



JACKSON ARBORICULTURE INC.

CONSULTING AND GIS ANALYSIS

118 Pleasant Ridge Road, Brantford ON, N3R 0B8

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Tree Inventory and Preservation Plan Report

Subject Property:

189 William Street
Niagara-on-the-Lake, ON

Prepared For:

Rebecca & Steve deBoer
189 William Street
P.O. Box 8, Niagara-on-the-Lake, ON L0S 1J0

Prepared By:

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

23 March 2026

Jackson Arboriculture Inc. Project No. 627

1.0 Introduction

Jackson Arboriculture Inc. was retained by Rebecca and Steve deBoer to complete a Tree Inventory and Preservation Plan report for a property situated at 189 William Street in the Town of Niagara-on-the-Lake, Ontario, hereby referred to as the subject property. It is understood that an application will be filed with the Town for the redevelopment of the property.

This study has been completed in accordance with the Town of Niagara-on-the-Lake's private tree by-law No. 5139-19. The private tree by-law regulates the removal of trees 12.5 cm in diameter and larger.

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 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 19th of March 2026 to complete the tree inventory. All trees 12.5 cm in diameter and larger situated on subject property, on neighbouring property within 6 m and within the road allowance were included in the 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 branches.
- **mTPZ:** Minimum tree preservation zone distance as measured in meters from the base of the tree. This is the distance at which tree protection fence is to be installed (unless noted otherwise below).
- **Location:** The property where the tree is situated, based on the topographic survey and observations made on site.
- **Comments:** Any additional notes relevant to the tree's health or growing conditions.
- **Action:** The recommended removal or preservation of each tree based on the results of the impact assessment.

- **Reason:** The portion of the proposed development that conflicts with the tree location.

The trees included in the inventory were identified with numbers 1-12 and 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 tree 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 conflict with construction machinery during construction.

During the tree preservation analysis the minimum Tree Preservation Zone (mTPZ) distance was utilized to determine the potential impacts to each tree included in the inventory. Where encroachment is required within the mTPZ, tree removal may be required.

The mTPZ distance is the minimum distance at which development can safely occur without considerably impacting a tree's root system. The mTPZ distance is based on the diameter of the tree and measured in meters from the base of the stem. Refer to Table 2 for the mTPZ distances based on trunk diameter and Table 1 for the mTPZ distance for each tree.

Table 2. Minimum tree preservation zone distances.

DBH (cm)	Min. Tree Preservation Zone Distance (m)*
	Radius
< 10	1.8
11 – 40	2.4
41 – 50	3.0
51 – 60	3.6
61 – 70	4.2
71 – 80	4.8
81 – 90	5.4
91 – 100	6.0
101 – 110	6.6

*As measured from the outside of the tree trunk.

3.0 Existing Conditions

The subject property is currently occupied by a single-family residential dwelling, amenity areas and manicured lawn. The property is bound by residential development to the north, east and west, and William Street to the south.

4.0 Tree Inventory Results

The results of the tree inventory indicate that a total of 12 trees 12.5 cm in diameter or larger 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 includes severing the property into two lots for the construction of two single-family residential dwellings.

6.0 Discussion

The following sections discuss the tree removal requirements, tree preservation opportunities and the tree preservation recommendations.

6.1 Tree Removal

The results of the impact assessment indicate that the removal of Trees 4-6, and 9 will be required to accommodate the proposed development. Tree 8 does conflict with the proposed development footprint, however, it will not be removed, it will be relocated to the back of the property using a large tree spade.

Trees 4-6 reside on neighbouring property to the west. Permission from the neighbouring property owner will be required prior to their removal.

6.2 Tree Preservation

The preservation of Trees 1-3, 7 and 10-12 will be possible with the use of appropriate tree protection measures. Tree protection measures must be implemented prior to the commencement of demolition to ensure that the trees identified for preservation are not impacted by the proposed development.

Encroachment within the mTPZ Trees 3 and 11 will be required to accommodate foundation excavation. If any tree roots are exposed they must be pruned by a Certified Arborist in accordance with good arboricultural practice to ensure that the root systems are not damaged.

Tree protection fence must be installed at the mTPZ distance, unless noted otherwise in this report and on Sheet 1. 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 the trees identified for preservation:

- Tree protection fence must be installed at the mTPZ distance prior to the commencement of construction, unless noted otherwise in this report and on Sheet 1. Refer to the tree inventory table for the mTPZ distance for each tree and Sheet 1 for the prescribed tree protection fence locations.
- 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.
- No storage of machinery, construction debris, materials, waste or any other items is allowed within a TPZ.
- Any tree branches or roots that conflict with 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 Rebecca and Steve deBoer to complete a Tree Inventory and Preservation Plan report for a property situated at 189 William Street in the Town of Niagara-on-the-Lake, 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 12 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 4 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

8.0 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 or group of trees or their component parts in all 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 at the time of the inspection.

