Tree Inventory & Preservation Plan Report
2243 and 2269 Fairview Street and 864 Drury Lane – Phase 1
Burlington, Ontario

prepared for

Fairview Limited Partnership
2386 New Street
Burlington, Ontario L7R 1J7

prepared by

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KUNTZ FORESTRY CONSULTING Inc. Project P1973

Introduction

Kuntz Forestry Consulting Inc. was retained by Fairview Limited Partnership to complete a Tree Inventory and Preservation Plan report in support of a development application for properties located at 2243 and 2269 Fairview Street and 864 Drury Lane in the City of Burlington, Ontario. The site is located on the northwest corner of Fairview Street and Drury Lane.

The work plan for this tree preservation study included the following:

- Prepare inventory of the tree resources over 10 cm in diameter on private lands and trees of all sizes within the road right-of-way;
- Evaluate potential tree saving opportunities based on proposed development plans; and,
- Document the findings in a Tree Inventory and Preservation Plan report.

Tree resources were visually assessed for condition utilizing the following parameters:

Tree # - numbers assigned to trees that corresponds to Figure 1.
Species - common and botanical names provided in the inventory table.
DBH - diameter (centimeters) at breast height, measured at 1.4 m above the ground.
Condition - condition of tree considering trunk integrity, crown structure and crown vigor. Condition ratings include poor (P), fair (F) and good (G).
Comments - additional relevant detail.

The results of the evaluation are provided below.

Methodology

Trees measuring over 10cm DBH on private lands and trees of all sizes on the road right-of-way were included in the tree inventory. Trees were located using topographic survey provided for the subject property and aerial imagery downloaded from the City of Burlington website. Trees included in the inventory were numbered 1-47. Tree locations are shown on Figure 1. See Table 1 for the results of the inventory.

Existing Site Conditions

The subject properties are currently occupied by several commercial buildings, and associated amenity areas and parking lots. Tree resources exist in the form of landscape trees and natural generation. Refer to Figure 1 for the existing site conditions.

Individual Tree Resources

The tree inventory was conducted on 18 October 2018. The inventory documented 42 trees on and within six metres of the subject properties. The second inventory was conducted on 8 June 2022. Four additional trees growing over 10cm DBH since the first inventory and one tree requested by the City were added into the inventory (47 trees in total). Refer to Table 1 for the full tree inventory and Figure 1 for the location of trees reported in the tree inventory. See Appendix A for the photographs of the trees.

Tree resource was comprised of Freeman Maple (*Acer freemanii*), Norway Maple (*Acer platanoides*), Globe Norway Maple (*Acer platanoides 'Globosum'*), Serviceberry Species (*Amelanchier spp*.), European Beech (*Fagus sylvatica*), Weeping Copper Beech (*Fagus sylvatica 'Purpurea Pendula'*), Ginkgo (*Ginkgo biloba*), Shademaster Honey Locust (*Gleditsia triacanthos 'inermis'*), Black Walnut (*Juglans nigra*), Dawn Redwood (*Metasequoia glyptostroboides*), Blue Spruce (*Picea pungens*), Limber Pine (*Pinus flexilis 'Vanderwolf Pyramid'*), Austrian Pine (*Pinus nigra*), Austrian Pine 'Komet' (*Pinus nigra 'Komet'*), Trembling Aspen (*Populus tremuloides*), Pear Species (*Pyrus spp*.), Lilac (*Syringa vulgaris*), White Elm (*Ulmus americana*), and Siberian Elm (*Ulmus pumila*).

It is confirmed that Tree 32, a dead tree in the original inventory, was removed from the site.

On 23 November 2021, Metrolinx had confirmed that Trees 1, 2 and all small trees, located on Metrolinx property, have been removed during their maintenance work.

According to the topographic survey completed by Rady-Pentek & Edward Surveying Ltd., Trees 7-15 and 22 are located within the subject property. However, the City Urban Forestry inventory recorded these trees planted as city street trees. As such, the ownership of Trees 7-15 and 22 was changed from private to the city-owned trees.

