



URBAN FORESTRY & FOREST MANAGEMENT CONSULTING

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April 30, 2024

Gino Aiello
Landscape Architect
110 Didsbury Road, #9
Ottawa, ON K2T 0C2

RE: TREE CONSERVATION REPORT FOR 1540 - 1560 STAR TOP ROAD, OTTAWA

This Tree Conservation Report (TCR) was prepared by IFS Associates Inc. (IFS) on behalf of Boone Plumbing in support of a site plan control application for the construction of a warehouse and surrounding parking at 1540-1560 Star Top Road.

The need for this report is related to trees protected under the City of Ottawa's Tree Protection By-law (By-law No. 2020-340). The By-law reflects Section 4.8.2. of the City of Ottawa's Official Plan which calls for the retention and enhancement of the city's urban forest to reach the target 40% canopy cover.

Under the 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.

Being at the periphery of the property most existing trees can be preserved. Two notable exceptions are a mature Colorado spruce (*Picea pungens*) fully on the subject property and a mature bur oak (*Quercus macrocarpa*) on adjacent City of Ottawa lands. However, many of the trees along the edges of the property are poplar species – a large growing, weak wooded family of trees prone to failure under wind and ice loads. For this reason, their retention should be carefully considered, especially near the proposed new warehouse.

The approval of this tree conservation report by the City of Ottawa and the issuing of a permit authorizes the removal of approved trees. **Importantly, although this report may be used to support the application for a tree removal permit, it does not by itself constitute permission to remove trees or begin site clearing activities. No such work should occur before a tree removal permit is issued authorizing the injury or destruction of a tree in accordance with the By-law. Further, the removal of any trees shared with or fully on neighbouring properties require prior written permission of the adjacent landowner.**

Field work for this report was completed in July 2023.



TREE SPECIES, CONDITION, SIZE AND STATUS

Table 1 below details the species, ownership, size (diameter), condition and status of the trees on the subject property and adjacent lands. Tree locations are referenced by the numbers plotted on the accompanying tree conservation plans.

Table 1. Species, ownership, diameter, condition and status of trees at 1540-1560 Star Top Road

Tree No.	Tree species	Owner-ship ¹	DBH ² (cm)	Tree Condition; Age Class; Condition Notes; Species Origin & Preservation Status (to be removed or preserved and protected)
1	Bur oak (<i>Quercus macrocarpa</i>)	City	27	Fair; maturing; in decline – 20 percent crown dieback; invasive Russian-olive (<i>Elaeagnus angustifolia</i>) growing at base; native species; to be removed (conflicts with new entranceway)
2	Colorado spruce (<i>Picea pungens</i>)	Private	54	Good; mature; good form; fair crown density, growth increment and needle colour; introduced species; to be preserved and protected
3	Eastern cottonwood (<i>Populus deltoides</i>)	Private	17	Fair; maturing; single stemmed with co-dominant leaders at 2.25m; originated from seed; growing against building foundation; native species; to be removed (damaging building)
4	Little-leaf linden (<i>Tilia cordata</i>)	Private	15 avg.	Poor; mature; three trees: one dead, two in decline; introduced species; to be removed (conflicts with proposed new landscape)
5	Little-leaf linden (<i>Tilia cordata</i>)	Private	10 avg.	Poor; mature; two trees: both multi-stemmed from grade (likely coppice growth from stumps of previously removed parent trees); introduced species; to be removed (conflicts with proposed new landscape)
6	Little-leaf linden (<i>Tilia cordata</i>)	Private	11 & 14 avg,	Fair; maturing; two trees: one tree single stemmed, the other double stemmed from grade; introduced species; to be removed (conflicts with proposed new landscape)
7	Eastern cottonwood (<i>Populus deltoides</i>)	Private	18	Fair; maturing; central dominant stem; native species; to be removed (conflicts with proposed new landscape)
8	Eastern cottonwood (<i>Populus deltoides</i>)	Neighbouring property	+/-15	Dead; two trees in total; native species; to be preserved (though recommended for removal by adjacent landowner)

Table 1. Species, ownership, diameter, condition and status of trees at 1540-1560 Star Top Road

