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URBAN FORESTRY & FOREST MANAGEMENT CONSULTING

October 12, 2021

James Colizza Colizza Bruni Architecture 76 Chamberlain Avenue Ottawa, ON K1S 1V9

RE: TREE CONSERVATION REPORT FOR ST. THOMAS THE APOSTLE (2345 ALTA VISTA DRIVE) AND ELLWOOD HOUSE (2270 BRAESIDE AVENUE), OTTAWA

Dear James,

This report details a pre-construction tree conservation report (TCR) for the above-noted property located in Ottawa. The need for this TCR is related to the proposed demolition of an existing dwelling on the property and an extension to Ellwood House.

The need for this report is related to trees protected under the City of Ottawa's Tree Protection By-law No. 2020-340. Tree conservation reports are required for all site plan control applications for properties on which a tree of ten centimetres in diameter or greater is present. The approval of this TCR by the City of Ottawa authorizes site clearing activities, including the removal of any 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. Further, if any trees fully on or shared with adjacent properties are to be removed permission from adjacent land owners must first be obtained.

In terms of existing vegetation, there is a mixture of planted amenity trees and cedar hedges. Under the current site plan the majority of existing trees can be retained as the proposed layout of the extension is relatively small in relation to the overall property. The one area where tree retention will not be possible is the proposed new entranceway from Braeside Avenue. A mature city tree will be lost as a result of this conflict.

Field work for this report was completed in September and October 2021.



TREE SPECIES, SIZE AND CONDITION
All current vegetation is shown on the tree conservation plan included on page 8 of this report. By the numbers indicated on the plan, each tree and hedge is detailed below:

Table 1. Species, condition, size (diameter) and status of trees at 2345 Alta Vista Drive and 2270 Braeside Avenue

Tree	Tree species	Condition	DBH ¹	Owner-	Age class, tree condition notes &
No.		$(VP \rightarrow E)$	(cm)	ship	preservation status (to be removed or
					preserved and protected)
1	White elm	Good	20.4	City	Maturing; central stem with suppressed
	(Ulmus		(at		laterals starting at 1.2m from grade;
	americana)		1m)		broad crown with good density and leaf
					size; cultivar; to be preserved and
					protected
2	White elm	Good	20.8	City	Maturing; central stem with competing
					lateral at 1.75m on southeast; good
					crown density and leaf size; cultivar; to
					be preserved and protected
3	White elm	Good	23.1	City	Maturing; central stem with competing
					laterals starting at 1.5m; broad crown
					with good density and leaf size; cultivar;
					to be preserved and protected
4	Honey-locust	Good	11.1	City	Maturing; central stem with competing
	(Gleditsia				lateral at 1m and two suppressed laterals
	triacanthos)				at 1.5m; crown asymmetric towards
					southwest; introduced species to Eastern
					Ontario; to be preserved and protected
5	Honey-locust	Fair	9.9	City	Maturing; central stem divergent
					towards northwest due to sweep at
					2.5m; slight epicormic growth on lower
					bole; introduced species to Eastern
					Ontario; to be preserved and protected
6	Honey-locust	Fair	11.1	City	Maturing; central stem with three
					competing leaders at 2.5m; crown
					mildly asymmetric towards southwest;
					heavy epicormic growth on lower bole
					from 0.2m; introduced species to
					Eastern Ontario; to be preserved and
					protected
7	Norway maple	Poor	25.2	Private	Maturing; lost lateral on southeast at
	(Acer				2m; barkless wound from grade to 3.5m
	platanoides)				with incipient decay; crown asymmetric
					towards northwest; introduced invasive
					species; to be removed

