DST CONSULTING ENGINEERS INC.
2150 Thurston Drive, Suite 203
Ottawa, ON K1G 5T9
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Upper Hunt Club Centre Inc. February 10, 2021

2325 St. Laurent Blvd. Unit 107,

Ottawa, Ontario

K1G 5G6

Attention: Mr. Nabil Abdulla

Subject: Tree Conservation Report (TCR)

Proposed commercial development at 2585 – 2600 Bank Street

DST Job No.: TSSO-034880

DST Consulting Engineers Inc., a division of Englobe (DST), was retained by Power Marketing Real Estate Brokerage to provide a Tree Conservation Report (TCR) for the proposed commercial development at 2585 – 2600 Bank Street, Ottawa, Ontario.

IFS Associates (IFS) was retained by DST to assist with the tree inventory and TCR with a certified arborist. The tree inventory consisted of trees greater than 10 cm Diameter at Breast Height (DBH). Field work for this report was completed in July 2019 in regards to Butternut Tree Health Assessments and December 2020 for the remainder of the vegetation. The tree inventory was conducted by systematically travelling through the property and taking note of any trees which had a DBH of 10 cm or greater.

In general, tree health throughout the site is good. Notable instances of poor health are generally related to age, and some other outside factors such a heavy vine growth (Vitus spp.) and native white elms (*Ulmus americana*) killed by Dutch elm disease (*Ophiostoma ulmi/novo-ulmi*). No retainable Butternut trees (Category 2 or greater) were observed within the property or surrounding area that may be affected by constructions activities. Further details on the Butternut Tree assessment is provided in the Environmental Impact Study (EIS) that was previously completed for the project (*Scoped Environmental Impact Statement, 2584-2600 Bank Street, Ottawa, Ontario.* DST Consulting Engineers, September 17th, 2020).

It should be noted that it is illegal to harm or harass migratory birds, their nests, and/or eggs under the Migratory Bird Convention Act (1994). Tree clearing activities should not occur within the breeding bird period from April 15th to August 31st. Should vegetation removal be necessary during this period, a qualified biologist should be consulted to conduct nesting surveys and develop a mitigation plan.

Prior to any site clearing activities, it is recommended that all property boundaries be clearly marked by a licensed land surveyor. Preservation and protection measures intended to mitigate damage during construction are required for trees shared with or fully on adjacent property.

Minimum tree protection measures required by the City of Ottawa to ensure tree survival during and following construction are outlined in the IFS report.

A copy of IFS's report and summary of the tree inventory is attached in Appendix A.

We trust the foregoing will satisfy your present requirements. If you have any questions regarding this matter, please do not hesitate to contact the undersigned.

Yours truly,

DST Consulting Engineers Inc.

David Vardy, *Ph.D., P.Bio.*

Senior Biologist and Project Manager

Appendix A

Tree Conservation Report

P.O. BOX 13593, KANATA, ON K2K 1X6
TELEPHONE: (613) 838-5717
WEBSITE: WWW.IFSASSOCIATES.CA
URBAN FORESTRY & FOREST MANAGEMENT CONSULTING

January 27, 2021

David Vardy, *Ph.D., P.Bio.*
Senior Biologist / Project Manager
DST CONSULTING ENGINEERS INC.
203 - 2150 Thurston Drive
Ottawa, ON
K1G 5T9

RE: TREE CONSERVATION REPORT FOR 2584, 2600 BANK STREET, OTTAWA

This report details a pre-construction Tree Conservation Report (TCR) for the above-noted properties in Ottawa. The need for this TCR is related to the proposed development of the subject properties. Such reports are required for all plans of subdivision and site plan control applications for properties on which trees of 10 centimetres in diameter or greater are present. The approval of this TCR by the City of Ottawa and the issuing of a permit by them authorize the removal of approved trees. **Importantly, although this report may be used to support the application for a city tree removal permit, it does not by itself constitute permission to remove trees or begin site clearing activities. No such work should occur before a tree removal permit is issued by the City of Ottawa. 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 groups of similar species and individual trees of high value on the subject properties. An existing one-storey commercial building is present at 2600 Bank Street. This property holds no trees over 10 cm in diameter. Further, no trees are present on adjacent City of Ottawa property. Field work for this report was completed in July 2019 in regards to butternuts and December 2020 for the remainder of the vegetation.

The construction proposed for the site includes four three-storey mixed use 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 all trees currently on 2584 Bank Street. The exception is those trees shared with adjacent private properties to the east and west. 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

A review of historic aerial photography found the subject properties to have been a small-scale working farm starting prior to the 1950s through to approximately the early 1970s. Cultivated fields with planted lines (hedgerows) between them dominated the site in the early years.

