

**Tree Inventory and Preservation Plan Report
3115 Hurontario Street
Mississauga, Ontario**

prepared for

**Clearbrook Developments Ltd.
506 – 80 Front Street East
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prepared by



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KUNTZ FORESTRY CONSULTING Inc. Project P3292

Introduction

Kuntz Forestry Consulting Inc. was retained by Clearbrook Developments Ltd. to complete a Tree Inventory and Preservation Plan for the proposed development for the property located at 3115 Hurontario Street in the City of Mississauga, Ontario. The subject property is located on the northeast side of Hurontario Street and Dundas Street East, within a commercial area.

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

- Prepare inventory of the tree resources greater than 10cm DBH on and within six metres of the subject property;
- Evaluate potential tree saving opportunities based on proposed site plans; and,
- Document the findings in a Tree Inventory and Preservation Plan Report.

Methodology

Trees greater than 10cm DBH on and within six metres of the subject property were identified in the tree inventory. Trees were located using the topographic survey provided for the subject property and measurements taken from known points in-field. Trees were identified as 1-36.

Tree resources were assessed utilizing the following parameters:

Tree # - number assigned to tree 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 metres above the ground.

Condition - condition of tree considering trunk integrity, crown structure, crown vigour, and root zone environment. Condition ratings include poor (P), fair (F) and good (G).

Dripline – radius (metres) of the tree crown, measured from the stem to the outer branches of the crown.

Crown Dieback – percentage of crown that has died.

Comments - additional relevant detail.

Refer to Figure 1 for the tree locations and Table 1 for the results of the tree inventory. The results of the evaluation are provided below.

Existing Site Conditions

The subject property is currently occupied by a one-storey brick and stone building and associated asphalt parking. Tree resources exist in the form of landscape trees and natural generations. Refer to Figure 1 for the existing site conditions.

Tree Resources

The tree inventory was conducted on 7 July 2022. The inventory documented 36 trees on and within six metres of the subject property. Refer to Table 1 for the detailed tree inventory, Figure 1 for the location of trees reported in the tree inventory, and Appendix A for photographs of the trees.

Tree resources were comprised of Manitoba Maple (*Acer negundo*), Norway Maple (*Acer platanoides*), Silver Maple (*Acer saccharinum*), shademaster Honey Locust (*Gleditsia triacanthos 'inermis'*), Eastern Red Cedar (*Juniperus virginiana*), Norway Spruce (*Picea abies*), Blue Spruce (*Picea pungens*), Eastern White Cedar (*Thuja occidentalis*), and Siberian Elm (*Ulmus pumila*).

Proposed Development

The proposed development includes the demolition of the existing building and the construction of a 35-storey residential tower with associated underground parking. Shoring for underground parking is required up to the property boundary. Refer to Figure 1 for the proposed site plan.

Discussion

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

Development Impacts / Tree Removal

The removal of 23 trees is required to accommodate the proposed development. Required tree removals include Trees 7, 13-16, 18-29, and 31-36. All trees that require removal are greater than 15cm DBH and protected by the City of Mississauga Private Tree By-law; a permit will be required prior to their removal. Trees 7, 13-16, and 18 are located on the adjacent property; written consent from the respective property owner is required prior to their removal. Refer to Figure 1 for the required and recommended tree removal.

Tree Preservation

The preservation of the remaining 13 trees will be possible with the use of appropriate tree protection measures as indicated on Figure 1. Tree protection measures must be implemented prior to the proposed demolition to ensure tree resources designated for retention are not impacted by the proposed development. Refer to Figure 1 for the location of required tree preservation fencing and general Tree Protection Plan Notes and tree preservation fence details.

Minor encroachment into the minimum Tree Protection Zone (mTPZ) of Tree 12 is required to accommodate the proposed development. Given that encroachment is limited to outer edge of the mTPZ, long-term adverse impacts are not anticipated to the tree.

