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URBAN FORESTRY & FOREST MANAGEMENT CONSULTING

November 29, 2023

Alessandro Ferrante  
9 Tower Road  
Ottawa, ON  
K2G 2E2

Committee of Adjustment  
Received | Reçu le  
2023-12-07  
City of Ottawa | Ville d'Ottawa  
Comité de dérogation

**RE: TREE INFORMATION REPORT (FULL) FOR 9 TOWER ROAD**

This Tree Information Report (TIR) was prepared by IFS Associates Inc. (IFS) in support of an application to sever 9 Tower Road. The need for this report is related to trees protected under the City of Ottawa’s Tree Protection By-law (By-law No. 2020-340). The work proposed for the subject property involves the construction of a single-family dwelling on the newly severed lot.

Within the inner urban area of Ottawa a TIR is required for infill developments and/or demolitions when a ‘distinctive’ tree is present (*i.e.* 30 cm in diameter at breast height (DBH) or greater). This includes distinctive trees on adjacent properties which have critical root zones (CRZ) extending onto a property slated for development or demolition. A “tree” is defined in the By-law as any species of woody perennial plant, including its root system, which has reached or can reach a minimum height of at least 450 cm at physiological maturity. The CRZ is calculated as DBH x 10 cm.

The approval of this TIR by the city and the issuing of a permit authorizes the removal of approved trees. Importantly, although this report may be used to support the application for a tree removal permit, it does not by itself constitute permission to remove trees or begin site clearing activities. No such work should occur before a tree removal permit is issued authorizing the injury or destruction of a tree in accordance with the By-law.

The inventory in this report details the assessment of all individual trees on the subject and adjacent private property, including any trees on nearby City of Ottawa lands. Field work for this report was completed in September 2023.

**TREE SPECIES, CONDITION, SIZE AND STATUS**

Table 1 on pages 2, 3 and 4 details the individual distinctive trees on and adjacent to the subject property. All trees are referenced by the numbers plotted on the tree information plan included on page 5 of this report.



Table 1. Tree information for 9 Tower Road

Tree No.	Tree species /Tolerance to Construction <sup>1</sup>	Ownership	DBH <sup>2</sup> (cm)	CRZ <sup>3</sup> (m)	Distance to excavation (m) <sup>4</sup>	Tree Condition, Age Class, Condition Notes, Species Origin and <b>Status (to be removed or preserved and protected)</b>	Reason for removal	Forester's Opinion re. Removal
1	Silver maple ( <i>Acer saccharinum</i> ) / Poor - Moderate	City	81.5	8.1	+/-3	Good; mature; four stemmed from 2.5-3.5m from grade – central with three competing laterals (east, northeast and southwest); very broad crown; suppressed lateral previously removed at 2m on south – wound healing; shear plane fracture in southwest lateral (over future driveway); native species; <b>to be preserved and protected</b>	Not applicable – to be preserved	NA
2	Siberian elm ( <i>Ulmus pumila</i> ) / Moderate - Good	Shared	37.5	3.8	>10	Fair; mature; generally upright growth form; crown asymmetric towards west; introduced invasive species; <b>to be preserved and protected</b>	Not applicable – to be preserved	NA
3	Siberian elm ( <i>Ulmus pumila</i> ) / Moderate - Good	Neighbour	31.7	3.2	>10	Poor; mature; topped at 5m (below Hydro lines); lateral at 3.5m on west now dominant; introduced invasive species; <b>to be preserved and protected</b>	Not applicable – to be preserved	NA
4	Siberian elm ( <i>Ulmus pumila</i> ) / Moderate - Good	Neighbour	62.3	6.2	>10	Poor; mature; central stem with suppressed lateral at 1.5m on east; central stem divergent towards south and lateral towards north due to pruning from Hydro lines; slime flux in wound at 3.25m; introduced invasive species; <b>to be preserved and protected</b>	Not applicable – to be preserved	NA

