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ARBORIST REPORT & TREE PROTECTION PLAN

Attention:
Town of Burlington
426 Brant Street, PO Box 5013
Burlington, ON
L7R 3Z6

Project Address:
490,496,508 Walkers Line
Burlington, ON
L7N 2E2

Prepared by:
Lakeshore Tree Services Inc.
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Report created: April 6th, 2024

Report Revised: December 9th, 2024

Table of Contents

TITLE PAGE 1

TABLE OF CONTENTS 2

INTRODUCTION 3

SITE CONTEXT.....4

PLANS UTILIZED & TREE PROTECTION ZONES.....4

SITE OBSERVATIONS.....5

TREE PRESERVATION, INJURIES, & REMOVALS.....5-6

CONCLUSION..... 7

SITE PHOTOS 8- 13

RECOMMENDATIONS 14

LIMITATIONS OF ASSESSMENTS 15

TREE INVENTORY & ASSESSMENT 16

TREE PROTECTION PLAN 17

TREE PROTECTION HOARDING / FENCING 18

ARBORIST REPORT & TREE PROTECTION PLAN 490,496,508 Walkers Line Burlington, ON L7N 2E2

Introduction

Lakeshore Tree Services Inc. has been retained to prepare this Arborist Report & Tree Protection Plan for the property at 490,496,508 Walkers Line Burlington, Ontario, Ward 4. The tree assessment was completed on September 26th, 2023 according to the requirements set forth by the City of Burlington Urban Forestry. The purpose of this report is to inventory and assess trees ≥ 20cm dia. on the subject property, within 6m of the proposed construction, and any trees in the city road allowance adjacent to the property.

The subject properties 490,496, & 508 Walkers Line currently have two 1-storey dwellings and one historical 3-storey dwelling. The proposal for these properties is to demolish the existing two 1-storey dwellings and keep the historical dwelling and build sixteen new townhouse units. There will also be a new driveway built to allow for access to the townhouses and five visitor parking spaces and one handicap parking space. Storm water management tanks and a new storm water management pipeline will be constructed.

To facilitate the construction for the proposed development fourteen (14) privately owned and neighbouring boundary trees that are >20cm in diameter will need to be removed due to their existing conditions and/or location. These removals will require permits and neighbouring properties permission to remove. There are twenty five (25) trees for removal that are under 20cm in diameter; " 5.1 No person shall: (b) cause or permit the injury, destruction or removal of more than five (5) trees with a Diameter at Breast Height of greater than 10 cm and less than 20 cm in one calendar year. "

Those twenty-five (25) trees are composed of privately owned trees. Any neighbouring trees will also require neighbouring properties' permission to remove. A permit is required from Burlington Urban Forestry for these removals due to City of Burlington By-law 02-2020: Section 5.1 (b). Individual removal permits will be sought for Trees #02,05,06,08,10,11,12,13,14,17,18,19,20,21,22,23,26,28,30,31,32,33,4W,5W,6W.

There are five (5) neighbouring trees that will be injured from various proposed construction in order to facilitate the development these trees will all need individual permits from the city of Burlington. In addition there are two (2) private non-neighbouring trees and one (1) municipally owned tree (#2E) that will be injured for a final total of eight (8) injuries. A permit is required from Burlington Urban Forestry for these injuries due to City of Burlington By-law 02-2020: Section 5.1 (b). Individual injury permits will be sought for Trees #2E,6E,7E,1S,2S,3S,4S,2N.

As a result of the proposed privately owned tree removals due to the proposed works, my client is required to plant trees on private property as compensation. The number of compensation plantings, the species and planting location of the compensation trees is to be determined in conjunction with Burlington Urban Forestry.

My client may wish to exercise their option of paying Burlington Urban Forestry cash-in-lieu for any of the compensation trees not planted on their property.

Tree protection hoarding/fencing should be installed prior to any demolition or construction activities as outlined on sheets T1-T2.

Site Context

The subject site is 490,496, & 508 Walkers line located on the west side of Walkers Line in Burlington. The subject site is three residential properties surrounded by neighbouring residential sites.

Plans Utilized

The plans utilized for this inventory and proposed works were a survey under a proposed site plan with existing tree locations.

Tree Inventory

The trees inventoried were those on the subject property and those within 6m of the subject property. The trees were inventoried by botanical species and measured at 1.4m from grade (DBH). The trees were assessed upon their current condition and overall health.

Tree Protection Zones

City of Burlington Tree Protection Standards (Table Below). Trees are recommended for preservation or removal based on the proximity of the TPZ to the limit of construction, in conjunction with the overall health, size and anticipated ability to withstand root or crown impacts.

