

P.O. BOX 13593, STN. KANATA, OTTAWA, ON K2K 1X6 Telephone: (613) 838-5717 Website: www.ifsassociates.ca Urban Forestry & Forest Management Consulting

May 17, 2022

Tanya Farlinger exhālō Spa 3150 Woodroffe Avenue Ottawa, ON K2J 4G4

RE: TREE CONSERVATION REPORT FOR 3150 WOODROFFE AVENUE, OTTAWA

This Tree Conservation Report (TCR) was prepared by IFS Associates Inc. (IFS) on behalf of exhālō Spa in support of their proposed redevelopment of 3150 Woodroffe Avenue in Ottawa. 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). Presently the subject property is occupied by a one-storey dwelling with an asphalt driveway extending from Deerfox Drive. Four parking spaces are present to the north of the dwelling. The proposed redevelopment will include renovating the building for use as a day spa - reconfiguring of the front entrance way, removal of front septic tanks and extending the driveway so as to reach as additional 27 parking spaces to the north and east of the building.

Under the Tree Protection By-law a TCR is required for all Plans of Subdivision, Site Plan Control Applications, Common Elements Condominium Applications, and Vacant Land Condominium Applications where there is a tree of 10 cm in diameter at breast height (DBH) or greater on a site and/or if there is a tree on an adjacent site that has a critical root zone (CRZ) extending onto a development site. Trees of any size on adjacent City lands must also be documented in a TCR. 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 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's General Manager 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 trees on nearby City of Ottawa lands. Field work for this report was completed in April and May of 2022.



TREE SPECIES, CONDITION, SIZE AND STATUS

Table 1 below details the species, condition, size (diameter) and status of the individual trees on and adjacent to the subject property. Each of these trees is referenced by the numbers plotted on the tree conservation plan included on page 10 of this report.

Tree	Tree species	DBH ² /	Owner-	Condition, age class, tree condition notes;
No.	/Tolerance to	CRZ^3	ship ⁴	species origin & preservation status (to be
	Construction ¹			removed or preserved and protected)
1	Beech	10-	City	Fair; maturing; four stems from grade – all root
	(Fagus	25cm /		or stool shoots from previous parent tree; native
	grandifolia)/	1-2.5m		species; to be preserved and protected
	Poor			
2	Sugar maple	34.8 &	Shared	Fair; mature; double stemmed at 0.3m from
	(Acer	37.8 cm	with	grade; stems moderately divergent; early dieback
	saccharum)/	/	City	in north stem (closest to road), poor wound
	Poor-Moderate	7.3m		closure – two small cavities; native species; to
				be preserved and protected
3	Sugar maple	+/-40	Neigh-	Good; mature; upright form with symmetric
	(Acer	cm /	bour	crown; co-dominant leaders at 10m; living
	saccharum)/	+/-4m		crown held to within 4m of grade; native
	Poor-Moderate			species; to be preserved and protected
4	Eastern white	+/-	Neigh-	Fair; maturing; suppressed by surrounding trees -
	cedar	10cm /	bour	fair crown density, annual growth increment and
	(Thuja	+/-1m		needle colour; native species; to be preserved
	occidentalis)/			and protected
	Good			-
5	Sugar maple	+/-	Neigh-	Fair; mature; dominant main stem with three
	(Acer	60cm /	bour	competing leaders at 12m; crown asymmetric
	saccharum)/	+/-6m		towards north; living crown held high (8m from
	Poor-Moderate			grade) due to intercompetition for sunlight;
				native species; to be preserved and protected
6	Sugar maple	+/-	Neigh-	Fair; mature; upright dominant main stem with
	(Acer	30cm /	bour	dog's leg at 14m; living crown held high (10m
	saccharum)/	+/-3m		from grade) due to intercompetition for sunlight;
	Poor-Moderate			native species; to be preserved and protected
7	Sugar maple	+/-	Neigh-	Fair; mature; central stem with strongly
	(Acer	50cm /	bour	divergent leaders at 10m; crown asymmetric
	saccharum)/	+/-5m		towards east due to influence of surrounding
	Poor-Moderate			trees; native species; to be preserved and
				protected