A number of barns were present as well. It is obvious the original owners had an inherent knowledge and interest in the use of trees as wind breaks/erosion control as a large number of exotic species were found on the site. Trees were planted both in hedgerows and individually, presumably as amenity features, including a single Ohio buckeye (*Aesculus glabra*). This interest in tree planting explains the large diversity of species found on the site. It also explains the preponderance of hybrid butternuts.

Since the cessation of cultivation in the 1970s, the fields became colonized with seed spread from nearby trees – including native, naturalized and introduced invasive species. As no remnant trees of invasive species were found on the site it is presumed these species become established by seed spread from trees on adjacent properties. In particular, the introduced and invasive Siberian elm *(Ulmus pumila)* and Norway maple *(Acer platanoides)* and naturalized Manitoba maple *(Acer negundo)* have become successfully established throughout the both properties. Lesser amounts of the introduced and invasive Scots pine *(Pinus sylvestris)* have also become established from remnant trees on site. In terms of native species, sugar maple *(Acer saccharum)*, black walnut *(Juglans nigra)*, bitternut hickory *(Carya cordiformis)* and white pine *(Pinus strobus)* have become established from planted parent trees. Small numbers of silver maple *(Acer saccharinum)* and eastern white cedar *(Thuja occidentalis)* are also present. In areas still lacking a closed canopy early successional native poplar *(Populus spp.)* and staghorn sumac *(Rhys typhina)* have dominated. In the understory below a closed canopy introduced and highly invasive buckthorn species *(Rhamnus* spp.*)* have become dominant with regeneration of shade-tolerant species (both native and non-native), including scattered pagoda dogwood *(Cornus alternifolia)*.

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 trees and those within hedgerows are declining in health due to age. Other trees are suffering from outside factors such a heavy vine growth *(Vitus* spp.*),* especially on edge trees, and native white elms *(Ulmus americana)* killed by Dutch elm disease *(Ophiostoma ulmi/novo-ulmi)*.

Table 1 below details the species, condition, size (diameter) and status of selected individual and groups of trees on the subject properties. Each of these is referenced by the numbers plotted on the accompanying tree conservation plan.

Table 1. Species, condition, size (diameter) and age of trees at 2584 Bank Street

Tree No.	Tree Species	Condition (VP→E)	DBH[1] (cm)	Age Class & Tree Condition Notes
1	Silver maple	Fair	60 avg.	Mature; multi-stemmed from grade; broad, open grown crown; native species
2	Eastern white cedar	Fair	30 avg.	Mature; multi-stemmed clump
3	Black walnut	Good	+/-100	Very mature; broad crown; remnant from previous tree line

Table 1. Con't

4	Grouping of Scots pine and white pine	Poor to fair	40 avg.	Mature to overmature; crowns of Scots pine held high due to shade intolerance – senescent; white pines with deeper crowns, better foliage colour
5	Grouping of black walnut and butternut	Good to fair	40 avg.	Mature to overmature; no discernable planting pattern - likely originated from seed spread by squirrels; butternut is a hybrid
6	White pine	Poor	40 avg.	Mature; two trees; both with major sweeps in main stem
7	Mixed coniferous hedgerow	Fair		Mature to overmature line of one Norway spruce, two white spruce *(Picea glauca)*, one Scots pine and one red pine
8	Mixedwood hedgerow	Very poor to fair	40-90	Mature to overmature line of two white pine, two black walnut, four Scots pine, three red pine and one sugar maple
9	Sugar maple	Poor to good	30-60	Mature to overmature; planted line of 10 trees (3 of which are on adjacent private property); larger trees in decline
10	Manitoba, Norway and sugar maple	Fair	20 avg.	Maturig to mature; primarily naturalized and introduced species (Manitoba and Norway maple*)* with some native sugar maple; all originated from seed; steeply sloped site
11	Norway spruce and Scots pine	Fair	40 avg	Mature; twenty four spruce and two pine planted on edge of old pit; scattered cottonwood *(Populus deltoides)* – up to +/- 80cm diameter
12	Grouping of Norway spruce	Good	40 avg.	Mature; six trees in total; randomly planted group of trees

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

Pictures 1 through 8 on pages 5, 6, 7 and 8 show selected tree lines and groupings on the subject properties.

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 these properties:

1) Endangered Species Act (2007): Numerous butternuts *(Juglans cinerea)* were identified on the subject properties. This species of tree is listed as threatened under the Province of Ontario's Endangered Species Act and so is protected from harm. However, genetic testing of those trees found not to be Category 1 (*i.e.* 'non-retainable') determined them to be

hybrids and so not relevant in relation to the ESA. The one Category 2 (*i.e.* 'retainable') tree is beyond 50m from the proposed construction and so will not be harmed. Please see the accompanying tree conservation plan.