Table 1 – Minimum Tree Protection Zones

Trunk Diameter (DBH) [2]	Minimum Tree Protection Zone (MTPZ) Distances Required [3]	Critical Root Zone (CRZ) Distances Required [3&4]
< 10 cm	1.8 m	1.8 m
11 - 40 cm	2.4 m	4.0 m
41 - 50 cm	3.0 m	5.0 m
51 - 60 cm	3.6 m	6.0 m
61 - 70 cm	4.2 m	7.0 m
71 - 80 cm	4.8 m	8.0 m
81 - 90 cm	5.4 m	9.0 m
91 - 100+ cm	6.0 m	10.0 m

Site Observations

The existing trees on the subject property and surrounding properties are composed of primarily immature to mature trees planted for landscape purposes and some naturalized groupings. The species primarily found on subject and surrounding properties were White Mulberry, Black Locust, Black Walnut, Cedars, Junipers, Colorado Blue Spruce, Catalpa, Silver Maple, Norway Maple, and Manitoba Maple. The trees ranged from good to poor conditions with comments regarding their current health and conditions some having comments raising concern for their existing condition resulting in the removal due to concerns regarding the structural integrity and long term health.

Tree Preservation

The trees on the subject property and surrounding properties that will be preserved through the proposed construction. All the trees are required to be protected with tree protection hoarding before any construction and will remain protected until construction is completed. The other trees are all under 20cm in diameter on private property and do not require to be protected. Tree protection hoarding/fencing should be installed as outlined on sheet T1. Tree protection hoarding details can be found on sheet T2.

Trees to be Impacted/ Injured

The following tree #2E on the neighbouring property will be injured due to the removal of the existing driveway on the north side of the property which will occur 1.1m away from the base of the tree. The following trees on the neighbouring property will be injured due to the overdig, demolition of the existing dwelling, and the construction of the new townhouse units on the south side.

The injuries to tree #1S occur 3.4m away from the base of the tree. Tree #2S is being injured due to the removal of the existing dwelling and is 1.8m away from the base of the tree. Trees #3S will be injured due to the new walkway being constructed along the south side of the property. The walkway is being constructed 1.8m away from the base of tree #3S and the existing shed is to be removed which is immediately beside tree#3S. Tree #4S is being injured 2.2m away from the base of the tree due to the new walkway to be constructed. Tree #6E and tree #7E is being injured due to construction of a storm management pipe at 3m from the base and 2.4m respectively. Trees #1S, #2S, #3S, #4S, #6E, #7E are all being injured due to proximity to the proposed storm management pipe. It is unclear at this time the severity of injury as it will depend on the construction method. Any of the neighboruing trees that are proposed to be injured will require written signed permission from the adjacent landowner.

Tree #2N is being injured due to the removal of the existing dwelling 1.7m away from the base. The impact should be minimal and not have significant impact on the trees' long-term health and condition.

Trees to be Removed

The following private property trees require permits to be removed to facilitate the construction of the new townhouse units, walkways, and driveway. Trees #01,03,04,07,09,15,16,24,27,29,34 all these trees are in the areas of the proposed townhouse units, walkways, and driveway and will need to be removed to facilitate the proposed works. All these trees will require permits to be removed and compensation planting to be decided upon by Burlington Urban Forestry. My client may wish to exercise their option of paying Burlington Urban Forestry cash-in-lieu for any of the compensation trees not planted on their property.

Trees 3N is within the areas of the proposed townhouse units, walkways, and driveway. The tree is on neighbouring private property that require neighbouring properties permission and permits from the Burlington Urban Forestry to be removed. The tree will require a permit to be removed and compensation planting to be decided upon by Burlington Urban Forestry. My client may wish to exercise their option of paying Burlington Urban Forestry cash-in-lieu for any of the compensation trees not planted on their property.

Tree #25 is within the area of a proposed bioswale and will need to be removed to facilitate this. A permit will be required for this removal and compensation planting to be decided upon by Burlington Urban Forestry. My client may wish to exercise their option of paying Burlington Urban Forestry cash-in-lieu for any of the compensation trees not planted on their property.

Tree #35 is within the area of a proposed storm water management tank and will need to be removed to facilitate this. A permit will be required for this removal and compensation planting to be decided upon by Burlington Urban Forestry. My client may wish to exercise their option of paying Burlington Urban Forestry cash-in-lieu for any of the compensation trees not planted on their property.