Table 1. Species, condition, size, ownership and status of trees at 3150 Woodroffe Avenue



Table 1	. Con't			
Tree	Tree species	$DBH^2/$	Owner-	Condition, age class, tree condition notes;
No.	/Tolerance to	CRZ^3	ship ⁴	species origin & preservation status (to be
	Construction ¹			removed or preserved and protected)
8	Sugar maple	+/-	Neigh-	Good; very mature; upright dominant main stem
	(Acer	80cm /	bour	and leader; crown asymmetric towards
	saccharum)/	+/-8m		southwest due to influence of surrounding trees;
	Poor-Moderate			living crown held low – 4m from grade; native
				species; to be preserved and protected
9	Colorado	+/-	Neigh-	Fair; mature; three competing leaders at 10m;
	spruce (Picea	50cm /	bour	fair crown density, annual growth increment and
	pungens)/	+/-5m		needle colour; introduced species; to be
	Moderate-			preserved and protected
10	Colorado	L /_	Neigh-	Door mature single dominant stem and leader
10	spruce (Picea	40cm /	bour	poor crown density annual growth increment
	$\frac{\text{spruce}(1)(\text{cen})}{\frac{\text{spruce}(1)}{2}}$	$\pm/-4m$	UUui	and needle colour: introduced species: to be
	Moderate-	⊤/ - ∓111		nreserved and protected
	Good			preserved and protected
11	Norway	+/-30-	Neigh-	Fair; line of four mature trees; fair crown
	spruce (Picea	50cm /	bour	density, annual growth increment and needle
	abies)/	+/-		colour; introduced species; to be preserved and
	Moderate-	3-5m		nrotected
		00111		protected
	Good			
12	Good Crab apple	25.5cm	Private	Fair; mature; strongly divergent and asymmetric
12	Good Crab apple (<i>Malus spp.</i>)/	25.5cm /2.6m	Private	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of
12	Good Crab apple (<i>Malus spp.</i>)/ unknown	25.5cm /2.6m	Private	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of neighbouring trees; heavy vine growth into
12	Good Crab apple (<i>Malus spp.</i>)/ unknown	25.5cm /2.6m	Private	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of neighbouring trees; heavy vine growth into crown; fair annual increment (vigour); cultivar;
12	Good Crab apple (<i>Malus spp.</i>)/ unknown	25.5cm /2.6m	Private	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of neighbouring trees; heavy vine growth into crown; fair annual increment (vigour); cultivar; to be preserved and protected
12	Good Crab apple (<i>Malus spp.</i>)/ unknown Sugar maple	25.5cm /2.6m	Private Private	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of neighbouring trees; heavy vine growth into crown; fair annual increment (vigour); cultivar; to be preserved and protected Very good; maturing; upright form with
12	Good Crab apple (<i>Malus spp.</i>)/ unknown Sugar maple (<i>Acer</i>	25.5cm /2.6m 13.8cm /1.4m	Private Private	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of neighbouring trees; heavy vine growth into crown; fair annual increment (vigour); cultivar; to be preserved and protected Very good; maturing; upright form with competing lateral at 6m on south; crown
12	Good Crab apple (<i>Malus spp.</i>)/ unknown Sugar maple (<i>Acer</i> saccharum)/ Poor-Moderate	25.5cm /2.6m 13.8cm /1.4m	Private Private	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of neighbouring trees; heavy vine growth into crown; fair annual increment (vigour); cultivar; to be preserved and protected Very good; maturing; upright form with competing lateral at 6m on south; crown asymmetric towards north due to influence of paighbouring tree; native species; to be
12	Good Crab apple (<i>Malus spp.</i>)/ unknown Sugar maple (<i>Acer</i> <i>saccharum</i>)/ Poor-Moderate	25.5cm /2.6m 13.8cm /1.4m	Private Private	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of neighbouring trees; heavy vine growth into crown; fair annual increment (vigour); cultivar; to be preserved and protected Very good; maturing; upright form with competing lateral at 6m on south; crown asymmetric towards north due to influence of neighbouring tree; native species; to be
12	Good Crab apple (<i>Malus spp.</i>)/ unknown Sugar maple (<i>Acer</i> <i>saccharum</i>)/ Poor-Moderate	25.5cm /2.6m 13.8cm /1.4m	Private Private	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of neighbouring trees; heavy vine growth into crown; fair annual increment (vigour); cultivar; to be preserved and protected Very good; maturing; upright form with competing lateral at 6m on south; crown asymmetric towards north due to influence of neighbouring tree; native species; to be preserved and protected
12 13 14	Good Crab apple (<i>Malus spp.</i>)/ unknown Sugar maple (<i>Acer</i> <i>saccharum</i>)/ Poor-Moderate Sugar maple (<i>Acer</i>	25.5cm /2.6m 13.8cm /1.4m +/- 50cm/	Private Private Neigh- bour	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of neighbouring trees; heavy vine growth into crown; fair annual increment (vigour); cultivar; to be preserved and protected Very good; maturing; upright form with competing lateral at 6m on south; crown asymmetric towards north due to influence of neighbouring tree; native species; to be preserved and protected Good; mature; upright dominant main stem with co-dominant leaders at 18m; narrow symmetric
12 13 14	Good Crab apple (Malus spp.)/ unknown Sugar maple (Acer saccharum)/ Poor-Moderate Sugar maple (Acer saccharum)/	25.5cm /2.6m 13.8cm /1.4m +/- 50cm/ +/-5m	Private Private Neigh- bour	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of neighbouring trees; heavy vine growth into crown; fair annual increment (vigour); cultivar; to be preserved and protected Very good; maturing; upright form with competing lateral at 6m on south; crown asymmetric towards north due to influence of neighbouring tree; native species; to be preserved and protected Good; mature; upright dominant main stem with co-dominant leaders at 18m; narrow symmetric crown due to intense intercompetition with
