



## ARBORIST REPORT

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### TREE CONSERVATION REPORT FOR 1010 DAIRY ROAD, OTTAWA(ORLEANS), ONTARIO

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by

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for

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Report 21-007

Submitted  
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**ARBORSPHERE**  
Arboriculture & Urban Forestry Consulting

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# Summary

Arborsphere was retained to provide a Tree Conservation Report for trees affected by a proposed development in Ottawa(Orleans), Ontario. Associated fieldwork included a tree inventory and assessment of 10 trees that are not suitable for preservation. All trees in nearby treed areas will be preserved and protected with temporary fencing.

PROPERTY			
Legal Descriptions	Part of Lot 29, Concession 1 (Old Survey), Part 13 4R-8326, Geographic Township of Cumberland [formerly City of Cumberland, now in the City of Ottawa]		
Address	1010 Dairy Road, Ottawa(Orleans), Ontario		
Zoning	IG H(21)		
Area	29,485.01 m² (317,373.70 ft²) (2.95 ha)		
Ward	#1 (Orléans), Matthew Luloff (Councillor)		
TREES			
Provincial species-at-risk, genetically pure trees			0
Affected City-owned trees			0
Shared trees			0
Living hazard trees			0
Standing dead trees			0
Non-hazard trees unsuitable for preservation			10
Non-City trees suitable for preservation			17
TOTAL:			27
CONTACTS			
Owner/Applicant	Apetito HFS Ltd.	1010 Dairy Dr, Orléans, ON, K4A 3N3	800-268-8199
Agent	Thakar Associates Design	54 Bennett Street, Ottawa, ON, K1V 9L4	613-523-7602
Arborist	Oliver K. Reichl	18 Larue Mills Rd, Mallorytown, ON, K0E 1R0	613-213-6840

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## Tree Conservation Report for 1010 Dairy Road, Ottawa(Orleans), Ontario

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### 1.0 INTRODUCTION

#### 1.1 Background

Apetito HFS (the “applicant”) is proposing additions to the property at 1010 Dairy Road in Orleans (the “site”). The site is zoned as IG H(21) (Ottawa 2021).



#### 1.2 Assignment

I was contacted by Sid Thakar of Thakar Associates Design on behalf of the applicant and retained to complete a tree conservation report for the site.

#### 1.3 Limitations

This report has been prepared according to guidelines provided by the City of Ottawa (the “City”) with respect to its 2020 Tree Protection By-law 2020-340 (the “By-law”). Tree size was limited to on-site stems with a dbh of 10cm or greater, plus any immediate neighbouring City trees. Assessments are based on visual observations only. No invasive probing or injurious sampling was done. Appraisal of any tree’s amenity value is not included in its assessment. For preservation considerations, I relied on a drawing prepared by Thakar Associates Design (Thakar 2021). More tree information or protection could be required, as may be determined during any secondary review by the City.

### 2.0 OBSERVATIONS

## 2.1 Methodology

Tree diameters (“dbh”) were measured at approximately 1.20 metres above grade using a Richter diameter tape. As I could not find any City guideline for recording multi-stemmed trees (i.e., codominant; trees that fork below breast height), I defaulted to recording each stem’s dbh separately but still count them as a single tree. Each tree’s canopy spread was visually estimated to the nearest metre. I used a generalized assessment system to describe the overall condition of each tree. This system uses a 3-tier rating scale (good, fair, poor) and is based solely on non-invasive *in situ* observations. Each tree’s rating, along with its proximity to proposed construction, was considered when determining its retainability.

## 2.2 Field Notes

Arboriculture field work was completed on July 12, 2021, resulting in an inventory of 10 affected trees. Adjacent treed areas, totalling 17 trees, were also summarized. Table 1 summarizes my field observations and comments. Photos may be found in Appendix A. Drawings in Appendix B show the locations and status of all surveyed trees.

Table 1: Tree Inventory and Assessment						
ID	SPECIES	DBH (cm)	CANOPY (m)	COND RATING	PRESERV. RATING	COMMENT
1	White Birch <i>Betula papyrifera</i>	*	7	Good	Poor	dbh=10/10/9/8/8/5 MAINTENANCE: none PRESERVATION: remove (conflict with proposed parking area)
2	Colorado Blue Spruce <i>Picea pungens</i> var. <i>glauca</i>	25	5	Good	Poor	MAINTENANCE: none PRESERVATION: remove (conflict with proposed parking area)
3	Colorado Spruce <i>Picea pungens</i>	25	4	Good	Poor	MAINTENANCE: none PRESERVATION: remove (conflict with proposed parking area)
4	Colorado Spruce <i>Picea pungens</i>	25	4	Good	Poor	some needle cast MAINTENANCE: none PRESERVATION: remove (conflict with proposed parking area)
5	Colorado Blue Spruce <i>Picea pungens</i> var. <i>glauca</i>	30	6	Good	Poor	MAINTENANCE: none PRESERVATION: remove (conflict with proposed parking area)
6	Colorado Spruce <i>Picea pungens</i>	24	6	Good	Poor	MAINTENANCE: none PRESERVATION: remove (conflict with proposed parking area)
7	Green Ash <i>Fraxinus pennsylvanica</i>	*	8	Good	Poor	dbh=13/13/12/11/7/7/5; EAB signs MAINTENANCE: none PRESERVATION: remove (not expected to survive)
8	Colorado Blue Spruce <i>Picea pungens</i> var. <i>glauca</i>	32	8	Good	Poor	MAINTENANCE: none PRESERVATION: remove (conflict with proposed building envelope)
9	Colorado Spruce <i>Picea pungens</i>	25	6	Good	Poor	minor needle cast MAINTENANCE: none PRESERVATION: remove (conflict with proposed building envelope)

