in support of the proposal assessed the natural heritage features and associated functions adjacent to the subject site. It concluded that in the long term net result of the proposal will achieve no negative impacts to the natural heritage features or ecological functions provided that the mitigation recommendations and other related technical studies are implemented.

Continued coordination with the adjacent landowners and input/guidance from the authorities having jurisdiction is recommended to promote the protection of the natural features that extends across the adjacent properties. As development discussions proceed and as plans are developed in more detail, predicted effects and mitigation measures can be further considered, along with potential mitigation/compensation.

❖ In our opinion, the proposal is consistent and conforms to matters of Provincial interest as identified in the PPS.

4.3 Growth Plan for the Greater Golden Horseshoe, August 2020 Consolidation

The proposal has been reviewed for conformity with A Place to Grow, Growth Plan for the Greater Golden Horseshoe (Growth Plan). The Growth Plan provides the framework for implementing the Government of Ontario's vision for building stronger, more prosperous communities by better managing growth to the 2041 planning horizon. It encourages intensification within Built-Up Areas and provides direction with respect to transportation, infrastructure, planning, land-use planning, urban form, housing, natural heritage and resource protection.

Pursuant to Section 1.2.1 of the Growth Plan, the consent applications adhere to the Growth Plan's principles as to how land is to be developed. They optimize the use of existing infrastructure, as well as providing residential housing units in a location of the City of Vaughan that is accessible to transit and other amenities. It is anticipated that the proposed lots will contribute to the vibrancy and diversity of the local planning area and the whole of the City. Located within a Built-Up Area of the municipality, capacity exists to accommodate projected growth.

Section 2.2.1 of the Growth Plan requires that population and employment growth be accommodated by building compact, serviced, and transit-supportive communities in Settlement Areas. More specifically, within Settlement Areas growth is to be focused within the Delineated Built-up Area, Strategic Growth Areas, locations with existing or planned transit, and areas with existing or planned public service facilities.

The subject site is located within the Built-Up Area of the City of Vaughan where infrastructure and public transit exists. The proposal will contribute to the establishment



of complete communities by facilitating the optimal use of lands within a residential area and by expanding the range and mix of housing options. Future residents who will occupy the residential units will be able to take advantage of the subject site's close proximity to commercial uses, natural features, public transit, institutional uses (i.e. schools, places of worship, community centres) and park space.

Section 2.2.2 of the Growth Plan includes policy with respect to “Designated Built-Up Areas”. The proposal represents an appropriate and desirable land use within the City's Designated Built-Up Area that supports the goals and objectives of the *Places to Grow Act* and the Provincial Growth Plan. It will contribute toward the use of lands located within the Built Boundary.

Section 2.2.6 of the Growth Plan includes policy with respect to Housing. The proposal will assist in achieving the Region of York and City of Vaughan population targets as set out in Schedule 3: Distribution of Population and Employment of the Growth Plan.

Within Section 4.2 of the Growth Plan, detailed policies are provided for protecting what is valuable within the Growth Plan area. Section 4.2.2 provides policies governing Natural Heritage Systems which have been mapped by the Province to support the protection of the region's natural heritage and biodiversity. The System excludes lands within settlement area boundaries that were approved and in effect as of July 1, 2017. Notwithstanding this exclusion Section 4.2.2.6 still requires that natural heritage features beyond the System and within settlement areas to continue to be protected in a manner consistent with PPS. The supporting Environmental Impact Study (EIS) reviews the development in the context of the planning and environmental policies and concludes that the proposal can proceed if its recommendations are successfully implemented. The result is no long term negative impacts.

❖ In our opinion, the proposal complies with the policies and objectives of the Growth Plan.

4.4 Region of York Official Plan, April 2019 Consolidation

The Region of York Official Plan (YROP) includes policies to guide growth and development within the designated “Urban Area”. The YROP provides Regional Council with a long-term, Region-wide strategic policy framework for guiding growth and development. The YROP serves to protect the environment, manage resources, and guide the evolution of the municipal structure by trying to manage growth effectively and efficiently.

Designations

The YROP includes schedules and figures which serve to communicate, by way of illustration, the relationship between land uses and existing/proposed resources and infrastructure. The subject site is designated as follows:

- Map 1 Regional Structure: “Urban Area”; and
- Map 5 Woodlands: “Urban Area” and “Woodlands”.



Appendix 6 includes a copy of the Schedules listed above.

The YROP requires the establishment of healthy urban communities that contain living, working, and recreational opportunities. They are to respect the natural environment and resources, achieve intensified and compact form and uses, and efficiently use land, services, infrastructure and public finances. Urban structure, form and densities are to be sensitive to the characteristics of existing communities while striving to be pedestrian-friendly and transit-supportive.

The YROP directs development/redevelopment to the Urban Area within the Regional Urban Boundary. The subject site is located within the Urban Area. Its development will result in the utilization of existing and/or planned infrastructure and as such will contribute toward the optimization of the use of Regional resources.

Section 3.5 of the YROP addresses residential housing. Section 3.5.4 requires that local municipal official plans and zoning by-laws permit a mix and range of housing types, lot sizes, unit sizes, functions, tenures, and levels of affordability within each community. A modest infill development, the consent applications will contribute to providing diverse residential opportunities. It will add to the range and mix of housing opportunities within the Region as a whole and thereby further support the Region's urban structure.

From a housing perspective the consent applications will assist the Region in achieving a supply of accessible, adequate and appropriate housing, of a type, size, density and tenure meant to meet the existing and projected housing market requirements of current and future residents.

Section 2.0 of the YROP contains policies aimed at protecting and enhancing the natural environment. Section 2.2.4 of the YROP prohibits new development and site alteration within natural heritage features unless it is demonstrated that it will not result in a negative impact on the feature or its ecological functions. The specific delineation of such features shall typically occur through the approval of *Planning Act* applications supported by appropriate technical studies including Environmental Impact Studies (EIS), heritage evaluations, and servicing plans. Where such delineation refines boundaries shown on Maps within the YROP, refinements to these Maps can occur without an amendment to the Official Plan.

Section 2.2 addresses key natural features and key hydrologic features within the Region including but not limited to significant valleylands, woodlands, habitats of wildlife, endangered and threatened species. Public and private landowners with lands containing these features are to manage the lands in a manner that conserves them.

Section 2.3 addresses natural hazards and outlines that development and site alteration shall be directed away from hazard lands and hazardous sites and shall be planned and designed to minimize flooding and erosion impacts.

The planning and build-out of the subdivision lots fronting onto National Drive are evidence that development and site alteration within all or part of the area woodland can be successfully managed. The woodland remains largely intact after 30+ years. It is



assumed that during the planning approvals process it was confined to the south and eastern limits of the subject site otherwise it would have been placed in the appropriate natural heritage/open space designation and/or zoning. The Environmental Impact Study (EIS), site servicing and grading plans submitted in support of the consent applications propose avoidance, mitigation, and enhancement strategies to prevent adverse impacts to the woodland. The appropriate time to finalize ground stability and erosion control both in the short term and long is when the individual building footprint locations and grading limits of each lot have been established. Like the original subdivision application, the consent applications will only facilitate the division of the individual residential lots.

It is evident that a great many choices will be made as the Region continues to grow, develop/redevelop and re-invent itself. As indicated in the YROP, the Region's future is one of sustainable natural environments, healthy communities, and economic growth. In the spirit of the YROP, the proposal has been advanced being sensitive to the need to provide balanced and cost-effective development.

❖ In our opinion, the proposal complies with the policies and objectives of the Regional Official Plan.

4.5 City of Vaughan Official Plan Amendment No. 240 (Woodbridge Community Plan), Passed By City of Vaughan Council June 22, 1997, Approved by York Region Council November 25, 1998

Prior to adoption of the current 2010 City of Vaughan Official Plan, Official Plan Amendment No. 240 (Woodbridge Community Plan) was the planning document that governed the area bound by Rutherford Road to the north, Highway No. 7 to the south, Weston Road to the East and Highway No. 27 to the west.

Designations

A general goal of OPA No. 240 was to create a distinctive residential community of a scale and character which will relate well to the existing village quality of Woodbridge, and possess a strong sense of community identity. The planning area was intended to be a predominately low rise, low density residential area with a full range of supporting uses. Residential housing types were to be primarily single family detached with some higher densities to accommodate seniors and other family needs.

Schedule 'A': Land Use Plan of OPA No. 240 designated the subject site and all residential lots on National Drive "Low Density Residential". The abutting National Golf Course lands were designated "Special Use" which permitted a golf course.

Appendix 7 includes a copy of Schedule 'A': Lands Use Plan.

The Low Density Residential designation permitted single detached and semi-detached dwelling units. The greater subdivision was subject to site specific policy 3.3(g)



requiring lands northeast of Pine Valley Drive and Langstaff Road, adjacent to the National Golf Course in the west half of Lots 11, 12, 13, and 14, Concession 6, to have a minimum lot size shall be 0.4 hectares (0.98 acres). The basis for this policy was the availability of only a municipal water supply and the existence of private septic systems. The lot size requirement was to ensure that the lots were large enough to support a septic system. This is no longer a concern as both municipal water and sanitary services are now available to lots fronting onto National Drive.

As neighbourhoods age, it is expected that some transformation will occur. From a planning perspective, it is how those elements of character are addressed that is important to the overall residential character of an area. The National Drive subdivision is a stable residential neighbourhood. The consent applications will facilitate an attractive and appropriately scaled infill development. Built form is expected to enhance the unique characteristics of the neighbourhood, protect and preserve neighbouring natural heritage features, promote public safety, and contribute to an attractive streetscape. The proposed lots albeit smaller than the lot area prescribed in OPA No. 240 is in keeping with the general intent of the Official Plan policy being large low density, low intensity forms of residential development.

❖ In our opinion, the intended use of the subject site maintains and complies with the intent and purpose, as well as the policies, goals and objectives of OPA No. 240.

4.6 City of Vaughan Official Plan 2010, 2020 Consolidation

The City of Vaughan Official Plan (VOP) 2010 was adopted by City Council on September 7, 2010, and was subsequently modified on September 27, 2011, March 20, 2012 and April 17, 2012. Its approval resulted in the former Official Plan, and the Community and Employment Area Plans being superseded.

The VOP 2010 contains policies which are similar to the YROPs in regards to guiding the planning, growth and development of the municipality. It is a master plan meant to capture Vaughan Council's vision for the future of the municipality. The 2020 Consolidation reflects Local Planning Appeal Tribunal (LPAT) decisions and City Council approved Official Plan Amendments as of May 29, 2019.

Designations

The following is a summary of relevant designations from the VOP 2010. **Appendix 8** includes a copy of the Schedules listed below:

- Schedule 1: Urban Structure – “Natural Areas and Countryside”;
- Schedule 2: Natural Heritage Network – “Core Features”;
- Schedule 13: Land Use – “Natural Areas”.



Vaughan's Urban Structure

The Urban Structure establishes a comprehensive framework for guiding growth in the City. Natural Areas and Countryside are key features on City's landscape and contribute to the overall environmental health of the City and wider Region. They form part of the larger Regional Greenlands System. VOP 2010 identifies these areas to be protected and enhanced. Section 2.2.2.1 states that Natural Areas shall be protected and their ecological functions preserved, restored or, where possible improved. The VOP 2010 identifies the Subject Site as Natural Areas. By contrast National Drive, neighbouring subdivision lots, and the golf course are identified as Community Areas which are characterized by predominately low-rise residential housing stock, with local amenities. As the City grows and matures Community Areas will remain mostly stable. Incremental change is expected as a natural part of maturing neighbourhoods. This change will be sensitive to, and respectful of, the existing character area. Limited intensification may be permitted as long as it is sensitive and compatible with the character, form, and planned function of the surrounding context.

Natural Heritage Network

The City's Natural Heritage Network illustrated on Schedule 2 represents an interconnected system of natural features and the functions they perform. Natural features including wetlands, woodlands, valleys and stream corridors, wildlife habitat, significant habitat of endangered and threatened species, are identified as Core Features to be protected and enhanced. The policies of Section 3.2 of the VOP restrict development or site alteration within Core Features. In cases where past development has taken place and buildings currently exist, uses may continue with minor alterations but no new such uses will be allowed in order to maintain the integrity of the feature.

Pursuant to Section 3.2.3.2 Schedule 2 may not identify all the natural features in the City. The precise limits of mapped natural heritage features, and any addition to the mapped network, will be determined through appropriate study undertaken in consultation with the authorities having jurisdiction. This may occur on a site-by-site bases through the development process or through studies carried out by the City, Region or TRCA. Moreover Section 3.2.3.11 states that minor modifications to the boundaries and alignment of Core Features, as identified on Schedule 2, may be considered if environmental studies, submitted as part of the development process provide appropriate rationale for such minor modifications and include measures to maintain the overall habitat area and enhance ecosystem function. Minor modifications to Core Features from such site-specific studies if deemed acceptable do not require an Amendment to the VOP.

Woodlands

Woodlands are comprised of Natural Areas of vegetation in the landscape and their associated wildlife populations. The City supports the maintenance of important environmental functions, attributes, and linkages of woodland resources, recognizing that this will lead to more stable and resilient systems of vegetation.



Section 3.3.3.1 states that development and site alteration is prohibited in woodlands and their minimum vegetation protection zones. Development and site alteration on lands adjacent to woodlands will not be permitted unless the precise limit of the woodland and its protection zone has been established.

To the best of our knowledge the City of Vaughan does not have an ecological analysis confirming the extent of the woodland on the subject site at the time of the plan of subdivision's approval in 1978 therefore it is difficult to ascertain the original edge of the woodlot. It is assumed that during the planning approvals process the woodlot was confined to the south and eastern limits of the subject site otherwise it would have been placed in the appropriate natural heritage/open space designation and/or zoning. A registered lot, the VOP mapping and designation does not reflect the subject site's legal status or its residential zoning.

The proposal contemplates development and site alteration on the westerly half of the subject site. The supporting technical reports, studies and plans including the Environmental Impact Study (EIS), preliminary site servicing and grading plan propose mitigation measures to prevent adverse impacts to the abutting woodland. They will form the basis for future detail design.

Valley and Stream Corridors, Hazardous Lands and Sites, Flood Hazards

Development in certain areas of the City poses risks to human health and safety and private property because of flooding or unstable slopes or erosion issues. Development is to be directed away from these areas. Pursuant to Sections 3.3.1, 3.6.3 and 3.6.4 of the VOP permission for development or site alteration in these areas is regulated by the TRCA.

As noted earlier in this Report, the subject site is unique in-so-far as being the last remaining undeveloped lot within the residential subdivision. The street's housing stock consists of custom homes with large footprints. Dwellings are predominately 2-storeys in height and multi-leveled on account of changing topography. There are precedent examples on National Drive and neighbouring local streets (Pine Valley Drive, Pine Valley Crescent, Clubhouse Road, Intersite Place, Goldpark Court) where grading, erosion, and siltation control measures have been successfully implemented.

The proposal's areas of alteration and development are situated above the neighbouring watercourse and free of any potential flooding. In an effort to minimize major excavation and potentially creating a hazard over the long term the proposed dwellings will attempt to respect existing grades to the greatest extent. It is expected that the buildings will improve the overall ground stability of the subject site and abutting lands in the long term. Engineering and geotechnical plans, reports, and studies evaluating soil profiles, structural loadings, slope stabilization, and general construction considerations will be submitted and approved during the detail design/permitting process to the satisfaction of the City and TRCA.



Significant Wildlife Habitat and Species at Risk

The lands that comprise the Natural Heritage Network provide habitat for a wide variety of plant and animal species. Certain species are considered Species at Risk as determined by the *Federal Species at Risk Act* or *Provincial Endangered Species Act*.

Section 3.3.4.1 and 3.3.4.2 of the VOP prohibits development and site alteration within habitats of significant wildlife or endangered and threatened species. The Environmental Impact Study (EIS) assessed the subject site's potential for significant wildlife habitat and species at risk (SAR). To address direct and indirect impacts avoidance, mitigation and enhancements strategies are recommended. The long term net result will achieve no negative impacts.

Urban Design and Built Form

According to Section 9.1.2.1 new development is intended to respect and reinforce the existing and planned context within which it is situated. In Community Areas new development will be designed to respect and reinforce the physical character of the established neighbourhood within which it is located. An Established Community Area is a portion of the Community Area identified on Schedule 1 generally bounded by Major or Minor Arterial streets or other significant features such as the Natural Heritage System, which it is entirely or almost entirely developed and occupied, such that its physical character is well defined. National Drive meets this definition.

Section 9.1.2.2 requires new development within an Established Community Area to be designed to respect and reinforce the existing physical character and uses of the surrounding area, specifically respecting and reinforcing the following elements:

- (a) *local pattern of lots, streets and blocks;*
- (b) *size and configuration of lots;*
- (c) *building type of nearby residential properties;*
- (d) *orientation of buildings;*
- (e) *heights and scale of adjacent and immediately surrounding residential properties;*
- (f) *setback of buildings from the street;*
- (g) *pattern of rear and side-yard setbacks;*
- (h) *presence of mature trees and general landscape character of the streetscape;*

The proposal satisfies the elements as follows:

- (a) No new roads, streets and/or blocks are proposed. Consistent with the original plan of subdivision the proposed lots will front onto National Drive. The lot pattern within the area is varied, from wide street frontages and shallow lot depths, to lots with narrower frontages and long lot depths, to square and irregular shaped lots.
- (b) Existing residential lots are irregular in shape with varying areas and frontages. Their size was based on the need to support private septic systems. Municipal water and sanitary services are now available to all lots fronting onto National Drive.



Opportunity exists to create additional lots which will better utilize the subject site's exceptional frontage.

- (c) National Drive consists of only single detached residential dwellings. The consent applications will facilitate the construction of single detached dwellings.
- (d) Existing dwellings are generally oriented to face National Drive. Select dwellings contain large setbacks which make them difficult to view from the street. The proposed dwellings will be oriented towards National Drive.
- (e) The existing National Drive housing stock consists of custom homes with large footprints. Dwellings are predominately 2-storeys in height. Roof styles include a mix of hip and flat roofs. Proposed dwellings are anticipated to be multi-leveled, from the street they will appear to be no greater than 1 or 1½ storeys in height.
- (f) Variation in building footprints, vehicular driveways, and grading results in an inconsistent building setback from the street. The subject site is the only lot situated on the east half of National Drive, proposed dwellings are not required to align with the front wall of any abutting structures. Dwellings are to be sited such that suitably sized vehicular driveways can be provided.
- (i) Rear yard setbacks are expected to be comply and/or exceed the Zoning By-law minimum. The subject site is oriented such that there will be no impact on the rear yards of the two adjacent lots. Select side yard setbacks are expected to less than the zoning by-law minimum but still within a range that maintains a reasonable distance between structures and which does not detract from the large lot character of the street.
- (j) Efforts will be made to preserve mature trees where practical and reasonably possible. New trees will be planted to offset trees which have been removed.

Section 9.1.2.3 pertains specifically to established residential neighbourhoods that are characterized exclusively or predominantly by detached houses located on generally large lots with frontages exceeding 20.0 metres and/or by their historical, architectural or landscape value. In order to maintain the character of established, large-lot neighbourhoods the following policies shall apply to all developments within these areas:

- (a) *Lot frontage: In the case of lot creation, new lots should be equal to or exceed the frontages of the adjoining lots or the average of the frontage of the adjoining lots where they differ;*
- (b) *Lot area: The area of new lots should be consistent with the size of adjacent lots;*
- (c) *Lot configuration: New lots should respect the existing lotting fabric in the immediately surrounding area;*
- (d) *Front yards and exterior side yards: Buildings should maintain the established pattern of setbacks for the neighbourhood to retain a consistent streetscape;*
- (e) *Rear yards: Buildings should maintain the established pattern of setbacks for the neighbourhood to minimize visual intrusion on the adjacent residential lots;*
- (f) *Dwelling types: A new dwelling replacing an existing one shall be of the same type, as defined in Section 9.2.3 of this Plan, except on a lot fronting an Arterial Street, as*



identified in Schedule 9 (Future Transportation Network), where a Semi-detached House or Townhouse replacing a detached dwelling may be permitted, subject to Policy 9.1.2.4 and the other urban design policies of this plan;

- (g) Building heights and massing: Should respect the scale of adjacent residential buildings and any city urban design guidelines prepared for Community Areas;*
- (h) Lot coverage: In order to maintain the low-density character of these areas and ensure opportunities for generous amenity and landscaping areas, lot coverage consistent with development in the area and as provided for in the zoning by-law is required to regulate the area of the building footprint within the building envelope, as defined by the minimum yard requirements of the zoning by-law.*

The proposal satisfies the aforementioned policies as follows:

- (a) Lot frontage: Lot frontages on National Drive vary. The subject site's current frontage is equivalent of the four (4) adjacent lots combined. The proposed lot widths are not a significant deviation from the frontages of the adjacent lots.
- (b) Lot area: Lot sizes and houses in the area vary in size and shape. The lot sizes for the original subdivision were required to be larger in order to accommodate the private septic systems. The proposed lots do not require a septic system as full municipal services are now available. The lot areas although smaller than those typically found on National Drive are of a sufficient size to accommodate the construction of a new residence.
- (c) Lot configuration: Lot configuration on National Drive varies on account of topography, vegetation, and the local road pattern. This variation is also present on neighbouring residential streets immediately to the east and west. The proposed lots are of a similar configuration to those in its immediate vicinity. They do not disturb the existing pattern of development or perpetuate an undesirable pattern of development.
- (d) Front yards and exterior side yards: The subject site is an interior lot. It is the only lot situated on the east half of National Drive, proposed dwellings are not required to align with the front wall of abutting structures.
- (e) Rear yards: The subject site is oriented such that there will be no visual intrusion on the two adjacent residential lots.
- (f) Dwelling types: The subject site was planned and registered as residential lot. Its zoning only permits a single detached dwelling. The consent applications will facilitate the construction of single detached dwellings.
- (g) Building heights and massing: The proposed dwellings are to be multi-leveled; the topography will dictate the change in levels. From the street they will appear to be no greater than 1 or 1½ storeys in height. Building heights and mass are expected to be sympathetic and complimentary to the adjacent dwellings.
- (h) Lot coverage: Lot coverage is defined as the percentage of the land or lot area covered by buildings. The intent in restricting lot coverage is to prevent overdevelopment and allow a sufficient amount of open space/amenity space on site. The final configuration of the dwelling footprints has not yet been determined. Minor exceedances in lot coverage will provide generous dwelling sizes which still



maintain the low-density character of the area. On account of National Drive now having full municipal services there is opportunity for increased lot coverage which achieves a higher utilization of land.

Land Use Designation, Low Rise Residential, and Development Criteria

Pursuant to Section 9.2.2.1 of the VOP lands designated Low-Rise Residential shall be planned to consist of buildings in a low-rise form no greater than three (3) storeys. Residential building types include detached and semi-detached dwellings and townhouses.

Section 9.2.3.1 provides development criteria that are to be applied to detached and semi-detached dwellings:

- (a) A Detached House is a Low-Rise Residential building, up to three storeys in height, situated on a single lot and not attached to any other residential building. A Semi-Detached House is a Low-Rise Residential building, up to three storeys in height, situated on a single lot and attached to no more than one other residential building situated on a separate parcel.*
- (b) In Established Community Areas where Detached Houses and Semi-Detached Houses exist, the scale, massing, setback and orientation of new Detached Houses and Semi-Detached Houses will respect and reinforce the scale, massing, setback and orientation of other built and approved houses of the same type in the immediate area. Variations are permitted for the purposes of minimizing driveways.*
- (c) In areas of new development, the scale, massing, setback and orientation of Detached Houses and Semi-Detached Houses will be determined through the process of developing and approving Secondary Plans, Block Plans, Plans of Subdivision, Zoning By-laws, and/or urban design guidelines.*

As previously noted in earlier sections of the Report the subject site is an existing residential lot within a registered plan of subdivision. It was planned and zoned for the purposes of a single detached residential dwelling. The consent applications will facilitate the division of the subject site to permit the construction of five (5) single detached dwellings which are to be of a similar height, scale, and mass as the existing dwellings in the immediate area. The orientation of the subject site is such that there is no adverse impact on adjacent lots. National Drive is unique in-so-far as lots are irregular in shape with varying areas and frontages. There is no predominant architectural style or theme amongst the custom homes. The proposed lots and dwellings can seamlessly be integrated into the host community.

Plans of Subdivision and Consents (Severances)

Sections 10.1.2.34 to 10.1.2.47 of the VOP address consent to sever applications. The following Sections are of particular importance as they relate to the subject applications:



Section 10.1.2.38 – That a lot(s) may be created only if there is enough net developable area on both the severed lot and the remainder lot to accommodate proposed uses, buildings and structures and accessory uses without encroachment on the Natural Heritage Network.

Section 10.1.2.39 – As a condition of approval, the City shall enter into an agreement with the applicant establishing conditions requiring that natural self-sustaining vegetation be maintained or restored in order to ensure the long-term protection of any Natural Heritage Network components and hydrologically sensitive features on the lot.

Section 10.1.2.42 – That a consent(s) to sever land in the Urban Area, including the lands designated as Oak Ridges Moraine Settlement Area on Schedule 4, will be considered for the purposes of infilling in an existing Urban Area, but shall not extend the existing Urban Area. Such consent(s) in the Urban Area will be subject to the following:

- (a) Infilling which economizes the use of urban land without disturbing the existing pattern of development or perpetuating an undesirable pattern of development or prejudicing the layout of future development shall be considered acceptable;*
- (b) Where a parcel of land is located within an existing settlement or designated by the Official Plan for development, and the size of the parcel is large and it is apparent that an application for a severance could be a forerunner of other similar applications on the original parcel, such individual severances from that parcel shall not be permitted but may be considered through an application for a Plan of Subdivision; and*
- (c) Where existing developed lots have the potential for redevelopment on a more comprehensive scale, a proposed severance(s) which might block potential points of access or further fragment ownership of these lands, shall not be approved unless such severance is determined to be appropriate following a Council approved comprehensive study of the area such as through a Secondary Plan or Block Plan process.*

Section 10.1.2.47 – That in addition to matters under the Planning Act, the Committee of Adjustment, in determining whether a consent is to be granted, shall have regard for the following matters in consultation with the appropriate departments and agencies:

- (a) Compatibility of the proposed size, shape and use of the lot...;*
- (b) Access;*
- (c) Servicing;*
- (d) Conservation;*
- (e) Financial Implications.*

In general, applications for the creation of multiple lots are encouraged to proceed by registered plan of subdivision, particularly where any of the following apply:

- (1) Where the future development potential of the retained lands is in question;
- (2) Where major extension or dedication of a new public road would be required;



- (3) Where major extension of municipal water or sewage services would be required; or
- (4) Where an agreement or condition would be required for any part of the retained lands which is not capable of being accommodated through the consent process.

It is acknowledged that Section 10.1.2.28 of the VOP deems a plan of subdivision necessary where the number of new lots created is greater than three (3) however when the above conditions do not apply, multiple lot creation through the consent process may be possible. The subject site is already a lot within a registered plan, to further subdivide lands by way a plan of subdivision is not permitted by the *Planning Act*; accordingly the only process to divide the lands is via consent.

Notwithstanding the subject site's current VOP designation, the subject site has historically been planned, designated, and zoned for residential land use. As highlighted earlier in this Report the subject site can be further divided into smaller lots and accommodate detached dwellings of generous size. The proposal is modest form of infill development that economizes urban land without altering the development pattern of the host neighbourhood.

The consent applications do not contemplate the major extension or dedication of a new public road; National Drive is not to be extended or widened, the proposed lots will have direct frontage onto the local road. The consent applications do not require the major extension of municipal water or sewage services; the proposed dwellings will be serviced by existing water and sanitary sewer services situated within the road right-of-way. The applications do not warrant extra ordinary conditions or agreements that cannot be secured through the normal consent process; the City, Region, and TRCA have the authority to impose conditions as deemed necessary and appropriate.

❖ In our opinion, the intended use of the subject site maintains and complies with the intent and purpose, as well as the policies, goals and objectives of the City of Vaughan Official Plan.

4.7 City of Vaughan Zoning By-law 1-88, as Amended

The general intent and purpose of Zoning By-laws are to establish precise standards as to how land is developed. Restrictions are used, in part, to achieve more uniform and consistent built form streetscapes, thereby contributing to a more predictable pattern of development.

Zoning By-law 1-88 is the City's comprehensive zoning by-law. The subject site is zoned "Rural Residential (RR)" which permits the construction of one (1) single detached residential dwelling. The RR zoning includes select performance standards; including: lot frontage, lot area, lot coverage, yard setbacks, and building height.

Appendix 9 includes a mapping extract from Zoning By-law 1-88 and a copy of Schedule 'A' Zone Requirement Schedule.



Appendix 10 includes an aerial photo illustrating the subject site's as-of-right maximum building envelope. A building that conforms to the performance standards can accommodate a 2-storey dwelling that measures approximately 2,195 m² (23,629 ft²).

It is emphasized that the zoning for the original subdivision was based on the need for large lots that could accommodate private septic systems. Smaller lots on full municipal services (water and sanitary) can achieve similar sized dwellings that are compatible within the greater subdivision.

The Conceptual Siting Plan found in **Appendix 11** illustrates building footprints having 17-22% lot coverage that can accommodate 2-storey dwellings ranging between 388 to 480 m² (4,181 to 5,176 ft²). The plan demonstrates that there is enough net developable area on each lot while maintaining general conformity with the Zoning By-law.

Recent land division applications on lots which form part of the neighbouring Intersite Place subdivision west of Pine Valley Drive, north of Langstaff Road, are evidence of similar proposals that have optimized the use of excess land and the availability of municipal services.

Minor Variance Applications

BelCap Management Inc., on behalf of the Registered Owner submitted in conjunction with the four (4) consent applications five (5) minor variance applications to the Committee of Adjustment. Seeking relief from zoning standards is a common practice on infill projects and is an accepted means of addressing constraints often associated with road widening dedications, site servicing, irregularly shaped lots and legal non-complying conditions. The variance applications are specific to minimum lot area and width. Additional Zoning By-law deficiencies may be identified during the detail design of each specific lot. Future minor variance applications will be filed on a site-by-site basis.

Pursuant to Section 45(1) of the Planning Act, a minor variance application must satisfy all 'Four Tests' as follows:

- (1) Does the Variance conform to the intent of the Official Plan?
- (2) Does the Variance conform to the intent of the Zoning By-law?
- (3) Is the proposal desirable for the appropriate development or use of the lands?
- (4) Is the proposal minor in nature?

Test #1 – Does the Minor Variance Conform to the Intent of the Official Plan?

Low-rise residential communities are considered to be stable areas; however the City Official Plan recognizes that they are not static and that there will be change in these areas. It is expected that some physical change will occur in the form of enhancements, additions and infill housing.



The subject site is situated within an area that is characterized by large custom detached dwellings. The Conceptual Siting Plan illustrates how the subject site can accommodate additional lots with dwellings of a similar size and scale. The combined variances are performance related as opposed to land use and as such do not impact or conflict with the goals and objectives of the City Official Plan.

The requested variances are considered to conform to the general intent of the City Official Plan.

Test #2 – Does the Minor Variance Conform to the Intent of the Zoning By-Law?

The requested variances are divided into two (2) regulations: lot area and lot frontage.

Lot Area

The intent of the Zoning By-law in regulating lot area is to ensure consistency in lot size and to ensure that sufficient area is provided to properly accommodate a dwelling, amenity areas, and driveways.

Schedule 'A' of the Zoning By-law requires that a RR Zone have a minimum lot area of 4,000 m². **Table 2** highlights the variation of lot size and shape on National Drive. The availability of municipal services no longer warrants oversized lots that must accommodate private septic systems.

Table 2		
Municipal Address	Lot	Area (m ²)
121 National Drive	63	~4,174m ²
135 National Drive	64	~8,250m ²
167 National Drive	65	~10,999m ²
215 National Drive	66	~13,990m ²
208 National Drive	67	~7,405m ²
198 National Drive	68	~5,603m ²
182 National Drive	69	~4,687m ²
160 National Drive	70	~4,313m ²
136 National Drive	NA	~4,096m ²

The proposed lot areas listed in **Table 3** although smaller than those typically found on National Drive are reflective of generous urban lots, sufficiently sized to accommodate the construction of new residence. They are of a size that can support a built form that is comparable and compatible with other lots on the street as well as the greater neighbourhood at large.



Table 3			
City File	Reference Plan	Lot	Area (m ²)
A117/21	PART 1	1	2,258.79
A118/21	PART 2	2	2,383.36
A119/21	PART 3	3	2,406.44
A120/21	PART 4	4	2,086.72
A121/21	PARTs 5, 6, 7	5	1,942.37

Lot Frontage

The intent of the Zoning By-law in regulating lot frontage is to ensure that a certain character is maintained for the property and that a lot is of a sufficient width to accommodate the various land uses permitted within a given zone category.

Schedule 'A' of the Zoning By-law requires that a RR zone have a minimum lot frontage of 45.0 metres. **Table 4** provides a complete list of lot frontages on National Drive. The subject site's current frontage is equivalent of the four (4) adjacent lots combined.

The proposed frontages listed in **Table 5** are not a significant departure from those of the adjacent lots. The lots while smaller are similar in configuration and lotting pattern. They will not result in any detrimental impact on adjoining properties or the neighbourhood as a whole and density is not an issue (4 additional dwellings are proposed).

Table 4		
Municipal Address	Lot	Frontage (m)
121 National Drive	63	~45.86
135 National Drive	64	~65.33m
167 National Drive	65	~200m
215 National Drive	66	~63.97m
208 National Drive	67	~56.08m
198 National Drive	68	~48.18m
182 National Drive	69	~46.86m
160 National Drive	70	~89.89m
136 National Drive	NA	~45.72m



Table 5			
City File	Reference Plan	Lot	Frontage (m)
A117/21	PART 1	1	40.07
A118/21	PART 2	2	35.03
A119/21	PART 3	3	35.03
A120/21	PART 4	4	35.29
A121/21	PARTs 5, 6, 7	5	51.14

Test 3 – Is the Minor Variance Desirable and Appropriate for the Area?

Zoning By-laws contain numerical standards for such matters as height, density, lot size, lot depth, and other matters to ensure that new development will be compatible with the existing physical character of the neighbourhood.

The neighbourhood has for many years been undergoing reinvestment and revitalization in the form of renovations and entirely new construction. This aids in guaranteeing the neighbourhood’s stability and reinforces its existing character.

The development of the subject site represents a positive contribution to a neighbourhood that is experiencing ongoing investment in its housing stock. The subject site, although challenged by grades, is large enough to accommodate more than a single dwelling. The proposed dwellings will provide sufficient space and amenities to meet the needs of today’s modern families, including liveable rooms, integral garages, and adequate front and rear yards. The approach being taken to its design is progressive and reflective of current engineering practices. Related items including materials, site servicing and grading, tree preservation and landscaping, will be addressed and refined as part of the detailed design and permitting process.

The requested variances are not excessive or out of character with the neighbourhood. The variances do not jeopardize the character or functionality of the surrounding area nor will they negatively affect the streetscape. They will contribute to the completion of the subdivision and urbanization of the area.

The variances are considered desirable and appropriate for the area.

Test 4 – Is the Minor Variance Minor in Nature?

In determining whether the variances are minor it is imperative that it not simply become an exercise of numeric calculation but also an analysis of fit and impact on the immediate context and surrounding neighbourhood. When viewed either individually or collectively, the variances result in the orderly development of the lands. They are not expected to have an unacceptable adverse impact on the adjacent properties, the streetscape, or the neighbourhood in general. They do not pose a significant departure



from the intended use of the lands; rather they recognize the evolution of the area context.

The requested Variances are considered to be minor in nature.

❖ The minor variance applications have been filed for the purpose of facilitating the related consent applications and ultimately the build-out of the proposed lots. The requested variances have been reviewed in the context of the relevant provisions of the Planning Act. We are of the opinion that the variances satisfy the four (4) tests and can be supported from a land use and policy perspective and represent good planning. We respectfully request that they be approved by the Committee of Adjustment.

5.0 SUMMARY of BACKGROUND STUDIES

Several technical reports, studies, and plans have been filed in support of the Committee of Adjustment applications. It is recommended that they be reviewed when assessing the applications.

Tree Inventory Report – Noica Consulting Inc. (February 2021)

In order to document the existing condition on-site a Tree Inventory Report was prepared in January/February 2021. Trees were observed with respect to their individual biological traits such as species and size. The Report's work plan included:

- Preparing an inventory of the tree resources greater than 15cm DBH on and within 6.0 metres of the subject site and trees of all sizes within the road right-of-way;
- Identifying dead, hazard, and diseased trees, and
- Documenting the findings in a Tree Inventory Report.

The findings of the Report indicate a total of 432 individual trees on and within 6.0 metres of the subject site. The removal of 9 trees and 4 dead trees was recommended due to hazardous conditions on National Drive and the golf course. An additional nine 9 trees and 26 dead trees/snags were identified as hazard trees however given that they are located far from National Drive and the golf course they do not pose an immediate threat.

In order to accommodate the proposed dwellings it will be necessary to remove additional trees beyond those inventoried as hazardous or dead. Only once the design



of the dwelling unit is finalized can recommendations for preservation or removal be determined. These recommendations will be based on the nature of the proposed works, the current health of the tree, and the susceptibility/tolerance of the tree species to various stresses/insults related to construction and other sources.

It is anticipated that removals will be limited to the subject site and adjacent lands will be unaffected. The final tree removal compensation calculations will be determined at a future date. In the event that not all the replacement trees can be accommodated on site, cash-in-lieu (CIL) of trees will be required.

Functional Servicing Brief – Valdor Engineering Inc. (October 2021)

A Functional Servicing Brief was prepared to document existing conditions and available/required services. It demonstrates that the proposed dwellings can be adequately serviced by existing sanitary and water infrastructure. The Brief also details methodologies for proposed site grading, erosion and sediment control (ESC). Its recommendations shall be incorporated into the future detailed design of each lot.

An existing 200mm sanitary sewer situated within the National Drive right-of-way is to be extended from its current terminus. Lots 1, 2, and 3 are to be serviced by gravity sanitary services connections, whereas Lots 4 and 5 will require sewage ejector pumps with small forcemains discharging to the sanitary sewer.

An existing 150mm watermain is located within the National Drive road right-of-way. Municipal water supply for each lot is to be provided via 25mm water service connections to the watermain.

The preliminary grading plan assumes possible building envelopes which follow the existing drainage pattern, minimize disturbance, and maximize tree preservation. A small portion of each lot including driveways and front yards will drain to an existing ditch on National Drive which ultimately drains to the same watercourse through an easement at the southwestern limits of the property. Driveway culverts are anticipated in order to maintain the ditch flow from the lots as well as the drainage from the paved portion of National Drive. Roof drainage and foundation drainage will generally be directed towards the rear of the lots and to soak away pits to meet water balance requirements. The lot grading will be designed for sheet drainage flow in order to avoid any erosion issues that are generally caused by concentrated flows. Flow splitters will be utilized in such situations.

The subject site is located within an area of the Humber River watershed where quantity control of stormwater runoff is not required. Water quality control will not be required since storm runoff consists of clean roof runoff and runoff from the existing vegetated lands. The water balance will need to be addressed as per TRCA requirements. Infiltration will be achieved by directing roof runoff into soak away pits located at the rear of the lots. The exact sizing will be determined at the detail design once building sizes and roof areas have been established.



An erosion and sediment control (ESC) plan will be prepared at detailed design stage. The appropriate time to prepare this plan is when the individual building footprint locations and grading limits of each lot have been established. Silt fencing is to be installed prior to building construction and the tree removal stage. Double silt fencing with straw bales along with other measures such as rock check dams will be used if required in areas that are experiencing higher flows, concentrated flows, and are more susceptible to erosion. All ESC measures will be inspected on a regular basis, particularly after rainfall events in order to ensure functionality. The measures will remain in place until all disturbed areas are vegetated or stabilized.

Environmental Impact Study – Dougan & Associates (October 2021)

An Environmental Impact Study (EIS) was prepared to assess the natural heritage features and associated functions on and adjacent to the subject site. It also reviewed the proposal's potential impacts on the aforementioned features and how the proposal complies with applicable environmental legislation, regulations, and policies.

Natural heritage constraints present on and adjacent to the subject site include:

- Migratory Birds;
- Deciduous Forest and Tree Canopy;
- Valleylands;
- Fish Habitat;
- Confirmed Significant Wildlife Habitat (SWH);
- Candidate Significant Wildlife Habitat (SWH);
- Potential Species at Risk (SAR) Habitat;

Inevitably there will be impacts to the existing natural heritage features and functions. Provided that the avoidance, mitigation and enhancement strategies listed below are implemented, the long term net result will achieve no negative impacts.

- (1) Clearing of natural vegetation as part of site preparation should be conducted in the late fall or winter months (i.e. October 1 to March 31) to avoid the active seasons of migratory birds and endangered bats.
- (2) Prior to construction activities, Tree Preservation Zones (TPZ) should be established to protect trees identified as “injure” or “preserve”. These trees must be surrounded by a continuous barrier (TPF), which shall be installed prior to site clearing, grading and demolition, and maintained through construction and landscaping.
- (3) An erosion and sediment control (ESC) plan should be prepared in accordance with local requirements. ESC is proposed to be installed at the grading limits in the back of the lots hugging the same contour elevation where possible. Silt and erosion control devices are to be in place prior to construction and shall remain until construction is complete and vegetation has established. All disturbed vegetated



areas left for 30 days or longer will be stabilized and restored with native, non-invasive species following completion of the work.

- (4) Maintain water balance through roof leaders connected to soak away pits; the quantity and sizing of which will be determined at detailed design stage. Sump pumps are recommended for foundational drainage, discharging to the surface or by gravity flow and discharging at the back of the lot.
- (5) An environmental stewardship resource should be developed for distribution to new homeowners.
- (6) To provide a net gain in habitat, a restoration area of 0.37 hectares has been recommended with a target community of deciduous forest. Species planted should be entirely native species and should include a mixture of suitable groundcover, shrubs and trees. The restored area should be monitored for a minimum of three years to ensure plantings have survived, manage any invasive species or disturbance, and ensure the target community is being met.
- (7) At least three (3) bat boxes should be installed in accordance with MECP and bat conservation international requirements.
- (8) To demonstrate net gain in tree canopy, trees should be replaced at a 2:1 ratio (~244 trees). Replacement trees should be comprised of native species and function to meet the target community of deciduous forest.

6.0 CONCLUSIONS

The Committee of Adjustment consent and minor variance applications have been reviewed from the perspective of conformity, consistency and compliance with the general intent and purpose of applicable governing planning documents. The applications do not advance changes to the underlying land use designations nor do they alter the governing planning policy framework which dictates how the subject site is intended to be developed.

As demonstrated throughout this Planning Justification Report the subject site is an ideal candidate for residential infill on account of its location, access to existing and/or planned infrastructure, and the opportunity it presents to complete the existing residential subdivision. The proposal as conceived represents an attractive infill housing project which capitalizes on the site and local area opportunities, while responding to and overcoming constraints not typically found on conventional lots.

In summary, the proposal can be justified on the basis that it:

- Appropriately considers matters of Provincial interest as set out in Section 2 of the *Planning Act*;
- Appropriately considers land division criteria as set out in Section 51(24) of the *Planning Act*;
- Is consistent with the Provincial Policy Statement and conforms to the Growth Plan;
- Meets the policy intent of the Region of York and City of Vaughan Official Plans;



- Develops an underutilized property while promoting revitalization, restoration, and enhancements;
- Provides a built form that can be designed to be compatible, attractive and complimentary to the surrounding area;
- Maximizes and optimizes the use of existing and proposed infrastructure and public service facilities;
- Supports and generates housing supply to assist in meeting Regional and City forecasts;
- Contributes to the provision of a range of housing types for residents at various life stages, household sizes; and incomes;
- Is supported by public transit and opportunities for active transportation;
- Is within close proximity of existing retail commercial uses, institutional uses, open spaces and recreational areas; and
- Is consistent with the City's goals and objectives of building complete communities

The applications are supportable from a technical perspective based on the myriad of reports, studies and plans submitted in support thereof.

We are of the opinion that the proposal represents a desirable development and is representative of "good planning".

We reserve the opportunity to prepare and submit additional information and justification in support of the applications.

Thank you for your consideration.

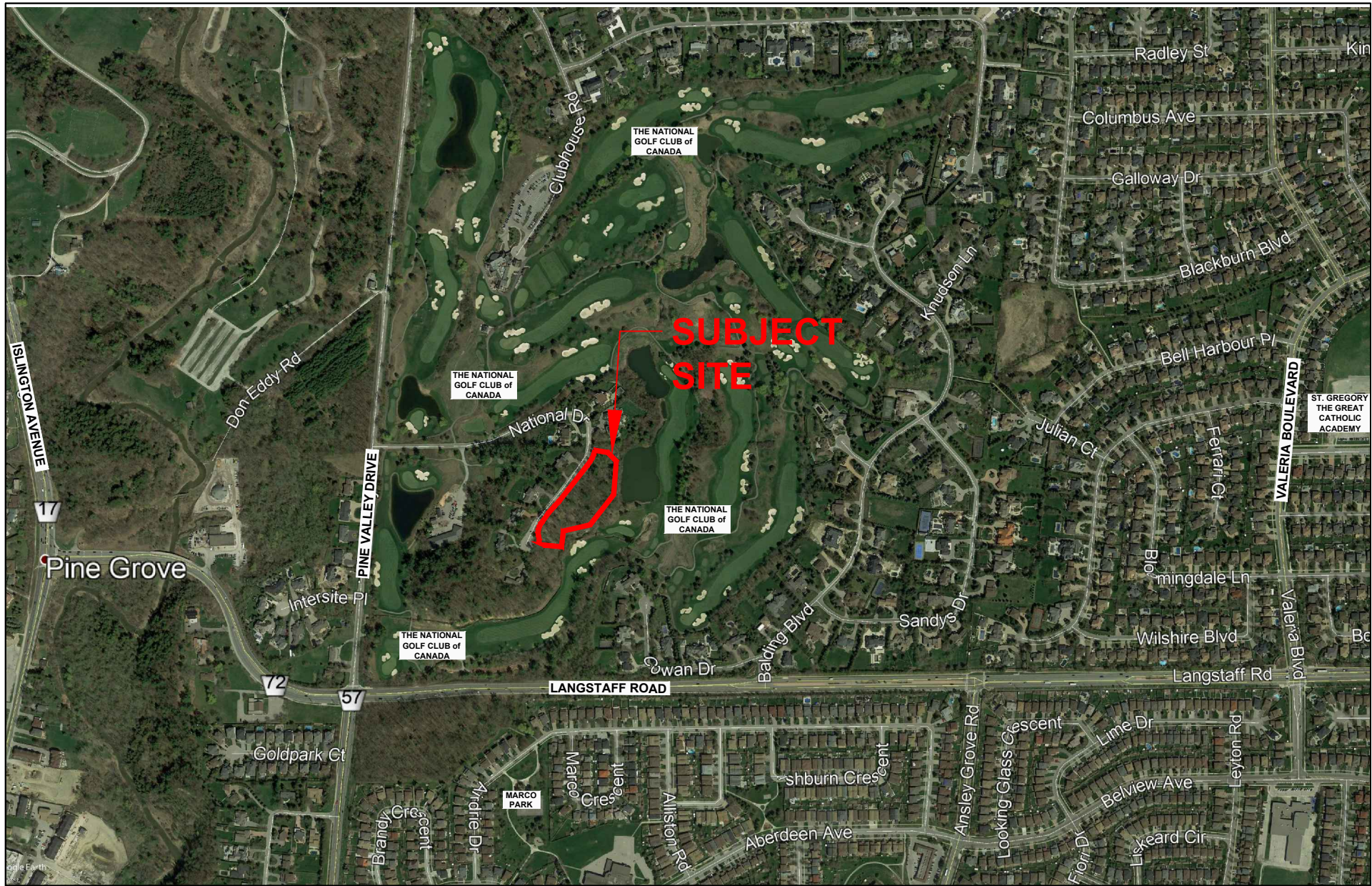
Yours truly,



Marc De Nardis, B.U.R.P.I., M.C.I.P., R.P.P.
Planning Associate
mdenardis@gwdplanners.com



APPENDIX 1



AIR PHOTO - SUBJECT SITE and SURROUNDING AREA
167 NATIONAL DRIVE
CITY of VAUGHAN
REGION of YORK

LEGEND

 **SUBJECT SITE**

P.N.: 21.2834

Date: July 16, 2021

Scale: N.T.S

Revised:

Drawn By: D.S.

