# Arborist Report 51 & 57 Tannery Street and 208 Emby Avenue City of Missisauga

Prepared For:

**NYX Tannery LP** 

Prepared By:

**Beacon Environmental Limited** 

Date: Project:

2023-05-01 217069



# Table of Contents

		page
1.	Introduction	1
2.	Methods	
3.	Findings	
4.	Description of Proposed Redevelopment	
5.	Impact Assessment and Recommendations	
	5.1 Tree Removals	2 3
	Figures	
Figu	ure 1. Site Location	after page 2
	Tables	
Tabl	ole 1. Minimum Tree Protection Zones	3

#### Appendices

Appendix A. Limitations of Assessment

Appendix B. Site Photos

Appendix C. Tree Inventory and Preservation Plan

#### 1. Introduction

Beacon Environmental Limited (Beacon) was retained by NYX Tannery LP prepare an Arborist Report and Tree Inventory and Preservation Plan (TIPP) for adjoining properties located at 51 and 57 Tannery Street and 208 Emby Avenue in the City of Mississauga (subject property) (**Figure 1**).

The Arborist Report has been prepared as part of an application for a re-development proposal of the subject property (OPZR-104636) in accordance with the City of Mississauga's *Terms of Reference for Arborist Reports, Tree Inventory, Survey and Tree Preservation Plans* (2022). The Arborist Report summarizes the findings of a tree inventory and assessment for the subject property and identifies trees to be removed or preserved based on impacts related to the proposed development and consideration of tree condition. The Arborist Report includes recommendations for tree protection, including establishing tree protection zones (TPZs) and other measures to ensure trees identified for preservation are adequately protected.

Beacon had previously prepared Arborist Reports for the subject property in 2018 and 2020. This Revised Arborist Report has been updated to reflect existing site conditions and the latest versions of the Site Plan.

#### 2. Methods

All trees measuring ≥10 cm in diameter at breast height (DBH, measured 1.4 m above grade) on and adjacent to the subject properties (where accessible) within 6.0 m of the property line, were inventoried and assessed by an ISA Certified Arborist on April 24, 2017. Trees on the subject property were marked with numbered aluminum forestry tags. Tagged trees were surveyed by a registered Ontario Land Surveyor. Follow-up site visits were conducted on November 6, 2019, April 25, 2023, and March 15, 2024 to review and update the tree inventory.

The assessment included collecting data on species, trunk diameter (DBH), tree health and condition. The DBH of multi-stem trees was calculated by multiplying each stem diameter by itself (the square), adding up all stem amounts and calculating the square root of the total. The condition of individual trees was assessed in terms of overall health and structural integrity based on indicators such as live leaves and buds, dead wood, decay, structural defects, and presence of disease. Each tree was assigned a condition rating of good, fair, poor, or dead, based on the following criteria:

- **Poor** Severe dieback, significant lean, missing leader, major defects, significant decay and/or disease presence;
- Fair Moderate dieback and/or lean, limb defects, multiple stems, moderate foliage damage from stress;
- Good Healthy vigorous growth, minor visible defects or damage; and
- Dead No live crown

Limitations of the Assessment are included in **Appendix A**.



## 3. Findings

Based on the most recent assessment (March 2024), 61 trees were inventoried on and adjacent to the subject property. Tree locations are illustrated in **Drawing TP-1 (Appendix C)**. A summary of the trees is provided in **Drawing TP-2 (Appendix C)**. Of the 61 trees, 50 are located on the subject property, seven are located on the adjacent CNR property, and four are located on adjacent private property.

Trees range in size from 10 to 95 cm DBH, with a median DBH of 22 cm. The majority of the trees are Manitoba Maple (*Acer negundo*). The number of trees in each condition category is summarized as follows:

Good: 11;

Fair to Good: 6;

• Fair: 14;

Poor to Fair: 10;

Poor: 18;Dead: 2.

No tree species at risk were found on the subject property.

