



URBAN FORESTRY & FOREST MANAGEMENT CONSULTING

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February 9, 2024

Jessica Bellissimo
Development Coordinator
Windmill Developments
150 Elgin Street, Suite 1000
Ottawa, ON
K2P 1L4

RE: TREE CONSERVATION REPORT FOR 330 LAURIER AVENUE EAST, OTTAWA

Dear Jessica,

This report details a pre-construction tree conservation report (TCR) for the above-noted property in Ottawa. The need for this TCR is related to the proposed construction of a nine-storey residential building with two levels of underground parking.

Tree conservation reports are required for all properties subject to site plan control applications on which trees of 10 centimetres in diameter or greater are present. The approval of this TCR by the City of Ottawa and the issuing of a permit by them authorize the removal of approved trees. **Importantly, although this report may be used to support the application for a City 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 by the City of Ottawa.**

The inventory in this report details the assessment of all individual trees on and directly adjacent to the subject property. Twelve trees on and adjacent to the development zone conflict with the proposed construction and so are slated for removal. Of these trees four are on the subject property and eight are located on City of Ottawa property. Field work for this report was completed in April 2023.

TREE SPECIES, CONDITION, SIZE AND STATUS

Table 1 on pages 2 through 4 details the species, condition, size (diameter), ownership and status of each individual tree on and adjacent to the subject property. Each of these trees are referenced by the numbers plotted on the tree conservation plan shown on page 5 of this report.



Table 1. Species, condition, size (diameter) and status of trees at 330 Laurier Avenue East

Tree No.	Tree species	Condition (VP→E)	DBH ¹ (cm)	Owner -ship	Age class, tree condition notes & preservation status (to be removed or preserved and protected)
1	Red maple (<i>Acer rubrum</i>)	Very good	64.3	City	Mature; central stem for most of height with competing leaders near apex; broad, generally symmetric crown; good root collar; fair annual increment (vigour); major wounds from removal of lower laterals with early decay/small cavities developing; native species; to be preserved and protected
2	Norway maple (<i>Acer platanoides</i>)	Fair	41.8	Shared with City	Mature; central stem suppressed by three competing laterals at 1.5m (partial branch cluster); weak union with lateral towards southeast; broad, dense crown – mildly asymmetric towards north and west due to past clearance pruning from church; fair root collar – mainly binding roots; introduced invasive species; to be preserved and protected
3	Norway maple (<i>Acer platanoides</i>)	Fair	35.2	Shared with City	Mature; co-dominant stems at 1.5m with one suppressed lateral; broad, dense, symmetric crown; limited rooting area; introduced invasive species; to be preserved and protected
4	Norway maple (<i>Acer platanoides</i>)	Fair	43.5	Shared with City	Mature; central stem with three competing laterals at 2m with weak unions; broad, dense, symmetric crown; very limited rooting area; introduced invasive species; to be preserved and protected
5	Sugar maple (<i>Acer saccharum</i>)	Fair	27.8	Shared with City	Mature; central stem with suppressed laterals at 1.25m; poor annual increment (vigour); very limited rooting area; native species; to be preserved and protected
6	Norway maple (<i>Acer platanoides</i>)	Fair	20 avg.	Shared with City	Mature; tri-stemmed at 0.5m from grade – mildly divergent with poor unions; mildly limited rooting area; introduced invasive species; to be preserved and protected

