



# TREE CONSERVATION REPORT

1047 Richmond Road

Tree Conservation Report submitted as Partial Requirements for a Site Plan Control Application.



**Dendron Forestry Services**

August 23, 2024



## Tree Conservation Report

Submitted as part of Site Plan Control Application

**Address:** 1047 Richmond Road  
**Date of Report:** August 23, 2024  
**Date of Site Visit:** August 13, 2024  
**Prepared by:** Kevin Myers, ISA Certified Arborist; kevin.myers@dendronforestry.ca  
**Client:** Fengate Asset Management  
c/o Corina Sajewski; corina.sajewski@fengate.com

**This Report must be read in its entirety, including the Assumptions and Limiting Conditions.**

### Purpose of the Report

This Tree Conservation Report has been prepared for Fengate Asset Management as partial requirements for a Site Plan Control Application submitted to the City of Ottawa. The objectives of this Tree Conservation Report are:

- To describe all trees with diameters over 10 cm on the site, recording their species, size, and current health condition. This includes trees on adjacent private property 10 cm or greater in diameter, with critical root zones that extend onto the subject property. It also includes city trees of all sizes that will be impacted by the proposed development.
- To evaluate the impact to the trees by the proposed development and recommend removal or retention based on the provided plans
- To provide recommendations on how to mitigate damage to retained trees during construction

The assessments made at this stage are based on the information provided at the time of writing and may change should new information become available.

### Methodology

The following materials were reviewed as part of this report:

- Survey by Annis, O'Sullivan, Vollebekk Ltd., dated September 29, 2021
- Site plan by Roderick Lahey Architect Inc., dated August 16, 2024
- Proposed lot grading and servicing plan by Egis, dated July 17, 2024
- GeOttawa tree inventory layer and aerial photography
- Google© Street View imagery – various years

A site visit was conducted to collect the following information from each tree classified as protected under the City of Ottawa's Tree Protection By-law No. 2020-340:

- Diameter at breast height (1.3 m from grade)
- Species
- Tree health



### Existing Site Conditions

The site is currently vacant – according to the client, the building was demolished in late 2023. According to aerial imagery available on GeoOttawa, the site was occupied by a large commercial building – a car dealership – since at least 1965.

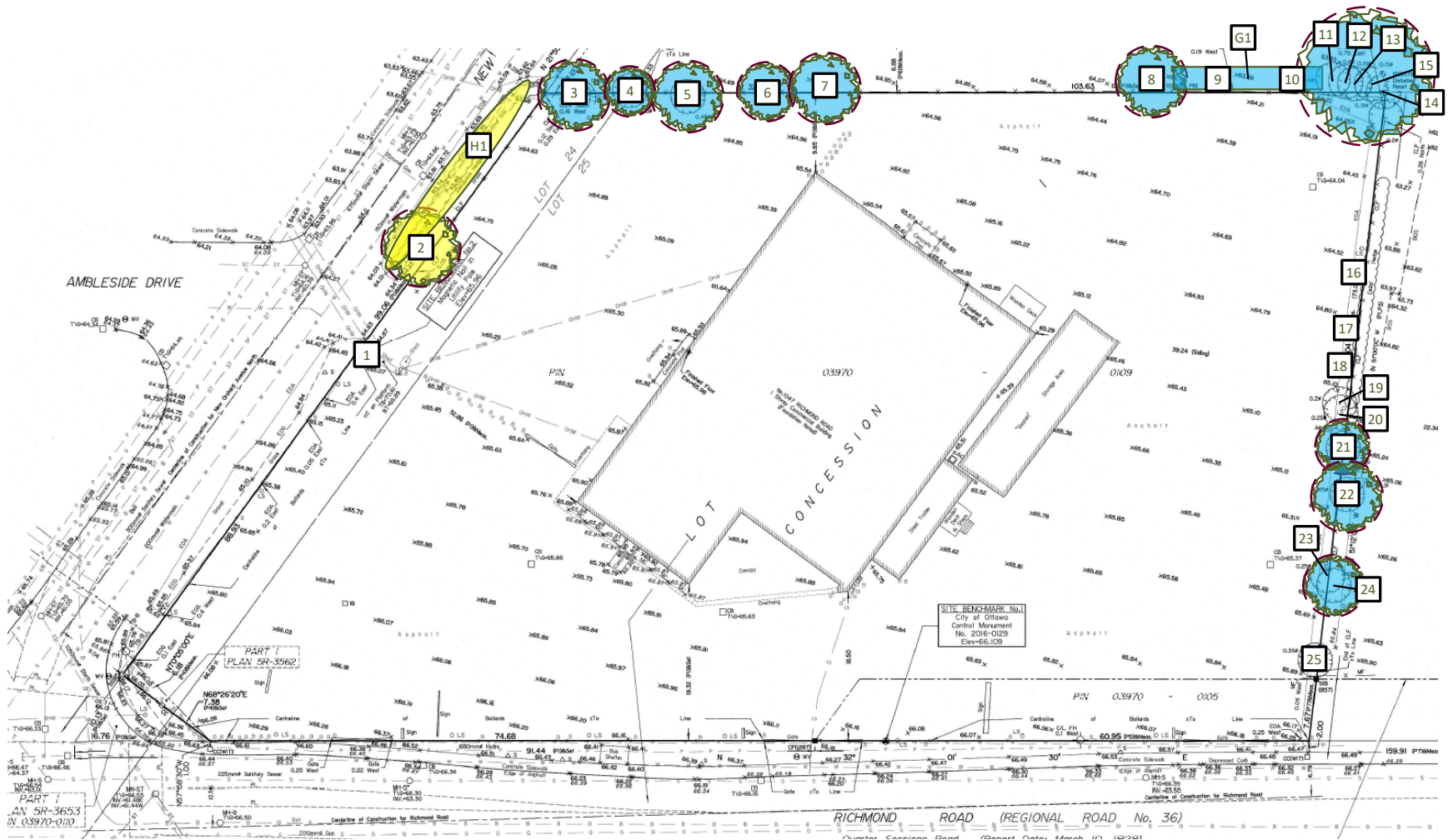
Vegetation on the site is limited to the periphery. Trees and shrubs are growing in small strips of soil between hardscaping on the subject and adjacent sites – all the vegetation has limited rooting space. Aerial imagery also shows trees growing around the periphery of the property relatively consistently since that time – although in its current configuration since 1991. This means it is likely some of the trees present today are at least 33 years old. Ownership of all trees on site was difficult to determine; the wire fence was used as a proxy for the property line.