Photos are included in **Appendix B.** 

### 4. Description of Proposed Redevelopment

The proposed redevelopment consists of a 12 to 14 storey apartment building and three levels of underground parking. The redevelopment will be accessed by a driveway from Tannery Street. The proposed development is illustrated in **Drawing TP-1**.

## 5. Impact Assessment and Recommendations

#### 5.1 Tree Removals

A total of 29 trees are recommended for removal to accommodate the proposed re-development (see **TP-1 and TP-2**), of which 17 are in fair or good condition, nine (9) are in poor condition, four (2) are in fair-poor condition, and one is dead.

In addition, one tree (#467), located on adjacent private property, is recommended for removal due to poor structural condition and potential risk. One trunk leans toward the subject property and the other leans over a garage on the adjacent property. The tree exhibits branch and leader dieback,







broken/hanging branches, large patches of missing bark, and extensive trunk decay (**Photograph 1**). Permission from the adjacent property owner must be obtained in order to remove the tree.



Photograph 1. Tree 467 (March 2024)

#### 5.2 Tree Preservation

A total of 32 trees are identified for preservation (see **Drawings TP-1 and TP-2**), primarily along Mullet Creek in the southern portion of the property and along the CPR Railway to the north.

Tree health and structural integrity can be compromised by grade changes, soil compaction, root cutting, and mechanical damage to trunks and branches resulting from the operation of construction equipment.

Trees to be retained shall be protected through the establishment of a tree protection zone (TPZ). The minimum recommended TPZ is based on the DBH of the tree as indicated in **Table 1** and illustrated on **Figure 1**.

**Table 1. Minimum Tree Protection Zones** 

Trunk Diameter (cm)	Minimum TPZ (m)*
<10	1.2
10-29	1.8



Trunk Diameter (cm)	Minimum TPZ (m)*
30-40	2.4
41-50	3
51-60	3.6
61-70	4.2
71-80	4.8
81-90	5.4
91-100	6

<sup>\*</sup> to be measured from the outside edge of the base of the tree

The TPZ should be demarcated with tree protection hoarding consisting of solid wood hoarding as per City of Mississauga specifications or an alternative approved by the City. The location of tree protection hoarding and design specifications are illustrated **Drawings TP-1** and **TP-2**. Hoarding should be installed before any construction or site alteration takes place.

No grading, soil disturbance, or surface treatments shall occur within the TPZ and no equipment or materials shall be stored inside the TPZ.

In addition to the establishment of the TPZ, the following specifications are recommended to ensure the health and survival of any retained trees:

- Before the beginning of work, the contractor and qualified arborist, should meet on site to review work procedures, access routes, storage areas and the TPZ or other tree protection measures:
- Where underground utilities are to be installed, the route shall be outside any TPZ, or tunnelling or boring methods should be used for installation;
- Some tree roots may extend beyond the tree protection zone. Any root damage occurring during construction should be cut cleanly with a hand saw or pruning shears;
- Any injury to a tree during construction should be evaluated by a qualified arborist; and
- Any pruning of trees for construction clearance shall be performed by a qualified arborist.

#### 5.3 Tree Replacement/Compensation

To compensate for the loss of trees from the subject property, replacement trees should be planted in accordance with the City's *Terms of Reference for Arborist Reports, Tree Inventory/Survey & Tree Preservation Plans* (2022) as follows:

- One replacement tree for every 15 cm (6 inches) diameter of healthy private or public tree removed; and
- Replacement trees must be at least 1.8 m tall if it's a coniferous tree or at least 60 mm in diameter if it's a deciduous tree.

The aggregate diameter of healthy trees (assessed to be in fair or good condition) proposed for removal is 463 cm; therefore, 31 60 mm replacement trees are required, or an equivalent mix of smaller stock as approved by the City.



Should you have any questions, please contact the undersigned.