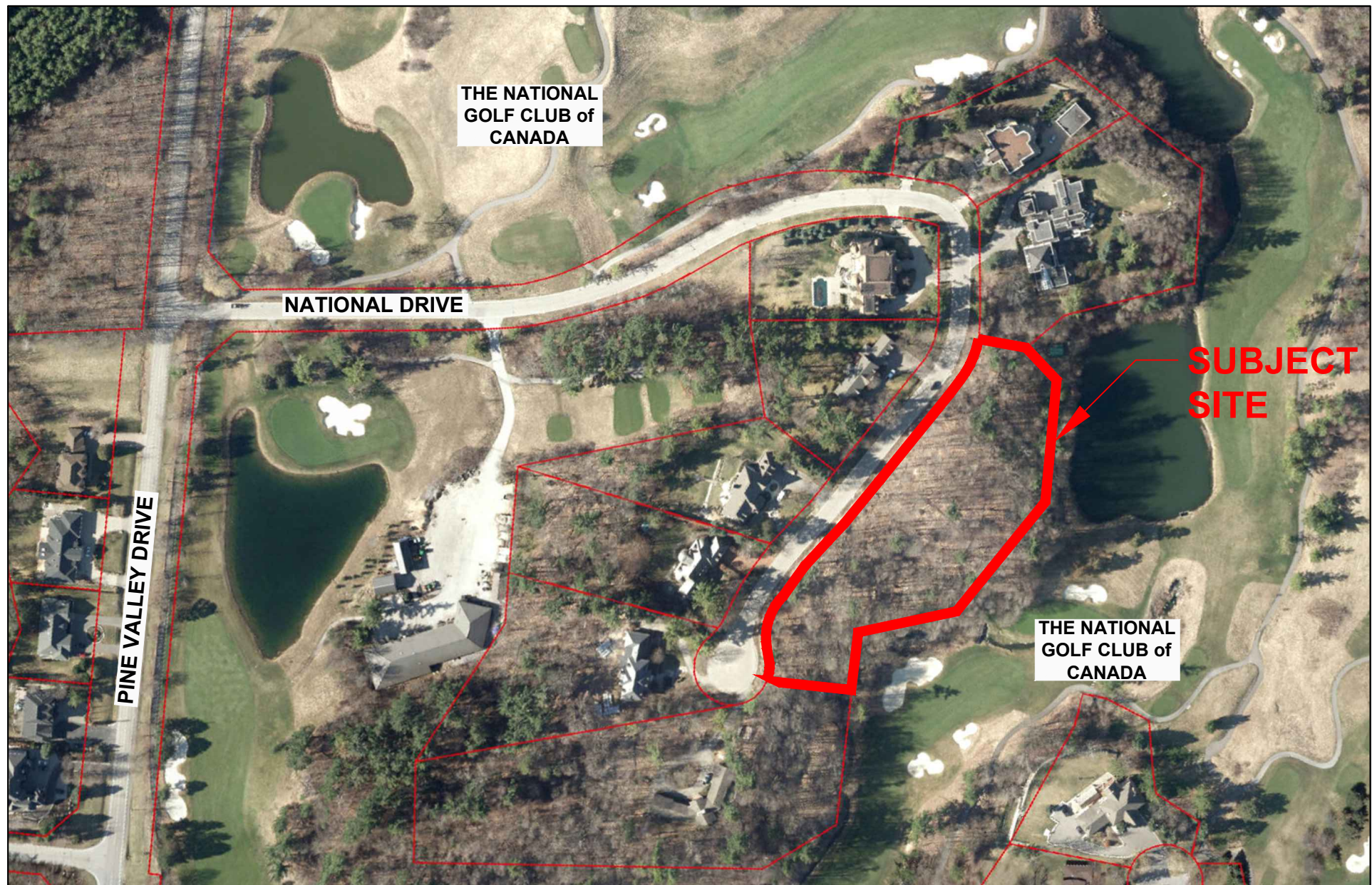
File No.: PN 2834_ Aerial_Images



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 L3R 0M3
 P. (905) 477 - 6556



**THE NATIONAL
GOLF CLUB of
CANADA**

NATIONAL DRIVE

PINE VALLEY DRIVE

**SUBJECT
SITE**

**THE NATIONAL
GOLF CLUB of
CANADA**

AIR PHOTO - SUBJECT SITE
167 NATIONAL DRIVE
CITY of VAUGHAN
REGION of YORK

LEGEND

 **SUBJECT SITE**

P.N.: 21.2834	Date: July 16, 2021
Scale: N.T.S	Revised:
Drawn By: D.S.	File No.: PN 2834_ Aerial_Images



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AIR PHOTO - NATIONAL DRIVE EXISTING CONDITION
167 NATIONAL DRIVE
CITY of VAUGHAN
REGION of YORK

Source: York Maps 2020

LEGEND

 **SUBJECT SITE**

P.N.: 21.2834	Date: August 10, 2021
Scale: N.T.S	Revised:
Drawn By: D.S.	File No.: PN 2834_ Aerial_Images



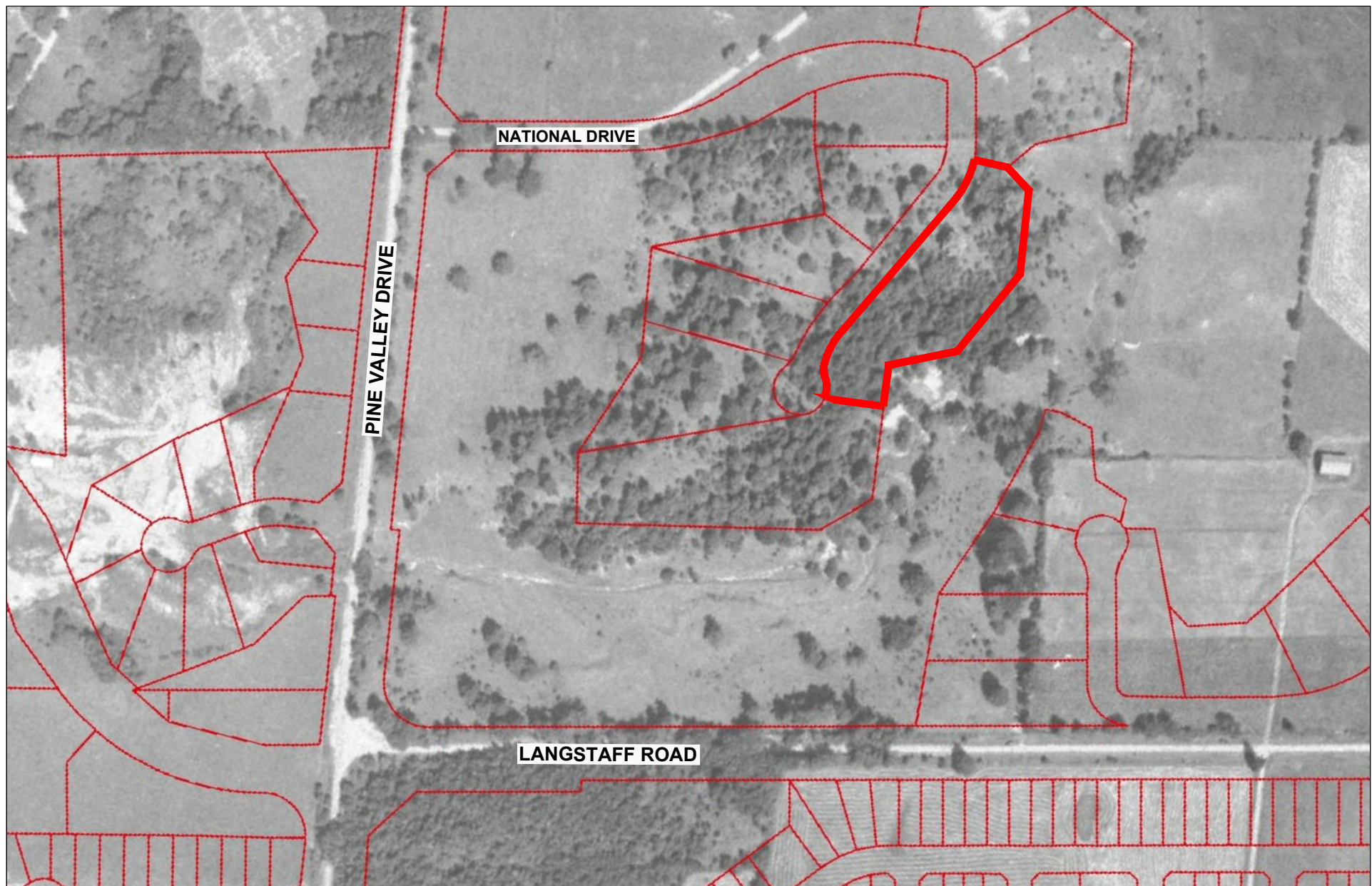
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APPENDIX 2



HISTORICAL AERIAL IMAGERY REVIEW
1954 AERIAL IMAGE
167 NATIONAL DRIVE
CITY of VAUGHAN
REGION of YORK

Source: York Maps, 1954

LEGEND

 **SUBJECT SITE**

P.N.: 21.2834

Date: August 9, 2021

Scale: N.T.S

Revised:

Drawn By: D.S.

File No.: PN 2834_ Aerial_Images



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HISTORICAL AERIAL IMAGERY REVIEW
1970 AERIAL IMAGE
167 NATIONAL DRIVE
CITY of VAUGHAN
REGION of YORK

Source: York Maps, 1970

LEGEND

 **SUBJECT SITE**

P.N.: 21.2834

Date: August 9, 2021

Scale: N.T.S

Revised:

Drawn By: D.S.

File No.: PN 2834_ Aerial_Images



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HISTORICAL AERIAL IMAGERY REVIEW
1988 AERIAL IMAGE
167 NATIONAL DRIVE
CITY of VAUGHAN
REGION of YORK

Source: York Maps, 1988

LEGEND

 **SUBJECT SITE**

P.N.: 21.2834

Date: August 9, 2021

Scale: N.T.S

Revised:

Drawn By: D.S.

File No.: PN 2834_ Aerial_Images



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HISTORICAL AERIAL IMAGERY REVIEW
1995 AERIAL IMAGE
167 NATIONAL DRIVE
CITY of VAUGHAN
REGION of YORK

Source: York Maps, 1995

LEGEND

 **SUBJECT SITE**

P.N.: 21.2834

Date: August 9, 2021

Scale: N.T.S

Revised:

Drawn By: D.S.

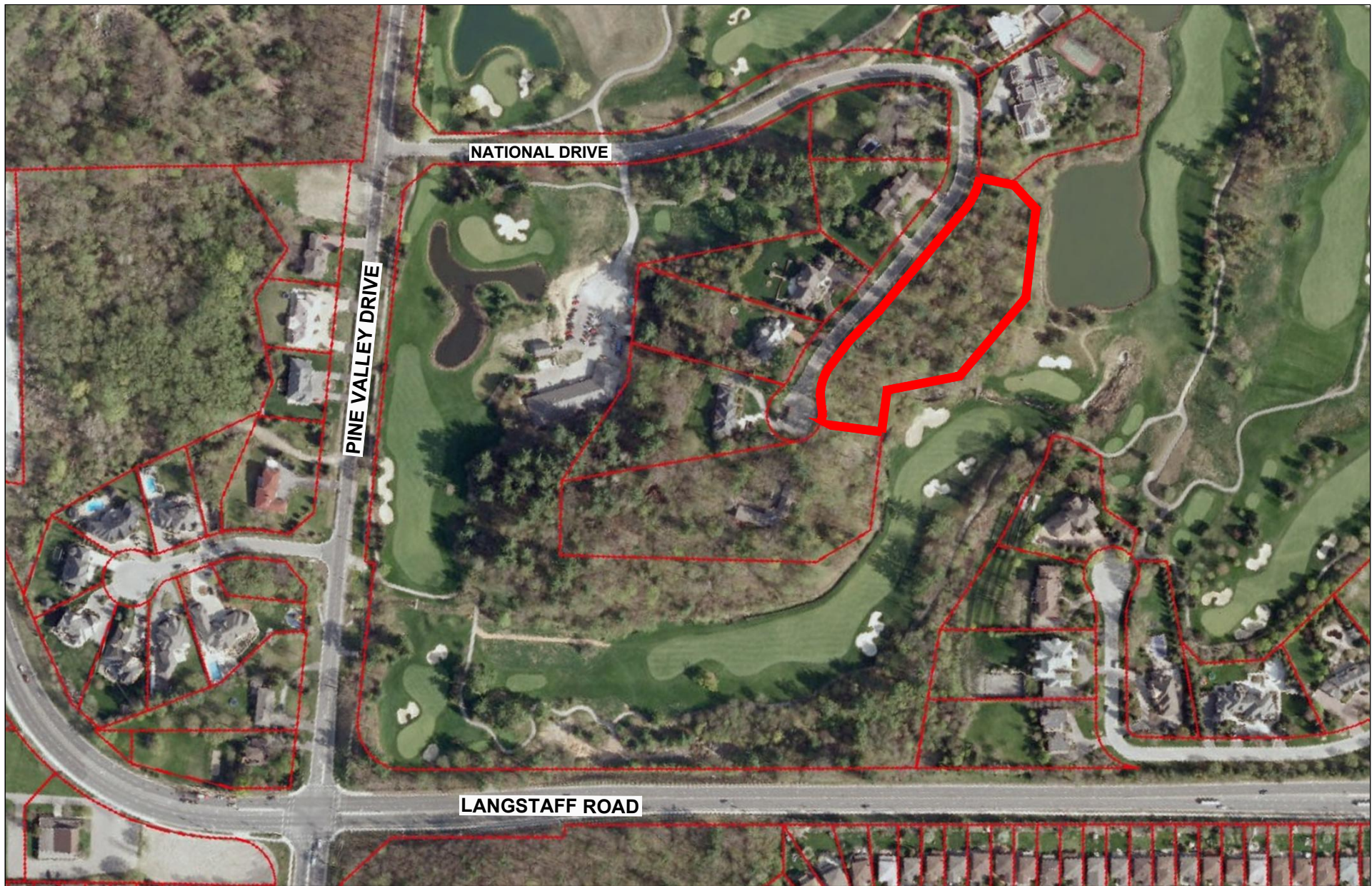
File No.: PN 2834_ Aerial_Images



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HISTORICAL AERIAL IMAGERY REVIEW
2007 AERIAL IMAGE
167 NATIONAL DRIVE
CITY of VAUGHAN
REGION of YORK

Source: York Maps, 2007

LEGEND

 **SUBJECT SITE**

P.N.: 21.2834

Date: August 9, 2021

Scale: N.T.S

Revised:

Drawn By: D.S.

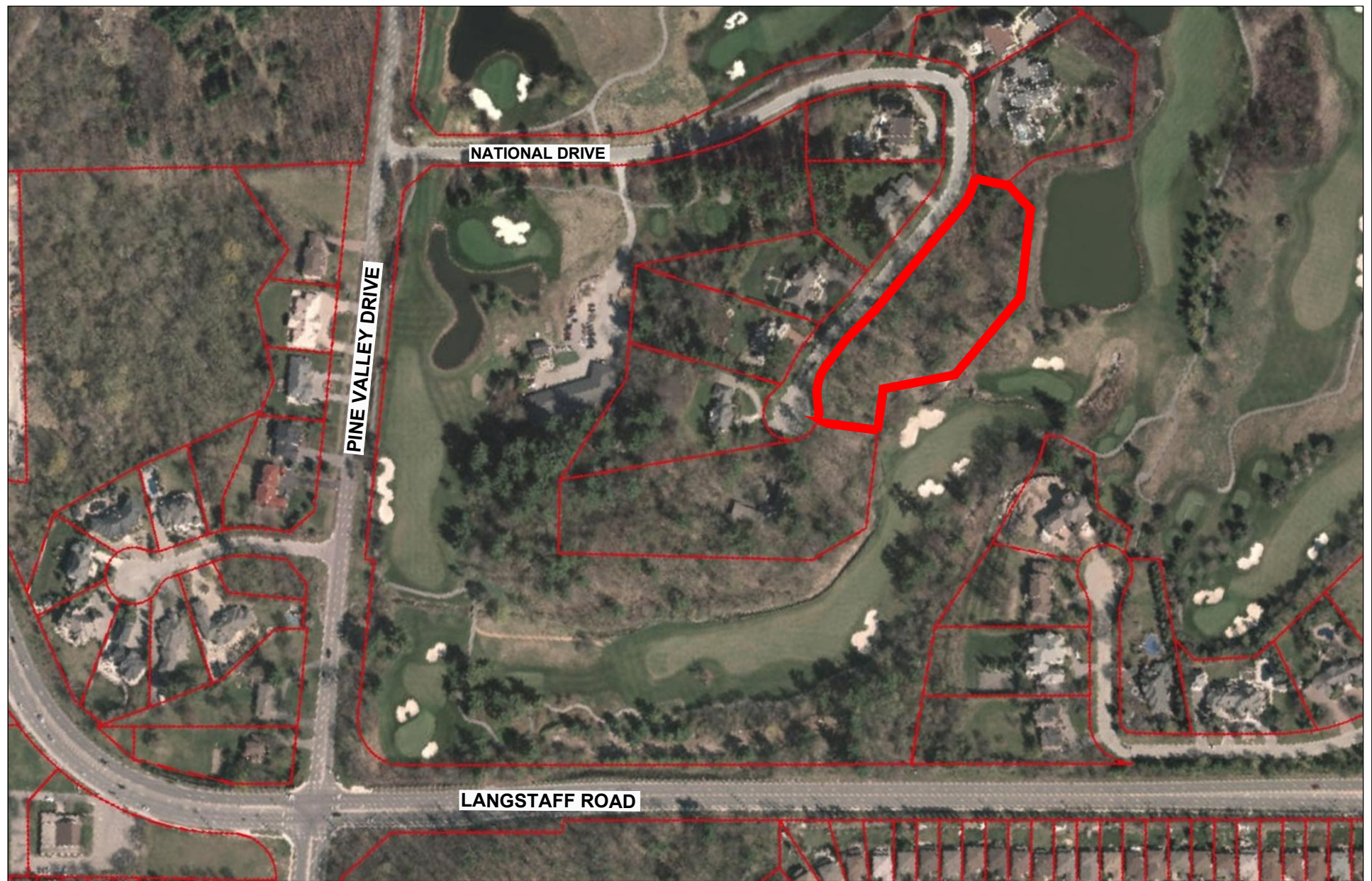
File No.: PN 2834_ Aerial_Images



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HISTORICAL AERIAL IMAGERY REVIEW
2012 AERIAL IMAGE
167 NATIONAL DRIVE
CITY of VAUGHAN
REGION of YORK

Source: York Maps, 2012

LEGEND

 **SUBJECT SITE**

P.N.: 21.2834

Date: August 9, 2021

Scale: N.T.S

Revised:

Drawn By: D.S.

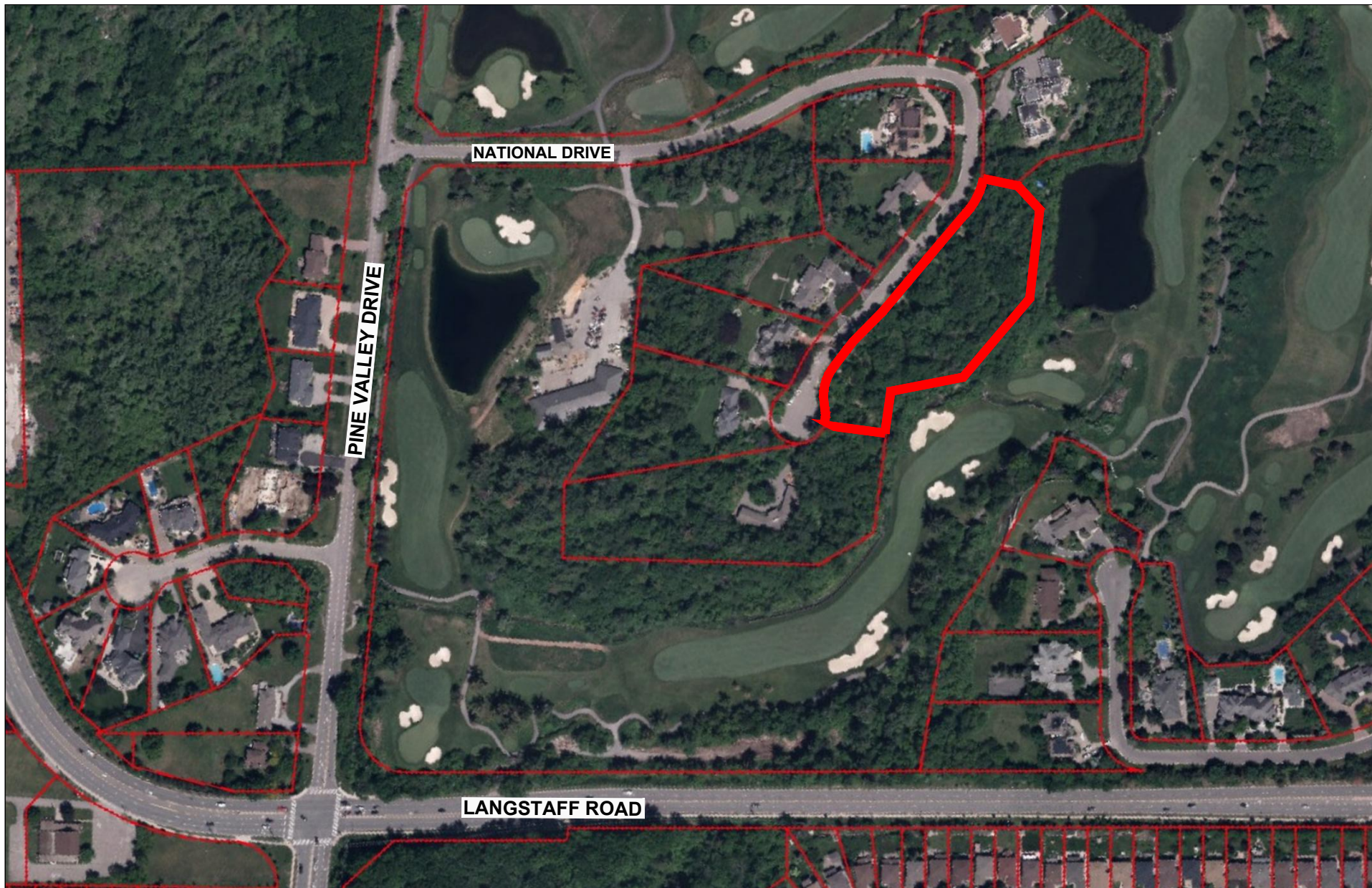
File No.: PN 2834_ Aerial_Images



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HISTORICAL AERIAL IMAGERY REVIEW
2017 AERIAL IMAGE
167 NATIONAL DRIVE
CITY of VAUGHAN
REGION of YORK

Source: York Maps, 2017

LEGEND

 **SUBJECT SITE**

P.N.: 21.2834

Date: August 9, 2021

Scale: N.T.S

Revised:

Drawn By: D.S.

File No.: PN 2834_ Aerial_Images



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HISTORICAL AERIAL IMAGERY REVIEW
2020 AERIAL IMAGE
167 NATIONAL DRIVE
CITY of VAUGHAN
REGION of YORK

Source: York Maps, 2020

LEGEND

 **SUBJECT SITE**

P.N.: 21.2834

Date: August 9, 2021

Scale: N.T.S

Revised:

Drawn By: D.S.

File No.: PN 2834_ Aerial_Images



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APPENDIX 3

OWNER'S CERTIFICATE

LOTS 1 TO 70 BOTH INCLUSIVE, BLOCKS B, C, D AND E AND THE STREETS NAMED NATIONAL DRIVE, COWAN DRIVE, BALDING BOULEVARD, HANSON COURT, SANDY'S DRIVE, KNUDSON LANE AND BUCK'S PLACE AND THE 17 RESERVES DESIGNATED AS BLOCKS A, F, G, H, I AND J AS DESIGNATED WITHIN THE AREA OF SURVEY OUTLINED HAVE BEEN LAID OUT IN ACCORDANCE WITH OUR INSTRUCTIONS AND THE STREETS ARE HEREBY DEDICATED AS PUBLIC HIGHWAYS

DATED AT TORONTO THIS 7th DAY OF JANUARY 1977

310218 ONTARIO LIMITED

PER GILBERT BLECHMAN President

PLAN OF SUBDIVISION OF PART OF LOTS 11, 12 AND 13 CONCESSION 6 TOWN OF VAUGHAN REGIONAL MUNICIPALITY OF YORK

SCALE 1 INCH = 200 FEET J.A. MIDDLETON O.L.S. - 1976

LT 2849 14T-75341

M-1800

APPROVED FOR REGISTRATION 23 Feb 1978

A.C. NADAPINE Asst. EXAMINER OF SURVEYS

PLAN M-1800 REGISTERED 11 APR 1978

AND ENTERED ON PARCEL PLAN 1

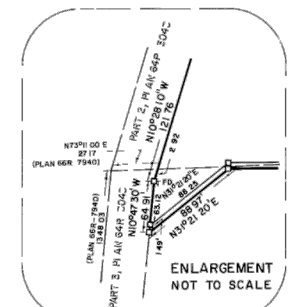
SECTION M-1800

D.P. REGISTRAR

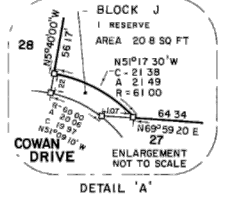
CERTIFICATES, CONSENTS AND DEDICATIONS ARE FILED UNDER M-1800 IN THE OFFICE OF LAND TITLES AT TORONTO

CURVE DATA

Table with columns: LOT No., RADIUS, ARC, CHORD, BEARING. Contains 70 rows of curve data for lots 1 through 70.



PLAN MATERIAL table listing items like Plastic Material, Gauge, Process, Ink and their corresponding specifications.



SURVEYOR'S CERTIFICATE

1. HEREBY CERTIFY THAT THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT AND THE LAND TITLES ACT AND THE REGULATIONS MADE THEREUNDER...

NOTE

BEARINGS HEREON ARE ASTROMONIC REFERRED TO THE WESTERLY LIMIT OF PART 2 PLAN 66R-7940 (N10°28'10"W)

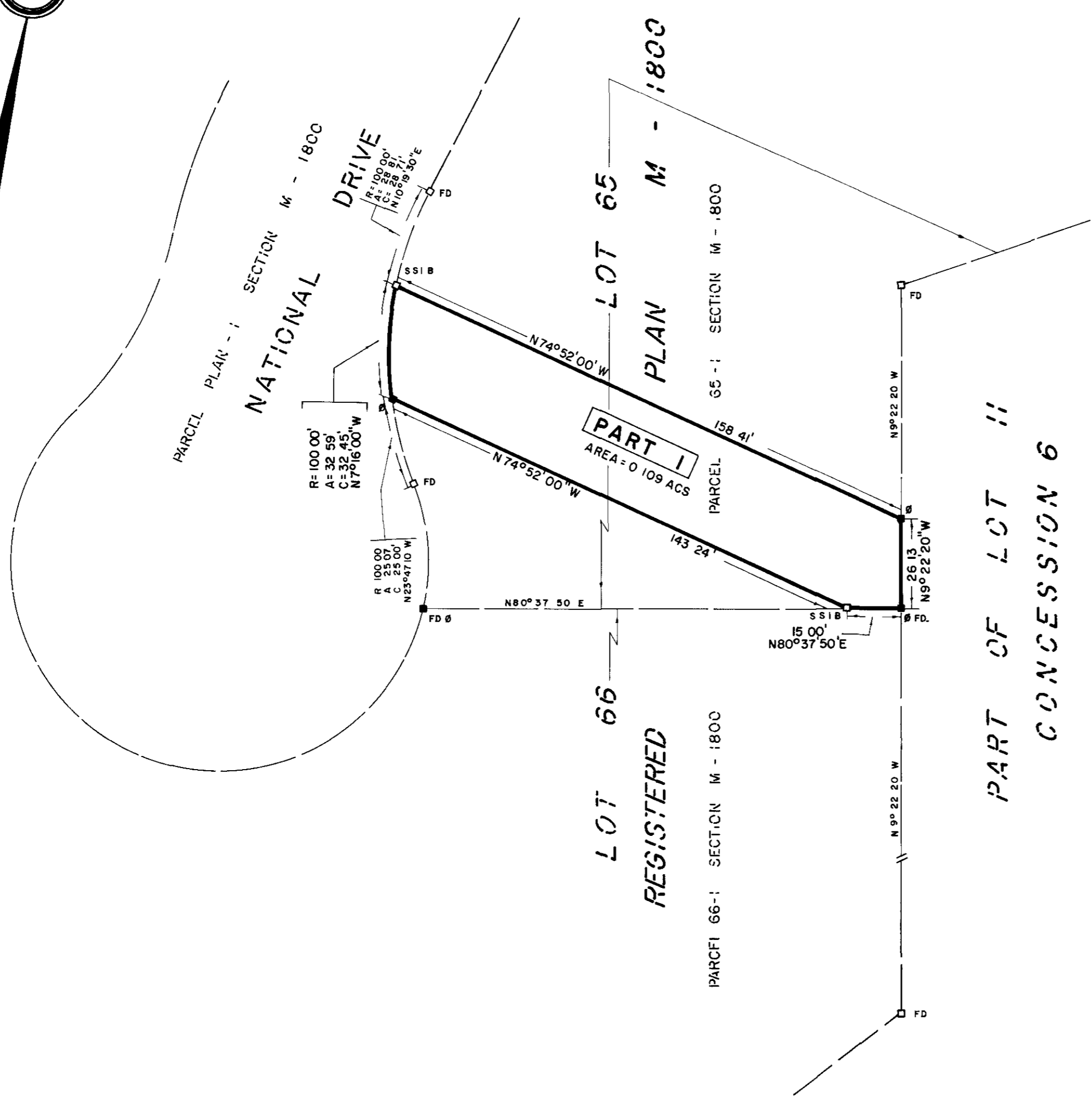
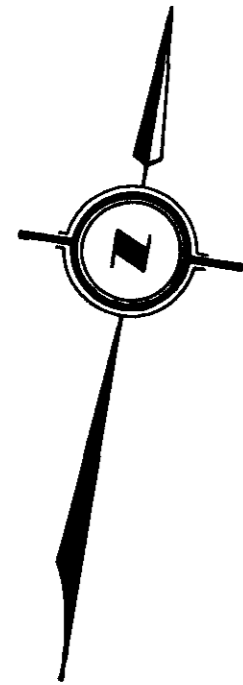
LEGEND

- I- DENOTES 1 SQ x 4 LONG STANDARD IRON BAR PLANTED
-I- DENOTES 1 SQ x 2 LONG SHORT STANDARD IRON BAR PLANTED
• DENOTES 5/8 DIA x 2 LONG ROUND IRON BAR PLANTED
NT DENOTES NOT TANGENTIAL
FD DENOTES SURVEY MONUMENT FOUND
W1 DENOTES WITNESS

J. D. BARNES LIMITED, Surveyors. Cadastral, Geodetic, Photogrammetric and Engineering Surveys TORONTO. Includes logo and contact information.

Approved under Section 33 of THE PLANNING ACT. This 22nd day of FEB. 1978. Includes signature of Claude F. Bennett, Minister of Housing.

M-1800 (vertical stamp)



I REQUIRE THIS PLAN TO BE DEPOSITED UNDER THE LAND TITLES ACT

PLAN 66R-10,152

RECEIVED AND DEPOSITED

DATE MAY 12, 1978

Ronald S Karpiel
RONALD S KARPIEL

DATE 19 May 1978

A-6891660
J. Waldh 950
J. WALDHOFF
FULL AND REGISTRAR FOR THE LAND TITLES DIVISION OF TORONTO AND YORK SOUTH (N^o 66)

PLAN 66R- 10,152

Approved MAY 17, 1978

J.A. Middleton
Asst. Examiner of Surveys

PART I - PART OF PARCEL 65-1 SECTION M-1800

PLAN OF SURVEY OF PART OF LOT 65 REGISTERED PLAN M-1800 TOWN OF VAUGHAN REGIONAL MUNICIPALITY OF YORK

SCALE 1 INCH = 30 FEET
J A MIDDLETON O L S 1978

NOTES

BEARINGS HEREON ARE ASTRONOMIC DERIVED FROM THE MOST SOUTHERLY LIMIT OF LOT 65 REGISTERED PLAN M 1800 (N80°37'50"E)

- ALL HANGING LINES SHOWN ON THIS PLAN HAVE BEEN VERIFIED
- DENOTES 1" SQ 4 LONG STANDARD IRON BAR PLANTED
 - S S I B DENOTES 1" SQ 2 LONG SHORT STANDARD IRON BAR PLANTED
 - Ø DENOTES 3/4" DIA 2 LONG IRON BAR PLANTED
 - FD DENOTES SURVEY MONUMENT FOUND
 - WIT DENOTES WITNESS

SURVEYOR'S CERTIFICATE

- I HEREBY CERTIFY
- 1 THAT THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT AND THE LAND TITLES ACT AND THE REGULATIONS MADE THERE UNDER
 - 2 THAT I WAS PRESENT AT AND DID PERSONALLY SUPERVISE THE SURVEY REPRESENTED BY THIS PLAN
 - 3 THAT THIS PLAN CONTAINS A TRUE COPY OF THE FIELD NOTES OF SURVEY
 - 4 THAT THE SURVEY WAS COMPLETED ON THE 29th DAY OF DECEMBER 1976

DATE MAY 11, 1978

J.A. Middleton
J A MIDDLETON
ONTARIO LAND SURVEYOR



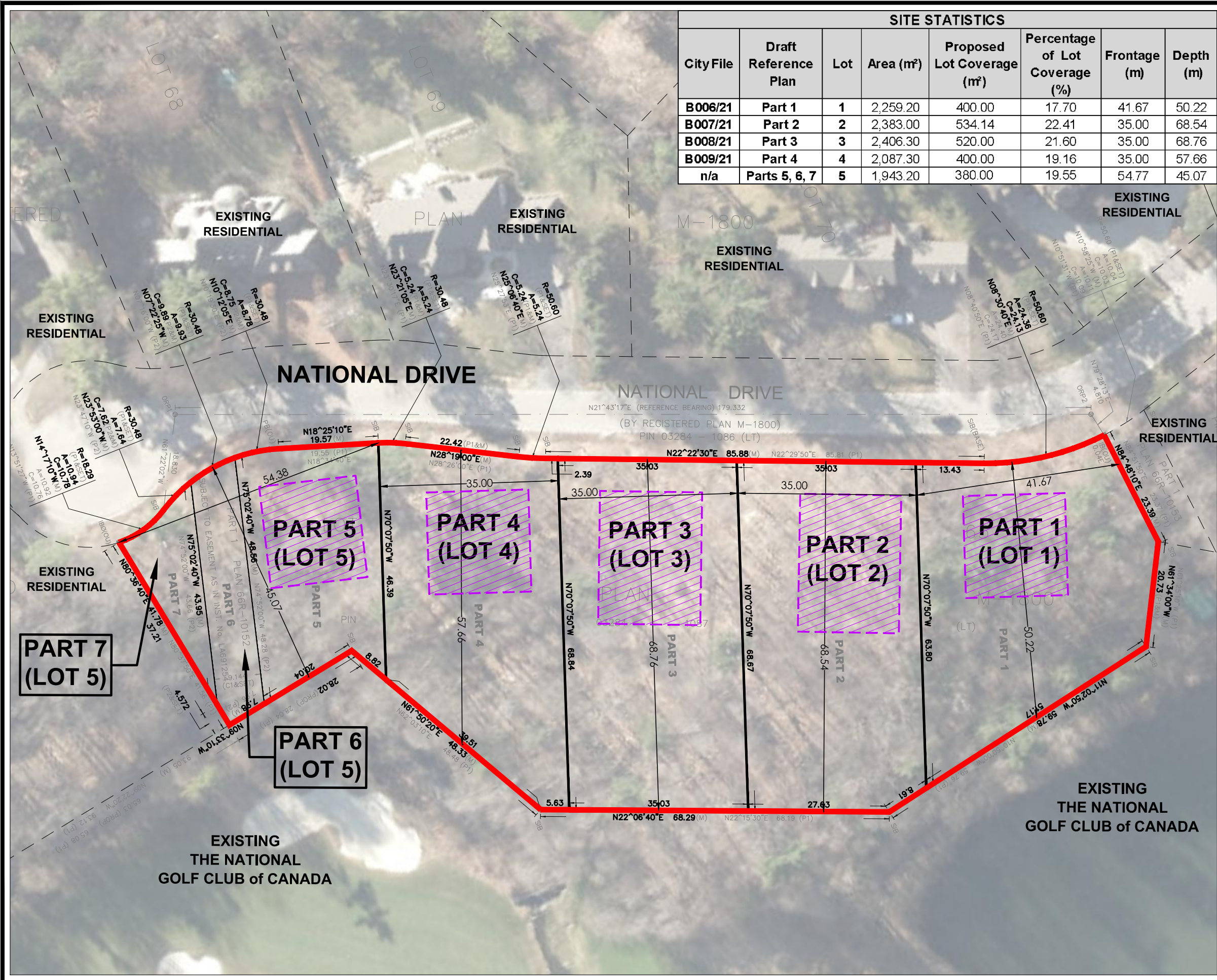
J D BARNES LIMITED, Surveyors

Cadastral, Geodetic, Photogrammetric and Engineering Surveys
TORONTO BRAMPTON OTTAWA

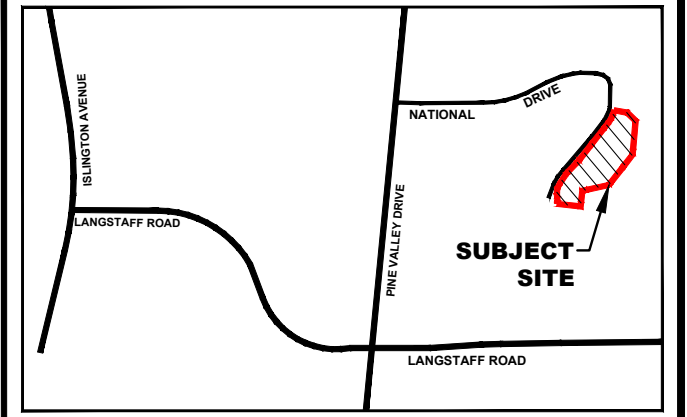
DRAWN BY R B CHECKED BY J A M SCALE 1" = 30 REFERENCE NO 76-60-21-566-10-5



APPENDIX 4



SITE STATISTICS							
City File	Draft Reference Plan	Lot	Area (m ²)	Proposed Lot Coverage (m ²)	Percentage of Lot Coverage (%)	Frontage (m)	Depth (m)
B006/21	Part 1	1	2,259.20	400.00	17.70	41.67	50.22
B007/21	Part 2	2	2,383.00	534.14	22.41	35.00	68.54
B008/21	Part 3	3	2,406.30	520.00	21.60	35.00	68.76
B009/21	Part 4	4	2,087.30	400.00	19.16	35.00	57.66
n/a	Parts 5, 6, 7	5	1,943.20	380.00	19.55	54.77	45.07



KEYMAP SUBJECT SITE N.T.S.

- LEGEND**
- SUBJECT SITE
 - PROPOSED LOT LINES
 - PROPOSED LOT COVERAGE (subject to change)

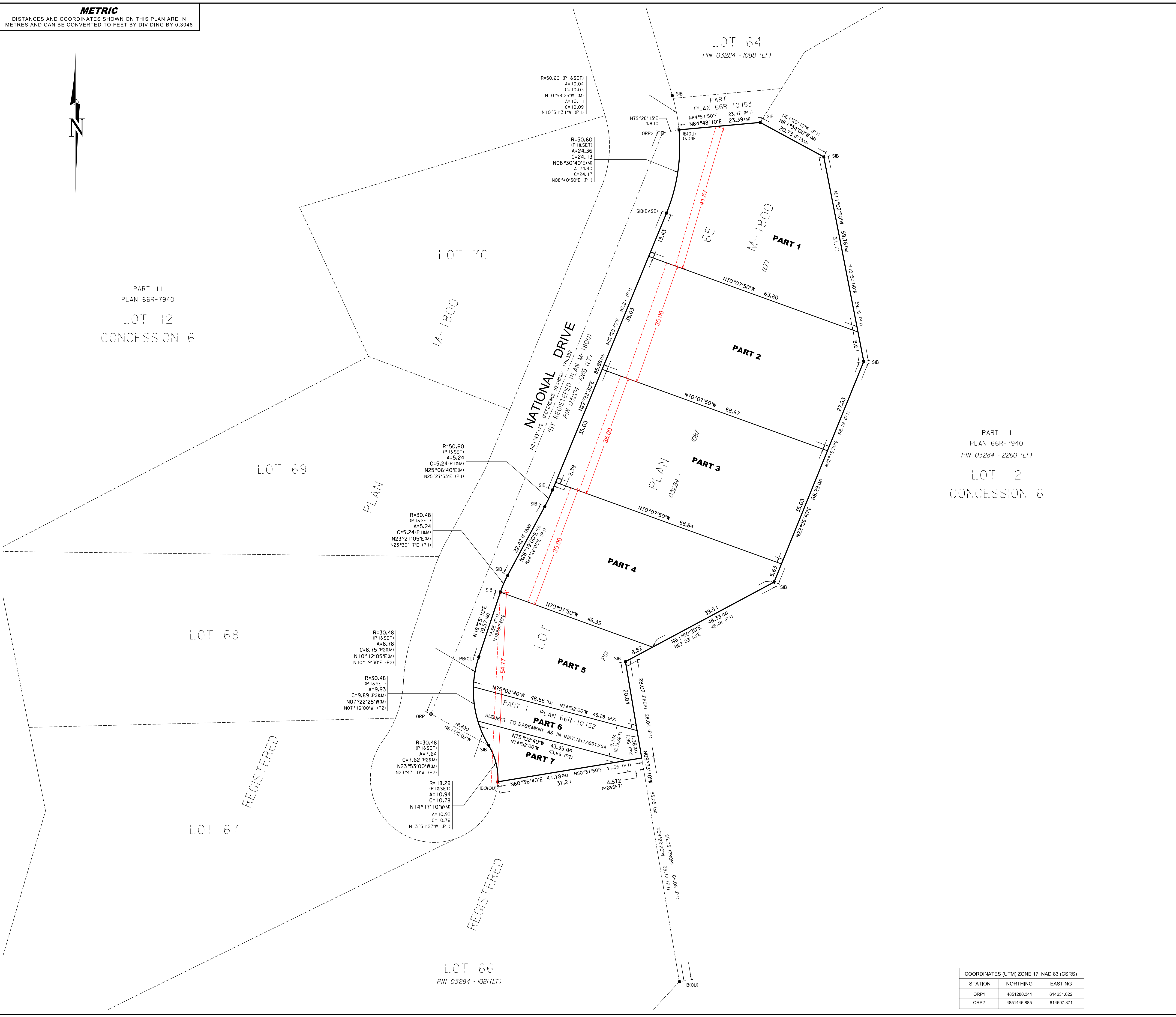
Note: Base Plan and Lot Frontages is based on draft reference plan prepared by nanfara & ng surveyors inc.

MASTER SEVERANCE CONCEPT PLAN with AERIAL IMAGE UNDERLAY
 167 NATIONAL DRIVE
 LOT 65, REGISTERED PLAN M-1800
 CITY of VAUGHAN , REGION of YORK

P.N.: 21.2834	Date: October 4, 2021
Scale: 1:750	Revised:
Drawn By: D.S.	File No.: PN 2834_ Aerial_Images

	BRAMPTON 21 Queen Street East Suite 500 Brampton, ON L6W 3P1 P (905) 796 - 5790	GWD Cogoon Walker Domes PROFESSIONAL PLANNERS Toll Free 1 (855) 771-7266 www.gwdplanners.com	MARKHAM 3601 Highway 7 East Suite 310 Markham, ON L3R 0M3 P (905) 477 - 6556
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METRIC
DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

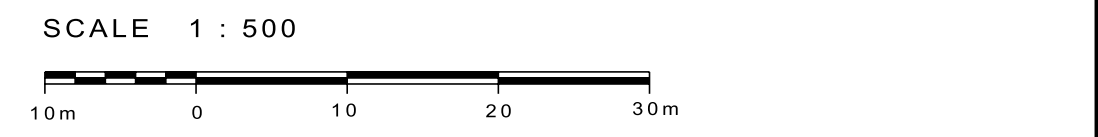


PLAN 65R-
RECEIVED AND DEPOSITED
DATE: _____
DATE: JULY 9, 2021
J. NANFARA
ONTARIO LAND SURVEYOR
REPRESENTATIVE FOR THE LAND REGISTRAR FOR THE LAND TITLES DIVISION OF YORK No. 65

PART SCHEDULE				
PART	LOT	PLAN	PIN No.	AREA ±
1				2259.2
2				2383.0
3				2406.3
4	ALL OF LOT 65	M-1800	ALL OF PIN 03284-1087 (LT)	2087.3
5				1173.5
6				444.1
7				325.6

PART 6: SUBJECT TO EASEMENT AS IN INST. No. LA691254

PLAN OF SURVEY OF
LOT 65
REGISTERED PLAN M-1800
CITY OF VAUGHAN
REGIONAL MUNICIPALITY OF YORK



NOTES
BEARINGS ARE UTM GRID, ZONE 17, NAD83(CSRS)(2010) AND ARE DERIVED FROM THE OBSERVED REFERENCE POINTS ORP1 AND ORP2 AS DETERMINED BY LEICA NETWORK GPS STATIC OBSERVATIONS.

DISTANCES SHOWN ON THIS PLAN ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9997018.

OBSERVED REFERENCE POINTS SHOWN HAVE BEEN TIED TO THIS SURVEY TO THE URBAN ACCURACY PER SEC. 14(2) OF ONTARIO REGULATION 216/10.

