



April 11, 2023

Jack Billen, CEO/Co-Founder  
Lion Trade Ltd.  
4-91 Prince Albert Street  
Ottawa, ON  
K1K 2A2

**RE: TREE CONSERVATION REPORT FOR 211 ARMSTRONG STREET, OTTAWA**

This Tree Conservation Report (TCR) was prepared by IFS Associates Inc. (IFS) on behalf of Lion Trade Ltd. in support of their proposed redevelopment of 211 Armstrong Street 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-and-half-storey dwelling with a one-storey rear addition. The proposed redevelopment will include the demolition of the existing dwelling and construction of a three-storey apartment 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. Further, the removal of any trees shared with or fully on neighbouring properties will require written permission of the adjacent landowner.**

The inventory in this report details the assessment of all individual trees on the subject and adjacent private property. No trees were found on nearby City of Ottawa property. Field work for this report was completed in February 2022. A site meeting with City staff occurred on March 7, 2023.



## 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 6 of this report.

Table 1. Species, condition, size, ownership and status of trees at 211 Armstrong Street

Tree No.	Tree species /Tolerance to Construction <sup>1</sup>	DBH <sup>2</sup> (cm)	Owner-ship <sup>3</sup>	Condition, age class, tree condition notes & <b>preservation status</b> (to be removed or preserved and protected)
1	Eastern white cedar ( <i>Thuja occidentalis</i> ) Good	36.3	Neighbour	Fair; mature; mildly divergent form and asymmetric crown towards southeast; fair crown density, growth increment and needle colour; native species; <b>to be preserved and protected</b>
2	Manitoba maple ( <i>Acer negundo</i> ) Good	34.7	Private	Fair; mature; moderately divergent towards southwest; central stem with two competing laterals towards southwest (both with weak unions); three competing leaders at 5-6m from grade; naturalized species; <b>to be removed</b> (conflicts with proposed walkway)
3	Manitoba maple ( <i>Acer negundo</i> ) Good	27.6	Private	Fair; mature; moderately divergent towards southwest; competing, divergent leaders at 4m from grade; naturalized species; <b>to be removed</b> (conflicts with proposed walkway)
4	Manitoba maple ( <i>Acer negundo</i> ) Good	30.8	Private	Fair; mature; heavily divergent towards west; three competing, divergent leaders at 4-5m from grade; naturalized species; <b>to be removed</b> (conflicts with proposed walkway)
5	Manitoba maple ( <i>Acer negundo</i> ) Good	38.2	Private	Poor; mature; very heavily divergent towards south; central stem with three competing leaders at 5m (near crown apex); <b>to be removed</b> (conflicts with excavation, grading and side of building)
6 & 7	Manitoba maple ( <i>Acer negundo</i> ) Good	58.7 & 63.2	Private	Fair; very mature; single tree with co-dominant stems from grade - moderately divergent north/south; north stem with major barkless stub at 3m on northeast with decay and three competing leaders at 7m; south stem with competing laterals starting at 6m and three competing leaders at 9m; broad crown; naturalized species; <b>to be preserved and protected</b>

Table 1. Con't

8	Manitoba maple ( <i>Acer negundo</i> ) Good	49.3	Private	Fair; mature; mildly divergent towards northwest; central stem broken at 6m (stub with decay); leader is epicormic in nature – upright; naturalized species; <b>to be preserved and protected</b>
9	Manitoba maple ( <i>Acer negundo</i> ) Good	17.8	Private	Fair; maturing; central stem with competing lateral at 3.5m on north; competing leaders at 4.5m; divergent form towards north; naturalized species; <b>to be preserved and protected</b>
10	Cherry ( <i>Prunus spp.</i> ) Poor-Moderate	14.4	Private	Good; maturing; mildly asymmetric towards north; minor black knot ( <i>Apiosporina morbosa</i> ); basal spout; cultivar; <b>to be preserved and protected</b>
11	Cherry ( <i>Prunus spp.</i> ) Poor-Moderate	22 avg.	Private	Very poor; mature; co-dominant stems with multiple basal sprouts; south stem broken at 3m; heavy black knot ( <i>Apiosporina morbosa</i> ) throughout crown; cultivar; <b>to be removed</b> (very poor condition and conflicts with proposed walkway)
12	Japanese tree lilac ( <i>Syringa reticulata</i> ) unknown	+/-20	Neighbour	Fair; mature; crown asymmetric due to clearance pruning from private Hydro line; cultivar; <b>to be preserved and protected</b>