Table 1. Con't

Tree No.	Tree species /Tolerance to Construction <sup>1</sup>	Owner ship	DBH <sup>2</sup> (cm)	CRZ <sup>3</sup> (m)	Distance to excavation (m) <sup>4</sup>	Tree Condition, Age Class, Condition Notes, Species Origin and <b>Status (to be removed or preserved and protected)</b>	Reason for removal	Forester's Opinion re. Removal
5	Sugar maple ( <i>Acer saccharum</i> ) / Poor - Moderate	Private	54.2	5.4	+/-5	Fair; mature; central stem with strongly upright laterals starting at 0.5m from grade; lower crown asymmetric towards south due to pruning from Hydro lines on north and east; co-dominant leaders at 7m; root collar buried; native species; <b>to be preserved and protected</b>	Not applicable – to be preserved	NA
6	Siberian elm ( <i>Ulmus pumila</i> ) / Moderate - Good	Private	42.7	4.3	<2	Fair; mature; generally upright growth form; co-dominant leaders at 11m with suppressed laterals towards northwest; living crown held high; introduced invasive species; <b>to be removed</b>	Will not survive root loss; highly undesirable species	Tree and stump be removed
7	Siberian elm ( <i>Ulmus pumila</i> ) / Moderate - Good	Private	57.2	5.7	<1	Fair; mature; generally upright growth form; tri-dominant leaders at 12.5m – central with two competing laterals towards west and east; heavy storm damage in east stem; living crown held high; introduced invasive species; <b>to be removed</b>	Will not survive root loss; highly undesirable species	Tree and stump be removed
8	Manitoba maple ( <i>Acer negundo</i> ) / Good	Private	64.4	6.4	0	Very poor; overmature; co-dominant, divergent stems at 1.75m; east stem almost dead, west resting on private Hydro line; decay in base of tree; naturalized species; <b>to be removed</b>	Conflicts with excavation; undesirable species; hazardous	Tree and stump be removed