Table 1. Tree Inventory

Location: 189 William St, NOTL

Date: 19 Mar. 2026

Surveyors: JJJ

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	DL	mTPZ	Location	Comments	Action	Reason
1	Norway Maple	<i>Acer platanoides</i>	55	FG	G	G	6	3.6	Municipal ROW	Union at 1.6 m, diameter measured at 0.8 m due to union	Preserve	
2	Norway Maple	<i>Acer platanoides</i>	48	FG	FG	G	6	3.0	Neighbouring (Private)	Stem wound, weed species	Preserve	
3	Norway Maple	<i>Acer platanoides</i>	~25, 28	F	FG	G	6	2.4	Neighbouring (Private)	Union at 1.2 m with peeling bark/stem wound, weed species	Preserve	
4	Blue Spruce	<i>Picea pungens</i>	~22	G	FG	FG	3	2.4	Neighbouring (Private)	Shading	Remove	Foundation excavation
5	Norway Spruce	<i>Picea abies</i>	~41	G	G	G	4	3.0	Neighbouring (Private)		Remove	Foundation excavation
6	Blue Spruce	<i>Picea pungens</i>	~18	G	FG	FG	3	2.4	Neighbouring (Private)	Shading	Remove	Foundation excavation
7	White Mulberry	<i>Morus alba</i>	~17, 18, 18, 19	F	FG	G	4	2.4	Neighbouring (Private)	Union at ground, weed species	Preserve	
8	Tulip-tree	<i>Liriodendron tulipifera</i>	19	G	G	G	3	2.4	Subject Property		Relocate	Foundation excavation
9	Blue Spruce	<i>Picea pungens</i>	41	G	G	G	4	3.0	Subject Property		Remove	Foundation excavation
10	Horsechestnut	<i>Aesculus hippocastanum</i>	30	FG	G	G	3	2.4	Subject Property	Union at 1.7 m	Preserve	
11	Eastern Cottonwood	<i>Populus deltoides</i>	~65	G	G	G	7	4.2	Neighbouring (Private)		Preserve	
12	Columnar Sugar Maple	<i>Acer saccharum</i> 'Columnar'	~28	G	G	G	3	2.4	Municipal ROW		Preserve	

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)
G	Good	
F	Fair	
P	Poor	
~	Estimate	