<sup>1</sup> As taken from Managing Trees during Construction; 2<sup>nd</sup> Ed., Fite and Smiley; <sup>2</sup>Diameter at breast height, or 1.4m from grade (unless otherwise indicated); <sup>3</sup> As determined by topographic survey prepared by J.D. Barnes Ltd. dated 01/18/22

Pictures 1 through 4 on pages 8, 9 and 10 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) 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 MEASURES**

As excavation for the new walkway will occur within the CRZ of tree #1, the following features have been incorporated into the design:

1. Moving the walkway 0.35m from the shared property line to help reduce root loss from tree #1 (refer to grading plan).
2. Limiting excavation for the walkway to 0.26m through the use of a rigid grid product (Ecoraster or similar) supporting permeable pavers (refer to grading plan and landscape drawings).

Further, the measures below will be followed prior to and during construction:

3. Hand digging or hydro excavation along the walkway edge in closest proximity to the tree to carefully expose roots. Exposed roots were then cleanly cut and sealed before being reburied. Excavation then resumed using traditional mechanical means. Sealing the cleanly cut ends of roots greater than 1cm diameter with a beeswax product will help prevent the loss of moisture and facilitate healing.
4. As the excavation will be left open for extended periods, a covering of at least three layers of moistened burlap will be draped over the exposed face of excavation closest to the tree. This will help reduce the loss of soil moisture.
5. During construction the area within the remaining CRZ is to be protected with a combined layer of woodchip mulch and steel plates. This is to help protect against soil compaction.

## **TREE 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<sup>1</sup>) of trees (see City of Ottawa Tree Protection Barrier specifications on page 7).
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.

<sup>1</sup> 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.

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

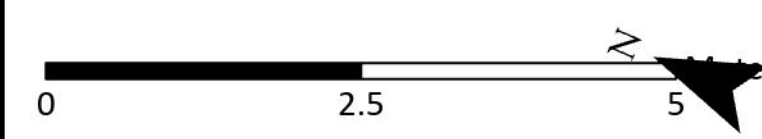
**GENERAL NOTES**

1. This drawing is the property of the Architect and may not be reproduced or used without the expressed consent of the Architect.
2. Drawings are not to be scaled. The Contractor is responsible for checking and verifying all levels and dimensions and shall report all discrepancies to the Architect and obtain clarification prior to commencing work.
3. Upon notice in writing, the Architect will provide written/graphic clarification or supplementary information regarding the intent of the Contract Documents.
4. The Architectural drawings are to be read in conjunction with all other Contract Documents including Project Manuals and the Structural, Mechanical and Electrical Drawings.
5. Positions of exposed or finished Mechanical or Electrical devices, fittings and fixtures are indicated on the Architectural Drawings. Locations shown on the Architectural Drawings shall govern over Mechanical and Electrical Drawings. Mechanical and Electrical items not clearly located will be located as directed by the Architect.
6. These documents are not to be used for construction unless specifically noted for such purpose.

PLANS PROJECT1 STUDIO INCORPORATED (28/03/23)

**LEGEND**

- BUILDING ENTRANCE
- BUILDING EXIT
- WOOD BOARD FENCE
- OVERHEAD WIRES
- UTILITY POLE
- BICYCLE PARKING
- EXISTING TREE (PRESERVE & PROTECT) REFER TO CIVIL
- EXISTING TREE (TO BE REMOVED) REFER TO CIVIL
- CRITICAL ROOT ZONE
- PROTECTIVE FENCING



