



URBAN FORESTRY & FOREST MANAGEMENT CONSULTING

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November 12, 2021

2 Robinson Property Limited Partnership
88 Albert Street
Ottawa, ON
K1P 5E9

RE: TREE CONSERVATION REPORT FOR 2 ROBINSON AVENUE, OTTAWA

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 re-development of the subject property. Such reports are required for all plans of subdivision and site plan control applications for properties on which trees of 10 centimetres 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. Further, any shared trees or trees located on adjacent properties will require permission from neighbouring owners prior to removal.**

The inventory in this report details the assessment of all individual trees of at least 10cm diameter on and directly adjacent to the subject property. Field work for this report was completed in January 2021. Although covered by snow at the time, it was obvious that a sizable building had recently been removed from the site. Some damage from demolition activities was noted on surrounding trees.

The construction proposed for the site includes four multi-storey residential buildings with associated surface and underground parking. The combined foot print of the buildings in addition to the excavation necessary for the underground parking will result in the removal of the majority of trees on the property. The majority of trees on adjacent City of Ottawa lands will also be retained as will a portion of the wooded area on the northern edge of the subject property (see the accompanying tree conservation plan). All trees fully on adjacent private property will be retained. The tree preservation and protection measures cited in this report will be followed to ensure the survival of trees proposed for retention.

TREE SPECIES, CONDITION, SIZE AND STATUS

In general terms tree health throughout the site is good. Notable instances of poor health are generally related to age – older senescent trees, both individual seeded and planted amenity trees



which are declining in health due to age. Other trees are suffering from biotic factors such as heavy vine growth (*Vitus* spp.), especially on edge trees, elms (*Ulmus americana*) killed by Dutch elm disease (*Ophiostoma ulmi/novo-ulmi*) and ash (*Fraxinus* spp.) killed by emerald ash borer (*Agrilus planipennis*).

Table 1 below details the species, condition, size (diameter) and status of individual and groups of trees on the subject property. Each of these is referenced by the numbers plotted on the accompanying tree conservation plan. Their status (*i.e.* to be removed or retained) is highlighted on the plan (green to remain and red to be removed).

Table 1. Species, condition, size (diameter) and age of trees at 2 Robinson Avenue

| Tree No. | Tree Species | DBH (cm) ¹ | Tree condition, age class & health condition notes/ Status (to be removed or preserved and protected) |
|----------|--------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------------------|
| 1 | Red oak (<i>Quercus rubra</i>) | 24 | Co-dominant leaders at 3.5m from grade; maturing; salt spray damage to crown/ to be removed |
| 2 | Red oak | 19 | Tri-dominant leaders at 3m from grade; maturing/ to be removed |
| 3 | Red oak | 23 | Salt spray damage to crown; maturing/ to be removed |
| 4 | Red oak | 20 | Divergent form; maturing/ to be removed |
| 5 | Red oak | 20 | Sweep in main stem at 4m from grade; maturing/ to be removed |
| 6 | Red oak | 24 | Frost crack in main stem from grade to 2.5m; maturing/ to be removed |
| 7 | Honey-locust (<i>Gleditsia triacanthos</i>) | 28 | Encroaching on light standard; mature/ to be removed |
| 8 | Honey-locust | 15 | Stem divergent at 1m from grade/ to be removed |
| 9 | Honey-locust | 16 | Minor salt spray damage/ to be removed |
| 10 | Honey-locust | 24 | Broad crown; maturing epicormic shoot at 1m from grade/ to be removed |
| 11 | Honey-locust | 18 | Good condition/ to be preserved and protected |
| 12 | Honey-locust | 25 | Good condition/ to be preserved and protected |
| 13 | Honey-locust | 25 | Good condition/ to be preserved and protected |
| 14 | Honey-locust | 20 | Epicormic growth at 1m from grade/ to be preserved and protected |
| 15 | Honey-locust | 11 avg. | Tri-stemmed from grade/ to be preserved and protected |
| 16 | Honey-locust | 23 | Good condition/ to be preserved and protected |
| 17 | Honey-locust | 22 | Good condition/ to be preserved and protected |
| 18 | Honey-locust | 26 | Good condition/ to be preserved and protected |
| 19 | Freeman maple (<i>Acer x freemanii</i>) | 10 | Co-dominant leaders at 4m from grade/ to be preserved and protected |

