Tree Inventory and Preservation Plan Report
48 Grenoble Drive
Toronto, Ontario

prepared for

STUDIO tla
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prepared by

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18 March 2022

KUNTZ FORESTRY CONSULTING INC Project P3112

Introduction

Kuntz Forestry Consulting Inc. was retained by STUDIO tla to complete a Tree Inventory and Preservation Plan in support of a development application for the property located at 48 Grenoble Drive in Toronto, Ontario. The subject property is located on the north side of Grenoble Drive, west of Deauville Lane, and south of St. Dennis Drive, within a residential 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 City 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 City road right-of-way were included in the inventory. Trees were located using the topographic survey provided and estimations made from known points in the field. Trees included in the inventory were identified as Trees 778 – 800 and 1491 – 1497. Where appropriate, trees were tagged with their identification numbers. Trees that were not tagged were denoted with an "NT" before their identification number. 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 m 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 site is currently occupied by a nine-storey apartment building, one laneway that accesses Grenoble Drive and another that accesses Deauville Lane, a surface parking area, and various walkways and outdoor amenity areas. Tree resources exist predominantly in the form of landscape trees. Refer to Figure 1 for the existing conditions.

Individual Tree Resources

The tree inventory was conducted on 25 January 2022. The inventory documented 30 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 Apple species (*Malus sp.*), Austrian Pine (*Pinus nigra*), White Mulberry (*Morus alba*), Norway Maple (*Acer platanoides*), Shademaster Honey Locust (*Gleditsia triacanthos 'inermis'*), Manitoba Maple (*Acer negundo*), and Siberian Elm (*Ulmus pumila*).

Proposed Development

The proposed development involves the demolition of the existing nine-storey building and the construction of a multi-storey residential building, ranging from six- to 43-storeys. Two levels of subsurface parking are also proposed. The existing laneway accessing Grenoble Drive is to be removed. 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 25 trees, including Trees 783 – 800 and 1491 – 1497, is required to accommodate the proposed development.

Trees 786 – 793 and 1494 – 1497 are identified for removal due to proposed grading changes within the proposed parkland dedication area. It is presumed that removal of the concrete pad and regrading of this area will be required to bring it to base park conditions.

Trees 784, 788, 789, 793, and 1494 – 1496 do not require permits for their removal.

Trees 783, 785 – 787, 790 – 792, 794 – 800, and 1491 – 1493 are located on the subject property and are greater than 30cm DBH (Category 1). Tree 1497 is located on the boundary

between the subject property and a neighbouring property and is greater than 30cm DBH (Category 1 / 2). A permit is required prior to the removal of these trees.

In addition to Tree 1497, Trees 793 and 1496 are shared trees located along the boundary between the subject property and a neighbouring property. The Forestry Act, R.S.O 1990 provides legislation for the definition and treatment of boundary trees. Per section 10 of the Act, "Every tree whose trunk is growing on the boundary between adjoining lands is the common property of the owners of the adjoining lands", and consent from all property owners must be obtained prior to the removal of common trees. Trees 1494 and 1495 are located fully on a neighbouring property. Permission from the neighbouring property owner is required prior to the removal of Trees 793 and 1494 – 1497.

Refer to Figure 1 for the location of tree removals.

Tree Preservation

The preservation of the remaining five trees, including Trees 778 – 782, 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 commencement of the proposed works to ensure tree resources designated for retention are not impacted by the development.

While grading within a minimum tree protection zone (mTPZ) should be avoided, if grading within the mTPZ of Tree 778 is required it must occur by hand. The addition up to 5m of topsoil within the area of the mTPZ that lies within the bounds of the subject property is permitted; however, no cutting is permitted within the mTPZ of this tree.

Refer to Figure 1 for the location of required tree preservation fencing, general Tree Protection Plan Notes, and the tree preservation fence details.