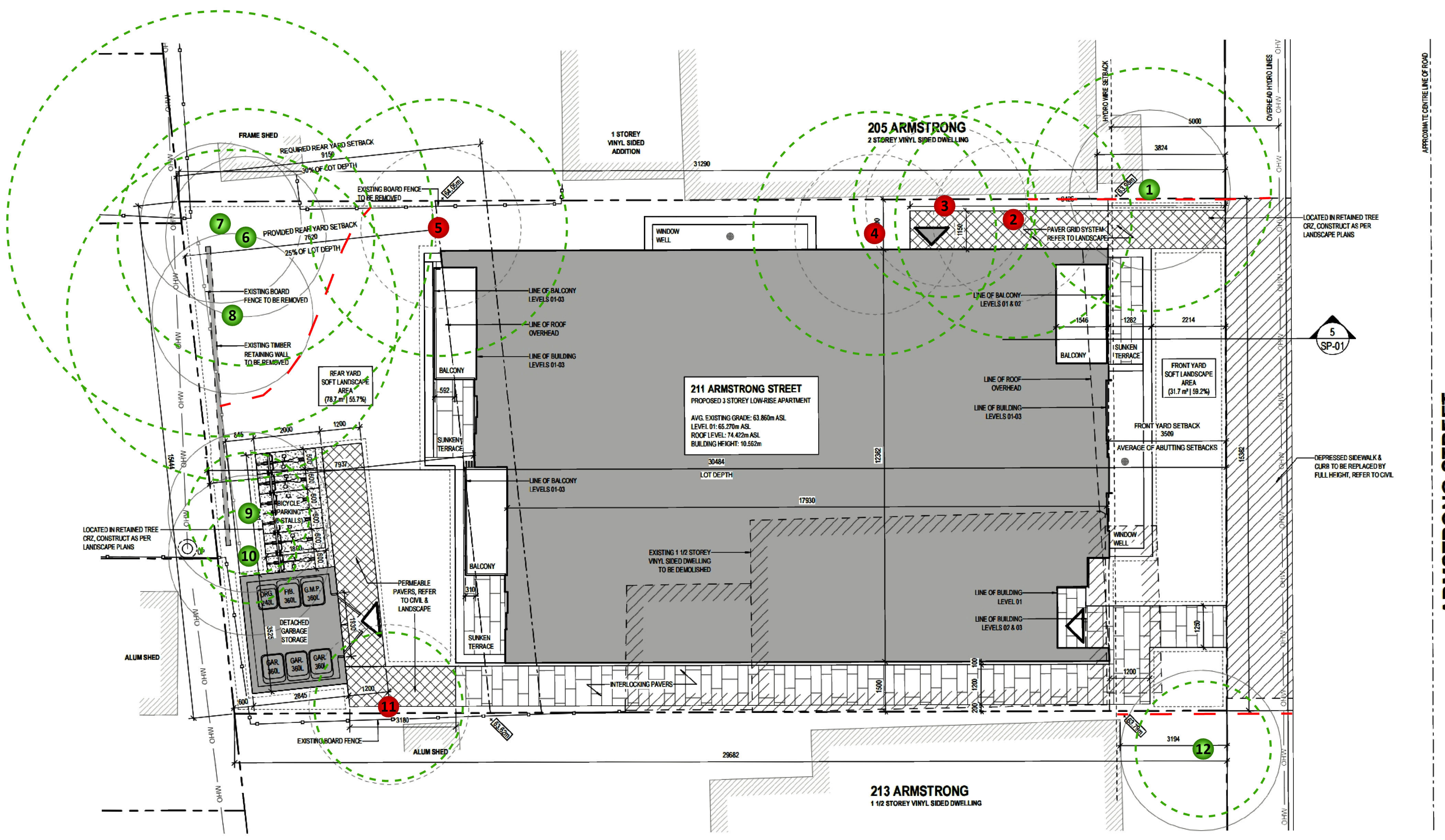
DRAWING: Tree Conservation Plan

PROJECT: 211 ARMSTRONG STREET  
CITY OF OTTAWA



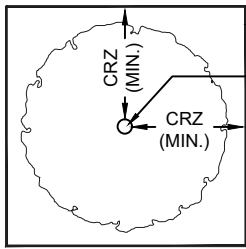
Andrew K. Boyd, R.P.F.