Proposed Development

The proposed development at Phase 1 includes the demolition of the existing building on the southwest corner of the subject property and the construction of 37-storey and 33-storey towers and associated underground parking on the northwest corner of the subject property. The existing driveway from Drury Lane will be demolished and the construction of a future private road and construction access is proposed. The construction of a fire route and servicing easement to Fairview Street is also proposed. The remaining buildings will be retained at Phase 1. Re-landscaping of the existing sidewalk is not at Phase 1. Refer to Figure 1 for the proposed development.

Discussion

The following sections provide a discussion and analysis of tree impacts and tree preservation relative to the proposed development and existing conditions.

Development Impacts/Tree Removal

The removal of 14 trees will be required to accommodate the proposed development, including Trees 7-9, 18, 32-38, 43, and 45-47. Trees 7-9 have direct conflicts with the proposed private road. As the existing driveway does not have enough width for construction vehicle access, a new wider driveway is required for construction purposes and ultimately to create the private road. Therefore, the removal of Trees 7-9 will be required. The removal of Trees 18, 43, and 45 is required due to the direct conflicts with the proposed driveway and future private road. The construction of a fire route and excavation for underground servicing will have direct conflicts with Trees 32, 37, and 38 and therefore, these trees require removal. Trees 33-36 are located in proximity to the existing building that will be demolished at Phase 1. Due to proximity to the building, the trees will be likely damaged during the demolition and re-grading of the area is proposed

up to the property boundary. Therefore, the removal of Trees 33-36 is also required. The removal of Trees 46 and 47 is required due to shoring for underground parking.

Trees 7-9, 37, and 38 (5 trees) are located on the City of Burlington road right-of-way; a permit is required prior to their removal. Refer to Figure 1 for the location of the proposed tree removal with RED tree labels.

Tree Preservation

The preservation of the remaining 30 trees will be possible with the use of appropriate tree protection measures as indicated on Figure 1. Tree protection measures will have to be implemented prior to the proposed demolition. The construction fence will be installed along the property boundary and the existing sidewalk will be accessible to public at Phase 1, except the area where the proposed fire route and construction access are required. Construction fence will be sufficient to protect the street trees designated for preservation. Refer to Figure 1 for the location of required tree preservation fencing and Appendix B for tree protection plan notes and the hoarding details.

Summary and Recommendations

Kuntz Forestry Consulting Inc. was retained by Fairview Limited Partnership to complete a Tree Inventory and Preservation Plan report in support of a development application for properties located at 2243 and 2269 Fairview Street and 864 Drury Lane in the City of Burlington, Ontario. A tree inventory was conducted and reviewed in the context of the proposed development.

The findings of the study indicate a total of 47 trees on and within six metres of the subject properties. Three (3) trees have been removed from the property. The removal of 14 trees is required to accommodate the proposed development. The remaining 30 trees can be saved provided appropriate tree protection measures are installed prior to construction.

The following recommendations are suggested to minimize impacts to trees identified for preservation. Refer to Figure 1 for additional tree preservation notes and the preservation hoarding details.

- Tree protection barriers and fencing shall be erected at locations prescribed on Figure 1.

- Tree protection measures will have to be implemented prior to demolition to ensure the trees identified for preservation are not impacted by the development. Barriers should be maintained throughout construction.

- Branches and roots that extend past prescribed tree protection zones that require pruning must be pruned by a qualified Arborist or other tree professional. All pruning of tree roots and branches must be in accordance with good arboricultural standards.

- Site visits, pre, during, and post construction are recommended by either a certified consulting arborist (I.S.A.) or registered professional forester (R.P.F.) to ensure proper utilization of tree protection barriers. Trees shall also be inspected for damage incurred during construction to ensure appropriate pruning or other mitigation measures are implemented.

Respectfully Submitted,
Kuntz Forestry Consulting Inc.