**Table 1: Tree Inventory and Assessment**

ID	SPECIES	DBH (cm)	CANOPY (m)	COND RATING	PRESERV. RATING	COMMENT
10	Colorado Spruce <i>Picea pungens</i>	31	8	Good	Poor	minor needle cast MAINTENANCE: none PRESERVATION: remove (conflict with proposed building envelope)

## NOTES:

1. All diameter measurements were taken at approximately 1.20 metres above grade, unless otherwise noted.
2. Asterisk(\*) denotes codominant stems (i.e., tree forks below 1.20 metres); stem diameters are listed in comments.
3. Dripline distances were not measured, and are only based on a rough visual estimate to the nearest metre.
4. EAB = Emerald Ash Borer

**Table 2: Other Treed Areas**

ID	TREES	DBH 10-30 cm	DBH >30 cm	COND RATING	PRESERV. RATING	COMMENT
A	8 coniferous 4 deciduous	8 3	1	Good	Good	MAINTENANCE: none PRESERVATION: CRZ
B	3 coniferous	3	0	Good	Good	MAINTENANCE: none PRESERVATION: CRZ
C	2 coniferous 1 deciduous	2 1	0	Good	Good	MAINTENANCE: none PRESERVATION: CRZ

### 3.0 ANALYSIS

The site consists mostly of a single building, paved parking areas, and several grassy areas, some with trees of various sizes. Vegetation is minimal overall. The site contains no wetlands, no woodlots, no high quality specimen trees, no rare vegetation communities, and no unique ecological features. There are no nearby off-site trees on neighbouring property or the adjacent City-owned right-of-way. All trees on this site appear to have been planted, and include both native and non-native species.

### 4.0 DISCUSSION

#### 4.1 Tree Maintenance

Individual urban trees tend to require periodic maintenance to ensure safety and promote optimum health. Typically, most health and safety concerns can be addressed by:

- removal of dead limbs and branches
- removal of dead codominant stems (i.e., multiple trunks)
- removal of hanging or broken branches
- removal of diseased or structurally unsound stems
- removal of rubbing branches
- removal of inward-growing branches
- removal or severance of parasitizing vegetation (i.e., vines)
- removal of epicormic twigs/branches
- removal of stubs from previous prunings
- removal of debris piled against trunks
- removal of excess soil or mulch burying the root collar
- removal of competing non-native woody vegetation
- removal or severance of girdling roots (where practical)

## 4.2 Tree Preservation

Trees within the proposed building additions, and the adjacent parking area easterly, cannot be saved. Various replacement trees have been proposed (Thakar 2021). Three treed areas have been identified for preservation and can be protected with CRZs.

## 5.0 RECOMMENDATIONS

In the following subsections, recommended actions are numbered and are those required by the City. Additionally, some “best practices” have been included to provide the property owner(s) with a more comprehensive set of management actions with respect to the site’s future trees.

### 5.1 Before Construction

#### 5.1.1 Tree Conservation Plan

- (R#1) **Required:** Print and retain at least one copy of the Tree Conservation Plan on site during all phases of construction.

#### 5.1.2 Hazard Mitigation & Tree Maintenance

- (R#2) **Required:** remove any identified tree hazards and non-retainable trees. Retain a copy of any Tree Permit on the property prior to the commencement of any tree removal.
- (R#3) *Best practice:* facilitate the treatment of all retainable trees according to the good arboricultural practices discussed in Section 4.1.

#### 5.1.3 Tree Preservation

- (R#4) **Required:** protect the critical roots of retained trees by establishing Critical Root Zones (CRZs).

A CRZ in the City of Ottawa is ideally ten(10) centimetres from the trunk of the tree for every centimetre of trunk at breast height. The CRZ is calculated as dbh x 10.

- (R#5) **Required:** construct barriers to delineate CRZs.

Barriers shall be constructed under the guidance of an arborist. Neighbouring trees shall be protected with staked/anchored fencing to City standards, erected a minimum of dbh x 10 at the discretion of City staff. Barrier material shall be 1.2 metre snow fence wired to steel “T” bar posts (@2.4 metres o.c. max) 50 x 150 wood top rail bolted to posts.

- (R#6) *Best practice:* use exterior grade plywood lengthwise (i.e., 4 feet high) on any side where excavated (or other) material could spill into the CRZ.