12 13 14	Good Crab apple (<i>Malus spp.</i>)/ unknown Sugar maple (<i>Acer</i> saccharum)/ Poor-Moderate Sugar maple (<i>Acer</i> saccharum)/ Poor-Moderate	25.5cm /2.6m 13.8cm /1.4m +/- 50cm/ +/-5m	Private Private Neigh- bour	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of neighbouring trees; heavy vine growth into crown; fair annual increment (vigour); cultivar; to be preserved and protected Very good; maturing; upright form with competing lateral at 6m on south; crown asymmetric towards north due to influence of neighbouring tree; native species; to be preserved and protected Good; mature; upright dominant main stem with co-dominant leaders at 18m; narrow symmetric crown due to intense intercompetition with surrounding trees for sunlight; native species; to
12 13 14	Good Crab apple (<i>Malus spp.</i>)/ unknown Sugar maple (<i>Acer</i> saccharum)/ Poor-Moderate Sugar maple (<i>Acer</i> saccharum)/ Poor-Moderate	25.5cm /2.6m 13.8cm /1.4m +/- 50cm/ +/-5m	Private Private Neigh- bour	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of neighbouring trees; heavy vine growth into crown; fair annual increment (vigour); cultivar; to be preserved and protected Very good; maturing; upright form with competing lateral at 6m on south; crown asymmetric towards north due to influence of neighbouring tree; native species; to be preserved and protected Good; mature; upright dominant main stem with co-dominant leaders at 18m; narrow symmetric crown due to intense intercompetition with surrounding trees for sunlight; native species; to be preserved and protected
12 13 14 15	Good Crab apple (<i>Malus spp.</i>)/ unknown Sugar maple (<i>Acer</i> saccharum)/ Poor-Moderate Sugar maple (<i>Acer</i> saccharum)/ Poor-Moderate Beech	25.5cm /2.6m 13.8cm /1.4m +/- 50cm/ +/-5m 56.1cm	Private Private Neigh- bour Private	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of neighbouring trees; heavy vine growth into crown; fair annual increment (vigour); cultivar; to be preserved and protected Very good; maturing; upright form with competing lateral at 6m on south; crown asymmetric towards north due to influence of neighbouring tree; native species; to be preserved and protected Good; mature; upright dominant main stem with co-dominant leaders at 18m; narrow symmetric crown due to intense intercompetition with surrounding trees for sunlight; native species; to be preserved and protected Fair; mature; moderately divergent and strongly
12 13 14 15	Good Crab apple (Malus spp.)/ unknown Sugar maple (Acer saccharum)/ Poor-Moderate Sugar maple (Acer saccharum)/ Poor-Moderate Beech (Fagus	25.5cm /2.6m 13.8cm /1.4m +/- 50cm/ +/-5m 56.1cm /5.6m	Private Private Neighbour Private	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of neighbouring trees; heavy vine growth into crown; fair annual increment (vigour); cultivar; to be preserved and protected Very good; maturing; upright form with competing lateral at 6m on south; crown asymmetric towards north due to influence of neighbouring tree; native species; to be preserved and protected Good; mature; upright dominant main stem with co-dominant leaders at 18m; narrow symmetric crown due to intense intercompetition with surrounding trees for sunlight; native species; to be preserved and protected Fair; mature; moderately divergent and strongly asymmetric towards east; good wound response
12 13 14 15	Good Crab apple (Malus spp.)/ unknown Sugar maple (Acer saccharum)/ Poor-Moderate Sugar maple (Acer saccharum)/ Poor-Moderate Beech (Fagus grandifolia)/	25.5cm /2.6m 13.8cm /1.4m +/- 50cm/ +/-5m 56.1cm /5.6m	Private Private Neighbour Private	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of neighbouring trees; heavy vine growth into crown; fair annual increment (vigour); cultivar; to be preserved and protected Very good; maturing; upright form with competing lateral at 6m on south; crown asymmetric towards north due to influence of neighbouring tree; native species; to be preserved and protected Good; mature; upright dominant main stem with co-dominant leaders at 18m; narrow symmetric crown due to intense intercompetition with surrounding trees for sunlight; native species; to be preserved and protected Fair; mature; moderately divergent and strongly asymmetric towards east; good wound response (vigour); minor cavities in upper crown; good rot
12 13 14 15	Good Crab apple (Malus spp.)/ unknown Sugar maple (Acer saccharum)/ Poor-Moderate Sugar maple (Acer saccharum)/ Poor-Moderate Beech (Fagus grandifolia)/ Poor	25.5cm /2.6m 13.8cm /1.4m +/- 50cm/ +/-5m 56.1cm /5.6m	Private Private Neighbour Private	Fair; mature; strongly divergent and asymmetric towards northwest due to influence of neighbouring trees; heavy vine growth into crown; fair annual increment (vigour); cultivar; to be preserved and protected Very good; maturing; upright form with competing lateral at 6m on south; crown asymmetric towards north due to influence of neighbouring tree; native species; to be preserved and protected Good; mature; upright dominant main stem with co-dominant leaders at 18m; narrow symmetric crown due to intense intercompetition with surrounding trees for sunlight; native species; to be preserved and protected Fair; mature; moderately divergent and strongly asymmetric towards east; good wound response (vigour); minor cavities in upper crown; good rot collar; native species; to be preserved and