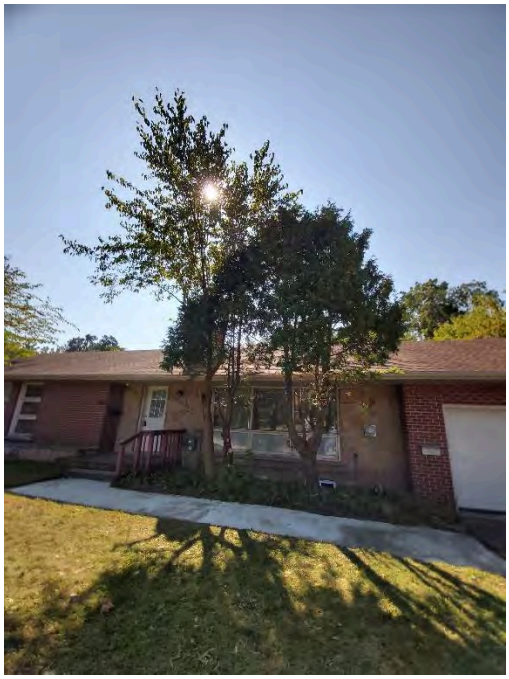
The remaining trees to be removed are under permit size but due to quantity and the City of Burlington By-law 02-2020: Section 5.1 (b). Individual removal permits will be sought for Trees #02,05,06,08,10,11,12,13,14,17,18,19,20,21,22,23,26,28,30,31,32,33,4W,5W,6W. All these trees will require permits to be removed and compensation planting to be decided upon by Burlington Urban Forestry. My client may wish to exercise their option of paying Burlington Urban Forestry cash-in-lieu for any of the compensation trees not planted on their property.

Tree Preservation, Injuries, & Removals Conclusion

The demolition of the two 1-storey dwellings, proposed driveway, sixteen townhouse units and the new walkways require many removals and injuries. All removals will require a permit, or if situated on the property line, permission from the neighbour. There are twenty five (25) total trees under 20cm in diameter on the subject and neighbouring properties that will require individual permits to be removed along with letters of approval from the neighbouring properties in order to remove the neighbouring trees. The trees that are being injured and preserved through construction should follow the tree protection plan. Any trees that are being injured and have construction activities within the tree protection zones is recommended to have an arborist on site to supervise the construction to ensure minimal injuries occur and proper arboriculture practices are used. The rest of the trees on the subject property and surrounding properties that are over 20cm in diameter are to be preserved and protected with tree protection hoarding according to T1 and T2. This report should be reviewed with document T1 the tree inventory and protection plan, and the tree inventory spreadsheet to review and assess the impacts that will occur to the trees on the subject and neighbouring sites.

Tree protection hoarding/fencing along with root protection measures should be installed prior to any demolition or construction activities as outlined on sheets T1-T2.

Site Photos

	
Tree #01,3N	Tree #02,5W,6W
	
Tree #03 &04, 4W	Tree #05,06,07

	
Tree #08,09	Tree #10,11,12
	
Mulberry Grouping Trees #14-24	Mulberry Grouping Trees #14-24 and Tree #25 In the left corner