Kaho Hayashi

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ISA Certified Arborist #ON-2153A

References

Guide for Plant Appraisal, 9th Edition, 2000. Council of Landscape and Tree Appraisers. International Society of Arboriculture, Champaign, Illinois. 143 pp.

Ontario Supplement to the Guide for Plant Appraisal- 8th Edition, 2003. ISA Ontario. International Society of Arboriculture, Champaign, Illinois. 26 pp. Updated 2003.

Table 1. Tree Inventory

Location: 2243 and 2269 Fairview Street and 864 Drury Lane, Burlington Date: 18 October 2018 & 8 June 2022 Surveyors: KH

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	CDB	DL	mTPZ	CRZ	Comments	Owner	Action
1	~~Trembling Aspen~~	~~*Populus tremuloides*~~	~~~16~~	~~F/G~~	~~G~~	~~F~~		~~2~~	~~2.4~~	~~4.0~~	~~Grape vine competition (L), seam (L)~~	~~Neighbour~~	Had been Removed
2	~~Black Walnut~~	~~*Juglans nigra*~~	~~~16~~	~~F~~	~~G~~	~~F/G~~		~~3~~	~~2.4~~	~~4.0~~	~~Crook (L), included fence (M)~~	~~Neighbour~~	Had been Removed
3	Globe Norway Maple	*Acer platanoides 'Globosum'*	16.5	G	G	G		3	2.4	4.0		City	Preserve
4	Blue Spruce	*Picea pungens*	~34	F/G	G	F	15	4	2.4	4.0	Sweep (L), dead leader	City	Preserve
5	Blue Spruce	*Picea pungens*	40	G	G	F	15	4	2.4	4.0	Pruning wounds (L), dead branches (L)	City	Preserve
6	Globe Norway Maple	*Acer platanoides 'Globosum'*	17	F	F/G	F/G		3	2.4	4.0	Lean (L), wilt (L)	City	Preserve
7	Honey Locust (shademaster)	*Gleditsia triacanthos inermis*	24, 21	F	G	F/G		4	2.4	4.0	Union at 1.2m (V-shaped) with included bark (M), epicormic branches (M)	City	Remove
8	Honey Locust (shademaster)	*Gleditsia triacanthos inermis*	22	F	G	F/G		4	2.4	4.0	Co-dominance at 4m (4 stems), central stem pruned, included wire (L)	City	Remove
9	Honey Locust (shademaster)	*Gleditsia triacanthos inermis*	~33, 28	F	G	F/G		5	2.4	4.0	Union at 1m with included bark (H), included wire (M), epicormic branches (M)	City	Remove
10	Globe Norway Maple	*Acer platanoides 'Globosum'*	29	F	F	F	25	5	2.4	4.0	Seam (M), wilt (L)	City	Preserve
11	Pear Species	*Pyrus spp.*	~12, 12, 12	F/G	G	F	15	4	2.4	4.0	Union at 0.5m (3 stems)	City	Preserve
12	Pear Species	*Pyrus spp.*	~10, 10, 8, 7	F/G	G	F	20	4	2.4	4.0	Union at base and 0.6m (4 stems)	City	Preserve
13	Blue Spruce	*Picea pungens*	24.5	G	G	F/G		3	2.4	4.0	Pruning wounds (L), epicormic branches (L)	City	Preserve
14	Blue Spruce	*Picea pungens*	20.5	-	-	-	100	2	2.4	4.0	Dead	City	Preserve
15	Blue Spruce	*Picea pungens*	29	G	G	F		2	2.4	4.0	Pruning wounds (L)	City	Preserve
16	Siberian Elm	*Ulmus pumila*	~35, 31, 23	P/F	F/G	F		8	2.4	4.0	Union at 1.2m, seam (M) with sap oozing at union	Private	Preserve
17	Ivory Silk Lilac	*Syringa reticulata 'Ivory Silk'*	6	G	G	F	15	1	1.8	1.8	Potential lilac leafminer	City	Preserve
18	Honey Locust (shademaster)	*Gleditsia triacanthos inermis*	21.5	F/G	G	F/G		4	2.4	4.0	Seam (L), union at 1.5m	Private	Remove
19	Honey Locust (shademaster)	*Gleditsia triacanthos inermis*	23.5	G	G	F/G		4	2.4	4.0		Private	Preserve