Appendix A is an inventory of all trees that are protected under City of Ottawa Tree Protection By-law (2020-340) on the site. This includes private trees with a diameter at breast height (DBH) of 10 cm or greater, and city-owned trees of all sizes. It also includes trees with a DBH of 10 cm or greater on adjacent properties whose Critical Root Zone (CRZ) extend into the subject area. The CRZ is an area around the trunk with a radius equivalent to 10 times the diameter of the trunk. This does not take into account infrastructure such as buildings and asphalt and it assumes the tree has no restrictions on root growth. The map on the following page indicates locations of existing protected trees and shows CRZs where the scale permits.




**H1** is unmaintained shrubby growth along the city ROW on New Orchard Avenue. Species identified in this ‘hedge’ include common buckthorn (*Rhamnus cathartica*), young ash saplings (*Fraxinus spp.*) and Manitoba maples (*Acer negundo*). These shrubs are all small and competing with one another and grape vine (*Vitis spp.*) and Virginia creeper (*Parthenocissus quinquefolia*) for light and space. None of the trees are good candidates for retention.

**G1** is a cluster of approximately 25 small stems (between 2-12cm DBH) of mostly American elm (*Ulmus americana*) with some scattered Norway maple (*Acer platanoides*). These small trees are growing on a slight slope and are shaded by the larger trees surrounding them. Despite these challenges, many of the stems show good growth and may be candidates for retention.

No butternut (*Juglans cinerea*) or black ash (*Fraxinus nigra*), protected species in Ontario, were identified on site.



**Legend**

-  Critical Root Zone (as defined in By-Law 2020-340)
-  Tree either fully or partly on adjacent property
-  Tree either fully or partly on city property



### Proposed Development and Conserved Vegetation

Phase 1 will necessitate the removal of **Trees 1-7** based on the proximity of proposed roadways and proposed changes in grade.

On the grading and servicing plan provided by the client, retaining walls are shown along the western and northern property lines. The wall on the western property line will necessitate the removal of **Trees 8-10**. It will come to approximately 3m from the base of Tree 11 and it is expected that construction of this wall will necessitate excavation closer to the base. The grades are also expected to be raised by approximately 1m at the northwestern corner of the property. Because **Trees 11-14** are mature poplars nearing the pinnacle of their growth, they are unlikely to adapt well to these impacts from construction and are recommended for removal. While Tree 15 may be able to adapt to the new site conditions, it is an invasive species that should be removed.

Eventually it is expected that all trees on site will need to be removed. However Phase 2 will occur at a later date, and **Trees 16-25** could be preserved until that phase begins to continue to provide ecosystem services. If these trees are to be retained, fencing as described below and shown in Map 2 is to be installed.

#### *Tree Protection*

Prior to any site works, protective fencing should be installed around the trees as indicated in the attached Tree Information Map and maintained until all construction on site has been completed as per the **City of Ottawa Tree Protection Specifications (March 2021)**. Within the fenced area, the following tree protection guidelines should be applied:

- Do not change the grade
- Do not store construction material
- Do not operate machinery
- Do not convert to hard surface or change the landscaping
- Do not excavate unless it is a method that has been pre-approved by the City
- Do not place signs, notices or posters to any tree
- Do not damage the root system, trunk, or branches of any tree
- Direct the exhaust away from the tree

The tree protection fencing must be 1.2 m in height and constructed of a rigid or framed material (e.g. modulus – steel, plywood hoarding, or snow fence on a 2"X4" wood frame) with posts 2.4 m apart such that the fence location cannot be altered. All supports must be placed outside of the CRZ and installation must minimize damage to existing roots.

If the fenced tree protection area must be reduced to facilitate construction, *one* of the following mitigation measures should be applied:

- Place a layer of 6-12 inches (15 to 30 cm) of woodchip mulch to the area
- Apply ¾ (2 cm) inch plywood, or road mats over a 4+ inch (10 cm) thick layer of the wood chip mulch
- Apply 4-6 inches (10 to 15 cm) of gravel over a taut, staked, geotextile fabric



### **Tree Planting Recommendation**

Native species should be prioritized in landscape planning. Best management practices recommend 30m<sup>3</sup> of soil per tree planted, and while this may not be possible, maximizing soil volume per tree is highly recommended. Engineered solutions such as soil cells and structural soil can present opportunities to increase soil volume even in constrained environments. Raised curb-style planters are recommended for hard surface plantings, and underplanting trees with shrubs can provide nutrients to the roots and protection to the trunks.

### **Wildlife Impact**

Given current site conditions, it is unexpected this development will impact wildlife.

### **Tree Clearing and Migratory Birds**

Following the guidelines under the *Migratory Birds Convention Act, 1994*, removal of vegetation should be avoided during the nesting periods for migratory birds which extends from April 15 to as late as August 15<sup>th</sup>. If tree removal is required during this period, a nesting survey should be completed by a biologist within 5 days of tree removal to confirm that no nests are present.