Table 1. Con't

| Tree No. | Tree Species | DBH (cm) ¹ | Tree condition, age class & health condition notes/Status (to be removed or preserved and protected) |
|----------|-----------------|-----------------------|------------------------------------------------------------------------------------------------------|
| 20 | Freeman maple | 9 | Co-dominant leaders at 2m from grade/ to be preserved and protected |
| 21 | Red oak | 7 | Divergent leader/ to be preserved and protected |
| 22 | Red oak | 7 | Divergent leader/ to be preserved and protected |
| 23 | Red oak | 5 | Low vigour, heavy basal damage/ to be preserved and protected |
| 24 | Honey-locust | 27 | Good condition/ to be preserved and protected |
| 25 | Norway maple | 37 | Multiple leaders at 2m from grade, branch cluster/ to be removed |
| 26 | Norway maple | 24 | Co-dominant stem at 2m from grade, included bark union/ to be removed |
| 27 | Colorado spruce | 31 | Good condition/ to be removed |
| 28 | Norway maple | 32 | Branch cluster at 2m from grade/ to be removed |
| 29 | Norway maple | 33 | Co-dominant stems at 2.5m from grade/ to be removed |
| 30 | Norway maple | 25 | Tri-dominant stems at 2.5m from grade/ to be removed |
| 31 | Austrian pine | 33 | Significant sap sucker damage/ to be removed |
| 32 | Austrian pine | 40 | Asymmetrical/ to be removed |
| 33 | Austrian pine | 36 | Good condition/ to be removed |
| 34 | Colorado spruce | 31 | Visible signs of pitch mass borer/ to be removed |
| 35 | Colorado spruce | 31 | Good condition/ to be removed |
| 36 | Austrian pine | 37 | Sap sucker damage/ to be removed |
| 37 | Colorado spruce | 31 | Good condition/ to be removed |
| 38 | Colorado spruce | 33 | Good condition/ to be removed |
| 39 | Colorado spruce | 43 | Good condition/ to be removed |
| 40 | Norway maple | 24 | Good condition/ to be removed |
| 41 | Norway maple | 34 | 4 competing stems at 4m from grade/ to be removed |
| 42 | Colorado spruce | 27 | Mild sweep/ to be removed |
| 43 | Colorado spruce | 28 | Mild sweep/ to be removed |
| 44 | Colorado spruce | 21 | Mild sweep/ to be removed |
| 45 | Colorado spruce | 21 | Mild sweep/ to be removed |
| 46 | Colorado spruce | 26 | Mild sweep/ to be removed |
| 47 | Colorado spruce | 20 | Good condition/ to be removed |
| 48 | Colorado spruce | 33 | Good condition/ to be removed |
| 49 | Colorado spruce | 33 | Competing parallel stems at 2.5m from grade/ to be removed |
| 50 | Norway maple | 10 | Good condition/ to be removed |
| 51 | Norway maple | 24 | Severely decayed stem from grade to 4m/ to be removed |
| 52 | Norway maple | 20 | Significant lower deadwood/ to be removed |
| 53 | Norway maple | 27 | Severely decayed from grade to 2.5m/ to be removed |
| 54 | Honey-locust | 21 | Asymmetrical/ to be removed |