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

Prior to any site clearing activities it is recommended all property boundaries be clearly marked by a licensed land surveyor. This should include any boundary trees for preservation (unless permission for removal has been granted in writing by adjacent property owners).

Preservation and protection measures intended to mitigate damage during construction will be applied for trees shared with or fully on adjacent property. 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[1]) 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.

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,

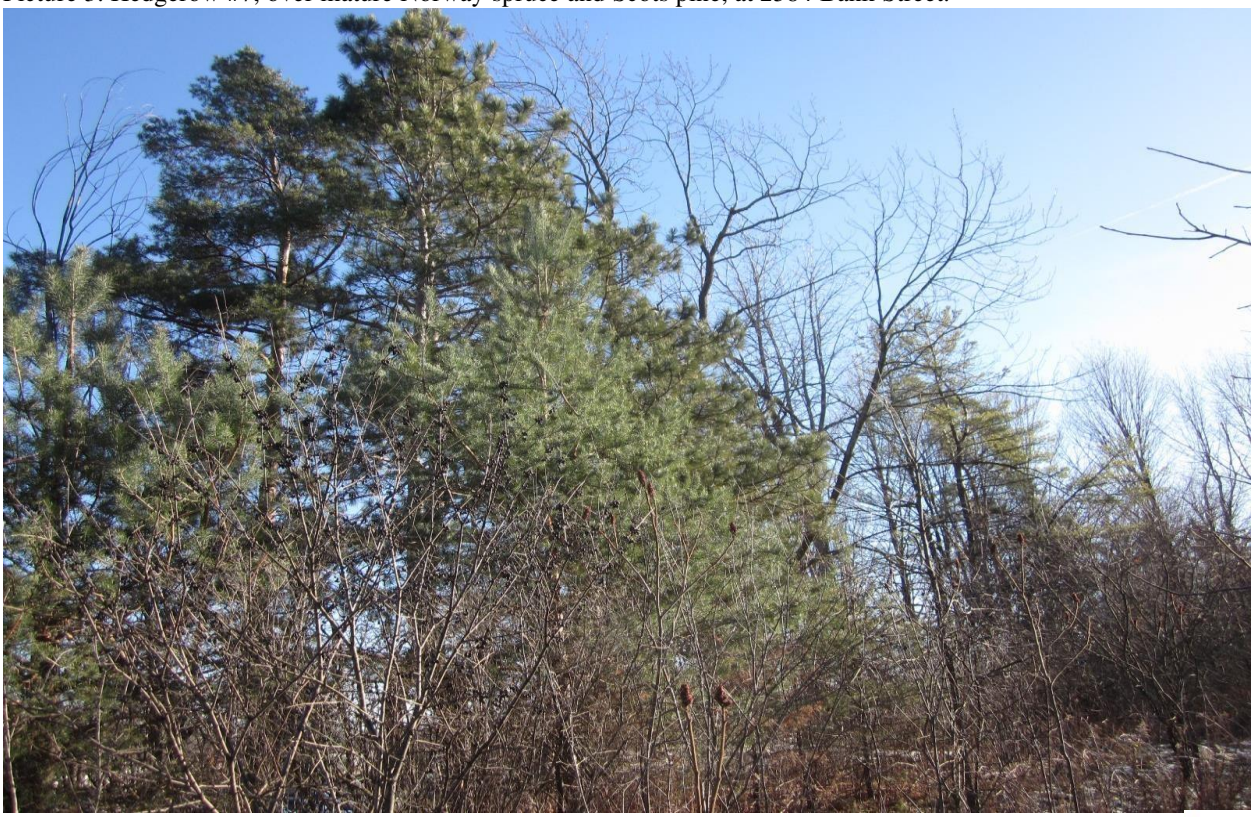
Andrew K. Boyd, B.Sc.F, R.P.F. (#1828)
Certified Arborist #ON-0496A and TRAQualified
Consulting Urban Forester

IFS ASSOCIATES

Picture 1. Tree #1, silver maple (far right) and seeded Siberian elm, Manitoba maple and black walnut at 2584 Bank.

Picture 2. Grouping #5, mature black walnut and butternut (foreground), at 2584 Bank Street.

Picture 3. Hedgerow #7, over mature Norway spruce and Scots pine, at 2584 Bank Street.



Picture 4. Hedgerow #8, mature red, white and Scots pine and black walnut, at 2584 Bank Street.