## 5.2 During Construction

**(R#7) Required:** maintain the integrity of all CRZs.

CRZ protection barriers must be kept intact and in good repair. Any missing signage must be promptly replaced. Within a CRZ, there must be no encroachments of any kind:

- No trenching, addition of fill, excavating, or scraping to change the grade without City approval
- No storage of building materials or equipment (including vehicles)
- No storage of surplus soil, construction waste, or debris over the root systems of the protected trees
- No disposal (dumping or flushing) of contaminants or liquids
- No movement of vehicles (personal or business), equipment or pedestrians
- Ensure that exhaust fumes from any equipment are not directed towards any tree canopy.

Directional micro-tunnelling, boring, and/or hand-digging within a CRZ may be permitted. Any open face cuts outside of a CRZ that are consistent with an approved plan that require root pruning, will require the services of a certified arborist or qualified tree worker under the supervision of a certified arborist.

**(R#8) Required:** where root systems of trees are exposed directly adjacent to, or are damaged by construction work, they must be trimmed neatly with pruners or saws (do not use backhoe or other machinery) and the area promptly backfilled with appropriate material, such as top soil, burlap or mulch, to prevent dessication.

**(R#9) Best practice:** establish and use designated storage areas, as remote as possible from any CRZ, for excavated material, equipment, vehicle parking, building materials, etc...

## 5.3 After Construction

**(R#10) Required:** secure the City's permission before removing any tree protection barriers.

If a barrier needs to be removed to facilitate landscaping activity (e.g., sodding), the City must be notified. Once any landscaping is done, barriers need to be promptly re-erected pending any final inspections by the City.

**(R#11) Best practice:** leave as much top soil as possible on site to help ensure a fertile growing environment for any new trees that may be planted.

**(R#12) Best practice:** when replanting near or under overhead wires, plant only tree species known to be relatively small at maturity (e.g., juneberry, tree lilac).



## 6.0 CONCLUSION

The tree preservation methodology for this site depends on the use of tree protection zones and barriers. Any tree protection barrier is just an arbitrary line regardless of the materials used in its construction. Stronger materials and more robust barrier construction will always have greater protection potential in the event of any accidental encroachment. However, even with a minimal barrier of plastic orange fencing, the enclosed healthy trees will be adequately protected as long as that line is respected.

Municipal tree protection by-laws exist to conserve both green infrastructure and the overall urban “forest”. Wise management of urban trees includes favouring species that are suitable to their locations and tolerant of urban growing conditions. While every tree death or removal results in some amount of canopy loss, the overall loss in quantity and diversity from this site would appear to be adequately compensated for by the number of proposed replacement trees.

This 13-page report was prepared by



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ISA Certified Arborist #ON-1178A  
Ontario Butternut Health Assessor #039  
ISA Tree Risk Assessor Qualified  
OUFC Heritage Tree Inspector

## References

Ottawa (City of). *GeoOttawa(beta)*. Ottawa, ON: City of Ottawa, 2021.  
(<http://maps.ottawa.ca/geoottawa/>)

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(<http://ottawa.ca/en/residents/laws-licenses-and-permits/laws/municipal-trees-and-natural-areas-protection-law-no-2006>)

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(<http://ottawa.ca/en/residents/water-and-environment/trees-and-community-forests/protecting-trees>)

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Thakar, S. Landscape Plan for 1010 Dairy Road. Ottawa, ON: Thakar Associates Design, 2021.

## Appendix A

### Photos



Photo 1: Trees 1 thru 7 (right to left).



Photo 2: Trees 8, 9, and 10.



Photo 3: Signs of needle cast.



Photo 4: Treed area A.



## Appendix C

### Assumptions and Limiting Conditions

1. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the arborist can neither guarantee nor be responsible for the accuracy of information provided by others.
2. Loss or alteration of any part of this report invalidates the entire report.
3. Possession of this report or copy thereof does not imply right of publication or use for any purpose by anyone other than the person(s) to whom it is addressed, without the prior expressed hand-written permission of the consulting arborist.
4. The consulting arborist shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services.
5. Sketches, diagrams, graphs, and photographs in this report are intended as visual aids, are not necessarily to scale, and should not be construed as engineering or architectural reports or surveys.
6. Unless expressed otherwise: 1) information contained in this report covers only those items at the time of inspection; and 2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.

## Appendix D

### Certification of Performance

I, Oliver K. Reichl, certify:

- that I have personally inspected the tree(s) and/or property referred to in this report, and have stated my findings accurately;
- that I have no current or prospective interest in the plant material or the property that is the subject of this report, and I have no personal interest or bias with respect to the parties involved;
- that the analysis, opinions, and conclusions stated herein are my own, and are based on current scientific procedures and facts;
- that my compensation is not contingent upon the reporting of a predetermined conclusion that favours the cause of the client or any other party, nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events;
- that my analysis, opinions, and conclusions were developed, and this report has been prepared, according to commonly accepted arboricultural practices;
- that no one provided significant professional assistance to me, except as indicated within the report.
- that I am a member in good standing of the American Society of Consulting Arborists (ASCA) and the International Society of Arboriculture (ISA), and that I am a current ASCA Registered Consulting Arborist and ISA Certified Arborist.