Table 1. Con't

| Tree No. | Tree Species | DBH (cm) ¹ | Tree condition, age class & health condition notes/ Status (to be removed or preserved and protected) |
|----------|----------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------|
| 55 | Honey-locust | 29 | Good condition/ to be removed |
| 56 | Honey-locust | 22 | Good condition/ to be removed |
| 57 | Honey-locust | 17 | Low vigour/ to be removed |
| 58 | Honey-locust | 36 | Major physical basal damage/ to be removed |
| 59 | Eastern cottonwood (<i>Populus deltoides</i>) | 14 | Good condition/ to be removed |
| 60 | Eastern cottonwood | 20 | Good condition/ to be removed |
| 61 | Trembling aspen (<i>Populus tremuloides</i>) | 14 | Good condition/ to be removed |
| 62 | Eastern cottonwood | 13 | Good condition/ to be removed |
| 63 | Eastern cottonwood | 13 | Good condition/ to be removed |
| 64 | Eastern cottonwood | 11 | Good condition/ to be removed |
| 65 | Eastern cottonwood | 19 | Good condition/ to be removed |
| 66 | Balsam poplar (<i>Populus balsamifera</i>) | 14 | Divergent/ to be removed |
| 67 | Siberian elm (<i>Ulmus pumila</i>) | 17 & 10 | Divergent/ to be removed |
| 68 | Eastern cottonwood | 32 & 40 | Double stems from grade, infested with wild grape vine, growing into chain link fence/ to be removed |
| 69 | American elm (<i>Ulmus americana</i>) | 17 & 20 | Double stem from grade/ to be removed |
| 70 | Manitoba maple (<i>Acer negundo</i>) | 13 avg. | 4 stemmed at grade/ to be removed |
| 71 | Balsam poplar | 13 & 17 | Double stem at 0.3m from grade, heavily divergent/ to be removed |
| 72 | Manitoba maple | 17 | Divergent/ to be removed |
| 73 | Manitoba maple | 17 | Upright form, encroaching on chain link fence/ to be removed |
| 74 | Manitoba maple | 17 avg. | 4 stemmed at grade/ to be removed |
| 75 | Crab apple (<i>Malus spp.</i>) | 10 avg. | 5 stemmed at grade/ to be removed |

Table 1. Con't

| Tree No. | Tree Species | DBH (cm) ¹ | Tree condition, age class & health condition notes/ Status (to be removed or preserved and protected) |
|----------|--------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------|
| 76 | Manitoba maple | 12 avg. | 7 stemmed at grade/ to be removed |
| 77 | Manitoba maple | 10 avg. | Tri-stemmed at grade/ to be removed |
| 78 | Manitoba maple | 14 avg. | 9 stemmed at grade/ to be removed |
| 79 | Manitoba maple | 16 avg. | 6 stemmed at grade, infested with wild grape vine/ to be removed |
| 80 | Eastern cottonwood | 13 | Good condition/ to be removed |
| 81 | Eastern cottonwood | 29 | Infested with wild grape vine/ to be removed |
| 82 | Siberian elm | 12 & 15 | Co-dominant stems at 0.5m/ to be removed |
| 83 | Manitoba maple | 10 | Divergent/ to be removed |
| 84 | Siberian elm | 14 & 11 | Stems growing on either side of chain link fence/ to be removed |
| 85 | Eastern cottonwood | 23 | Slightly divergent/ to be removed |
| 86 | Eastern cottonwood | 15 | Divergent/ to be removed |
| 87 | Siberian elm | 16 | Good condition/ to be removed |
| 88 | Siberian elm | 16 | Good condition/ to be removed |
| 89 | Eastern cottonwood | 10 | Co-dominant leaders/ to be removed |
| 90 | Manitoba maple | 12 | Strongly divergent/ to be removed |
| 91 | Siberian elm | 17 | Good condition/ to be removed |
| 92 | Siberian elm | 18 | Good condition/ to be removed |
| 93 | Eastern cottonwood | 14 | Divergent/ to be removed |
| 94 | Siberian elm | 10 & 12 | Double stem at 0.2m from grade/ to be removed |
| 95 | Siberian elm | 20 | Good condition/ to be removed |
| 96 | Siberian elm | 12 | Good condition/ to be removed |
| 97 | Eastern cottonwood | 19 | Divergent/ to be removed |
| 98 | Eastern cottonwood | 14 | Divergent/ to be preserved and protected |
| 99 | Eastern cottonwood | 15 & 15 | Double stem at grade, divergent/ to be preserved and protected |

