JACKSON
ARBORICULTURE
INC.
CONSULTING AND GIS ANALYSIS
118 Pleasant Ridge Road, Brantford ON, N3R 0B8
905-512-6303, jeremy@jacksonarbor.ca

Tree Inventory and Preservation Plan Report

Subject Property:

3151 Montrose Road
Niagara Falls, ON

Prepared For:

1000441695 Ontario Inc.
10 Wilfrid Laurier Crescent
St. Catharines, ON L2P 0A4

Prepared By:

Jackson Arboriculture Inc.
118 Pleasant Ridge Road
Brantford, ON N3R 0B8

30 May 2023

Jackson Arboriculture Inc. Project No. P392

1.0 Introduction

Jackson Arboriculture Inc. was retained by 1000441695 Ontario Inc. to complete a Tree Inventory and Preservation Plan report for a property situated at 3151 Montrose Road in the City of Niagara Falls, Ontario, hereby referred to as the subject property. It is understood that a development application will be filed with the City for the construction of a residential development.

2.0 Methodology

At the onset of the project the scope of work was coordinated with the client and the consulting team. Prior to conducting a site visit, the topographic survey and current aerial photography were overlaid utilizing geographic information system software for use on site during the completion of the tree inventory. The tree locations and the site plan were then overlaid and a tree preservation analysis was completed to determine the impacts to the trees included in the inventory.

2.1 Tree Inventory

A site visit was conducted on the 29th of May 2023 to complete the tree inventory. All trees 10 cm in diameter and larger situated on subject property, on neighbouring property within 6 m and within the road allowance were included in the tree inventory. A visual assessment was completed on each tree included in the inventory and the following information is provided in the tree inventory table (Table 1):

- **Tree #**: A number assigned to each tree corresponding to the tree inventory (Table 1) and the Tree Preservation Plan (Sheet 1).
- **Species**: Common and scientific (Latin) species names.
- **DBH**: The trunk diameter at breast height, measured in centimeters at 1.4 m from the ground.
- **Condition**: The health of the tree considering the trunk integrity, the crown structure and the crown vigour; each rated as good, fair or poor. The condition ratings are based on the signs, symptoms and defects exhibited by each tree, considering the surroundings in which it is growing.
- **Dripline**: The distance from the trunk to the tips of the live branches.
- **Location**: The property where the tree is situated, based on the topographic survey and gps locations taken on site.
- **Comments**: Any additional notes relevant to the tree's health or growing conditions.
- **Recommendation**: The recommended removal or preservation of each tree based on the results of the impact assessment.

The trees included in the inventory are identified with numbers 1-47. Trees were located using the topographic survey provided and a tablet computer with a GPS receiver (± 2m error).

2.2 Impact Assessment

A tree preservation analysis was completed on each tree included in the inventory considering the impacts from the proposed development and many other factors including, but not limited to, tree condition, species, DBH and the existing site conditions. The impacts from the proposed development will occur where tree roots and branches conflict with machinery during pre-grading and construction.

During the tree preservation analysis the distance of dripline was used to assess the impacts to the trees included in the tree inventory. Where considerable encroachment is required within the dripline tree removal may be required.

3.0 Existing Conditions

The subject property is currently occupied by a single family residential dwelling and amenity areas. The site is bound by a hydro corridor and residential development to the north, Montrose Road to the east and residential development to the south and west.

4.0 Tree Inventory Results

The results of the tree inventory indicate that a total of 47 trees reside on subject property, on neighbouring property within 6 m and within the road allowance. The trees included in the inventory appear to be comprised of landscape plantings.

No rare, threatened or endangered tree species were documented in the tree inventory. Refer to Table 1 for the complete tree inventory and Sheet 1 for the tree locations.

5.0 Proposed Development

The proposed development is comprised of an 11-unit townhouse complex. The existing dwelling is proposed to be retained within the site planning, for a total of 12 residential units.

6.0 Discussion

The following sections discuss the tree removal requirements, tree preservation opportunities and tree preservation recommendations based on the results of the impact assessment.

6.1 Tree Removal

The removal of Trees 4, 7-11, 13-16, 26, 27, 31-35, 37 and 40-45 will be required to accommodate the proposed development.

Tree 31 appears to reside on the property boundary. Permission from the respective property owner will be required prior to the removal of the tree, as per the Forestry Act, R.S.O. 1990.

6.2 Tree Preservation

The preservation of Trees 1-3, 5, 6, 12, 17-25, 28-30, 36, 38, 39, 46 and 47 will be possible with the use of appropriate tree protection measures, pending the review of grading and servicing plans. Some of the trees identified for preservation reside on small berms placed around the perimeter of the property and could be heavily impacted by drainage swales or sub drains and catch basins.