Picture 5. Tree line #9, mature and overmature sugar maples, at 2584 Bank Street

Picture 6. Grouping #10, Manitoba and Norway maple growth on sloped potion of 2626 Bank Street

Picture 7. Tree line #11, planted mature Norway spruce and Scots pines (background) and seeded Manitoba and Norway maples (foreground) on lower plateau at 2626 Bank Street

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.*

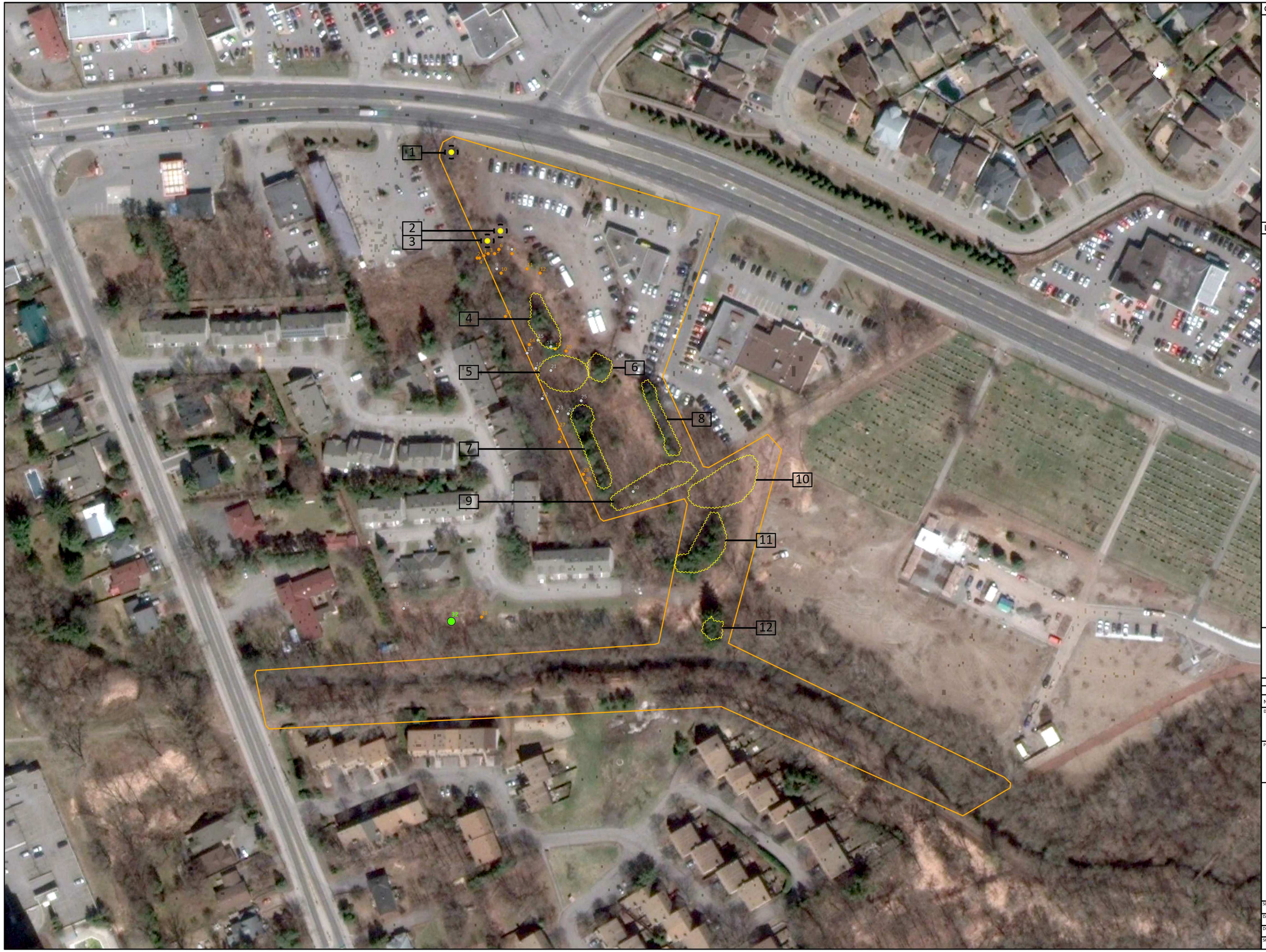
LIABILITY

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 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.



GENERAL NOTES

GeoEye, Maxar, Microsoft

LEGEND

- Subject Lands
- Tree
- Trees
- Butternut
  - Category 1
  - Category 2
  - Hybrid (Genetically Tested)

0 5 10 20 30 40 Meters

N

NO.	REVISION	DATE (Y/M/D)

DRAWING: Tree Conservation Report

PROJECT: 2584 to 2600 and 2626 BANK STREET CITY OF OTTAWA

IFS ASSOCIATES
613-838-5717

SCALE:	1:750
DATE:	2021-01-27
DRAWN BY:	SS
SHEET NO.	1

DRAWING NO.: BANK