Table 1. Con't

| Tree No. | Tree Species | DBH (cm) ¹ | Tree condition, age class & health condition notes/ Status (to be removed or preserved and protected) |
|----------|------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------|
| 100 | Manitoba maple | 13 & 13 | Double stem at grade/ to be preserved and protected |
| 101 | Siberian elm | 17 | Good condition, upright/ to be preserved and protected |
| 102 | Manitoba maple | 14 avg. | 4 stemmed at grade/ to be preserved and protected |
| 103 | Eastern cottonwood | 15 | Slight divergence/ to be preserved and protected |
| 104 | Eastern cottonwood | 21 | Slight divergence/ to be preserved and protected |
| 105 | Eastern cottonwood | 18 | Good condition/ to be preserved and protected |
| 106 | Eastern cottonwood | 12 | Slight divergence/ to be preserved and protected |
| 107 | Eastern cottonwood | 15 | Slight divergence/ to be preserved and protected |
| 108 | Eastern cottonwood | 11 | Slight divergence/ to be preserved and protected |
| 109 | Eastern cottonwood | 11 | Slight divergence/ to be removed |
| 110 | Eastern cottonwood | 13 | Good condition/ to be removed |
| 111 | Eastern cottonwood | 10 & 10 | Co-dominant stems at grade/ to be preserved and protected |
| 112 | Largetooth aspen (<i>Populus grandidentata</i>) | 13 & 10 | Double stem at grade/ to be preserved and protected |
| 113 | Eastern cottonwood | 12 | Good condition/ to be preserved and protected |
| 114 | Largetooth aspen | 17 | Good condition/ to be preserved and protected |
| 115 | Eastern cottonwood | 13 | Divergent/ to be removed |
| 116 | Eastern cottonwood | 15 | Good condition/ to be removed |
| 117 | Largetooth aspen | 18 | Sap sucker damage/ to be removed |
| 118 | Eastern cottonwood | 15 & 17 | Double stemmed at grade, good condition, upright/ to be removed |
| 119 | Eastern cottonwood | 18 & 13 | Double stemmed at grade/ to be removed |
| 120 | Eastern cottonwood | 19 | Good condition, upright/ to be removed |

Table 1. Con't

| Tree No. | Tree Species | DBH (cm) ¹ | Tree condition, age class & health condition notes/ Status (to be removed or preserved and protected) |
|----------|--------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------|
| 121 | Eastern cottonwood | 14 | Slight divergence/ to be removed |
| 122 | Eastern cottonwood | 16 | Slight divergence/ to be removed |
| 123 | Eastern cottonwood | 19 | Good condition, upright/ to be removed |
| 124 | Eastern cottonwood | 12 avg. | 5 stemmed at grade/ to be removed |
| 125 | Eastern cottonwood | 21 | Good condition/ to be removed |
| 126 | Largetooth aspen | 10 | Good condition/ to be removed |
| 127 | Eastern cottonwood | 14 | Slight divergence/ to be removed |
| 128 | Siberian elm | 13 & 18 | Double stem at grade, stems growing on either side of fence/ to be removed |
| 129 | Red oak | 32 | Good condition/ to be removed |
| 130 | Siberian elm | 35 | Co-dominant leaders at 2.5m from grade/ to be removed |

¹Diameter at breast height, or 1.4m from grade.

Pictures 1 through 8 on pages 9, 10, 11 and 12 show selected individual trees and tree groupings on the subject property.

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) 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) 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 trees retained on the subject and adjacent 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 critical root zone (CRZ¹) of the tree(s);
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 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.

I trust this report satisfies your requirements. Please do not hesitate to contact the undersigned with any questions or comments you may have.

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

Yours,



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



Picture 1. Dead ash trees at 2 Robinson Avenue



Picture 2. Poplars resulting from root sprouts at 2 Robinson Avenue



Picture 3. Seeded Siberian elms and Manitoba maples at 2 Robinson Avenue



Picture 4. Poplars along western property line of 2 Robinson Avenue



Picture 5. Planted grouping of Colorado spruce at 2 Robinson Avenue



Picture 6. Line of planted honey-locust at 2 Robinson Avenue



Picture 7. Line of planted Colorado spruce (centre) and Norway maples at 2 Robinson Avenue



Picture 8. Planted grouping of Colorado spruce at 2 Robinson 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 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 (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 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.