Table 1. Con't

Table 1	. Con t				
8	Colorado spruce (Picea pungens)	Poor	29.0	Private	Mature; three competing leaders – all dead; poor crown density and growth increment, fair needle colour on recent growth; introduced species; to be removed
9	Colorado spruce	Fair	30.5	Private	Mature; upright form due to influence of adjacent trees; leader dead; poor density, fair increment and colour; introduced species; to be removed
10	Colorado spruce	Good	36.5	Private	Mature; leader alive and intact; lower crown shaded by tree #11; good density, increment and colour; introduced species; to be removed
11	Little-leaf linden (Tilia cordata)	Good	61.7 (at 1m)	Private	Very mature; single dominant stem for most of height; suppressed laterals starting at 1.5m; very broad, dense crown with good leaf size; introduced species; to be preserved and protected
12	Colorado spruce	Good	28.6	Private	Mature; very asymmetric toward southwest due to influence of neighbouring trees; good density, increment and colour where exposed to direct sunlight; introduced species; to be preserved and protected
13	Colorado spruce	Poor	26.9	Private	Mature; leader missing; growth suppressed by adjacent trees – poor density, increment and colour; introduced species; to be preserved and protected
14	Little-leaf linden	Good	69.7 (at 1m)	Private	Very mature; competing stems 1.5m – mildly divergent; northwest stem dominant; very broad, dense crown with good leaf size; introduced species; to be preserved and protected
15	Colorado spruce	Fair	34.3	Private	Mature; leader dead; crown asymmetric towards west; good density, increment and colour where exposed to direct sunlight; introduced species; to be preserved and protected
16	Colorado spruce	Good	40.2	Private	Mature; crown asymmetric towards northwest; good density, increment and colour where exposed to direct sunlight; introduced species; to be preserved and protected

Table 1. Con't

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17	Little-leaf	Good	74.5	Private	Very mature; central stem to 7.5m with
	linden				multiple leaders above (rounded crown
					apex); suppressed laterals starting at 2m
					– very broad, dense crown with good
					leaf size; good root collar; mildly
					restricted rooting area (parking median);
					introduced species; to be preserved
					and protected
18	Red maple	Very good	12.5	Private	Maturing; central stem with competing
	(Acer rubrum)	, ,			leaders; lowest lateral at 1m; native
					species; to be removed (could possibly
					be transplanted for use elsewhere)
19	Hackberry	Fair	10.4	Private	Maturing; central stem with competing
	(Celtis		(at		laterals at 1.3m on southeast and 2.25m
	occidentalis)		1m)		on northwest; native species; to be
	,				removed (could possibly be
					transplanted for use elsewhere)
20	Red maple	Fair	81.2	Private	Very mature; tri-stemmed at 0.5m from
	1		(at		grade - moderately divergent; lower
			0.2m)		crown asymmetric towards south due to
					clearing from Hydro lines; good crown
					density and leaf size; native species; to
					be removed
21	Red maple	Good	60.2	Private	Mature; central stem with competing
					lateral at 2.25m on south and co-
					dominant leaders at 5m; crown
					asymmetric towards southwest due to
					influence of tree #22; native species; to
					be removed
22	Red oak	Fair	95.2	Private	Very mature; tri-stemmed at 2m –
	(Quercus rubra)				dominant stem towards east with
					suppressed stem on west and heavily
					suppressed stem on north (strongly
					divergent); heavy buttressing in lower
		7			bole with opposing basal wounds (one
					with advanced decay); polypore fruiting
					body on ground near base present in
					October; native species; to be
					preserved and protected (must be
					decay tested to ensure integrity of bole)



Table 1. Con't

Table I	. Con't				
23	Austrian pine (Pinus nigra)	Good	55.9	Private	Very mature; central dominant stem mildly divergent towards northwest due to proximity of building; co-dominant leaders at 12m; crown generally symmetric; deep crown - held at 2m from grade; good density; increment and colour for age; introduced species; to be preserved and protected
24	Pin oak (Quercus palustris)	Good	+/15	Private	Maturing; within fence playground; introduced species to Eastern Ontario; to
25	* '	Good	27.2	Private	be preserved and protected
23	Norway maple	Good	21.2	Private	Mature; lower stem divergent towards
					northwest, crown asymmetric in same direction due to influence of adjacent
					trees; likely originated from seed;
					introduced invasive species; to be
					removed
26	White cedar	Fair	15	Private	Mature hedge with 11 stems in total;
	(Thuja	1 1111	avg.	111.000	west section divergent with stem damage
	occidentalis)				from snow piling - poor density,
	,				increment and colour with heavy cone
					crop in 2021; east section with fair
					density, increment and colour; located
					within a mildly restricted rooting area;
					native species; to be removed
27	Sugar maple	Good	35.3	Private	Mature; central stem with co-dominant
	(Acer				leaders at 4m and competing lateral at
	saccharum)				3.25m on southwest; suppressed laterals
					starting at 1.5m; lower crown asymmetric
					towards northwest due to proximity of
					building; located within a restricted
					rooting area; native species; to be
					preserved and protected
28	Sugar maple	Poor	31.9	City	Mature; tri-dominant stems with
					competing lateral on northwest at 1.75-
					2m; in advanced decline - holding less
					than 50% living foliage in lower crown
					only, major deadwood present in upper
					crown; located within a very restricted
					rooting area; native species; to be
					preserved and protected (though should
			İ		be removed due to hazard potential)