Tree No.	Tree species	Ownership ¹	DBH ² (cm)	Tree Condition; Age Class; Condition Notes; Species Origin & Preservation Status (to be removed or preserved and protected)
9	Largetooth aspen (<i>Populus grandidentata</i>)	Private	12 avg.	Poor; maturing; three trees in total: all in decline; native species; to be removed (due to poor condition)
10	Trembling aspen (<i>Populus tremuloides</i>)	Private and shared with neighbouring property	14 avg.	Poor; maturing; three trees in total: all in decline; native species; to be removed (due to poor condition)
11	Eastern cottonwood (<i>Populus deltoides</i>)	Neighbouring property	+/-25	Dead; three trees in total; native species; to be preserved (though recommended for removal by adjacent landowner)
12	Eastern cottonwood (<i>Populus deltoides</i>)	Six private, one neighbouring	20 avg.	Dead to fair; seven individual trees in total – six on the subject property, one on neighbouring; four dead, three in fair condition; native species; neighbouring tree to be preserved and protected, six on subject property to be removed (dead and/or conflict with building, grading)
13	Eastern cottonwood (<i>Populus deltoides</i>); Trembling aspen (<i>Populus tremuloides</i>); White elm (<i>Ulmus americana</i>)	Neighbouring property	+20	Dead to fair; immature to mature; all trees originating from seed; understory composed primarily of buckthorn (<i>Rhamnus</i> spp.); native species; to be preserved and protected (form portion of a riparian area along a municipal drain)
14	Eastern cottonwood (<i>Populus deltoides</i>)	Private	21 avg.	Good; maturing; six-stemmed from grade; native species; to be removed (conflicts with parking)

¹As determined by the survey prepared by McIntosh Perry Surveying Inc.; ² Diameter at breast height, or 1.3m from grade (unless otherwise indicated)

Pictures 1 to 7 on pages 6 through 10 of this report shows 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) Endangered Species Act (2007): No butternuts (*Juglans cinerea*) or black ash (*Fraxinus nigra*) were identified on the subject or adjacent properties. These tree species are listed as threatened under the Province of Ontario's Endangered Species Act (2007) and so are 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 PROTECTION MEASURES

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. As per the City of Ottawa's tree protection barrier specification (included on page 5), erect a fence as close as possible to the CRZ of the trees. **With grading required to property lines protective fencing will be within CRZs of most trees.**
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.
8. **Ensure roots of tree #2 are protected following removal of nearby curb. If left exposed for any length of time they should be covered with at least three layers of moistened burlap with a top covering of white or clear plastic sheeting to hold the moisture inside.**