	
Mulberry Grouping Trees #14-24 and Tree #3W in the left corner	Tree #27 & 28
	
Tree #29	Tree #30



Tree #31,32,33, & 3S



Tree #34



Tree #35



Tree #35,36,37,38,39



Tree #1S & 2S



Tree # 1N & 2N



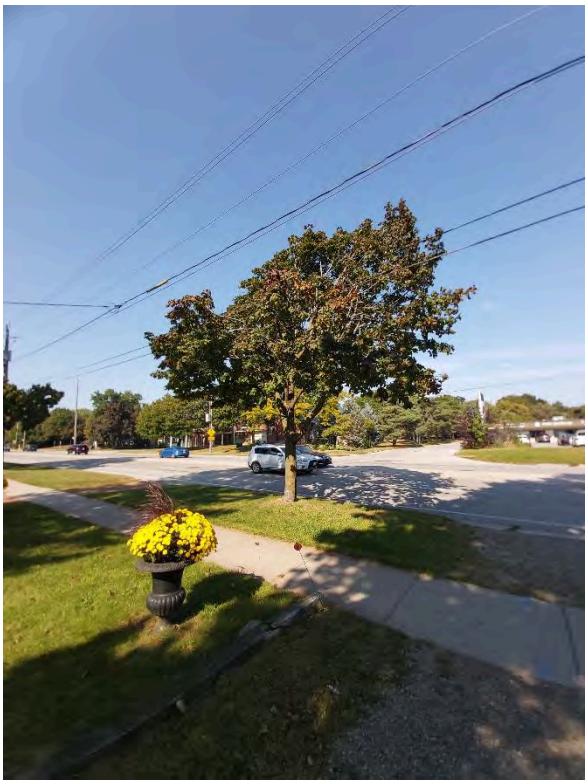
Tree #3N



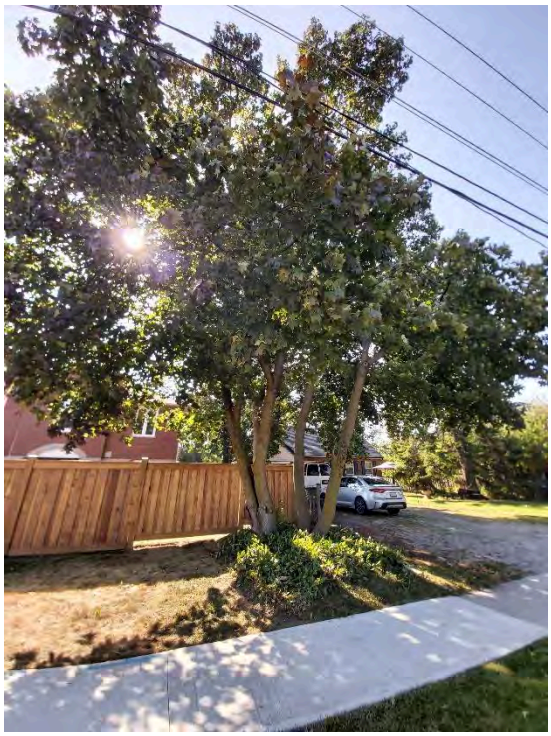
Tree #1E & 2E



Tree #3E & 4E



Tree #5E



Tree #6E & 7E



Tree #1W & 2W

GENERAL RECOMMENDATIONS

The following recommendations are given to maximize the health and protection of all trees near construction:

1. No groundbreaking activities or demolition of existing dwelling should occur until all tree preservation requirements have been met. Of primary concern is the erection of proper hoarding to establish the tree protection zones (TPZ).
2. An Arborist should be consulted for all site work that impacts the Tree Protection Zone (TPZ).
3. No roots larger than 5cm in diameter are to be cut. If roots 5cm in diameter are found during excavation Urban Forestry MUST be contacted. Roots 5cm in diameter or smaller must be cut cleanly by a Certified Arborist.

RECOMMENDATIONS FOR TREES PROPOSED TO BE INJURED

The following recommendations are given for the trees that are proposed to be injured in the interest of maximizing their health and longevity.

1. Fertilize via "deep root feeding" as large an area as possible within the TPZ of these trees. The fertilizer should be low in nitrogen and high in phosphorous in order to promote new root growth to compensate for any root loss during construction. Ideally this work would occur prior to injury, however it can be done post-injury.

2. Following construction mulch the base of these trees with 75mm of composted wood chips (free of disease and dyes) as large an area as possible within the TPZ of these trees.

LIMITATIONS OF ASSESSMENTS

It is the policy of Lakeshore Tree Services Inc. to attach the following clause in regards to limitations. This is to ensure that the client is fully aware of what is technically and professionally realistic in the preservation and assessment of trees in the urban environment.

The assessment of the trees in this report has been done in conjunction with and according to accepted arboriculture methods and techniques. These include an examination of the above ground parts of the tree for structural defects, scars, cracks, the overall condition of the root structures, the severity and direction of lean (if any), the general condition of the trees and the surrounding environment, external indications of decay such as fungal fruiting bodies, evidence of attack by insects, symptoms of infestation and pathogens, discoloured foliage, and the proximity of potential targets should a tree fail. Except where specifically noted, the trees were not cored, probed or climbed and there was no detailed inspection of the root crowns involving excavations, or samples taken to be scientifically tested.

Notwithstanding the recommendations and conclusions presented in this report, it must be acknowledged that trees are living organisms. They are not immune to changes in site conditions, dramatic weather events or seasonal variations in climate. Therefore it should always be recognized that trees are ever evolving and their health and vigour constantly vary over time. While all reasonable efforts have been made to ensure that the subject trees are healthy, no guarantees are offered or implied that these trees or part(s) of any trees will remain intact.

It is professionally and practically impossible to predict with absolute certainty the behaviour of any tree or its component parts under all circumstances and variables. Most trees have the potential for failure under adverse weather conditions and the risk can only be completely eliminated if the tree is removed. Inherently, a standing tree will always pose some level of risk. 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 inspection.

This report is property of Lakeshore Tree Services Inc. and/or its agents and may not be used until payment is made in full unless written permission is granted. Lakeshore Tree Services Inc. reserves the right to withdraw this report and its recommendations, if any requirements are not met. All details and graphics are copyright of Lakeshore Tree Services Inc.