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

ALL FOUND BARS SHOWN HEREON ARE (JDB) UNLESS SHOWN OTHERWISE.

LEGEND

P1	-----	REGISTERED PLAN M-1800
P2	-----	PLAN 66R-10152
C1	-----	CALCULATED FROM 66R-10152
PROP	-----	PROPORTIONED
M	-----	MEASURED
JDB	-----	J.D. BARNES LIMITED
OU	-----	ORIGIN UNKNOWN
PB	-----	PLASTIC BAR
ORP	-----	OBSERVED REFERENCE POINT
■	-----	FOUND SURVEY MONUMENT

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:
1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON THE XXth DAY OF JULY, 2021.

DATE: JULY 9, 2021
J. NANFARA
ONTARIO LAND SURVEYOR

PART 11
PLAN 66R-7940
PIN 03284 - 2260 (LT)
LOT 12
CONCESSION 6

PART 11
PLAN 66R-7940
LOT 12
CONCESSION 6

COORDINATES (UTM) ZONE 17, NAD 83 (CSRS)		
STATION	NORTHING	EASTING
ORP1	4851280.341	614631.022
ORP2	4851446.885	614697.371

nanfara & ng surveyors inc
PROFESSIONAL LAND SURVEYORS
#1 ASHBURIDGE CIRCLE, UNIT 9 WOODBRIDGE, ONTARIO, L4L 3R5
TEL: 905.856.5923 FAX: 905.856.7092 nnsurveyors@gmail.com

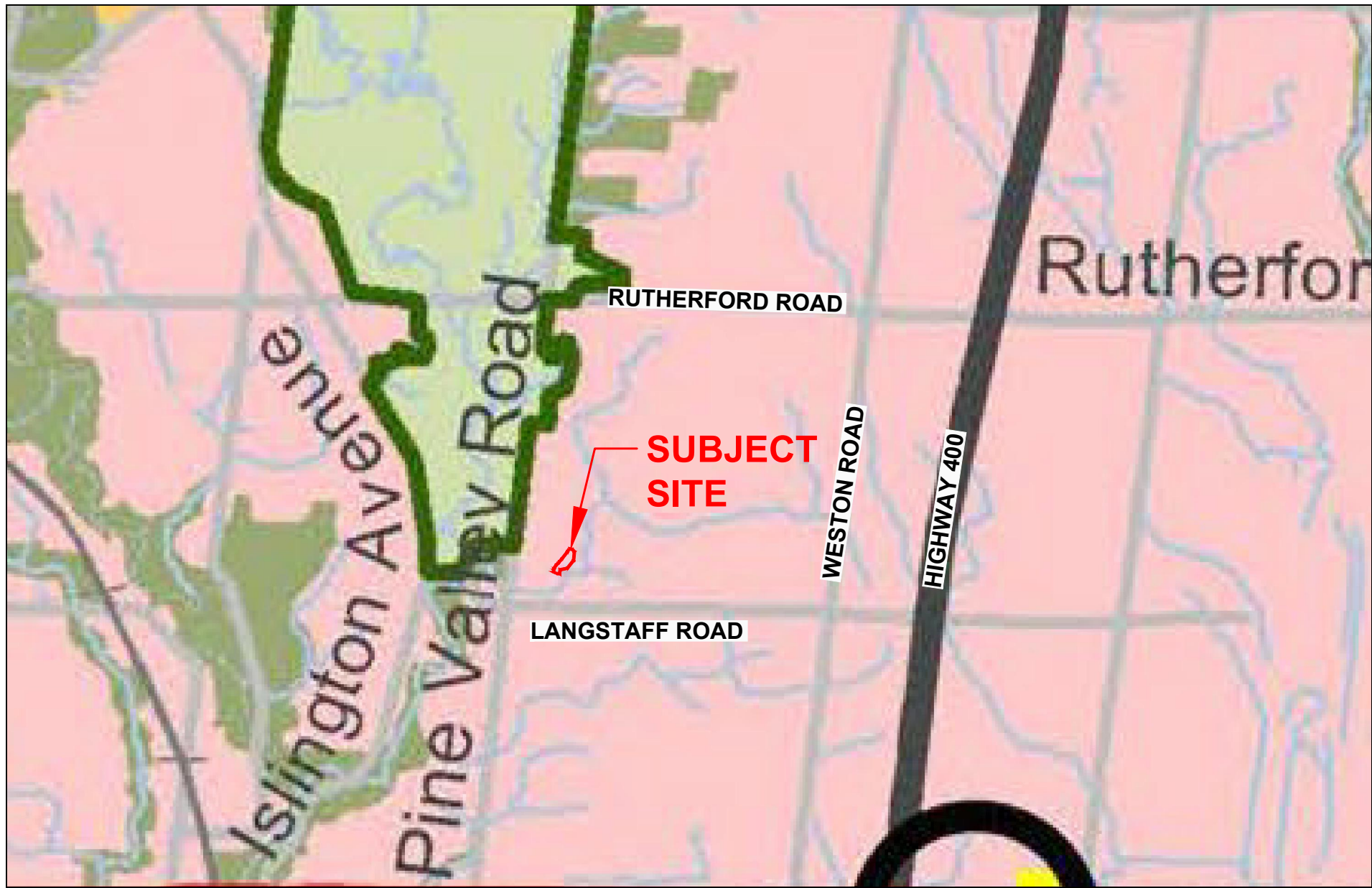
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



APPENDIX 5



APPENDIX 6



**EXTRACT from MAP 1
REGIONAL STRUCTURE
REGION of YORK OFFICIAL PLAN**

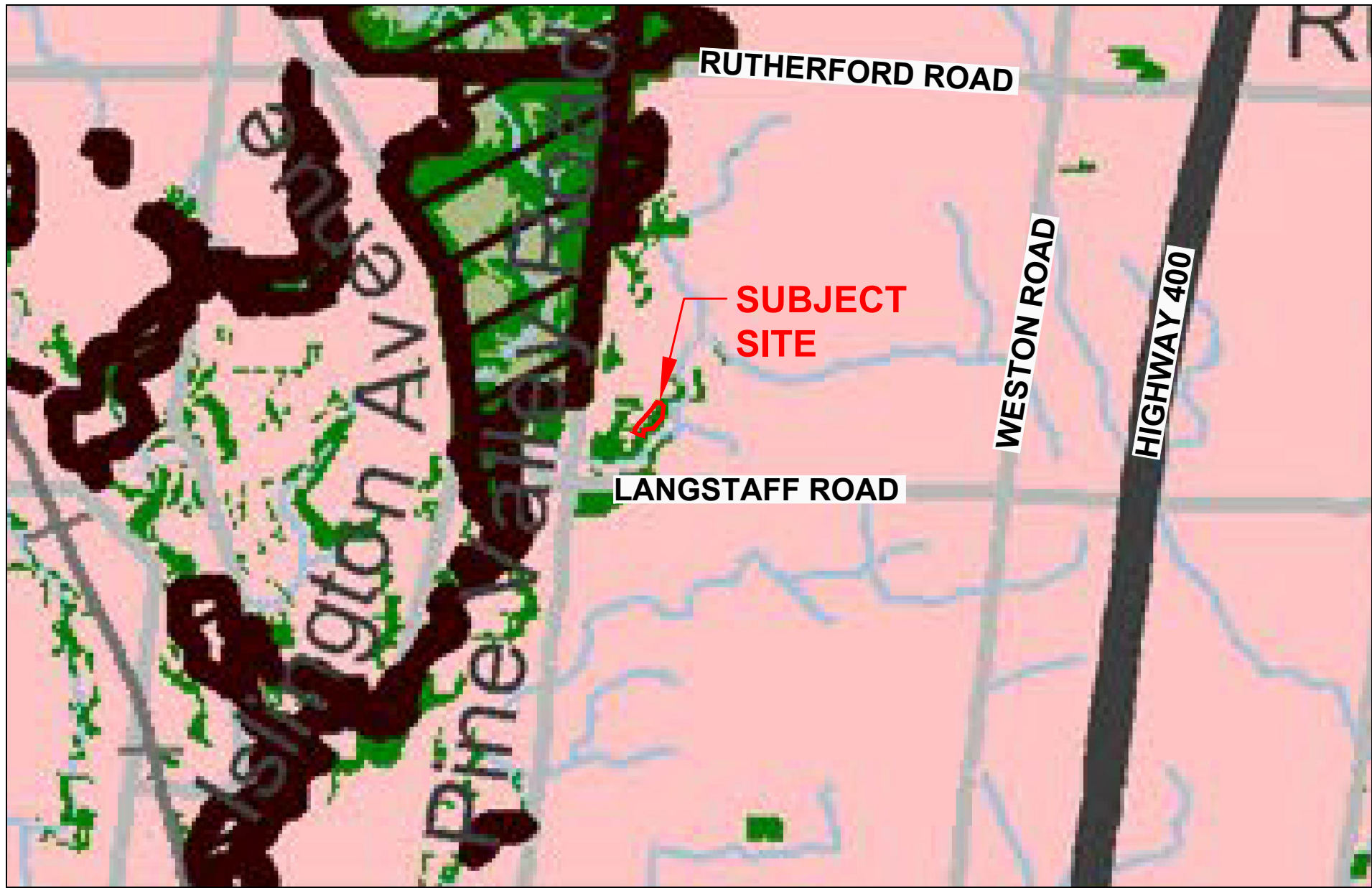
LEGEND	
 SUBJECT SITE	 PROVINCIAL HIGHWAY EXISTING
 URBAN AREA	 GREENBELT PLAN BOUNDARY
 REGIONAL GREENLANDS SYSTEM (Schematic, See Map 2 for Details)	 PROTECTED COUNTRYSIDE/HAMELT

P.N.: 21.2834 Date: July 19, 2021








Scale: N.T.S. Revised:

Drawn By: D.S. File No.: PN 2834_Figures

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**EXTRACT from MAP 5
WOODLANDS
REGION of YORK OFFICIAL PLAN**

LEGEND	
	SUBJECT SITE
	URBAN AREAS
	WOODLANDS
	CONSERVATION AREA / REGIONAL FOREST
	GREENBELT PLAN BOUNDARY
	GREENBELT PLAN NATURAL HERITAGE SYSTEM
	CONTROLLED ACCESS HIGHWAYS

P.N.: 21.2834 Date: July 19, 2021

Scale: N.T.S. Revised:

Drawn By: D.S. File No.: PN 2834_Figures

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APPENDIX 7

CONCESSION 8

CONCESSION 7

CONCESSION 6

THIS IS SCHEDULE "A"
TO AMENDMENT NO. 240
ADOPTED THE 22 DAY OF JUN

L.D. JACKSON
MAYOR
R.M. PRENTICE
DEPUTY CLERK

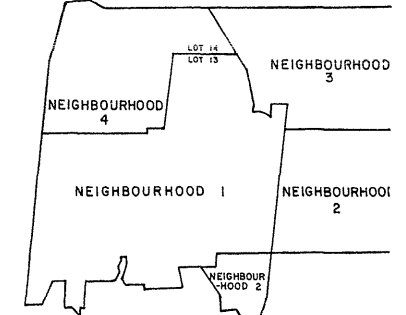
LEGEND

- [Symbol] LOW DENSITY RESIDENTIAL
- [Symbol] MEDIUM DENSITY RESIDENTIAL
- [Symbol] HIGH DENSITY RESIDENTIAL
- [Symbol] COMMUNITY COMMERCIAL
- [Symbol] LOCAL CONVENIENCE COMMERCIAL
- [Symbol] GENERAL COMMERCIAL
- [Symbol] SERVICE STATION
- [Symbol] SERVICE COMMERCIAL
- [Symbol] INDUSTRIAL
- [Symbol] UTILITY
- [Symbol] OPEN SPACE
- [Symbol] DRAINAGE TRIBUTARY
- [Symbol] CHURCH
- [Symbol] SPECIAL USE
- [Symbol] CONSERVATION AUTHORITY FLOODLIN
- [Symbol] ELEMENTARY SCHOOL
- [Symbol] SECONDARY SCHOOL
- [Symbol] BOUNDARY OF WOODBRIDGE CORE - SEE SCHEDULE "B"
- [Symbol] BOUNDARY OF WOODBRIDGE COMMUNITY
- [Symbol] PARKWAY BELT BOUNDARY

SCALE: 0 500 1000 m

WOODBRIDGE COMMUNITY

NEIGHBOURHOOD KEY



SUBJECT SITE

ADJOURNED BY OMB
PUBLIC USE CAMPUS
SINE DIE, DATED 198

ADJOURNED BY OMB
SINE DIE, DATED 198
OMB APPROVED SEPT 7/90

DEFERRED BY MINISTER

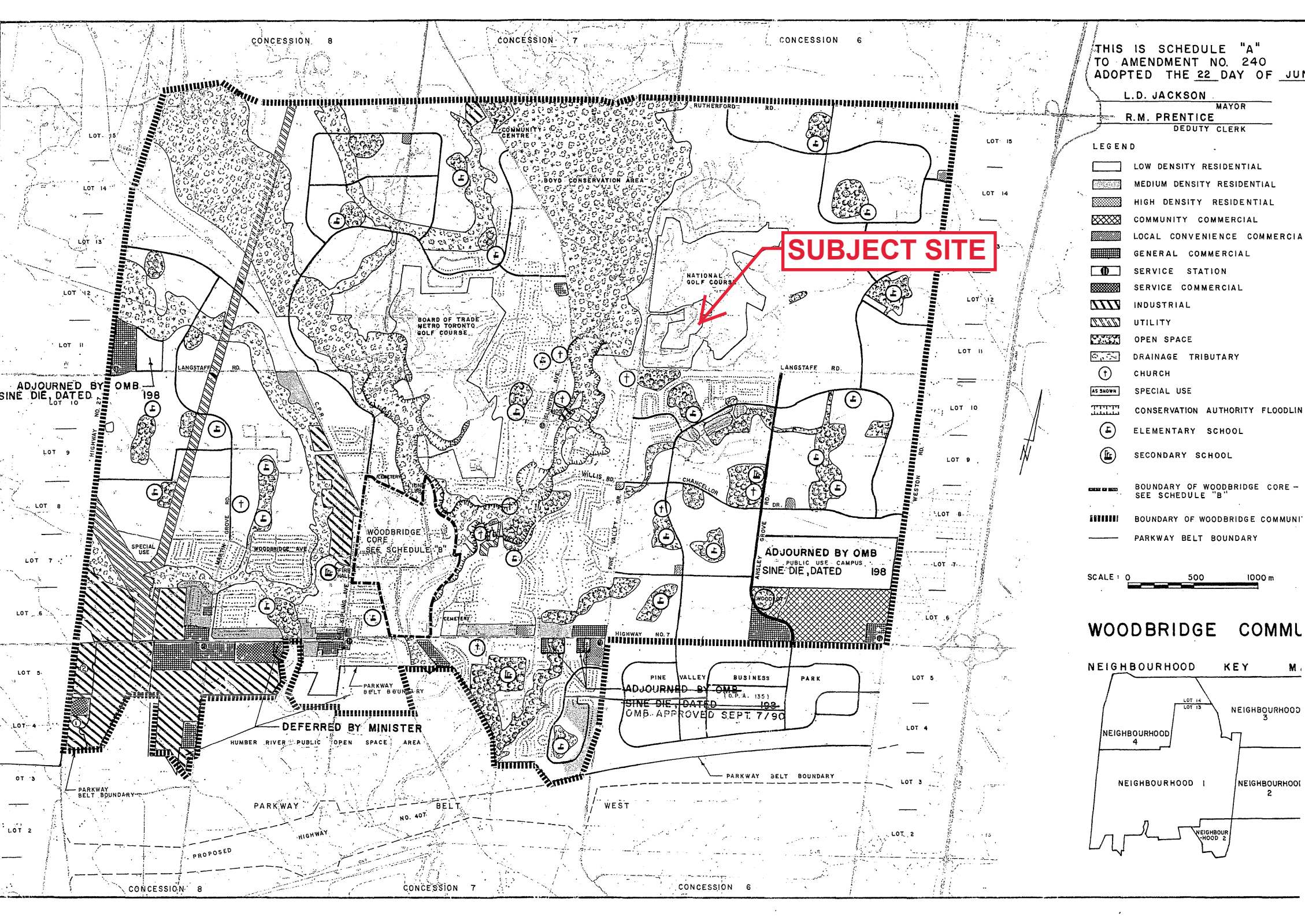
ADJOURNED BY OMB
SINE DIE, DATED 198

ADJOURNED BY OMB
SINE DIE, DATED 198

ADJOURNED BY OMB
SINE DIE, DATED 198

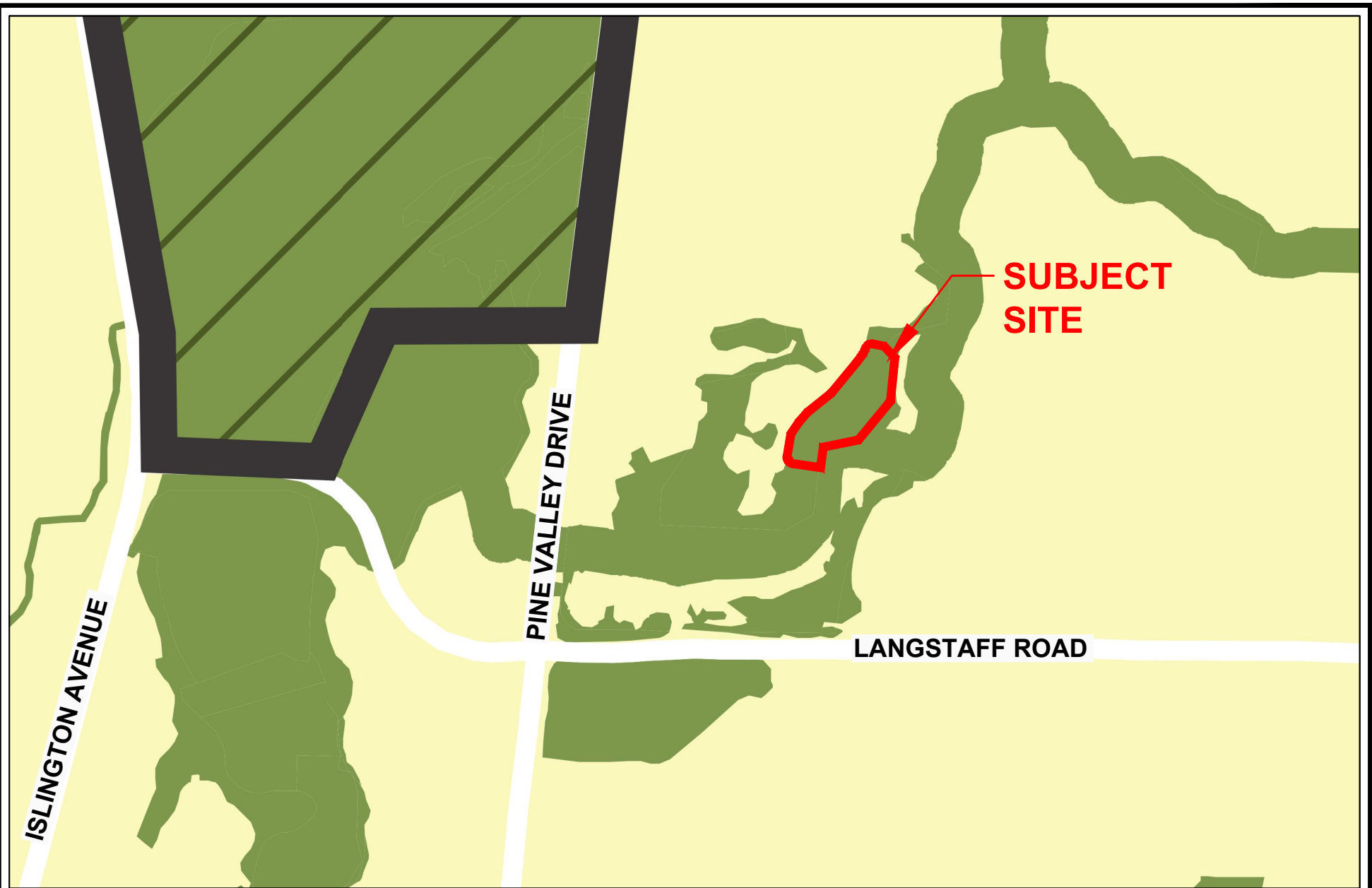
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SINE DIE, DATED 198

ADJOURNED BY OMB
SINE DIE, DATED 198





APPENDIX 8



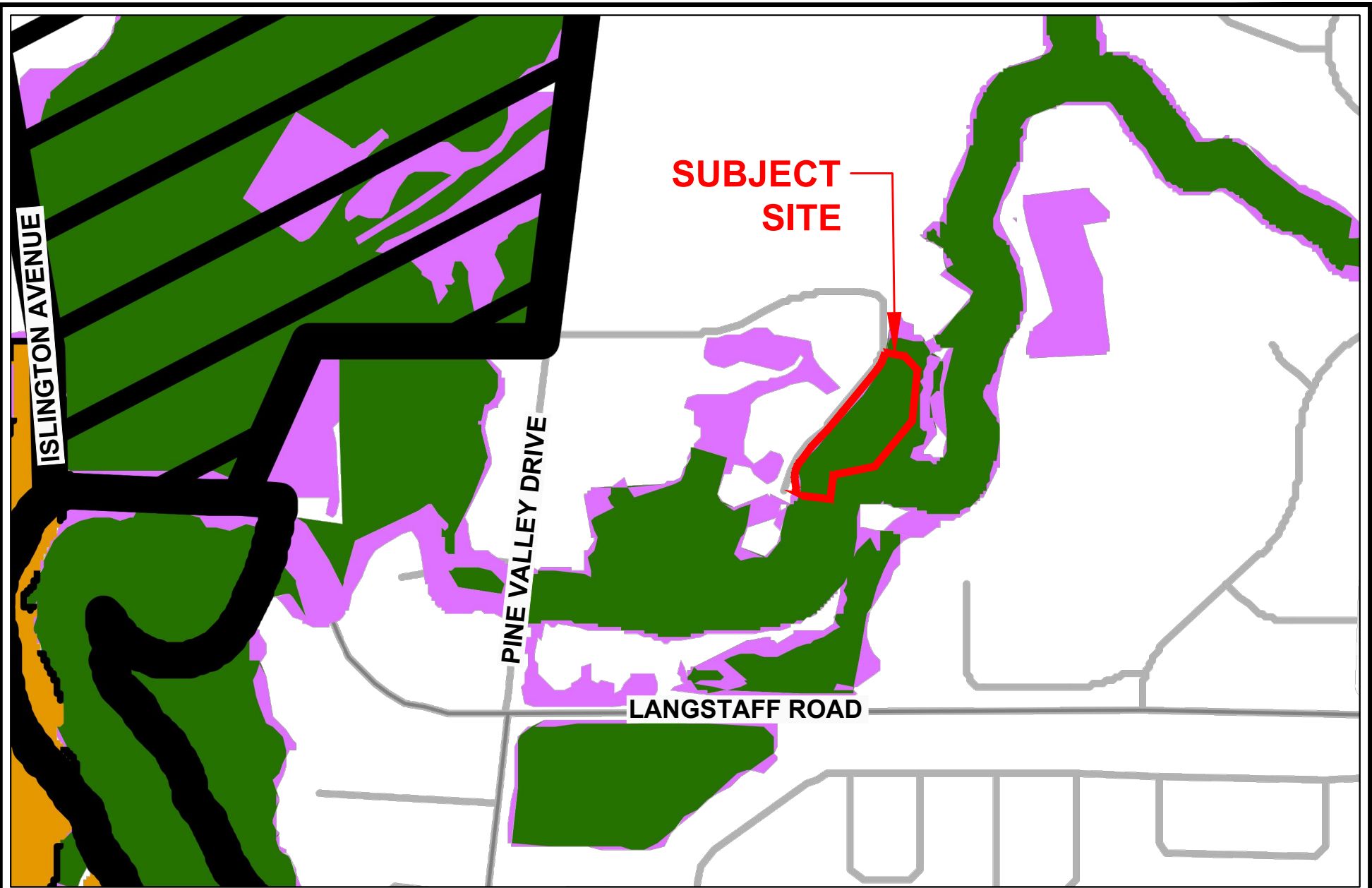
**EXTRACT from SCHEDULE 1
URBAN STRUCTURE
CITY of VAUGHAN OFFICIAL PLAN**

LEGEND

- SUBJECT SITE
- RESIDENTIAL
- NATURAL AREAS and COUNTRYSIDE
- GREENBELT PLAN AREA

P.N.: 21.2834	Date: July 19, 2021
Scale: N.T.S	Revised:
Drawn By: D.S.	File No.: PN 2834_Figures

			
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**EXTRACT from SCHEDULE 2
NATURAL HERITAGE NETWORK
CITY of VAUGHAN OFFICIAL PLAN**

LEGEND

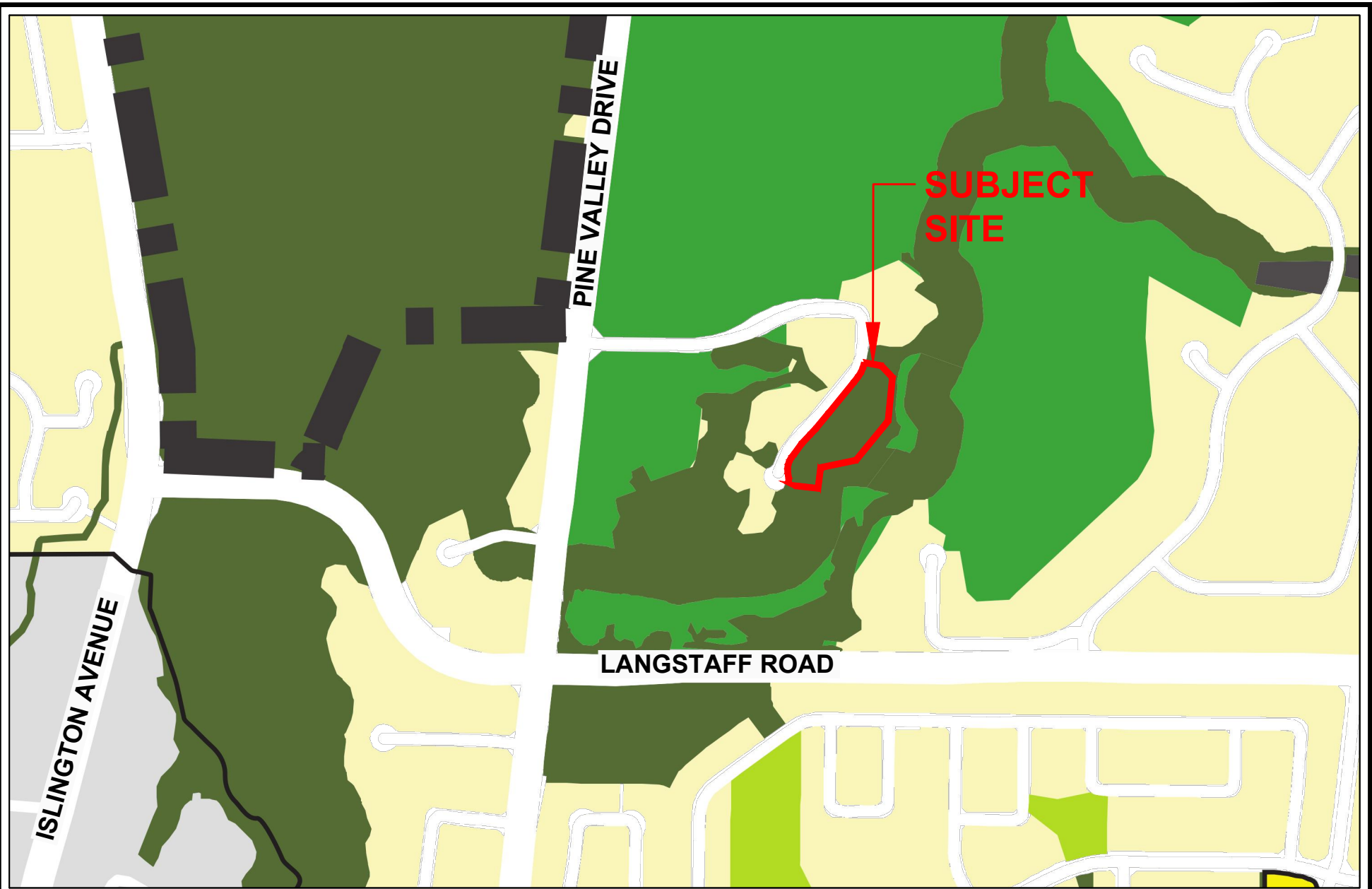
- | | |
|--|--|
|  SUBJECT SITE |  GREENBELT PLAN AREA |
|  CORE FEATURES |  GREENBELT NATURAL HERITAGE SYSTEM |
|  BUILT-UP VALLEY LANDS¹ | Footnotes: |
|  UNAPPROVED³ | 1) Data provided by Urban Strategies. |
| | 2) Sites under consideration for Core Feature additions, Core Feature deletions, or classification as an Enhancement Area. |
| | 3) Sites under consideration for Core Feature additions, Core Feature deletions, or classification as an Enhancement Area. |

P.N.: 21.2834 Date: July 19, 2021

Scale: N.T.S. Revised:

Drawn By: D.S. File No.: PN 2834_Figures

			
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**EXTRACT from SCHEDULE 13
LAND USE
CITY of VAUGHAN OFFICIAL PLAN**

LEGEND

- SUBJECT SITE**
- NATURAL AREAS**
- PRIVATE OPEN SPACE**
- LOW-RISE RESIDENTIAL**
- GREENBELT PLAN AREA & OAK RIDGES MORAINÉ CONSERVATION PLAN AREA**
- PARKS**
- LANDS SUBJECT TO SECONDARY PLANS (SEE SCHEDULES 14A)**

P.N.: 21.2834 Date: July 19, 2021

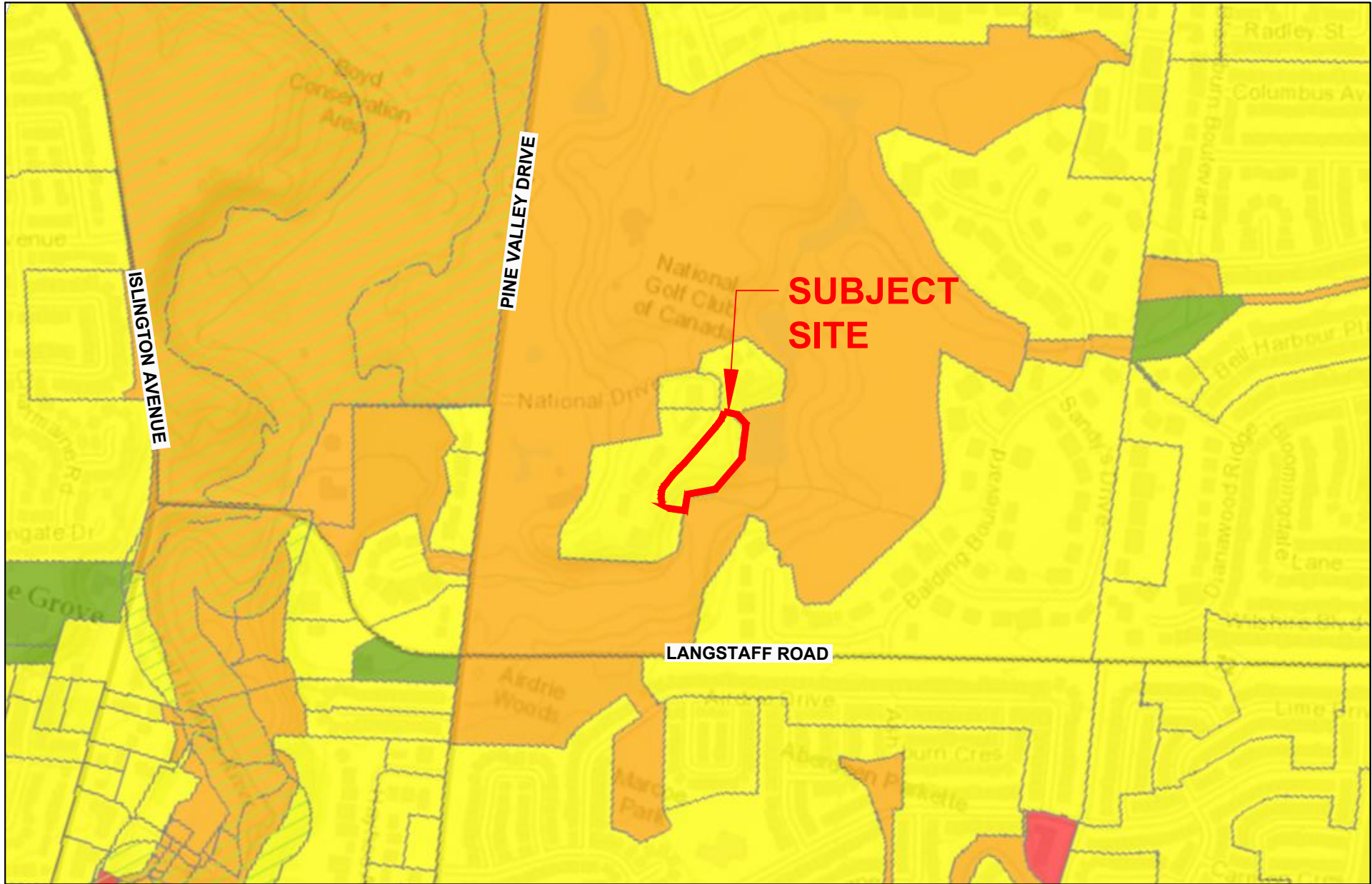
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Drawn By: D.S. File No.: PN 2834_Figures

	<p>BRAMPTON 21 Queen Street East Suite 500 Brampton, ON L6W 3P1 P. (905) 796 - 5790</p>		<p>GWD Geospatial Walker Davies FEDERAL/LOCAL PLANNERS Toll Free 1 (855) 771-7266 www.gwdplanners.com</p>		<p>MARKHAM 3601 Highway 7 East Suite 310 Markham, ON L3R 0M3 P. (905) 477 - 6556</p>
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APPENDIX 9



ZONING MAP EXTRACT
CITY of VAUGHAN ZONING BY-LAW 1-88

LEGEND

- SUBJECT SITE
- RESIDENTIAL
- OPEN SPACE
- AGRICULTURAL
- COMMERCIAL
- GREENBELT AREA

P.N.: 21.2834	Date: July 16, 2021
Scale: N.T.S	Revised:
Drawn By: D.S.	File No.: PN 2834_ Aerial_Images

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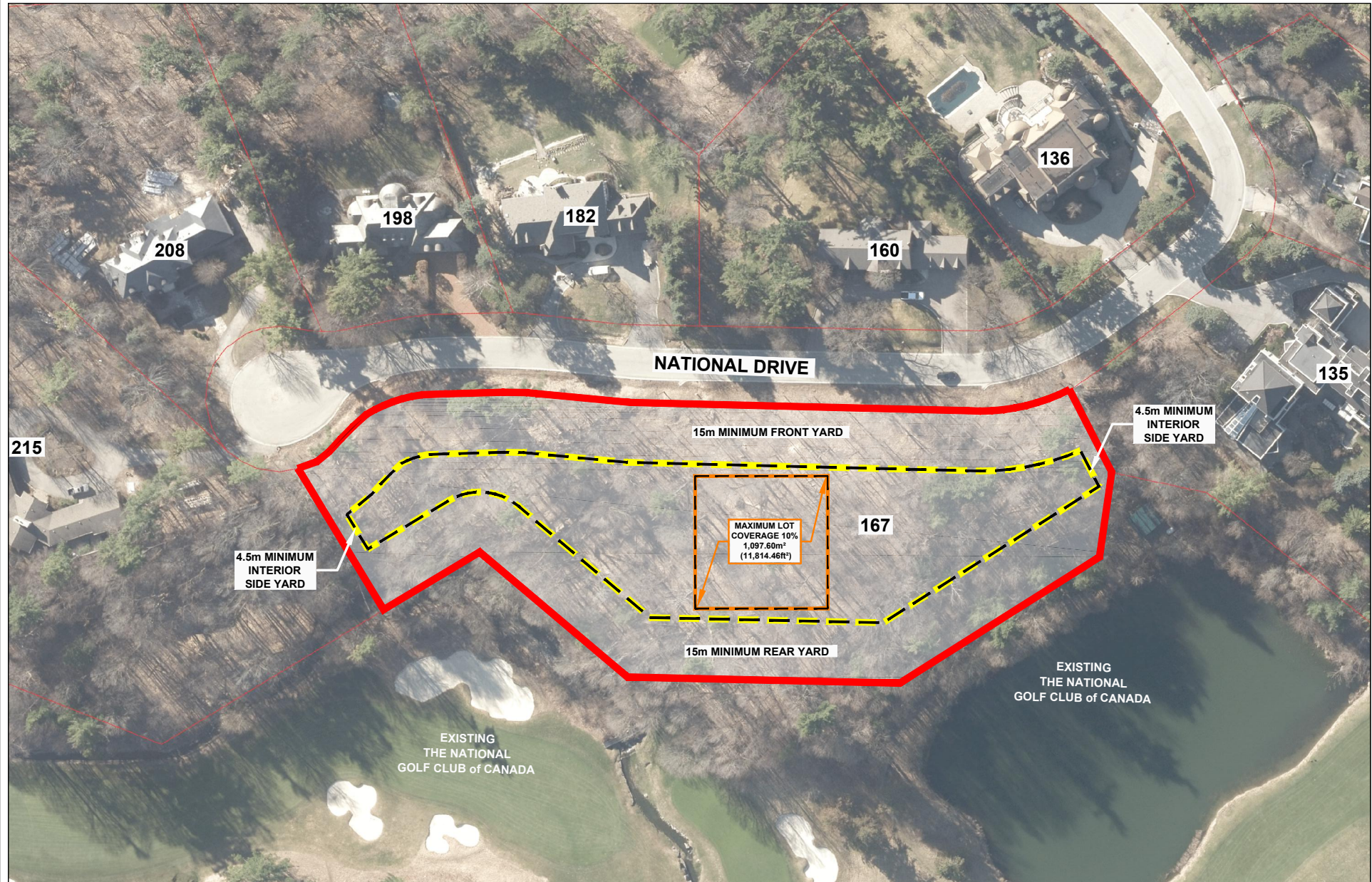
ZONE REQUIREMENT TABLE

SCHEDULE 'A' TO BY-LAW 1-88

ZONE	PERMITTED USE CATEGORY	MINIMUM LOT FRONTAGE (m)	LOT AREA (minimums unless otherwise noted) (m ² unless otherwise noted)	MINIMUM YARD				MAXIMUM LOT COVERAGE (%)	MINIMUM LOT DEPTH (m)	MAXIMUM BUILDING HEIGHT (m)	MAXIMUM GROSS FLOOR AREA (m ²)	MINIMUM SETBACK FROM AN 'R' ZONE TO ANY BUILDING STRUCTURE OR OPEN STORAGE USE (m)
				FRONT (m)	REAR (m)	INTERIOR SIDE (m)	EXTERIOR SIDE (m)					
RR	SINGLE FAMILY DETACHED DWELLING	45	4000	15	15	4.5	9	10	—	9.5	—	—
R1V	SINGLE FAMILY DETACHED DWELLING	30	845	9.0 ^{11,6}	7.5	1.5 ⁶	9 ¹	20 ¹⁶	—	9.5 ¹⁶	—	—
R1	SINGLE FAMILY DETACHED DWELLING	18	540 ¹²	7.5	7.5	1.5 ⁶	4.5 ²	35 ¹²	—	9.5	—	—
R2	SINGLE FAMILY DETACHED DWELLING	15	450	4.5 ^{2,6}	7.5	1.2 ⁶	4.5 ²	40	—	9.5	—	—
R3	SINGLE FAMILY DETACHED DWELLING	12	360	4.5 ^{2,6}	7.5	1.2 ⁶	4.5 ²	40	—	9.5	—	—
R4	SINGLE FAMILY DETACHED DWELLING SEMI DETACHED DWELLING	9/ unit	270/ unit	4.5 ^{2,6}	7.5	1.2 ^{3,4,6}	4.5 ²	45	—	9.5	—	—
R5	SINGLE FAMILY DETACHED DWELLING SEMI DETACHED DWELLING	7.5/ unit	225/ unit	4.5 ^{2,6}	7.5	1.2 ^{3,4,6}	4.5 ²	50	—	11	—	—
RM1	STREET TOWNHOUSE DWELLING	6/ unit	180/ unit	4.5 ²	7.5	1.5 ^{FOR ENCL. UNITS}	4.5 ²	50	—	11	—	—
RM2	BLOCK TOWNHOUSE DWELLING, APARTMENT DWELLING, MULTIPLE FAMILY DWELLING	30	230/ unit	4.5 ²	4.5	1.5	4.5 ²	50	—	11	—	—
RA1	APARTMENT DWELLING	30	170/ unit	4.5	7.5	4.5 ⁵	7.5	—	—	16.5	—	—
RA2	APARTMENT DWELLING	30	80/ unit	7.5	7.5	4.5 ⁵	7.5	—	—	44	—	—
RA3	APARTMENT DWELLING	30	67/ unit	7.5	7.5	4.5 ⁵	7.5	—	—	44	—	—
C1	RESTRICTED COMMERCIAL	—	—	9	15	—	9	50	60	11	—	9
C2	GENERAL COMMERCIAL	—	—	15	15	6	9	30	60	11	—	13.5 ¹⁰
C3	LOCAL COMMERCIAL	—	8100 ^{max.}	11	9	9	11	33	60	11	1860	9
C4	NEIGHBOURHOOD COMMERCIAL	—	25000 ^{max.}	11	15	11	11	33	60	11	7000	22.5
C5	COMMUNITY COMMERCIAL	—	25000 ^{max.}	11	15	11	11	33	60	11 ⁷	—	22.5
C6	HIGHWAY COMMERCIAL	60	—	15	15	10	15	30	60	11 ⁷	—	13.5 ¹⁰
C7	SERVICE COMMERCIAL	65	8000	9	22	6	9	—	—	11 ⁷	—	20
C8	OFFICE COMMERCIAL	65	8000	9	22	6	9	—	—	11 ⁷	—	20
EM1	PREST.EMPLOYMENT AREA ABUTTING MAJOR ROADS ⁸	65	8000	6 ¹⁴	12	6 ¹⁵	6 ¹⁴	60	—	15 ¹³	—	20
EM1	PREST.EMPLOYMENT AREA	36	3000	6 ¹⁴	12	6 ¹⁵	6 ¹⁴	60	—	15 ¹³	—	20
EM2	GENERAL EMPLOYMENT AREA	34	3000	6 ¹⁴	12	6 ¹⁵	6 ¹⁴	—	—	15 ¹³	—	20
EM2-A	RESTRICTED EMPLOYMENT AREA	65	8000	6 ¹⁴	12	6 ¹⁵	6 ¹⁴	—	—	15 ¹³	—	20
EM3	RETAIL WAREHOUSE EMPLOYMENT AREA	34	3000	6 ¹⁴	12	6 ¹⁵	6 ¹⁴	60	—	15 ¹³	—	20
EM4	EMPLOYMENT AREA TRANSPORTATION ZONE	—	—	15	12	9 ¹⁵	15	60	60	15	—	150
M1	RESTRICTED INDUSTRIAL	35	3000	9	15	6	9	—	—	11 ⁷	—	60
M1	RESTRICTED INDUSTRIAL ABUTTING MAJOR ROADS ⁸	65	8000	9	22	6	9	—	—	11 ⁷	—	60
M2	GENERAL INDUSTRIAL	36	3000	9	15	6	9	—	—	11 ⁷	—	60
M3	TRANSPORTATION INDUSTRIAL	—	—	15	15	9	15	60	60	11	—	150
M4	PITS & QUARRIES INDUSTRIAL	—	—	15	15	9	15	60	60	11	—	150
M5	DISPOSAL INDUSTRIAL	—	—	15	15	9	15	60	60	11	—	150
PBM1	PARKWAY BELT RESTRICTED INDUSTRIAL ABUTTING MAJOR ROADS ⁸	35 65	3000 8000	9 9	15 22	6 6	9 9	20 ⁹ 20 ⁹	— —	11 11	— —	60 60
PBM7	PARKWAY BELT INDUSTRIAL ABUTTING MAJOR ROADS ⁸	35 65	3000 8000	9 9	15 22	6 6	9 9	20 ⁹ 20 ⁹	— —	6 11	— —	60 60
ORM	OAK RIDGES MORaine USES	100	10ha	15	15	15	15	5	—	11	—	—
OS1	OPEN SPACE CONSERVATION	—	—	15	15	15	15	—	—	11	—	—
OS2	OPEN SPACE PARK	—	—	15	15	15	15	—	—	11	—	—
OS5	OPEN SPACE ENVIRONMENTAL PROTECTION USES	—	—	15	15	15	15	5	—	9.5	—	—
PB1	PARKWAY BELT OPEN SPACE	20	—	15	15	15	15	—	—	11	—	—
PB1(S)	PARKWAY BELT LINEAR FACILITIES	20	—	15	15	15	15	20	—	11	—	—
PB2	PARKWAY BELT COMPLEMENTARY USE	20	—	15	15	15	15	10	—	11	—	—
A	AGRICULTURAL — RESIDENTIAL	100	10ha	15	15	9	15	5	—	11	—	—
	— COMMERCIAL	—	—	15	15	15	15	20	—	11	—	15
	— FARMING	100	10ha	15	15	9	15	10	—	11	—	15
ALL ZONES	INSTITUTIONAL & RECREATION USES	20	—	15	15	15	15	20	—	11	—	—






APPENDIX 10



AIR PHOTO - MAXIMUM BUILDING ENVELOPE
167 NATIONAL DRIVE
CITY of VAUGHAN
REGION of YORK

Source: York Maps

LEGEND

-  SUBJECT SITE
-  MAXIMUM BUILDING ENVELOPE BASED ON RR ZONING
-  MAXIMUM LOT COVERAGE BASED ON RR ZONING

P.N.: 21.2834

Date: October 7, 2021

Scale: N.T.S

Revised:

Drawn By: D.S.