20	Honey Locust (shademaster)	*Gleditsia triacanthos inermis*	34	G	G	F/G	15	5	2.4	4.0	Union at 2m, asymmetrical crown (L)	Private	Preserve
21	Austrian Pine	*Pinus nigra*	50	F/G	G	F/G		6	3.0	5.0	Lean (L) to east, pruning wounds (L)	Private	Preserve
22	Austrian Pine	*Pinus nigra*	50	G	G	F/G		6	3.0	5.0	Overhead utility wire in crown, pruning wounds (L), asymmetrical crown (L)	City	Preserve
23	Dawn Redwood	*Metasequoia glyptostroboides*	19.5, 18.5, 12, 11	F/G	G	F	20	4	2.4	4.0	Union at base, epicormic branches (H)	Private	Preserve
24	Dawn Redwood	*Metasequoia glyptostroboides*	22	G	G	F		3	2.4	4.0	Epicormic branches (M)	Private	Preserve
25	Serviceberry	*Amenlanchier spp.*	13.5	F	G	F/G		3	2.4	4.0	Lean (M), exposed roots (M), seam (M)	City	Preserve
26	Freeman Maple	*Acer freemanii*	52.5	F/G	F	F/G		8	3.6	6.0	Co-dominance at 3m, lean (VL) to south, pruning wounds (M) due to overhead utility wires	City	Preserve
27	Freeman Maple	*Acer freemanii*	31	G	G	F/G		6	2.4	4.0	Exposed roots (M)	City	Preserve
28	Ivory Silk Lilac	*Syringa reticulata 'Ivory Silk'*	7.5	F/G	F/G	F/G		1	1.8	1.8	Broken branches (M), stem wound (L) at base	City	Preserve
29	Ivory Silk Lilac	*Syringa reticulata 'Ivory Silk'*	7	G	F/G	F/G		1	1.8	1.8	Broken branches (M)	City	Preserve
30	Ivory Silk Lilac	*Syringa reticulata 'Ivory Silk'*	6.5	G	G	G		1	1.8	1.8		City	Preserve
31	Pear Species	*Pyrus spp.*	10	G	G	F/G	10	1	2.4	4.0		City	Preserve
32	~~Limber Pine~~	~~*Pinus flexilis 'Vanderwolf' Pyramid'*~~	~~-~~	~~-~~	~~-~~	~~-~~	~~100~~	~~1~~	~~-~~	~~-~~	~~Dead and failed to ground~~	~~Private~~	Had been Removed
33	Austrian Pine 'Komet	*Pinus nigra 'Komet'*	~26	F/G	G	G		3	2.4	4.0	Lean (M), sweep (L)	Private	Remove
34	Austrian Pine 'Komet	*Pinus nigra 'Komet'*	~22	F/G	G	G		2	2.4	4.0	Sweep (M)	Private	Remove
35	Austrian Pine 'Komet	*Pinus nigra 'Komet'*	~22	G	G	G		2	2.4	4.0		Private	Remove
36	Weeping Copper Beech	*Fagus sylvatica 'Purpurea Pendula'*	~22	F/G	G	F/G		3	2.4	4.0	Crook (L)	Private	Remove
37	Pear Species	*Pyrus spp.*	7	F/G	G	P	80	1	1.8	1.8	Lean (L), sparse crown (L), epicormic branches (M), dead leader	City	Remove
38	Pear Species	*Pyrus spp.*	8	F/G	G	F	25	1	1.8	1.8	Lean (L), sparse crown (M), epicormic branches (M)	City	Remove
39	Pear Species	*Pyrus spp.*	8	G	G	G		1	1.8	1.8	Epicormic branches (M)	City	Preserve
40	Ginkgo	*Ginkgo biloba*	14	G	G	G		2	2.4	4.0		Private	Preserve
41	Freeman Maple	*Acer freemanii*	18	G	G	P	40	3	2.4	4.0	Dead leader, sparse crown (M)	Private	Preserve
42	Freeman Maple	*Acer freemanii*	20	F/G	G	F/G		3	2.4	4.0	Crack (L), epicormic branches (M)	Private	Preserve
43	Weeping Copper Beech	*Fagus sylvatica 'Purpurea Pendula'*	~12	G	G	F		1	2.4	4.0		Private	Remove
44	Blue Spruce	*Picea pungens*	~14	G	G	F/G		1	2.4	4.0		Private	Preserve
45	European Beech	*Fagus sylvatica*	8.5, 5.5, 3	F/G	F/G	P/F	25	1	1.8	1.8	Union at 1m	Private	Remove
46	White Elm	*Ulmus americana*	13	F	G	F/G		2	2.4	4.0	Co-dominance at 2m, included fence (M) at base	Private	Remove
47	Blue Spruce	*Picea pungens*	~16	G	G	G		1	2.4	4.0		Private	Remove