Prepared by:

**Beacon Environmental Ltd.** 

Dan Westerhof, B.Sc., M.E.S. Senior Terrestrial Ecologist,

ISA Certified Arborist (ON-1536A)

Reviewed by:

**Beacon Environmental Ltd.** 

Todd Smith, B.Sc., M.L.A., OALA, CSLA Senior Landscape Architect, Practice Lead, ISA Certified Arborist (ON-1608A)





# Appendix A





#### Attachment A

#### **Limitations of Tree Assessment**

It is the policy of Beacon Environmental Ltd. to attach the following clause regarding limitations of the tree assessment. The intent is to ensure that the client is aware of what is technically and professionally realistic in assessing and/or retaining trees.

The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These techniques 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 insect attack, crown dieback, 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 property and people. Except where specifically noted in the report, none of the trees examined were dissected, cored, probed, or climbed, and detailed root crown examinations involving excavation were not undertaken.

Notwithstanding the recommendations and conclusions made in this report, it must be recognized that trees are living organisms and their health and vigour constantly change over time. They are not immune to changes in site conditions, pests, or variations in the weather conditions including severe storms with high-speed winds. Furthermore, some symptoms may only be visible seasonally; the extent of observations that can be made may be limited by the time of year in which the inspection took place.

While reasonable efforts have been made to ensure that the trees recommended for retention are healthy unless stated otherwise within the report, no warranty or guarantees are offered, or implied, that these trees, or any parts of them, will have continued health or structure as noted in the report. 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 if provided with the necessary combinations of stresses and elements. This risk can only be eliminated if the tree is removed.

Although every effort has been made to ensure that this assessment is reasonably accurate, it is recommended that trees be re-assessed periodically to identify changes in condition. Design or site plan changes may also necessitate re-assessment and/or revisions to this report. The assessment presented in this report is valid at the time of the inspection and is intended for sole use of the client. Any use of this report by a third party, and any decision based on this report, is the singular responsibility of the third party.



# Appendix B





Photograph 1. View of trees (355-375) looking northeast toward residence (March 25, 2022)



Photograph 2. View of trees (447, 449, and 451) looking northeast (March 25, 2022)





Photograph 3. View of trees along Mullet Creek, looking southwest (April 25, 2022)



Photograph 4. View of trees looking northeast (355 and 356 in foreground)





Photograph 5. Aerial view of property, looking south from Tannery Street (February 2024)



Photograph 6. Aerial view of property, looking north toward Tannery Street (February 2024)





Photograph 7. Looking west at trees along Mullet Creek (February 2024)