The undersigned personally inspected the property and issues associated with this report on August 13, 2024. On Behalf of Dendron Forestry Services,

Kevin Myers, MFC, RPF in Training  
ISA Certified Arborist®, ON-2907A  
[kevin.myers@dendronforestry.ca](mailto:kevin.myers@dendronforestry.ca)  
(514) 726-8531



**Appendix A: Tree Information Table**

Tree <sup>1</sup>	Species	DBH (cm)	Ownership <sup>2</sup>	Tree Condition	Action	Forester recommendation
1	Siberian elm ( <i>Ulmus pumila</i> )	16	Subject property	Fair: being defoliated; codominant stems @3m	Remove	Remove due to level of site activity.
2	Manitoba maple ( <i>Acer negundo</i> )	45 (estimate)	City	Poor: very weak foliage at top; fungal bodies at base; cavities; epicormic shoots throughout	Remove	Remove due to level of site activity.
3	Siberian elm ( <i>U. pumila</i> )	41	Boundary – 99 New Orchard	Fair/Good: slight lean South; black bark high in canopy	Remove	Remove due to proximity of proposed laneway.
4	American elm ( <i>U. americana</i> )	24	Boundary – 99 New Orchard	Dead	Remove	Remove – dead.
5	Manitoba maple ( <i>A. negundo</i> )	42	Boundary – 99 New Orchard	Fair/Poor: wound and hollow at base; weak foliage; branch attachment wound @4m	Remove	Remove due to proximity of proposed laneway.
6 <sup>4</sup>	Manitoba maple ( <i>A. negundo</i> )		Subject property	Poor: large stump with single remaining stem - cavity, wound and decay in that stem	Remove	Remove due to proximity of proposed laneway.
7 <sup>4</sup>	Manitoba maple ( <i>A. negundo</i> )	37	Boundary – 99 New Orchard	Poor: heavy lean North; codominant stems @1.5m	Remove	Remove due to proximity of proposed laneway and health status.
8 <sup>4</sup>	Manitoba maple ( <i>A. negundo</i> )	45	Adjacent – 99 New Orchard	Fair: twisted form; small wound at base; lean into subject property	Remove	Remove due to proximity of retaining wall.
9 <sup>4</sup>	American elm ( <i>U. americana</i> )	11	Adjacent – 99 New Orchard	Good	Remove	Remove due to proximity of retaining wall.
10 <sup>4</sup>	Manitoba maple ( <i>A. negundo</i> )	12	Adjacent – 99 New Orchard	Fair/Poor: growing on fence; curve at base	Remove	Remove due to proximity of retaining wall.
G1 <sup>4</sup>	American elm ( <i>U. americana</i> ) and Norway maple ( <i>A. platanoides</i> )	~25 stems 2-12cm	Adjacent – 99 New Orchard	Fair/Good: young stems – shaded by larger trees; growing on slope	Remove	Remove due to proximity of retaining wall.
11	Eastern cottonwood ( <i>Populus deltoides</i> )	42	Adjacent – 99 New Orchard	Fair: extended lateral growth; slight lean South	Remove	Remove due to installation of retaining wall and grade changes.
12	Eastern cottonwood ( <i>P. deltoides</i> )	62	Adjacent – 99 New Orchard	Fair: extended lateral growth	Remove	Remove due to installation of retaining wall and grade changes.
13	American elm ( <i>U. americana</i> )	14	Adjacent – 99 New Orchard	Fair/Good: asymmetrical and lean to West	Remove	Remove due to installation of retaining wall and grade changes.





14	Eastern cottonwood ( <i>P. deltoides</i> )	70	Adjacent – 99 New Orchard	Fair: extended lateral growth	Remove	Remove due to installation of retaining wall and grade changes.
15	Norway maple ( <i>Acer platanoides</i> )	19	Adjacent – 99 New Orchard	Good/Fair	Remove	Remove due to installation of retaining wall and grade changes.
16 <sup>4</sup>	American elm ( <i>U. americana</i> )	19	Subject property	Fair: lean West; covered in grape vine	Retain	Retain during Phase 1. Further assessment required at beginning of Phase 2.
17 <sup>4</sup>	American elm ( <i>U. americana</i> )	22	Subject property	Good	Retain	Retain during Phase 1. Further assessment required at beginning of Phase 2.
18 <sup>4</sup>	Manitoba maple ( <i>A. negundo</i> )	15, 15, 16, 11	Subject property	Fair/Poor: multi-stem growth – included bark at base; asymmetrical crown and lean	Retain	Retain during Phase 1. Further assessment required at beginning of Phase 2.
19	Manitoba maple ( <i>A. negundo</i> )	23	Subject property	Poor: decay in wounds	Retain	Retain during Phase 1. Further assessment required at beginning of Phase 2.
20	Manitoba maple ( <i>A. negundo</i> )	20, 9	Subject property	Fair/Poor: poor form – codominant stems and crook	Retain	Retain during Phase 1. Further assessment required at beginning of Phase 2.
21	American elm ( <i>U. americana</i> )	31	Boundary – 1025 Richmond	Poor: growing on fence	Retain	Retain during Phase 1. Further assessment required at beginning of Phase 2.
22	Norway maple ( <i>A. platanoides</i> )	40 (estimate)	Adjacent – 1025 Richmond	Poor: large central leader removed; decay in remaining stem; seams with decay on scaffold branches	Retain	Retain during Phase 1. Further assessment required at beginning of Phase 2.
23	Ash ( <i>Fraxinus spp.</i> )	~25	Boundary – 1025 Richmond	Dead	Retain	Retain during Phase 1. Further assessment required at beginning of Phase 2.
24	Norway maple ( <i>A. platanoides</i> )	30 (estimate)	Adjacent – 1025 Richmond	Fair: poor form	Retain	Retain during Phase 1. Further assessment required at beginning of Phase 2.
25	Manitoba maple ( <i>A. negundo</i> )	15 (estimate)	Subject property	Poor: shrub-like growth from large old stump – one live stem remaining – dead stem leaning east.	Retain	Retain during Phase 1. Further assessment required at beginning of Phase 2.

<sup>1</sup> Please refer to the enclosed Tree Conservation Report map for tree numbers. Note that this map includes a tree layer added to the site plan (in pdf format) provided by the client. This layer includes only information about the trees and the original site plan is not altered in this process.

<sup>2</sup>Ownership of the tree in this report is based on the information provided and should not be used as a determination of ownership. For ownership disputes, a survey should be relied on. For boundary trees, consent from the adjacent property owner is required for removal as part of the application.

<sup>3</sup>Trees on adjacent properties do not include a full assessment. The diameters are estimated, and the health is estimated based on what is visible from the subject property. Trees along the property line may also have limited health assessments if part of the tree is not visible.