Table 1	. Con't			
Tree	Tree species	DBH ² /	Owner-	Condition, age class, tree condition notes;
No.	/Tolerance to	CRZ^3	ship ⁴	species origin & preservation status (to be
	Construction ¹			removed or preserved and protected)
16	Bitternut	17.7cm	Private	Good; maturing; moderately divergent and very
	hickory	/1.7m		asymmetric towards east due to influence of tree
	(Carya			#15; native species; to be preserved and
	cordiformis)/			protected
	Moderate			
17	Beech	44.4cm	Private	Poor; mature; mildly divergent and very
	(Fagus	/4.4m		asymmetric towards east due to influence of
	grandifolia)/			nearby trees; co-dominant stems at 10m – one
	Poor			fully dead; major basal wound on southwest
				without decay; root collar obscured by raised
				grade; native species; to be preserved and
				protected
18	Beech	48.1cm	Private	Fair; mature; poor form - divergent co-dominant
	(Fagus	/4.8m		stems at 7m – dominant towards south,
	grandifolia)/			suppressed towards east; good annual increment;
	Poor			native species; to be preserved and protected
19	Sugar maple	80.6cm	Private	Fair; very mature; upright main stem and crown
	(Acer	/8.1m		held high (12m) due to intercompetition between
	saccharum)/			trees for sunlight; co-dominant leaders with two
	Poor-Moderate			suppressed laterals at 16m; recent root damage;
				good root collar; native species; to be removed
• •	~ 1	10.0		(will not survive root loss)
20	Sugar maple	69.0cm	Private	Fair; mature; single dominant stem with dog's
	(Acer	/6.9m		leg at 16m; suppressed laterals at 6m on
	saccharum)/			northwest and 10m on north; moderately
	Poor-Moderate			divergent and strongly asymmetric towards
				southwest; good root collar; recent root damage;
				native species; to be removed (conflicts with
21	White array	22.8	Duivesta	parking)
21	white spruce	32.8cm	Private	Fair; mature; upright main stem and leader;
	(Picea	/3.311		crown asymmetric towards southwest due to
	giauca)/			influence of tree #22; good crown density,
	Moderate-			annual growth increment and needle colour;
	G000			recent root damage; native species; to be
22	White array	20.8	Duivesta	Fein matural poor form
	white spruce	30.8Cm	Private	rair, indure; poor form – series of dog's legs in
	(<i>Ficea</i>	/3.1m		density oppued growth increment and goe 11
	giauca)/ Moderate			activity, annual growth increment and needle
	Moderate-			colour; native species; to be preserved and
	000D			protectea