File No.: PN 2834_ Aerial_Images



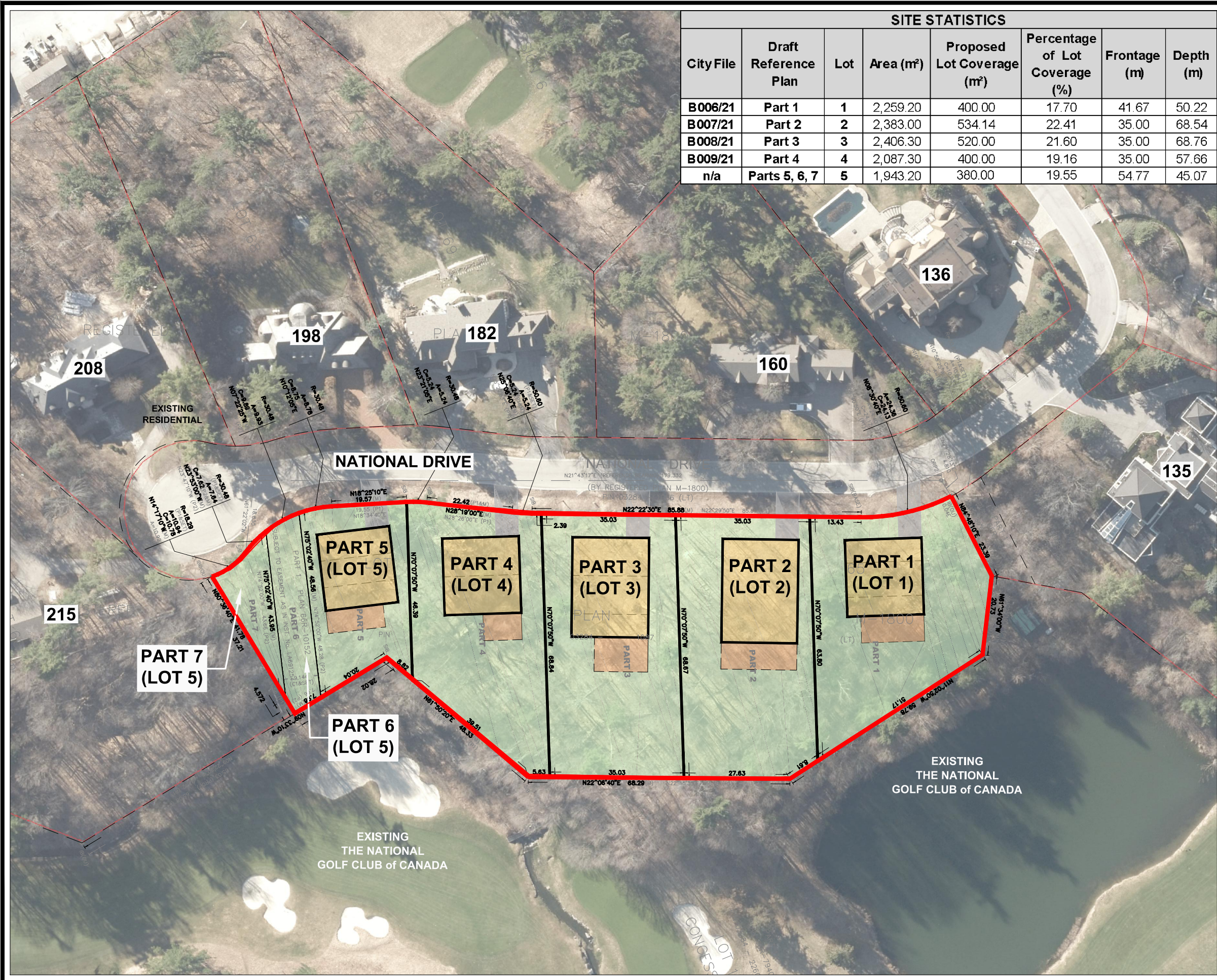
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 Suite 310
 Markham, ON
 L3R 0M3
 P: (905) 477 - 6556

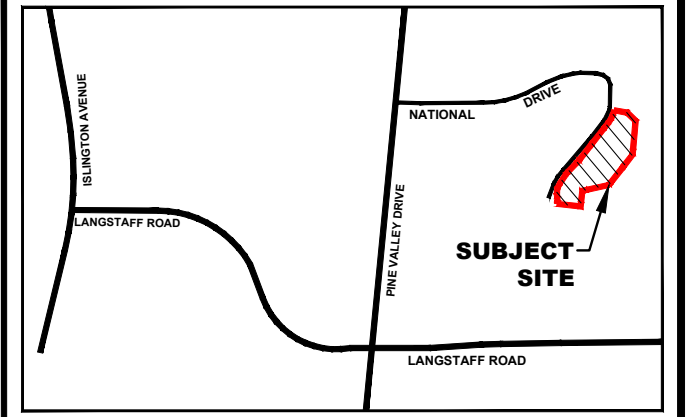
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 3601 Highway 7 East
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APPENDIX 11



SITE STATISTICS							
City File	Draft Reference Plan	Lot	Area (m ²)	Proposed Lot Coverage (m ²)	Percentage of Lot Coverage (%)	Frontage (m)	Depth (m)
B006/21	Part 1	1	2,259.20	400.00	17.70	41.67	50.22
B007/21	Part 2	2	2,383.00	534.14	22.41	35.00	68.54
B008/21	Part 3	3	2,406.30	520.00	21.60	35.00	68.76
B009/21	Part 4	4	2,087.30	400.00	19.16	35.00	57.66
n/a	Parts 5, 6, 7	5	1,943.20	380.00	19.55	54.77	45.07



KEYMAP  **SUBJECT SITE** N.T.S.

- LEGEND**
-  **SUBJECT SITE**
 -  **PROPOSED LOT LINES**
 -  **CONCEPTUAL BUILDING FOOTPRINT**
 -  **OUTDOOR AMENITY AREA**
 -  **LANDSCAPED AREA**
 -  **DRIVEWAY**

**CONCEPTUAL SITING PLAN
PROPOSED LOTS 1-5**

167 NATIONAL DRIVE
LOT 65, REGISTERED PLAN M-1800
CITY of VAUGHAN , REGION of YORK

P.N.: 21.2834	Date: October 4, 2021
Scale: N.T.S.	Revised:
Drawn By: D.S.	File No.: PN 2834_ Aerial_Images



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TEL (905) 264-0054
FAX (905) 264-0069
info@valdor-engineering.com
www.valdor-engineering.com

07 October 2021
File: **21148**

Belcap Management Inc.

5000 Yonge St., Suite 1901
Toronto ON M2N 7E9
Canada

Attention: **Lou Pompili**
President & CEO
Belcap Management Inc.

Dear Mr. Pompili:

Functional Servicing Brief
167 National Drive, Woodbridge

INTRODUCTION

Valdor Engineering Inc. has been retained by Belcap Management Inc. to prepare a Functional Servicing Brief for the proposed property known as 167 National Drive, approximately 1.1 ha in size to support the development of five (5) single-family dwellings. The subject property is located on the east side of National Drive in the Pine Grove neighbourhood of Woodbridge, abutting the National Golf Club of Canada to the east and existing residential development to the north, to the west and south. The site is vegetated and on a sloped terrain draining easterly towards a tributary of the East Humber River which runs in a southwesterly direction within the Golf Club lands.

This Brief outlines the engineering design elements for the proposed development, including water supply, sanitary sewers, storm drainage, stormwater management and grading.

EXISTING CONDITION

The subject site is approximately 1.1 hectares in size and is known municipally as 167 National Drive in Woodbridge, Ontario. The property is currently vacant and tree covered. The property is located on a sloped terrain and drains towards a tributary to the East Humber River located within the National Golf Club of Canada lands. National Drive, in front of the subject lands

drains in a southerly direction at roughly 5.0% gradient to an easement labelled as Part 6 on the attached Preliminary Grading and Servicing Plan. The road consists of rolled curb and gutter with spillways to direct road drainage into the ditch which ultimately drains into the East Humber River tributary through an existing easement.

PROPOSED CONDITION – SUBJECT SITE

The proposed development involves the creation of 5 single family lots that are fully serviced with sanitary sewage and watermain.

WATER SUPPLY

The City of Vaughan is responsible for distribution of water which is supplied in bulk by York Region. The subject community is supplied with water by the York Water System which itself derives water from the City of Toronto and Region of Peel. The Region's water system consists of a network of large diameter transmission mains, pumping stations, elevated tanks and reservoirs located throughout the City of Vaughan as well as neighbouring municipalities in the Region.

There are several pressure zones within Vaughan which are directly linked to the broader York Region pressure zones which are based on prevailing ground elevations. The subject site is located within Pressure District PD 5 which services an area that has ground elevations ranging from 165m to 195m. The proposed subdivision will have road surface grades which range from 184m to 191m which are within the PD 5 range so pressures are anticipated to be sufficient.

Watermains in the vicinity of the site includes an existing 150mm diameter watermain on National Drive which will service the proposed 5 dwelling development. Just to the north the watermain increases to a 200mm size and eventually connects to the 350mm watermain on Pine Valley Drive as per Engineering plans received from the City of Vaughan (attached).

The average domestic water demand for the proposed development was calculated using the following City of Vaughan engineering design criteria:

Average Day Demand:	300 L/person/day
Maximum Day Factor:	1.80
Peak Hour Factor:	3.00
Minimum Hour Factor:	0.85

The City of Vaughan Engineering Design Criteria assumes 4 persons per single family detached dwelling for an equivalent population of 20 persons for the 5 dwellings.

Based on the above, it is anticipated that the development will have an average day demand 4.2 L/min. The demands are summarized in **Table 1**.

Table 1. Domestic Water Demand

Land Use	Equivalent Population (Persons)	Average Day Demand (L/min)	Maximum Day Demand (L/min)	Peak Hour Demand (L/min)	Minimum Hour Demand (L/min)
Detached Dwellings	20	4.2	7.6	12.6	3.6
Total	28	4.2	7.6	12.6	3.6

WATER SERVICE CONNECTIONS

Based on Ontario Building Code (OBC 2012) regulations (7.6.3.4.(1) and (5) and Table 7.6.3.4), each proposed dwelling will be serviced with a 25mm diameter water connection given that it is anticipated that the dwellings will each have more than 16 fixture units.

As per standard practice a water meter is to be purchased from and supplied by the City of Vaughan and installed in the basement of each dwelling with a remote readout device located on the exterior ground floor wall of the house.

The location of the proposed water services is illustrated on **the Preliminary Grading and Servicing Plan**. A copy of the standard water service connection detail is attached for reference.

FIRE PROTECTION

In accordance with the Ontario Building Code the principal entrance of each dwelling unit must be within 90m of a fire hydrant. Based on a review of the location of the existing municipal fire hydrants on National Drive this criteria will be achieved with the existence of 2 fire hydrants located in the west boulevard of National Drive directly opposite of the proposed dwellings.

WASTEWATER SERVICING

Responsibility for wastewater servicing in the City of Vaughan is divided between the City, which is responsible for local wastewater collection and local pumping, and York Region, which is responsible for major pumping stations, major trunk sewers and treatment facilities. The City's wastewater collection system conveys flows to York Region's York Durham Sewage System (YDSS) except for wastewater flows from the community of Kleinburg-Nashville which are directed to the Kleinburg Water Pollution Control Plant (WPCP).

A 200mm sanitary sewer currently ends at a manhole on National Drive near the north limit of the development. The sewer runs north then west on National Drive and eventually connects to

an existing 525 mm sanitary sewer on Pine Valley Drive as per the attached drawings received from the City of Vaughan.

WASTEWATER LOADING

The wastewater analysis for the subject site was completed using the design criteria stipulated in the City engineering design guidelines which include the following parameters:

Domestic Flow: $Q = 364 \text{ L/person/day}$

Extraneous Flow: $I = 0.23 \text{ L/s/Ha (Infiltration)}$

Peaking Factor: $KH = 1 + \frac{14}{4 + \sqrt{P}}$

Where: $KH = \text{Harmon Peaking Factor (Min 2.0, Max 4.0)}$
 $P = \text{Population in thousands}$

Design Flow, $Q = Q \times KH + I$

Based on the proposed 5 lot plan, the total wastewater flow for the proposed development is 0.59 L/s as summarized in **Table 2**.

Table 2. Wastewater Loading Summary

Area (Ha)	Pop. (Persons)	Average Daily Flow (L/s)	Harmon Peaking Factor	Peak Daily Flow (L/s)	Infiltration Rate (L/s)	Total Flow (L/s)
1.1	20	0.085	4.0	0.337	0.25	0.587

The increase in loading is very minimal and we do not anticipate any capacity issues with the existing 200mm sanitary sewer on National Drive which eventually connects into a much larger 525mm sanitary collector sewer at Pine Valley Drive.

SANITARY SERVICE CONNECTIONS

It is proposed to extend the existing 200mm sanitary sewer south on National Drive by approximately 64m as indicated on the attached Grading/Servicing Plan in order to provide gravity service connections to 3 of the dwelling units, Parts 1, 2 and 3. Due to the drop in elevation of National Drive to the south it is not possible to extend the sanitary sewer further due to cover restrictions. It is therefore proposed to install sewage ejector pumps for the dwellings in Parts 4 and 5 with small forcemains installed within the road boulevard discharging to the new manhole. Additional design information will be provided at the detailed design stage including Plan/Profile Drawing.

STORMWATER QUANTITY CONTROL

The Development is within a tributary to the East Humber River watershed where quantity control measures are not required (see attached TRCA mapping). There are no quantity control measures that are currently existing within the neighbouring Development. Runoff from National Drive drains uncontrolled into the East Humber River tributary located within the National Golf Club of Canada lands.

STORMWATER QUALITY CONTROL

The Development consists of roof drainage and drainage from landscaped areas as well as existing, undisturbed vegetated areas. The storm runoff draining into the tributary will therefore be clean and no quality control measures are required

WATER BALANCE

The Toronto Conservation Authority (TRCA) requires that a water balance assessment be completed to maintain infiltration. This will be achieved with use of roof leaders connected to soak away pits as per the attached detail. The water balance assessment will be completed at detailed design or at Site Plan Application stage once all the building parameters such as roof area, building footprint size etc. have been determined.

LOT GRADING

A Preliminary Grading/Servicing Plan has been prepared and attached as part of this document. Possible building locations and proposed elevations superimposed on the topographical survey along with legal survey are indicated on this plan. The main design criteria involves minimizing the amount of disturbance to the lots in order to maximize tree preservation.

Due to the rapid drop in elevation from the road to the rear property line it is proposed to construct terraced houses where the floor slab drops, following the existing ground as it slopes towards the rear of the lot. The preliminary grading and servicing plan provides some detail on that as well as a typical section illustrating this. More details will follow once architectural and structural plans are developed. Driveways and the front yards will be designed to drain towards the street which eventually drains into the same tributary. The rest of the lots will drain towards the rear to the East Humber River tributary following the natural drainage pattern.

National Drive is sloped from south to north in front of the subject lands with an average gradient of about 5.0%. Rolled curb and gutter exist on both sides of the road with spillways that carry the pavement drainage into a ditch that eventually drains into the East Humber tributary via an easement indicated as Part 6 on the plan. Driveway culverts will therefore be required along with any improvements to the ditch to ensure that proper drainage flow is maintained.

It is anticipated that there will be individual site plans for each dwelling with additional grading/architectural and structural details provided for review by the City.

EROSION AND SEDIMENT CONTROL

Erosion and Sediment Control (ESC) will be provided during construction in order to minimize any risk of sediment runoff to the tributary of the East Humber River. Erosion controls will be provided mainly in the form of sediment fencing and placed at the rear limit of construction for each dwelling which will be addressed at the site plan stage for each individual lot. Fencing will also be installed around tree protection areas.

Additional measures will be in place in areas that are more prone to erosion where there are higher flows or concentrated flows. Measures in the form of double sediment fencing including use of straw bales and rock check dams will be installed in areas that are necessary and more susceptible to erosion.

All ESC measures will be inspected on a regular basis, particularly after rainfall events in order to ensure functionality. Any repair work is to be completed immediately by the builder.

The measures will remain in place until all disturbed areas are vegetated or stabilized.

CONCLUSION

Water service connections of 25mm will be provided to each lot from an existing 150mm watermain located on National Drive. The existing 200mm sanitary sewer on National Drive will be extended southerly by approximately 64m to service Parts 1 to 3 by gravity with standard 100mm lateral connections. Parts 4 and 5 will require sewage ejection pumps and forcemains that discharge to the extended sanitary sewer manhole.

As for the storm drainage and stormwater management for the site, quantity control for Stormwater Management is not required for this section of the East Humber River Tributary. Quality Control is not required due to the fact that we are dealing with clean roof flow and flow from vegetated areas. The water balance requirements as per TRCA criteria will be dealt with at detailed design stage.

The overall grading and house design will follow the natural slope of the land and minimize disturbance to protect as many trees as possible. Erosion Sediment Control measures in the form of silt fencing, rock check dams etc. will be incorporated as necessary during the construction stage.

Respectfully submitted,

VALDOR ENGINEERING INC.



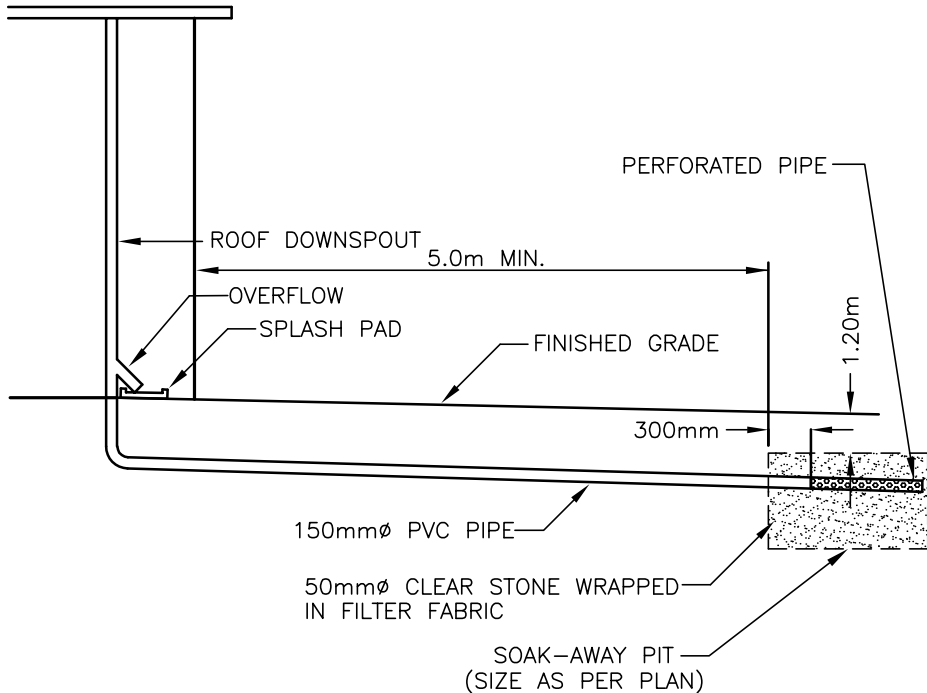
Peter S.Zourntos, P.Eng, C.Eng
Senior Project Manager

This report was prepared by Valdor Engineering Inc. for the account of Belcap Management Inc. The comments, recommendations and material in this report reflect Valdor Engineering Inc.'s best judgment in light of the information available to it at the time of preparation. Any use of which a third party makes of this report, or any reliance on, or decisions made based on it, are the responsibility of such third parties. Valdor Engineering Inc. accepts no responsibility whatsoever for any damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

S:\Projects\2021\21148\Report\21148_FSB_October 2021.doc

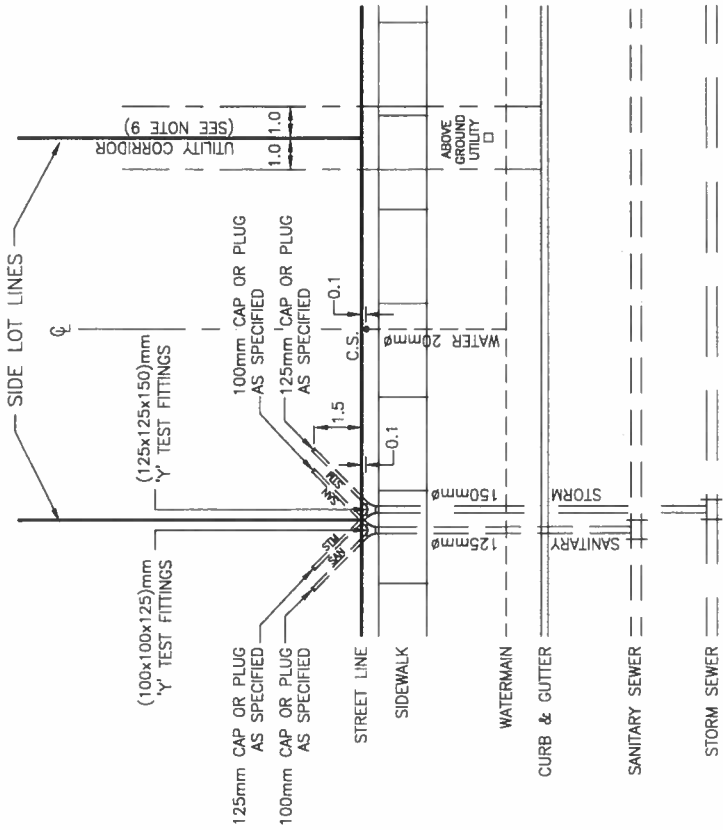
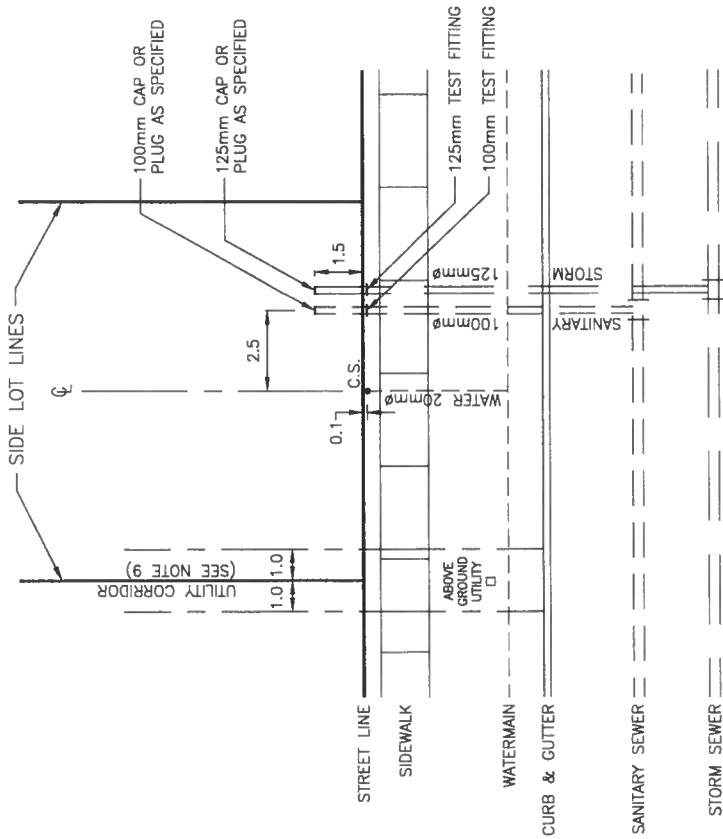
ATTACHMENTS

- Soakaway Pit Detail
- Preliminary Servicing and Grading Plan
- Residential Service Connections
- Silt Fence Detail – ‘Type A’ Frozen Ground
- Silt Fence Detail – ‘Type A’ Non-Frozen Ground
- Silt Fence Detail – ‘Type B’
- Woodbridge Road Reconstruction and Watermain Replacement 2004
- TRCA Unit Flow Equations
- Water Service Connection



ROOF DRAINAGE SOAK AWAY PIT DETAIL

N.T.S.



SINGLE SEWER & SINGLE WATER SERVICE

SINGLE WATER & DOUBLE SEWER SERVICE

m DIMENSIONS IN METRES
EXCEPT AS NOTED

4	REVISED NOTES	AUG/11
3	EXTEND SEWER CONNECTIONS 1.5m BEYOND PROPERTY LINE	NOV/10
2	REVISIONS	DATE
1		



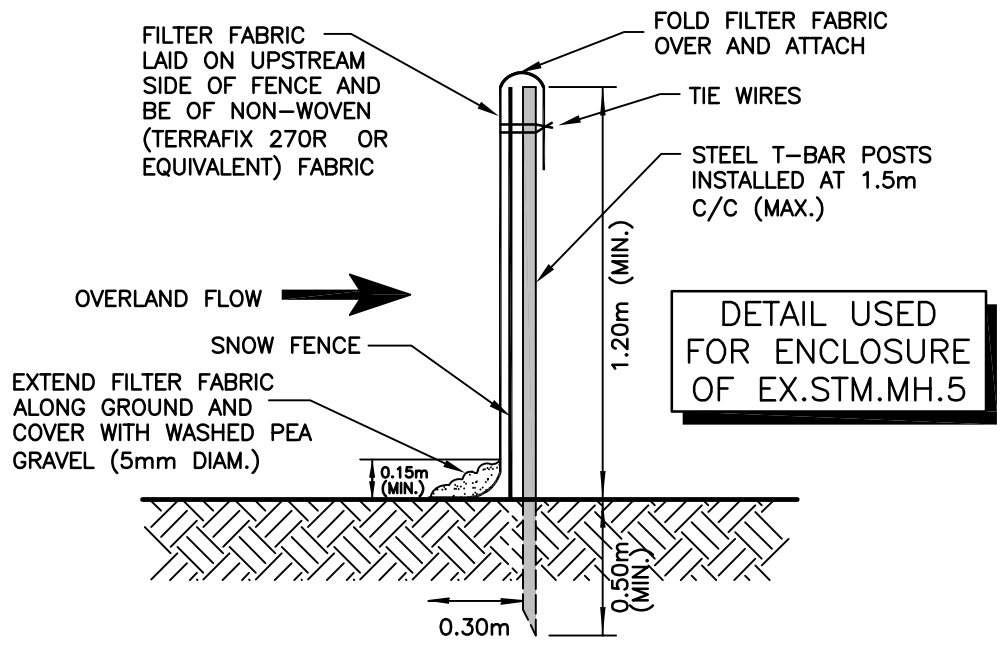
CITY OF VAUGHAN ENGINEERING STANDARD

RESIDENTIAL SERVICE CONNECTIONS

NOT TO SCALE
DESIGNED: ENG. DEPT.
REVISION: DATE: MARCH 2004
STD. DWG. I-1

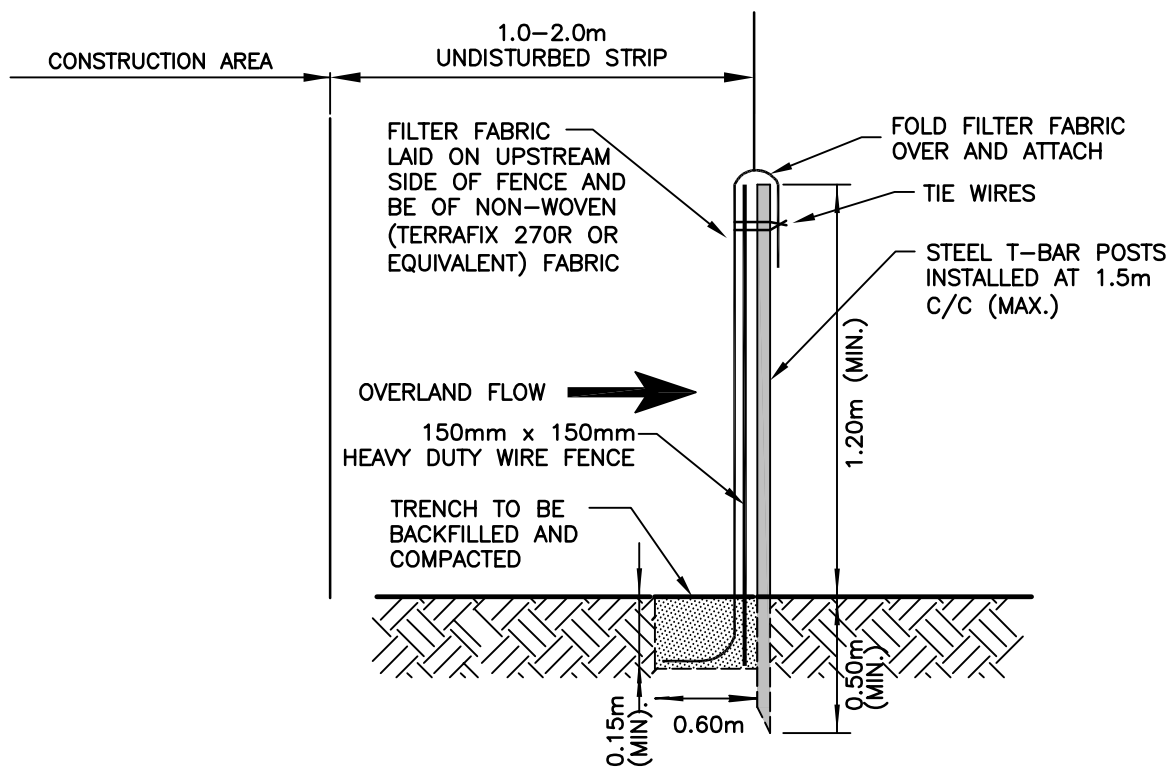
NOTES

1. WATER SERVICE CONNECTIONS AND CURB STOPS SHALL BE AS DETAILED ON O.P.S.D. 1104.010 OR 1104.020.
2. SANITARY AND STORM SERVICE CONNECTIONS SHALL BE AS PER O.P.S.D. 1006.010 OR 1006.020 EXCEPT THAT THE CONNECTIONS SHALL EXTEND 1.5m BEYOND THE PROPERTY LINE AND SHALL BE PLUGGED OR CAPPED AT THAT POINT.
3. ALL PVC SANITARY LATERAL PIPE SHALL BE ANY COLOUR BUT WHITE.
4. SANITARY TEST FITTINGS SHALL BE LETTERED 'SAN'. FITTINGS SHALL BE CROWLE TYPE WITH PLUGS OR EQUAL.
5. ALL PVC STORM LATERAL PIPE SHALL BE WHITE IN COLOUR.
6. STORM TEST FITTING SHALL BE LETTERED 'STM'. FITTINGS SHALL BE CROWLE TYPE WITH PLUGS OR EQUAL.
7. MARKERS SHALL BE PLACED AT ENDS OF 'SAN' AND 'STM' CONNECTIONS.
8. THE WATER SERVICE CURB STOP IS TO BE LOCATED IN THE GRASSED PORTION OF THE FRONT YARD.
9. IN THE CASE OF ZERO-LOT LINE UNITS AND TOWNHOUSES, THE LOCATION OF THE UTILITY CORRIDOR TO BE TO THE SATISFACTION OF THE CITY.



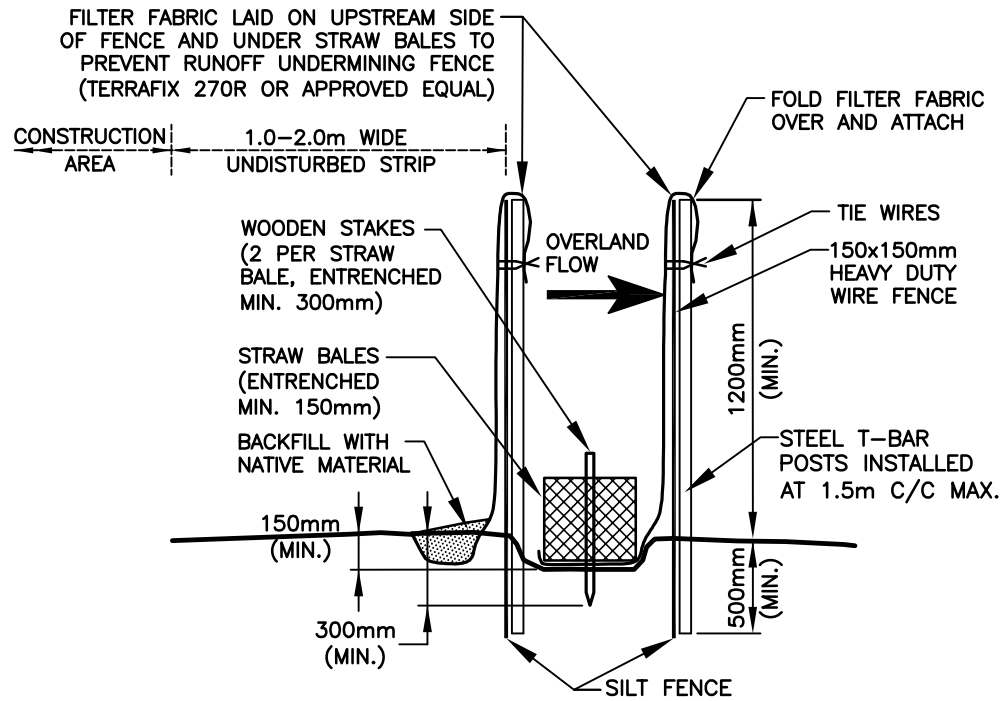
SILT FENCE DETAIL – TYPE "A"
FROZEN GROUND

SCALE N.T.S.



SILT FENCE DETAIL – TYPE "A"
NON-FROZEN GROUND

SCALE N.T.S.



SILT FENCE DETAIL - TYPE "B"

SCALE N.T.S.

CONNECT TO EX. 350mm ϕ WM WITH TAPPING SLEEVE & VALVE (SEE DETAIL ON SHEET 11)
STA.: 0+003.28
O/S: 3.04m L

NOTE:

- SAWCUT PINE VALLEY DRIVE FOR PROPOSED WORKS.
- STAGE PROPOSED WORKS SO THAT 1 LANE OF TRAFFIC IS OPEN AT ALL TIMES.
- POST SIGNAGE IN ACCORDANCE WITH CURRENT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- FLAGMAN SHALL BE POSTED ON BOTH SIDES WHENEVER EQUIPMENT IS WITHIN PINE VALLEY DRIVE RIGHT OF WAY, AND WHENEVER BOTH LANES ARE NOT AVAILABLE TO TRAFFIC.
- RESTORE PINE VALLEY DRIVE WITH GRANULAR 'B' TO UNDER SIDE OF SUBGRADE. PAVEMENT STRUCTURE TO MATCH EXISTING.

NATIONAL/PINE VALLEY INT.
N. 4851350.188
E. 614321.391

SAWCUT EX. ASPHALT AT LIMIT OF CONSTRUCTION

PROP. VALVE & CHAMBER
STD. DWG. H-1
STA.: 0+014.08
O/S: 2.54m L
(INCL. DRAIN VALVE AS SHOWN ON STD. DWG. H-1)

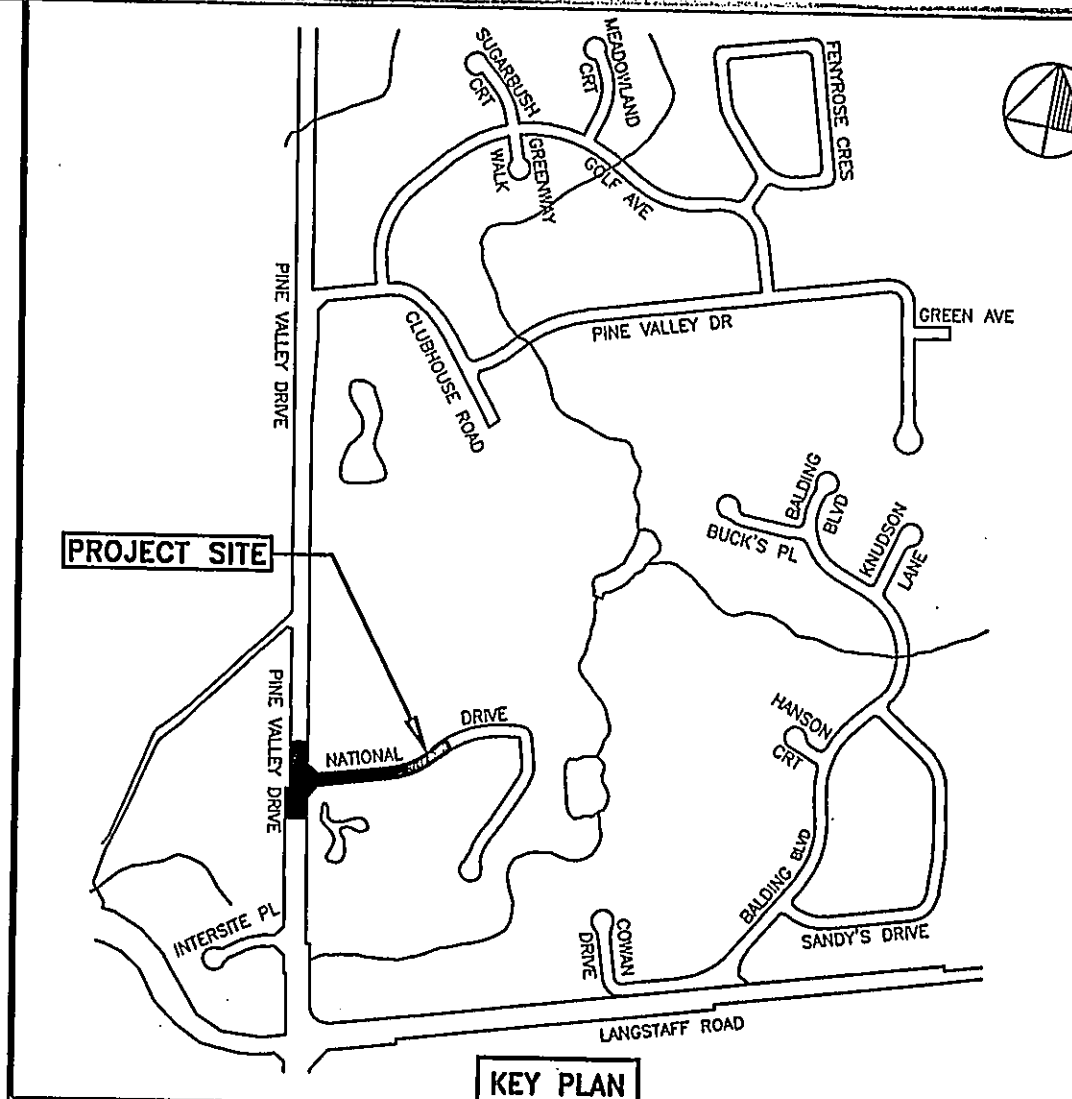
CLEAN EX. CULVERTS
REGRADE EX. DITCHES
AS DIRECTED BY THE ENGINEER

B.C.
N. 4851392.985
E. 614464.398

Q CURVE DATA

R	= 213.23m
Δ	= 30°24'57"
A	= 113.19m
C	= 111.87m
BC	= 0+149.27
EC	= 0+262.47

NOTE:
SEE SHEET No. 11 FOR PAVEMENT STRUCTURE AND CURB DETAILS.



1. ALL DIMENSIONS ARE IN METRES AND / OR MILLIMETRES UNLESS OTHERWISE INDICATED.
2. DRAWINGS ARE NOT TO BE SCALED.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY UPON FINDING.
4. THE EXACT LOCATION OF UTILITIES SHALL BE DETERMINED BY CONSULTING THE UTILITY COMPANIES CONCERNED. THE CONTRACTOR SHALL PROVE THE LOCATION OF UTILITIES AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION FROM DAMAGE.
5. BENCHMARKS FOR LAYOUT ARE TO BE OBTAINED FROM THE CITY OF VAUGHAN ENGINEERING DEPARTMENT.

NOTE:
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THE EXISTENCE, LOCATION AND ELEVATION OF UTILITIES AND/OR CONCEALED STRUCTURE AT THE PROJECT SITE ARE NOT GUARANTEED BY UMA. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXISTENCE, LOCATION AND ELEVATION OF ALL SUCH UTILITIES AND/OR STRUCTURES AND IS RESPONSIBLE FOR NOTIFYING THE APPROPRIATE COMPANY, DEPARTMENT OR PERSON(S) OF ITS INTENTION TO CARRY OUT ITS OPERATIONS.

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NO.	DESCRIPTION	BY	DATE

REVISIONS

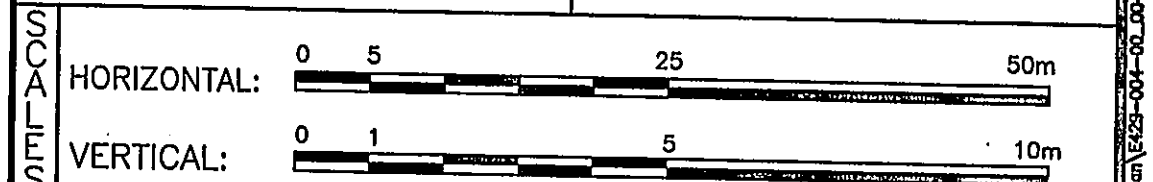
uma **UMA Engineering Ltd.**
Engineers & Planners
5080 Commerce Blvd.
Mississauga, Ontario
L4W 4P2
Tel. (905) 238-0007
Fax (905) 238-0038

ENGINEER'S STAMP:

APPROVED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF UMA ENGINEERING LTD., AS TO DESIGN AND SPECIFICATIONS.