<sup>4</sup>The location of these trees was not provided and has been estimated





**Appendix B: Photographs**



Above left: Tree 1 - City elm to be removed.



Above right: Tree 3 - boundary elm to be removed - and Tree 4 - dead elm to be removed.

Below: Trees 5-7 – adjacent trees to be removed.

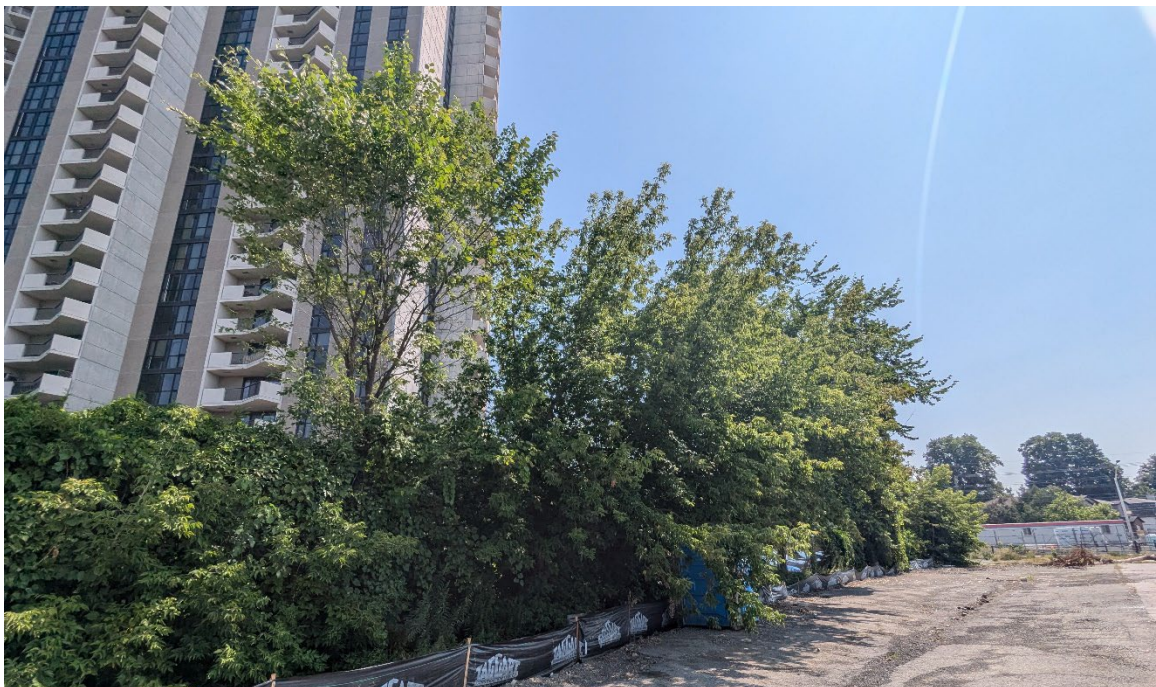






Above: Trees 8-15 and G1.

Below: Trees 16-20





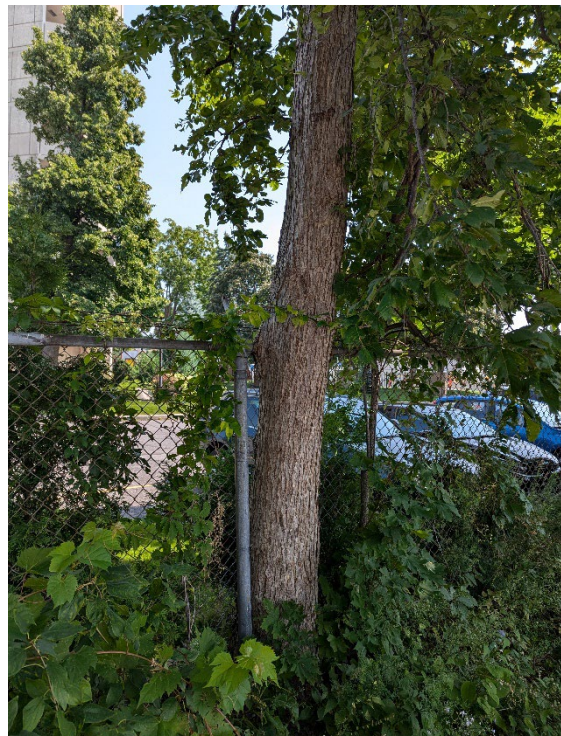
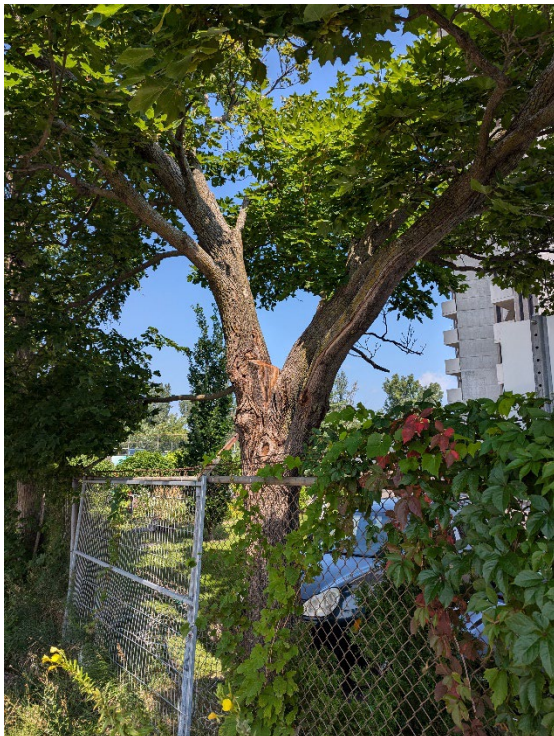


Above left: Tree 23 - dead ash to be removed - and Tree 24 - adjacent Norway maple.

Above right: Tree 25 - boundary Manitoba maple to be removed.

Below right: trunk of Tree 21.

Below left: Tree 22 – adjacent Norway maple.







