

**Tree Inventory and Preservation Plan Report
450 Dufferin Street
Toronto, Ontario**

prepared for

**PMA Landscape Architects Ltd.
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prepared by



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KUNTZ FORESTRY CONSULTING INC. Project P3494

Introduction

Kuntz Forestry Consulting Inc. was retained by PMA Landscape Architects Ltd. to complete a Tree Inventory and Preservation Plan in support of a development application for the property located at 450 Dufferin Street in Toronto, Ontario. The subject property is located on the northwest corner of the intersection of Dufferin Street and Alma Avenue, within a mixed-use area.

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

- Prepare inventory of the tree resources greater than 15cm diameter at breast height (DBH) on and within six metres of the subject property 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.

The results of the evaluation are provided below.

Policy Framework

The subject property is subject to the provisions of the City of Toronto's Private Tree-By-law (Chapter 813) which regulates tree injury and destruction of individual trees within the City of Toronto. Preliminary information is acquired on individual trees which are then categorized in compliance with the by-law in support of development applications. Tree categories range from one through five and are as follows:

Categories

- 1. Trees with diameters of 30 cm or more situated on private property on the subject site.*
- 2. Trees with diameters of 30 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. On lands designated under City of Toronto Municipal Code, Chapter 658, Ravine and Natural Feature Protection, trees of all diameters within 10 metres of any construction activity.*
- 5. Trees of all diameters situated within the City road allowance adjacent to the subject site.*

Methodology

Trees greater than 15cm DBH on and within six metres of the subject property and trees of all sizes within the road right-of-way were included in the inventory. Trees were located using the topographic survey provided, aerial imagery, and estimations made from known points in the field. Trees included in the inventory were identified as Trees A – N. See Table 1 for the results of the inventory, Figure 1 for the locations of the trees, and Appendix A for photographs of the trees.

Tree resources were visually assessed utilizing the following parameters:

Tree # – Number 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 metres above the ground.

Condition – Condition of tree considering trunk integrity (TI), crown structure (CS) and crown vigor (CV). Condition ratings include poor (P), fair (F), and good (G).

Crown Dieback – Percentage of dead branches within the crown.

Comments – Any other relevant tree condition information.

Existing Site Conditions

The subject property is currently occupied by a one-storey brick building and a surface parking area. Vehicular accesses to the property exist from Alma Avenue. Tree resources exist in the form of self-seeded volunteers. Refer to Figure 1 for the existing conditions.

Individual Tree Resources

The tree inventory was conducted on 20 September 2022. The inventory documented 14 trees on and adjacent to the subject property. Refer to Table 1 for the full tree inventory and Figure 1 for the location of trees reported in the tree inventory.

Tree resources were comprised of Manitoba Maple (*Acer negundo*) and Siberian Elm (*Ulmus pumila*).

Proposed Development

The proposed development involves the demolition of the existing one-storey brick building and surface parking area. A 15-storey mixed-use building with two levels of subsurface parking is proposed for the subject property. 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 development and existing conditions.

Development Impacts/Tree Removals

The removal of 13 trees, including Trees A – I and K – N, is required to accommodate the proposed development. Trees A – H and N conflict with the proposed subsurface parking garage. Trees I and K – M have crowns that conflict with the second floor of the proposed development.

It should be noted that all trees identified for removal are in poor to poor-fair condition as it relates to the tree's trunk integrity owing to moderate to heavy inclusion of the existing fence in the trees' trunks and various other defects, as described in Table 1.

Trees C, D, I, and K appear to be shared trees along the property boundary between the subject property and a neighbouring property and are greater than 30cm DBH (Category 1 / 2). Permits will be required prior to the removal of any Category 1 / 2 trees. Additionally, as trees A – I and

K – M appear to be shared trees, permission from the respective neighbouring property owners will be required prior to the removal of these trees.

Refer to Figure 1 for the location of tree removals.

Tree Preservation

The preservation of the remaining one tree, Tree J, will be possible. As Tree J is located well beyond the limit of disturbance and the minimum tree protection zone (mTPZ) of this tree does not intersect the boundary of the subject property, tree preservation fencing has not been prescribed.

Refer to Figure 1 for the general Tree Protection Plan Notes.