Table 1	. Con't			
Tree	Tree species	DBH ² /	Owner-	Condition, age class, tree condition notes;
No.	/Tolerance to	CRZ^3	ship ⁴	species origin & preservation status (to be
	Construction ¹			removed or preserved and protected)
23	Colorado	26.3cm	Private	Fair; mature; upright main stem and leader;
	spruce (Picea	/2.6m		lower crown asymmetric due to influence of
	pungens)/			nearby trees; fair crown density, annual growth
	Moderate-			increment and needle colour; introduced species;
	Good			to be removed (will not survive root loss)
24	Eastern white	26.4cm	Private	Fair; mature; co-dominant leaders with
	cedar	/2.6m		suppressed lateral at 2.5m on southwest; native
	(Thuja			species; to be removed (conflicts with
	occidentalis)/			pedestrian walkway)
	Good	01.5		
25	Sugar maple	81.5cm	Private	Fair; very mature; main stem mildly divergent
	(Acer	/8.2m		towards west; crown moderately asymmetric
	saccharum)/			towards west; tri-dominant leaders at 18m;
	Poor-Moderate			recent root damage and broken branches; root
				collar partially obscured by raised grade; native
2.5			D.	species; to be removed (conflicts with parking)
26	Beech	75.6cm	Private	Fair; very mature; dominant upright main stem
	(Fagus	/7.6m		with competing leaders at 10.5m; scattered
	grandifolia)/			moderate-major deadwood; signs of beech
	Poor			scale (<i>Cryptococcus fagisuga</i>) – usually a
				precursor to the fatal beech bark disease
				(Neonectria faginata); root sprouts; native
				species; to be removed (conflicts with septic
	. .	10.0	D.	tank removal and new entranceway)
27	Juniper	19.8cm	Private	Good; mature; upright form; generally
	(Juniperus	/2.0m		symmetric crown; fair crown density, growth
	spp.)/			increment and needle colour; cultivar; to be
•	Good	01.1	D.	removed (conflicts with parking)
28	Colorado	21.1cm	Private	Fair; maturing; moderately asymmetric towards
	spruce (Picea	/2.1m		southeast due to influence of nearby <i>Prunus</i> root
	pungens)/			sprouts; fair crown density, growth increment
	Moderate-			and needle colour; introduced species; to be
20		157		preserved and protected
29	Colorado	15./cm	Private	Fair; maturing; very asymmetric towards west
	spruce (Picea	/1.6m		due to influence of nearby <i>Prunus</i> root sprouts;
	pungens)/			competing leaders at 4m; fair crown density,
	Moderate-			growth increment and needle colour; introduced
	Good			species; to be preserved and protected