## **Appendix C: Assumptions and Limiting Conditions**

### **Intended Use of the Report**

This Report was prepared by Dendron Forestry Services (hereafter “Dendron”) at the request of the Client. The results, observations, interpretations, analysis, recommendations, and conclusions contained within this Report are to be used solely for the purposes outlined within this Report. All other uses are impermissible and unintended, unless specifically stated in writing in the Report.

### **Intended User of the Report**

This Report was prepared by Dendron for the exclusive use of the Client and may not be used or relied upon by any other party. All other users are unintended and unauthorized, unless specifically stated in writing in the Report.

### **Limitations of this Report**

This Report is based on the circumstances and on-site conditions as they existed at the time of the site inspection and the information provided by the Client and/or third parties to Dendron. On-site conditions may limit the extent of the on-site inspection(s) conducted by Dendron, including weather events such as rain, flooding, storms, winds, tornados, snowfall, snow cover, hail; obstructions including fencing, dwellings, buildings, sheds, plants, and animals; lack of access to the entire perimeter of the tree due to adjacent properties; the shape of the tree; and accessibility of the tree crown, branches, trunk, or roots for examination.

In the event that information provided by the Client or any third parties, including but not limited to documents, records, site and grading plans, permits, or representations or any site conditions are updated or change following the completion of this Report, this Report is no longer current and valid and cannot be relied upon for the purpose for which it was prepared. Dendron and its agents, assessors, and/or employees are not liable for any damages, injuries, or losses arising from amendments, revisions, or changes to the documents, records, site and grading plans, permits, representations, or other information upon which Dendron relied in preparing this Report.

No assessment of any other trees or plants has been undertaken by Dendron. Dendron and its agents, assessors, and/or employees are not liable for any other trees or plants on or around the subject Property except those expressly identified herein. The results, observations, interpretations, analysis, recommendations, and conclusions contained within this Report apply only to the trees identified herein.

Trees and plants are living organisms and subject to change, damage, and disease, and the results, observations, interpretations, analysis, recommendations, and conclusions as set out in this Report are valid only as at the date any inspections, observations, tests, and analysis took place. No guarantee, warranty, representation, or opinion is offered or made by Dendron as to the length of the validity of the results, observations, interpretations, analysis, recommendations, and conclusions contained within this Report. As a result the Client shall only rely upon this Report as representing the results, observations, interpretations, analysis, recommendations, and conclusions that were made as at the date of such inspections, observations, tests, and analysis. The trees discussed in this Report should be re-assessed periodically and at least within one year of the date of this Report.

### **No Opinion regarding ownership of the Tree**

This Report was not prepared to make a determination as to ownership of the subject tree(s). Where ownership of the subject tree(s) is identified within this Report, said identification is based on the information provided by the Client and third parties, including surveys, permits, and site and grading plans and may not be relied upon as a guarantee, warranty, or representation of ownership.

### **Assumptions**

This Report is based on the circumstances and conditions as they existed at the time of the site inspection and the information provided by the Client and/or third parties to Dendron. Where documents, records, site and grading plans, permits, representations, and any other information was provided to Dendron for the purpose of preparing this Report, Dendron assumed that said information was correct and up-to-date and prepared this Report in reliance on that information. Dendron and its agents, assessors, and/or employees, are not responsible for the veracity or accuracy of such information. Dendron and its agents, assessors, or employees are not liable for any damages, injuries, or losses arising from inaccuracies, errors, and/or omissions in the documents, records, site and grading plans, permits, representations, or other information upon which Dendron relied in preparing this Report.

For the purpose of preparing this Report, Dendron and its agents, assessors, and/or employees assumed that the property which is the subject of this Report is in full compliance with all applicable federal, provincial, municipal, and local statutes, regulations, by-laws, guidelines, and other related laws. Dendron and its agents, assessors, and/or employees are not liable for any issues with respect to non-compliance with any of the above-referenced statutes, regulations, bylaws, guidelines, and laws as it may pertain to or affect the property to which this Report applies.

For the purpose of preparing this Report, Dendron and its agents, assessors, and/or employee assumed that there are no hidden or unapparent conditions affecting the results, observations, interpretations, analysis, recommendations, and conclusions contained within this Report.

### **No Publication**

The Client acknowledges and agrees that all intellectual property rights and title, including without limitation, all copyright in this Report shall remain solely with Dendron Forestry. Possession of this Report, or a copy thereof, does not entitle the Client or any third party to the right of publication or reproduction of the Report for any purpose save and except where Dendron has given its prior written consent.



Neither all nor any part of the contents of this Report shall be disseminated to the public through advertising, public relations, news, sales, the internet or other media (including, without limitation, television, radio, print or electronic media) without the prior written consent of Dendron Forestry.

### **Implementing the Report Recommendations**

Dendron and its agents, assessors, and/or employees accept no responsibility for the implementation of any part of this Report unless specifically requested to provide oversight on the implementation of the recommendations. In the event that inspection or supervision of all or part of the implementation of the within recommendations is requested, that request shall be in writing and the details agreed to in writing by both parties.

Dendron and its agents, assessors, and/or employees are not liable for any damages or injuries arising from the manner in which the recommendations in this Report are implemented, including failure to, incorrect, or negligent implementation of the recommendations.

### **Further Services**

Neither Dendron nor any assessor employed or retained by Dendron for the purpose of preparing or assisting in the preparation of this Report shall be required to provide any further consultation or services to the Client, save and except as already carried out in the preparation of this Report and including, without limitation, to act as an expert witness or witness in any court in any jurisdiction unless the Client has first made specific arrangements with respect to such further services, including, without limitation, providing the payment of the Report's regular hourly billing fees.

### **Limits of Liability**

In carrying out this Report, Dendron and its agents, assessors, and/or employees have exercised a reasonable standard of care, skill, and diligence as would be customarily and normally provided in carrying out this Report. While reasonable efforts have been made to ensure that the trees recommended for retention are healthy, no guarantees are offered, or implied, that these trees, or all parts of them will remain standing. It is professionally impossible to predict with absolute certainty the behaviour of any single tree or group of trees, or all their component parts, in all given circumstances. Inevitably, a standing tree will always pose some risk. Most trees have the potential to fall, lean, or otherwise pose a danger to property and persons in the event of adverse weather conditions, and this risk can only be eliminated if the tree is removed.