Table 1. Con't

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29	Sugar maple	Very poor	36.5	City	Mature; central stem with upright co- dominant leaders at 2.5m; suppressed laterals starting at 1.5m; in very advanced decline - holding less than 10% living foliage; major deadwood present; native variety; to be preserved and protected (though should be removed due to hazard potential)
30	Sugar maple	Fair	41.0	City	Mature; tri-dominant stems at 2m with competing laterals on northwest and northeast and a suppressed lateral on south – all at 1.5m from grade; broad, dense crown; good leaf size; native species; to be preserved and protected
31	Colorado spruce	Fair	40.3	Private	Mature; good form, density, increment and colour; lower crown shaded by tree #30; introduced species; to be preserved and protected
32	Colorado spruce	Very good	31.5	Private	Mature; good form, density, increment and colour; introduced species; to be preserved and protected
33	Sugar maple	Very good	16.5	City	Maturing; central dominant stem with suppressed laterals at 4m on east; native species; to be preserved and protected
34	Sugar maple	Good	49.7	City	Mature; central stem with co-dominant leaders at 5.5m; competing laterals at 2m on east and 2.25 and 4m on west; multiple suppressed laterals – very broad, dense crown; native species; to be preserved and protected
35	White cedar	Fair	22 avg.	Private	Mature hedge of 4 multi-stemmed clumps; all stems previously topped; fair density, increment and colour; native species; to be removed
36	Little-leaf linden	Good	55.5	City	Mature; central stem with competing laterals at 2m on southwest and southeast; co-dominant leaders at 4m; broad, dense crown with good leaf size; introduced species; to be removed
37	White cedar	Good	10 avg.	Shared	Maturing hedge with approx. 20 stems; shaded by nearby trees – esp. #36; good density, increment and colour when exposed to direct sunlight, fair when not; native species; to be preserved and protected

FEDERAL AND PROVINCIAL REGULATIONS

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

- 1) 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. Several juvenile trees of a closely related species, black walnut (*Juglans nigra*), were observed on the property but this species is not endangered.
- 2) <u>Migratory Bird Convention Act (1994)</u>: In the period between April and August of each year nest surveys must 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

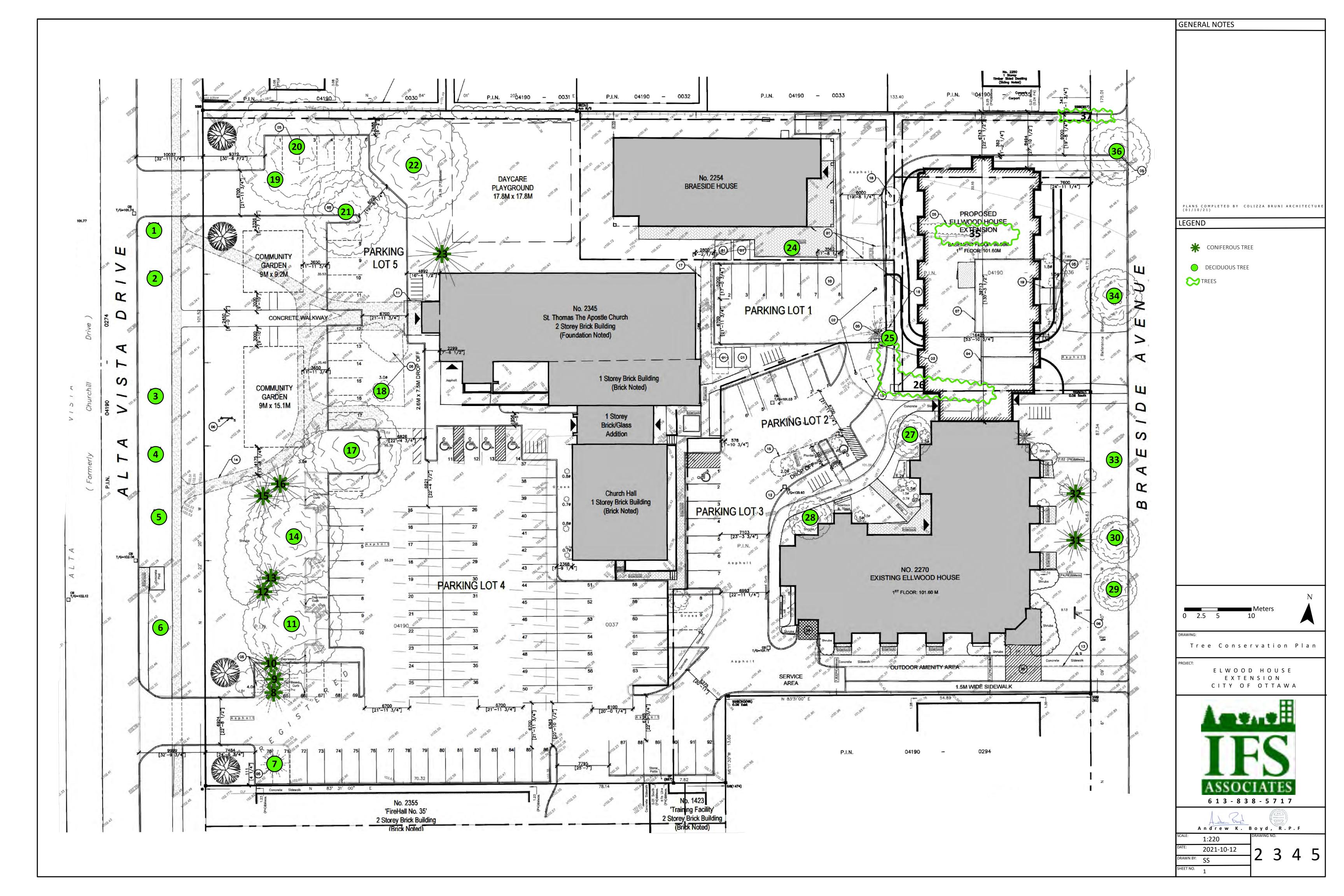
Preservation and protection measures intended to mitigate damage during construction will be applied for any trees to be preserved on and adjacent to the subject properties. The following measures are the minimum required by the City of Ottawa to ensure tree survival during and following construction:

- 1. Erect a fence at the critical root zone (CRZ¹) of trees;
- 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 canopy.
 - ¹ The critical root zone (CRZ) is established as being 10 centimetres from the trunk of a tree for every centimetre of trunk Diameter at breast height (DBH). The CRZ is calculated as DBH x 10 cm.

REPLACEMENT TREE PLANTING OR COMPENSATION

New trees are shown on the site plan for planting in the new landscape. Additional planting may be required to achieve parity with trees lost as a result of the proposed construction. Further planting or monetary compensation may be required for the loss of the one tree on City of Ottawa property.





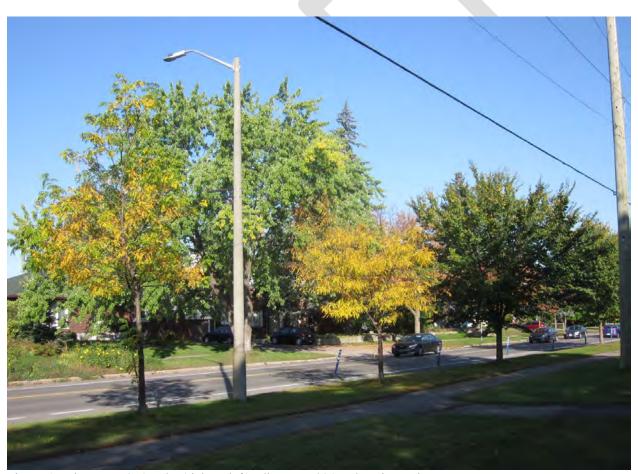
Pictures 1 through 9 on pages 9 to 14 of this report show selected trees on and adjacent to the two subject properties.

This report is subject to the attached Limitations of Tree Assessments to which the reader's attention is directed. Please do not hesitate to contact the undersigned with any questions concerning this report.

Yours,

This report is not a valid copy unless signed and stamped.

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



Picture 1. City trees #3, 4 and 5 (right to left) adjacent to 2345 Alta Vista Drive





Picture 2. Private trees # 9 through 14 (right to left) at 2345 Alta Vista Drive (looking northward)



Picture 3. Private trees #8, 9, 10, 11 and 14 (left to right) at 2345 Alta Vista Drive (looking westward)



Picture 4. Private tree #17 at 2345 Alta Vista Drive





Picture 6. Private tree #23 at 2345 Alta Vista Drive





Picture 7. Private trees #25 and 26 (left to right) at 2270 Braeside Avenue



Picture 8. City trees #30 and 33 and private tree #32 (left to right) at 2270 Braeside Avenue



Picture 9. City tree #36 adjacent to 2270 Braeside Avenue (tree is to be removed for new driveway)

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 carried out 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 activates 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.