Table 1. Con't

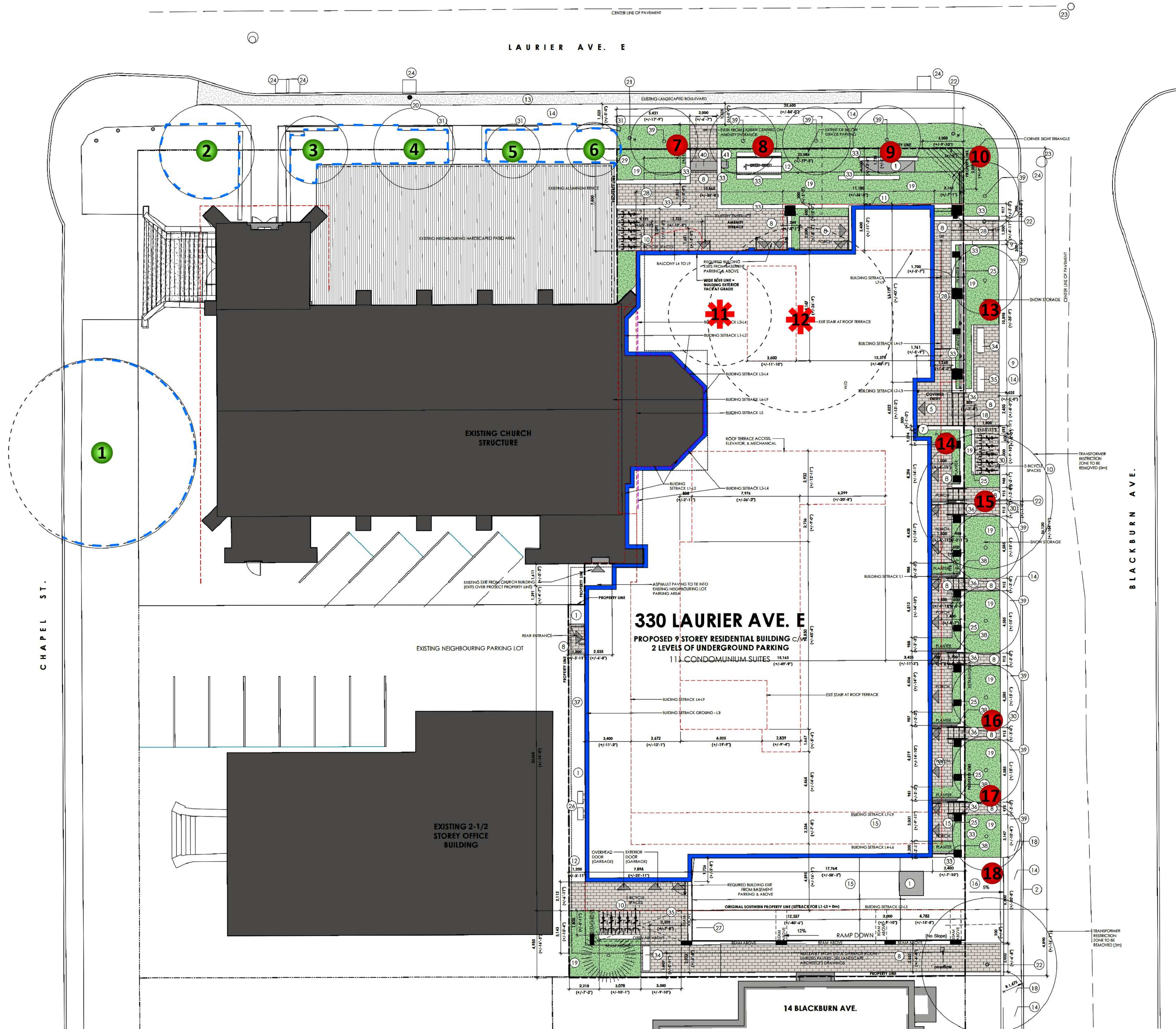
Tree No.	Tree species	Condition (VP→E)	DBH ¹ (cm)	Owner -ship	Age class, tree condition notes & preservation status (to be removed or preserved and protected)
7	Norway maple (<i>Acer platanoides</i>)	Fair	20 avg.	City	Mature; co-dominant stems at 0.7m from grade with weak union; both stems bisect at 2m; major basal wound on south; mildly limited rooting area; introduced invasive species; to be removed (conflicts with underground parking)
8	Sugar maple (<i>Acer saccharum</i>)	Very good	32.2	City	Mature; central dominant stem and leader with competing lateral at 6m on south; mildly limited rooting area; native species; to be removed (conflicts with underground parking)
9	Norway maple (<i>Acer platanoides</i>)	Poor	45.7	Private	Mature; central stem very suppressed by competing laterals at 2m on east and north, 2.5m on southwest and 3m on south – poor form; broad, dense crown; introduced invasive species; to be removed (conflicts with underground parking)
10	Siberian elm (<i>Ulmus pumila</i>)	Fair	33.4	City	Mature; co-dominant stems at 2m with weak union; both stems bisect at 3-3.5m; crown asymmetric toward north and east due influence of tree #9; introduced invasive species; to be removed (conflicts with construction access)
11	Juniper (<i>Juniperus</i> spp.)	Fair	30.6	Private	Very mature; crown form divergent and asymmetric towards west due to influence of tree #12; cultivar; to be removed (conflicts with construction)
12	White pine (<i>Pinus strobus</i>)	Good	58.4	Private	Mature; single upright main stem for entire height; fair crown density, annual increment (vigour) and needle colour (mildly chlorotic); native species; to be removed (conflicts with construction)