Table 1	. Con't			
Tree	Tree species	DBH ² /	Owner-	Condition, age class, tree condition notes;
No.	/Tolerance to	CRZ^3	ship ⁴	species origin & preservation status (to be
	Construction ¹			removed or preserved and protected)
30	Colorado	24.2cm	Private	Good; maturing; lower crown asymmetric
	spruce (Picea	/2.4m		towards west due to influence of nearby trees;
	pungens)/			good crown density, growth increment and
	Moderate-			needle colour; introduced species; to be
	Good			preserved and protected
31	Colorado	25.1cm	Private	Fair; maturing; crown asymmetric towards
	spruce (Picea	/2.5m		south/southeast due to influence of tree #32;
	pungens)/			slight sweep in main stem at 2m; fair crown
	Moderate-			density, growth increment and needle colour;
	Good			introduced species; to be preserved and
				protected
32	Sugar maple	40.3cm	Private	Good; mature; co-dominant stems at 5.5m, both
	(Acer	/4.0m		bisect within 0.5m of primary union; competing
	saccharum)/			lateral at 4m on east; suppressed laterals starting
	Poor-Moderate			at 2m – broad, dense crown; good root collar –
				only 2 distal binding roots; native species; to be
				preserved and protected
33	Sugar maple	32.9cm	Private	Fair; mature; moderately divergent and strongly
	(Acer	/3.3m		asymmetric towards northeast due to influence
	saccharum)/			of trees #32 and 34; good root collar; native
	Poor-Moderate			species; to be preserved and protected
34	Sugar maple	35.5cm	Private	Good; mature; central stem with three competing
	(Acer	/3.6m		laterals at 3m; major wound from lost co-
	saccharum)/			dominant stem at 3m on east; crown very
	Poor-Moderate			asymmetric towards northwest due influence of
				trees #32 and 33; to be removed (conflicts with
				parking)
35	White spruce	46.0cm	Private	Good; mature; upright main stem and leader;
	(Picea	/4.6m		crown generally symmetric; good crown density,
	glauca)/			annual growth increment and needle colour;
	Moderate-			multiple exposed surface roots; native species; to
	Good			be removed (conflicts with parking)
36	White spruce	31.8cm	Private	Good; mature; upright main stem and leader;
	(Picea	/3.2m		crown generally symmetric; good crown density,
	glauca)/			annual growth increment and needle colour;
	Moderate-			multiple exposed surface roots within area of
	Good			root plate; native species; to be removed
				(conflicts with laneway)