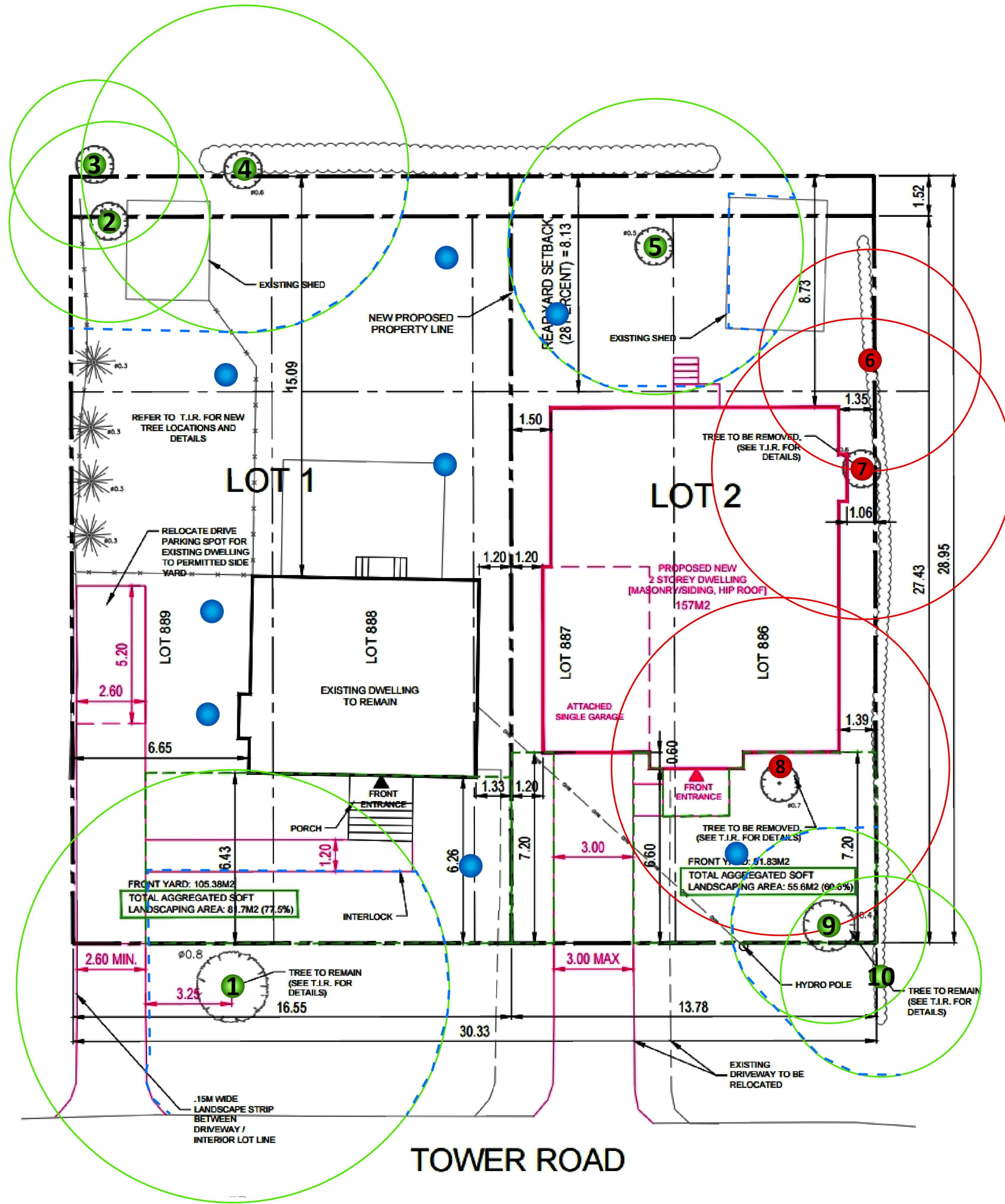
Table 1. Con't

Tree No.	Tree species /Tolerance to Construction <sup>1</sup>	Owner ship	DBH <sup>2</sup> (cm)	CRZ <sup>3</sup> (m)	Distance to excavation (m) <sup>4</sup>	Tree Condition, Age Class, Condition Notes, Species Origin and <b>Status (to be removed or preserved and protected)</b>	Reason for removal	Forester's Opinion re. Removal
9	White spruce ( <i>Picea glauca</i> ) / Moderate - Good	Private	37.4	3.7	>5	Fair; mature; central upright stem; crown asymmetric towards south and west; poor crown density, fair growth increment and needle colour; native species; <b>to be preserved and protected</b>	Not applicable – to be preserved	NA
10	Siberian elm ( <i>Ulmus pumila</i> ) / Moderate - Good	City	37.5	3.8	>5	Fair; mature; central dominant stem with suppressed basal stem on east; multiple competing leaders at 14m; introduced invasive species; <b>to be preserved and protected</b> (although tree is marked for removal by City)	Not applicable – to be preserved	NA

<sup>1</sup>As taken from Managing Trees during Construction; 2<sup>nd</sup> Ed., Fite and Smiley; <sup>2</sup>Diameter at breast height, or 1.3m from grade (unless otherwise indicated); <sup>3</sup>Critical root zone (CRZ) is considered as being 10 centimetres from the trunk of a tree for every centimetre of DBH. The CRZ is calculated as DBH x 10 cm;

<sup>4</sup>Approximate distances only.