On behalf of **Lakeshore Tree Services Inc.**



Jeffrey Hocking,
Certified Arborist
ISA ON-2957A



ON-2957A

TREE INVENTORY & ASSESSMENT - 490, 496 and 508 Walkers Line

DATE: 26 September 2023

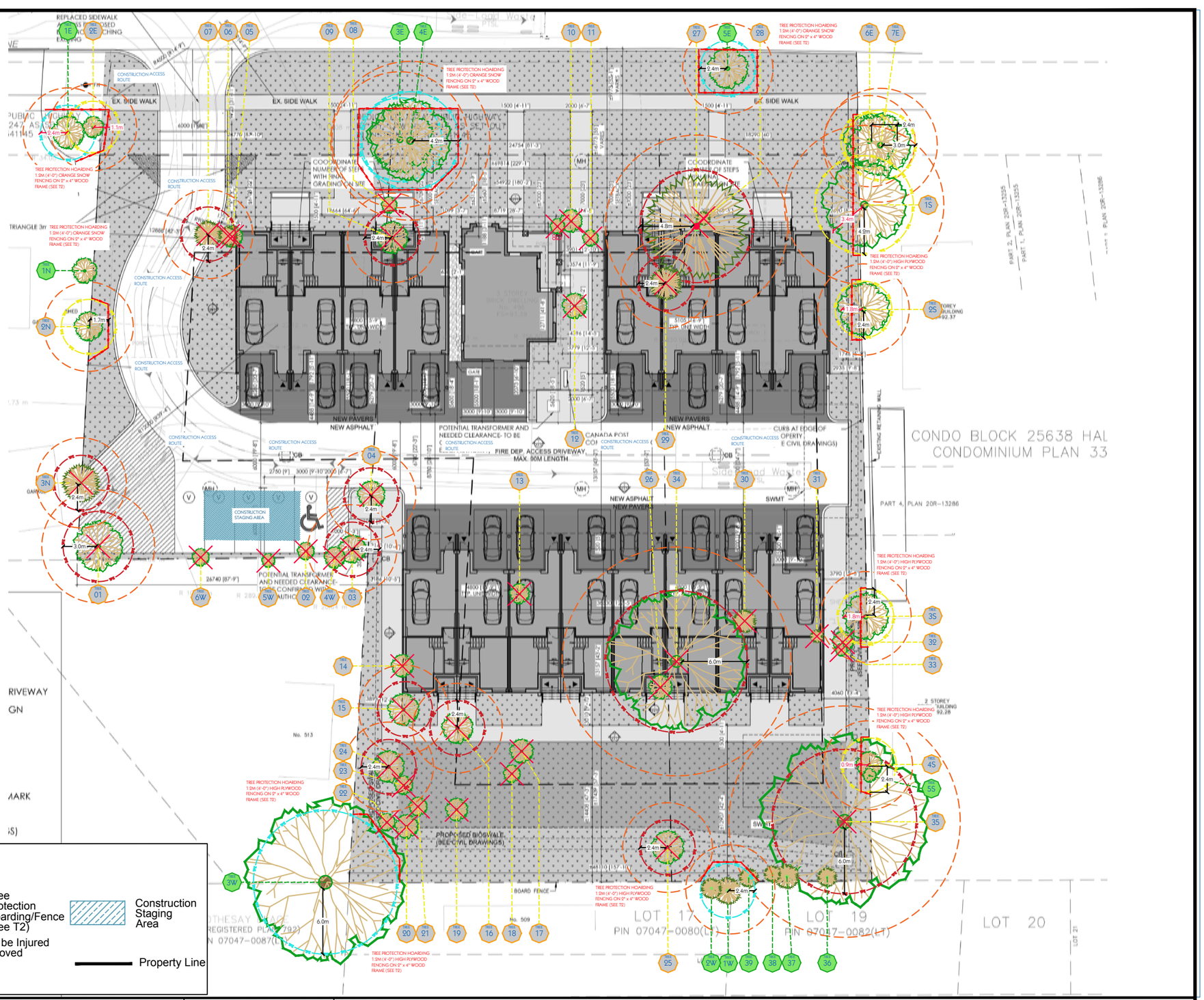
Tree #	Common Name	Botanical Name	Dia. (cm)	R.Z.	T.I.	C.S.	C.V.	Category	Min. TPZ (m)	Critical Root Zone (m)	Comments	Proposed
01	White Mulberry	*Morus alba*	38.25	F	P	P	F	1	3.0	5.0	Codominance [28,22,14] deformed trunks, watersprouts, leaning leaders	Remove (P)
02	Black Locust	*Robinia pseudoacacia*	13	F	F	P	P	0	NA	NA	Virginia creeper infestation, suppressed	Remove (P)
03	White Mulberry	*Morus alba*	21	F	P	F	F	1	2.4	4.0	Codominance [11,11,10,10], epicormic shoots, leaning leaders	Remove (P)
04	White Mulberry	*Morus alba*	21	F	P	F	F	1	2.4	4.0	Codominance [14,12,9], epicormic shoots, leaning leaders	Remove (P)
05	White Mulberry	*Morus alba*	16	F	F	F	F	0	NA	NA	Suppressed by adjacent vegetation	Remove (P)
06	Cedar	*Thuja occidentalis*	14	F	F	F	F	0	NA	NA	Suppressed by adjacent vegetation	Remove (P)
07	Cedar	*Thuja occidentalis*	20	F	P	F	F	1	2.4	4.0	Codominant at base [14,14], suppressed by adjacent vegetation	Remove (P)
08	White Mulberry	*Morus alba*	12	F	F	F	F	0	NA	NA	Multi Stem (10,4,4)	Remove (P)
09	White Mulberry	*Morus alba*	24	F	F	F	F	1	2.4	4.0	Multi Stem (15,15,12)	Remove (P)
10	White Mulberry	*Morus alba*	17	F	F	F	F	0	NA	NA	Multi Stem (10,10,9)	Remove (P)
11	White Mulberry	*Morus alba*	12	F	P	F	F	0	NA	NA	Multi Stem (8,7,6)	Remove (P)
12	White Mulberry	*Morus alba*	19	F	F	P	F	0	NA	NA	Multi Stem (13,10,10)	Remove (P)
13	White Mulberry	*Morus alba*	15	F	F	F	F	0	NA	NA	Naturalized grouping	Remove (P)
14	White Mulberry	*Morus alba*	17	F	P	F	P	0	NA	NA	Naturalized grouping	Remove (P)
15	White Mulberry	*Morus alba*	20	F	F	F	F	1	2.4	4.0	Naturalized grouping	Remove (P)
16	White Mulberry	*Morus alba*	25	F	P	F	F	1	2.4	4.0	Naturalized grouping	Remove (P)
17	White Mulberry	*Morus alba*	18	F	F	P	F	0	NA	NA	Naturalized grouping	Remove (P)
18	White Mulberry	*Morus alba*	13	F	F	F	F	0	NA	NA	Naturalized grouping	Remove (P)
19	White Mulberry	*Morus alba*	17	F	P	F	F	0	NA	NA	Naturalized grouping	Remove (P)
20	White Mulberry	*Morus alba*	18	F	F	F	P	0	NA	NA	Naturalized grouping	Remove (P)
21	White Mulberry	*Morus alba*	14	F	F	F	F	0	NA	NA	Naturalized grouping	Remove (P)
22	White Mulberry	*Morus alba*	13	F	F	F	F	0	NA	NA	Naturalized grouping	Remove (P)
23	White Mulberry	*Morus alba*	14	F	F	P	F	0	NA	NA	Naturalized grouping	Remove (P)
24	White Mulberry	*Morus alba*	22	F	F	F	F	1	2.4	4.0	Naturalized grouping	Remove (P)
25	White Mulberry	*Morus alba*	25	P	P	F	F	1	2.4	4.0	Overburden at base, multi stemmed	Remove (P)
26	White Mulberry	*Morus alba*	18	F	F	F	F	0	NA	NA	Naturalized grouping	Remove (P)
27	White Spruce	*Picea glauca*	78	F	P	F	F	1	4.8	8.0	Codominance, bark inclusion, compromised union, exposed roots	Remove (P)
28	Juniper	*Juniperus sp.*	10	F	F	F	F	0	NA	NA		Remove (P)
29	Cedar	*Thuja occidentalis*	24	F	F	F	F	1	2.4	4.0		Remove (P)
30	Colorado Blue Spruce	*Picea pungens*	17	G	G	G	G	0	NA	NA		Remove (P)
31	Colorado Blue Spruce	*Picea pungens*	9	F	F	G	F	0	NA	NA		Remove (P)
32	Catalpa	Catalpa sp.	16	F	F	F	F	0	NA	NA		Remove (P)
33	Catalpa	Catalpa sp.	9	F	F	F	F	0	NA	NA		Remove (P)
34	Norway Maple	*Acer platanoides*	106	P	P	F	F	1	6.0	10.0	Significant trunk cavity at base, insect damage, active decay, compromised structurally	Remove (P)
35	Silver Maple	*Acer saccharinum*	129	P	P	F	F	1	6.0	10.0	Significant unhealed wounds, insect damage, fruting bodies, active decay, compromised structurally	Remove (P)
36	Cedar	*Thuja occidentalis*	14*	G	F	F	F	0	NA	NA	Back property line	Preserve
37	Cedar	*Thuja occidentalis*	18*	F	G	F	F	0	NA	NA	Back property line	Preserve
38	Cedar	*Thuja occidentalis*	12*	F	G	G	F	0	NA	NA	Back property line	Preserve
39	Cedar	*Thuja occidentalis*	14*	F	F	F	F	0	NA	NA	Back property line	Preserve