Without limiting the foregoing, no liability is assumed by Dendron for:

- a) any legal description provided with respect to the Property;
- b) issues of title and or ownership respect to the Property;
- c) the accuracy of the Property line locations or boundaries with respect to the Property; and
- d) the accuracy of any other information provided to Dendron by the Client or third parties;
- e) any consequential loss, injury or damages suffered by the Client or any third parties, including but not limited to replacement costs, loss of use, earnings and business interruption; and
- f) the unauthorized distribution of the Report.

The total monetary amount of all claims or causes of action the Client may have as against Dendron Forestry, including but not limited to claims for negligence, negligent misrepresentation, and breach of contract, shall be strictly limited solely to the total amount of fees paid by the Client to Dendron Forestry pursuant to the Contract for Services dated July 4, 2024, for which this Assessment was carried out.

Further, under no circumstance may any claims be initiated or commenced by the Client against Dendron or any of its directors, officers, employees, contractors, agents, assessors, or Assessors, in contract or in tort, more than 12 months after the date of this Report.

### **No Third Party Liability**

This Report was prepared by Dendron exclusively for the Client for the purpose set out in the Report. Any use which a third party makes of this Report, or any reliance on or decisions a third party may make based upon this Report, are made at the sole risk of any such third parties. Dendron Forestry accepts no responsibility for any damages or loss suffered by any third party or by the Client as a result of decisions made or actions based upon the unauthorized use or reliance of this Report by any such party.

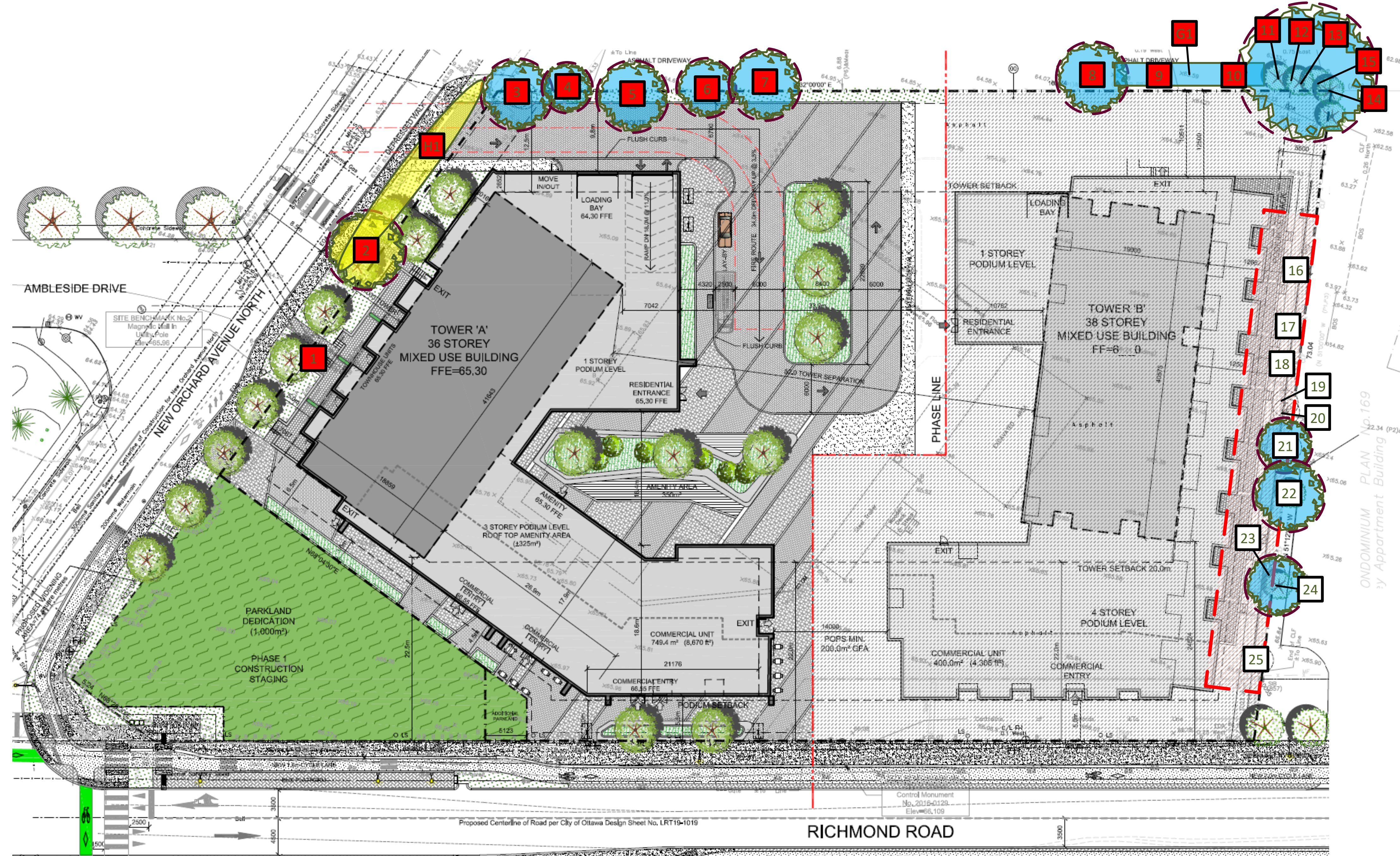
### **General**

Any plans and/or illustrations in this Report are included only to help the Client visualize the issues in this Report and shall not be relied upon for any other purpose. This report is best viewed in colour. Any copies printed in black and white may make some details difficult to properly understand. Dendron accepts no liability for misunderstandings due to a black and white copy of the report.

Notwithstanding any of the above, nothing in this Report is taken to absolve the Client of the responsibility of obtaining a new Report in the event that the circumstances of the tree change.