I. B. FINLAYSON
L. B. FINLAYSON
01/04/04
PROVINCE OF ONTARIO

Garry Carroll 5/7/04
GARY CARROLL, P.ENG
DIRECTOR OF ENGINEERING SERVICES



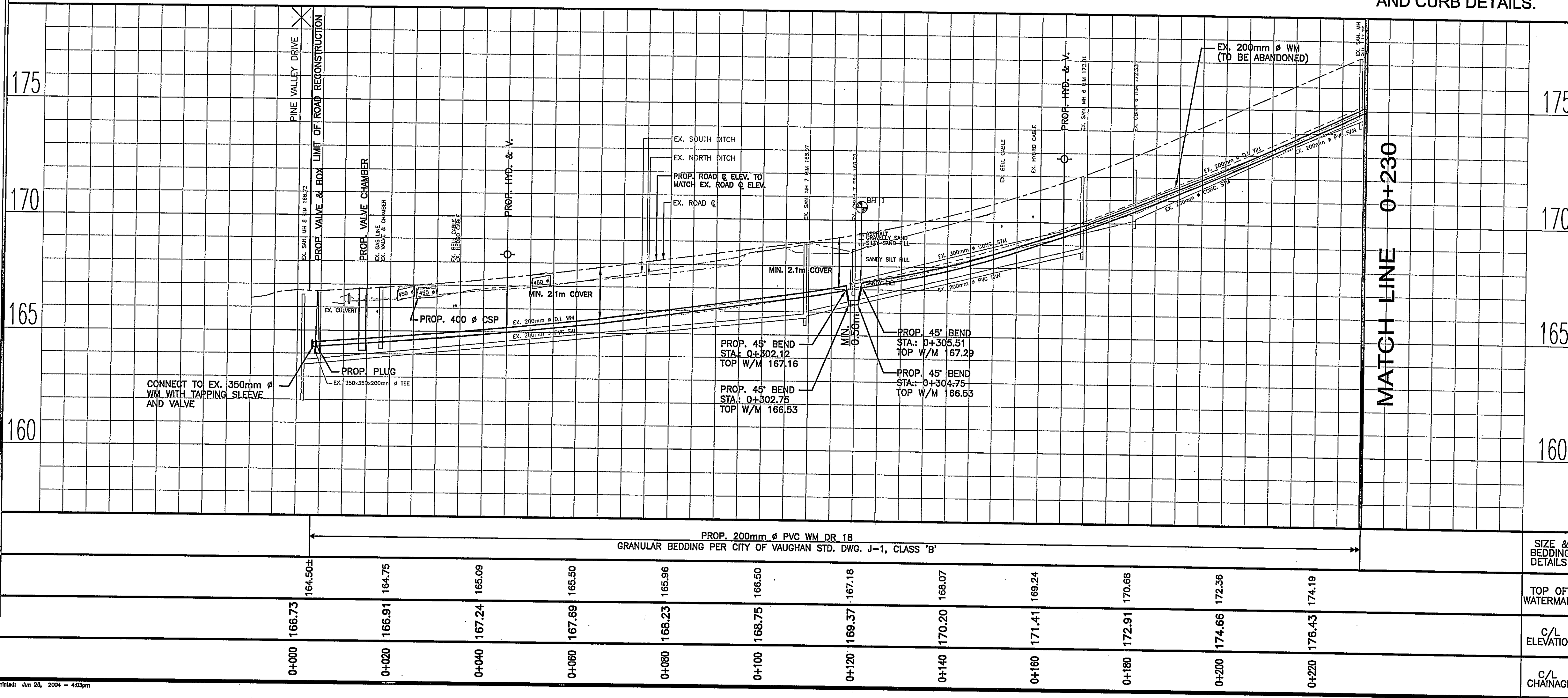
NATIONAL DRIVE
0+000 TO 0+230
WOODBRIDGE ROAD RECONSTRUCTION AND WATERMAIN REPLACEMENT, 2004

City of Vaughan
The City Above Toronto

ENGINEERING DEPARTMENT

DESIGNED BY: I.F.	DATE: FEBRUARY 2004	CHECKED BY:
DRAWN BY: D.A.L.	SURVEYED BY: R.P.	APPROVED BY: G.W.S.
SCALE: HORIZONTAL: 1:500 VERTICAL: 1:100	CONTRACT No. T04-118	DWG. No. 8 of 11

NATIONAL DRIVE



Ⓢ CURVE DATA

R = 213.23m
Δ = 30°24'57"
A = 113.19m
C = 111.87m
BC = 0+149.27
EC = 0+262.47

Ⓢ CURVE DATA

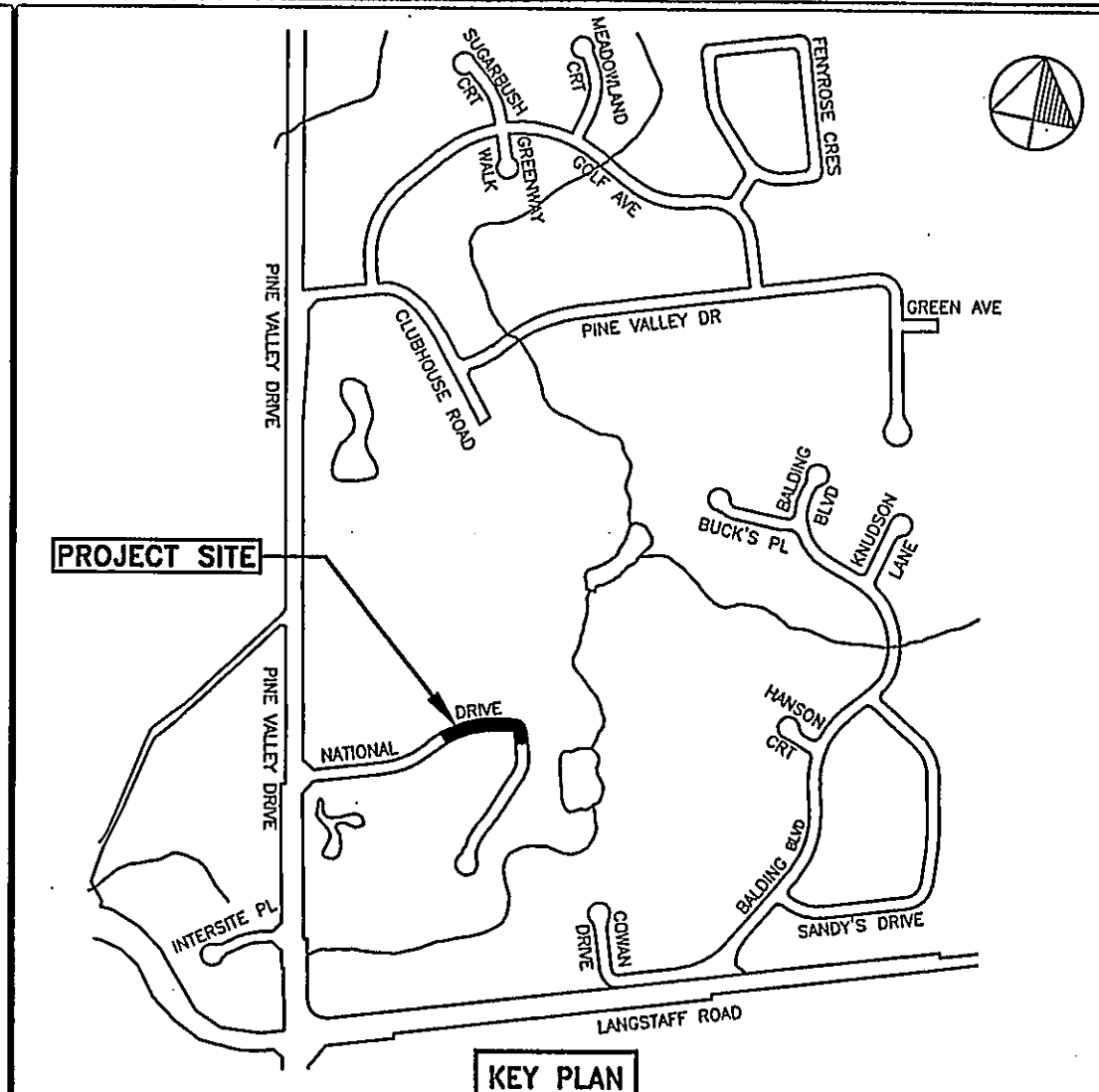
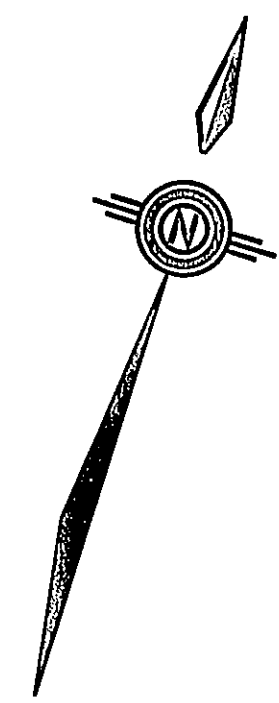
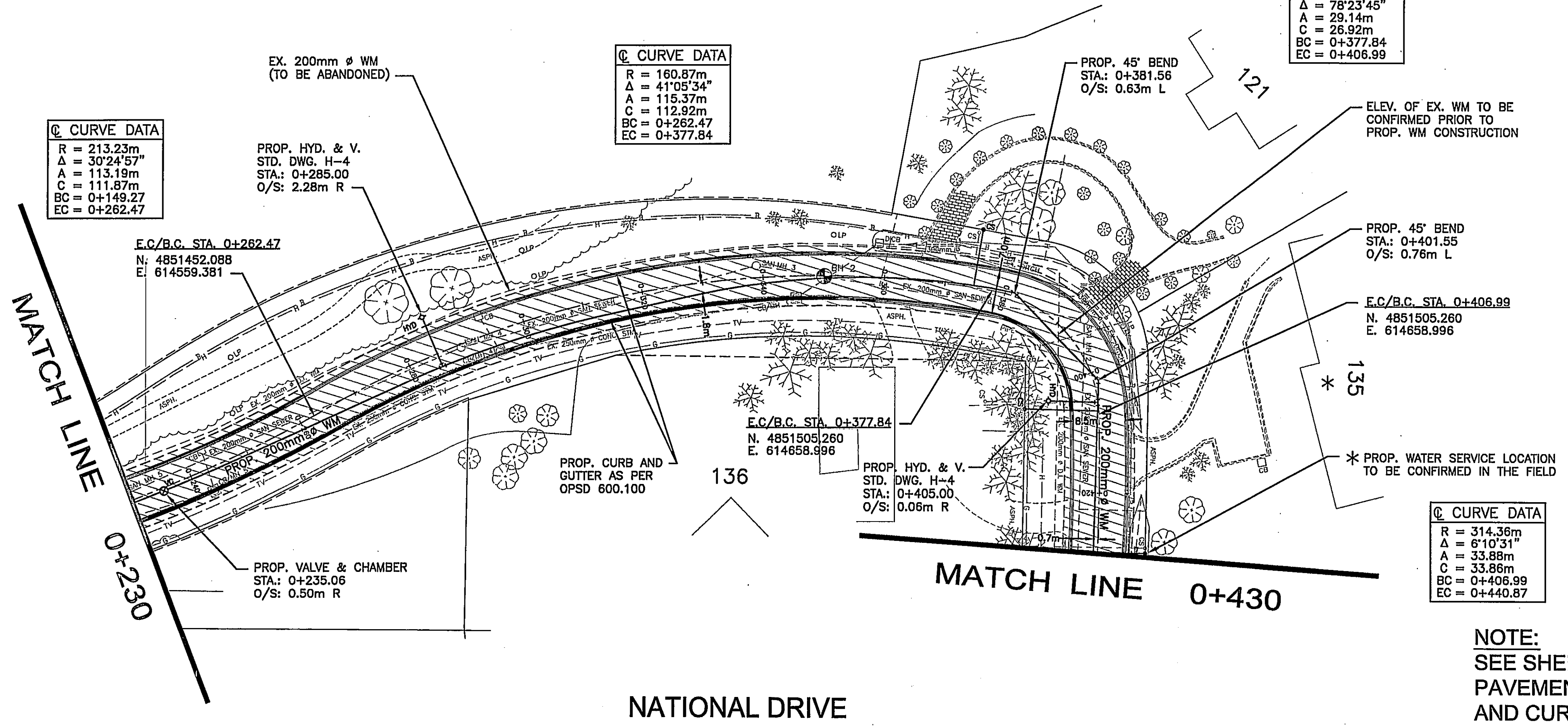
R = 160.87m
Δ = 41°05'34"
A = 115.37m
C = 112.92m
BC = 0+252.47
EC = 0+377.84

Ⓢ CURVE DATA

R = 21.30m
Δ = 78°23'45"
A = 29.14m
C = 26.92m
BC = 0+377.84
EC = 0+406.99

Ⓢ CURVE DATA

R = 314.36m
Δ = 6°10'31"
A = 33.88m
C = 33.86m
BC = 0+406.99
EC = 0+440.87

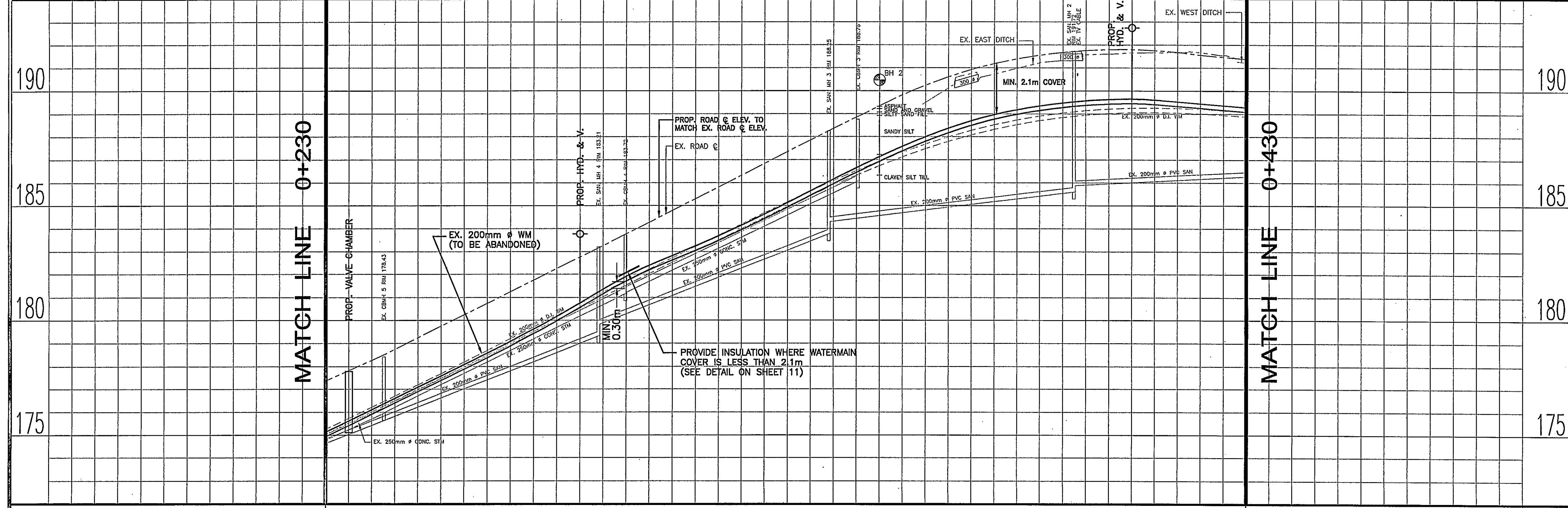


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- BENCHMARKS FOR LAYOUT ARE TO BE OBTAINED FROM THE CITY OF VAUGHAN ENGINEERING DEPARTMENT.

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NOTE:
SEE SHEET No. 11 FOR PAVEMENT STRUCTURE AND CURB DETAILS.



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NO.	DESCRIPTION	BY DATE

REVISIONS

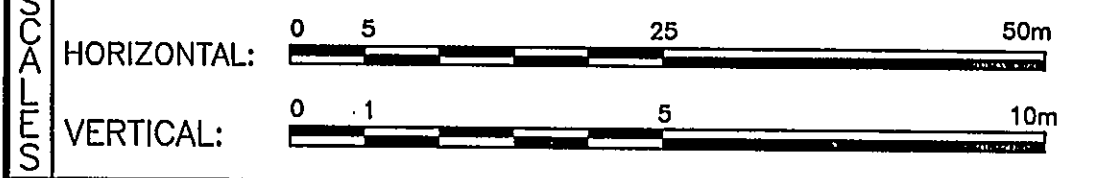
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UMA Engineering Ltd.
Engineers & Planners
5080 Commerce Blvd.
Mississauga, Ontario
L4W 4P2
Tel. (905) 238-0007
Fax (905) 238-0038

ENGINEER'S STAMP:
APPROVED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND ABILITY OF UMA ENGINEERING LTD. AS TO DESIGN AND SPECIFICATIONS.

L. B. FINLAYSON
5/16/04
PROVINCE OF ONTARIO

GARY CARROLL, P.ENG
5/7/04
DIRECTOR OF ENGINEERING SERVICES



NATIONAL DRIVE
0+230 TO 0+430
WOODBRIDGE ROAD RECONSTRUCTION
AND WATERMAIN REPLACEMENT, 2004

City of Vaughan
The City Above Toronto

ENGINEERING DEPARTMENT

PROP. 200mm Ø PVC WM DR 18 GRANULAR BEDDING PER CITY OF VAUGHAN STD. DWG. J-1, CLASS "B"		SIZE & BEDDING DETAILS	
0+240	178.27	176.12	
0+260	180.24	178.09	
0+280	182.25	180.11	
0+300	184.28	182.40	
0+320	186.32	184.15	
0+340	188.36	186.16	
0+360	190.25	188.00	
0+380	191.40	189.19	
0+400	191.80	189.64	
0+420	191.56	189.45	
C/L ELEVATION	DESIGNED BY: I.F.	DATE: FEBRUARY 2004	CHECKED BY:
C/L CHAINAGE	DRAWN BY: D.A.L.	SURVEYED BY: R.P.	APPROVED BY: G.W.S.
	SCALE:	CONTRACT No.	DWG. No.
	HORIZONTAL: 1:500	T04-118	9 of 11
	VERTICAL: 1:100		

F.C./B.C. STA. 0+440.87
N. 4851458.655
E. 614691.362

PROP. 200x150 REDUCER
STA.: 0+449.10
O/S: 0.75m L

PROP. 45° BEND
STA.: 0+449.58
O/S: 0.85m L

② CURVE DATA
R = 60.30m
Δ = 35°15'20"
A = 37.16m
C = 36.52m
BC = 0+440.87
EC = 0+477.97

PROP. 11¼° BEND
STA.: 0+467.10
O/S: 0.02m R

PROP. CONC. OUTLET
AND RIP-RAP (TYP.)
(SEE DETAIL SHEET 11)

② CURVE DATA
R = 43.90m
Δ = 4°04'53"
A = 3.13m
C = 3.13m
BC = 0+549.82
EC = 0+552.95

PROP. ROCKCHECK DAM (TYP.)
(SEE DETAIL ON SHEET 11)

② CURVE DATA
R = 105.60m
Δ = 23°22'31"
A = 43.08m
C = 42.78m
BC = 0+585.16
EC = 0+628.24

PROP. CURB AND
GUTTER AS PER
OPSD 600.100

PROP. HYD. & V.
STD. DWG. H-4
STA.: 0+663.27
O/S: 1.35m R

F.C. STA. 0+628.24
N. 4851282.590
E. 614634.982

MATCH LINE
0+430

② CURVE DATA
R = 314.36m
Δ = 8°10'31"
A = 33.88m
C = 33.88m
BC = 0+406.99
EC = 0+440.87

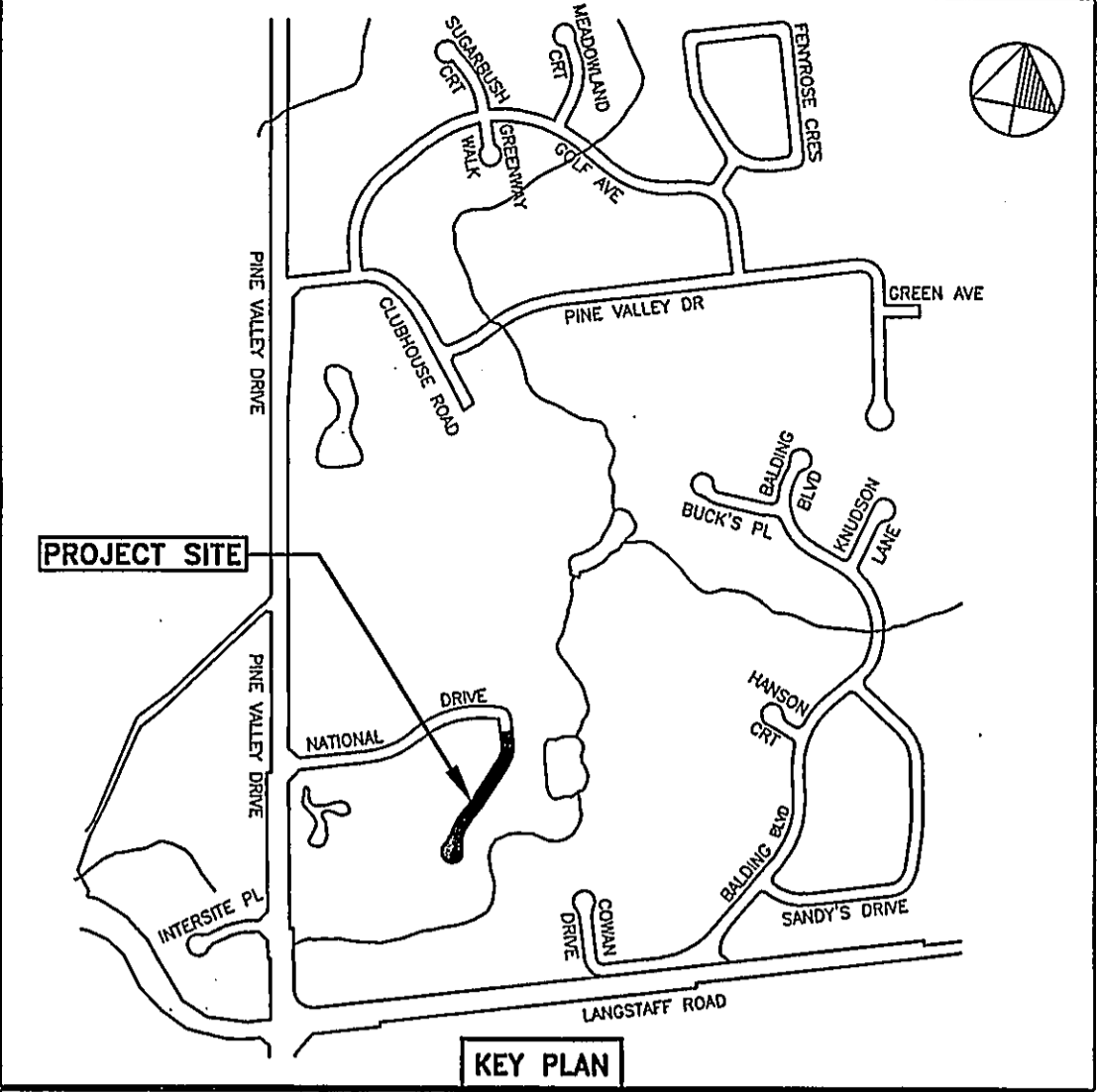
PROP. VALVE CHAMBER
STA.: 0+470.00
O/S: 0.48m R

PROP. HYD. & V.
STD. DWG. H-4
STA.: 0+490.00
O/S: 1.00m R

REMOVE AND DISPOSE OF EX.
CULVERT AND HEADWALLS
PLACE 400mm Ø CSP AND
RECONSTRUCT HEADWALLS

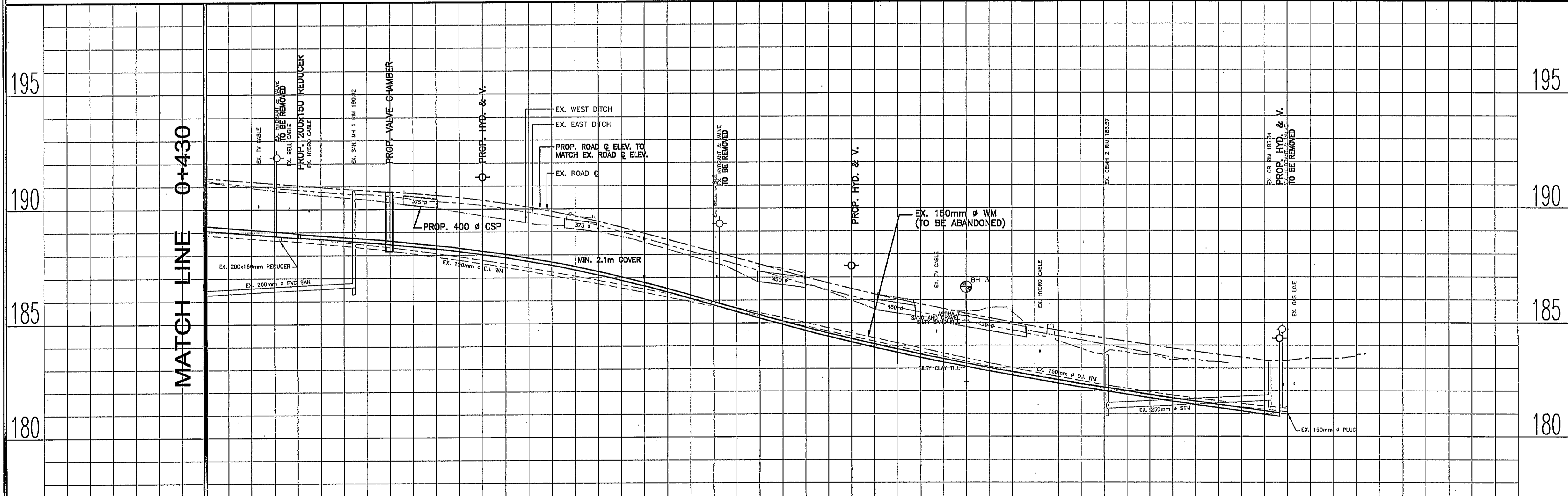
NATIONAL DRIVE

NOTE:
SEE SHEET No. 11 FOR
PAVEMENT STRUCTURE
AND CURB DETAILS.



1. ALL DIMENSIONS ARE IN METRES AND / OR MILLIMETRES UNLESS OTHERWISE INDICATED.
2. DRAWINGS ARE NOT TO BE SCALED.
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5. BENCHMARKS FOR LAYOUT ARE TO BE OBTAINED FROM THE CITY OF VAUGHAN ENGINEERING DEPARTMENT.

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NO.	DESCRIPTION	BY	DATE

REVISIONS
UMA **UMA Engineering Ltd.**
Engineers & Planners
5080 Commerce Blvd. Tel: (905) 238-0007
Mississauga, Ontario Fax: (905) 238-0038
L4W 4P2

ENGINEER'S STAMP:

APPROVED AS TO FORM IN RELIANCE, UPON THE PROFESSIONAL SKILL AND ABILITY OF UMA ENGINEERING LTD. AS TO DESIGN AND SPECIFICATIONS.

GARY CARROLL, P.ENG
DIRECTOR OF
ENGINEERING SERVICES

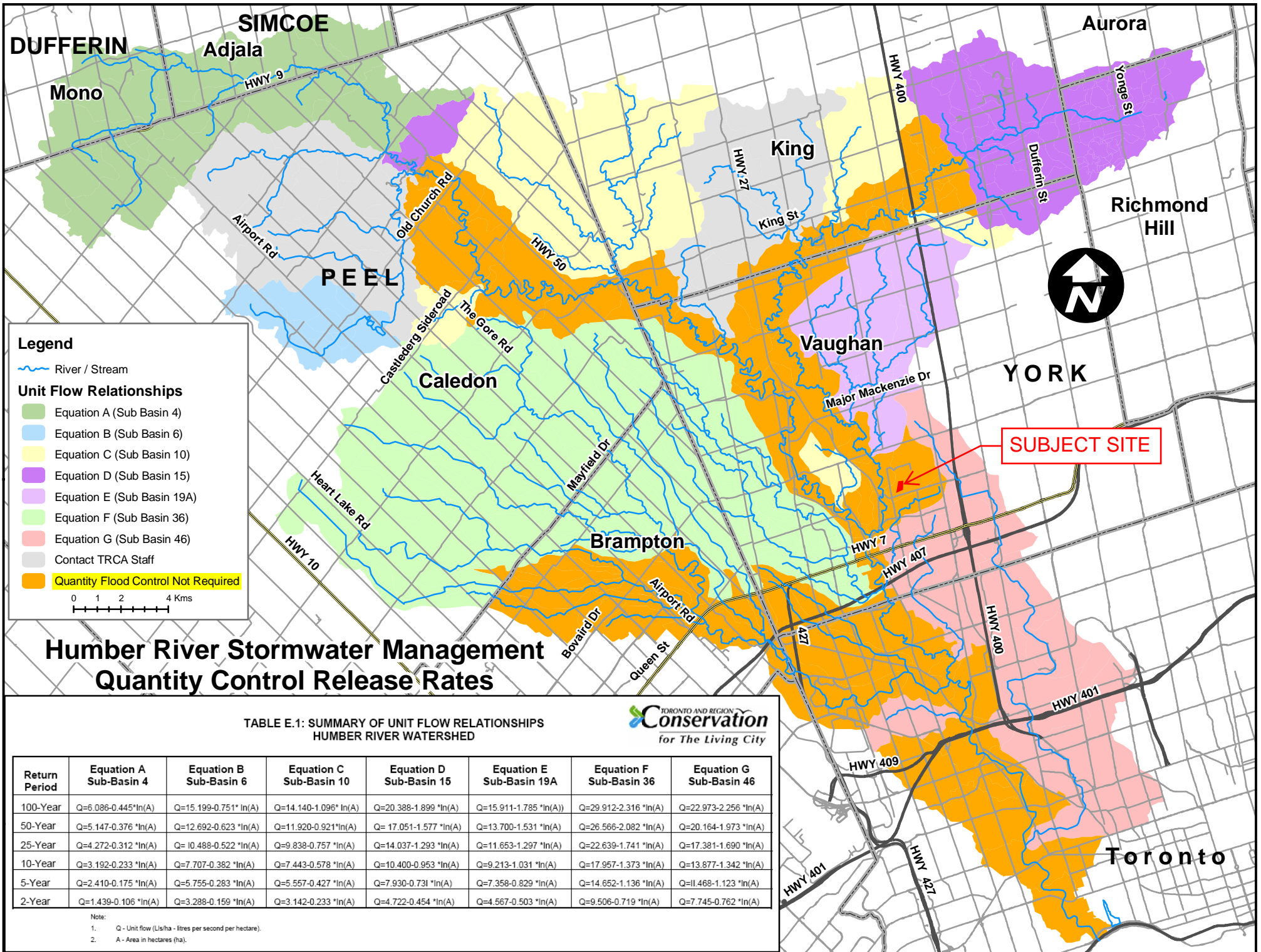
SCALE:
HORIZONTAL: 0 5 25 50m
VERTICAL: 0 1 5 10m
NATIONAL DRIVE
0+430 TO 0+666.92
**WOODBRIDGE ROAD RECONSTRUCTION
AND WATERMAIN REPLACEMENT, 2004**

PROP. 200mm Ø PVC WM DR 18 GRANULAR BEDDING PER CITY OF VAUGHAN STD. DWG. J-1, CLASS 'B'		PROP. 150mm Ø PVC WM DR 18 GRANULAR BEDDING PER CITY OF VAUGHAN STD. DWG. J-1, CLASS 'B'		SIZE & BEDDING DETAILS
0+440	191.21	189.12	188.78	TOP OF WATERMAIN
0+460	190.90	188.42	187.87	C/L ELEVATION
0+480	190.64	187.04	186.83	C/L CHAINAGE
0+500	189.16	185.95	183.86	
0+520	188.12	182.32	181.13	
0+540	187.02	181.69	180.99	
0+560	186.04	181.13	180.99	
0+580	185.21	180.99	180.99	
0+600	184.50	180.99	180.99	
0+620	183.74	180.99	180.99	
0+640	183.35	180.99	180.99	
0+660	183.57	180.99	180.99	

City of Vaughan
The City Above Toronto

ENGINEERING DEPARTMENT

DESIGNED BY: I.F.	DATE: FEBRUARY 2004	CHECKED BY:
DRAWN BY: D.A.L.	SURVEYED BY: R.P.	APPROVED BY: G.W.S.
SCALE: HORIZONTAL: 1:500 VERTICAL: 1:100		DWG. No. 10 of 11
CONTRACT No. T04-118		



Legend

- River / Stream
- Unit Flow Relationships**
 - Equation A (Sub Basin 4)
 - Equation B (Sub Basin 6)
 - Equation C (Sub Basin 10)
 - Equation D (Sub Basin 15)
 - Equation E (Sub Basin 19A)
 - Equation F (Sub Basin 36)
 - Equation G (Sub Basin 46)
 - Contact TRCA Staff
 - Quantity Flood Control Not Required

0 1 2 4 Kms

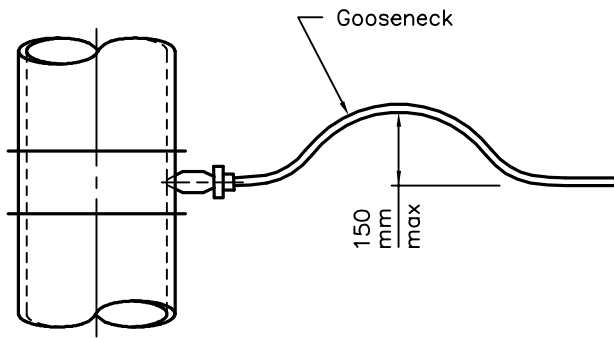
Humber River Stormwater Management Quantity Control Release Rates

TABLE E.1: SUMMARY OF UNIT FLOW RELATIONSHIPS
HUMBER RIVER WATERSHED

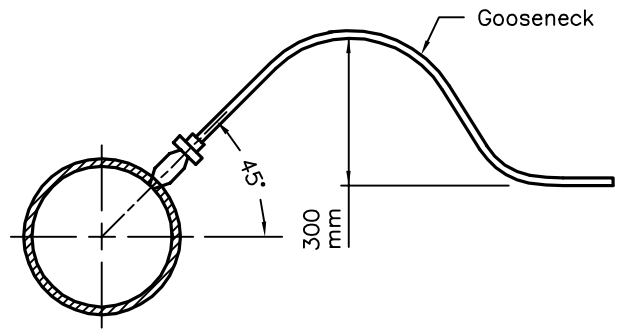


Return Period	Equation A Sub-Basin 4	Equation B Sub-Basin 6	Equation C Sub-Basin 10	Equation D Sub-Basin 15	Equation E Sub-Basin 19A	Equation F Sub-Basin 36	Equation G Sub-Basin 46
100-Year	$Q=6.086-0.445 \cdot \ln(A)$	$Q=15.199-0.751 \cdot \ln(A)$	$Q=14.140-1.096 \cdot \ln(A)$	$Q=20.388-1.899 \cdot \ln(A)$	$Q=15.911-1.785 \cdot \ln(A)$	$Q=29.912-2.316 \cdot \ln(A)$	$Q=22.973-2.256 \cdot \ln(A)$
50-Year	$Q=5.147-0.376 \cdot \ln(A)$	$Q=12.692-0.623 \cdot \ln(A)$	$Q=11.920-0.921 \cdot \ln(A)$	$Q=17.051-1.577 \cdot \ln(A)$	$Q=13.700-1.531 \cdot \ln(A)$	$Q=26.566-2.082 \cdot \ln(A)$	$Q=20.164-1.973 \cdot \ln(A)$
25-Year	$Q=4.272-0.312 \cdot \ln(A)$	$Q=10.488-0.522 \cdot \ln(A)$	$Q=9.838-0.757 \cdot \ln(A)$	$Q=14.037-1.293 \cdot \ln(A)$	$Q=11.653-1.297 \cdot \ln(A)$	$Q=22.639-1.741 \cdot \ln(A)$	$Q=17.381-1.690 \cdot \ln(A)$
10-Year	$Q=3.192-0.233 \cdot \ln(A)$	$Q=7.707-0.382 \cdot \ln(A)$	$Q=7.443-0.578 \cdot \ln(A)$	$Q=10.400-0.953 \cdot \ln(A)$	$Q=9.213-1.031 \cdot \ln(A)$	$Q=17.957-1.373 \cdot \ln(A)$	$Q=13.877-1.342 \cdot \ln(A)$
5-Year	$Q=2.410-0.175 \cdot \ln(A)$	$Q=5.755-0.283 \cdot \ln(A)$	$Q=5.557-0.427 \cdot \ln(A)$	$Q=7.930-0.731 \cdot \ln(A)$	$Q=7.358-0.829 \cdot \ln(A)$	$Q=14.652-1.136 \cdot \ln(A)$	$Q=11.468-1.123 \cdot \ln(A)$
2-Year	$Q=1.439-0.106 \cdot \ln(A)$	$Q=3.288-0.159 \cdot \ln(A)$	$Q=3.142-0.233 \cdot \ln(A)$	$Q=4.722-0.454 \cdot \ln(A)$	$Q=4.567-0.503 \cdot \ln(A)$	$Q=9.506-0.719 \cdot \ln(A)$	$Q=7.745-0.762 \cdot \ln(A)$

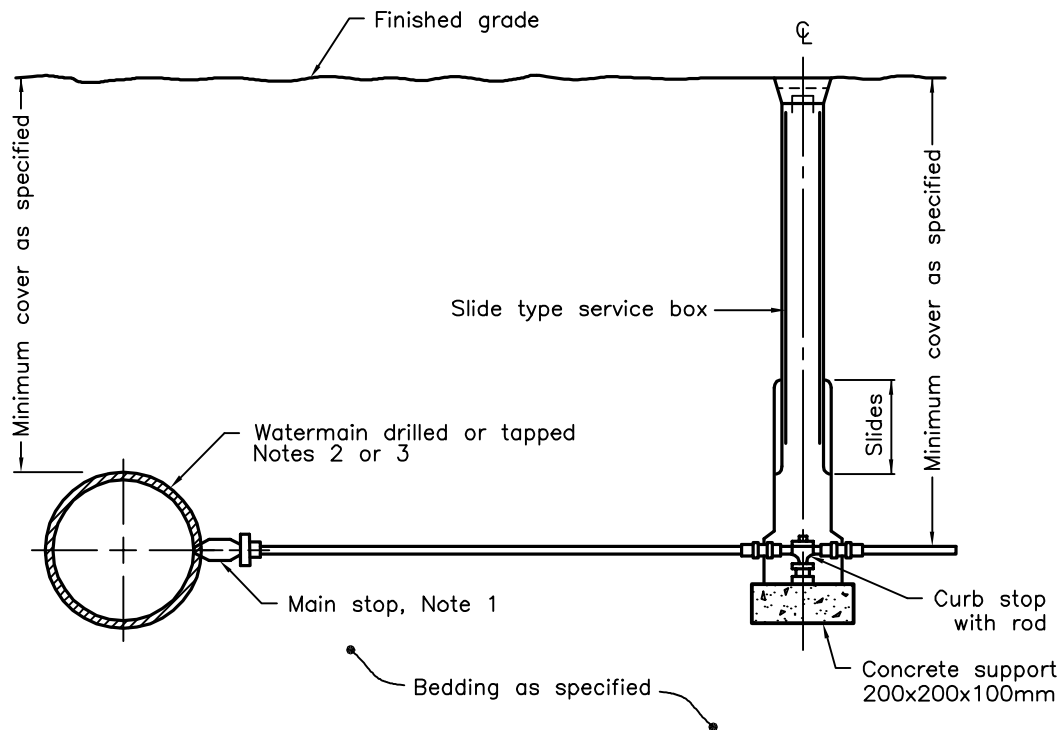
Note:
 1. Q - Unit flow (L/s/ha - litres per second per hectare).
 2. A - Area in hectares (ha).



HORIZONTAL GOOSENECK



VERTICAL GOOSENECK OPTION



VERTICAL SECTION

NOTES:

- 1 For plastic service pipes, install main stop at 15° above horizontal with a minimum 1.2m long gooseneck.
- 2 Direct tap ductile iron pipe with approved tool with standard AWWA inlet thread.
- 3 Service connections to plastic watermains shall be made using service saddles or factory made tees.
- A When specified, the vertical gooseneck option shall be used.
- B Couplings shall not be permitted unless the service length exceeds 20m between the main stop and curb stop.
- C All water services shall be installed 90° to the longitudinal axis of the watermain.
- D Backfill material within 500mm of service box shall be native or imported, as specified.
- E All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING

Nov 2013

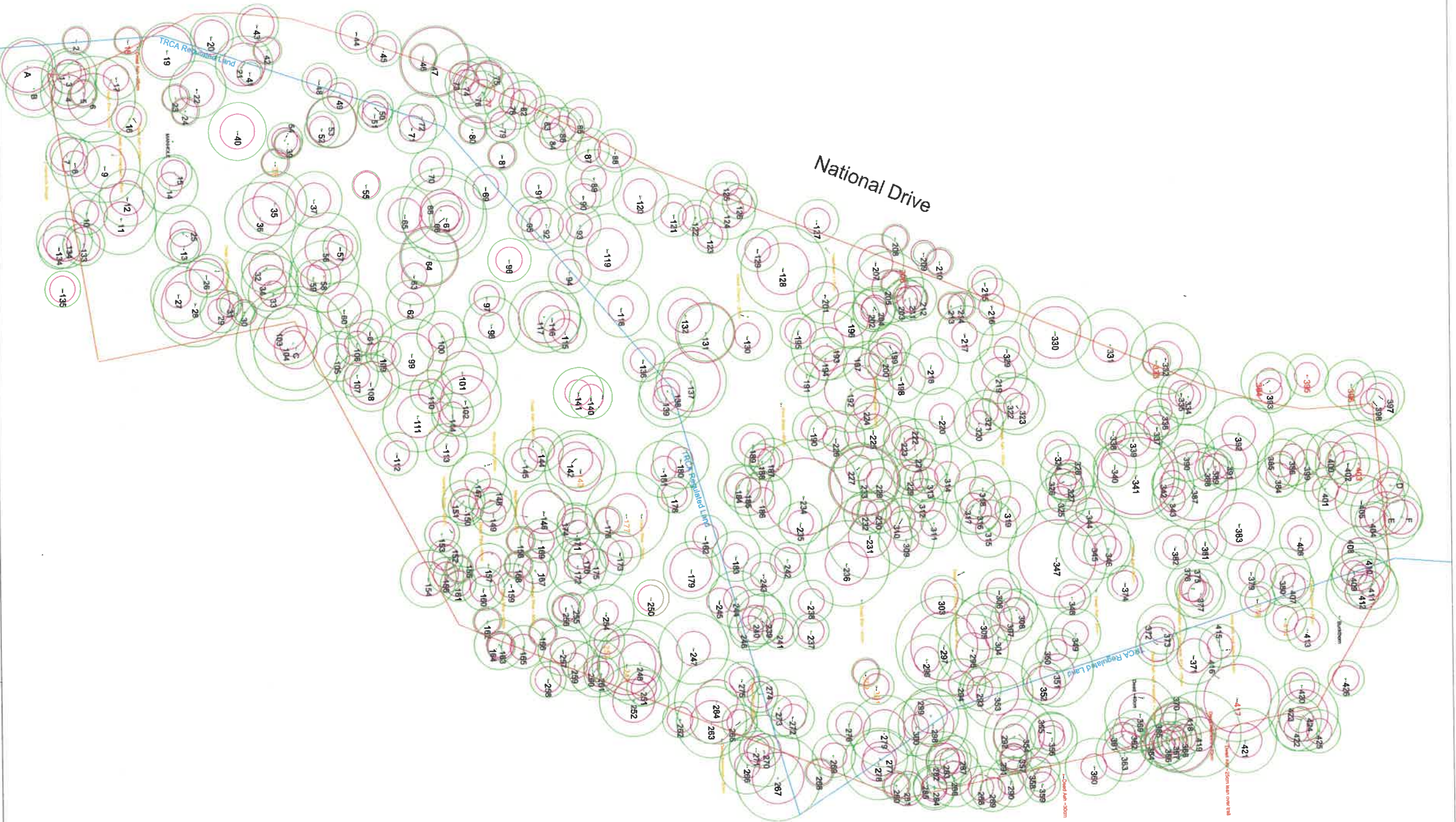
Rev 3

WATER SERVICE CONNECTION

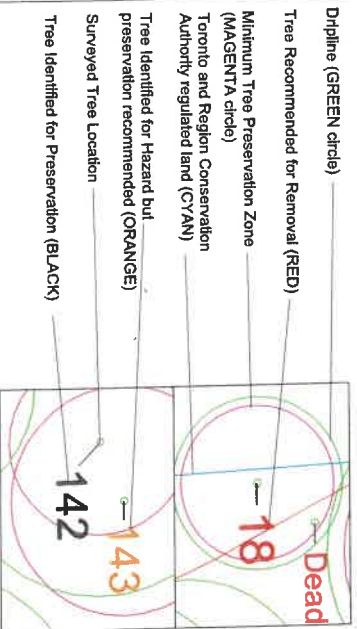
19 and 25mm DIAMETER SIZES

OPSD 1104.010





LEGEND



Tree Inventory
Refer to Table 1 of report dated 4 February 2021 for complete tree inventory information. Trees over 15cm DBH on and within six metres of the subject property and trees of all diameters within the road right-of-way were included in the inventory.

Tree Removals
The removal of 9 tagged trees and 4 dead trees is recommended due to hazardous condition to the street and the trail as indicated with RED labels.

Tree Preservation
Preservation of all remaining tree resources will be possible. 9 tagged trees and 26 dead trees are in hazardous condition but preservation is possible as shown with ORANGE labels. The remaining trees are indicated with BLACK labels. Minimum Tree Preservation Zones (mTPZ) is indicated in MAGENTA. mTPZ circles represent minimum distances for construction and grading near trees. Diphline is shown in GREEN circle.

Issue	Issue/Revisions	Date	By
1	Report Submission	4 Feb. 2021	KH

Base Data: York Maps (raster)

Noica Consulting
c/o AJ Lucas Tree Service
102 Angella Avenue
Woodbridge, Ontario L4L 8N9
Property
167 National Drive
Vaughan, ON

Existing Conditions & Tree Inventory

Project	P2645	Figure	1
Date	4 February 2021		
Scale	1:300		

Table 1. Tree Inventory

Location: 167 National Drive, Vaughan

Date: 29 January and 1 February 2020

Surveyors: KH

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	CDB	DL	mTPZ	Comments	Protected by By-law	Owner	Hazard Trees
1	Black Cherry	<i>Prunus serotina</i>	15.5	F	F	F		3	1.8	Lean (M) to west, bow (L), crook (L)	Yes	City	
2	Sugar Maple	<i>Acer saccharum</i>	14.5	G	F	G		2	1.8	Lean (L) to west, asymmetrical crown (H)	Yes	City	
3	Sugar Maple	<i>Acer saccharum</i>	39.5	FG	FG	G		4	2.4	Growth deficit (L) at base with rot, asymmetrical crown (M)	Yes	Private	
4	Sugar Maple	<i>Acer saccharum</i>	39	G	G	G		4	2.4	Crook (L), sap sucker damage (L)	Yes	Private	
5	Sugar Maple	<i>Acer saccharum</i>	15.5	P	G	F		2	1.8	Sweep (L), canker (H) at 4m	No	Private	
6	Sugar Maple	<i>Acer saccharum</i>	52, 24	FG	FG	FG		6	3.6	Union at 0.8m with included bark (M), broken branches (M)	Yes	Private	
7	Eastern Hemlock	<i>Tsuga canadensis</i>	32	F	G	F		3	2.4	Lean (L) to north, hollow stem, wood pecker damage (L)	Yes	Private	
8	Sugar Maple	<i>Acer saccharum</i>	26	G	G	G		3.5	1.8		Yes	Private	
9	Sugar Maple	<i>Acer saccharum</i>	39, 21	FG	G	G		5	3	Union at base	Yes	Private	
10	Ironwood	<i>Ostrya virginiana</i>	21	FG	F	G		3	1.8	Co-dominance in crown, lean (L) to east, asymmetrical crown (H)	Yes	Private	
11	Sugar Maple	<i>Acer saccharum</i>	34.5	G	FG	G		5	2.4	Asymmetrical crown (M)	Yes	Private	
12	Eastern Hemlock	<i>Tsuga canadensis</i>	31.5	G	G	G		4	2.4		Yes	Private	
13	Manitoba Maple	<i>Acer negundo</i>	31	PF	P	PF		2	2.4	Co-dominance at 3m with included bark (M) but 1 stem snapped, stem wound (M), lost leader, epicormic branches (H)	Yes	Private	
14	Manitoba Maple	<i>Acer negundo</i>	22	F	FG	F		4	1.8	Bow (M) to west, asymmetrical crown (M), epicormic branches (L)	Yes	Private	
15	Manitoba Maple	<i>Acer negundo</i>	15.5	F	G	FG		2.5	1.8	Lean (L) to southwest, crook (M), epicormic branches (M)	No	Private	
16	Sugar Maple	<i>Acer saccharum</i>	15	G	G	G		2.5	1.8		No	Private	
17	Sugar Maple	<i>Acer saccharum</i>	15.5, 15.5	FG	G	G		3	1.8	Co-dominance at base	Yes	Private	
18	Sugar Maple	<i>Acer saccharum</i>	17	P	FG	F		2	1.8	Lean (L) to street, seam (M) with rot, stem wound (M) near base, poor form	Yes	City	Hazard to Street ==> Remove
19	White Pine	<i>Pinus strobus</i>	54.5	PF	FG	F		4	3.6	Cavity on pruning wound, hollow, wood pecker damage (M)	Yes	Private	
20	Manitoba Maple	<i>Acer negundo</i>	34.5	PF	F	F		3	2.4	Union at 0.5m but 1 stem pruned with rot, bow (M) to south, crook (M), broken branches (M), epicormic branches (H)	Yes	Private	
21	Manitoba Maple	<i>Acer negundo</i>	34, 23	PF	PF	PF	20	4	3	Union at base, lean (L-M), crook (H), pruning wounds (L), poor form, dead branches (L), epicormic branches (H)	Yes	Private	
22	Manitoba Maple	<i>Acer negundo</i>	36	PF	PF	F		4	2.4	Co-dominance at 1.8m with included bark (M), 1 stem lost leader at 5m, crook (M), sweep (L), epicormic branches (H)	Yes	Private	
23	Manitoba Maple	<i>Acer negundo</i>	20	P	P	P		2	1.8	Lean (M) to south, lost leader at 3m, epicormic branches (H)	Yes	Private	
24	Poplar	<i>Populus spp.</i>	24.5	P	P	P	90	2	1.8	Lean (M) to north, lost leader, only epicormic branches (L) alive, grape vine competition (H)	Yes	Private	

25	Manitoba Maple	<i>Acer negundo</i>	25.5	PF	F	F		4	1.8	Bow (H) to east, stem wound (L), broken branches (M), epicormic branches (M)	Yes	Private	
26	Black Cherry	<i>Prunus serotina</i>	36	G	G	G		3	2.4		Yes	Private	
27	Sugar Maple	<i>Acer saccharum</i>	26	G	G	G		4	1.8		Yes	Private	
28	Sugar Maple	<i>Acer saccharum</i>	~80	F	FG	F		6	4.8	Lean (L) to east, co-dominance at 6m, union at 1.8m, crook (L), broken branches (M), deadwood, epicormic branches (M)	Yes	Private	
29	Sugar Maple	<i>Acer saccharum</i>	21.5	G	G	G		3	1.8		Yes	Private	
30	Eastern Hemlock	<i>Tsuga canadensis</i>	20	G	G	FG		1.5	1.8		Yes	Private	
31	Eastern Hemlock	<i>Tsuga canadensis</i>	15.5	FG	G	FG		1.5	1.8	Sweep (L)	No	Private	
32	Sugar Maple	<i>Acer saccharum</i>	30	G	F	G		3.5	2.4	Asymmetrical crown (H)	Yes	Private	
33	Sugar Maple	<i>Acer saccharum</i>	29	G	FG	G		3.5	1.8	Asymmetrical crown (M)	Yes	Private	
34	Sugar Maple	<i>Acer saccharum</i>	33, 13	F	G	G		4	2.4	Union at base, co-dominance at 4m with included bark (M)	Yes	Private	
35	Sugar Maple	<i>Acer saccharum</i>	41.5	G	G	G		4.5	3	Asymmetrical crown (L)	Yes	Private	
36	Sugar Maple	<i>Acer saccharum</i>	42	G	G	G		5	3		Yes	Private	
37	Sugar Maple	<i>Acer saccharum</i>	34.5	G	G	G		4	2.4		Yes	Private	
38	Sugar Maple	<i>Acer saccharum</i>	18	P	G	G		2	1.8	Vertical crack with deadwood, co-dominance in crown ==> hazard	No	Private	Hazard
39	Sugar Maple	<i>Acer saccharum</i>	17.5	PF	G	F	15	2	1.8	Poor form, stem wound (M) near base	No	Private	
40	Basswood	<i>Tilia americana</i>	34	G	FG	G		4	2.4	Crook (L)	Yes	Private	
41	Black Cherry	<i>Prunus serotina</i>	15	P	P	F	75	1.5	1.8	Lost leader at 6m, epicormic branches (M)	No	Private	
42	White Oak	<i>Quercus alba</i>	24.5	G	G	G		2	1.8		Yes	Private	
43	Black Cherry	<i>Prunus serotina</i>	32	F	F	F	20	3	2.4	Crook (M), stem wound (L) at base, dead branches (L), broken branches (L), epicormic branches (H)	Yes	Private	
44	Sugar Maple	<i>Acer saccharum</i>	31.5	FG	FG	FG		3	2.4	Lean (L), sweep (L), asymmetrical crown (M)	Yes	City	
45	Ironwood	<i>Ostrya virginiana</i>	16	FG	G	G		2.5	1.8	Lean (L) to south, crook (L)	No	Private	
46	Sugar Maple	<i>Acer saccharum</i>	15	G	G	G		2	1.8	Understory tree	Yes	City	
47	White Pine	<i>Pinus strobus</i>	72.5	G	F	F	20	5	4.8	Bow (M)	Yes	City	
48	Basswood	<i>Tilia americana</i>	17, 12	FG	G	G		2.5	1.8	Union at base, sweep (L), crook (L)	Yes	Private	
49	Ironwood	<i>Ostrya virginiana</i>	20.5	FG	G	G		2.5	1.8	Crook (M)	Yes	Private	
50	Sugar Maple	<i>Acer saccharum</i>	17	G	G	G		2.5	1.8		No	Private	
51	Black Cherry	<i>Prunus serotina</i>	16	FG	G	FG		2.5	1.8	Crook (M)	No	Private	
52	Sugar Maple	<i>Acer saccharum</i>	21.5	FG	G	G		2.5	1.8	Co-dominance in crown, crook (L)	Yes	Private	
53	Basswood	<i>Tilia americana</i>	53.5	FG	G	FG		3.5	3.6	Small crown, co-dominance at 3m with included bark (M)	Yes	Private	
54	Sugar Maple	<i>Acer saccharum</i>	16.5	PF	G	G		2.5	1.8	Stem wound (H) at base with rot, little reaction wood	Yes	Private	
55	Sugar Maple	<i>Acer saccharum</i>	18	F	G	F		2	1.8	Union at base but 1 stem dead, stem wound (M), crook (L)	No	Private	
56	Sugar Maple	<i>Acer saccharum</i>	45	FG	G	G		5	3	Co-dominance at 3m with included bark (M)	Yes	Private	
57	American Beech	<i>Fagus grandifolia</i>	16	G	G	G		2.5	1.8		No	Private	
58	Sugar Maple	<i>Acer saccharum</i>	33.5	G	G	G		5	2.4	Asymmetrical crown (L)	Yes	Private	
59	Ironwood	<i>Ostrya virginiana</i>	16.5	G	FG	G		2.5	1.8	Asymmetrical crown (M)	No	Private	
60	Sugar Maple	<i>Acer saccharum</i>	34	G	G	G		4	2.4		Yes	Private	
61	Ironwood	<i>Ostrya virginiana</i>	18	G	G	G		3	1.8		No	Private	
62	Sugar Maple	<i>Acer saccharum</i>	23	G	G	G		3.5	1.8		Yes	Private	