Tree Compensation

The City of Mississauga requires replacement trees for any by-law protected tree removal. The ratio of required replacement plantings per tree is below:

DBH of Trees to be Removed	Number of Replacement Trees
16-30cm	2
31-45cm	3
46-60cm	4
61-75cm	5
76-90cm	6

As such, a total of 64 replacement trees is required on the subject property. Refer to Landscape Plan for the proposed plantings. Replacement trees that will not be planted on the subject property will be provided in cash-in-lieu. Refer to Table 1 for the number of replacement tree for individual tree removals.

Summary and Recommendations

Kuntz Forestry Consulting Inc. was retained by Clearbrook Developments Ltd. to complete a Tree Inventory and Preservation Plan for the proposed development for the property located at 3115 Hurontario Street in the City of Mississauga, Ontario. A tree inventory was conducted and reviewed in the context of the proposed site plan.

The findings of the study indicate a total of 36 trees on and within six metres of the subject property. The removal of 23 trees is required to accommodate the proposed development. The remaining 13 trees can be saved provided proper tree protection is installed as per Figure 1.

The following recommendations are suggested to minimize impacts to trees identified for preservation. Refer to Figure 1 for tree protection fencing locations and general Tree Protection Plan Notes and tree preservation fence details.

- Tree protection barriers and fencing should be erected at locations as prescribed on Figure 1. All tree protection measures should follow the guidelines as set out in the tree preservation plan notes and the tree preservation fencing detail.
- No construction activity including surface treatments, excavations of any kind, storage of materials or vehicles, unless specifically outlined above, is permitted within the area identified on Figure 1 as a tree protection zone (TPZ) at any time during or after construction.
- Branches and roots that extend beyond 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 is 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 should also be inspected for damage incurred during construction to ensure appropriate pruning or other measures are implemented.

Respectfully Submitted,
Kuntz Forestry Consulting Inc.

Kaho Hayashi

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Tree Risk Assessment Qualified

Limitations of Assessment

Only the tree(s) identified in this report were included in the inventory. The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These may include a visual examination taken from the ground of all the above-ground parts of the 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 of lean (if any), the general condition of the trees and the identification of potentially hazardous trees or recommendations for removal (if applicable). Where trees could not be directly accessed (ie. due to obstructions, and/or on neighbouring properties), trees were assessed as accurately as possible from nearby vantage points.

Locations of trees provided in the report are determined as accurately as possible based on the best information available. If official survey information is not provided, tree location in the report may not be exact. In this case, if trees occur on or near property boundaries, an official site survey may be required to determine ownership utilizing specialized survey protocol to gain precise location.

Furthermore, recommendations made in this report are based on the site plans that have been provided at the time of reporting. These recommendations may no longer be applicable should changes be made to the site plan and/or grading, servicing, or landscaping plans following report submission.

Notwithstanding the recommendations and conclusions made in this report, it must be recognized that trees are living organisms, and their health and vigor constantly change over time. They are not immune to changes in site conditions or seasonal variations in the weather conditions. Any tree will fail if the forces applied to the tree exceed the strength of the tree or its parts.

Although every effort has been made to ensure that this assessment is reasonably accurate, the trees should be re-assessed periodically. The assessment presented in this report is valid at the time of inspection.