Summary and Recommendations

Kuntz Forestry Consulting Inc. was retained by STUDIO tla to complete a Tree Inventory and Preservation Plan in support of a development application for the property located at 48 Grenoble Drive 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 30 trees on and within six metres of the subject property. The removal of 25 trees is required to accommodate the proposed development. Of the 25 trees to be removed, 17 trees are greater than 30cm DBH and are located on the subject property (Category 1). One tree is greater than 30cm DBH located on the boundary between the subject property and a neighbouring property (Category 1 / 2). As such, 18 trees require permits prior to their removal in accordance with City of Toronto's Private Tree-By-law (Chapter 813). All other trees can be preserved with the use of appropriate tree protection measures.

The following recommendations are suggested to minimize impact to trees identified for preservation. Refer to Figure 1 for the location of required tree preservation fencing, general Tree Protection Plan Notes, and the tree preservation fence detail.

- 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.

Kaylee Harper

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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: 48 Grenoble Drive, Toronto Date: 25 January 2022 Surveyors: KNH

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	CDB	mTPZ	Cat.	Comments	Action
NT778	Shademaster Honey Locust	*Gleditsia triacanthos inermis*	50	G	G	FG		3.6	2	Pruning wounds (L), previously tagged: 080	Preserve
NT779	Shademaster Honey Locust	*Gleditsia triacanthos inermis*	47.5	FG	G	G		3	2	Bow (L), pruning wounds (L), previously tagged: 079	Preserve
NT780	Austrian Pine	*Pinus nigra*	~32	FG	G	G		2.4	2	Lean (L)	Preserve
NT781	Norway Maple	*Acer platanoides*	~32	G	G	G		2.4	2	Pruning wounds (L)	Preserve
NT782	Austrian Pine	*Pinus nigra*	~30	FG	G	G		2.4	2	Crook (L)	Preserve
783	Siberian Elm	*Ulmus pumila*	42, 15, 10	PF	F	G		3	1	Included fence (M), lean (L), stem wounds (M) from branch tear-out, pruning wounds (L), union at base	Remove
784	Norway Maple	*Acer platanoides*	15	FG	FG	FG		1.8	-	Crook (M), poor form (L)	Remove
785	Siberian Elm	*Ulmus pumila*	46	FG	FG	PF		3	1	Lean (L), broken branches (L)	Remove
786	Apple species	*Malus sp.*	32	FG	F	FG		2.4	1	One leader cut at 0.2m, epicormic branching (H), lean (L)	Remove
787	Norway Maple	*Acer platanoides*	~52	PF	FG	G		3.6	1	Included fence (M), lean (L), stem wounds (L), v-union at 2m with included bark	Remove
788	Manitoba Maple	*Acer negundo*	20.5, 26	F	F	FG		1.8	-	V-union at 0.2m with included bark, crook (L), asymmetrical crown (M)	Remove
789	Siberian Elm	*Ulmus pumila*	26, 17	FG	FG	PF	10	1.8	-	Union at base, crook (L), deadwood (L)	Remove
790	Manitoba Maple	*Acer negundo*	40	FG	F	FG	15	2.4	1	Pruning wounds (M), deadwood (L), broken branches (L), asymmetrical crown (L), crook (L)	Remove
791	White Mulberry	*Morus alba*	35, 21	F	FG	FG		2.4	1	Lean (L), v-union at 1m with included bark, asymmetrical crown (L), pruning wounds (L), included fence (L)	Remove
792	White Mulberry	*Morus alba*	35, 16	FG	FG	F	10	2.4	1	V-union at 0.75m with included bark, union at 2m, deadwood (L)	Remove
793	White Mulberry	*Morus alba*	~24, 22, 21, 18	F	F	F	15	1.8	-	Union at base with four leaders, asymmetrical crown (M), bow (M), deadwood (L), included fence (L)	Remove
794	Siberian Elm	*Ulmus pumila*	62	F	FG	FG		4.2	1	V-union at 1.5m with included bark, broken branches (L), pruning wounds (L), bow (L)	Remove
795	Siberian Elm	*Ulmus pumila*	50, 42, 37	F	FG	FG		3	1	V-unions at base and 0.1m, bow (L)	Remove
796	Norway Maple	*Acer platanoides*	51	F	FG	F	10	3.6	1	Lean (M), broken branches (L), deadwood (L), stem wounds (L) with decay (L)	Remove
797	Norway Maple	*Acer platanoides*	63	FG	FG	F	10	4.2	1	Pruning wounds (L), deadwood (L), broken branches (L), asymmetrical crown (L), lean (L)	Remove
798	Norway Maple	*Acer platanoides*	69	PF	FG	F	10	4.2	1	Decay (M) in trunk from base to 2m, v-union at 2m with included bark, asymmetrical crown (L), pruning wounds (L), deadwood (L)	Remove
799	Norway Maple	*Acer platanoides*	51	FG	FG	FG		3.6	1	Union at 2.5m (codominance), asymmetrical crown (L), pruning wounds (L), crook (L)	Remove
800	Norway Maple	*Acer platanoides*	49	G	FG	F	10	3	1	Asymmetrical crown (L), deadwood (L), pruning wounds (L)	Remove