Table 1. Con't

Tree No.	Tree species	Condition (VP→E)	DBH ¹ (cm)	Owner -ship	Age class, tree condition notes & preservation status (to be removed or preserved and protected)
13	Norway maple (<i>Acer platanoides</i>)	Poor	37.3	City	Mature; poor growth form - series of competing and suppressed lateral stems starting at 1.75m; pruned by Hydro – upper crown divergent in form; one binding root present; introduced invasive species; to be removed (conflicts with construction access)
14	Red maple (<i>Acer rubrum</i>)	Poor	31.8	Private	Mature; single upright stem for half height; competing laterals at 1.75m on southwest and 4m on northwest (now the dominant leader); poor growth form – likely topped in past; native species; to be removed (conflicts with construction)
15	Sugar maple (<i>Acer saccharum</i>)	Poor	35.1	City	Mature; co-dominant stems at 1.75m with weakening union; both topped by Hydro – upper crown divergent in form; native species; to be removed (conflicts with construction access)
16	Japanese tree lilac (<i>Syringa reticulata</i>)	Fair	23.0	City	Mature; co-dominant stems at 1.75m with competing lateral on northwest (dead) and suppressed stem at 1.5m on northeast; cultivar; to be removed (conflicts with construction access)
17	Japanese tree lilac (<i>Syringa reticulata</i>)	Fair	27.1 (at 0.5m)	City	Mature; four-stemmed at 0.75m; moderately divergent - broad crown; cultivar; to be removed (conflicts with ramp to underground parking)
18	Japanese tree lilac (<i>Syringa reticulata</i>)	Fair	26.2 (at 1m)	City	Mature; multi-stemmed at 1.3m; cultivar; to be removed (conflicts with ramp to underground parking)

¹ diameter at breast height, or 1.4m from grade (unless otherwise indicated); average diameters indicate multi-stemmed trees

Pictures 1 through 6 on pages 8 to 11 of this report show all trees on and adjacent to the subject property.



GENERAL NOTES

PLANS COMPLETED BY LINEBOX STUDIO (25/01/24)

LEGEND

- DECIDUOUS TREE TO REMAIN
- ✱ CONIFEROUS TREE TO BE REMOVED
- DECIDUOUS TREE TO BE REMOVED
- CRITICAL ROOT ZONE
- PROTECTIVE FENCING



DRAWING: Tree Conservation Plan

PROJECT: 330 LAURIER AVENUE
CITY OF OTTAWA

IFS ASSOCIATES
613-838-5717

Andrew K. Boyd, R.P.F.

SCALE: 1:150	A S T C
DATE: 2024-02-09	
DRAWN BY: SS	
SHEET NO.: 1	

FEDERAL AND PROVINCIAL REGULATIONS

Federal and provincial regulations can be applicable to trees on private and public property. In particular, the following two regulations have been considered for this property:

- 1) Provincial Endangered Species Act (2007): No butternuts (*Juglans cinerea*) were identified on the subject or adjacent properties. This species of tree is listed as threatened under the Province of Ontario's Endangered Species Act (2007) and so is protected from harm.
- 2) Federal Migratory Bird Convention Act (1994): In the period between April and August of each year nest surveys are required to be performed by a suitably trained person no more than five (5) days before trees or other similar nesting habitat are to be removed.

TREE PRESERVATION AND PROTECTION MEASURES

Preservation and protection measures intended to mitigate damage during construction will be applied for the trees to be retained on and adjacent to the subject property. The following measures are the minimum required by the City of Ottawa to ensure tree survival during and following construction:

1. As per the City of Ottawa's tree protection barrier specification, erect a fence as close as possible to the CRZ of each tree (see City of Ottawa Tree Protection Barrier specifications on page 7).
2. Do not place any material or equipment within the CRZ of the tree(s).
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 instead of trenching within the CRZ of any 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 canopy.

¹ critical root zone (CRZ) is established as being 10 centimetres from the trunk of a tree for every centimetre of DBH. The CRZ is calculated as DBH x 10 cm.

This report is subject to the attached Limitations of Tree Assessments and Liability to which the reader's attention is directed.

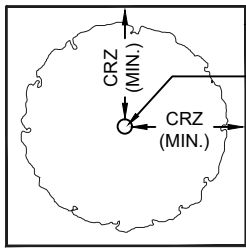
Please do not hesitate to contact the undersigned with any questions concerning this report.