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

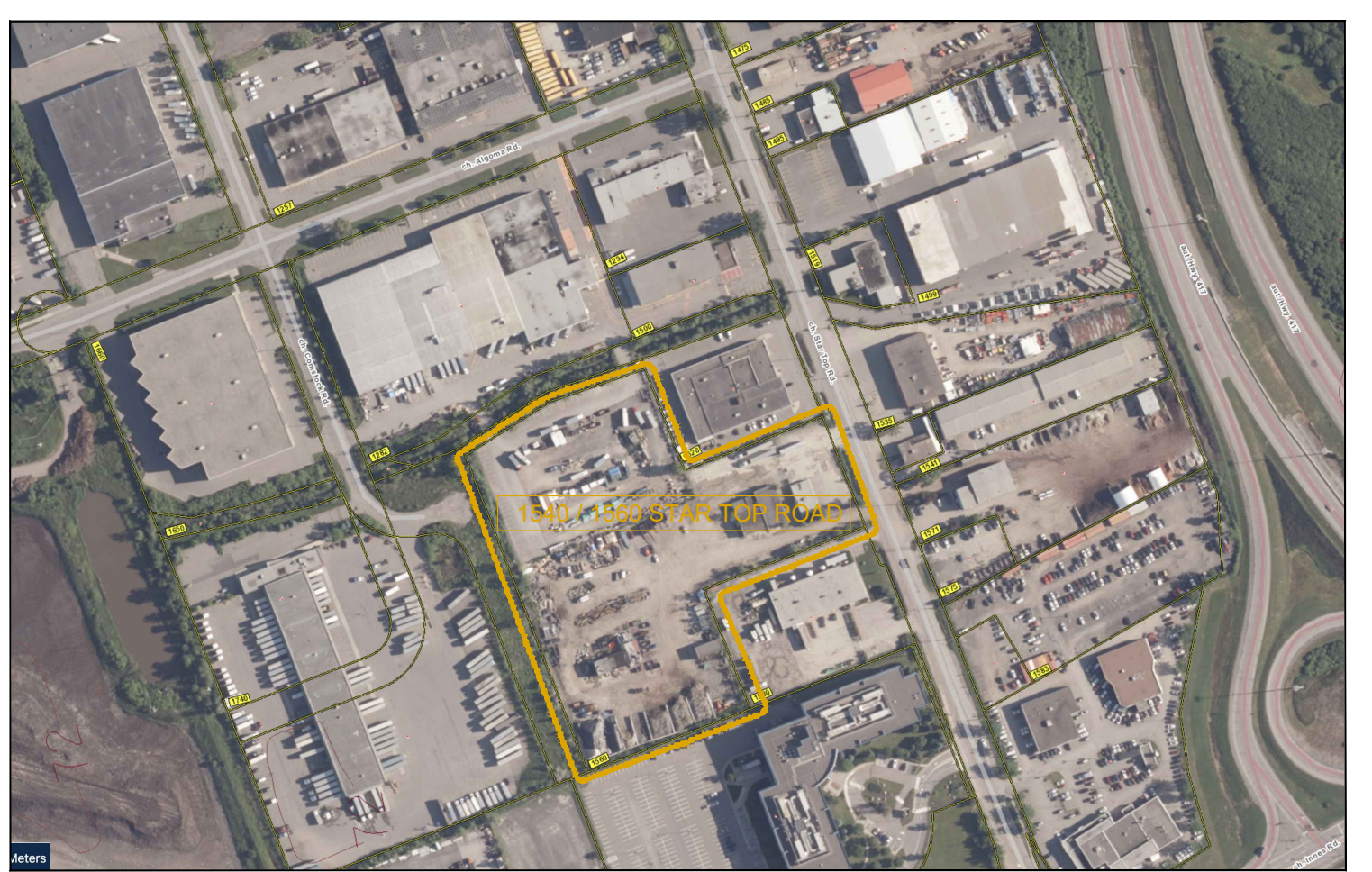
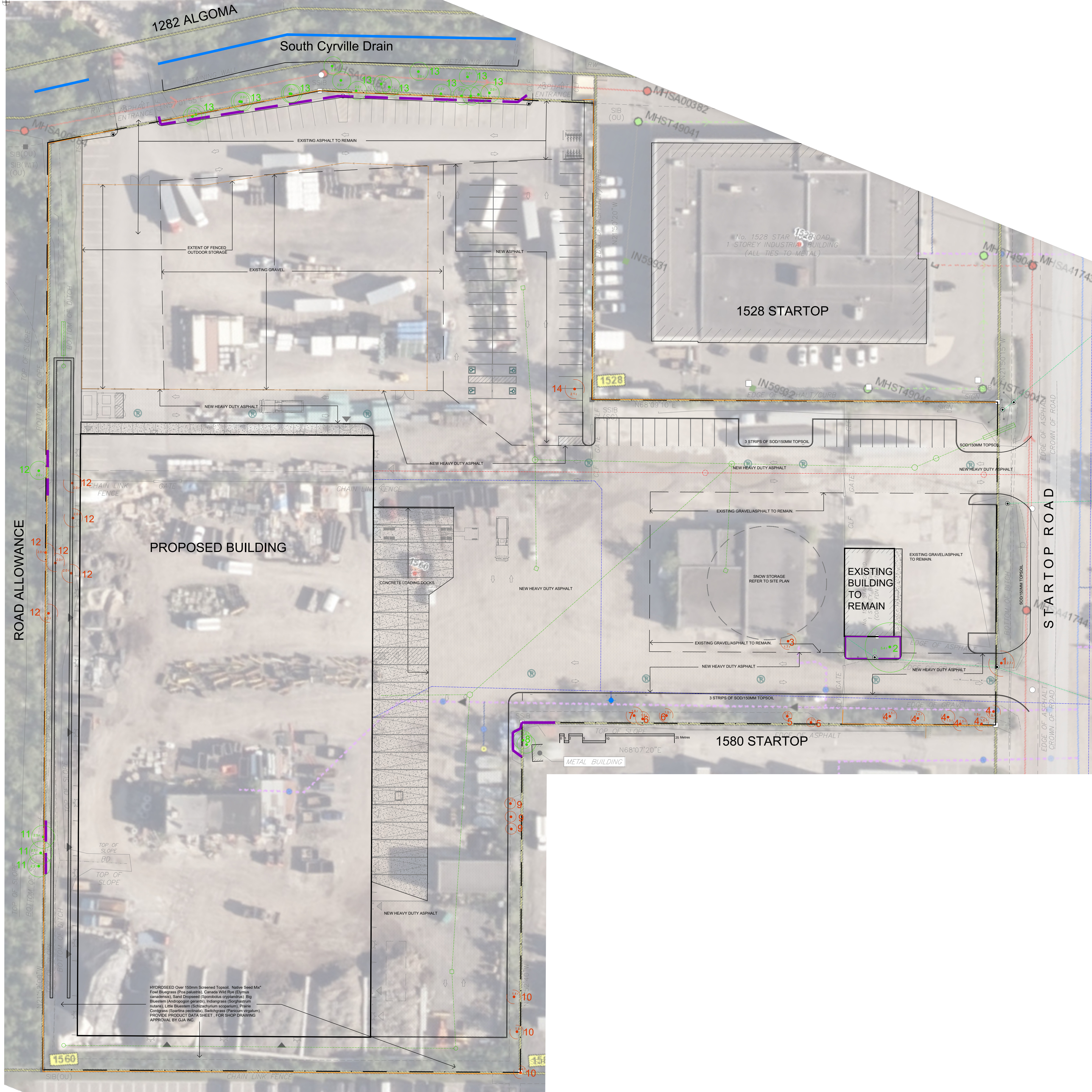
This report is subject to the attached Limitations of Tree Assessments and Liability to which the reader's attention is directed.