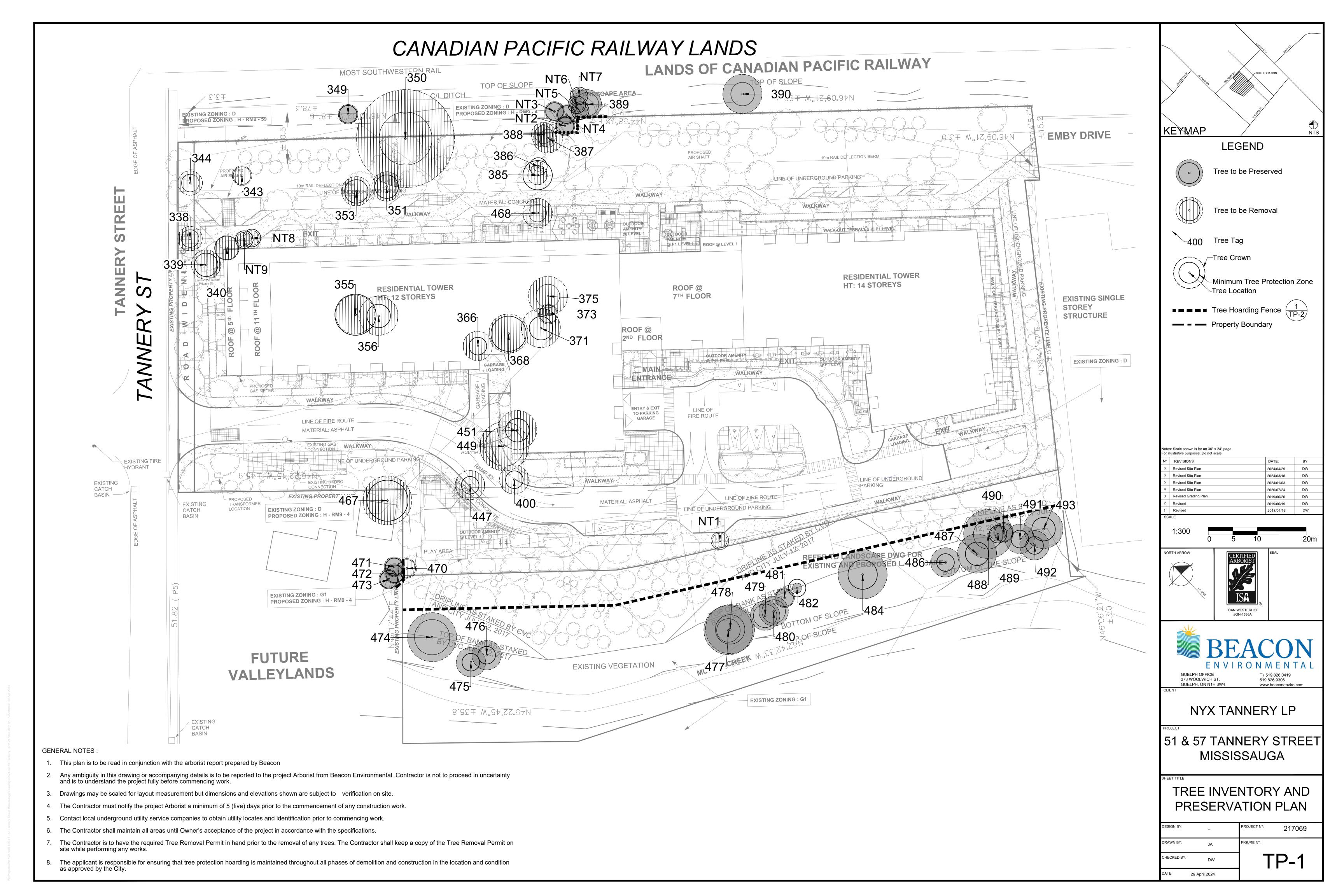
Photograph 8. Looking southwest Mullet Creek and Tannery Street (February 2024)