Codes		
DBH	Diameter at Breast Height	*(cm)*
TI	Trunk Integrity	*(G, F, P)*
CS	Crown Structure	*(G, F, P)*
CV	Crown Vigor	*(G, F, P)*
CDB	Crown Die Back	*(%)*
DL	Dripline	*(m)*
mTPZ	minimum Tree Protection Zone	*(m)*
Owner	Private, Neighbour, Town	
~ = estimate; (VL) = very light; (L) = light; (M) = moderate; (H) = heavy		

Appendix A. Photographs of the Trees

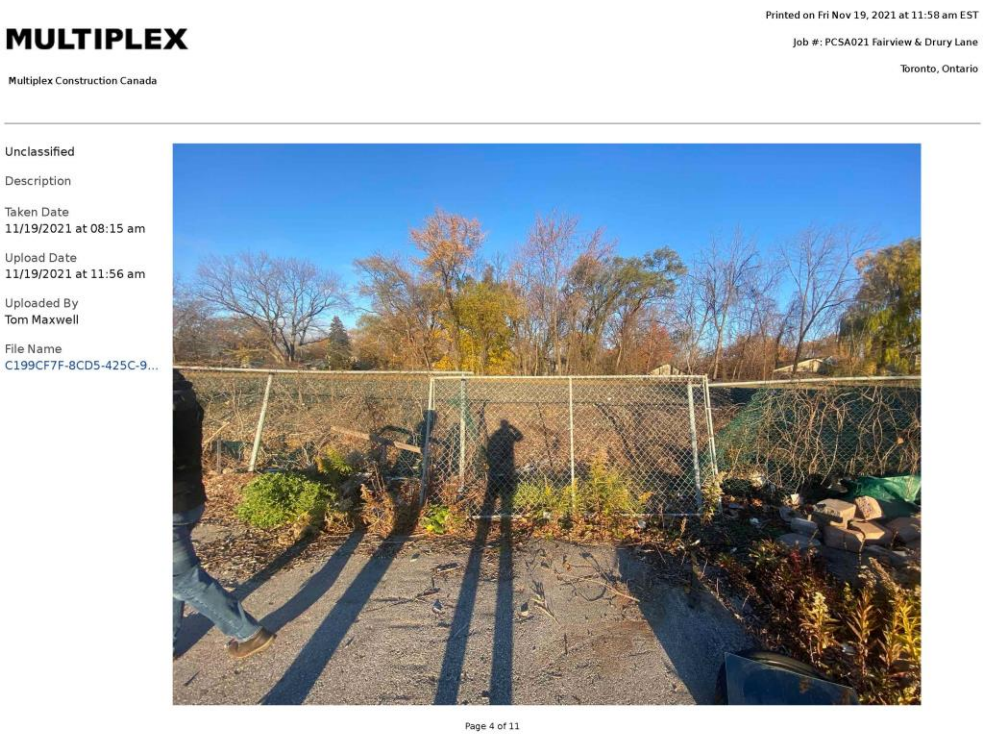


Image 1. Tree 1 (left) and 2



Image 2. Tree 3 (right) and 4



Image 3. Tree 5 (right) and 6

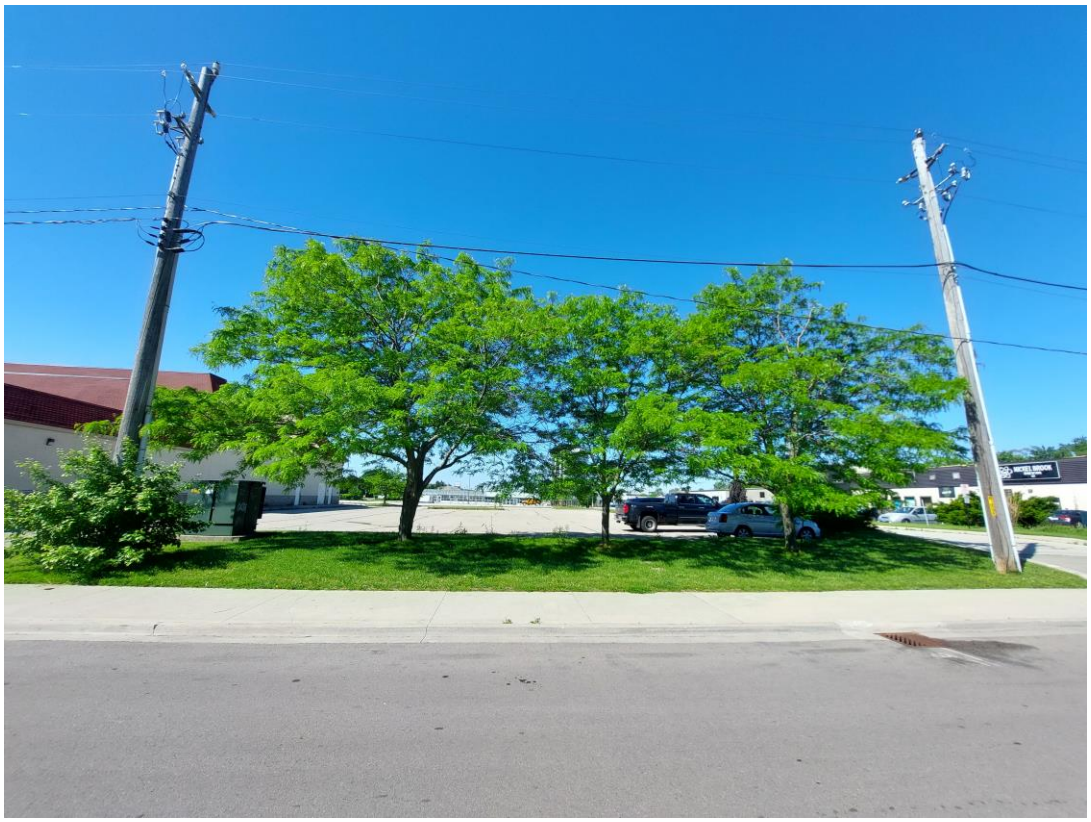


Image 4. Trees 7, 8, and 9 (from left)



Image 5. Trees 10-15 (from right)