1N	White Mulberry	*Morus alba*	19	F	P	P	F	2	NA	NA	Multi Stem (12,10,10)	Preserve
2N	White Mulberry	*Morus alba*	22	F	F	F	F	2	2.4	4.0	Multi Stem (18,12)	Injury (P)
3N	Juniper	*Juniperus sp.*	28	F	F	F	F	2	2.4	4.0	Neighbouring tree/ Boundary tree	Remove (P)
1E	Catalpa	*Catalpa sp.*	25	G	F	F	G	5	2.4	4.0	Neighbouring tree	Preserve
2E	Manitoba Maple	*Acer negundo*	16*	F	F	P	F	5	2.4	4.0	Municpal tree	Injury (P)
3E	Norway Maple	*Acer platanoides*	51	F	F	F	F	5	3.6	6.0	City tree, Multi Stem (37,34)	Preserve
4E	Norway Maple	*Acer platanoides*	62	F	F	F	F	5	4.2	7.0	City tree, Multi Stem (53,33)	Preserve
5E	Norway Maple	*Acer platanoides*	31	F	F	F	F	5	2.4	4.0	Overhead wires, minor dieback, minor deadwood present in canopy, City tree	Preserve
6E	Norway Maple	*Acer platanoides*	40	F	F	F	F	5	2.4	4.0	Multi Stem (29,28) , Neighbouring tree	Injury (P)
7E	Norway Maple	*Acer platanoides*	47	F	F	F	F	5	3.0	5.0	Multi Stem (35,32)	Injury (P)
1S	Norway Maple	*Acer platanoides*	65	F	F	F	F	2	4.2	7.0	Neighbouring tree	Injury (P)
2S	Norway Maple	*Acer platanoides*	40	F	F	F	F	2	2.4	4.0	Neighbouring tree	Injury (P)
3S	Black Walnut	*Juglans nigra*	35	F	F	F	F	2	2.4	4.0	Multi Stem (26,24)	Injury (P)
4S	Manitoba Maple	*Acer negundo*	20	F	F	F	F	2	2.4	4.0	Neighbouring tree	Injury (P)
5S	Manitoba Maple	*Acer negundo*	10*	F	P	F	P	0	NA	NA	Neighbouring tree	Injury (P)
1W	Cedar	*Thuja occidentalis*	20	F	F	F	F	2	2.4	4.0	Neighbouring tree	Preserve
2W	Cedar	*Thuja occidentalis*	15*	F	F	F	F	0	NA	NA	Neighbouring tree	Preserve
3W	Silver Maple	*Acer saccharinum*	123	F	F	F	F	5	6.0	10.0	Neighbouring tree	Preserve
4W	Tree of Heaven	*Ailanthus altissima*	16	F	F	F	F	0	NA	NA	Neighbouring tree	Remove (P)
5W	White Mulberry	*Morus alba*	10	F	F	F	F	0	NA	NA	Neighbouring tree	Remove (P)
6W	White Mulberry	*Morus alba*	13	P	P	F	F	0	NA	NA	Seepage, structurally compromised	Remove (P)
			25									39