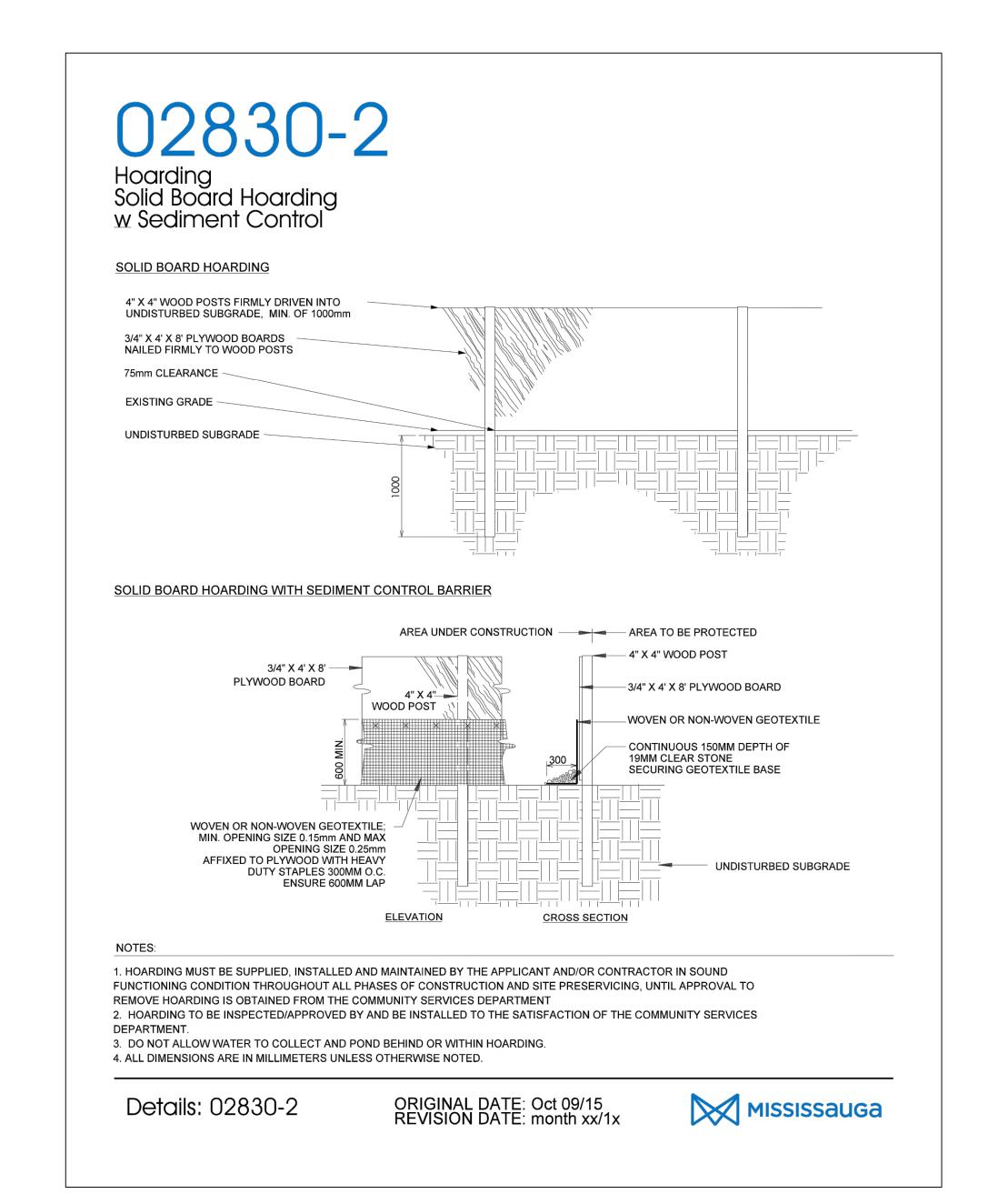
# Appendix C

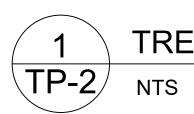
Tree Inventory and Preservation Plan



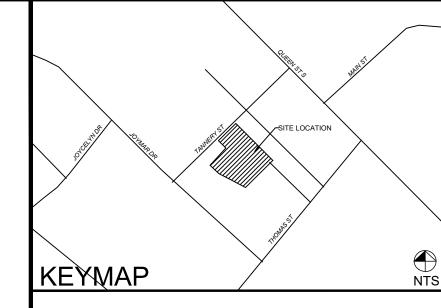
# TREE INVENTORY TABLE

<b>Tree #</b> 338	Species  Acer platanoides	Common Name Norway Maple	<b>DBH (cm)</b> 18	(m) 5	<b>Condition</b> Good	Comments Good form and vigour	TPZ Radius (m)	Ownership On-site	Recommendat  Remove
339	Picea pungens	Colorado Blue Spruce	37	6	Fair	Branch dieback	2.4	On-site	Remove
340	Picea pungens	Colorado Blue Spruce	34	5	Good	Dianell dieback	2.4	On-site	Remove
343	Magnolia sp.	Magnolia	14 (10,10)	4	Good		1.8	On-site	Remove
344	Acer platanoides	Norway Maple	19	5	Good		1.8	On-site	Remove
349	Juglans nigra	Black Walnut	15	4	Good		1.8	Adjacent - CPR	Protect
350	Salix x sepulcralis	Crack Willow	95	20	Fair	broken branches, cavity at 4 m	5.4	On-site	Remove
351	Acer negundo	Manitoba Maple	35	6	Poor	Significant dieback, poor form	2.4	On-site	Remove
353	Betula papyrifera	White Birch	36 (20,20,22)	6	Fair-Poor	Branch dieback	2.4	On-site	Remove
						old wound at base approx 1 m x 10 cm,			
355	Acer negundo	Manitoba Maple	69 (35,44,40)	8	Poor	significant dieback, overhead wires	4.2	On-site	Remove
356	Acer negundo	Manitoba Maple	36 (24,27)	8	Poor	Poor form, dieback, overhead wires	2.4	On-site	Remove
366	Acer negundo	Manitoba Maple	25	6	Poor	Severe lean	1.8	On-site	Remove
368	Acer negundo	Manitoba Maple	47 (28,38)	8	Fair-Poor	poor form, uneven crown, cavity at 4 m	3.6	On-site	Remove
371	Ulmus americana	White Elm	32	8	Fair		2.4	On-site	Remove
373	Juglans nigra	Black Walnut	27	4	Fair	uneven crown	1.8	On-site	Remove
374	Acer negundo	Manitoba Maple	20 (14,14)	1	Dead	basal sprouts	-	On-site	Remove
375	Acer negundo	Manitoba Maple	34	8	Poor		2.4	On-site	Remove
						one stem broken @ 2 m, one stem			
385	Acer negundo	Manitoba Maple	42 (25,33)	4	Poor	leaning with dead top, severe decline/nearely dead	3	On-site	Remove
386	Acer negundo	Manitoba Maple	21 (15,14)	2	Poor	poor form	1.8	On-site	Remove
387	Acer negundo	Manitoba Maple	31	6	Poor	Severe lean	1.8	On-site	Remove