Table 1. Tree Inventory

Location: 3115 Hurontario Street, Mississauga

Date: 7 July 2022

Surveyors: KH

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	CDB	DL	mTPZ	Ownership	DL in SP	Comments	Action	Comp.
1	Norway Maple	<i>Acer platanoides</i>	30	G	G	G		4	1.8	Neighbour	0.5m	Exposed roots (L), growth deficit (L), pruning wounds (L), epicormic branches (L)	Preserve	
2	Norway Maple	<i>Acer platanoides</i>	31	FG	G	FG		4	2.4	Neighbour	1m	Co-dominance at 2.5m with included bark (L), exposed roots (L), pruning wounds (L), exposed roots (L)	Preserve	
3	Norway Maple	<i>Acer platanoides</i>	35	FG	G	FG		4.5	2.4	Neighbour	1.5m	Previously tagged 469, co-dominance in crown, pruning wounds (L), exposed roots (L), epicormic branches (L)	Preserve	
4	Norway Maple	<i>Acer platanoides</i>	25	FG	G	FG		3.5	1.8	Neighbour	1.5m	Co-dominance at 3.5m, pruning wounds (L), sweep (L)	Preserve	
5	Manitoba Maple	<i>Acer negundo</i>	36	F	G	FG		3.5	2.4	Neighbour	None	Co-dominance at 1.8m, lean (M) to southwest, pruning wounds (M), epicormic branches (M)	Preserve	
6	Norway Maple	<i>Acer platanoides</i>	23	F	G	FG		3	1.8	Neighbour	None	Co-dominance at 4m, sweep (L), pruning wounds (M) with cavity	Preserve	
7	Silver Maple	<i>Acer saccharinum</i>	78.5	F	PF	PF	40	8	4.8	Neighbour	6m	Cavity at 1.6m, union at 2m, 3.5m, and 4m with 4 stems, deadwood, dead branches (M), epicormic branches (M), 1 stem has dead leader	Remove	6
8	Norway Maple	<i>Acer platanoides</i>	28	G	G	G		4	1.8	Neighbour	0.5m	Previously tagged 474, pruning wounds (L), exposed roots (L)	Preserve	
9	Norway Maple	<i>Acer platanoides</i>	27.5	FG	G	G		4	1.8	Neighbour	1m	Previously tagged 475, exposed roots (M), crook (L), growth deficit (L)	Preserve	
10	Siberian Elm	<i>Ulmus pumila</i>	15.5, 15, 14, 11.5, 9.5	F	F	PF	29	3	1.5	Neighbour	None	Previously tagged 476, union at 1m, bow (L) to south, chlorosis (M), pruning wounds (L)	Preserve	
11	Norway Maple	<i>Acer platanoides</i>	23.5	G	G	G		3.5	1.8	Neighbour	None		Preserve	
12	Norway Maple	<i>Acer platanoides</i>	29.5	F	FG	FG		4	1.8	Neighbour	1m	Seam (L) - closed, spiral stem, lean (L) to south, crook (M)	Preserve	
13	Norway Maple	<i>Acer platanoides</i>	46.5	P	G	G		5	3	Neighbour	4m	Hazard , co-dominance at 3m with split from union to 0.5m from ground	Remove	4
14	Norway Maple	<i>Acer platanoides</i>	33.5	FG	FG	PF	20	5	2.4	Neighbour	4m	Previously tagged 480, exposed roots (L), co-dominance at 3.5m, broken branches (L)	Remove	3
15	Norway Maple	<i>Acer platanoides</i>	26.5	FG	FG	FG		4	1.8	Neighbour	4m	Previously tagged 481, co-dominance at 4m, asymmetrical crown (M)	Remove	2
16	Norway Maple	<i>Acer platanoides</i>	41	FG	G	FG		6	3	Neighbour	5m	Previously tagged 482, co-dominance at 4m	Remove	3
17	Norway Maple	<i>Acer platanoides</i>	28	PF	FG	FG		3.5	1.8	Neighbour	None	Stem wound (H) from failed stem at 3m, deadwood, asymmetrical crown (M), overhead utility wires in crown	Preserve	
18	Siberian Elm	<i>Ulmus pumila</i>	47	F	F	F	20	5	3	Neighbour	5m	Union at 1m with included bark (M), broken branches (M), dead branches (L), epicormic branches (H)	Remove	4