preserve - tree proposed to be preserved, not being injured or removed
INJURY (P) - tree proposed to be injured - permit required
remove - tree to be removed - no permit required
REMOVE (P) - tree proposed to be removed - permit required

Tree # - this number refers to the number on the tree assessment and plan - only the last three numbers on the tree tag are referenced
Species - the common name and botanical name for each tree are provided
Diameter - refers to diameter (in centimeters) measured at 1.4 m above finished grade
Root Zone (R.Z.) - this is an assessment of the growing conditions within the root zone of the tree. It is measured on a scale of Good, Fair, Poor
Trunk Integrity (T.I.) - this is an assessment of the trunk for any defects or weaknesses. It is measured on a scale of Good, Fair, Poor
Canopy Structure (C.S) - this is an assessment of the scaffold branches and the canopy of the tree. This is also measured on a Good, Fair, Poor
Canopy Vigour (C.V.) - this is an assessment of the health of the tree and assesses the amount of deadwood and live growth in the crown as compared to a 100% healthy tree. The condition of the foliage is also considered.
Tree Protection Zone (TPZ) - minimum Tree Protection Zone as recommended by the City of Burlington. This distance is based on the diameter of the tree and the protection zone is measured from the trunk.

Categories
0. Trees with diameters of less than 20 cm, situated on private property on the subject site.
1. Trees with diameters of 20 cm or more, situated on private property on the subject site.
2. Trees with diameters of 20 cm or more, situated on private property, within 6 m of the subject site.
3. Trees of all diameters situated on City owned parkland within 6 m of the subject site.
4. Trees of all diameters situated within lands designated under lands under local conservation authority protection.
5. Trees of all diameters situated within the City road allowance adjacent to the subject site.



Legend

- Existing Deciduous Tree
- Existing Evergreen Tree
- Tree Protection Zone (TPZ)
- Tree Protection Zone (TPZ) - Proposed for Injury
- Tree to be Preserved Tree #
- Tree Protection Zone (TPZ) - Proposed for Injury
- Tree Protection Hoarding/Fence (See T2)
- Tree to be Injured or Removed Tree #
- Construction Staging Area
- Property Line

Lakeshore Tree Services Inc.