388	Malus sp	Apple	23 (16,16)	5	Poor	poor form, nearly dead	1.8	On-site	Remove
389	Malus sp	Apple	33 (18,23,15)	6	Poor	extensive dieback	2.4	Adjacent - CPR	Protect
390	Ulmus pumila	Siberian Elm	37 (24,20,19)	8	Fair-Good	SACHERO GIOSGON	2.4	Adjacent - CPR	Protect
400	Juglans nigra	Black Walnut	25	6	Good		1.8	On-site	Remove
447	Juglans nigra	Black Walnut	22	6	Good		1.8	On-site	Remove
449	Juglans nigra	Black Walnut	49	10	Good		3	On-site	Remove
451	Juglans nigra	Black Walnut	34	8	Fair-Good	uneven crown	2.4	On-site	Remove
						knobby old trunk, large stub @ 2 m, dieback, broken branches, large hanging branch, dead leader, extensive decay in			
467	Acer negundo	Manitoba Maple	64 (38,50)	10	Poor	trunk, against garage	4.2	Adjacent - Private	Remove - Cond
468	Juglans nigra	Black Walnut	28	6	Good		1.8	On-site	Remove
470	Crataeagus sp	Hawthorn	29 (14,10,11)	4	Fair		1.8	On-site	Remove
471	Crataeagus sp	Hawthorn	19 (14,13)	4	Fair		1.8	Adjacent - Private	Protect
472	Crataeagus sp	Hawthorn	21 (16,14)	4	Fair		1.8	Adjacent - Private	Protect
473	Malus sp	Apple	23 (15,18)	4	Fair-Poor	one stem dead	1.8	Adjacent - Private	Protect
474	Populus deltoides	Cottonwood	55	10	Fair	Branch dieback	3.6	On-site	Protect
475	Juglans nigra	Black Walnut	20	6	Good	vine in crown	1.8	On-site	Protect
476	Juglans nigra	Black Walnut	28	6	Good	vine in crown lean toward creek, uneven crown,	1.8	On-site	Protect
477	Acer negundo	Manitoba Maple	39	10	Poor	dead/broken branches	2.4	On-site	Protect
478	Acer negundo	Manitoba Maple	40	10	Fair-Poor	sprawling, uneven form	3	On-site	Protect
479	Acer negundo	Manitoba Maple	35	6	Fair-Poor	ean north, dieback	2.4	On-site	Protect
480	Acer negundo	Manitoba Maple	35	6	Poor	split in crotch, one stem fallen over onto trailer along top of bank	2.4	On-site	Protect
481	Acer negundo	Manitoba Maple	16	4	Poor	significant lean south	1.8	On-site	Protect
482	Acer negundo	Manitoba Maple	10	2	Poor		1.8	On-site	Protect
483	Acer negundo	Manitoba Maple	46 (35,30)	1	Dead	dead trunk fallen over onto tableland	-	On-site	Protect