Yours,



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





Drawing Remains the Property of/Copyright Reserved by Gino J. Aiello Landscape Architect. Do Not Use or Reproduce Without Approval of Gino J. Aiello.

NOT To Be Used For Construction Unless indicated by Revision: "FOR LANDSCAPE CONSTRUCTION"

Contractor is Responsible for Verification of Site Locations of all Utilities. Report any Discrepancies Between Site and Drawing Immediately to Gino J. Aiello. Do NOT Proceed Until Clarified.

TURF AREAS TO BE SOD C/W 150MM DEPTH TOPSOIL ON APPROVED SUBGRADE | SOD TO BE #1 GRADE TURFGRASS NURSERY SOD PER NSGA - Fine Fescue/Kentucky Bluegrass Sod | PLANTING MIX TO BE APPROVED BY LANDSCAPE ARCHITECT | PLANT MATERIAL TO MEET CNLA STANDARDS/BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO PLANTING ALL MATERIALS & WORK TO BE MAINTAINED UNTIL FINAL ACCEPTANCE. (MOWING TURF, WEEDING BEDS, WATERING TURF & PLANTS) & INCLUDE 1 YEAR WARRANTY FROM DATE OF FINAL ACCEPTANCE | PROVIDE WATERING OF ALL PLANT MATERIAL AS REQUIRED FOR PROPER ESTABLISHMENT, UNTIL END OF WARRANTY PERIOD | REFER TO CIVIL ENGINEER'S DRAWING FOR ELEVATIONS / GRADING |

The Landscape Plan is to be read in conjunction with the grading, servicing, site and survey plan | Bare root material to be planted in season only | All plant material locations to be staked on site by the landscape contractor and checked by the landscape architect prior to planting | All trees to be preserved on or directly adjacent to the site will be protected | Plant material are to be installed a minimum of: 3.0m away from any part of any hydro transformer, 3.0m from between a fire hydrant and the curb, a 2.5m radius beside or behind a fire hydrant, 2.0m from any servicing/utility line or structure |

PLANT VIEW

CRZ = 2m X 1.2m
CRZ IS TO BE MEASURED FROM THE OUTSIDE EDGE OF THE TREE BASE

TPZ = 2m X 1.2m
TPZ IS TO BE SPACED AT 2m O.C. MAX AS PER REQUIREMENT # 3

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

POSTS TO BE SPACED AT 2m O.C. MAX AS PER REQUIREMENT # 3

SOIL AND ROOT DISTURBANCE NOT PERMITTED

TREE PROTECTION REQUIREMENTS:

- 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.
- UNLESS PLANS ARE APPROVED BY CITY FORESTRY STAFF, FOR WORK WITHIN THE CRZ:
 - DO NOT PLACE ANY MATERIAL OR EQUIPMENT - INCLUDING OUTDOORS.
 - 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 OF 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.
- 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 4" X 4" WOOD FRAMES 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 MINIMIZE DAMAGE TO EXISTING ROOTS. (SEE DETAILS)
- THE LOCATION OF THE TREE PROTECTION FENCING MUST BE DETERMINED BY AN ARBORIST AND DETAILS ON ANY ASSOCIATED PLANS FOR THE SITE (E.G. TREE CONSERVATION REPORT, TREE INFORMATION REPORT, ETC.)
- 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 BY CITY FORESTRY STAFF. THESE MAY INCLUDE ROOTS WHERE ENCOUNTERED.