SCALE: 1:60	2 1 1 A
DATE: 2023-03-29	
DRAWN BY: SS	
SHEET NO. 1	



APPROXIMATE CENTRE LINE OF ROAD

ARMSTRONG STREET



PLAN VIEW

TREE PROTECTION FENCING

TREE TRUNK

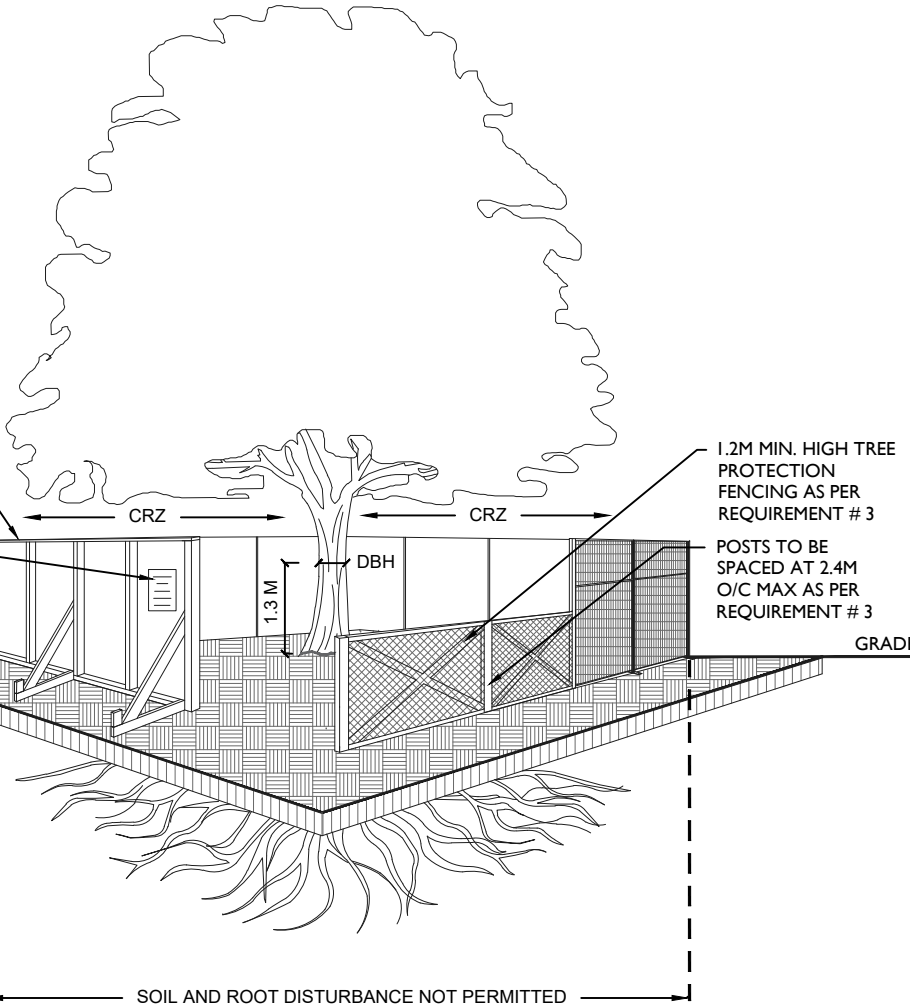
CRZ (MIN.)

CRZ (MIN.)

CRZ = DBH X 10CM.  
CRZ IS TO BE MEASURED FROM THE OUTSIDE EDGE OF THE TREE BASE

TREE PROTECTION SIGNAGE AS PER CITY STANDARD

GRADE



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

POSTS TO BE SPACED AT 2.4M O/C MAX AS PER REQUIREMENT # 3

SOIL AND ROOT DISTURBANCE NOT PERMITTED

ACCESSIBLE FORMATS AND COMMUNICATION SUPPORTS ARE AVAILABLE, UPON REQUEST

**TREE PROTECTION REQUIREMENTS:**

1. 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.
2. UNLESS PLANS ARE APPROVED BY CITY FORESTRY STAFF, FOR WORK WITHIN THE CRZ:
  - DO NOT PLACE ANY MATERIAL OR EQUIPMENT - INCLUDING OUTHOUSES;
  - 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 OR 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
3. 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 A 2"X4" WOOD FRAME) 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 MINIMISE DAMAGE TO EXISTING ROOTS. (SEE DETAIL)
4. THE LOCATION OF THE TREE PROTECTION FENCING MUST BE DETERMINED BY AN ARBORIST AND DETAILED ON ANY ASSOCIATED PLANS FOR THE SITE ( E.G. TREE CONSERVATION REPORT, TREE INFORMATION REPORT, ETC). THE PLAN AND CONSTRUCTED FENCING MUST BE APPROVED BY CITY FORESTRY STAFF PRIOR TO THE COMMENCEMENT OF WORK.
5. 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 OR THE PROPER PRUNING AND CARE OF ROOTS WHERE ENCOUNTERED.

THE CITY'S TREE PROTECTION BY-LAW, 2020-340 PROTECTS BOTH CITY-OWNED TREES, CITY-WIDE, AND PRIVATELY-OWNED TREES WITHIN THE URBAN AREA. PLEASE REFER TO [WWW.OTTAWA.CA/TREEBYLAW](http://WWW.OTTAWA.CA/TREEBYLAW) 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



Picture 1. Tree #1, neighbouring white cedar (far right) and Manitoba maples #2, 3 and 4 at 211 Armstrong Street



Picture 2. Trees #9-11 (right to left) at 211 Armstrong Street





Picture 3. Trees #5-8 (right to left) at 211 Armstrong Street



Picture 4. Neighbouring tree #12 adjacent to 211 Armstrong 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.

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 regard 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.