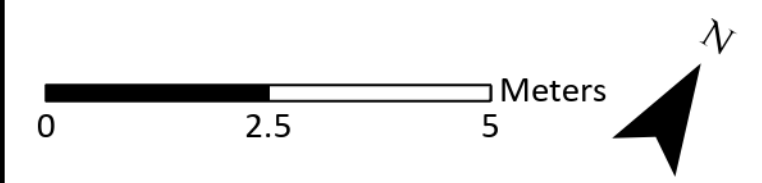
GENERAL NOTES

LEGEND

- TREE TO REMAIN
- CRITICAL ROOT ZONE
- TREE TO BE REMOVED
- CRITICAL ROOT ZONE
- PROTECTIVE FENCING
- PROPOSED REPLANTING LOCATIONS

REPLACEMENT TREE OPTIONS

<b>Large-sized Coniferous Trees</b>	
White pine ( <i>Pinus strobus</i> )	
White spruce ( <i>Picea glauca</i> )	
Larch species ( <i>Larix spp.</i> )	
Norway spruce ( <i>Picea abies</i> )	
<b>Small/medium-sized Coniferous Trees</b>	
Serbian spruce ( <i>Picea omorika</i> )	
Hemlock ( <i>Tsuga canadensis</i> )	
<b>Large-sized Deciduous Trees</b>	
Bur oak ( <i>Quercus macrocarpa</i> )	
Red oak ( <i>Quercus rubra</i> )	
Sugar maple ( <i>Acer saccharum</i> )	
Red maple ( <i>Acer rubrum</i> )	
Black walnut ( <i>Juglans nigra</i> )	
<b>Medium-sized Deciduous Trees</b>	
Kentucky coffee tree ( <i>Gymnocladus dioica</i> )	
Hackberry ( <i>Celtis occidentalis</i> )	
Red mulberry ( <i>Morus rubra</i> )	
Chinese elm ( <i>Ulmus parvifolia</i> )	
Ginkgo ( <i>Ginkgo biloba</i> )	
<b>Small-sized Deciduous Trees</b>	
Serviceberry ( <i>Amelanchier spp.</i> )	
Japanese tree lilac ( <i>Syringa reticulata</i> )	
Magnolia ( <i>Magnolia spp.</i> )	
Thorn-less Hawthorn ( <i>Crataegus spp.</i> )	
Pagoda dogwood ( <i>Cornus alternifolia</i> )	
Redbud ( <i>Cercis canadensis</i> )	



DRAWING: Tree Information Plan

PROJECT: 9 TOWER ROAD  
CITY OF OTTAWA



Andrew K. Boyd, R.P.F.

SCALE: 1:85	DRAWING NO. 9 T O W
DATE: 2023-11-21	
DRAWN BY: SS	
SHEET NO. 1	

Pictures 1 to 5 on pages 9 through 13 of this report show selected distinctive trees on and adjacent to the subject property.

### **PROVINCIAL REGULATIONS**

Certain provincial regulations are applicable to trees on private property. In particular, the Endangered Species Act – ESA (2007) mandates that tree species on the Species at Risk in Ontario (SARO) list be identified. Butternut (*Juglans cinerea*) is present in Eastern Ontario and is listed as threatened on the SARO. Because of this it is protected from harm. No trees of this species were found on or near the subject property.

### **TREE PROTECTION MEASURES**

Protection measures intended to mitigate damage during construction will be applied for the trees to be preserved. The following measures are the minimum required by the City of Ottawa to ensure tree survival during and following construction:

1. Erect a fence as close as possible to the critical root zone (CRZ) of trees (City of Ottawa tree protection barrier detail included on page 7).
2. Do not place any material or equipment within the CRZ of the tree.
3. Do not attach any signs, notices or posters to any tree.
4. Do not raise or lower the existing grade within the CRZ without approval.
5. Tunnel or bore when digging within the CRZ of a tree.
6. Do not damage the root system, trunk or branches of any tree.
7. Ensure that exhaust fumes from all equipment are NOT directed towards any tree's crown.

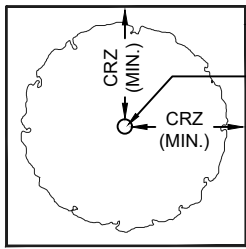
### **TREE PRESERVATION MEASURES**

The proposed driveway on the east side of the property will fall within the CRZ of silver maple #1. This will lead to root loss as roots will be encountered wherever any excavation occurs within the tree's CRZ.