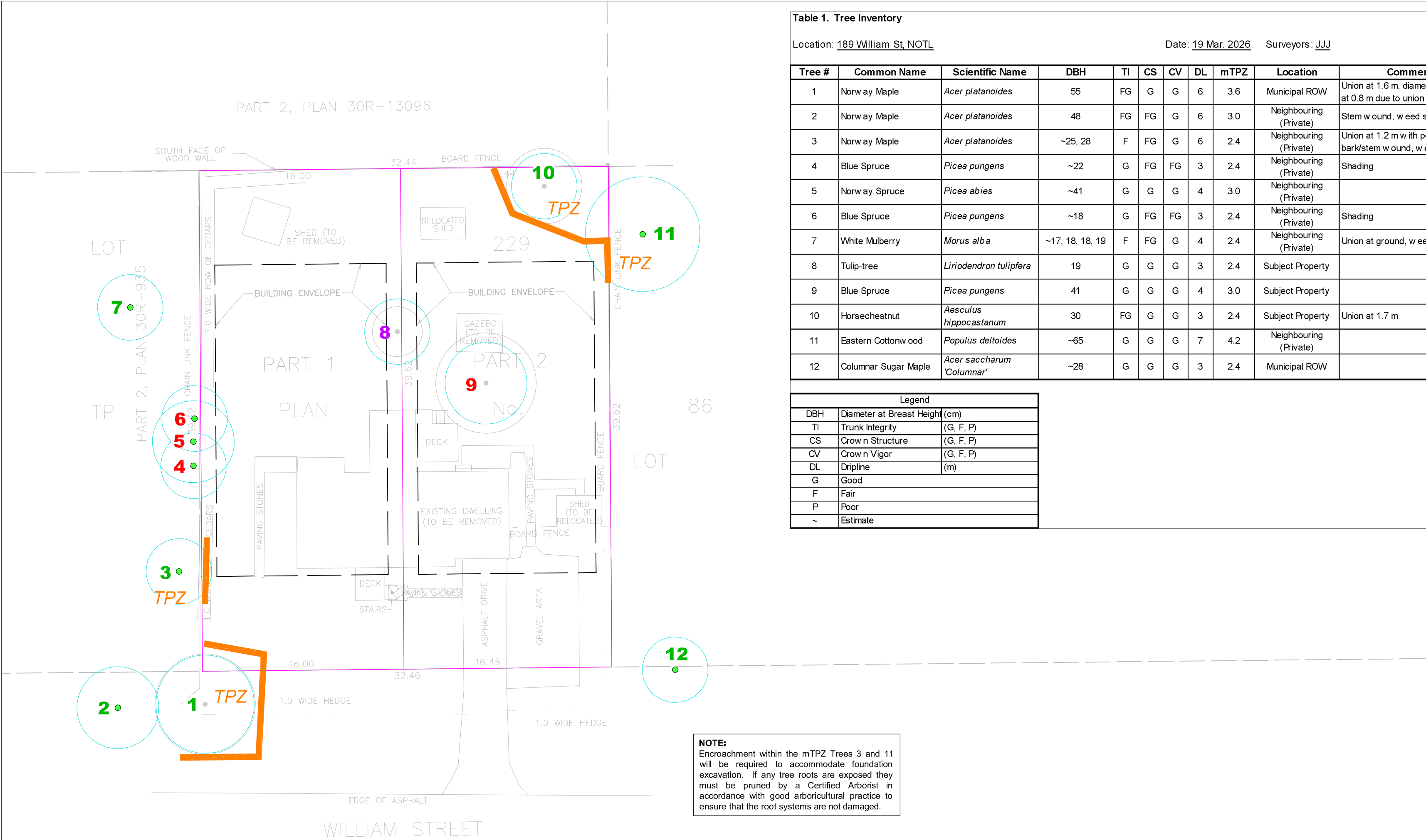


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DL	Dripline (m)
G	Good
F	Fair
P	Poor
~	Estimate

LEGEND

- GPS Tree Location
- Surveyed Tree Location
- Tree Number Identified for Preservation (GREEN)
- Tree Number Identified for Removal (RED)
- Tree Number Identified for Relocation (PURPLE)
- Minimum Tree Preservation Zone (mTPZ)
- Property Boundary
- Tree Protection Fence
- Tree Preservation Zone Symbol

Tree Preservation Recommendations:

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

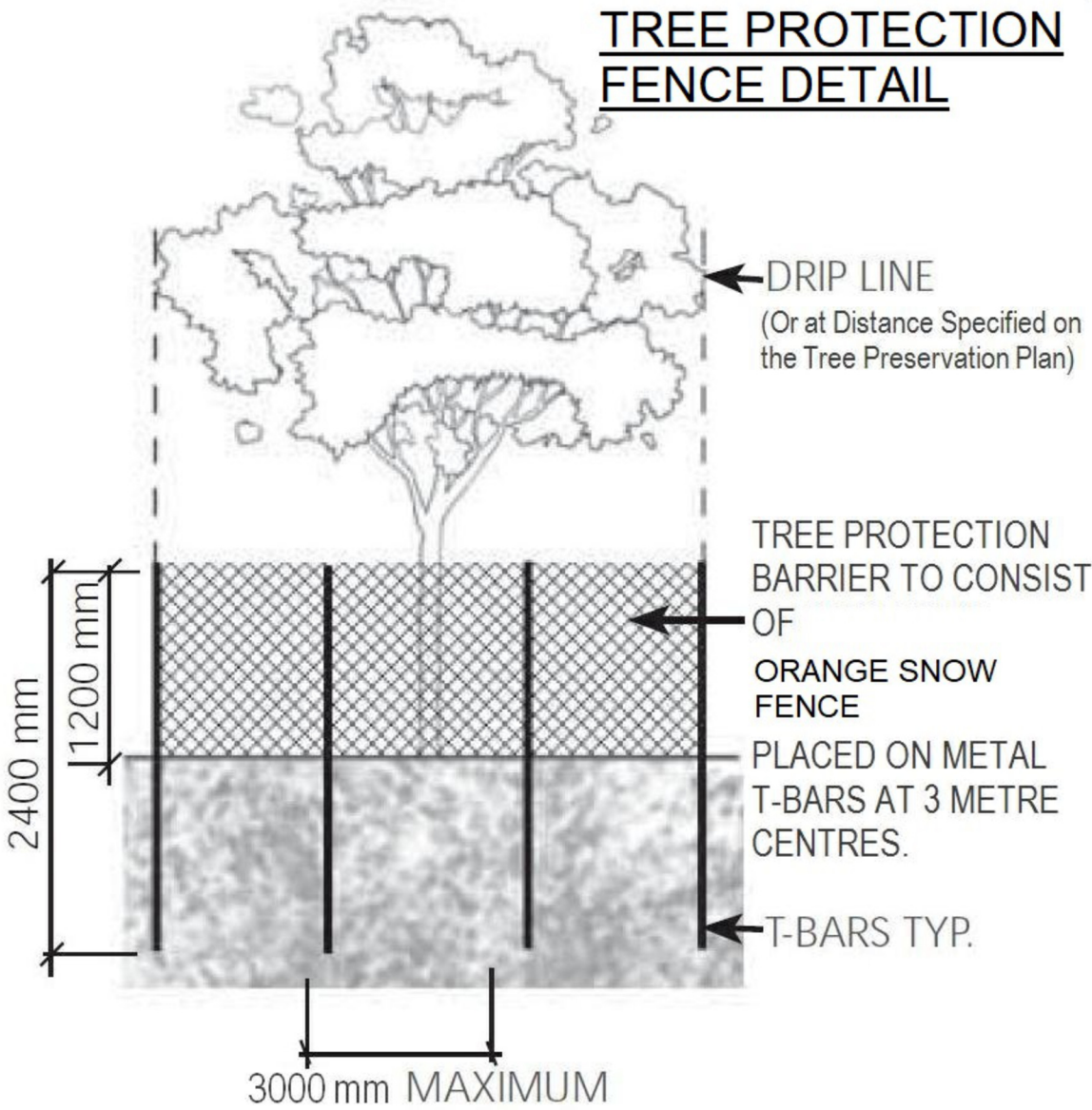
- Tree protection fence must be installed at the mTPZ distance prior to the commencement of demolition, unless noted otherwise on this drawing. Refer to the tree inventory table for the mTPZ distance for each tree and this drawing for the prescribed tree protection fence locations.
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- 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.