63	Sugar Maple	<i>Acer saccharum</i>	22	G	G	G		4	1.8		Yes	Private	
64	White Pine	<i>Pinus strobus</i>	69	G	F	F		4	4.2	Small crown, broken branches (M)	Yes	Private	
65	Sugar Maple	<i>Acer saccharum</i>	38	FG	G	G		4	2.4	Union at 5m, crook (L)	Yes	Private	
66	Sugar Maple	<i>Acer saccharum</i>	55.5	G	G	G		6	3.6		Yes	Private	
67	Sugar Maple	<i>Acer saccharum</i>	17	G	G	G		2.5	1.8		No	Private	
68	Sugar Maple	<i>Acer saccharum</i>	48.5	FG	G	G		6	3	Co-dominance at 8	Yes	Private	
69	Ironwood	<i>Ostrya virginiana</i>	18	G	G	G		3	1.8		No	Private	
70	Sugar Maple	<i>Acer saccharum</i>	19.5	G	G	G		3	1.8		No	Private	
71	Poplar	<i>Populus spp.</i>	22.5	G	G	G		3.5	1.8		Yes	Private	
72	Sugar Maple	<i>Acer saccharum</i>	20.5	F	G	G		3.5	1.8	Stem wound (M) at base	Yes	Private	
73	Sugar Maple	<i>Acer saccharum</i>	26.5	G	G	G		4.5	1.8		Yes	Private	
74	Sugar Maple	<i>Acer saccharum</i>	14.5	G	G	G		3	1.8		No	Private	
75	Sugar Maple	<i>Acer saccharum</i>	11	G	G	G		2	1.8	Understory tree	Yes	City	
76	Sugar Maple	<i>Acer saccharum</i>	21	G	FG	G		3	1.8	Sweep (L), asymmetrical crown (M), understory tree	Yes	Private	
77	White Pine	<i>Pinus strobus</i>	70	G	P	P	75	5	4.2	Dead leader, deadwood, dead branches (H)	Yes	Private	Hazard to Street ==> Remove
78	Sugar Maple	<i>Acer saccharum</i>	28.5	G	FG	G		4	1.8	Asymmetrical crown (M)	Yes	Private	
79	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	G		2.5	1.8		No	Private	
80	Sugar Maple	<i>Acer saccharum</i>	15	G	G	G		2	1.8		No	Private	
81	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		2	1.8		No	Private	
82	Sugar Maple	<i>Acer saccharum</i>	18	G	FG	G		3	1.8	Asymmetrical crown (M)	Yes	City	
83	Sugar Maple	<i>Acer saccharum</i>	19.5	G	F	G		3	1.8	Asymmetrical crown (H)	No	Private	
84	Sugar Maple	<i>Acer saccharum</i>	25.5	FG	G	G		4	1.8	Co-dominance at 5m	Yes	Private	
85	Black Cherry	<i>Prunus serotina</i>	23.5	F	G	FG		3	1.8	Lean (M) to northwest, co-dominance in crown, crook (L)	Yes	City	
86	Sugar Maple	<i>Acer saccharum</i>	21	G	G	G		3	1.8		Yes	Private	
87	Sugar Maple	<i>Acer saccharum</i>	22.5	G	FG	G		3	1.8	Asymmetrical crown (M)	Yes	Private	
88	Sugar Maple	<i>Acer saccharum</i>	34, 22	FG	G	G		3	2.4	Co-dominance at 0.8m with included bark (M)	Yes	Private	
89	Sugar Maple	<i>Acer saccharum</i>	22	G	G	G		4	1.8		Yes	Private	
90	Sugar Maple	<i>Acer saccharum</i>	15.5	F	FG	F		2.5	1.8	Stem wound (M) at base, asymmetrical crown (M)	No	Private	
91	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		2.5	1.8		No	Private	
92	Eastern Hemlock	<i>Tsuga canadensis</i>	38.5	FG	G	FG		3.5	2.4	Lean (L) to north	Yes	Private	
93	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	G		3	1.8		No	Private	
94	Sugar Maple	<i>Acer saccharum</i>	18.5	PF	G	FG		3	1.8	Stem wound (H) at base, deadwood	No	Private	
95	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	G		3	1.8		No	Private	
96	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		3	1.8	Asymmetrical crown (L)	No	Private	
97	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	G		2.5	1.8		No	Private	
98	Sugar Maple	<i>Acer saccharum</i>	21.5	G	G	G		4	1.8		Yes	Private	
99	Sugar Maple	<i>Acer saccharum</i>	43	FG	G	G		5	3	Sweep (M)	Yes	Private	
100	Ironwood	<i>Ostrya virginiana</i>	20.5	G	G	G		3.5	1.8		Yes	Private	
101	Sugar Maple	<i>Acer saccharum</i>	46.5	F	G	FG		5	3	Stem wound (M), lean (L) to south	Yes	Private	
102	Sugar Maple	<i>Acer saccharum</i>	54	FG	G	G		5	3.6	Lean (L) to east, crook (L)	Yes	Private	
103	Sugar Maple	<i>Acer saccharum</i>	38, 24, 21	FG	FG	G		5	3	Union at base, sweep (L), co- dominance in crown, asymmetrical crown (M)	Yes	Neighbour	
104	Sugar Maple	<i>Acer saccharum</i>	~42	PF	G	F		8	3	Growing from side of bank, lean (M) over creek	Yes	Neighbour	
105	Sugar Maple	<i>Acer saccharum</i>	24	FG	G	G		3.5	1.8	Sweep (L), co-dominance in crown	Yes	Private	
106	Ironwood	<i>Ostrya virginiana</i>	17	G	G	G		3	1.8		No	Private	
107	Sugar Maple	<i>Acer saccharum</i>	18.5	FG	FG	FG		3	1.8	Bow (L), crook (M), asymmetrical crown (M), understory tree	No	Private	

108	Sugar Maple	<i>Acer saccharum</i>	44	FG	G	G		4	3	Lean (L) to east, asymmetrical crown (L)	Yes	Private	
109	Sugar Maple	<i>Acer saccharum</i>	17.5	G	G	G		2.5	1.8		No	Private	
110	Sugar Maple	<i>Acer saccharum</i>	21	FG	G	G		3	1.8	Co-dominance in crown, crook (L)	Yes	Private	
111	Sugar Maple	<i>Acer saccharum</i>	50	F	FG	FG		5	3	Union at 4m with included bark (M), cavity, stem wound (L), asymmetrical crown (M), crook (L)	Yes	Private	
112	Sugar Maple	<i>Acer saccharum</i>	17.5	G	FG	G		3	1.8	Asymmetrical crown (M)	No	Private	
113	Sugar Maple	<i>Acer saccharum</i>	24	FG	FG	FG		3	1.8	Crook (M), asymmetrical crown (M)	Yes	Private	
114	Sugar Maple	<i>Acer saccharum</i>	19	F	G	G		3	1.8	Crook (H)	No	Private	
115	Sugar Maple	<i>Acer saccharum</i>	18	G	FG	G		3	1.8	Asymmetrical crown (M)	No	Private	
116	Sugar Maple	<i>Acer saccharum</i>	29.5	G	FG	G		4	1.8	Asymmetrical crown (M)	Yes	Private	
117	Yellow Birch	<i>Betula alleghaniensis</i>	51	G	FG	F	15	5	3.6	Broken branches (L), dead branches (L)	Yes	Private	
118	Ironwood	<i>Ostrya virginiana</i>	25	G	G	G		4	1.8		Yes	Private	
119	Sugar Maple	<i>Acer saccharum</i>	45.5	G	G	FG		5	3		Yes	Private	
120	Ironwood	<i>Ostrya virginiana</i>	28.5, 28	F	G	FG		4	2.4	Co-dominance at 0.8m with included bark (H), co-dominance in crown	Yes	Private	
121	Basswood	<i>Tilia americana</i>	20.5	G	G	G		3	1.8		Yes	Private	
122	Sugar Maple	<i>Acer saccharum</i>	19.5	F	F	F		2.5	1.8	Union at 0.3m but 1 stem pruned, crook (M), pruning wounds 9M)	No	Private	
123	Basswood	<i>Tilia americana</i>	17.5	G	G	G		2.5	1.8	Crook (L)	No	Private	
124	Poplar	<i>Populus spp.</i>	30.5	FG	G	G		4	2.4	Lean (L) to southwest	Yes	Private	
125	Sugar Maple	<i>Acer saccharum</i>	18.5	FG	G	G		3	1.8	Co-dominance at 4m	Yes	City	
126	Sugar Maple	<i>Acer saccharum</i>	15	G	G	G		2.5	1.8		Yes	City	
127	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		3	1.8	Stem wound (L)	Yes	City	
128	Red Oak	<i>Quercus rubra</i>	54.5	FG	G	G		6	3.6	Lean (L) to northeast, union at 3m with included bark (L), pruning wounds (L)	Yes	Private	
129	Basswood	<i>Tilia americana</i>	23	G	FG	G		3	1.8	Asymmetrical crown (M)	Yes	Private	
130	Sugar Maple	<i>Acer saccharum</i>	21	G	G	G		3.5	1.8		Yes	Private	
131	White Pine	<i>Pinus strobus</i>	62	G	G	P	25	4	4.2	In decline	Yes	Private	
132	Sugar Maple	<i>Acer saccharum</i>	33.5	G	G	G		4	2.4		Yes	Private	
133	Eastern Hemlock	<i>Tsuga canadensis</i>	34.5	FG	FG	FG		3	2.4	Sweep (L), asymmetrical crown (M)	Yes	Neighbour	
134	Sugar Maple	<i>Acer saccharum</i>	30, 28, 27	FG	G	G		4	3	3 trees, sweep (L)	Yes	Neighbour	
	Ironwood	<i>Ostrya virginiana</i>	22	G	FG	G		3	1.8	Asymmetrical crown (M), growing with Sugar Maples	Yes	Neighbour	
135	Sugar Maple	<i>Acer saccharum</i>	15	G	FG	G		2.5	1.8	Asymmetrical crown (M)	No	Neighbour	
136	Sugar Maple	<i>Acer saccharum</i>	20	G	G	G		3	1.8		Yes	Private	
137	White Oak	<i>Quercus alba</i>	62	FG	G	G		5	4.2	Seam (L)	Yes	Private	
138	Sugar Maple	<i>Acer saccharum</i>	26	G	G	G		4	1.8		Yes	Private	
139	Sugar Maple	<i>Acer saccharum</i>	27	G	FG	G		4	1.8	Asymmetrical crown (M)	Yes	Private	
140	Sugar Maple	<i>Acer saccharum</i>	19	P	F	F		3	1.8	Stem wound (H) at base, vertical crack, co-dominance in crown	No	Private	
141	Sugar Maple	<i>Acer saccharum</i>	23.5	G	G	G		3.5	1.8		Yes	Private	
142	Sugar Maple	<i>Acer saccharum</i>	30	G	G	G		4	2.4	Asymmetrical crown (L)	Yes	Private	
143	Sugar Maple	<i>Acer saccharum</i>	44	P	G	F		5	3	Stem wound (H), decay, wood pecker damage (M) ==> hazard	Yes	Private	Hazard
144	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		3	1.8	Asymmetrical crown (L)	No	Private	
145	Ironwood	<i>Ostrya virginiana</i>	23	G	G	G		3	1.8		Yes	Private	
146	Eastern Hemlock	<i>Tsuga canadensis</i>	43	FG	FG	FG		4	3	Lean (L), asymmetrical crown (M), sweep (L)	Yes	Private	
147	Sugar Maple	<i>Acer saccharum</i>	23	G	G	G		4	1.8	Crook (L)	Yes	Private	

148	Eastern Hemlock	<i>Tsuga canadensis</i>	26	P	P	P	50	3	1.8	Lost leader, asymmetrical crown (H), dead branches (H)	Yes	Private	
149	Ironwood	<i>Ostrya virginiana</i>	20.5	G	G	G		3	1.8		Yes	Private	
150	Eastern Hemlock	<i>Tsuga canadensis</i>	24	FG	G	FG		2.5	1.8	Lean (L) to south, crook (L)	Yes	Private	
151	Eastern Hemlock	<i>Tsuga canadensis</i>	29	G	G	G		3	1.8		Yes	Private	
152	Sugar Maple	<i>Acer saccharum</i>	17	G	FG	G		2.5	1.8	Asymmetrical crown (M)	No	Private	
153	Sugar Maple	<i>Acer saccharum</i>	18.5	FG	FG	G		2.5	1.8	Co-dominance at 2.5m with included bark (M), asymmetrical crown (M), crook (L)	Yes	Private	
154	Sugar Maple	<i>Acer saccharum</i>	31	FG	G	G		4	2.4	Co-dominance in crown	Yes	Neighbour	
155	Sugar Maple	<i>Acer saccharum</i>	15	G	FG	G		2	1.8	Asymmetrical crown (M)	No	Private	
156	Sugar Maple	<i>Acer saccharum</i>	18	G	FG	G		2.5	1.8	Asymmetrical crown (M)	No	Private	
157	Sugar Maple	<i>Acer saccharum</i>	20	G	G	F	15	3	1.8		Yes	Private	
158	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		2	1.8		No	Private	
159	Sugar Maple	<i>Acer saccharum</i>	25	G	G	G		3	1.8		Yes	Private	
160	Sugar Maple	<i>Acer saccharum</i>	23	G	FG	G		3	1.8	Asymmetrical crown (M)	Yes	Private	
161	Sugar Maple	<i>Acer saccharum</i>	15	F	F	F	15	2.5	1.8	Bow (M) to southeast, dead branches (L)	No	Private	
162	Sugar Maple	<i>Acer saccharum</i>	18.5	G	F	G		2	1.8	Asymmetrical crown (H)	No	Private	
163	Sugar Maple	<i>Acer saccharum</i>	22.5	G	FG	G		2	1.8	Asymmetrical crown (M)	Yes	Neighbour	
164	Sugar Maple	<i>Acer saccharum</i>	27.5	G	G	G		3.5	1.8	Asymmetrical crown (L)	Yes	Neighbour	
165	Sugar Maple	<i>Acer saccharum</i>	25	G	FG	G		3	1.8	Asymmetrical crown (M)	Yes	Private	
166	Sugar Maple	<i>Acer saccharum</i>	16	G	FG	G		2	1.8	Asymmetrical crown (M)	No	Private	
167	Sugar Maple	<i>Acer saccharum</i>	20.5, 14.5	FG	G	G		3	1.8	Union at base	Yes	Private	
168	Sugar Maple	<i>Acer saccharum</i>	21	FG	G	G		2	1.8	Co-dominance at 4m with included bark (L)	Yes	Private	
169	Sugar Maple	<i>Acer saccharum</i>	19	G	G	G		3	1.8		No	Private	
170	Sugar Maple	<i>Acer saccharum</i>	17.5	G	G	G		2.5	1.8		No	Private	
171	Sugar Maple	<i>Acer saccharum</i>	18	G	G	G		3	1.8		No	Private	
172	Sugar Maple	<i>Acer saccharum</i>	29	G	G	G		4	1.8		Yes	Private	
173	Sugar Maple	<i>Acer saccharum</i>	15.5	G	G	G		3	1.8		No	Private	
174	Sugar Maple	<i>Acer saccharum</i>	17	G	G	G		2.5	1.8	Crook (L)	No	Private	
175	Sugar Maple	<i>Acer saccharum</i>	27	G	G	G		4	1.8		Yes	Private	
176	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	F	10	2	1.8	Epicormic branches (M)	No	Private	
177	Black Cherry	<i>Prunus serotina</i>	41	P	F	F		6	3	Stem wound (H) at base on north side, lean (M) to south, crook (M), deadwood, deadbranches (M) ==> hazard	Yes	Private	Hazard
178	Ironwood	<i>Ostrya virginiana</i>	18.5	G	G	G		2.5	1.8		No	Private	
179	Eastern Hemlock	<i>Tsuga canadensis</i>	42.5	FG	G	G		4	3	Lean (L) to west	Yes	Private	
180	Sugar Maple	<i>Acer saccharum</i>	26	G	G	G		4	1.8		Yes	Private	
181	Ironwood	<i>Ostrya virginiana</i>	27.5	FG	G	G		4	1.8	Co-dominance in crown, crook (M)	Yes	Private	
182	Sugar Maple	<i>Acer saccharum</i>	20	F	G	G		3	1.8	Sweep (L), stem wound (L), co-dominance in crown	Yes	Private	
183	Sugar Maple	<i>Acer saccharum</i>	21	G	FG	G		3.5	1.8	Asymmetrical crown (M)	Yes	Private	
184	Ironwood	<i>Ostrya virginiana</i>	21.5	FG	G	G		3	1.8	Crook (M), co-dominance in crown	Yes	Private	
185	Ironwood	<i>Ostrya virginiana</i>	21	G	G	G		3.5	1.8	Seam (L)	Yes	Private	
186	Sugar Maple	<i>Acer saccharum</i>	28	G	G	G		4	1.8		Yes	Private	
187	Ironwood	<i>Ostrya virginiana</i>	18	G	G	G		3	1.8		No	Private	
188	Ironwood	<i>Ostrya virginiana</i>	15.5	PF	FG	G		2.5	1.8	Crook (L), asymmetrical crown (M), stem wound (M) at base with rot	No	Private	
189	Sugar Maple	<i>Acer saccharum</i>	19	F	G	G		3	1.8	Stem wound (M) at base	No	Private	
190	Ironwood	<i>Ostrya virginiana</i>	21.5	G	G	G		3	1.8		Yes	Private	

191	Ironwood	<i>Ostrya virginiana</i>	22.5	FG	FG	G		3	1.8	Lean (L) to north, crook (M), asymmetrical crown (M)	Yes	Private	
192	Sugar Maple	<i>Acer saccharum</i>	55	G	G	G		6	3.6		Yes	Private	
193	Sugar Maple	<i>Acer saccharum</i>	35	G	G	G		5	2.4		Yes	Private	
194	Ironwood	<i>Ostrya virginiana</i>	21	G	FG	G		3	1.8	Asymmetrical crown (M)	Yes	Private	
195	Sugar Maple	<i>Acer saccharum</i>	20.5	G	F	F		2.5	1.8	Asymmetrical crown (H)	Yes	Private	
196	Ironwood	<i>Ostrya virginiana</i>	30	G	G	G		4	2.4		Yes	Private	
197	Sugar Maple	<i>Acer saccharum</i>	20.5	G	G	G		3.5	1.8		Yes	Private	
198	Basswood	<i>Tilia americana</i>	23.5	G	G	G		3.5	1.8		Yes	Private	
199	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		3	1.8		No	Private	
200	Poplar	<i>Populus spp.</i>	32	G	G	FG		3	2.4		Yes	Private	
201	Sugar Maple	<i>Acer saccharum</i>	25	G	G	G		4	1.8		Yes	Private	
202	Sugar Maple	<i>Acer saccharum</i>	18.5	G	G	G		3	1.8		No	Private	
203	Sugar Maple	<i>Acer saccharum</i>	22	G	G	G		3	1.8		Yes	Private	
204	Sugar Maple	<i>Acer saccharum</i>	22	G	G	G		3	1.8	Stem wound (L)	Yes	Private	
205	Sugar Maple	<i>Acer saccharum</i>	36	G	G	G		5	2.4	Stem wound (L) at base	Yes	Private	
206	Poplar	<i>Populus spp.</i>	18.5	P	P	P	90	2	1.8	Crook (M), asymmetrical crown (H), deadwood, dead leader, hollow stem	No	Private	Hazard to Street ==> Remove
207	Black Cherry	<i>Prunus serotina</i>	32.5	F	F	F		4	2.4	Stem wound (M), lean (L) to west, crook (L), asymmetrical crown (M), co-dominance in crown	Yes	Private	
208	Poplar	<i>Populus spp.</i>	16	G	F	F	15	2	1.8	Asymmetrical crown (H)	Yes	City	
209	Poplar	<i>Populus spp.</i>	12.5	G	G	G		1.5	1.8		Yes	City	
210	Poplar	<i>Populus spp.</i>	21	G	G	G		2	1.8		Yes	City	
211	Poplar	<i>Populus spp.</i>	21.5	G	G	F	10	2.5	1.8		Yes	Private	
212	Poplar	<i>Populus spp.</i>	23.5	G	G	G		3	1.8	Deadwood	Yes	Private	
213	Poplar	<i>Populus spp.</i>	16	G	G	G		2	1.8		No	Private	
214	Poplar	<i>Populus spp.</i>	18.5	F	F	F	20	2	1.8	Lost leader, bow (L) to west	No	Private	
215	Sugar Maple	<i>Acer saccharum</i>	17	FG	FG	G		2.5	1.8	Bow (L), crook (L), asymmetrical crown (M)	Yes	City	
216	Sugar Maple	<i>Acer saccharum</i>	29	G	G	G		4	1.8		Yes	Private	
217	Sugar Maple	<i>Acer saccharum</i>	24	FG	G	G		4	1.8	Co-dominance in crown	Yes	Private	
218	Poplar	<i>Populus spp.</i>	26	G	G	PF	25	4	1.8		Yes	Private	
219	Sugar Maple	<i>Acer saccharum</i>	30.5	FG	G	G		4	2.4	Co-dominance at 5m with included bark (H)	Yes	Private	
220	Sugar Maple	<i>Acer saccharum</i>	28	G	G	G		4	1.8		Yes	Private	
221	Black Cherry	<i>Prunus serotina</i>	38	FG	G	F	20	5	2.4	Co-dominance at 5m with included bark (M), grape vine competition (H)	Yes	Private	
222	Black Cherry	<i>Prunus serotina</i>	19	F	P	P	30	3	1.8	Lean (L) to south, crook (L)	No	Private	
223	Sugar Maple	<i>Acer saccharum</i>	15.5	PF	G	G		3	1.8	Stem wound (H) at base	No	Private	
224	Basswood	<i>Tilia americana</i>	17	FG	FG	G		3	1.8	Lean (L) to northwest, sweep (L), asymmetrical crown (M)	No	Private	
225	Black Cherry	<i>Prunus serotina</i>	35	G	G	F	20	4	2.4	Grape vine competition (H)	Yes	Private	
226	Ironwood	<i>Ostrya virginiana</i>	26	FG	G	G		4	1.8	Sweep (L), co-dominance in crown	Yes	Private	
227	Black Cherry	<i>Prunus serotina</i>	25	FG	G	G		3.5	1.8	Crook (L), sweep (L), co-dominance at 5m, epicormic branches (M)	Yes	Private	
228	Ironwood	<i>Ostrya virginiana</i>	15.5, 9.5	FG	G	G		3	1.8	Union at 0.5m	Yes	Private	
229	Black Cherry	<i>Prunus serotina</i>	24	G	G	G		2.5	1.8		Yes	Private	
230	Ironwood	<i>Ostrya virginiana</i>	20.5	G	G	G		3	1.8	Sweep (L)	Yes	Private	
231	Black Cherry	<i>Prunus serotina</i>	43	FG	G	F	20	6	3	Lean (L) to north, co-dominance at 5m, crook (L), deadwood	Yes	Private	
232	Ironwood	<i>Ostrya virginiana</i>	24	G	G	G		3	1.8	Sweep (L)	Yes	Private	
233	White Pine	<i>Pinus strobus</i>	76	G	G	PF	15	5	4.8	Deadwood with fruiting bodies, dead leader	Yes	Private	

234	Red Oak	<i>Quercus rubra</i>	86	FG	G	G		8	5.4	Sweep (L)	Yes	Private	
235	Ironwood	<i>Ostrya virginiana</i>	21	G	G	G		3	1.8		Yes	Private	
236	Sugar Maple	<i>Acer saccharum</i>	43	FG	G	G		6	3	Co-dominance at 5m with included bark (M)	Yes	Private	
237	Sugar Maple	<i>Acer saccharum</i>	16	PF	G	G		2.5	1.8		No	Private	
238	Sugar Maple	<i>Acer saccharum</i>	23.5	G	G	G		3	1.8	Stem wound (H) at base	Yes	Private	
239	Ironwood	<i>Ostrya virginiana</i>	20.5, 20	FG	G	G		3.5	1.8	Co-dominance at 0.3m with included bark (M)	Yes	Private	
240	Ironwood	<i>Ostrya virginiana</i>	19, 18.5	FG	G	FG	10	4	1.8	Co-dominance at base	Yes	Private	
241	Ironwood	<i>Ostrya virginiana</i>	16.5	G	G	G		2.5	1.8		No	Private	
242	Ironwood	<i>Ostrya virginiana</i>	19.5	G	G	G		2.5	1.8		No	Private	
243	Sugar Maple	<i>Acer saccharum</i>	21	G	G	G		3	1.8		Yes	Private	
244	Sugar Maple	<i>Acer saccharum</i>	26	G	G	G		4	1.8		Yes	Private	
245	Sugar Maple	<i>Acer saccharum</i>	19	G	FG	G		3	1.8	Asymmetrical crown (M)	No	Private	
246	Ironwood	<i>Ostrya virginiana</i>	17.5	G	G	G		3	1.8	Lean (L) to east	No	Private	
247	Sugar Maple	<i>Acer saccharum</i>	32	G	G	G		5	2.4		Yes	Private	
248	Sugar Maple	<i>Acer saccharum</i>	45	G	G	G		6	3		Yes	Private	
249	White Pine	<i>Pinus strobus</i>	63	PF	F	F	15	5	4.2	Vertical crack at base, bow (L) to south, failed tree leaning, cavity ==> hazard	Yes	Private	Hazard
250	Sugar Maple	<i>Acer saccharum</i>	15.5	G	G	G		2.5	1.8		No	Private	
251	Sugar Maple	<i>Acer saccharum</i>	18	G	G	G		2.5	1.8		Yes	Private	
252	Sugar Maple	<i>Acer saccharum</i>	48	FG	G	G		5	3	Sweep (M), crook (L)	Yes	Neighbour	
253	Sugar Maple	<i>Acer saccharum</i>	21	PF	G	G		2.5	1.8	Stem wound (H) at base with rot, co-dominance at 5m, crook (L) ==> hazard	Yes	Private	Hazard
254	Sugar Maple	<i>Acer saccharum</i>	29	G	G	G		4	1.8		Yes	Private	
255	Sugar Maple	<i>Acer saccharum</i>	25	G	G	G		3.5	1.8		Yes	Private	
256	Sugar Maple	<i>Acer saccharum</i>	15.5	G	F	PF	30	2	1.8	Asymmetrical crown (H), dead branches (M)	No	Private	
257	Sugar Maple	<i>Acer saccharum</i>	23.5	G	FG	G		3.5	1.8	Asymmetrical crown (M)	Yes	Private	
258	Sugar Maple	<i>Acer saccharum</i>	18	G	G	F	20	2.5	1.8		No	Neighbour	
259	Sugar Maple	<i>Acer saccharum</i>	22	G	G	G		3.5	1.8		Yes	Private	
260	Sugar Maple	<i>Acer saccharum</i>	26.5	G	G	G		4	1.8		Yes	Private	
261	Sugar Maple	<i>Acer saccharum</i>	17.5	G	G	G		2.5	1.8		No	Private	
262	Ironwood	<i>Ostrya virginiana</i>	17	FG	G	G		2.5	1.8	Co-dominance at 5m	No	Neighbour	
263	Sugar Maple	<i>Acer saccharum</i>	43	G	G	FG		5	3		Yes	Private	
264	Sugar Maple	<i>Acer saccharum</i>	42	FG	G	G		6	3	Co-dominance in crown	Yes	Private	
265	Ironwood	<i>Ostrya virginiana</i>	15.5	G	G	G		2.5	1.8		No	Private	
266	Black Cherry	<i>Prunus serotina</i>	23	PF	PF	PF	40	4	1.8	Lost leader, broken branches (M)	Yes	Neighbour	
267	White Pine	<i>Pinus strobus</i>	54	G	G	F		6	3.6		Yes	Neighbour	
268	Ironwood	<i>Ostrya virginiana</i>	16	F	F	F		2	1.8	Crook (M), asymmetrical crown (M), understory tree	No	Neighbour	
269	Ironwood	<i>Ostrya virginiana</i>	21.5, 19	FG	G	G		3	1.8	Co-dominance at base	Yes	Private	
270	Sugar Maple	<i>Acer saccharum</i>	39	G	G	G		5	2.4		Yes	Neighbour	
271	Ironwood	<i>Ostrya virginiana</i>	15, 12	FG	G	G		2.5	1.8	Co-dominance at base, merged to #270 at base	Yes	Neighbour	
272	Ironwood	<i>Ostrya virginiana</i>	15.5, 11.5	F	G	FG		3	1.8	Co-dominance at base, co-dominance in crown, lean (L) to northwest, crook (L)	Yes	Private	
273	Ironwood	<i>Ostrya virginiana</i>	21	F	FG	FG		4	1.8	Lean (M) to northwest, co-dominance at 4m, crook (M), sweep (L)	Yes	Private	
274	Ironwood	<i>Ostrya virginiana</i>	16	FG	G	G		2.5	1.8	Co-dominance in crown, bow (L) to west	No	Private	

275	Ironwood	<i>Ostrya virginiana</i>	16	G	G	G		2.5	1.8	Crook (L)	No	Private	
276	Sugar Maple	<i>Acer saccharum</i>	18.5	F	FG	G		3	1.8	Stem wound (M) at base, asymmetrical crown (M)	No	Private	
277	Sugar Maple	<i>Acer saccharum</i>	30	FG	G	G		4	2.4	Co-dominance at 4m with included bark (M)	Yes	Private	
278	Sugar Maple	<i>Acer saccharum</i>	38.5	G	G	G		5	2.4		Yes	Private	
279	Eastern Hemlock	<i>Tsuga canadensis</i>	44.5	G	G	FG		5	3		Yes	Private	
280	Eastern Hemlock	<i>Tsuga canadensis</i>	22.5	FG	F	G		2	1.8	Crook (L), sweep (L), asymmetrical crown (H)	Yes	Private	
281	Eastern Hemlock	<i>Tsuga canadensis</i>	34.5	FG	F	F		2	2.4	Crook (M), asymmetrical crown (H)	Yes	Private	
282	Sugar Maple	<i>Acer saccharum</i>	31	G	FG	G		4	2.4	Asymmetrical crown (M)	Yes	Private	
283	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	G		3	1.8		No	Private	
284	Sugar Maple	<i>Acer saccharum</i>	20	FG	FG	FG		3	1.8	Crook (L), asymmetrical crown (M)	Yes	Private	
285	Ironwood	<i>Ostrya virginiana</i>	23	G	F	G		3	1.8	Asymmetrical crown (H)	Yes	Private	
286	Sugar Maple	<i>Acer saccharum</i>	30	G	G	G		4	2.4		Yes	Private	
287	Sugar Maple	<i>Acer saccharum</i>	27	G	G	G		3.5	1.8		Yes	Private	
288	Sugar Maple	<i>Acer saccharum</i>	21	FG	F	G		3	1.8	Bow (L), co-dominance in crown, asymmetrical crown (H)	Yes	Neighbour	
289	Sugar Maple	<i>Acer saccharum</i>	26.5	PF	PF	F		3	1.8	Lost leader at 6m	Yes	Neighbour	
290	Sugar Maple	<i>Acer saccharum</i>	28	G	G	G		3.5	1.8	Asymmetrical crown (L)	Yes	Neighbour	
291	Ironwood	<i>Ostrya virginiana</i>	19	G	G	G		2	1.8	Bow (L) to east	No	Private	
292	White Pine	<i>Pinus strobus</i>	58.5	G	G	F	15	5	3.6	Deadwood	Yes	Private	
293	Basswood	<i>Tilia americana</i>	18.5	F	G	PF	30	3	1.8	Dead leader, bow (M) to southeast	No	Private	
294	American Beech	<i>Fagus grandifolia</i>	24	G	G	G		3.5	1.8		Yes	Private	
295	Sugar Maple	<i>Acer saccharum</i>	34	G	G	G		5	2.4		Yes	Private	
296	Ironwood	<i>Ostrya virginiana</i>	18	G	G	G		3.5	1.8		No	Private	
297	Red Oak	<i>Quercus rubra</i>	79	FG	G	FG		7	4.8	Seam (L), co-dominance at 5m	Yes	Private	
298	Sugar Maple	<i>Acer saccharum</i>	42	G	G	G		5	3		Yes	Private	
299	Sugar Maple	<i>Acer saccharum</i>	37	PF	G	F		4	2.4	Poor form, burl (M)	Yes	Private	
300	Sugar Maple	<i>Acer saccharum</i>	26	G	G	FG		4	1.8	Crook (L)	Yes	Private	
301	Sugar Maple	<i>Acer saccharum</i>	16.5	P	G	G		2.5	1.8	Stem wound (H) at base with rot ==> hazard	No	Private	Hazard
302	Sugar Maple	<i>Acer saccharum</i>	15	P	G	G		2	1.8	Stem wound (H) at base with rot ==> hazard	No	Private	Hazard
303	Ironwood	<i>Ostrya virginiana</i>	33	F	P	P	60	3	2.4	Lean (L) to south, union at 2m, crook (L), broken branches (H)	Yes	Private	
304	Red Oak	<i>Quercus rubra</i>	64	G	G	G		7	4.2		Yes	Private	
305	Sugar Maple	<i>Acer saccharum</i>	38	FG	FG	G		4	2.4	Co-dominance in crown, crook (L), spiral stems, asymmetrical crown (M)	Yes	Private	
306	Ironwood	<i>Ostrya virginiana</i>	20	F	P	P	75	3	1.8	Co-dominance at 5m with 3 stems but 2 stems dead, main leader dead	Yes	Private	
307	Eastern Hemlock	<i>Tsuga canadensis</i>	20.5	G	G	G		3	1.8		Yes	Private	
308	Eastern Hemlock	<i>Tsuga canadensis</i>	16	G	G	G		3	1.8	Sweep (L)	No	Private	
309	Ironwood	<i>Ostrya virginiana</i>	26.5	FG	F	F	25	4	1.8	Co-dominance at 4m but 1 stem dead	Yes	Private	
310	Ironwood	<i>Ostrya virginiana</i>	19, 18.5	FG	G	G		3	1.8	Co-dominance at 0.5m with included bark (M)	Yes	Private	
311	Sugar Maple	<i>Acer saccharum</i>	25	G	G	FG		3.5	1.8	Deadwood	Yes	Private	
312	Black Cherry	<i>Prunus serotina</i>	22	FG	G	FG		3	1.8	Co-dominance in crown, sweep (L)	Yes	Private	
313	Ironwood	<i>Ostrya virginiana</i>	24, 15.5	F	G	FG		3	1.8	Union at 0.6m, co-dominance at 2m with 3 stems	Yes	Private	
314	Sugar Maple	<i>Acer saccharum</i>	26.5	FG	G	G		4	1.8	Co-dominance at 5m with included bark (M)	Yes	Private	

315	Black Cherry	<i>Prunus serotina</i>	29	FG	F	F	25	4	1.8	Co-dominance in crown, broken branches (M), epicormic branches (H)	Yes	Private	
316	Sugar Maple	<i>Acer saccharum</i>	18	G	G	G		3	1.8		No	Private	
317	Sugar Maple	<i>Acer saccharum</i>	26	G	G	G		4	1.8		Yes	Private	
318	Sugar Maple	<i>Acer saccharum</i>	20.5, 11	FG	G	G		4	1.8	Union at 3m	Yes	Private	
319	Ironwood	<i>Ostrya virginiana</i>	23, 21	FG	G	G		4	1.8	Co-dominance at 0.6m with included bark (M)	Yes	Private	
320	Sugar Maple	<i>Acer saccharum</i>	22	G	G	G		3.5	1.8		Yes	Private	
321	Sugar Maple	<i>Acer saccharum</i>	19.5	G	FG	G		3	1.8	Asymmetrical crown (M)	No	Private	
322	Sugar Maple	<i>Acer saccharum</i>	26, 24	F	G	G		4	1.8	Co-dominance at 1m with included bark (H)	Yes	Private	
323	Sugar Maple	<i>Acer saccharum</i>	23, 17	FG	G	G		4	1.8	Union at base	Yes	Private	
324	Sugar Maple	<i>Acer saccharum</i>	19.5	G	G	FG		3	1.8	Grape vine competition (M)	No	Private	
325	Sugar Maple	<i>Acer saccharum</i>	21	G	G	G		3.5	1.8		Yes	Private	
326	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	G		2.5	1.8		No	Private	
327	Sugar Maple	<i>Acer saccharum</i>	18.5	FG	G	G		3	1.8	Co-dominance in crown	No	Private	
328	Sugar Maple	<i>Acer saccharum</i>	27, 10	FG	G	G		4	1.8	Union at base, co-dominance in crown	Yes	Private	
329	Sugar Maple	<i>Acer saccharum</i>	25.5	FG	G	G		4	1.8	Co-dominance in crown	Yes	Private	
330	Sugar Maple	<i>Acer saccharum</i>	53.5	FG	G	G		5	3.6	Co-dominance at 6m with 3 stems, pruning wounds (L) with rot	Yes	Private	
331	Sugar Maple	<i>Acer saccharum</i>	30, 16	FG	G	G		5	2.4	Union at base, co-dominance at 4m with included bark (L)	Yes	City	
332	Red Oak	<i>Quercus rubra</i>	35	FG	G	G		5	2.4	Lean (VL) to northwest, co-dominance at 5m	Yes	City	
333	Sugar Maple	<i>Acer saccharum</i>	13.5	P	F	FG		2	1.8	Stem wound (H) at base, lean (L) to west, asymmetrical crown (H)	Yes	City	Hazard to Street ==> Remove
334	Sugar Maple	<i>Acer saccharum</i>	25.5	G	G	G		4	1.8		Yes	Private	
335	Sugar Maple	<i>Acer saccharum</i>	17	G	G	G		3.5	1.8		No	Private	
336	Sugar Maple	<i>Acer saccharum</i>	18.5	FG	G	G		3.5	1.8	Co-dominance at base but 1 stem dead and removed	No	Private	
337	Sugar Maple	<i>Acer saccharum</i>	14.5, 13	FG	G	G		3	1.8	Co-dominance at 0.3m with included bark (M)	Yes	Private	
338	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		2.5	1.8		No	Private	
339	Sugar Maple	<i>Acer saccharum</i>	31	FG	G	G		4	2.4	Co-dominance in crown	Yes	Private	
340	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	G		3	1.8		No	Private	
341	Eastern Hemlock	<i>Tsuga canadensis</i>	~60, 60	FG	G	FG		6	5.4	Co-dominance at 1.2m	Yes	Private	
342	Ironwood	<i>Ostrya virginiana</i>	20.5	G	G	G		3	1.8		Yes	Private	
343	Ironwood	<i>Ostrya virginiana</i>	20	FG	G	FG		3	1.8	Crook (M), epicormic branches (M)	Yes	Private	
344	Ironwood	<i>Ostrya virginiana</i>	21.5	G	G	G		3.5	1.8		Yes	Private	
345	Eastern Hemlock	<i>Tsuga canadensis</i>	48.5	G	G	FG		5	3		Yes	Private	
346	Ironwood	<i>Ostrya virginiana</i>	21.5	G	G	G		3.5	1.8		Yes	Private	
347	Sugar Maple	<i>Acer saccharum</i>	86	F	F	PF	40	7	5.4	Co-dominance at 6m with 3 stems but 1 stem dead and failed, cavity at union, dead branches (M)	Yes	Private	
348	Black Cherry	<i>Prunus serotina</i>	15.5	FG	FG	F		2.5	1.8	Lean (L) to east, crook (M), epicormic branches (M)	No	Private	
349	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		3.5	1.8		No	Private	
350	Eastern Hemlock	<i>Tsuga canadensis</i>	18	G	G	G		3	1.8		No	Private	
351	White Birch	<i>Betula papyrifera</i>	31	F	G	G		5	2.4	Lean (M) to west, sweeo (M)	Yes	Private	
352	Ironwood	<i>Ostrya virginiana</i>	30	P	P	P	80	3	2.4	Lost leader, almost dead	Yes	Private	
353	Sugar Maple	<i>Acer saccharum</i>	35, 32	FG	G	FG		5	3	Co-dominance at 0.6m with included bark (M)	Yes	Private	

354	Ironwood	<i>Ostrya virginiana</i>	15, 13.5	FG	G	G		3	1.8	Co-dominance at 0.5m	Yes	Private	
355	Ironwood	<i>Ostrya virginiana</i>	16, 15	FG	G	G		3	1.8	Co-dominance at 0.2m	Yes	Private	
356	Sugar Maple	<i>Acer saccharum</i>	24.5	G	G	G		3.5	1.8		Yes	Private	
357	Sugar Maple	<i>Acer saccharum</i>	21	G	G	G		2.5	1.8		Yes	Private	
358	Ironwood	<i>Ostrya virginiana</i>	20.5	FG	G	G		3	1.8	Co-dominance in crown, crook (M)	Yes	Neighbour	
359	Ironwood	<i>Ostrya virginiana</i>	15	FG	G	G		2.5	1.8	Crook (M)	No	Neighbour	
360	Sugar Maple	<i>Acer saccharum</i>	24, 19	FG	FG	G		4	1.8	Co-dominance at base, asymmetrical crown (M)	Yes	Neighbour	
361	Sugar Maple	<i>Acer saccharum</i>	17.5	G	F	G		2.5	1.8	Asymmetrical crown (H)	No	Private	
362	Sugar Maple	<i>Acer saccharum</i>	23	G	F	G		3	1.8	Asymmetrical crown (H)	Yes	Private	
363	Sugar Maple	<i>Acer saccharum</i>	42	F	G	G		4	3	Lean (M) to east over trail, co-dominance in crown	Yes	Neighbour	
364	Sugar Maple	<i>Acer saccharum</i>	17.5	G	G	G		3	1.8		No	Neighbour	
365	Sugar Maple	<i>Acer saccharum</i>	22.5	FG	G	G		3	1.8	Co-dominance in crown	Yes	Neighbour	
366	Sugar Maple	<i>Acer saccharum</i>	36	FG	G	FG		4	2.4	Lean (L) to east, asymmetrical crown (M), co-dominance in crown, deadwood	Yes	Neighbour	
367	Sugar Maple	<i>Acer saccharum</i>	18	G	G	G		2.5	1.8	Crook (L), understory tree	No	Neighbour	
368	White Pine	<i>Pinus strobus</i>	73	FG	FG	F	15	5	4.8	Broken branches (L), crook (M)	Yes	Private	
369	Eastern Hemlock	<i>Tsuga canadensis</i>	43	G	G	FG		5	3	Sweep (L)	Yes	Private	
370	Ironwood	<i>Ostrya virginiana</i>	20	FG	G	FG		3	1.8	Crook (M), co-dominance in crown	Yes	Private	
371	Sugar Maple	<i>Acer saccharum</i>	38	G	G	G		4	2.4		Yes	Private	
372	Sugar Maple	<i>Acer saccharum</i>	35	PF	G	G		3	2.4	Lost leader due to failed tree, broken branches (M), bow (L) to east	Yes	Private	
373	Sugar Maple	<i>Acer saccharum</i>	27	G	G	G		3.5	1.8		Yes	Private	
374	Ironwood	<i>Ostrya virginiana</i>	17.5	G	G	G		2.5	1.8		No	Private	
375	Sugar Maple	<i>Acer saccharum</i>	22.5	G	G	G		4	1.8		Yes	Private	
376	Ironwood	<i>Ostrya virginiana</i>	15	G	G	G		2.5	1.8		No	Private	
377	Ironwood	<i>Ostrya virginiana</i>	29	G	G	G		3.5	1.8	Lean (L0 to north	Yes	Private	
378	Sugar Maple	<i>Acer saccharum</i>	15.5	P	G	F		2.5	1.8	Stem wound (H) at base ==> hazard	No	Private	Hazard
379	Sugar Maple	<i>Acer saccharum</i>	17.5	G	G	G		3.5	1.8		No	Private	
380	Black Cherry	<i>Prunus serotina</i>	20	PF	G	G		4	1.8	Loose bark, lean (M) to north, crook (M), cavity at 1.5m	Yes	Private	
381	Ironwood	<i>Ostrya virginiana</i>	18	FG	G	F		3	1.8	Crook (M), epicormic branches (H)	No	Private	
382	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		3	1.8		No	Private	
383	Sugar Maple	<i>Acer saccharum</i>	43	G	G	FG		5	3	Deadwood	Yes	Private	
384	Sugar Maple	<i>Acer saccharum</i>	18.5	G	G	G		3	1.8		No	Private	
385	Sugar Maple	<i>Acer saccharum</i>	20	G	G	G		3.5	1.8		Yes	Private	
386	Black Cherry	<i>Prunus serotina</i>	25	FG	G	FG		4	1.8	Lean (L) to west, crook (M)	Yes	Private	
387	White Pine	<i>Pinus strobus</i>	74, 23	FG	G	FG		6	4.8	Union at 0.8m	Yes	Private	
388	Ironwood	<i>Ostrya virginiana</i>	20	G	G	G		3	1.8		Yes	Private	
389	Ironwood	<i>Ostrya virginiana</i>	18	G	G	G		2.5	1.8		No	Private	
390	Ironwood	<i>Ostrya virginiana</i>	27	G	G	G		4	1.8		Yes	Private	
391	Sugar Maple	<i>Acer saccharum</i>	32	G	G	G		4	2.4		Yes	Private	
392	Sugar Maple	<i>Acer saccharum</i>	32.5	G	G	G		5	2.4		Yes	Private	
393	Sugar Maple	<i>Acer saccharum</i>	17	G	G	G		3	1.8	Stem wound (L) at base	Yes	City	
394	Sugar Maple	<i>Acer saccharum</i>	25	P	G	G		4	1.8	Stem wound (H) at base, cavity with vertical crack ==> hazard	Yes	City	Hazard to Street ==> Remove
395	Sugar Maple	<i>Acer saccharum</i>	17.5	P	PF	PF	30	3	1.8	Stem wound (H), co-dopminance at 3m ==> hazard	Yes	City	Hazard to Street ==> Remove
396	Sugar Maple	<i>Acer saccharum</i>	25.5	P	F	F		3.5	1.8	Crack, loose bark ==> hazard	Yes	City	Hazard to Street ==> Remove
397	Sugar Maple	<i>Acer saccharum</i>	20, 12	FG	G	F	15	3.5	1.8	Union at base, dead leader, co-dominance in crown	Yes	City	