1491	Norway Maple	*Acer platanoides*	67.5	PF	FG	F	10	4.2	1	Deadwood (L), broken branches (L), pruning wounds (L) with decay (L), lean (L), crook (L), growth deficit (L)	Remove
1492	Norway Maple	*Acer platanoides*	66	FG	G	F	10	4.2	1	Deadwood (L), multiple branch attachments, pruning wounds (L)	Remove
1493	Norway Maple	*Acer platanoides*	37	F	FG	F	10	2.4	1	Lean (M), decay (L) in trunk, deadwood (L), union at 2.5m	Remove
NT1494	White Mulberry	*Morus alba*	~20, 19	F	F	F	10	1.8	-	V-union at 0.5m with included bark with leaders fused to 1.5m, pruning wounds (L), epicormic branching (L), deadwood (L), included fence (L)	Remove
NT1495	White Mulberry	*Morus alba*	19, 18	F	FG	F	25	1.8	-	Stem wounds (M) with decay (L), deadwood (M), v-union at 0.5m with included bark, pruning wounds (L), included fence (L)	Remove
NT1496	White Mulberry	*Morus alba*	~19	F	F	F	10	1.8	-	Sweep (L), included fence (L), asymmetrical crown (L), deadwood (L)	Remove
NT1497	White Mulberry	*Morus alba*	~36, 20	F	FG	F	10	2.4	1 / 2	Deadwood (L), union at 0.5m, pruning wounds (L), included fence (L), v-union at 2.5m with included bark and decay (L)	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