Summary and Recommendations

Kuntz Forestry Consulting Inc. was retained by PMA Landscape Architects Ltd. to complete a Tree Inventory and Preservation Plan in support of a development application for the subject property located at 450 Dufferin Street in Toronto, 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 14 trees on and within six metres of the subject property. The removal of 13 trees is required to accommodate the proposed development. The remaining one tree can be preserved.

The following recommendations are suggested to minimize impact to trees identified for preservation. Refer to Figure 1 for the general Tree Protection Plan Notes.

- 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 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 should also be inspected for damage incurred during construction to ensure appropriate pruning or other measures are implemented.

Respectfully Submitted,
Kuntz Forestry Consulting Inc.

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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: 450 Dufferin Street, Toronto

Date: 20 September 2022

Surveyors: KNH

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	CDB	mTPZ	Cat.	Comments	Action
A	Manitoba Maple	<i>Acer negundo</i>	~16	P	P	PF	10	1.8		Included fence (H), poor form (H), epicormic branching (M), bow (M), deadwood (L), appears to be shared	Remove
B	Manitoba Maple	<i>Acer negundo</i>	~18	P	P	PF	10	1.8		Included fence (H), poor form (H), epicormic branching (M), v-unions at base with included bark and included deadwood, deadwood (L), appears to be shared	Remove
C	Siberian Elm	<i>Ulmus pumila</i>	~34	P	PF	PF		2.4	1 / 2	Crook (M), included fence (M), poor form (M), epicormic branching (M), appears to be shared	Remove
D	Siberian Elm	<i>Ulmus pumila</i>	~36	P	PF	PF		2.4	1 / 2	Included fence (H), union at 2m with one lost leader, epicormic branching (M), poor form (M), appears to be shared	Remove
E	Siberian Elm	<i>Ulmus pumila</i>	~20	P	PF	PF		1.8		Included fence (H), asymmetrical crown (M), poor form (M), epicormic branching (M), appears to be shared	Remove
F	Siberian Elm	<i>Ulmus pumila</i>	~20	P	P	PF		1.8		Included fence (H), pruning wounds (M), poor form (M), crook (H) in crown, epicormic branching (M), appears to be shared	Remove
G	Manitoba Maple	<i>Acer negundo</i>	~16	P	P	PF		1.8		Included fence (H), v-union at 1.5m with one lost leader, epicormic branching (H), asymmetrical crown (M), poor form (M), appears to be shared	Remove
H	Manitoba Maple	<i>Acer negundo</i>	~20	P	PF	PF		1.8		Included fence (H), lean (M), poor form (M), epicormic branching (M), appears to be shared	Remove
I	Manitoba Maple	<i>Acer negundo</i>	~48	PF	PF	FG		3.0	1 / 2	Lean (H), poor form (M), epicormic branching (L), appears to be shared	Remove
J	Manitoba Maple	<i>Acer negundo</i>	~22, 20	P	PF	F		1.8		Union at base, poor branch unions with included bark, included fence (H), poor form (H), epicormic branching (L)	Preserve
K	Siberian Elm	<i>Ulmus pumila</i>	~36, 32, 14, 14	PF	F	F	15	2.4	1 / 2	V-unions at base, 0.5m, and 1.2m with included bark, deadwood (L), broken branches (L), included fence (M), appears to be shared	Remove
L	Manitoba Maple	<i>Acer negundo</i>	~28	P	PF	PF		1.8		Included fence (H), bow (M), pruning wounds (L), epicormic branching (M), poor form (M), appears to be shared	Remove
M	Manitoba Maple	<i>Acer negundo</i>	~24, 20, 20, 15	P	PF	PF	15	1.8		V-union at base with included bark, deadwood (L), included fence (H), poor form (M), epicormic branching (M), sun scorch (L), stem wounds (M) in crown, appears to be shared	Remove
N	Manitoba Maple	<i>Acer negundo</i>	~17	P	P	P	95	1.8		Included fence (H), crook (M), deadwood (H)	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 Dieback	(%)
mTPZ	Minimum Tree Protection Zone, as measured from edge of tree	(m)
Cat.	City of Toronto By-law Category	1 – 5
P = poor, F = fair, G = good, ~ = estimate, (VL) = very light, (L) = light, (M) = moderate, (H) = heavy		

Appendix A. Site Photographs



Image 1. From left to right, Trees A – F



Image 2. From left to right, Trees G – I and K



Image 3. From left to right, Trees K – M