Image 6. Trees 14 (middle) is dead



Image 7. Tree 16



Image 8. Tree 17



Image 9. Tree 18 (right) and 45



Image 10. Tree 19



Image 11. Trees 20-22



Image 12. Trees 23-24



Image 13. Tree 25



Image 14. Tree 26



Image 15. Tree 27



Image 16. Tree 28



Image 17. Tree 29



Image 18. Tree 30

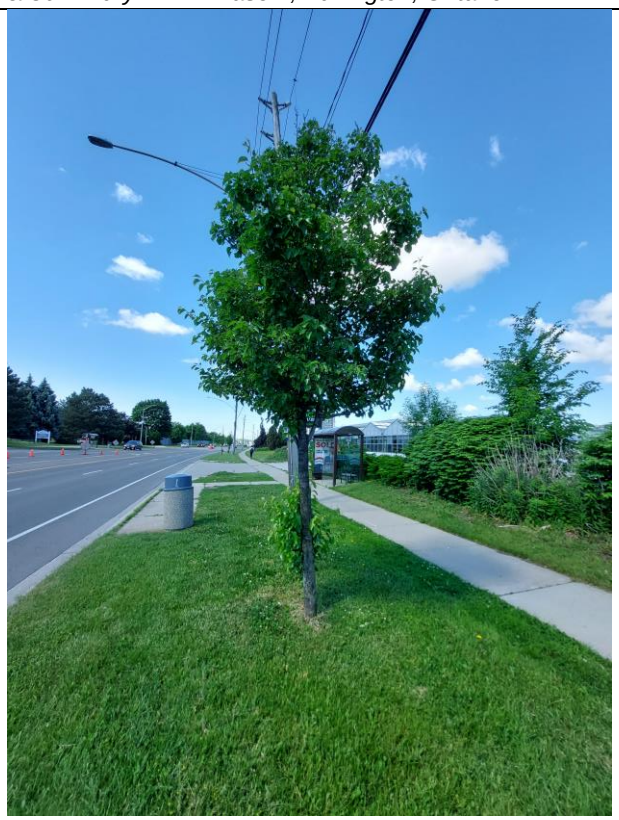


Image 19. Tree 31



Image 20. Tree 33-34 (from right)