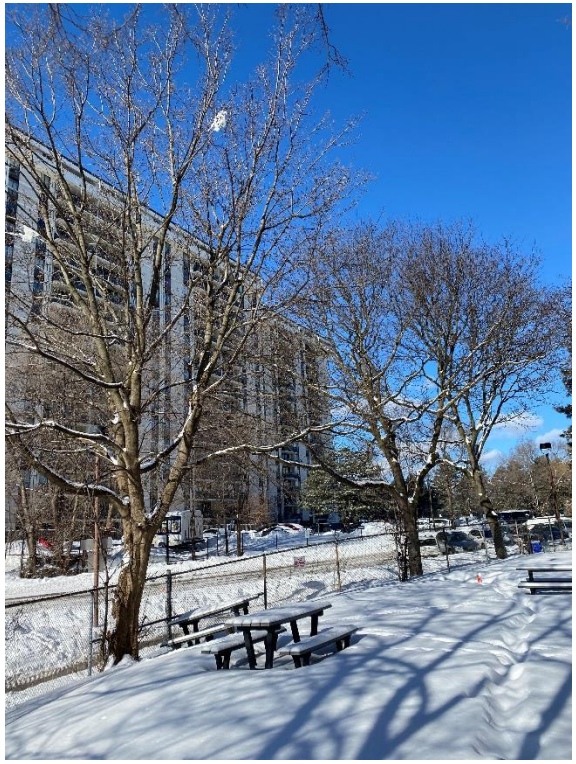


Image 1. From right (far) to left (near), Trees NT779, NT778, and 787

Image 2. From left (near) to right (far), Trees NT780, NT782, 785, 784, and 783


Image 3. Tree 786

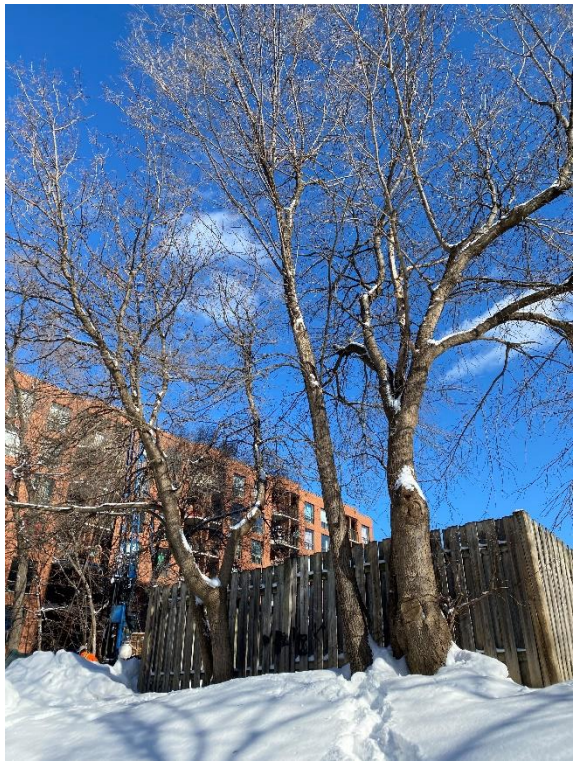


Image 4. From left to right, Trees 788 – 790


Image 5. From right to left, Trees 791 – 793


Image 6. Tree 794

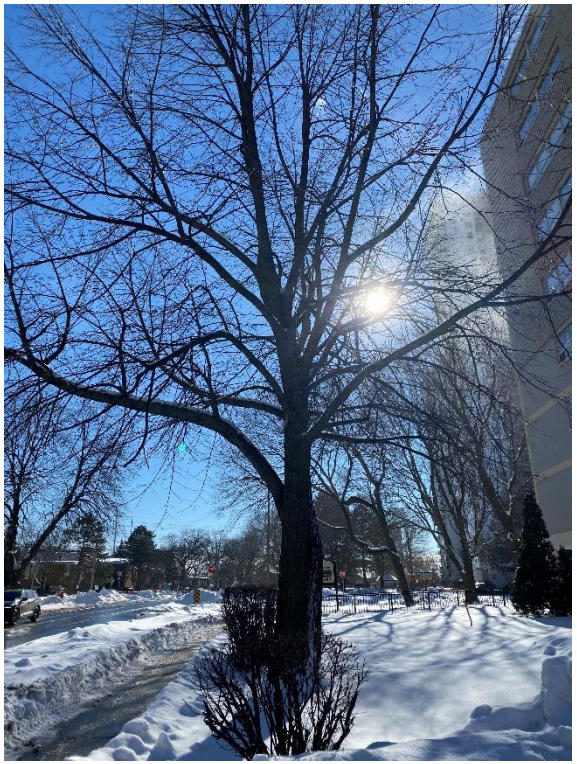


Image 7. Tree 795


Image 8. From left to right, Trees 798, 796, and 797


Image 9. From right to left, Trees 799, 800, and 1491


Image 10. Trees NT1494 (right) and NT1495 (left)