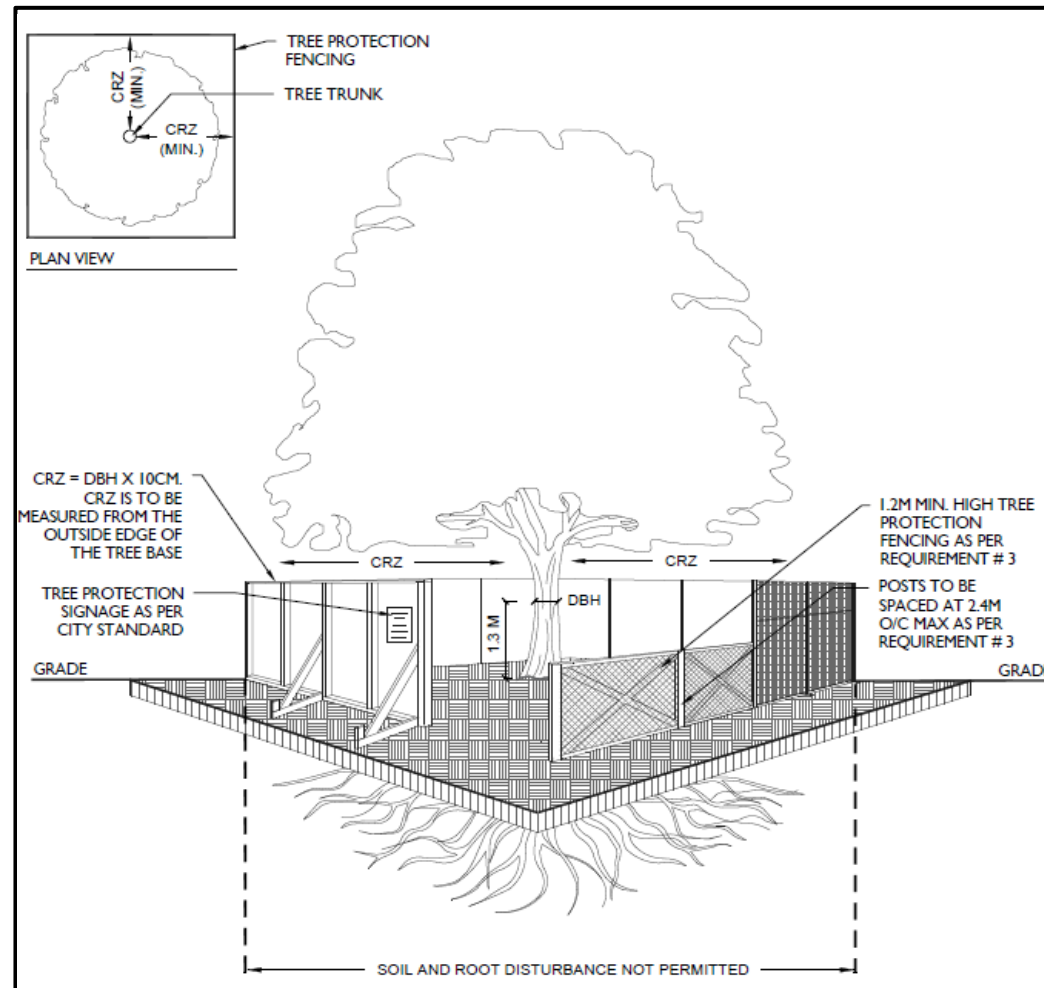


**Note:** the tree layer has been added to the original base layer supplied by the client in pdf format. This layer refers to the trees only, and the original base has not been altered in the process, although it may be cropped. Refer to the original plan for details as quality is lost when importing the plan into the software used to create the tree layer.  
**Base Layer:** Site plan by Roderick Lahey Architecture Inc., dated August 16, 2024



**TCR Map 2 – 1047 Richmond Road**

Date	Version	Prepared By
23/08/2024	1	KM



**Failure to install and maintain fencing as described in this report may result in fines from the city.**

Tree	Species	DBH (cm)	Tree Condition	Forester recommendation
1	Siberian elm ( <i>Ulmus pumila</i> )	16	Fair: being defoliated; codominant stems @3m	Remove due to level of site activity.
2	Manitoba maple ( <i>Acer negundo</i> )	45 (estimate)	Poor: very weak foliage at top; fungal bodies at base; cavities; epicormic shoots throughout	Remove due to level of site activity.
3	Siberian elm ( <i>U. pumila</i> )	41	Fair/Good: slight lean South; black bark high in canopy	Remove due to proximity of proposed laneway.
4	American elm ( <i>U. americana</i> )	24	Dead	Remove – dead.
5	Manitoba maple ( <i>A. negundo</i> )	42	Fair/Poor: wound and hollow at base; weak foliage; branch attachment wound @4m	Remove due to proximity of proposed laneway.
6 <sup>a</sup>	Manitoba maple ( <i>A. negundo</i> )		Poor: large stump with single remaining stem - cavity, wound and decay in that stem	Remove due to proximity of proposed laneway.
7 <sup>a</sup>	Manitoba maple ( <i>A. negundo</i> )	37	Poor: heavy lean North; codominant stems @1.5m	Remove due to proximity of proposed laneway and health status.
8 <sup>a</sup>	Manitoba maple ( <i>A. negundo</i> )	45	Fair: twisted form; small wound at base; lean into subject property	Remove due to proximity of retaining wall.
9 <sup>a</sup>	American elm ( <i>U. americana</i> )	11	Good	Remove due to proximity of retaining wall.
10 <sup>a</sup>	Manitoba maple ( <i>A. negundo</i> )	12	Fair/Poor: growing on fence; curve at base	Remove due to proximity of retaining wall.
G1 <sup>a</sup>	American elm ( <i>U. americana</i> ) and Norway maple ( <i>A. platanoides</i> )	~25 stems 2-12cm	Fair/Good: young stems – shaded by larger trees; growing on slope	Remove due to proximity of retaining wall.
11	Eastern cottonwood ( <i>Populus deltoides</i> )	42	Fair: extended lateral growth; slight lean South	Remove due to installation of retaining wall and grade changes.
12	Eastern cottonwood ( <i>P. deltoides</i> )	62	Fair: extended lateral growth	Remove due to installation of retaining wall and grade changes.
13	American elm ( <i>U. americana</i> )	14	Fair/Good: asymmetrical and lean to West	Remove due to installation of retaining wall and grade changes.
14	Eastern cottonwood ( <i>P. deltoides</i> )	70	Fair: extended lateral growth	Remove due to installation of retaining wall and grade changes.
15	Norway maple ( <i>Acer platanoides</i> )	19	Good/Fair	Remove due to installation of retaining wall and grade changes.