Measures intended to preserve tree #1 will centre on minimizing root loss and conserving current soil layers deeper within the soil profile (and the tree roots they contain). To this end the following measures are recommended to ensure no long term harm comes to this tree:

- 1) Use of hydro excavation along the edge of the driveway closest to the tree to carefully expose roots.
- 2) Cut and seal exposed roots before excavation resumes using traditional mechanical means. Sealing the cleanly cut root ends with a beeswax product will help prevent the loss of moisture and facilitate healing. Layers of moistened burlap with a clear plastic covering should protect the exposed cut face until backfilled.
- 3) The backfill material used for the driveway will consist fully of CU-structural soil. If necessary, permeable pavers can be installed as the driveway surface.





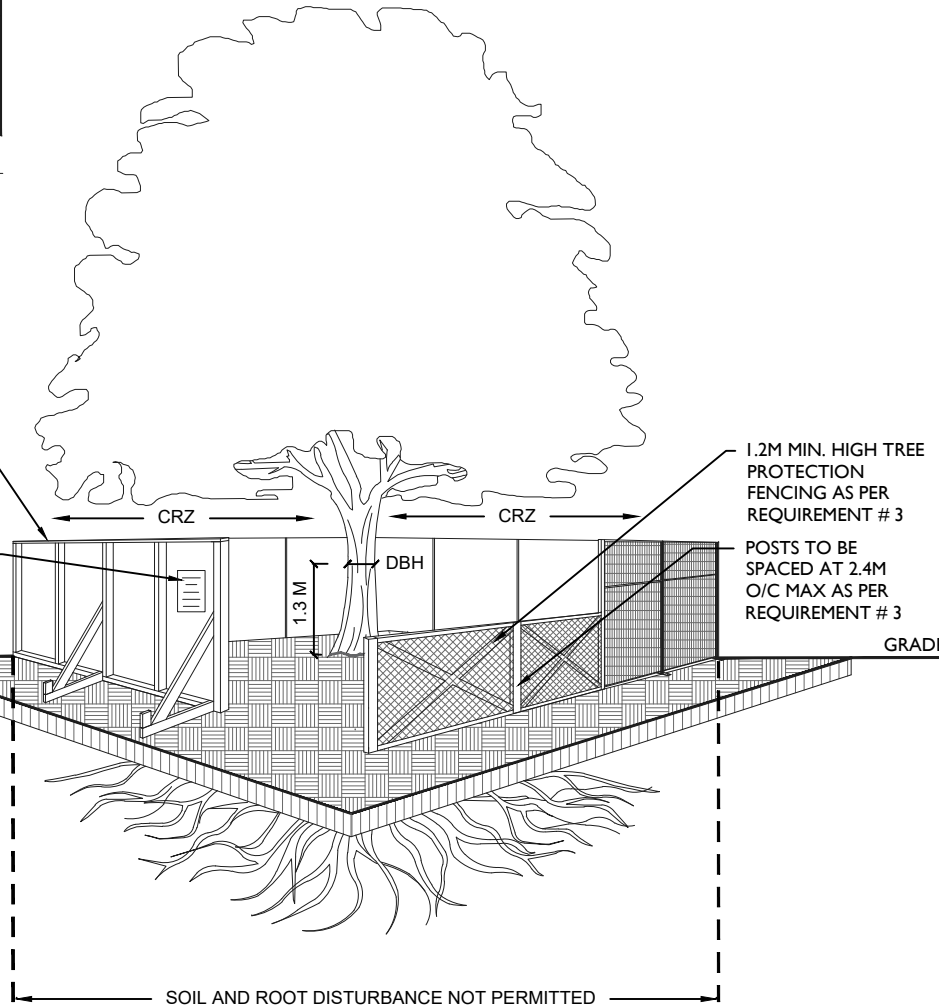
PLAN VIEW

TREE PROTECTION FENCING  
TREE TRUNK

CRZ = DBH X 10CM.  
CRZ IS TO BE MEASURED FROM THE OUTSIDE EDGE OF THE TREE BASE

TREE PROTECTION SIGNAGE AS PER CITY STANDARD

GRADE



1.2M MIN. HIGH TREE PROTECTION FENCING AS PER REQUIREMENT # 3

POSTS TO BE SPACED AT 2.4M O/C MAX AS PER REQUIREMENT # 3

SOIL AND ROOT DISTURBANCE NOT PERMITTED

**TREE PROTECTION REQUIREMENTS:**

1. 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.
2. 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
3. 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)
4. 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.
5. 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](http://WWW.OTTAWA.CA/TREEBYLAW) FOR MORE INFORMATION ON HOW THE TREE BY-LAW APPLIES.

ACCESSIBLE FORMATS AND COMMUNICATION SUPPORTS ARE AVAILABLE, UPON REQUEST



**TREE PROTECTION SPECIFICATION**

TO BE IMPLEMENTED FOR RETAINED TREES, BOTH ON SITE AND ON ADJACENT SITES, PRIOR TO ANY TREE REMOVAL OR SITE WORKS AND MAINTAINED FOR THE DURATION OF WORK ACTIVITIES ON SITE.

SCALE: NTS

DATE: MARCH 2021

DRAWING NO.: 1 of 1

**REPLACEMENT TREE PLANTING OR COMPENSATION**

As the property is within the inner urban area, the following ratios are used in terms of replacement tree planting: 2:1 for each distinctive tree measuring 30-49 cm in diameter and 3:1 for each distinctive tree measuring 50 cm or greater in diameter. Because one tree in the range of 30-49 cm and two trees greater than 50cm are being removed, compensation of eight new trees is required. Replacement trees must be at least 50mm in caliper if deciduous species and 2m height if coniferous. Suggested replanting locations are shown on the plan on page 5.