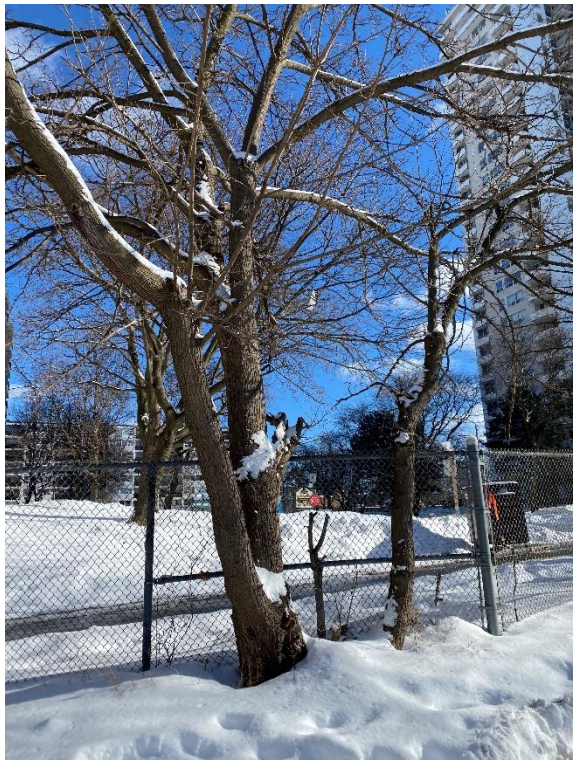
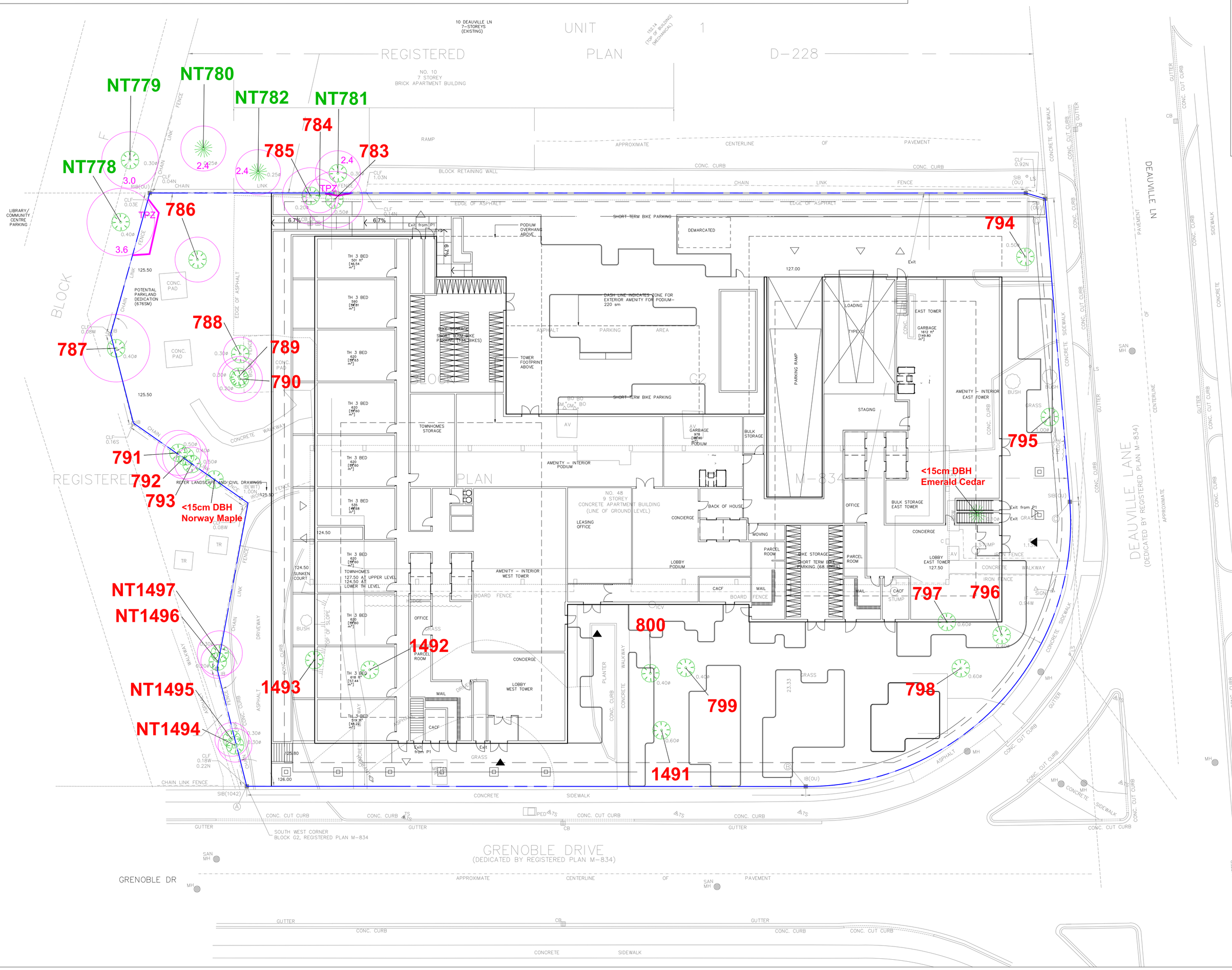