Image 21. Trees 35 (left) and 36



Image 22. Tree 37



Image 23. Tree 38



Image 24. Tree 39



Image 25. Trees 40-41



Image 26. Tree 42



Image 27. Tree 42



Image 28. Tree 44



Image 29. Tree 46-47 and cedars <10cm DBH

Appendix B. Tree Preservation Fence Details and Tree Protection Notes

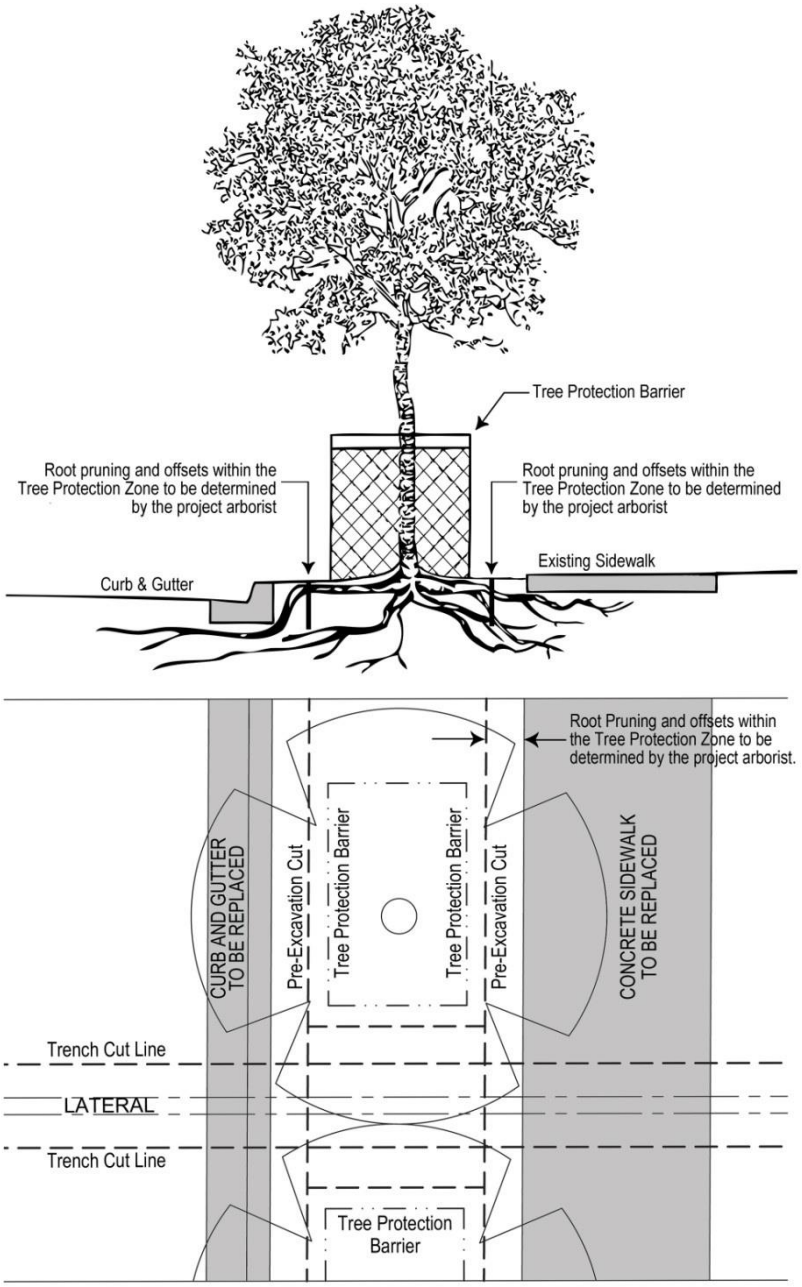
TREE PROTECTION PLAN NOTES
Prior to site disturbance the owner must confirm that no migratory birds are making use of the site for nesting. The owner must ensure that the works are in conformance with the Migratory Bird Convention Act and that no migratory bird nests will be impacted by the proposed work. 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. The applicant would be required to replace such trees to the satisfaction of the City of Burlington.

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:
For City-owned Trees: Tree protection barriers for trees situated on the City road allowance where visibility must be maintained, can be 1.2m (4ft.) high and consist of chain link, or orange plastic web snow fencing on a 2" x 4" wood frame. All supports and bracing used to secure the barrier should be located outside the TPZ. All supports and bracing should minimize damage to roots outside the TPZ. Where some fill or excavate has to be temporarily located near a tree protection barrier, plywood must be used to ensure no material enters the TPZ. If the TPZ needs to be reduced to facilitate construction access, the tree protection barrier must be maintained at a lesser distance and the exposed TPZ protected with plywood and wood chips. This must first be approved by the City of Burlington. **For trees on private property situated on or adjacent to construction sites:** Tree protection barriers must be installed around trees to be protected using plywood clad hoarding or an equivalent approved by the City of Burlington. 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 and written notice provided to the City of Burlington.
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. Written notice must be provided to the City of Burlington prior to the removal of the tree protection barriers.

ARBORICULTURAL WORK:
Any roots or branches which extend beyond the TPZ indicated on this plan which require pruning, must be pruned by a qualified Arborist or other tree professional as approved by the City of Burlington. 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 of Burlington to be pruned must first be exposed by hand digging or by using a low pressure hydro vac method. This will allow a proper pruning cut and minimize tearing of the roots. The Arborist/tree professional retained to carry out crown

or root pruning must contact the City of Burlington no less than 48 hours prior to conducting any specified work.



NOTE:
For excavations perpendicular to to the curbing (ie. sidewalk, curbing, water or sewer laterals renewal)

(a) The contractor is to use a trench box to minimize the width of the open cut.
(b) When the lateral replacement is within the Tree Protection Zone of a tree, the contractor is to complete the works using trenchless technologies.

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.