Yours,



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





PLAN VIEW

TREE PROTECTION FENCING

TREE TRUNK

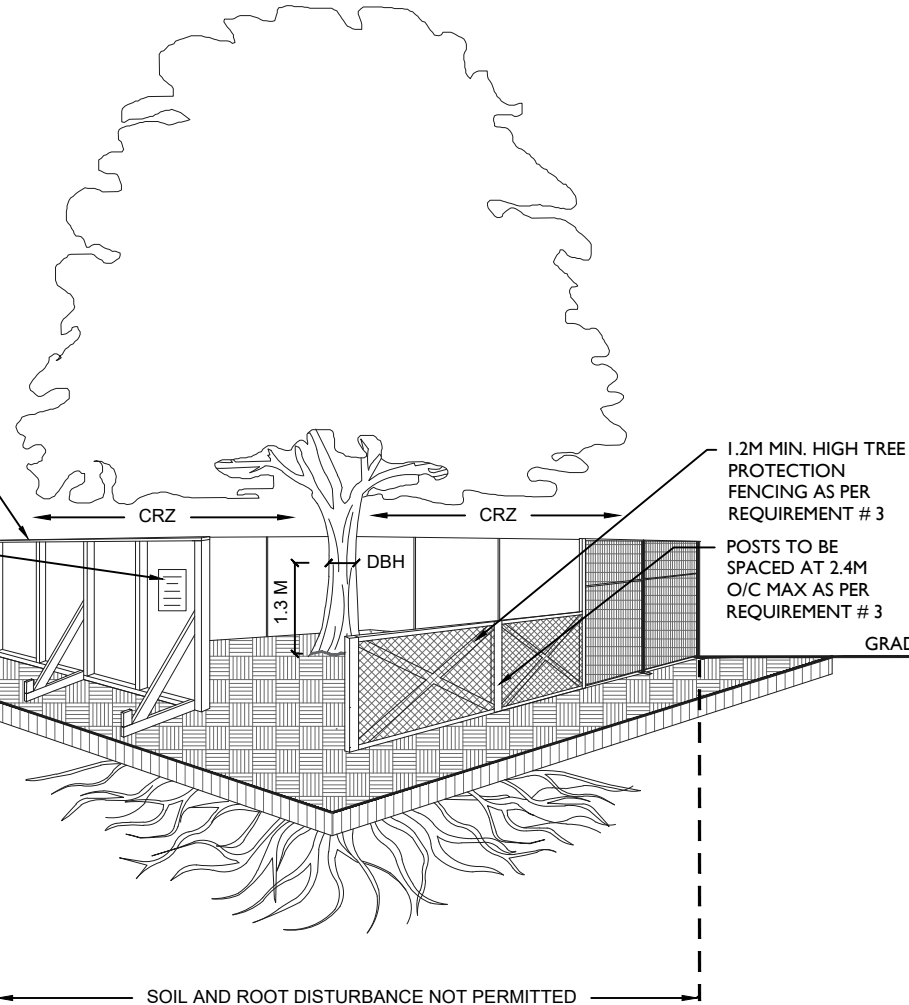
CRZ (MIN.)

CRZ (MIN.)

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

ACCESSIBLE FORMATS AND COMMUNICATION SUPPORTS ARE AVAILABLE, UPON REQUEST

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 FOR MORE INFORMATION ON HOW THE TREE BY-LAW APPLIES.



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



Picture 1. Tree #1, red maple on City of Ottawa property adjacent to 330 Laurier Avenue East



Picture 2. Trees #2-5 (right to left), maples on/shared or adjacent to 330 Laurier Avenue East



Picture 3. Trees #6-10 (left to right), maples on/shared or adjacent to 330 Laurier Avenue East



Picture 4. Trees #11 and 12 (right to left) located on 330 Laurier Avenue East



Picture 5. Trees #13-15 (right to left), maples on City of Ottawa property adjacent to 330 Laurier Avenue East



Picture 6. Trees #16-18 (right to left), tree lilacs on City of Ottawa property adjacent to 330 Laurier Avenue East

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 regards 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.

INDEMNIFICATION

An applicant for a permit or other approval based on this report shall agree to indemnify and save harmless *IFS Associates Inc.* from any and all claims, demands, causes of action, losses, costs or damages that affected private landowners and/or the City of Ottawa may suffer, incur or be liable for resulting from the issuance of a permit or approval based on this report or from the performance or non-performance of the applicant, whether with or without negligence on the part of the applicant, or the applicant's employees, directors, contractors and agents.

Further, under no circumstances may any claims be initiated or commenced by the applicant 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.