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Project Address

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BURLINGTON, ON
L7N 2E2

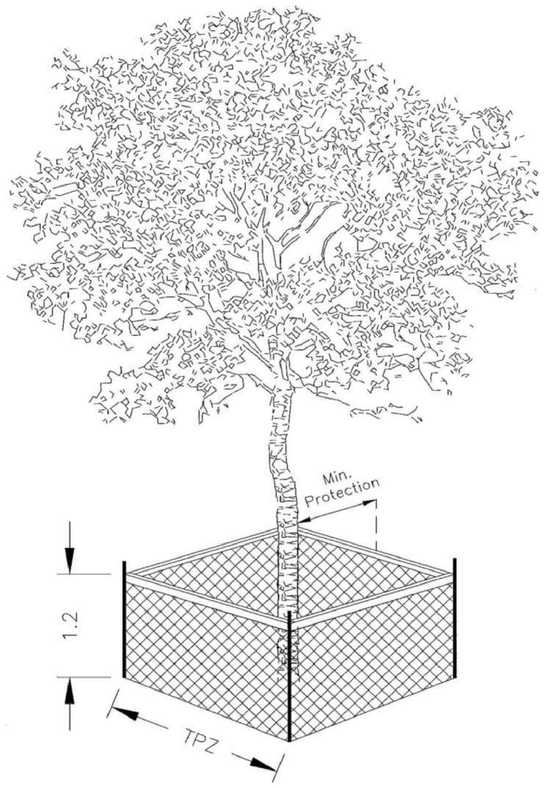
Title

TREE PROTECTION PLAN

Scale	1:350
Drawn	JH
Checked	JH
Date	Dec. 2024
Project #	#23078

Sheet

T1



Detail TP-1 – Tree Protection Detail.

Trunk Diameter (DBH) [2]	Minimum Tree Protection Zone (MTPZ) Distances Required [3]	Critical Root Zone (CRZ) Distances Required [3&4]
< 10 cm	1.8 m	1.8 m
11 - 40 cm	2.4 m	4.0 m
41 - 50 cm	3.0 m	5.0 m
51 - 60 cm	3.6 m	6.0 m
61 - 70 cm	4.2 m	7.0 m
71 - 80 cm	4.8 m	8.0 m
81 - 90 cm	5.4 m	9.0 m
91 - 100+ cm	6.0 m	10.0 m

NOTES:

[1] The roots of a tree can extend from the trunk to approximately 2-3 times the distance of the drip line.
[2] Diameter at breast height (DBH) is the measurement of tree trunk taken at 1.4 metres above ground.
[3] Minimum Tree Protection Zone and Critical Root Zone distances are to be measured from the outside edge of the tree base towards the drip line and may be limited by an existing paved surface, provided the existing paved surface remains intact throughout the construction work and is subject to Section 6 of this specification.
[4] Where work is being performed beyond the Minimum Tree Protection Zone but within the Critical Root Zone the works are subject to Section 8 of this specification.

TREE PROTECTION BARRIER

1. The required barrier is a 1.2 metre (4 ft) high orange plastic web snow fencing on 2" x 4" frame. Where orange plastic web snow fencing creates a restriction to sightlines, page wire fencing with reflective tape can be used.
2. Tree protection barriers are to be erected prior to the commencement of any construction or grading activities on the site and are to remain in place throughout the entire duration of the project. The barriers shall be maintained erect and in good repair throughout the duration of construction operations with breaks and unsupported sections repaired immediately. Tree protection may be not be removed prior to the completion of construction without written authorization from the Manager of Urban Forestry or designate.
3. All supports and bracing used to safely secure the barrier should be located outside the MTPZ. All supports and bracing should minimize damage to roots.
4. Where some fill or excavated material must be temporarily located near a MTPZ, a wooden barrier with silt fencing must be used to ensure no material enters the MTPZ.
5. No materials or fill may be stored within the MTPZ.
6. Equipment or vehicles shall not be operated, parked, repaired, or refueled within the MTPZ.
7. No construction activity, grade changes, surface treatment or excavations of any kind is permitted within the MTPZ without written authorization from the Manager of Urban Forestry or designate.
8. A laminated Minimum Tree Protection Zone sign (See Detail TP-3 – Minimum Tree Protection Zone Sign) must be attached to the side of the Tree Protection where it will be visible by persons entering the site. Minimum size must be 10"x14".

CITY OF Burlington

TREE PROTECTION ZONE (TPZ)

No equipment or vehicles shall be operated, parked, repaired or refueled within the Tree Protection Zone.

No construction activity, grade changes, surface treatment or excavations of any kind is permitted within the Tree Protection Zone.

No materials or fill may be stored within the Tree Protection Zone.

This tree protection barrier must not be removed prior to the completion of construction without written authorization from the City of Burlington, Urban Forestry Department.

For information, contact:
City of Burlington, Development and Infrastructure Division,
905-335-7642.

Detail TP-3 – Minimum Tree Protection Zone Sign

Lakeshore Tree Services Inc.
1011 Upper Middle Road E. Suite 1550
Oakville ON L6H 5Z9
905-407-5253
lakeshoretreeservices@gmail.com

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Project Address
490,496,508 WALKERS LINE
BURLINGTON, ON
L7N 2E2

Title
TREE PROTECTION DETAILS

Scale	N.T.S.
Drawn	JH
Checked	JH
Date	April 2024
Project #	#23078

Sheet
T2