484	Acer negundo	Manitoba Maple	43 (26,24,24)	10	Poor	diverging stems, uneven crown, poor form, large branch split and fallen	3	On-site	Protect
486	Acer negundo	Manitoba Maple	25	6	Poor	significant dieback	1.8	On-site	Protect
487	Acer negundo	Manitoba Maple	28 (20,20)	8	Fair	down slope	2.4	On-site	Protect
488	Acer negundo	Manitoba Maple	40	10	Poor	tree split and fallen over into valley	3	On-site	Protect
489	Acer negundo	Manitoba Maple	10	3	Fair	arching east	1.8	On-site	Protect
490	Acer negundo	Manitoba Maple	14 (6,8,10)	Δ	Fair	<u> </u>	1.8	On-site	Protect
491	Acer negundo	Manitoba Maple	17	6	Fair-Poor	lean toward creek, dieback	1.8	On-site	Protect
492	Acer negundo	Manitoba Maple	16	6	Fair	uneven crown	1.8	On-site	Protect
492	Acer negundo	Manitoba Maple	28 (16,18,15)	8	Fair-Poor	branch/twig dieback	2.4	On-site	Protect
	Ulmus pumila	Siberian Elm	13	3	Fair-Good		1.8	On-site	Remove
NT1	Crataegus sp	Hawthorn	20 (12,11,11)	<u>A</u>	Fair		1.8	Adjacent-CPR	Protect
NT1 NT2	Crataegus sp	Hawthorn	15	4	Fair-Poor		1.8	Adjacent - CPR	Protect
NT2	لارت د ن	Norway Maple	15	4	Fair-Good		1.8	Adjacent-CPR	Protect
NT2 NT3	Acer platanoides	,	1.∪	_ <del>                                     </del>			1.8	Adjacent - CPR	Protect
NT2 NT3 NT4	Acer platanoides Acer platanoides		19	3	Fair	1		Aujacent - Crin	
NT2 NT3 NT4 NT5	Acer platanoides	Norway Maple	12 12	3	Fair Fair-Poor	poor form			
NT2 NT3 NT4 NT5 NT6	Acer platanoides Acer negundo	Norway Maple  Manitoba Maple	12	J	Fair-Poor	poor form Significant lean	1.8	Adjacent - CPR	Protect
NT2 NT3 NT4 NT5	Acer platanoides	Norway Maple		J		poor form Significant lean			





TREE PROTECTION FENCING DETAIL



For illustrative purposes. Do not scale Nº REVISIONS DATE: BY: 2024/04/29 Revised Site Plan 2024/03/18 Revised Site Plan 2024/01/03 2019/06/20 2019/06/19 2018/04/16 DW

Notes: Scale shown is for an 36" x 24" page.



NYX TANNERY LP

51 & 57 TANNERY STREET MISSISSAUGA

TREE INVENTORY AND PRESERVATION PLAN

217069 FIGURE Nº: RAWN BY: TP-2 CHECKED BY:

DW

29 April 2024