Light encroachment within the driplines of Trees 3, 30, 38 and 39 will be required to accommodate the proposed development. If any roots are exposed during construction they must be pruned by a Certified Arborist in accordance with good arboricultural practice to ensure that the root systems are not damaged during construction.

Tree protection fence must be installed at the dripline unless noted otherwise in this report and on Sheet 1. Tree protection fence must be installed prior to the commencement of construction (pre-grading) to ensure that the trees identified for preservation are not impacted by the proposed development.

Refer to Sheet 1 for the prescribed tree protection fence locations, additional tree protection plan notes and the tree protection fence detail.

6.3 Tree Preservation Recommendations

The following recommendations are made in attempts to reduce the impacts to trees identified for preservation:

- Tree protection fence must be installed at the locations outlined on Sheet 1 prior to the commencement of pre-grading, unless noted otherwise in this report and on Sheet 1.
- Once tree protection fence has been installed it must not be moved, relocated or altered in any way (unless repairing fallen fence etc.) for the duration of the construction period.
- No intrusion into an area identified on Sheet 1 as a tree preservation zone (TPZ) is allowed at anytime during construction unless noted otherwise in this report and on Sheet 1.
- No storage of machinery, construction debris, materials, waste or any other items is allowed within a TPZ.
- Any tree branches and roots that conflict with the proposed development must be pruned by a Certified Arborist in accordance with good arboricultural practice.
- Tree protection fencing should be inspected by a Certified Arborist prior to and during construction to ensure that the fencing remains intact and in good repair throughout the stages of development.

7.0 Summary

Jackson Arboriculture Inc. was retained by 1000441695 Ontario Inc. to complete a Tree Inventory and Preservation Plan report for a property situated at 3151 Montrose Road in

the City of Niagara Falls, Ontario. A tree inventory was conducted and an impact assessment was completed in the context of the proposed development plan.

The tree inventory documented a total of 47 trees situated on subject property, in the road allowance and on neighbouring property within 6 m. The results of the impact assessment indicate that the removal of 24 trees will be required to accommodate the proposed development, pending the review of grading and servicing plans.

Respectfully submitted,
Jackson Arboriculture Inc.

Jeremy Jackson

Jeremy Jackson, H.B.Sc.,
ISA Certified Arborist #ON-1089A
GIS Analyst

Limitations of Assessment

It is our policy to attach the following limitations of assessment to ensure that the client, municipalities and agencies are fully aware of what is technically and professionally realistic when visually assessing and retaining trees.

The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These include a visual examination of the above ground parts of each tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of attack by insects, discoloured foliage, the condition of any visible root structures, the degree and direction of any lean, the general condition of the trees and the surrounding site, and the proximity of property and people.

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. They are not immune to changes in site conditions, or seasonal variations in the weather conditions, including severe storms with high-speed winds.

While reasonable efforts have been made to ensure that the trees recommended for retention are healthy no guarantees are offered, or implied, that these trees, or any parts of them, will remain standing. It is both professionally and practically impossible to predict with absolute certainty the behaviour of any single tree of group of trees or their component parts in al circumstances. Inevitably a standing tree will always pose some risk. Most trees have the potential for failure under adverse weather conditions, and the risk can only be eliminated if the tree is removed.

Although every effort has been made to ensure that this assessment is reasonably accurate, trees should be re-assessed periodically. The assessment presented in this report is valid as the time of the inspection.