19	Manitoba Maple	<i>Acer negundo</i>	62	P	PF	PF	30	7	4.2	Private	-	Co-dominance at 2m, included fence (L) at base, stem wound (L), deadwood, pruning wounds (M), dead branches (M), sweep (L), lean (L) to west, dead leader, epicormic branches (M)	Remove	5
20	Norway Maple	<i>Acer platanoides</i>	28.5	F	F	FG		3	1.8	Private	-	Lean (L) to south, sweep (L), crook (M), asymmetrical crown (H)	Remove	2
21	Norway Maple	<i>Acer platanoides</i>	28	G	G	G		3.5	1.8	Private	-	Grape vine competition (L)	Remove	2
22	Norway Maple	<i>Acer platanoides</i>	21.5, 21	FG	G	G		3.5	1.8	Private	-	Co-dominance at base, bow (L)	Remove	2
23	Norway Maple	<i>Acer platanoides</i>	18, 14, 11.5	F	G	G		4	1.5	Private	-	Union at base and 0.3m with included bark (M), sweep (M), lean (M)	Remove	2
24	Norway Maple	<i>Acer platanoides</i>	18	FG	FG	G		2.5	1.5	Private	-	Crook (M), asymmetrical crown (M)	Remove	2
25	Norway Maple	<i>Acer platanoides</i>	33.5	F	FG	G		3.5	2.4	Private	-	Bow (L) to southwest, co-dominance at 2m with included bark (M), crook (L), asymmetrical crown (M), sweep (L)	Remove	3
26	Norway Maple	<i>Acer platanoides</i>	17.5	G	G	G		3	1.5	Private	-		Remove	2
27	Norway Maple	<i>Acer platanoides</i>	20	G	G	G		3	1.5	Private	-		Remove	2
28	Norway Maple	<i>Acer platanoides</i>	18.5	G	G	G		3	1.5	Private	-		Remove	2
29	Eastern White Cedar	<i>Thuja occidentalis</i>	19	G	P	P	90	1	1.5	Private	-		Remove	2
30	Honey Locust (shademaster)	<i>Gleditsia triacanthos 'inermis'</i>	10	G	G	G		2	1.5	Neighbour	None		Preserve	
31	Blue Spruce	<i>Picea pungens</i>	33	G	F	F	15	1.5	2.4	Private	-		Remove	3
32	Norway Spruce	<i>Picea abies</i>	29	G	F	F	20	2	1.8	Private	-	Asymmetrical crown (M)	Remove	2
33	Blue Spruce	<i>Picea pungens</i>	30	G	P	P	85	1.5	1.8	Private	-		Remove	2
34	Blue Spruce	<i>Picea pungens</i>	26	FG	F	PF	35	1.5	1.8	Private	-	Lost leader, sweep (L)	Remove	2
35	Manitoba Maple	<i>Acer negundo</i>	63	PF	PF	PF	20	7	4.2	Private	-	Coppice growth (M) at base, union at base with 3 stems, dead branches (L), sparse leader, epicormic branches (H), lean (M) to south, sweep (L)	Remove	5
36	Eastern Red Cedar (Juniper)	<i>Juniperus virginiana</i>	30	F	F	F		2.5	1.8	Private	-	Frost crack (M), lean (L) to east, asymmetrical crown (M)	Remove	2
													TOTAL	64

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 in radius	(m)
mTPZ	minimum Tree Protection Zone	(m)
Ownership	Private, Neighbour, City	
DL in SP	Dripline of neighbour's trees extending over the subject property	(m)
Comp.	Compensation	
~ = estimate; (VL) = very light; (L) = light; (M) = moderate; (H) = heavy		

Appendix A. Photographs of the Trees



Image 1. Trees 1-6 (from right)



Image 2. Tree 7



Image 3. Trees 8-12 and 18 (from right)



Image 4. Trees 13-15 and 19 (from right)



Image 5. Tree 13 (view from south)



Image 6. Tree 13 (view from north)



Image 7. Trees 15 and 19 (from right)



Image 8. Trees 20-25 (from right)



Image 9. Trees 26-28 (from right)



Image 10. Trees 26-29 (from right)



Image 11. Tree 30



Image 12. Tree 31



Image 13. Tree 32



Image 14. Tree 33



Image 15. Tree 34



Image 16. Trees 35-36 (from left)