NOTES:

1. THIS DETAIL DOES NOT REPRESENT ANY PARTICULAR TREE SPECIES

2. NO CONSTRUCTION ACTIVITY, GRADE CHANGE, SURFACE TREATMENT, COMPACTION, EXCAVATION OR STOCKPILING OF ANY KIND IS PERMITTED WITHIN THE PROTECTED AREA.

TREE PROTECTION FENCE DETAIL



TREE PROTECTION PLAN NOTES

It is the applicants' responsibility to discuss potential tree injury of trees on shared property lines with their neighbours. Should such trees be injured to the point of instability or death the applicant may be held responsible for removal and such issues would be dealt with in civil court or through negotiation.

TREE PROTECTION ZONE: No construction activity including grade changes, surface treatments or excavations of any kind is permitted within the area identified on the Tree Protection Plan or Site Plan as a Tree Protection Zone (TPZ). No root cutting is permitted. No storage of materials or fill is permitted within the TPZ. No movement or storage of vehicles or equipment is permitted within the TPZ. Grade changes are not permitted within established TPZ. The area(s) identified as a TPZ must remain undisturbed at all times.

TREE PROTECTION BARRIERS:

Tree protection barriers must be installed around trees to be protected using orange snow fencing. All supports and bracing to safely secure the barrier should be outside the TPZ. All such supports and bracing should minimize damage to roots outside the TPZ.

General Note:

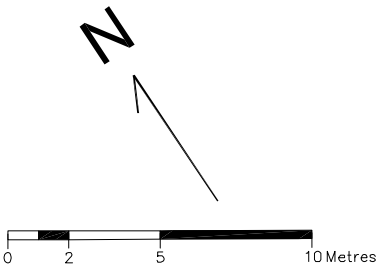
Prior to the commencement of any site activity the tree protection barriers specified on this plan must be installed. Established tree protection zones must not be used as construction access, storage or staging areas. The tree protection barriers must remain in effective condition until all site activities including landscaping are complete.

ARBORICULTURAL WORK:

Any roots or branches which extend beyond the TPZ indicated on this plan which require pruning, must be pruned by a Certified Arborist. All pruning of tree roots and branches must be in accordance with good arboricultural standards. Roots located outside the TPZ that have received approval from the City/Town to be pruned must first be exposed by hand digging or by using an air spade. This will allow a proper pruning cut and minimize tearing of the roots.

Table 2. Minimum tree preservation zone distances.

DBH (cm)	mTPZ. Protection Distance (m)*
	Radius
< 10	1.8
10 - 40	2.4
41 - 50	3
51 - 60	3.6
61 - 70	4.2
71 - 80	4.8
81 - 90	5.4
91 - 100	6



No.	Description	Date	By
1	Issued For Submission	23 Mar, 2026	JJ
Data Source:			
Rebecca & Steve deBoer 189 William Street P.O. Box 8, Niagara-on-the-Lake, L0S 1J0			
189 William Street Niagara-on-the-Lake, ON			
Tree Preservation Plan			
Project # P627		Sheet # 1	
Date 23 March 2026			
Scale 1:250 (@18x24)			