Image 11. Trees NT1496 (right) and NT1497 (left)

TREE PROTECTION PLAN NOTES

- It is the applicants' responsibility to discuss potential impacts to trees located near or wholly on adjacent properties or on shared boundary lines with their neighbours. Should such trees be injured to the point of instability or death the applicant may be held responsible through civil action. The applicant would also be required to replace such trees to the satisfaction of Urban Forestry.
- Tree protection barriers shall be installed to standards as detailed in this document and to the satisfaction of Urban Forestry.
- Tree protection barriers must be installed using plywood clad hoarding (minimum 19mm or ¾" thick) or an equivalent approved by Urban Forestry.
- Where required, signs as specified in Section 4, Tree Protection Signage must be attached to all sides of the barrier.
- Prior to the commencement of any site activity such as site alteration, demolition or construction, the tree protection measures specified on this plan must be installed to the satisfaction of Urban Forestry.
- Once all tree/site protection measures have been installed, Urban Forestry staff must be contacted to arrange for an inspection of the site and approval of the tree/site protection requirements. Photographs that clearly show the installed tree/site protection shall be provided for Urban Forestry review.
- Where changes to the location of the approved TPZ or sediment control or where temporary access to the TPZ is proposed, Urban Forestry must be contacted to obtain approval prior to alteration.
- Tree protection barriers must remain in place and in good condition during demolition, construction and/or site disturbance, including landscaping, and must not be altered, moved or removed until authorized by Urban Forestry.
- No construction activities including grade changes, surface treatments or excavation of any kind are permitted within the area identified on the Tree Protection Plan or Site Plan as a minimum 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. The area(s) identified as a TPZ must be protected and remain undisturbed at all times.
- All additional tree protection or preservation requirements, above and beyond the installation of tree protection barriers, must be undertaken or implemented as detailed in the Urban Forestry approved arborist report and/or the approved tree protection plan and to the satisfaction of Urban Forestry.
- If the minimum tree protection zone (TPZ) must be reduced to facilitate construction access, the tree protection barriers must be maintained at a lesser distance and the exposed portion of TPZ must be protected using a horizontal root protection method approved by Urban Forestry.
- Any roots or branches indicated on this plan which require pruning, as approved by Urban Forestry, must be pruned by an arborist. All pruning of tree roots and branches must be in accordance with good arboricultural practice. Roots that have received approval from Urban Forestry to be pruned must first be exposed using pneumatic (air) excavation, by hand digging or by a using low pressure hydraulic (water) excavation. The water pressure for hydraulic excavation must be low enough that root bark is not damaged or removed. This will allow a proper pruning cut and minimize tearing of the roots. The arborist retained to carry out crown or root pruning must contact Urban Forestry no less than three working days prior to conducting any specified work.
- The applicant/owner shall protect all by-law regulated trees in the area of consideration that have not been approved for removal throughout development works to the satisfaction of Urban Forestry.
- Convictions of offences respecting the regulations in the Street Tree By-law and Private Tree By-law are subject to fines. A person convicted of an offence under these by-laws is liable to a minimum fine of $500 and a maximum fine of $100,000 per tree, and /or a Special Fine of $100,000. The landowner may be ordered by the City to stop the contravening activity or ordered to undertake work to correct the contravention.
- 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 no less than 48 hours prior to conducting any specified work.