398	Sugar Maple	<i>Acer saccharum</i>	24.5	PF	F	PF	25	3.5	1.8	Loose bark, crack, dead branches (M)	Yes	City	
399	Sugar Maple	<i>Acer saccharum</i>	23.5	G	G	G		4	1.8		Yes	Private	
400	Manitoba Maple	<i>Acer negundo</i>	20	F	F	F		3.5	1.8	Lean (M) to north, crook (M), co-dominance at 4m, epicormic branches (M)	Yes	Private	
401	Black Cherry	<i>Prunus serotina</i>	21	FG	G	FG		3	1.8	Co-dominance at 5m, crook (M)	Yes	Private	
402	Sugar Maple	<i>Acer saccharum</i>	18	G	G	G		3	1.8		No	Private	
403	White Pine	<i>Pinus strobus</i>	68	P	F	F	20	6	4.2	Cavity at base, broken branches (M), deadwood ==> hazard	Yes	Private	Hazard to Street ==> Remove
404	Ironwood	<i>Ostrya virginiana</i>	16	G	G	G		2.5	1.8		No	Private	
405	White Pine	<i>Pinus strobus</i>	56	FG	FG	F		6	3.6	Crook (L), growth deficit (L), asymmetrical crown (M)	Yes	Private	
406	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		3	1.8		No	Private	
407	Sugar Maple	<i>Acer saccharum</i>	17	G	G	G		3	1.8		No	Private	
408	Black Cherry	<i>Prunus serotina</i>	32	FG	G	FG	15	4	2.4	Crook (M), sweep (L), epicormic branches (M)	Yes	Private	
409	Sugar Maple	<i>Acer saccharum</i>	17	FG	G	G		3	1.8	Co-dominance in crown, broken branches (L)	No	Private	
410	Sugar Maple	<i>Acer saccharum</i>	22	FG	G	G		4	1.8	Co-dominance at 5m with included bark (M)	Yes	Private	
411	Sugar Maple	<i>Acer saccharum</i>	22	F	FG	FG		3.5	1.8	Co-dominance in crown, stem wound (M) at base, broken branches (M)	Yes	Private	
412	Manitoba Maple	<i>Acer negundo</i>	32.5	PF	F	F	25	5	2.4	Lean (H) to east, crook (L), coppice growth (H), broken branches (M)	Yes	Private	
413	Sugar Maple	<i>Acer saccharum</i>	16.5	PF	F	PF	40	3	1.8	Lost leader at 4m, broken branches (M)	No	Private	
414	Sugar Maple	<i>Acer saccharum</i>	15.5	P	F	F	15	3	1.8	Stem wound (H) at base, lean (L) to north, epicormic branches (M) ==> hazard	No	Private	Hazard
415	Sugar Maple	<i>Acer saccharum</i>	18	G	G	G		3	1.8		No	Private	
416	Ironwood	<i>Ostrya virginiana</i>	16	FG	G	G		2.5	1.8	Crook (M)	No	Private	
417	Eastern Hemlock	<i>Tsuga canadensis</i>	55, 54	PF	FG	FG		6	4.8	Co-dominance at 0.6m with cavity and vertical crack from union to ground, rot, 1 stem lean (L) to east over trail ==> hazard	Yes	Private	Hazard to Trail ==> Remove
418	Sugar Maple	<i>Acer saccharum</i>	15	G	G	G		2.5	1.8		No	Neighbour	
419	Sugar Maple	<i>Acer saccharum</i>	38	G	G	G		6	2.4	Crook (L), failed tree leaning	Yes	Neighbour	
420	Sugar Maple	<i>Acer saccharum</i>	38.5	G	G	G		4.5	2.4	Deadwood	Yes	Private	
421	Sugar Maple	<i>Acer saccharum</i>	19, 16.5	F	F	F		3	1.8	Union at base, stem wound (M) at base, crook (H), poor form	Yes	Neighbour	
422	Sugar Maple	<i>Acer saccharum</i>	16	F	G	G		2.5	1.8	Stem wound (M) at base	No	Neighbour	
423	Eastern Hemlock	<i>Tsuga canadensis</i>	23	G	G	FG		3	1.8		Yes	Neighbour	
424	Eastern Hemlock	<i>Tsuga canadensis</i>	52	F	FG	F		5	3.6	Crook (M), seam (M) with open cavity	Yes	Neighbour	
425	Apple	<i>Malus spp.</i>	29	PF	PF	PF	20	3	1.8	Bow (M) to northeast, crook (M), deadwood, epicormic branches (H)	Yes	Neighbour	
426	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	G		2.5	1.8		No	Neighbour	
A	White Pine	<i>Pinus strobus</i>	~55	G	G	FG		4	3.6		Yes	Neighbour	
B	Sugar Maple	<i>Acer saccharum</i>	~42	G	G	G		4	3		Yes	Neighbour	
C	Manitoba Maple	<i>Acer negundo</i>	~20	P	F	F		6	1.8	Growing from side of bank, lean (H) over creek	Yes	Neighbour	
D	Ironwood	<i>Ostrya virginiana</i>	~20	G	FG	G		2.5	1.8	Bow (L) to east	Yes	Neighbour	
E	Sugar Maple	<i>Acer saccharum</i>	~45	G	G	G		5	3		Yes	Neighbour	

F	Ironwood	<i>Ostrya virginiana</i>	~30	FG	F	PF	30	3	2.4	Crook (L), stem wound (L), dead branches (L), broken branches (M)	Yes	Neighbour	
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Codes		
DBH	Diameter at Breast Height	(cm)
TI	Trunk Integrity	(G, F, P)
CS	Crown Structure	(G, F, P)
CV	Crown Vigor	(G, F, P)
CDB	Crown Die Back	(%)
DL	Dripline in radius	(m)
mTPZ	minimum Tree Protection Zone	(m)
Owner	Private, Neighbour, City, Region	
~ = estimate; (VL) = very light; (L) = light; (M) = moderate; (H) = heavy; (VH) = very heavy		

Hazard and removal rec 9
Hazard 9

	#	%	
Sugar Maple	257	0.5949074	1
Eastern Hemlock	23	0.0532407	3
White Pine	14	0.0324074	5
Black Cherry	22	0.0509259	4
Ironwood	72	0.1666667	2
Red Oak	5	0.0115741	
Basswood	9	0.0208333	
Manitoba Maple	11	0.025463	
Poplar	13	0.0300926	
TOTAL	426	0.9861111	



Noica Consulting Inc.

**TREE INVENTORY REPORT
167 National Drive
Vaughan, ON**

Prepared for:
**BelCap Management Inc.
8750 Jane Street, Unit 16
Vaughan ON L4K 2M9
Attention: Mr. Lou Pompili**

Prepared By:
**Arborist: Richard Burton
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**Arborist: Derek Thompson
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**Administrative Support
L. Valentine/ML Luna/ Indiana Cornu**

Project No. 21-016

February 16, 2021

Introduction

The work plan for this tree preservation study included the following:

- Prepare inventory of the tree resources greater than 15cm DBH on and within six metres of the subject property and trees of all sizes within the road right-of-way;
- Identify dead, hazard, and diseased trees, and
- Document the findings in a Tree Inventory Report.

Tree resources were assessed utilizing the following parameters:

Tree # - number assigned to tree that corresponds to Figure 1.

Species - common and botanical names provided in the inventory table.

DBH - diameter (centimetres) at breast height, measured at 1.4 m above the ground.

Condition - condition of tree considering trunk integrity, crown structure, and crown vigour. Condition ratings include poor (P), fair (F) and good (G).

Comments - additional relevant detail.

The results of the evaluation are provided below.

Policy Framework

The City of Vaughan Private Tree By-law 185-2007 protect all trees 20cm DBH or greater within the private properties. For multi-stemmed trees, if the sum of the three largest stems is greater than 20cm DBH, the tree is protected by the Private Tree By-law.

The City of Vaughan Public Property Tree Protection By-law protects the trees of all sizes on the public properties, including the road right-of-way.

The minimum Tree Protection Zone (mTPZ) is an area designated for the protection of the tree. Encroachment into the mTPZ of the tree is considered as an injury. Encroachment includes all construction related activities, including grade alteration, excavation, filling, soil compaction, any materials or equipment storage, disposal of liquid and vehicular traffic. The mTPZ of the trees are defined as follows:

Table 2. The mTPZ based on the DBH

DBH (Diameter at Brest Height)	mTPZ (minimum Tree Protection Zone)
<10cm	1.2m
10-20cm	1.2m
21-30cm	1.8m
31-40cm	2.4m
41-50cm	3.0m
51-60cm	3.6m
61-70cm	4.2m
71-80cm	4.8m
81-90cm	5.4m
91-100cm	6.0m
>101cm	6cm protection for each 1cm diameter

* mTPZ are to be measured from the outside edge of the tree base.

The removal or injury of any by-law protected trees will require a permit from the City of Vaughan prior to their removal or injury, except dead trees, hazardous trees, and Ash trees (*Fraxinus spp.*) dying from Emerald Ash Borer (EAB).

Methodology

Trees greater than 15cm DBH on and within six metres of the subject property and trees of all sizes within the road right-of-way were included in the inventory. Trees were located using a handheld GPS unit (Trimble GeoExplorer® 6000 series) accurate to $\pm 1\text{m}$. Trees located on the subject property, within the road right-of-way, and within the Golf Club were tagged with numbers 1-426. Trees located on the residential neighbouring properties were identified with letters A-E. Tree locations are shown on Figure 1. See Table 1 for the results of the inventory.

Dead trees are not included in the tree inventory; however, dead trees are marked with orange flagging tape and their locations are shown on Figure 1. Hazard trees included in the tree inventory are also marked with orange flagging tape.

Existing Site Conditions

The subject property is currently occupied by a woodlot. The neighbouring property to the east is the National Golf Club of Canada. A trail runs parallel to the property boundary on the east side of the subject property. A creek runs parallel to the property boundary on the southeast corner of the subject property. Tree resources exist in the form of natural re-generation. The east side of the subject property is regulated by the Toronto and Region Conservation Authority (TRCA). Refer to Figure 1 for the existing site conditions, Figure 2 for the aerial image of the subject site, and Figure 3 for the topographic survey.

Tree Resources

The tree inventory was conducted on 29 January and 1 February 2021. The inventory documented 432 trees on and within six metres of the subject property. Refer to Table 1 for the full tree inventory and Figure 1 for the location of trees reported in the tree inventory.

Tree resources included in the inventory are comprised of Manitoba Maple (*Acer negundo*), Sugar Maple (*Acer saccharum*), Yellow Birch (*Betula alleghaniensis*), White Birch (*Betula papyrifera*), American Beech (*Fagus grandifolia*), Apple (*Malus spp.*), Ironwood (*Ostrya virginiana*), White Pine (*Pinus strobus*), Poplar (*Populus spp.*), Black Cherry (*Prunus serotina*), White Oak (*Quercus alba*), Red Oak (*Quercus rubra*), Eastern Hemlock (*Tsuga canadensis*), and Basswood (*Tilia americana*).

The woodlot in the subject property mainly consists of Sugar Maple (59.5%) with Ironwood (16.7%), Eastern Hemlock (5.3%), Black Cherry (5.1%), and White Pine (3.2%). Majority of Sugar Maple is smaller than 30cm DBH and almost the entire forest floor is covered with Sugar Maple seedlings and saplings. Several mature Eastern Hemlock and White Pine were observed throughout the property; however, majority shows the signs of decline. There is a large number of dead trees fell over the forest ground. All Ash trees greater than 15cm DBH on the subject property are dead; regeneration of Ash was identified throughout the property. A few invasive Common Buckthorns (*Rhamnus*

cathartica) were identified on the northeast corner of the subject property, in close proximity to the existing trail at the Golf course.

Results

Recommended Tree Removals

The removal of nine hazard trees included in the tree inventory and four dead trees is recommended due to safety concerns to National Drive and the trail within the Golf Club. Trees 18, 77, 206, 333, 394, 395, 396, 403, and a dead Ash approximately 25cm DBH are located along the western perimeter. Trees 18, 333, 394, 395, and 396 are Sugar Maple with 15-25cm DBH with heavy stem wounds at or near the bases. Tree 77 is a White Pine with 70cm DBH with 75% crown-die-back and has a high risk of falling stem over National Drive. Tree 206 is a Poplar with 90% crown-die-back. Tree 403 is a White Pine with 68cm DBH with a cavity at the base. They have a risk of tree failure over National Drive and their removal is recommended. Trees 18, 303, 394, 395, and 396 are located within the City road right-of-way; approval from the City of Vaughan is required prior to their removal. Trees 77 and 403 are protected by the City of Vaughan Private Tree By-law and a permit exemption is required prior to their removal. Tree 206 is undersized and no permit will be required for its removal.

Tree 417, two dead Ash trees with 25-30cm DBH, and a dead Hemlock with approximately 70cm DBH are located in close proximity to the trail on the northeast side of the subject property. Tree 417 has a crack and cavity at the union at 0.8m from the ground. One of co-dominant stems of Tree 417 is leaning over the trail and has a high risk of tree failure over the trail. Tree 417 is protected by the City of Vaughan and a permit exemption is required prior to its removal. Two dead Ash trees are located within the Golf Club and the National Golf Club of Canada is responsible for the maintenance of their trees. All dead trees are exempt from the tree removal permit.

Refer to Figure 1 for the locations of the trees recommended for removal, Table 2 for the tree inventory, and Appendix A for the photographs of the trees.

Table 2. Trees recommended for Removal

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	CDB	DL	mTPZ	Comments	Protected by By-law	Owner	Hazard Trees
18	Sugar Maple	<i>Acer saccharum</i>	17	P	FG	F		2	1.8	Lean (L) to street, seam (M) with rot, stem wound (M) near base, poor form	Yes	City	Hazard to Street ==> Remove
77	White Pine	<i>Pinus strobus</i>	70	G	P	P	75	5	4.2	Dead leader, deadwood, dead branches (H)	Yes	Private	Hazard to Street ==> Remove
206	Poplar	<i>Populus spp.</i>	18.5	P	P	P	90	2	1.8	Crook (M), asymmetrical crown (H), deadwood, dead leader, hollow stem	No	Private	Hazard to Street ==> Remove
333	Sugar Maple	<i>Acer saccharum</i>	13.5	P	F	FG		2	1.8	Stem wound (H) at base, lean (L) to west, asymmetrical crown (H)	Yes	City	Hazard to Street ==> Remove
394	Sugar Maple	<i>Acer saccharum</i>	25	P	G	G		4	1.8	Stem wound (H) at base, cavity with vertical crack ==> hazard	Yes	City	Hazard to Street ==> Remove
395	Sugar Maple	<i>Acer saccharum</i>	17.5	P	PF	PF	30	3	1.8	Stem wound (H), co-dominance at 3m ==> hazard	Yes	City	Hazard to Street ==> Remove
396	Sugar Maple	<i>Acer saccharum</i>	25.5	P	F	F		3.5	1.8	Crack, loose bark ==> hazard	Yes	City	Hazard to Street ==> Remove
403	White Pine	<i>Pinus strobus</i>	68	P	F	F	20	6	4.2	Cavity at base, broken branches (M), deadwood ==> hazard	Yes	Private	Hazard to Street ==> Remove
417	Eastern Hemlock	<i>Tsuga canadensis</i>	55, 54	PF	FG	FG		6	4.8	Co-dominance at 0.6m with cavity and vertical crack from union to ground, rot, 1 stem lean (L) to east over trail ==> hazard	Yes	Private	Hazard to Trail ==> Remove

Hazard Trees but Preservation may be Possible

Nine trees included in the tree inventory and 26 dead trees/snags are identified as hazard trees. Given that they are located far from National Drive, the trail, or the golf courses, they have no immediate threats. Most hazard trees have significant stem wounds at or near the base due to fallen trees. Refer to Figure 3 for the tree inventory of hazardous trees and Appendix A for the photographs of the trees.

Table 3. Hazard Trees but Preservation is Possible

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	CDB	DL	mTPZ	Comments	Protected by By-law	Owner	Hazard Trees
38	Sugar Maple	<i>Acer saccharum</i>	18	P	G	G		2	1.8	Vertical crack with deadwood, co-dominance in crown ==> hazard	No	Private	Hazard
143	Sugar Maple	<i>Acer saccharum</i>	44	P	G	F		5	3	Stem wound (H), decay, wood pecker damage (M) ==> hazard	Yes	Private	Hazard
177	Black Cherry	<i>Prunus serotina</i>	41	P	F	F		6	3	Stem wound (H) at base on north side, lean (M) to south, crook (M), deadwood, deadbranches (M) ==> hazard	Yes	Private	Hazard
249	White Pine	<i>Pinus strobus</i>	63	PF	F	F	15	5	4.2	Vertical crack at base, bow (L) to south, failed tree leaning , cavity	Yes	Private	Hazard
253	Sugar Maple	<i>Acer saccharum</i>	21	PF	G	G		2.5	1.8	Stem wound (H) at base with rot, co-dominance at 5m, crook (L) ==> hazard	Yes	Private	Hazard
301	Sugar Maple	<i>Acer saccharum</i>	16.5	P	G	G		2.5	1.8	Stem wound (H) at base with rot ==> hazard	No	Private	Hazard
302	Sugar Maple	<i>Acer saccharum</i>	15	P	G	G		2	1.8	Stem wound (H) at base with rot ==> hazard	No	Private	Hazard
378	Sugar Maple	<i>Acer saccharum</i>	15.5	P	G	F		2.5	1.8	Stem wound (H) at base ==> hazard	No	Private	Hazard
414	Sugar Maple	<i>Acer saccharum</i>	15.5	P	F	F	15	3	1.8	Stem wound (H) at base, lean (L) to north, epicormic branches (M) ==> hazard	No	Private	Hazard

Non-Hazardous Trees

The remaining 414 trees are non-hazardous and can be retained.

Summary

The findings of the study indicate a total of 432 trees on and within six metres of the subject property. The removal of nine trees included in the tree inventory and four dead trees is recommended due to hazardous situation to National Drive and the golf course. Additional nine trees included in the tree inventory and 26 dead trees/snags are identified as hazard trees. The remaining trees can be saved.

Respectfully Submitted,

Kaho Hayashi

Kaho Hayashi, B.Sc., M.Sc.F.
 Associate Forest Ecologist
 ISA Certified Arborist #ON-2153A

References

City of Vaughan. 2005. The City of Vaughan By-law 95-2004. Public Property Tree Protection By-law.

City of Vaughan. 2007. The City of Vaughan By-law 185-2007. Private Tree By-law.

Limitations of Assessment

Only the tree(s) identified in this report were included in the inventory. The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These may include a visual examination taken from the ground of all the above-ground parts of the tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of attack by insects, discoloured foliage, the condition of any visible root structures, the degree of lean (if any), the general condition of the trees and the identification of potentially hazardous trees or recommendations for removal (if applicable). Where trees could not be directly accessed (ie. due to obstructions, and/or on neighbouring properties), trees were assessed as accurately as possible from nearby vantage points.

Locations of trees provided in the report are determined as accurately as possible based on the best information available. If official survey information is not provided, tree location in the report may not be exact. In this case, if trees occur on or near property boundaries, an official site survey may be required to determine ownership utilizing specialized survey protocol to gain precise location.

Furthermore, recommendations made in this report are based on the site plans that have been provided at the time of reporting. These recommendations may no longer be applicable should changes be made to the site plan and/or grading, servicing, or landscaping plans following report submission.

Notwithstanding the recommendations and conclusions made in this report, it must be recognized that trees are living organisms, and their health and vigor constantly change over time. They are not immune to changes in site conditions or seasonal variations in the weather conditions. Any tree will fail if the forces applied to the tree exceed the strength of the tree or its parts.

Although every effort has been made to ensure that this assessment is reasonably accurate, the trees should be re-assessed periodically. The assessment presented in this report is valid at the time of inspection.

Figure 2. Aerial Image for the Subject Site (source: York Maps)

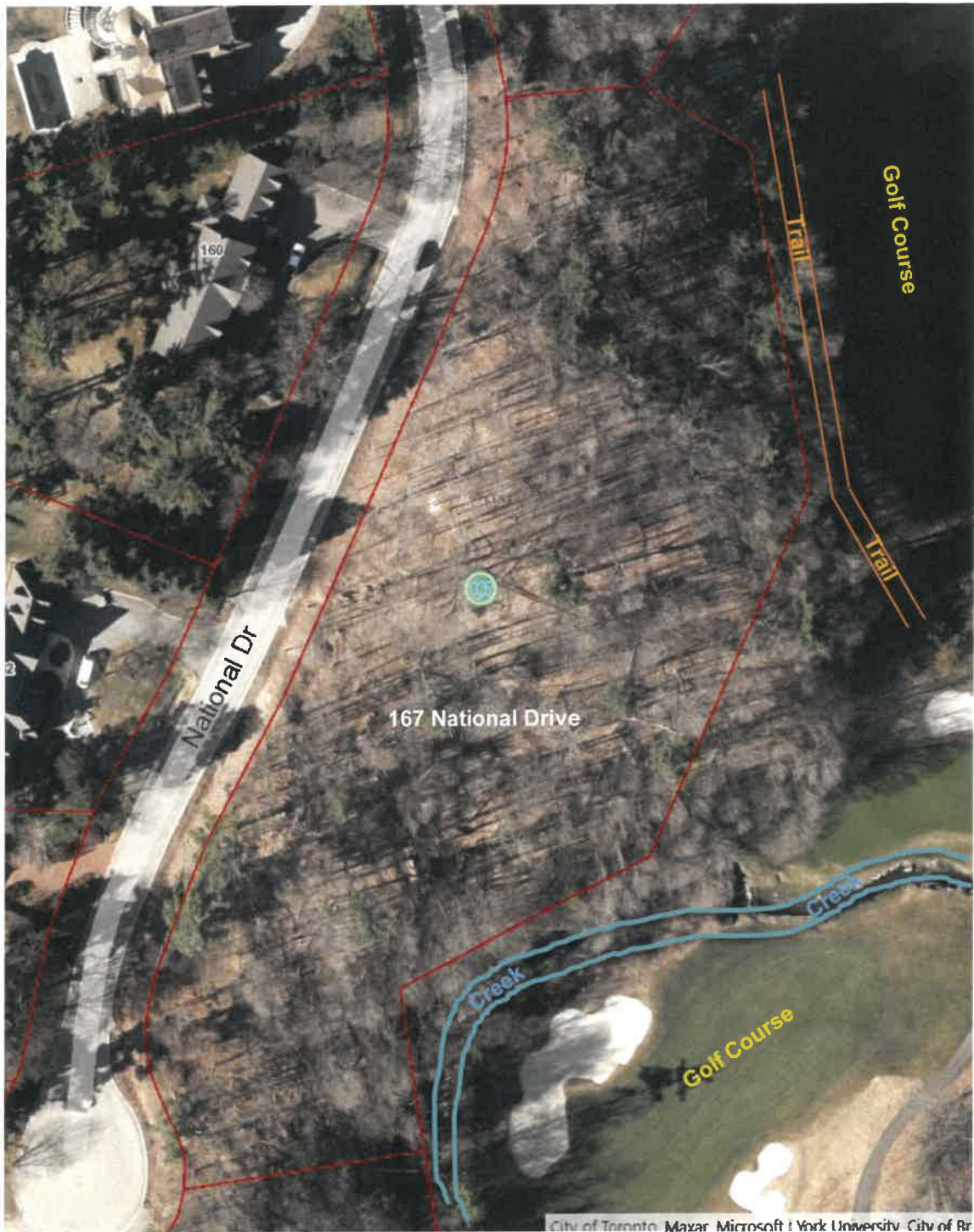


Figure 3. Topographic Survey for the Subject property
(source: Mackay, Mackay & Peters Limited dated 10 January 2017)



Table 1. Tree Inventory

Location: 167 National Drive, Vaughan

Date: 29 January and 1 February 2020

Surveyors: KH

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	CDB	DL	mTPZ	Comments	Protected by By-law	Owner	Hazard Trees
1	Black Cherry	<i>Prunus serotina</i>	15.5	F	F	F		3	1.8	Lean (M) to west, bow (L), crook (L)	Yes	City	
2	Sugar Maple	<i>Acer saccharum</i>	14.5	G	F	G		2	1.8	Lean (L) to west, asymmetrical crown (H)	Yes	City	
3	Sugar Maple	<i>Acer saccharum</i>	39.5	FG	FG	G		4	2.4	Growth deficit (L) at base with rot, asymmetrical crown (M)	Yes	Private	
4	Sugar Maple	<i>Acer saccharum</i>	39	G	G	G		4	2.4	Crook (L), sap sucker damage (L)	Yes	Private	
5	Sugar Maple	<i>Acer saccharum</i>	15.5	P	G	F		2	1.8	Sweep (L), canker (H) at 4m	No	Private	
6	Sugar Maple	<i>Acer saccharum</i>	52, 24	FG	FG	FG		6	3.6	Union at 0.8m with included bark (M), broken branches (M)	Yes	Private	
7	Eastern Hemlock	<i>Tsuga canadensis</i>	32	F	G	F		3	2.4	Lean (L) to north, hollow stem, wood pecker damage (L)	Yes	Private	
8	Sugar Maple	<i>Acer saccharum</i>	26	G	G	G		3.5	1.8		Yes	Private	
9	Sugar Maple	<i>Acer saccharum</i>	39, 21	FG	G	G		5	3	Union at base	Yes	Private	
10	Ironwood	<i>Ostrya virginiana</i>	21	FG	F	G		3	1.8	Co-dominance in crown, lean (L) to east, asymmetrical crown (H)	Yes	Private	
11	Sugar Maple	<i>Acer saccharum</i>	34.5	G	FG	G		5	2.4	Asymmetrical crown (M)	Yes	Private	
12	Eastern Hemlock	<i>Tsuga canadensis</i>	31.5	G	G	G		4	2.4		Yes	Private	
13	Manitoba Maple	<i>Acer negundo</i>	31	PF	P	PF		2	2.4	Co-dominance at 3m with included bark (M) but 1 stem snapped, stem wound (M), lost leader, epicormic branches (H)	Yes	Private	
14	Manitoba Maple	<i>Acer negundo</i>	22	F	FG	F		4	1.8	Bow (M) to west, asymmetrical crown (M), epicormic branches (L)	Yes	Private	
15	Manitoba Maple	<i>Acer negundo</i>	15.5	F	G	FG		2.5	1.8	Lean (L) to southwest, crook (M), epicormic branches (M)	No	Private	
16	Sugar Maple	<i>Acer saccharum</i>	15	G	G	G		2.5	1.8		No	Private	
17	Sugar Maple	<i>Acer saccharum</i>	15.5, 15.5	FG	G	G		3	1.8	Co-dominance at base	Yes	Private	
18	Sugar Maple	<i>Acer saccharum</i>	17	P	FG	F		2	1.8	Lean (L) to street, seam (M) with rot, stem wound (M) near base, poor form	Yes	City	Hazard to Street => Remove
19	White Pine	<i>Pinus strobus</i>	54.5	PF	FG	F		4	3.6	Cavity on pruning wound, hollow, wood pecker damage (M)	Yes	Private	
20	Manitoba Maple	<i>Acer negundo</i>	34.5	PF	F	F		3	2.4	Union at 0.5m but 1 stem pruned with rot, bow (M) to south, crook (M), broken branches (M), epicormic branches (H)	Yes	Private	
21	Manitoba Maple	<i>Acer negundo</i>	34, 23	PF	PF	PF	20	4	3	Union at base, lean (L-M), crook (H), pruning wounds (L), poor form, dead branches (L), epicormic branches (H)	Yes	Private	
22	Manitoba Maple	<i>Acer negundo</i>	36	PF	PF	F		4	2.4	Co-dominance at 1.8m with included bark (M), 1 stem lost leader at 5m, crook (M), sweep (L), epicormic branches (H)	Yes	Private	
23	Manitoba Maple	<i>Acer negundo</i>	20	P	P	P		2	1.8	Lean (M) to south, lost leader at 3m, epicormic branches (H)	Yes	Private	
24	Poplar	<i>Populus spp.</i>	24.5	P	P	P	90	2	1.8	Lean (M) to north, lost leader, only epicormic branches (L) alive, grape vine competition (H)	Yes	Private	
25	Manitoba Maple	<i>Acer negundo</i>	25.5	PF	F	F		4	1.8	Bow (H) to east, stem wound (L), broken branches (M), epicormic branches (M)	Yes	Private	
26	Black Cherry	<i>Prunus serotina</i>	36	G	G	G		3	2.4		Yes	Private	
27	Sugar Maple	<i>Acer saccharum</i>	26	G	G	G		4	1.8		Yes	Private	
28	Sugar Maple	<i>Acer saccharum</i>	~80	F	FG	F		6	4.8	Lean (L) to east, co-dominance at 6m, union at 1.8m, crook (L), broken branches (M), deadwood, epicormic branches (M)	Yes	Private	
29	Sugar Maple	<i>Acer saccharum</i>	21.5	G	G	G		3	1.8		Yes	Private	
30	Eastern Hemlock	<i>Tsuga canadensis</i>	20	G	G	FG		1.5	1.8		Yes	Private	
31	Eastern Hemlock	<i>Tsuga canadensis</i>	15.5	FG	G	FG		1.5	1.8	Sweep (L)	No	Private	
32	Sugar Maple	<i>Acer saccharum</i>	30	G	F	G		3.5	2.4	Asymmetrical crown (H)	Yes	Private	
33	Sugar Maple	<i>Acer saccharum</i>	29	G	FG	G		3.5	1.8	Asymmetrical crown (M)	Yes	Private	
34	Sugar Maple	<i>Acer saccharum</i>	33, 13	F	G	G		4	2.4	Union at base, co-dominance at 4m with included bark (M)	Yes	Private	
35	Sugar Maple	<i>Acer saccharum</i>	41.5	G	G	G		4.5	3	Asymmetrical crown (L)	Yes	Private	
36	Sugar Maple	<i>Acer saccharum</i>	42	G	G	G		5	3		Yes	Private	
37	Sugar Maple	<i>Acer saccharum</i>	34.5	G	G	G		4	2.4		Yes	Private	
38	Sugar Maple	<i>Acer saccharum</i>	18	P	G	G		2	1.8	Vertical crack with deadwood, co-dominance in crown => hazard	No	Private	Hazard
39	Sugar Maple	<i>Acer saccharum</i>	17.5	PF	G	F	15	2	1.8	Poor form, stem wound (M) near base	No	Private	
40	Basswood	<i>Tilia americana</i>	34	G	FG	G		4	2.4	Crook (L)	Yes	Private	
41	Black Cherry	<i>Prunus serotina</i>	15	P	P	F	75	1.5	1.8	Lost leader at 6m, epicormic branches (M)	No	Private	
42	White Oak	<i>Quercus alba</i>	24.5	G	G	G		2	1.8		Yes	Private	
43	Black Cherry	<i>Prunus serotina</i>	32	F	F	F	20	3	2.4	Crook (M), stem wound (L) at base, dead branches (L), broken branches (L), epicormic branches (H)	Yes	Private	
44	Sugar Maple	<i>Acer saccharum</i>	31.5	FG	FG	FG		3	2.4	Lean (L), sweep (L), asymmetrical crown (M)	Yes	City	
45	Ironwood	<i>Ostrya virginiana</i>	16	FG	G	G		2.5	1.8	Lean (L) to south, crook (L)	No	Private	
46	Sugar Maple	<i>Acer saccharum</i>	15	G	G	G		2	1.8	Understory tree	Yes	City	
47	White Pine	<i>Pinus strobus</i>	72.5	G	F	F	20	5	4.8	Bow (M)	Yes	City	
48	Basswood	<i>Tilia americana</i>	17, 12	FG	G	G		2.5	1.8	Union at base, sweep (L), crook (L)	Yes	Private	
49	Ironwood	<i>Ostrya virginiana</i>	20.5	FG	G	G		2.5	1.8	Crook (M)	Yes	Private	
50	Sugar Maple	<i>Acer saccharum</i>	17	G	G	G		2.5	1.8		No	Private	
51	Black Cherry	<i>Prunus serotina</i>	16	FG	G	FG		2.5	1.8	Crook (M)	No	Private	

52	Sugar Maple	<i>Acer saccharum</i>	21.5	FG	G	G	2.5	1.8	Co-dominance in crown, crook (L)	Yes	Private		
53	Basswood	<i>Tilia americana</i>	53.5	FG	G	FG	3.5	3.6	Small crown, co-dominance at 3m with included bark (M)	Yes	Private		
54	Sugar Maple	<i>Acer saccharum</i>	16.5	PF	G	G	2.5	1.8	Stem wound (H) at base with rot, little reaction wood	Yes	Private		
55	Sugar Maple	<i>Acer saccharum</i>	18	F	G	F	2	1.8	Union at base but 1 stem dead, stem wound (M), crook (L)	No	Private		
56	Sugar Maple	<i>Acer saccharum</i>	45	FG	G	G	5	3	Co-dominance at 3m with included bark (M)	Yes	Private		
57	American Beech	<i>Fagus grandifolia</i>	16	G	G	G	2.5	1.8		No	Private		
58	Sugar Maple	<i>Acer saccharum</i>	33.5	G	G	G	5	2.4	Asymmetrical crown (L)	Yes	Private		
59	Ironwood	<i>Ostrya virginiana</i>	16.5	G	FG	G	2.5	1.8	Asymmetrical crown (M)	No	Private		
60	Sugar Maple	<i>Acer saccharum</i>	34	G	G	G	4	2.4		Yes	Private		
61	Ironwood	<i>Ostrya virginiana</i>	18	G	G	G	3	1.8		No	Private		
62	Sugar Maple	<i>Acer saccharum</i>	23	G	G	G	3.5	1.8		Yes	Private		
63	Sugar Maple	<i>Acer saccharum</i>	22	G	G	G	4	1.8		Yes	Private		
64	White Pine	<i>Pinus strobus</i>	69	G	F	F	4	4.2	Small crown, broken branches (M)	Yes	Private		
65	Sugar Maple	<i>Acer saccharum</i>	38	FG	G	G	4	2.4	Union at 5m, crook (L)	Yes	Private		
66	Sugar Maple	<i>Acer saccharum</i>	55.5	G	G	G	6	3.6		Yes	Private		
67	Sugar Maple	<i>Acer saccharum</i>	17	G	G	G	2.5	1.8		No	Private		
68	Sugar Maple	<i>Acer saccharum</i>	48.5	FG	G	G	6	3	Co-dominance at 8	Yes	Private		
69	Ironwood	<i>Ostrya virginiana</i>	18	G	G	G	3	1.8		No	Private		
70	Sugar Maple	<i>Acer saccharum</i>	19.5	G	G	G	3	1.8		No	Private		
71	Poplar	<i>Populus spp.</i>	22.5	G	G	G	3.5	1.8		Yes	Private		
72	Sugar Maple	<i>Acer saccharum</i>	20.5	F	G	G	3.5	1.8	Stem wound (M) at base	Yes	Private		
73	Sugar Maple	<i>Acer saccharum</i>	26.5	G	G	G	4.5	1.8		Yes	Private		
74	Sugar Maple	<i>Acer saccharum</i>	14.5	G	G	G	3	1.8		No	Private		
75	Sugar Maple	<i>Acer saccharum</i>	11	G	G	G	2	1.8	Understory tree	Yes	City		
76	Sugar Maple	<i>Acer saccharum</i>	21	G	FG	G	3	1.8	Sweep (L), asymmetrical crown (M), understory tree	Yes	Private		
77	White Pine	<i>Pinus strobus</i>	70	G	P	P	75	5	4.2	Dead leader, deadwood, dead branches (H)	Yes	Private	Hazard to Street ==> Remove
78	Sugar Maple	<i>Acer saccharum</i>	28.5	G	FG	G	4	1.8	Asymmetrical crown (M)	Yes	Private		
79	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	G	2.5	1.8		No	Private		
80	Sugar Maple	<i>Acer saccharum</i>	15	G	G	G	2	1.8		No	Private		
81	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G	2	1.8		No	Private		
82	Sugar Maple	<i>Acer saccharum</i>	18	G	FG	G	3	1.8	Asymmetrical crown (M)	Yes	City		
83	Sugar Maple	<i>Acer saccharum</i>	19.5	G	F	G	3	1.8	Asymmetrical crown (H)	No	Private		
84	Sugar Maple	<i>Acer saccharum</i>	25.5	FG	G	G	4	1.8	Co-dominance at 5m	Yes	Private		
85	Black Cherry	<i>Prunus serotina</i>	23.5	F	G	FG	3	1.8	Lean (M) to northwest, co-dominance in crown, crook (L)	Yes	City		
86	Sugar Maple	<i>Acer saccharum</i>	21	G	G	G	3	1.8		Yes	Private		
87	Sugar Maple	<i>Acer saccharum</i>	22.5	G	FG	G	3	1.8	Asymmetrical crown (M)	Yes	Private		
88	Sugar Maple	<i>Acer saccharum</i>	34, 22	FG	G	G	3	2.4	Co-dominance at 0.8m with included bark (M)	Yes	Private		
89	Sugar Maple	<i>Acer saccharum</i>	22	G	G	G	4	1.8		Yes	Private		
90	Sugar Maple	<i>Acer saccharum</i>	15.5	F	FG	F	2.5	1.8	Stem wound (M) at base, asymmetrical crown (M)	No	Private		
91	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G	2.5	1.8		No	Private		
92	Eastern Hemlock	<i>Tsuga canadensis</i>	38.5	FG	G	FG	3.5	2.4	Lean (L) to north	Yes	Private		
93	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	G	3	1.8		No	Private		
94	Sugar Maple	<i>Acer saccharum</i>	18.5	PF	G	FG	3	1.8	Stem wound (H) at base, deadwood	No	Private		
95	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	G	3	1.8		No	Private		
96	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G	3	1.8	Asymmetrical crown (L)	No	Private		
97	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	G	2.5	1.8		No	Private		
98	Sugar Maple	<i>Acer saccharum</i>	21.5	G	G	G	4	1.8		Yes	Private		
99	Sugar Maple	<i>Acer saccharum</i>	43	FG	G	G	5	3	Sweep (M)	Yes	Private		
100	Ironwood	<i>Ostrya virginiana</i>	20.5	G	G	G	3.5	1.8		Yes	Private		
101	Sugar Maple	<i>Acer saccharum</i>	46.5	F	G	FG	5	3	Stem wound (M), lean (L) to south	Yes	Private		
102	Sugar Maple	<i>Acer saccharum</i>	54	FG	G	G	5	3.6	Lean (L) to east, crook (L)	Yes	Private		
103	Sugar Maple	<i>Acer saccharum</i>	38, 24, 21	FG	FG	G	5	3	Union at base, sweep (L), co-dominance in crown, asymmetrical crown (M)	Yes	Neighbour		
104	Sugar Maple	<i>Acer saccharum</i>	~42	PF	G	F	8	3	Growing from side of bark, lean (M) over creek	Yes	Neighbour		
105	Sugar Maple	<i>Acer saccharum</i>	24	FG	G	G	3.5	1.8	Sweep (L), co-dominance in crown	Yes	Private		
106	Ironwood	<i>Ostrya virginiana</i>	17	G	G	G	3	1.8		No	Private		
107	Sugar Maple	<i>Acer saccharum</i>	18.5	FG	FG	FG	3	1.8	Bow (L), crook (M), asymmetrical crown (M), understory tree	No	Private		
108	Sugar Maple	<i>Acer saccharum</i>	44	FG	G	G	4	3	Lean (L) to east, asymmetrical crown (L)	Yes	Private		
109	Sugar Maple	<i>Acer saccharum</i>	17.5	G	G	G	2.5	1.8		No	Private		
110	Sugar Maple	<i>Acer saccharum</i>	21	FG	G	G	3	1.8	Co-dominance in crown, crook (L)	Yes	Private		
111	Sugar Maple	<i>Acer saccharum</i>	50	F	FG	FG	5	3	Union at 4m with included bark (M), cavity, stem wound (L), asymmetrical crown (M), crook (L)	Yes	Private		
112	Sugar Maple	<i>Acer saccharum</i>	17.5	G	FG	G	3	1.8	Asymmetrical crown (M)	No	Private		
113	Sugar Maple	<i>Acer saccharum</i>	24	FG	FG	FG	3	1.8	Crook (M), asymmetrical crown (M)	Yes	Private		
114	Sugar Maple	<i>Acer saccharum</i>	19	F	G	G	3	1.8	Crook (H)	No	Private		
115	Sugar Maple	<i>Acer saccharum</i>	18	G	FG	G	3	1.8	Asymmetrical crown (M)	No	Private		
116	Sugar Maple	<i>Acer saccharum</i>	29.5	G	FG	G	4	1.8	Asymmetrical crown (M)	Yes	Private		
117	Yellow Birch	<i>Betula alleghaniensis</i>	51	G	FG	F	15	5	3.6	Broken branches (L), dead branches (L)	Yes	Private	
118	Ironwood	<i>Ostrya virginiana</i>	25	G	G	G	4	1.8		Yes	Private		
119	Sugar Maple	<i>Acer saccharum</i>	45.5	G	G	FG	5	3		Yes	Private		
120	Ironwood	<i>Ostrya virginiana</i>	28.5, 28	F	G	FG	4	2.4	Co-dominance at 0.8m with included bark (H), co-dominance in crown	Yes	Private		
121	Basswood	<i>Tilia americana</i>	20.5	G	G	G	3	1.8		Yes	Private		
122	Sugar Maple	<i>Acer saccharum</i>	19.5	F	F	F	2.5	1.8	Union at 0.3m but 1 stem pruned, crook (M), pruning wounds 9M)	No	Private		
123	Basswood	<i>Tilia americana</i>	17.5	G	G	G	2.5	1.8	Crook (L)	No	Private		
124	Poplar	<i>Populus spp.</i>	30.5	FG	G	G	4	2.4	Lean (L) to southwest	Yes	Private		
125	Sugar Maple	<i>Acer saccharum</i>	18.5	FG	G	G	3	1.8	Co-dominance at 4m	Yes	City		
126	Sugar Maple	<i>Acer saccharum</i>	15	G	G	G	2.5	1.8		Yes	City		
127	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G	3	1.8	Stem wound (L)	Yes	City		

