

Tree Inventory and Preservation Plan Report

Subject Property:

5558 Drummond Rd. & 6141 North St. Niagara Falls, ON

Prepared For:

Blythwood Homes 5-3483 Portage Road Niagara Falls, ON L2J 2K5

Prepared By:

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3 March 2023

Jackson Arboriculture Inc. Project No. P363



1.0 Introduction

Jackson Arboriculture Inc. was retained by Blythwood Homes Inc. to complete a Tree Inventory and Preservation Plan report for a property situated at 5558 Drummond Road and 6141 North Street 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 1st of March 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 1-33. Trees were located using the topographic survey provided and a tablet computer with a GPS receiver.

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 vacant residential property at 5558 Drummond Road and a portion of the rear yard of 6141 North Street.

4.0 Tree Inventory Results

The results of the tree inventory indicate that a total of 33 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 with some naturally occurring trees.

The trees included in the inventory are comprised of the following species:

- english walnut (*Juglans regia*),
- red oak (Quercus rubra),
- white mulberry (*Morus alba*),
- Manitoba maple (Acer negundo),
- common horsechestnut (Aesculus hippocastanum),
- Norway maple (*Acer platanoides*)
- pear species (*Pyrus sp.*),
- apple species (*Malus sp.*),
- sweet cherry (*Prunus avium*),
- weeping willow (Salix sp.),
- shagbark hickory (Carya ovata),
- eastern white cedar (*Thuja occidentalis*),
- pecan (Carya illinoinensis),
- silver maple (Acer saccharinum) and
- black walnut (Juglans nigra).

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 a 12 unit townhouse complex. Access to the complex is proposed from Drummond Road.

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 the following Trees will be required to accommodate the proposed development:

• 4-7, 11, 15-17, 20-22, 24-27 and 33.

Tree 24 appears to reside partially on neighbouring property. Permission from the neighbouring property owner will be required prior to the removal of the tree.

6.2 Tree Preservation

The preservation of the following Trees will be possible with the use of appropriate tree protection measures:

• 1-3, 8-10, 12-14, 18, 19, 23 and 28-32.

Tree protection measures must be implemented prior to the commencement of construction (pregrading).

Encroachment within the dripline of Trees 1 and 3 will be required to accommodate excavation for foundation construction. The limit of encroachment within the dripline of Trees 1 and 3 must be excavated using air spade excavation, under the supervision of a Certified Arborist, to expose any roots that may conflict with development. If any tree roots are exposed they must be pruned by a Certified Arborist in accordance with good arboricultural practice to ensure that they are not damaged by the proposed development.

Light encroachment within the driplines of Trees 2 and 18 will be required to accommodate excavation for foundation construction. If any tree roots are exposed during construction they must be pruned by a Certified Arborist in accordance with good arboricultural practice.

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 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 dripline prior to the commencement of construction (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.
- Gentle air spade excavation must be used, under the supervision of a Certified Arborist, to determine if any tree roots extend beyond the proposed tree protection fence location for Trees 1 and 3.
- No intrusion into an area identified on Sheet 1 as a tree preservation zone (TPZ) is allowed at anytime during construction.
- 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 Blythwood Homes Inc. to complete a Tree Inventory and Preservation Plan report for a property situated at 5558 Drummond Road and 6141 North Street 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 33 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 16 trees will be required to accommodate the proposed development.

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: <u>5558 Drummond Rd & 6141 North St, Niagara Falls</u>
Date: <u>1 Mar. 2023</u> Surveyors: <u>JJJ</u>

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Tree #	Common Name	Scientific Name	DBH	TI	cs	CV	DL	Location	Comments	Recom.
1	English Walnut	Juglans regia	45	G	G	G	5	Subject Property	Seam	Preserve
2	English Walnut	Juglans regia	29	G	G	G	4	Subject Property		Preserve
3	English Walnut	Juglans regia	32	G	G	G	4	Subject Property		Preserve
4	English Walnut	Juglans regia	43	G	G	G	5	Subject Property		Remove
5	English Walnut	Juglans regia	33	G	G	G	4	Subject Property		Remove
6	Red Oak	Quercus rubra	36	G	G	G	4	Subject Property		Remove
7	Red Oak	Quercus rubra	27	G	G	G	4	Subject Property		Remove
8	White Mulberry	Morus alba	12	G	G	G	3	Boundary		Preserve
9	White Mulberry	Morus alba	15, 15	FG	G	G	4	Subject Property	Union at ground	Preserve
10	Manitoba Maple	Acer negundo	13	F	G	G	2	Boundary	Included top fence rail	Preserve
11	Common Horsechestnut	Aesculus hippocastanum	17	G	G	G	3	Subject Property		Remove
12	Norway Maple	Acer platanoides	~15, 15	F	G	G	4	Neighbouring	Union at ground	Preserve
13	Pear species	Pyrus sp.	~20	G	F	F	2	Neighbouring	Topped at 3 m	Preserve
14	Apple species	Maplus sp.	~18, 22	F	F	PF	5	Neighbouring	Union at 0.5 m, 50% crown dieback, bowed, understorey	Preserve
15	Sweet Cherry	Prunus avium	29	F	PF	PF	4	Subject Property	Union at 1.5 m, broken branches, understorey, 50% crown dieback	Remove
16	Weeping Willow	Salix matsudana	83	FG	G	G	8	Subject Property	Union at 2 m	Remove
17	English Walnut	Juglans regia	12	G	G	G	4	Subject Property	No canker present	Remove
18	Shagbark Hickory	Carya ovata	~70	G	G	G	7	Neighbouring		Preserve
19	Eastern White Cedar	Thuja occidentalis	~35	G	G	G	3	Neighbouring		Preserve
20	White Mulberry	Morus alba	18	G	G	G	3	Subject Property	Bacterial wetwood	Remove
21	Pecan	Carya illinoinensis	42	F	G	G	6	Subject Property	Heavy bark lesions	Remove
22	White Mulberry	Morus alba	13	G	G	G	3	Subject Property		Remove
23	Silver Maple	Acer saccharinum	~20, 20, 25	FG	G	G	4	Neighbouring	Union at ground	Preserve
24	Silver Maple	Acer saccharinum	~25, 25, 20, 15, 25	F	FG	G	5	Boundary	Union at ground	Remove
25	Manitoba Maple	Acer negundo	~15, 17, 15	F	FG	G	4	Subject Property	Union at ground	Remove
26	Pear species	Pyrus sp.	-25, 18	F	F	F	3	Subject Property	Union at 0.4 m	Remove
27	Black Walnut	Juglans nigra	20, 20	F	FG	G	4	Subject Property	Union at 0.4 m	Remove
28	Apple species	Maplus sp.	~11	G	FG	G	3	Neighbouring	Pruning wounds	Preserve
29	Sweet Cherry	Prunus avium	12	F	G	PF	1	Boundary	Heavy black knot	Preserve
30	Manitoba Maple	Acer negundo	~12	G	G	G	2	Neighbouring		Preserve
31	Manitoba Maple	Acer negundo	~13, 14, 12	F	G	G	3	Boundary	Union at ground	Preserve
32	English Walnut	Juglans regia	~40	G	G	G	5	Neighbouring		Preserve

Т	ree #	Common Name	Scientific Name	DBH	TI	cs	CV	DL	Location	Comments	Recom.
	33	English Walnut	Juglans regia	41	G	G	G	6	Subject Property		Remove

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