THE CITY'S TREE PROTECTION BY-LAW, 2020-2021 PROTECTS BOTH CITY-OWNED TREES, CITY-WIDE, AND PRIVATELY OWNED TREES WITHIN THE URBAN AREA. PLEASE REFER TO WWW.OTTAWA.CA/TREELAW 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

TCR - REFER TO REPORT BY IFS

● Existing Tree to Remain
● Existing Tree to Remove
● Protection for Existing Trees

CONSULTANT TEAM:

DESIGN BUILDER:	IBS CONSTRUCTION INC.	(613) 226-8830
ARCHITECT:	DEMLING ARCHITECTURE & INTERIOR DESIGN	(613) 697-6113
TRANSPORTATION, PLANNING AND CIVIL:	MINTOSH PERRY CONSULTING ENGINEERS	(613) 896-2184
LANDSCAPE ARCHITECT:	GJA INC.	(613) 296-5130
GEOTECHNICAL AND ENVIRONMENTAL:	PATERSON GROUP INC.	(613) 226-7381
SURVEYOR:	MINTOSH PERRY SURVEYING INC.	(613) 267-6224
ENVIRONMENTAL PLANNING:	MUNCASTER ENVIRONMENTAL PLANNING INC.	(613) 748-3753

#	Revision	Date
4	SPC SUBMISSION 4	2024 04 15
1	SPC SUBMISSION 3	2023 12 11

PROPERTY OWNER

4457315 CANADA INC.
3901 RUE JARRY # 250 MONTREAL QUEBEC H1Z 2G1



NEW WAREHOUSE BOONE

1540 / 1560 STAR TOP ROAD OTTAWA

TREE CONSERVATION REPORT

TCR1

Scale: 1:400

PC2023 0219



Picture 1. Tree #1, bur oak on City property adjacent to 1540-1560 Star Top Road (note Russian-olive growing at base).



Picture 2. Tree #2, private Colorado spruce at 1540-1560 Star Top Road



Picture 3. Tree groupings #4 and 5 (right to left), private little-leaf lindens at 1540-1560 Star Top Road



Picture 4. Tree groupings #8 and 9 (left to right), neighbouring and private poplars at 1540-1560 Star Top Road



Picture 5. Tree grouping #12, private and neighbouring cottonwoods at 1540-1560 Star Top Road



Picture 6. Tree grouping #13, trees within a riparian area along a municipal drain adjacent to 1540-1560 Star Top Road





Picture 7. Tree #14, private cottonwood at 1540-1560 Star Top Road

LIMITATIONS OF TREE ASSESSMENTS & LIABILITY

GENERAL

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

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

This report and any values expressed herein represent the opinion of the author; his fee is in no way contingent upon the reporting of a specified value, a stipulated result, nor upon any finding to be reported. Details obtained from photographs, sketches, *etc.*, are intended as visual aids and are not to scale. They should not be construed as engineering reports or surveys. Although every effort has been made to ensure that this assessment is reasonably accurate, the tree(s) should be reassessed at least annually. The assessment presented in this report is valid at the time of the inspection only. The loss or alteration of any part of this report invalidates the entire report.

LIMITATIONS

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

While reasonable efforts have been made to ensure that the tree(s) proposed for retention are healthy, no warranty or guarantee, expressed or implied, are offered that these trees, or any parts of them, will remain standing. This includes other trees on or off the property not examined as part of this assignment. It is both professionally and practically impossible to predict with absolute certainty the behaviour of any single tree or groups of trees or their component parts in all circumstances, especially when within construction zones. Inevitably, a standing tree will always pose some risk. Most trees have the potential for failure in the event of root loss due to excavation and other construction-related impacts. This risk can only be eliminated through full tree removal.

Notwithstanding the recommendations and conclusions made in this report, it must be realized that trees are living organisms, and their health and vigour constantly change over time. They are not immune to changes in site conditions, or seasonal variations in the weather. It is a condition of this report that *IFS Associates Inc.* be notified of any changes in tree condition and be provided an opportunity to review or revise the recommendations within this report. Recognition of changes to a tree's condition requires expertise and extensive experience. It is recommended that *IFS Associates Inc.* be employed to re-inspect the tree(s) with sufficient frequency to detect if conditions have changed significantly.

ASSUMPTIONS

Statements made to *IFS Associates Inc.* in 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. If examination or supervision is requested, that request shall be made in writing and the details, including fees, agreed to in advance.