This report is subject to the attached limitations of tree assessments and liability to which the reader's attention is directed. Please do not hesitate to contact me with any questions concerning this report.

Yours,



Andrew K. Boyd, B.Sc.F, R.P.F. (#1828)  
Certified Arborist #ON-0496A and TRAQualified  
Consulting Urban Forester





Picture 1. Tree #1, city silver maple in front yard of 9 Tower Road







Picture 2. Tree #5, private sugar maple in rear yard of 9 Tower Road





Picture 3. Tree #7, private Siberian elm within side yard of 9 Tower Road





Picture 4. Tree #5 (right), private Manitoba maple in front yard of 9 Tower Road





Picture 5. Trees #9 (left) and 10 (centre), private spruce and city elm in front of 9 Tower Road



# LIMITATIONS OF TREE ASSESSMENTS & LIABILITY

## GENERAL

It is the policy of *IFS Associates Inc.* to attach the following clause regarding limitations. We do this to ensure that our clients are clearly aware of what is technically and professionally realistic in assessing trees for retention.

This report was prepared by *IFS Associates Inc.* at the request of the client. The information, interpretation and analysis expressed in this report are for the sole benefit and exclusive use of the client. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the client to whom it is addressed. Unless otherwise required by law, neither all or any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through public relations, news or other media, without the prior expressly written consent of the author, and especially as to value conclusions, identity of the author, or any reference to any professional society or institute or to any initialed designation conferred upon the author as stated in his qualifications.

This report and any values expressed herein represent the opinion of the author; his fee is in no way contingent upon the reporting of a specified value, a stipulated result, nor upon any finding to be reported.

Details obtained from photographs, sketches, *etc.*, are intended as visual aids and are not to scale. They should not be construed as engineering reports or surveys. Although every effort has been made to ensure that this assessment is reasonably accurate, the tree(s) should be reassessed at least annually. The assessment presented in this report is valid at the time of the inspection only. The loss or alteration of any part of this report invalidates the entire report.