Tree	Species	DBH (cm)	Tree Condition	Forester recommendation
16 <sup>a</sup>	American elm ( <i>U. americana</i> )	19	Fair: lean West; covered in grape vine	Retain during Phase 1. Further assessment required at beginning of Phase 2.
17 <sup>a</sup>	American elm ( <i>U. americana</i> )	22	Good	Retain during Phase 1. Further assessment required at beginning of Phase 2.
18 <sup>a</sup>	Manitoba maple ( <i>A. negundo</i> )	15, 15, 11	Fair/Poor: multi-stem growth – included bark at base; asymmetrical crown and lean	Retain during Phase 1. Further assessment required at beginning of Phase 2.
19	Manitoba maple ( <i>A. negundo</i> )	23	Poor: decay in wounds	Retain during Phase 1. Further assessment required at beginning of Phase 2.
20	Manitoba maple ( <i>A. negundo</i> )	20, 9	Fair/Poor: poor form – codominant stems and crook	Retain during Phase 1. Further assessment required at beginning of Phase 2.
21	American elm ( <i>U. americana</i> )	31	Poor: growing on fence	Retain during Phase 1. Further assessment required at beginning of Phase 2.
22	Norway maple ( <i>A. platanoides</i> )	40 (estimate)	Poor: large central leader removed; decay in remaining stem; seams with decay on scaffold branches	Retain during Phase 1. Further assessment required at beginning of Phase 2.
23	Ash ( <i>Fraxinus spp.</i> )	~25	Dead	Retain during Phase 1. Further assessment required at beginning of Phase 2.
24	Norway maple ( <i>A. platanoides</i> )	30 (estimate)	Fair: poor form	Retain during Phase 1. Further assessment required at beginning of Phase 2.
25	Manitoba maple ( <i>A. negundo</i> )	15 (estimate)	Poor: shrub-like growth from large old stump – one live stem remaining – dead stem leaning east.	Retain during Phase 1. Further assessment required at beginning of Phase 2.

- TREE PROTECTION REQUIREMENTS:**
- PRIOR TO ANY WORK ACTIVITY WITHIN THE CRITICAL ROOT ZONE (CRZ = 10 X DIAMETER OF A TREE, TREE PROTECTION FENCING MUST BE INSTALLED SURROUNDING THE CRITICAL ROOT ZONE, AND REMAIN IN PLACE UNTIL THE WORK IS COMPLETE.
  - UNLESS PLANS ARE APPROVED BY CITY FORESTRY STAFF, FOR WORK WITHIN THE CRZ:
    - DO NOT PLACE ANY MATERIAL OR EQUIPMENT - INCLUDING OUTHOUSES;
    - DO NOT ATTACH ANY SIGNS, NOTICES OR POSTERS TO ANY TREE;
    - DO NOT RAISE OR LOWER THE EXISTING GRADE;
    - TUNNEL OR BORE WHEN DIGGING;
    - DO NOT DAMAGE THE ROOT SYSTEM, TRUNK, OR BRANCHES OR ANY TREE;
    - ENSURE THAT EXHAUST FUMES FROM ALL EQUIPMENT ARE NOT DIRECTED TOWARD ANY TREE CANOPY.
    - DO NOT EXTEND HARD SURFACE OR SIGNIFICANTLY CHANGE LANDSCAPING
  - TREE PROTECTION FENCING MUST BE AT LEAST 1.2M IN HEIGHT, AND CONSTRUCTED OF RIGID OR FRAMED MATERIALS (E.G. MODULOC - STEEL, PLYWOOD HOARDING, OR SNOW FENCE ON A 2"x4" WOOD FRAME) WITH POSTS 2.4M APART, SUCH THAT THE FENCE LOCATION CANNOT BE ALTERED. ALL SUPPORTS AND BRACING MUST BE PLACED OUTSIDE OF THE CRZ, AND INSTALLATION MUST MINIMISE DAMAGE TO EXISTING ROOTS. (SEE DETAIL)
  - THE LOCATION OF THE TREE PROTECTION FENCING MUST BE DETERMINED BY AN ARBORIST AND DETAILED ON ANY ASSOCIATED PLANS FOR THE SITE (E.G. TREE CONSERVATION REPORT, TREE INFORMATION REPORT, ETC). THE PLAN AND CONSTRUCTED FENCING MUST BE APPROVED BY CITY FORESTRY STAFF PRIOR TO THE COMMENCEMENT OF WORK.
  - IF THE FENCED TREE PROTECTION AREA MUST BE REDUCED TO FACILITATE CONSTRUCTION, MITIGATION MEASURES MUST BE PRESCRIBED BY AN ARBORIST AND APPROVED BY CITY FORESTRY STAFF. THESE MAY INCLUDE THE PLACEMENT OF PLYWOOD, WOOD CHIPS, OR STEEL PLATING OVER THE ROOTS FOR PROTECTION OR THE PROPER PRUNING AND CARE OF ROOTS WHERE ENCOUNTERED.
- THE CITY'S TREE PROTECTION BY-LAW, 2020-340 PROTECTS BOTH CITY-OWNED TREES, CITY-WIDE, AND PRIVATELY-OWNED TREES WITHIN THE URBAN AREA. PLEASE REFER TO WWW.OTTAWA.CA/TREEBYLAW FOR MORE INFORMATION ON HOW THE TREE BY-LAW APPLIES.



**Legend**

- Critical Root Zone (as defined in By-Law 2020-340)
- Tree either fully or partly on adjacent property
- Tree either fully or partly on city property
- Tree to be removed
- Tree Protection Area