Tree No.Tree species (Tolerance to Construction1DBH2/ (CRZ3Owner- ship4Condition, age class, tree condition notes; species origin & preservation status (to be removed or preserved and protected)37Colorado spruce (Picea pungens)/47.1cm (4.7m)PrivateGood; mature; single upright main stem and leader; crown generally symmetric; lower crown thin due to influence of tree #48; good crown density, annual growth increment and needle colour elsewhere; introduced species; to be removed (conflicts with parking)38Colorado spruce (Picea pungens)/22.3cm (2.2m)PrivateVery good; maturing; generally symmetric crown; good crown density, annual growth increment and needle colour elsewhere;
No./Tolerance to Construction1CRZ3ship4species origin & preservation status (to be removed or preserved and protected)37Colorado spruce (Picea pungens)/ Moderate- Good47.1cm /4.7mPrivate leader; crown generally symmetric; lower crown thin due to influence of tree #48; good crown density, annual growth increment and needle colour elsewhere; introduced species; to be removed (conflicts with parking)38Colorado spruce (Picea pungens)/22.3cm /2.2mPrivate PrivateVery good; maturing; generally symmetric crown; good crown density, annual growth increment and needle colour elsewhere;
Construction1removed or preserved and protected)37Colorado47.1cmPrivateGood; mature; single upright main stem and leader; crown generally symmetric; lower crown thin due to influence of tree #48; good crown density, annual growth increment and needle colour elsewhere; introduced species; to be removed (conflicts with parking)38Colorado spruce (Picea Good22.3cmPrivate (2.2mVery good; maturing; generally symmetric crown; good crown density, annual growth38Colorado spruce (Picea pungens)/22.3cmPrivate (2.2mVery good; maturing; generally symmetric crown; good crown density, annual growth increment and needle colour elsewhere;
37Colorado spruce (Picea pungens)/ Moderate- Good47.1cm /4.7mPrivate PrivateGood; mature; single upright main stem and leader; crown generally symmetric; lower crown thin due to influence of tree #48; good crown density, annual growth increment and needle colour elsewhere; introduced species; to be removed (conflicts with parking)38Colorado spruce (Picea pungens)/22.3cm /2.2mPrivate PrivateVery good; maturing; generally symmetric crown; good crown density, annual growth increment and needle colour elsewhere;
spruce (Picea pungens)/ Moderate- Good/4.7mleader; crown generally symmetric; lower crown thin due to influence of tree #48; good crown density, annual growth increment and needle colour elsewhere; introduced species; to be removed (conflicts with parking)38Colorado spruce (Picea pungens)/22.3cmPrivateVery good; maturing; generally symmetric crown; good crown density, annual growth increment and needle colour elsewhere;
pungens)/ Moderate- Goodmoderate- Goodthin due to influence of tree #48; good crown density, annual growth increment and needle colour elsewhere; introduced species; to be removed (conflicts with parking)38Colorado spruce (Picea pungens)/22.3cm /2.2mPrivate (2.2mVery good; maturing; generally symmetric crown; good crown density, annual growth increment and needle colour elsewhere;
Moderate- Gooddensity, annual growth increment and needle colour elsewhere; introduced species; to be removed (conflicts with parking)38Colorado spruce (Picea pungens)/22.3cm /2.2mPrivate (2.2mVery good; maturing; generally symmetric crown; good crown density, annual growth increment and needle colour elsewhere;
Good colour elsewhere; introduced species; to be 38 Colorado 22.3cm spruce (Picea /2.2m pungens)/ /2.2m
38 Colorado spruce (Picea pungens)/ 22.3cm Private Very good; maturing; generally symmetric crown; good crown density, annual growth increment and needle colour elsewhere;
38Colorado spruce (<i>Picea</i> <i>pungens</i>)/22.3cmPrivateVery good; maturing; generally symmetric crown; good crown density, annual growth increment and needle colour elsewhere;
spruce (<i>Picea</i> /2.2m /2.2m crown; good crown density, annual growth increment and needle colour elsewhere;
<i>pungens)/</i> increment and needle colour elsewhere;
Moderate- introduced species; to be preserved and
Good protected
39Sugar maple29.1cmPrivateGood; maturing; co-dominant stems at 2.5m
(<i>Acer</i> /2.9m with competing lateral at 2m on east; native
saccharum)/ species; to be preserved and protected
Poor-Moderate
40 Balsam fir 15.6cm Private Poor; maturing; crown very asymmetric due to
(<i>Abies</i> /1.6m influence of tree #39; leader suffering abrasion
damage; fair crown density, annual growth
Moderate-
Good be preserved and protected
41 Colorado 15.1cm Private Poor; maturing; crown very asymmetric due to
spruce (<i>Picea</i> /1.5m influence of tree #39; good crown density,
annual growth increment and needle colour;
Moderate- Introduced species; to be preserved and
Good protected
42 Colorado 12.3cm Private Poor; maturing; crown very asymmetric due to
spruce (<i>Picea</i> /1.2m influence of tree #39; sweep at 2m from
<i>pungens)/</i> previously lost leader; good crown density,
Good introduced species: to be preserved and
nitioduced species, to be preserved and
13 Colorado 12.7cm Private Poor: maturing: crown very asymmetric due to
+5 Colorado 12.7 cm 111 vale 1001, maturing, crown very asymmetric due to influence of tree #44: sweep at 2m from
pungans)/
Moderate-
Good introduced species: to be preserved and
nrotected