Table 1. Tree Inventory

Location: 3151 Montrose Rd, Niagara Falls Date: 29 May 2023 Surveyors: JJJ

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	DL	Location	Comments	Recom.
1	Pear species	*Pyrus spp.*	22, 19, 12, 10, 11	FG	FG	G	4	Subject Property		Preserve
2	Blue Spruce	*Picea pungens*	20	G	G	G	2	Subject Property	Understorey	Preserve
3	Copper Beech	*Fagus sylvatica f. purpurea*	52	G	G	G	6	Subject Property		Preserve
4	Norway Maple	*Acer platanoides*	28	G	FG	G	4	Subject Property	Union at 2 m - main stem died at union	Remove
5	Blue Spruce	*Picea pungens*	39	G	G	G	3	Subject Property		Preserve
6	Nootka False Cypress	*Callitropsis nootkatensis*	~15	G	G	G	2	Neighbouring		Preserve
7	Blue Spruce	*Picea pungens*	25	G	G	G	3	Subject Property		Remove
8	Blue Spruce	*Picea pungens*	28	G	G	G	3	Subject Property		Remove
9	Honey Locust cultivar	*Gleditsia triacanthos var. 'inermis'*	9 ,15	F	FG	G	3	Subject Property	Union at ground	Remove
10	Blue Spruce	*Picea pungens*	26	G	G	G	2	Subject Property		Remove
11	Blue Spruce	*Picea pungens*	34	G	G	G	3	Subject Property		Remove
12	Norway Maple	*Acer platanoides*	~25	G	G	G	4	Neighbouring		Preserve
13	Blue Spruce	*Picea pungens*	28	G	G	G	3	Subject Property		Remove
14	Trident Red Maple	*Acer rubrum var. trilobum*	28	G	G	G	3	Subject Property		Remove
15	Blue Spruce	*Picea pungens*	31	G	G	G	3	Subject Property		Remove
16	Sweet Gum	*Liquidambar styraciflua*	26	G	G	G	3	Subject Property		Remove
17	Blue Spruce	*Picea pungens*	36	G	G	G	3	Subject Property		Preserve
18	Blue Spruce	*Picea pungens*	33	G	G	G	2.5	Subject Property		Preserve
19	White Fir	*Abies concolor*	39	G	G	G	3	Subject Property		Preserve
20	Japanese Maple	*Acer palmatum*	11	G	G	G	3	Subject Property		Preserve
21	White Fir	*Abies concolor*	40	F	G	G	3	Subject Property	Seam	Preserve
22	Sweet Cherry	*Prunus avium*	~18	FG	F	FG	3	Neighbouring	Topped at 2.5 m	Preserve
23	Tulip Tree	*Liriodendron tulipifera*	49	G	G	G	6	Subject Property		Preserve
24	Blue Spruce	*Picea pungens*	~25	G	G	G	2.5	Neighbouring	Lots of lower limb dieback due to competition	Preserve
25	Bigleaf Magnolia	*Magnolia macrophylla*	13	G	G	G	2	Subject Property		Preserve
26	Blue Spruce	*Picea pungens*	27	G	G	G	2.5	Subject Property		Remove
27	Dawn Redwood	*Metasequoia glyptostroboides*	67	G	G	G	5	Subject Property		Remove
28	Pussy Willow	*Salix discolor*	~20	F	F	PF	3	Neighbouring	30% crown dieback	Preserve
29	Pussy Willow	*Salix discolor*	~20, 25, 20	F	FG	G	3	Neighbouring	Union at ground	Preserve
30	Pussy Willow	*Salix discolor*	~20, 20	F	FG	G	3	Neighbouring		Preserve
31	European White Birch	*Betula pendula*	~35, 15	G	G	G	4	Boundary	Union at ground	Remove
32	White Spruce	*Picea glauca*	19	FG	FG	G	2	Subject Property	Exposed roots, lean, some root plate failure in the past - appears to be stable now	Remove
33	White Spruce	*Picea glauca*	20	G	G	G	3	Subject Property		Remove

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	DL	Location	Comments	Recom.
34	White Spruce	*Picea glauca*	25	G	G	G	2.5	Subject Property	Exposed roots, some rot plate failure in the past - appears to be stable now	Remove
35	White Spruce	*Picea glauca*	25	FG	G	G	3	Subject Property	Lean, some root plate failure in the past - appears to be stable now	Remove
36	White Spruce	*Picea glauca*	~25	P	P	P	2	Neighbouring	Failed - stem lying on ground	Preserve
37	Black Walnut	*Juglans nigra*	36	G	G	G	5	Subject Property		Remove
38	Blue Spruce	*Picea pungens*	48	G	G	G	4	Subject Property		Preserve
39	Ginkgo	*Ginkgo biloba*	22	G	G	G	3	Subject Property		Preserve
40	Weeping White Mulberry	*Morus alba 'Pendula'*	14	FG	G	G	1.5	Subject Property	Heavy crooks	Remove
41	Weeping White Mulberry	*Morus alba 'Pendula'*	16	FG	G	G	1.5	Subject Property	Heavy crooks	Remove
42	Austrian Pine	*Pinus nigra*	40	F	FG	G	5	Subject Property	Growing through fence, lean/bowed, some root plate failure in the past - appears to be stable now	Remove
43	Austrian Pine	*Pinus nigra*	39	G	G	G	5	Subject Property		Remove
44	European Hornbeam	*Carpinus betulus 'Fastigiata'*	11	G	G	G	3	Subject Property		Remove
45	European Hornbeam	*Carpinus betulus 'Fastigiata'*	21, 10, 10, 11	FG	G	G	3	Subject Property	Union at 0.3 m, seam in main stem	Remove
46	European Hornbeam	*Carpinus betulus 'Fastigiata'*	15	FG	G	G	3	Subject Property	Seam	Preserve
47	European Hornbeam	*Carpinus betulus 'Fastigiata'*	42	G	G	G	3	Subject Property		Preserve

Table Legend

DBH	Diameter at Breast Height (cm)
TI	Trunk Integrity (G, F, P)
CS	Crown Structure (G, F, P)
CV	Crown Vigor (G, F, P)
DL	Dripline (m)
Recom.	Recommendation (preserve/remove)
G	Good
F	Fair
P	Poor
~	Estimate