128	Red Oak	<i>Quercus rubra</i>	54.5	FG	G	G		6	3.6	Lean (L) to northeast, union at 3m with included bark (L), pruning wounds (L)	Yes	Private	
129	Basswood	<i>Tilia americana</i>	23	G	FG	G		3	1.8	Asymmetrical crown (M)	Yes	Private	
130	Sugar Maple	<i>Acer saccharum</i>	21	G	G	G		3.5	1.8		Yes	Private	
131	White Pine	<i>Pinus strobus</i>	62	G	G	P	25	4	4.2	In decline	Yes	Private	
132	Sugar Maple	<i>Acer saccharum</i>	33.5	G	G	G		4	2.4		Yes	Private	
133	Eastern Hemlock	<i>Tsuga canadensis</i>	34.5	FG	FG	FG		3	2.4	Sweep (L), asymmetrical crown (M)	Yes	Neighbour	
134	Sugar Maple	<i>Acer saccharum</i>	30, 28, 27	FG	G	G		4	3	3 trees, sweep (L)	Yes	Neighbour	
134	Ironwood	<i>Ostrya virginiana</i>	22	G	FG	G		3	1.8	Asymmetrical crown (M), growing with Sugar Maples	Yes	Neighbour	
135	Sugar Maple	<i>Acer saccharum</i>	15	G	FG	G		2.5	1.8	Asymmetrical crown (M)	No	Neighbour	
136	Sugar Maple	<i>Acer saccharum</i>	20	G	G	G		3	1.8		Yes	Private	
137	White Oak	<i>Quercus alba</i>	62	FG	G	G		5	4.2	Seam (L)	Yes	Private	
138	Sugar Maple	<i>Acer saccharum</i>	26	G	G	G		4	1.8		Yes	Private	
139	Sugar Maple	<i>Acer saccharum</i>	27	G	FG	G		4	1.8	Asymmetrical crown (M)	Yes	Private	
140	Sugar Maple	<i>Acer saccharum</i>	19	P	F	F		3	1.8	Stem wound (H) at base, vertical crack, co-dominance in crown	No	Private	
141	Sugar Maple	<i>Acer saccharum</i>	23.5	G	G	G		3.5	1.8		Yes	Private	
142	Sugar Maple	<i>Acer saccharum</i>	30	G	G	G		4	2.4	Asymmetrical crown (L)	Yes	Private	
143	Sugar Maple	<i>Acer saccharum</i>	44	P	G	F		5	3	Stem wound (H), decay, wood pecker damage (M) ==> hazard	Yes	Private	Hazard
144	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		3	1.8	Asymmetrical crown (L)	No	Private	
145	Ironwood	<i>Ostrya virginiana</i>	23	G	G	G		3	1.8		Yes	Private	
146	Eastern Hemlock	<i>Tsuga canadensis</i>	43	FG	FG	FG		4	3	Lean (L), asymmetrical crown (M), sweep (L)	Yes	Private	
147	Sugar Maple	<i>Acer saccharum</i>	23	G	G	G		4	1.8	Crook (L)	Yes	Private	
148	Eastern Hemlock	<i>Tsuga canadensis</i>	26	P	P	P	50	3	1.8	Lost leader, asymmetrical crown (H), dead branches (H)	Yes	Private	
149	Ironwood	<i>Ostrya virginiana</i>	20.5	G	G	G		3	1.8		Yes	Private	
150	Eastern Hemlock	<i>Tsuga canadensis</i>	24	FG	G	FG		2.5	1.8	Lean (L) to south, crook (L)	Yes	Private	
151	Eastern Hemlock	<i>Tsuga canadensis</i>	29	G	G	G		3	1.8		Yes	Private	
152	Sugar Maple	<i>Acer saccharum</i>	17	G	FG	G		2.5	1.8	Asymmetrical crown (M)	No	Private	
153	Sugar Maple	<i>Acer saccharum</i>	18.5	FG	FG	G		2.5	1.8	Co-dominance at 2.5m with included bark (M), asymmetrical crown (M), crook (L)	Yes	Private	
154	Sugar Maple	<i>Acer saccharum</i>	31	FG	G	G		4	2.4	Co-dominance in crown	Yes	Neighbour	
155	Sugar Maple	<i>Acer saccharum</i>	15	G	FG	G		2	1.8	Asymmetrical crown (M)	No	Private	
156	Sugar Maple	<i>Acer saccharum</i>	18	G	FG	G		2.5	1.8	Asymmetrical crown (M)	No	Private	
157	Sugar Maple	<i>Acer saccharum</i>	20	G	G	F	15	3	1.8		Yes	Private	
158	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		2	1.8		No	Private	
159	Sugar Maple	<i>Acer saccharum</i>	25	G	G	G		3	1.8		Yes	Private	
160	Sugar Maple	<i>Acer saccharum</i>	23	G	FG	G		3	1.8	Asymmetrical crown (M)	Yes	Private	
161	Sugar Maple	<i>Acer saccharum</i>	15	F	F	F	15	2.5	1.8	Bow (M) to southeast, dead branches (L)	No	Private	
162	Sugar Maple	<i>Acer saccharum</i>	18.5	G	F	G		2	1.8	Asymmetrical crown (H)	No	Private	
163	Sugar Maple	<i>Acer saccharum</i>	22.5	G	FG	G		2	1.8	Asymmetrical crown (M)	Yes	Neighbour	
164	Sugar Maple	<i>Acer saccharum</i>	27.5	G	G	G		3.5	1.8	Asymmetrical crown (L)	Yes	Neighbour	
165	Sugar Maple	<i>Acer saccharum</i>	25	G	FG	G		3	1.8	Asymmetrical crown (M)	Yes	Private	
166	Sugar Maple	<i>Acer saccharum</i>	16	G	FG	G		2	1.8	Asymmetrical crown (M)	No	Private	
167	Sugar Maple	<i>Acer saccharum</i>	20.5, 14.5	FG	G	G		3	1.8	Union at base	Yes	Private	
168	Sugar Maple	<i>Acer saccharum</i>	21	FG	G	G		2	1.8	Co-dominance at 4m with included bark (L)	Yes	Private	
169	Sugar Maple	<i>Acer saccharum</i>	19	G	G	G		3	1.8		No	Private	
170	Sugar Maple	<i>Acer saccharum</i>	17.5	G	G	G		2.5	1.8		No	Private	
171	Sugar Maple	<i>Acer saccharum</i>	18	G	G	G		3	1.8		No	Private	
172	Sugar Maple	<i>Acer saccharum</i>	29	G	G	G		4	1.8		Yes	Private	
173	Sugar Maple	<i>Acer saccharum</i>	15.5	G	G	G		3	1.8		No	Private	
174	Sugar Maple	<i>Acer saccharum</i>	17	G	G	G		2.5	1.8	Crook (L)	No	Private	
175	Sugar Maple	<i>Acer saccharum</i>	27	G	G	G		4	1.8		Yes	Private	
176	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	F	10	2	1.8	Epicormic branches (M)	No	Private	
177	Black Cherry	<i>Prunus serotina</i>	41	P	F	F		6	3	Stem wound (H) at base on north side, lean (M) to south, crook (M), deadwood, deadbranches (M) ==> hazard	Yes	Private	Hazard
178	Ironwood	<i>Ostrya virginiana</i>	18.5	G	G	G		2.5	1.8		No	Private	
179	Eastern Hemlock	<i>Tsuga canadensis</i>	42.5	FG	G	G		4	3	Lean (L) to west	Yes	Private	
180	Sugar Maple	<i>Acer saccharum</i>	26	G	G	G		4	1.8		Yes	Private	
181	Ironwood	<i>Ostrya virginiana</i>	27.5	FG	G	G		4	1.8	Co-dominance in crown, crook (M)	Yes	Private	
182	Sugar Maple	<i>Acer saccharum</i>	20	F	G	G		3	1.8	Sweep (L), stem wound (L), co-dominance in crown	Yes	Private	
183	Sugar Maple	<i>Acer saccharum</i>	21	G	FG	G		3.5	1.8	Asymmetrical crown (M)	Yes	Private	
184	Ironwood	<i>Ostrya virginiana</i>	21.5	FG	G	G		3	1.8	Crook (M), co-dominance in crown	Yes	Private	
185	Ironwood	<i>Ostrya virginiana</i>	21	G	G	G		3.5	1.8	Seam (L)	Yes	Private	
186	Sugar Maple	<i>Acer saccharum</i>	28	G	G	G		4	1.8		Yes	Private	
187	Ironwood	<i>Ostrya virginiana</i>	18	G	G	G		3	1.8		No	Private	
188	Ironwood	<i>Ostrya virginiana</i>	15.5	PF	FG	G		2.5	1.8	Crook (L), asymmetrical crown (M), stem wound (M) at base with rot	No	Private	
189	Sugar Maple	<i>Acer saccharum</i>	19	F	G	G		3	1.8	Stem wound (M) at base	No	Private	
190	Ironwood	<i>Ostrya virginiana</i>	21.5	G	G	G		3	1.8		Yes	Private	
191	Ironwood	<i>Ostrya virginiana</i>	22.5	FG	FG	G		3	1.8	Lean (L) to north, crook (M), asymmetrical crown (M)	Yes	Private	
192	Sugar Maple	<i>Acer saccharum</i>	55	G	G	G		6	3.6		Yes	Private	
193	Sugar Maple	<i>Acer saccharum</i>	35	G	G	G		5	2.4		Yes	Private	
194	Ironwood	<i>Ostrya virginiana</i>	21	G	FG	G		3	1.8	Asymmetrical crown (M)	Yes	Private	
195	Sugar Maple	<i>Acer saccharum</i>	20.5	G	F	F		2.5	1.8	Asymmetrical crown (H)	Yes	Private	
196	Ironwood	<i>Ostrya virginiana</i>	30	G	G	G		4	2.4		Yes	Private	
197	Sugar Maple	<i>Acer saccharum</i>	20.5	G	G	G		3.5	1.8		Yes	Private	
198	Basswood	<i>Tilia americana</i>	23.5	G	G	G		3.5	1.8		Yes	Private	
199	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		3	1.8		No	Private	
200	Poplar	<i>Populus spp.</i>	32	G	G	FG		3	2.4		Yes	Private	
201	Sugar Maple	<i>Acer saccharum</i>	25	G	G	G		4	1.8		Yes	Private	
202	Sugar Maple	<i>Acer saccharum</i>	18.5	G	G	G		3	1.8		No	Private	
203	Sugar Maple	<i>Acer saccharum</i>	22	G	G	G		3	1.8		Yes	Private	

204	Sugar Maple	<i>Acer saccharum</i>	22	G	G	G		3	1.8	Stem wound (L)	Yes	Private	
205	Sugar Maple	<i>Acer saccharum</i>	36	G	G	G		5	2.4	Stem wound (L) at base	Yes	Private	
206	Poplar	<i>Populus spp.</i>	18.5	P	P	P	90	2	1.8	Crook (M), asymmetrical crown (H), deadwood, dead leader, hollow stem	No	Private	Hazard to Street ==> Remove
207	Black Cherry	<i>Prunus serotina</i>	32.5	F	F	F		4	2.4	Stem wound (M), lean (L) to west, crook (L), asymmetrical crown (M), co-dominance in crown	Yes	Private	
208	Poplar	<i>Populus spp.</i>	16	G	F	F	15	2	1.8	Asymmetrical crown (H)	Yes	City	
209	Poplar	<i>Populus spp.</i>	12.5	G	G	G		1.5	1.8		Yes	City	
210	Poplar	<i>Populus spp.</i>	21	G	G	G		2	1.8		Yes	City	
211	Poplar	<i>Populus spp.</i>	21.5	G	G	F	10	2.5	1.8		Yes	Private	
212	Poplar	<i>Populus spp.</i>	23.5	G	G	G		3	1.8	Deadwood	Yes	Private	
213	Poplar	<i>Populus spp.</i>	16	G	G	G		2	1.8		No	Private	
214	Poplar	<i>Populus spp.</i>	18.5	F	F	F	20	2	1.8	Lost leader, bow (L) to west	No	Private	
215	Sugar Maple	<i>Acer saccharum</i>	17	FG	FG	G		2.5	1.8	Bow (L), crook (L), asymmetrical crown (M)	Yes	City	
216	Sugar Maple	<i>Acer saccharum</i>	29	G	G	G		4	1.8		Yes	Private	
217	Sugar Maple	<i>Acer saccharum</i>	24	FG	G	G		4	1.8	Co-dominance in crown	Yes	Private	
218	Poplar	<i>Populus spp.</i>	26	G	G	PF	25	4	1.8		Yes	Private	
219	Sugar Maple	<i>Acer saccharum</i>	30.5	FG	G	G		4	2.4	Co-dominance at 5m with included bark (H)	Yes	Private	
220	Sugar Maple	<i>Acer saccharum</i>	28	G	G	G		4	1.8		Yes	Private	
221	Black Cherry	<i>Prunus serotina</i>	38	FG	G	F	20	5	2.4	Co-dominance at 5m with included bark (M), grape vine competition (H)	Yes	Private	
222	Black Cherry	<i>Prunus serotina</i>	19	F	P	P	30	3	1.8	Lean (L) to south, crook (L)	No	Private	
223	Sugar Maple	<i>Acer saccharum</i>	15.5	PF	G	G		3	1.8	Stem wound (H) at base	No	Private	
224	Basswood	<i>Tilia americana</i>	17	FG	FG	G		3	1.8	Lean (L) to northwest, sweep (L), asymmetrical crown (M)	No	Private	
225	Black Cherry	<i>Prunus serotina</i>	35	G	G	F	20	4	2.4	Grape vine competition (H)	Yes	Private	
226	Ironwood	<i>Ostrya virginiana</i>	26	FG	G	G		4	1.8	Sweep (L), co-dominance in crown	Yes	Private	
227	Black Cherry	<i>Prunus serotina</i>	25	FG	G	G		3.5	1.8	Crook (L), sweep (L), co-dominance at 5m, epicormic branches (M)	Yes	Private	
228	Ironwood	<i>Ostrya virginiana</i>	15.5, 9.5	FG	G	G		3	1.8	Union at 0.5m	Yes	Private	
229	Black Cherry	<i>Prunus serotina</i>	24	G	G	G		2.5	1.8		Yes	Private	
230	Ironwood	<i>Ostrya virginiana</i>	20.5	G	G	G		3	1.8	Sweep (L)	Yes	Private	
231	Black Cherry	<i>Prunus serotina</i>	43	FG	G	F	20	6	3	Lean (L) to north, co-dominance at 5m, crook (L), deadwood	Yes	Private	
232	Ironwood	<i>Ostrya virginiana</i>	24	G	G	G		3	1.8	Sweep (L)	Yes	Private	
233	White Pine	<i>Pinus strobus</i>	76	G	G	PF	15	5	4.8	Deadwood with fruiting bodies, dead leader	Yes	Private	
234	Red Oak	<i>Quercus rubra</i>	86	FG	G	G		8	5.4	Sweep (L)	Yes	Private	
235	Ironwood	<i>Ostrya virginiana</i>	21	G	G	G		3	1.8		Yes	Private	
236	Sugar Maple	<i>Acer saccharum</i>	43	FG	G	G		6	3	Co-dominance at 5m with included bark (M)	Yes	Private	
237	Sugar Maple	<i>Acer saccharum</i>	16	PF	G	G		2.5	1.8		No	Private	
238	Sugar Maple	<i>Acer saccharum</i>	23.5	G	G	G		3	1.8	Stem wound (H) at base	Yes	Private	
239	Ironwood	<i>Ostrya virginiana</i>	20.5, 20	FG	G	G		3.5	1.8	Co-dominance at 0.3m with included bark (M)	Yes	Private	
240	Ironwood	<i>Ostrya virginiana</i>	19, 18.5	FG	G	FG	10	4	1.8	Co-dominance at base	Yes	Private	
241	Ironwood	<i>Ostrya virginiana</i>	16.5	G	G	G		2.5	1.8		No	Private	
242	Ironwood	<i>Ostrya virginiana</i>	19.5	G	G	G		2.5	1.8		No	Private	
243	Sugar Maple	<i>Acer saccharum</i>	21	G	G	G		3	1.8		Yes	Private	
244	Sugar Maple	<i>Acer saccharum</i>	26	G	G	G		4	1.8		Yes	Private	
245	Sugar Maple	<i>Acer saccharum</i>	19	G	FG	G		3	1.8	Asymmetrical crown (M)	No	Private	
246	Ironwood	<i>Ostrya virginiana</i>	17.5	G	G	G		3	1.8	Lean (L) to east	No	Private	
247	Sugar Maple	<i>Acer saccharum</i>	32	G	G	G		5	2.4		Yes	Private	
248	Sugar Maple	<i>Acer saccharum</i>	45	G	G	G		6	3		Yes	Private	
249	White Pine	<i>Pinus strobus</i>	63	PF	F	F	15	5	4.2	Vertical crack at base, bow (L) to south, failed tree leaning, cavity	Yes	Private	Hazard
250	Sugar Maple	<i>Acer saccharum</i>	15.5	G	G	G		2.5	1.8		No	Private	
251	Sugar Maple	<i>Acer saccharum</i>	18	G	G	G		2.5	1.8		Yes	Private	
252	Sugar Maple	<i>Acer saccharum</i>	48	FG	G	G		5	3	Sweep (M), crook (L)	Yes	Neighbour	
253	Sugar Maple	<i>Acer saccharum</i>	21	PF	G	G		2.5	1.8	Stem wound (H) at base with rot, co-dominance at 5m, crook (L) ==> hazard	Yes	Private	Hazard
254	Sugar Maple	<i>Acer saccharum</i>	29	G	G	G		4	1.8		Yes	Private	
255	Sugar Maple	<i>Acer saccharum</i>	25	G	G	G		3.5	1.8		Yes	Private	
256	Sugar Maple	<i>Acer saccharum</i>	15.5	G	F	PF	30	2	1.8	Asymmetrical crown (H), dead branches (M)	No	Private	
257	Sugar Maple	<i>Acer saccharum</i>	23.5	G	FG	G		3.5	1.8	Asymmetrical crown (M)	Yes	Private	
258	Sugar Maple	<i>Acer saccharum</i>	18	G	G	F	20	2.5	1.8		No	Neighbour	
259	Sugar Maple	<i>Acer saccharum</i>	22	G	G	G		3.5	1.8		Yes	Private	
260	Sugar Maple	<i>Acer saccharum</i>	26.5	G	G	G		4	1.8		Yes	Private	
261	Sugar Maple	<i>Acer saccharum</i>	17.5	G	G	G		2.5	1.8		No	Private	
262	Ironwood	<i>Ostrya virginiana</i>	17	FG	G	G		2.5	1.8	Co-dominance at 5m	No	Neighbour	
263	Sugar Maple	<i>Acer saccharum</i>	43	G	G	FG		5	3		Yes	Private	
264	Sugar Maple	<i>Acer saccharum</i>	42	FG	G	G		6	3	Co-dominance in crown	Yes	Private	
265	Ironwood	<i>Ostrya virginiana</i>	15.5	G	G	G		2.5	1.8		No	Private	
266	Black Cherry	<i>Prunus serotina</i>	23	PF	PF	PF	40	4	1.8	Lost leader, broken branches (M)	Yes	Neighbour	
267	White Pine	<i>Pinus strobus</i>	54	G	G	F		6	3.6		Yes	Neighbour	
268	Ironwood	<i>Ostrya virginiana</i>	16	F	F	F		2	1.8	Crook (M), asymmetrical crown (M), understory tree	No	Neighbour	
269	Ironwood	<i>Ostrya virginiana</i>	21.5, 19	FG	G	G		3	1.8	Co-dominance at base	Yes	Private	
270	Sugar Maple	<i>Acer saccharum</i>	39	G	G	G		5	2.4		Yes	Neighbour	
271	Ironwood	<i>Ostrya virginiana</i>	15, 12	FG	G	G		2.5	1.8	Co-dominance at base, merged to #270 at base	Yes	Neighbour	
272	Ironwood	<i>Ostrya virginiana</i>	15.5, 11.5	F	G	FG		3	1.8	Co-dominance at base, co-dominance in crown, lean (L) to northwest, crook (L)	Yes	Private	
273	Ironwood	<i>Ostrya virginiana</i>	21	F	FG	FG		4	1.8	Lean (M) to northwest, co-dominance at 4m, crook (M), sweep (L)	Yes	Private	
274	Ironwood	<i>Ostrya virginiana</i>	16	FG	G	G		2.5	1.8	Co-dominance in crown, bow (L) to west	No	Private	
275	Ironwood	<i>Ostrya virginiana</i>	16	G	G	G		2.5	1.8	Crook (L)	No	Private	

276	Sugar Maple	<i>Acer saccharum</i>	18.5	F	FG	G		3	1.8	Stem wound (M) at base, asymmetrical crown (M)	No	Private	
277	Sugar Maple	<i>Acer saccharum</i>	30	FG	G	G		4	2.4	Co-dominance at 4m with included bark (M)	Yes	Private	
278	Sugar Maple	<i>Acer saccharum</i>	38.5	G	G	G		5	2.4		Yes	Private	
279	Eastern Hemlock	<i>Tsuga canadensis</i>	44.5	G	G	FG		5	3		Yes	Private	
280	Eastern Hemlock	<i>Tsuga canadensis</i>	22.5	FG	F	G		2	1.8	Crook (L), sweep (L), asymmetrical crown (H)	Yes	Private	
281	Eastern Hemlock	<i>Tsuga canadensis</i>	34.5	FG	F	F		2	2.4	Crook (M), asymmetrical crown (H)	Yes	Private	
282	Sugar Maple	<i>Acer saccharum</i>	31	G	FG	G		4	2.4	Asymmetrical crown (M)	Yes	Private	
283	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	G		3	1.8		No	Private	
284	Sugar Maple	<i>Acer saccharum</i>	20	FG	FG	FG		3	1.8	Crook (L), asymmetrical crown (M)	Yes	Private	
285	Ironwood	<i>Ostrya virginiana</i>	23	G	F	G		3	1.8	Asymmetrical crown (H)	Yes	Private	
286	Sugar Maple	<i>Acer saccharum</i>	30	G	G	G		4	2.4		Yes	Private	
287	Sugar Maple	<i>Acer saccharum</i>	27	G	G	G		3.5	1.8		Yes	Private	
288	Sugar Maple	<i>Acer saccharum</i>	21	FG	F	G		3	1.8	Bow (L), co-dominance in crown, asymmetrical crown (H)	Yes	Neighbour	
289	Sugar Maple	<i>Acer saccharum</i>	26.5	PF	PF	F		3	1.8	Lost leader at 6m	Yes	Neighbour	
290	Sugar Maple	<i>Acer saccharum</i>	28	G	G	G		3.5	1.8	Asymmetrical crown (L)	Yes	Neighbour	
291	Ironwood	<i>Ostrya virginiana</i>	19	G	G	G		2	1.8	Bow (L) to east	No	Private	
292	White Pine	<i>Pinus strobus</i>	58.5	G	G	F	15	5	3.6	Deadwood	Yes	Private	
293	Basswood	<i>Tilia americana</i>	18.5	F	G	PF	30	3	1.8	Dead leader, bow (M) to southeast	No	Private	
294	American Beech	<i>Fagus grandifolia</i>	24	G	G	G		3.5	1.8		Yes	Private	
295	Sugar Maple	<i>Acer saccharum</i>	34	G	G	G		5	2.4		Yes	Private	
296	Ironwood	<i>Ostrya virginiana</i>	18	G	G	G		3.5	1.8		No	Private	
297	Red Oak	<i>Quercus rubra</i>	79	FG	G	FG		7	4.8	Seam (L), co-dominance at 5m	Yes	Private	
298	Sugar Maple	<i>Acer saccharum</i>	42	G	G	G		5	3		Yes	Private	
299	Sugar Maple	<i>Acer saccharum</i>	37	PF	G	F		4	2.4	Poor form, burf (M)	Yes	Private	
300	Sugar Maple	<i>Acer saccharum</i>	26	G	G	FG		4	1.8	Crook (L)	Yes	Private	
301	Sugar Maple	<i>Acer saccharum</i>	16.5	P	G	G		2.5	1.8	Stem wound (H) at base with rot ==> hazard	No	Private	Hazard
302	Sugar Maple	<i>Acer saccharum</i>	15	P	G	G		2	1.8	Stem wound (H) at base with rot ==> hazard	No	Private	Hazard
303	Ironwood	<i>Ostrya virginiana</i>	33	F	P	P	60	3	2.4	Lean (L) to south, union at 2m, crook (L), broken branches (H)	Yes	Private	
304	Red Oak	<i>Quercus rubra</i>	64	G	G	G		7	4.2		Yes	Private	
305	Sugar Maple	<i>Acer saccharum</i>	38	FG	FG	G		4	2.4	Co-dominance in crown, crook (L), spiral stems, asymmetrical crown (M)	Yes	Private	
306	Ironwood	<i>Ostrya virginiana</i>	20	F	P	P	75	3	1.8	Co-dominance at 5m with 3 stems but 2 stems dead, main leader dead	Yes	Private	
307	Eastern Hemlock	<i>Tsuga canadensis</i>	20.5	G	G	G		3	1.8		Yes	Private	
308	Eastern Hemlock	<i>Tsuga canadensis</i>	16	G	G	G		3	1.8	Sweep (L)	No	Private	
309	Ironwood	<i>Ostrya virginiana</i>	26.5	FG	F	F	25	4	1.8	Co-dominance at 4m but 1 stem dead	Yes	Private	
310	Ironwood	<i>Ostrya virginiana</i>	19, 18.5	FG	G	G		3	1.8	Co-dominance at 0.5m with included bark (M)	Yes	Private	
311	Sugar Maple	<i>Acer saccharum</i>	25	G	G	FG		3.5	1.8	Deadwood	Yes	Private	
312	Black Cherry	<i>Prunus serotina</i>	22	FG	G	FG		3	1.8	Co-dominance in crown, sweep (L)	Yes	Private	
313	Ironwood	<i>Ostrya virginiana</i>	24, 15.5	F	G	FG		3	1.8	Union at 0.6m, co-dominance at 2m with 3 stems	Yes	Private	
314	Sugar Maple	<i>Acer saccharum</i>	26.5	FG	G	G		4	1.8	Co-dominance at 5m with included bark (M)	Yes	Private	
315	Black Cherry	<i>Prunus serotina</i>	29	FG	F	F	25	4	1.8	Co-dominance in crown, broken branches (M), epicormic branches (H)	Yes	Private	
316	Sugar Maple	<i>Acer saccharum</i>	18	G	G	G		3	1.8		No	Private	
317	Sugar Maple	<i>Acer saccharum</i>	26	G	G	G		4	1.8		Yes	Private	
318	Sugar Maple	<i>Acer saccharum</i>	20.5, 11	FG	G	G		4	1.8	Union at 3m	Yes	Private	
319	Ironwood	<i>Ostrya virginiana</i>	23, 21	FG	G	G		4	1.8	Co-dominance at 0.6m with included bark (M)	Yes	Private	
320	Sugar Maple	<i>Acer saccharum</i>	22	G	G	G		3.5	1.8		Yes	Private	
321	Sugar Maple	<i>Acer saccharum</i>	19.5	G	FG	G		3	1.8	Asymmetrical crown (M)	No	Private	
322	Sugar Maple	<i>Acer saccharum</i>	26, 24	F	G	G		4	1.8	Co-dominance at 1m with included bark (H)	Yes	Private	
323	Sugar Maple	<i>Acer saccharum</i>	23, 17	FG	G	G		4	1.8	Union at base	Yes	Private	
324	Sugar Maple	<i>Acer saccharum</i>	19.5	G	G	FG		3	1.8	Grape vine competition (M)	No	Private	
325	Sugar Maple	<i>Acer saccharum</i>	21	G	G	G		3.5	1.8		Yes	Private	
326	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	G		2.5	1.8		No	Private	
327	Sugar Maple	<i>Acer saccharum</i>	18.5	FG	G	G		3	1.8	Co-dominance in crown	No	Private	
328	Sugar Maple	<i>Acer saccharum</i>	27, 10	FG	G	G		4	1.8	Union at base, co-dominance in crown	Yes	Private	
329	Sugar Maple	<i>Acer saccharum</i>	25.5	FG	G	G		4	1.8	Co-dominance in crown	Yes	Private	
330	Sugar Maple	<i>Acer saccharum</i>	53.5	FG	G	G		5	3.6	Co-dominance at 6m with 3 stems, pruning wounds (L) with rot	Yes	Private	
331	Sugar Maple	<i>Acer saccharum</i>	30, 16	FG	G	G		5	2.4	Union at base, co-dominance at 4m with included bark (L)	Yes	City	
332	Red Oak	<i>Quercus rubra</i>	35	FG	G	G		5	2.4	Lean (VL) to northwest, co-dominance at 5m	Yes	City	
333	Sugar Maple	<i>Acer saccharum</i>	13.5	P	F	FG		2	1.8	Stem wound (H) at base, lean (L) to west, asymmetrical crown (H)	Yes	City	Hazard to Street ==> Remove
334	Sugar Maple	<i>Acer saccharum</i>	25.5	G	G	G		4	1.8		Yes	Private	
335	Sugar Maple	<i>Acer saccharum</i>	17	G	G	G		3.5	1.8		No	Private	
336	Sugar Maple	<i>Acer saccharum</i>	18.5	FG	G	G		3.5	1.8	Co-dominance at base but 1 stem dead and removed	No	Private	
337	Sugar Maple	<i>Acer saccharum</i>	14.5, 13	FG	G	G		3	1.8	Co-dominance at 0.3m with included bark (M)	Yes	Private	
338	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		2.5	1.8		No	Private	
339	Sugar Maple	<i>Acer saccharum</i>	31	FG	G	G		4	2.4	Co-dominance in crown	Yes	Private	
340	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	G		3	1.8		No	Private	
341	Eastern Hemlock	<i>Tsuga canadensis</i>	-60, 60	FG	G	FG		6	5.4	Co-dominance at 1.2m	Yes	Private	
342	Ironwood	<i>Ostrya virginiana</i>	20.5	G	G	G		3	1.8		Yes	Private	
343	Ironwood	<i>Ostrya virginiana</i>	20	FG	G	FG		3	1.8	Crook (M), epicormic branches (M)	Yes	Private	
344	Ironwood	<i>Ostrya virginiana</i>	21.5	G	G	G		3.5	1.8		Yes	Private	
345	Eastern Hemlock	<i>Tsuga canadensis</i>	48.5	G	G	FG		5	3		Yes	Private	
346	Ironwood	<i>Ostrya virginiana</i>	21.5	G	G	G		3.5	1.8		Yes	Private	

347	Sugar Maple	<i>Acer saccharum</i>	86	F	F	PF	40	7	5.4	Co-dominance at 6m with 3 stems but 1 stem dead and failed, cavity at union, dead branches (M)	Yes	Private	
348	Black Cherry	<i>Prunus serotina</i>	15.5	FG	FG	F		2.5	1.8	Lean (L) to east, crook (M), epicormic branches (M)	No	Private	
349	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		3.5	1.8		No	Private	
350	Eastern Hemlock	<i>Tsuga canadensis</i>	18	G	G	G		3	1.8		No	Private	
351	White Birch	<i>Betula papyrifera</i>	31	F	G	G		5	2.4	Lean (M) to west, sweep (M)	Yes	Private	
352	Ironwood	<i>Ostrya virginiana</i>	30	P	P	P	80	3	2.4	Lost leader, almost dead	Yes	Private	
353	Sugar Maple	<i>Acer saccharum</i>	35, 32	FG	G	FG		5	3	Co-dominance at 0.6m with included bark (M)	Yes	Private	
354	Ironwood	<i>Ostrya virginiana</i>	15, 13.5	FG	G	G		3	1.8	Co-dominance at 0.5m	Yes	Private	
355	Ironwood	<i>Ostrya virginiana</i>	16, 15	FG	G	G		3	1.8	Co-dominance at 0.2m	Yes	Private	
356	Sugar Maple	<i>Acer saccharum</i>	24.5	G	G	G		3.5	1.8		Yes	Private	
357	Sugar Maple	<i>Acer saccharum</i>	21	G	G	G		2.5	1.8		Yes	Private	
358	Ironwood	<i>Ostrya virginiana</i>	20.5	FG	G	G		3	1.8	Co-dominance in crown, crook (M)	Yes	Neighbour	
359	Ironwood	<i>Ostrya virginiana</i>	15	FG	G	G		2.5	1.8	Crook (M)	No	Neighbour	
360	Sugar Maple	<i>Acer saccharum</i>	24, 19	FG	FG	G		4	1.8	Co-dominance at base, asymmetrical crown (M)	Yes	Neighbour	
361	Sugar Maple	<i>Acer saccharum</i>	17.5	G	F	G		2.5	1.8	Asymmetrical crown (H)	No	Private	
362	Sugar Maple	<i>Acer saccharum</i>	23	G	F	G		3	1.8	Asymmetrical crown (H)	Yes	Private	
363	Sugar Maple	<i>Acer saccharum</i>	42	F	G	G		4	3	Lean (M) to east over trail, co-dominance in crown	Yes	Neighbour	
364	Sugar Maple	<i>Acer saccharum</i>	17.5	G	G	G		3	1.8		No	Neighbour	
365	Sugar Maple	<i>Acer saccharum</i>	22.5	FG	G	G		3	1.8	Co-dominance in crown	Yes	Neighbour	
366	Sugar Maple	<i>Acer saccharum</i>	36	FG	G	FG		4	2.4	Lean (L) to east, asymmetrical crown (M), co-dominance in crown, deadwood	Yes	Neighbour	
367	Sugar Maple	<i>Acer saccharum</i>	18	G	G	G		2.5	1.8	Crook (L), understory tree	No	Neighbour	
368	White Pine	<i>Pinus strobus</i>	73	FG	FG	F	15	5	4.8	Broken branches (L), crook (M)	Yes	Private	
369	Eastern Hemlock	<i>Tsuga canadensis</i>	43	G	G	FG		5	3	Sweep (L)	Yes	Private	
370	Ironwood	<i>Ostrya virginiana</i>	20	FG	G	FG		3	1.8	Crook (M), co-dominance in crown	Yes	Private	
371	Sugar Maple	<i>Acer saccharum</i>	38	G	G	G		4	2.4		Yes	Private	
372	Sugar Maple	<i>Acer saccharum</i>	35	PF	G	G		3	2.4	Lost leader due to failed tree, broken branches (M), bow (L) to east	Yes	Private	
373	Sugar Maple	<i>Acer saccharum</i>	27	G	G	G		3.5	1.8		Yes	Private	
374	Ironwood	<i>Ostrya virginiana</i>	17.5	G	G	G		2.5	1.8		No	Private	
375	Sugar Maple	<i>Acer saccharum</i>	22.5	G	G	G		4	1.8		Yes	Private	
376	Ironwood	<i>Ostrya virginiana</i>	15	G	G	G		2.5	1.8		No	Private	
377	Ironwood	<i>Ostrya virginiana</i>	29	G	G	G		3.5	1.8	Lean (L) to north	Yes	Private	
378	Sugar Maple	<i>Acer saccharum</i>	15.5	P	G	F		2.5	1.8	Stem wound (H) at base ==> hazard	No	Private	Hazard
379	Sugar Maple	<i>Acer saccharum</i>	17.5	G	G	G		3.5	1.8		No	Private	
380	Black Cherry	<i>Prunus serotina</i>	20	PF	G	G		4	1.8	Loose bark, lean (M) to north, crook (M), cavity at 1.5m	Yes	Private	
381	Ironwood	<i>Ostrya virginiana</i>	18	FG	G	F		3	1.8	Crook (M), epicormic branches (H)	No	Private	
382	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		3	1.8		No	Private	
383	Sugar Maple	<i>Acer saccharum</i>	43	G	G	FG		5	3	Deadwood	Yes	Private	
384	Sugar Maple	<i>Acer saccharum</i>	18.5	G	G	G		3	1.8		No	Private	
385	Sugar Maple	<i>Acer saccharum</i>	20	G	G	G		3.5	1.8		Yes	Private	
386	Black Cherry	<i>Prunus serotina</i>	25	FG	G	FG		4	1.8	Lean (L) to west, crook (M)	Yes	Private	
387	White Pine	<i>Pinus strobus</i>	74, 23	FG	G	FG		6	4.8	Union at 0.8m	Yes	Private	
388	Ironwood	<i>Ostrya virginiana</i>	20	G	G	G		3	1.8		Yes	Private	
389	Ironwood	<i>Ostrya virginiana</i>	18	G	G	G		2.5	1.8		No	Private	
390	Ironwood	<i>Ostrya virginiana</i>	27	G	G	G		4	1.8		Yes	Private	
391	Sugar Maple	<i>Acer saccharum</i>	32	G	G	G		4	2.4		Yes	Private	
392	Sugar Maple	<i>Acer saccharum</i>	32.5	G	G	G		5	2.4		Yes	Private	
393	Sugar Maple	<i>Acer saccharum</i>	17	G	G	G		3	1.8	Stem wound (L) at base	Yes	City	
394	Sugar Maple	<i>Acer saccharum</i>	25	P	G	G		4	1.8	Stem wound (H) at base, cavity with vertical crack ==> hazard	Yes	City	Hazard to Street ==> Remove
395	Sugar Maple	<i>Acer saccharum</i>	17.5	P	PF	PF	30	3	1.8	Stem wound (H), co-dominance at 3m ==> hazard	Yes	City	Hazard to Street ==> Remove
396	Sugar Maple	<i>Acer saccharum</i>	25.5	P	F	F		3.5	1.8	Crack, loose bark ==> hazard	Yes	City	Hazard to Street ==> Remove
397	Sugar Maple	<i>Acer saccharum</i>	20, 12	FG	G	F	15	3.5	1.8	Union at base, dead leader, co-dominance in crown	Yes	City	
398	Sugar Maple	<i>Acer saccharum</i>	24.5	PF	F	PF	25	3.5	1.8	Loose bark, crack, dead branches (M)	Yes	City	
399	Sugar Maple	<i>Acer saccharum</i>	23.5	G	G	G		4	1.8		Yes	Private	
400	Manitoba Maple	<i>Acer negundo</i>	20	F	F	F		3.5	1.8	Lean (M) to north, crook (M), co-dominance at 4m, epicormic branches (M)	Yes	Private	
401	Black Cherry	<i>Prunus serotina</i>	21	FG	G	FG		3	1.8	Co-dominance at 5m, crook (M)	Yes	Private	
402	Sugar Maple	<i>Acer saccharum</i>	18	G	G	G		3	1.8		No	Private	
403	White Pine	<i>Pinus strobus</i>	58	P	F	F	20	6	4.2	Cavity at base, broken branches (M), deadwood ==> hazard	Yes	Private	Hazard to Street ==> Remove
404	Ironwood	<i>Ostrya virginiana</i>	16	G	G	G		2.5	1.8		No	Private	
405	White Pine	<i>Pinus strobus</i>	56	FG	FG	F		6	3.6	Crook (L), growth deficit (L), asymmetrical crown (M)	Yes	Private	
406	Sugar Maple	<i>Acer saccharum</i>	16	G	G	G		3	1.8		No	Private	
407	Sugar Maple	<i>Acer saccharum</i>	17	G	G	G		3	1.8		No	Private	
408	Black Cherry	<i>Prunus serotina</i>	32	FG	G	FG	15	4	2.4	Crook (M), sweep (L), epicormic branches (M)	Yes	Private	
409	Sugar Maple	<i>Acer saccharum</i>	17	FG	G	G		3	1.8	Co-dominance in crown, broken branches (L)	No	Private	
410	Sugar Maple	<i>Acer saccharum</i>	22	FG	G	G		4	1.8	Co-dominance at 5m with included bark (M)	Yes	Private	
411	Sugar Maple	<i>Acer saccharum</i>	22	F	FG	FG		3.5	1.8	Co-dominance in crown, stem wound (M) at base, broken branches (M)	Yes	Private	
412	Manitoba Maple	<i>Acer negundo</i>	32.5	PF	F	F	25	5	2.4	Lean (H) to east, crook (L), coppice growth (H), broken branches (M)	Yes	Private	
413	Sugar Maple	<i>Acer saccharum</i>	16.5	PF	F	PF	40	3	1.8	Lost leader at 4m, broken branches (M)	No	Private	
414	Sugar Maple	<i>Acer saccharum</i>	15.5	P	F	F	15	3	1.8	Stem wound (H) at base, lean (L) to north, epicormic branches (M) ==> hazard	No	Private	Hazard

415	Sugar Maple	<i>Acer saccharum</i>	18	G	G	G		3	1.8		No	Private	
416	Ironwood	<i>Ostrya virginiana</i>	16	FG	G	G		2.5	1.8	Crook (M)	No	Private	
417	Eastern Hemlock	<i>Tsuga canadensis</i>	55, 54	PF	FG	FG		6	4.8	Co-dominance at 0.6m with cavity and vertical crack from union to ground, rot, 1 stem lean (L) to east over trail ==> hazard	Yes	Private	Hazard to Trail ==> Remove
418	Sugar Maple	<i>Acer saccharum</i>	15	G	G	G		2.5	1.8		No	Neighbour	
419	Sugar Maple	<i>Acer saccharum</i>	38	G	G	G		6	2.4	Crook (L), failed tree leaning	Yes	Neighbour	
420	Sugar Maple	<i>Acer saccharum</i>	38.5	G	G	G		4.5	2.4	Deadwood	Yes	Private	
421	Sugar Maple	<i>Acer saccharum</i>	19, 16.5	F	F	F		3	1.8	Union at base, stem wound (M) at base, crook (H), poor form	Yes	Neighbour	
422	Sugar Maple	<i>Acer saccharum</i>	16	F	G	G		2.5	1.8	Stem wound (M) at base	No	Neighbour	
423	Eastern Hemlock	<i>Tsuga canadensis</i>	23	G	G	FG		3	1.8		Yes	Neighbour	
424	Eastern Hemlock	<i>Tsuga canadensis</i>	52	F	FG	F		5	3.6	Crook (M), seam (M) with open cavity	Yes	Neighbour	
425	Apple	<i>Malus spp.</i>	29	PF	PF	PF	20	3	1.8	Bow (M) to northeast, crook (M), deadwood, epicormic branches (H)	Yes	Neighbour	
426	Sugar Maple	<i>Acer saccharum</i>	16.5	G	G	G		2.5	1.8		No	Neighbour	
A	White Pine	<i>Pinus strobus</i>	~55	G	G	FG		4	3.6		Yes	Neighbour	
B	Sugar Maple	<i>Acer saccharum</i>	~42	G	G	G		4	3		Yes	Neighbour	
C	Manitoba Maple	<i>Acer negundo</i>	~20	P	F	F		6	1.8	Growing from side of bank, lean (H) over creek	Yes	Neighbour	
D	Ironwood	<i>Ostrya virginiana</i>	~20	G	FG	G		2.5	1.8	Bow (L) to east	Yes	Neighbour	
E	Sugar Maple	<i>Acer saccharum</i>	~45	G	G	G		5	3		Yes	Neighbour	
F	Ironwood	<i>Ostrya virginiana</i>	~30	FG	F	PF	30	3	2.4	Crook (L), stem wound (L), dead branches (L), broken branches (M)	Yes	Neighbour	

Codes		
DBH	Diameter at Breast Height	(cm)
TI	Trunk Integrity	(G, F, P)
CS	Crown Structure	(G, F, P)
CV	Crown Vigor	(G, F, P)
CDB	Crown Die Back	(%)
DL	Dripline in radius	(m)
mTPZ	minimum Tree Protection Zone	(m)
Owner	Private, Neighbour, City, Region	
~ = estimate; (VL) = very light; (L) = light; (M) = moderate; (H) = heavy; (VH) = very heavy		

Appendix A. Photographs of the Trees

Trees Recommended for Removal



Image 1. Tree 18



Image 2. Tree 18 – base



Image 3. Tree 77 – view from north



Image 4. Tree 77 – view from south



Image 5. Tree 206



Image 6. Tree 333



Image 7. Tree 333 - base



Image 8. Tree 394



image 9. Tree 394 – base



Image 10. Tree 395



Image 11. Tree 395 – base



Image 12. Tree 396



Image 13. Tree 396 – base

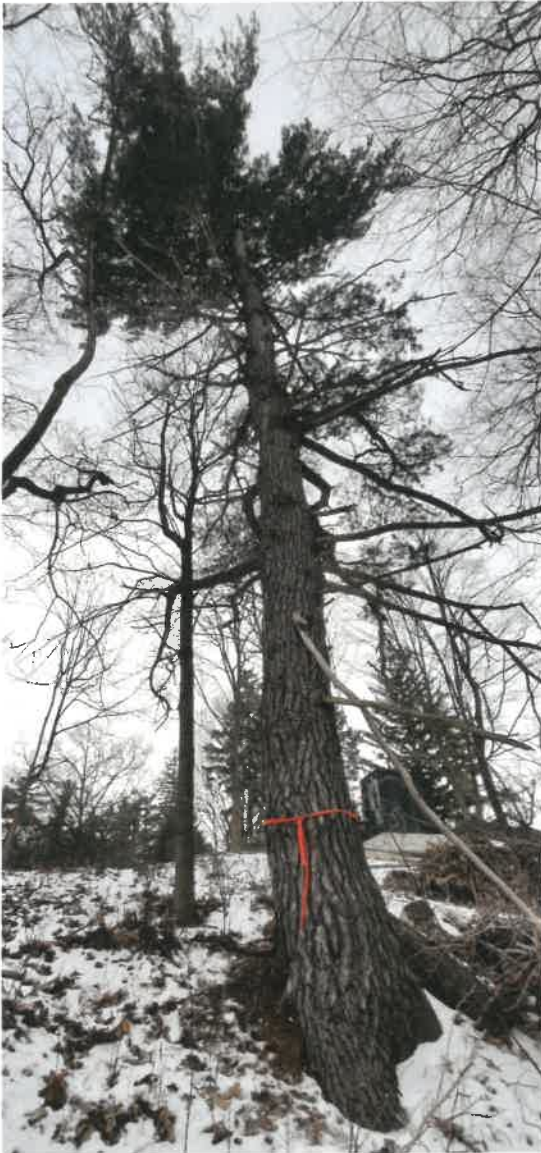


Image 14. Tree 403



Image 15. Tree 403 – base



Image 16. Tree 417



Image 17. Tree 417 – cavity and crack at union



Image 18. Dead Ash near Tree 421



Image 19. Dead Ash near Tree 360



Image 20. Dead Hemlock near Tree 417

Hazard Trees



Image 21. Tree 38



Image 22. Tree 38 – base



Image 23. Tree 143



Image 24. Tree 143 – lower stem



Image 25. Tree 177



Image 26. Tree 177 – base



Image 27. Tree 249



Image 28. Tree 249 – crack at base



Image 29. Tree 253



Image 30. Tree 253 – base



Image 31. Tree 301



Image 32. Tree 301 – base



Image 33. Tree 302



Image 34. Tree 302 – base



Image 35. Tree 378



Image 36. Tree 378 – base



Image 37. Tree 414



Image 38. Tree 414 – base



Image 39. 3 dead trees at SE corner near #16



Image 40. Dead Ash near #144



Image 41. Pine snag near #147



Image 42. Dead Pine near #177



Image 43. Dead Ironwood near #197



Image 44. Dead Elm near #236



Image 45. Dead Ash with vine near #303



Image 46. Dead Ash near #321



Image 47. Dead Ash near #348



Image 48. Dead Hemlock near #370



Image 49. Dead Ash near #372



Image 50. Dead Ash near #374



Image 51. Dead Ash near #415

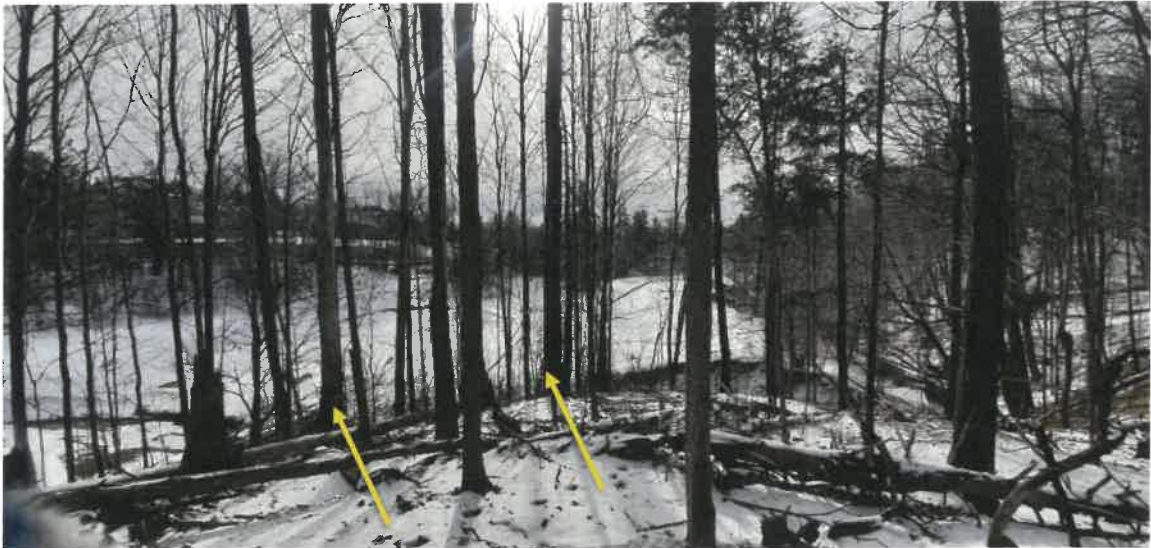


Image 52. Dead Pines near #150-160



LEGEND

- Drip-line (GREEN circle)
- Tree Recommended for Removal (RED)
- Minimum Tree Preservation Zone (MAGENTA circle)
- Toronto and Region Conservation Authority regulated land (CYAN)
- Tree Identified for Hazard but preservation recommended (ORANGE)
- Surveyed Tree Location
- Tree Identified for Preservation (BLACK)

Tree Inventory
Refer to Table 1 of report dated 4 February 2021 for complete tree Inventory Information. Trees over 15cm DBH on and within six metres of the subject property and trees of all diameters within the road right-of-way were included in the Inventory.

Tree Removals
The removal of 9 tagged trees and 4 dead trees is recommended due to hazardous condition to the street and the tall as indicated with RED labels.

Tree Preservation
Preservation of all remaining tree resources will be possible. 9 tagged trees and 26 dead trees are in hazardous condition but preservation is possible as shown with ORANGE labels. The remaining trees are indicated with BLACK labels. Minimum Tree Preservation Zones (mTPZ) is indicated in MAGENTA. mTPZ circles represent minimum distances for construction and grading near trees. Drip-line is shown in GREEN circle.

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102 Angelica Avenue
Woodbridge, Ontario L4L 8N9

Property
167 National Drive
Vaughan, ON

Existing Conditions & Tree Inventory

Project	P2645
Date	4 February 2021
Scale	1:300

Figure
1

Issue	Issue/Revisions	Date	By
1	Report Submission	4 Feb. 2021	RH

Base Data: York Maps (raster)