Table 1	. Con't			
Tree	Tree species	DBH ² /	Owner-	Condition, age class, tree condition notes;
No.	/Tolerance to	CRZ^3	ship ⁴	species origin & preservation status (to be
	Construction ¹			removed or preserved and protected)
44	Sugar maple	38.6cm	Private	Fair; mature; central stem with competing lateral
	(Acer	(at		at 1m on east; co-dominant leaders at 2.5m –
	saccharum)/	0.5m)/		both bisect at 3.5m with inclusion ridges at
	Poor-Moderate	3.9m		unions; native species; to be preserved and
				protected
45	Sugar maple	35.5cm	Private	Fair; mature; central stem with co-dominant
	(Acer	/3.6m		leaders at 5.5m – both bisect within 2m of
	saccharum)/			primary union; suppressed and competing
	Poor-Moderate			laterals starting at 1.5m - broad, dense crown;
				native species; to be preserved and protected
46	Ash	-	Private	Dead due to emerald ash borer (Agrilus
	(Fraxinus			planipennis); broken at 1m; to be removed
	spp.)			
47	White spruce	53.3cm	City	Fair; mature; single upright main stem and
	(Picea	/5.3m		leader; scattered dead branches due to Cytospora
	glauca)/			kunzei; fair crown density, annual growth
	Moderate-			increment and needle colour; native species; to
	Good			be preserved and protected
48	Austrian pine	67.1cm	Private	Fair; very mature; co-dominant stems at 3.5m;
	(Pinus nigra)/	/6.7m		suppressed basal lateral stems on north and east;
	Moderate-			fair crown density, annual growth increment and
	Good			needle colour in upper crown, lower crown poor
				due to competition with multiple seeded Norway
				maple (Acer platanoides) and a single bur oak
				(Quercus macrocarpa); introduced species; to
				be removed (will not survive root loss related to
				nearby parking and pedestrian pathway)

¹ as taken from Managing Trees during Construction; 2nd Ed., Fite and Smiley; ² diameter at breast height, or 1.4m from grade (unless otherwise indicated); ³ critical root zone is established as being 10 centimetres from the trunk of a tree for every centimetre of cumulative DBH. The CRZ is calculated as DBH x 10 cm; ⁴ as determined by topographic survey prepared by J.D. Barnes Ltd. dated 01/18/22

Pictures 1 to 8 on pages 11 through 16 of this report show selected trees on and adjacent to the subject property.

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) <u>Endangered Species Act (2007)</u>: 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) <u>Migratory Bird Convention Act (1994)</u>: 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. 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 (CRZ) 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 crown.

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





GENERAL NOTES PLANS COMPLETED BY ARBAUM LEGEND EXISTING SOD AREA TO REMAIN PERMEABLE PAVING CONCRETE PAVING Deciduous tree CONIFEROUS TREE TREES TO BE REMOVED Meters 0 1.5 3 9 6 Tree Conservation Plan PROJECT: 3150 WOODROFFE CITY OF OTTAWA **₩**41**₩** ASSOCIATES 6 1 3 - 8 3 8 - 5 7 1 7 Andrew K. Boyd, R.P.F 1:170 2022-05-17 3 1 5 0 awn by: SS SHEET NO.



Picture 1. Tree #2 to 8 (left to right), adjacent to 3150 Woodroffe Avenue



Picture 2. Trees #46 (left) and 48 (right) at 3150 Woodroffe Avenue





Picture 3. Trees #14 and 15 (right), 18 (centre) and 19 and 20 (left) at 3150 Woodroffe Avenue





Picture 4. Trees #21 to 24 (left to right) at 3150 Woodroffe Avenue





Picture 5. Trees #20-16 (right to left) and 25 (far left) at 3150 Woodroffe Avenue





Picture 6. Trees #28-34 (right to left) at 3150 Woodroffe Avenue



Picture 7. Trees #38-44 (right to left) at 3150 Woodroffe Avenue





Picture 8. Trees #35, 36 and 37 (left to right) at 3150 Woodroffe Avenue



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 aboveground 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 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 (which is recommended in this case).

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 of 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 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.