## LIMITATIONS

The information contained in this report covers only the tree(s) in question and no others. It reflects the condition of the assessed tree(s) at the time of inspection and was limited to a visual examination of the accessible portions only. *IFS Associates Inc.* has prepared this report in a manner consistent with that level of care and skill ordinarily exercised by members of the forestry and arboricultural professions, subject to the time limits and physical constraints applicable to this report. The assessment of the tree(s) presented in this report has been made using accepted arboricultural techniques. These include a visual examination of the above-ground portions of each tree for structural defects, scars, cracks, cavities, external indications of decay such as fungal fruiting bodies, evidence of insect infestations, discoloured foliage, the condition of any visible root structures, the degree and direction of lean (if any), the general condition of the tree(s) and the surrounding site, and the proximity of people and property. Except where specifically noted in the report, the tree(s) examined were not dissected, cored, probed or climbed to gain further evidence of their structural condition. Also, unless otherwise noted, no detailed root collar examinations involving excavation were undertaken.

While reasonable efforts have been made to ensure that the tree(s) proposed for retention are healthy, no warranty or guarantee, expressed or implied, are offered that these trees, or any parts of them, will remain standing. This includes other trees on or off the property not examined as part of this assignment. It is both professionally and practically impossible to predict with



absolute certainty the behaviour of any single tree or groups of trees or their component parts in all circumstances, especially when within construction zones. Inevitably, a standing tree will always pose some risk. Most trees have the potential for failure in the event of root loss due to excavation and other construction-related impacts. This risk can only be eliminated through full tree removal.

Notwithstanding the recommendations and conclusions made in this report, it must be realized that trees are living organisms, and their health and vigour constantly change over time. They are not immune to changes in site conditions, or seasonal variations in the weather. It is a condition of this report that *IFS Associates Inc.* be notified of any changes in tree condition and be provided an opportunity to review or revise the recommendations within this report.

Recognition of changes to a tree's condition requires expertise and extensive experience. It is recommended that *IFS Associates Inc.* be employed to re-inspect the tree(s) with sufficient frequency to detect if conditions have changed significantly.

### ASSUMPTIONS

Statements made to *IFS Associates Inc.* in regard to the condition, history and location of the tree(s) are assumed to be correct. Unless indicated otherwise, all trees under investigation in this report are assumed to be on the client's property. A recent survey prepared by a Licensed Ontario Land Surveyor showing all relevant trees, both on and adjacent to the subject property, will be provided prior to the start of field work. The final version of the grading plan for the project will be provided prior to completion of the report. Any further changes to this plan invalidate the report on which it is based. *IFS Associates Inc.* must be provided the opportunity to revise the report in relation to any significant changes to the grading plan. The procurement of said survey and grading plan, and the costs associated with them both, are the responsibility of the client, not *IFS Associates Inc.*

### LIABILITY

Without limiting the foregoing, no liability is assumed by *IFS Associates Inc.* for:

- 1) Any legal description provided with respect to the property.
- 2) Issues of title and/or ownership with respect to the property.
- 3) The accuracy of the property line locations or boundaries with respect to the property.
- 4) The accuracy of any other information provided by the client or third parties.
- 5) 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,
- 6) The unauthorized distribution of the report.

Further, under no circumstances may any claims be initiated or commenced by the client against *IFS Associates Inc.* or any of its directors, officers, employees, contractors, agents or assessors, in contract or in tort, more than 12 months after the date of this report.

### ONGOING SERVICES

*IFS Associates Inc.* accepts no responsibility for the implementation of any or all parts of the report, unless specifically requested to supervise the implementation or examine the results of activities recommended herein. In the event that examination or supervision is requested, that request shall be made in writing and the details, including fees, agreed to in advance.