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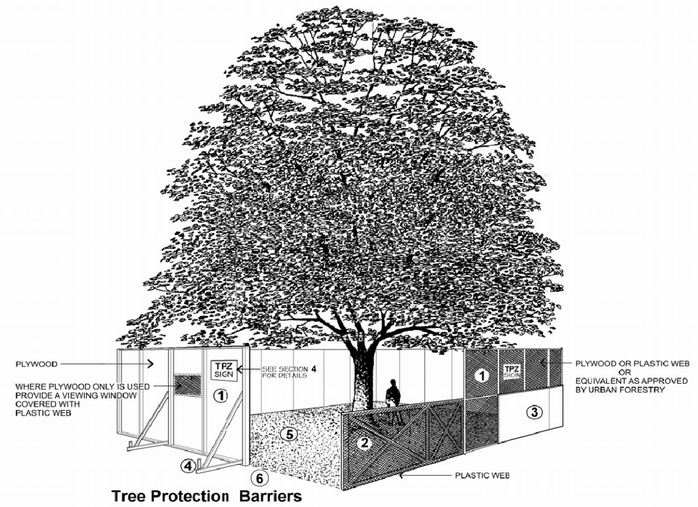
Tree Protection Zone (TPZ)

All construction related activities, including grade alteration, excavation, soil compaction, any materials or equipment storage, disposal of liquid and vehicular traffic are NOT permitted within this TPZ.

This tree protection barrier must remain in good condition and must not be removed or altered without authorization of City of Toronto, Urban Forestry.

Concerns or inquiries regarding this TPZ can be directed to:
311 or 311@toronto.ca



Tree Protection Barriers

1. **Tree protection barriers must be a plywood or plastic web hoarding or equivalent as approved by Urban Forestry.**
2. **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 orange plastic web snow fencing on a wood frame made of 2"x 4"s .**
3. **Where some excavate or fill has to be temporarily located near a tree protection barrier, plywood must be used to ensure no material enters the Tree Protection Zone.**
4. **All supports and brcing should be outside the Tree Protection Zone. All such supports should minimize damaging roots outside the Tree Protection Barrier.**
5. **No construction activity, grade changes, surface treatment or excavations of any kind is permitted within the Tree Protection Zone.**
6. **Sediment control fencing shall be installed in locations indicated in an Urban Forestry approved Tree Protection Plan. The sediment control fencing must be installed to Ontario Provicial Standards (OPSD-219.110) and to the satisfaction of Urban Forestry.**

TORONTO Parks, Forestry and Recreation
Urban Forestry — Sept 2008 — **Detail TP-1**

LEGEND

Tree Inventory
Refer to Table 1 of report dated 18 March 2022 for the complete tree inventory information. Trees greater than 15cm DBH on and within six metres of the subject property and trees of all sizes within the City road right-of-way were included in the inventory.

Tree Removals
The removal of 25 trees is required to accommodate the proposed development, as indicated with RED labels.

Tree Preservation
The preservation of all other trees included in the inventory will be possible with the use of appropriate tree protection measures. Minimum tree preservation zones (mTPZs) and required tree preservation hoarding are indicated in MAGENTA. Trees identified for preservation are indicated with GREEN labels.

Tree label (GREEN), preservation recommended — X

Tree label (RED), removal required — X

Minimum tree protection zone (MAGENTA circle) (with radius in metres, as measured from edge of stem) — xm

Heavy-duty tree preservation fencing location (solid, thick MAGENTA)

Surveyed Tree Location (Coniferous)

Surveyed Tree Location (Deciduous)

No.	Issue/Revisions	Date	By
1	Report Submission	18 Mar. '22	KNH

Base Data: R. Avis Surveying Inc. (topo.), Diamond Schmitt Architects (site)

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Property
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Toronto, Ontario

Tree Inventory & Preservation Plan

Project	P3112	Figure
Date	18 March 2022	1
Scale	1:250	