

ARBORIST REPORT AND PROTECTION PLAN

230 & 240 The Donway West Toronto, Ontario M3B 2V8

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Introduction

Donway Co-operative Development Corporation retained Cohen & Master Tree and Shrub Services Ltd. (formerly engaged as Bruce Tree Expert Company) in November 2020 to complete an Arborist Report and Tree Protection Plan for 230 and 240 The Donway West, Toronto. The report was requested relative to site redevelopment.

The purpose of this report is to:

- Establish species, size and condition of trees protected by the City of Toronto Private Tree Bylaw (City of Toronto Municipal Code, Chapter 813, Article III), the City Street Tree Bylaw (City of Toronto Municipal Code, Chapter 813, Article II) and the Parks By-law (City of Toronto Municipal Code, Chapter 608, Article VII).
- Provide a prescription for trees to be protected during the project.
- Provide a Tree Protection Plan showing the location of required tree protection measures, injuries, removals and protection notes based on the site plan.

<u>Key Items</u>

A total of 37 trees were inventoried for this report: 5 trees are located on the municipal road allowance and are protected by the City Street Tree Bylaw, 6 trees are located in park land and protected by the Parks By-law, 17 trees are located on private land and protected by the Private Tree By-law and 9 trees and additional trees not inventoried are undersized and/or memorial trees, not protected by a municipal tree protection by-laws. The client is required to submit an application to Urban Forestry, Tree Protection & Plan Review for a permit to injure or remove the following trees:

Action	Ownership/Location	Tag Number	Total No. Trees
Remove	Municipal Road Allowance	Trees 7, 27-30	5
Remove	Private Property, Subject Site	Trees 1-5, 9-20	17

These trees are in conflict with the proposed development. All other trees are to be protected, with tree protection barriers built at the minimum Tree Protection Zone (TPZ) or as specified in the Tree Protection Plan.

Trees 8, 21-26 are undersized memorial trees. These trees are proposed for removal and may be transplanted if possible.

<u>Method</u>

- I. The subject site was assessed on Nov. 3, 2020, by the Consulting Arborist.
- 2. The methods used to collect data and the information provided below are consistent with the details provided in the City of Toronto Urban Forestry document entitled "Tree Protection Policy and Specifications for Construction Near Trees ", March 2016.
- 3. The City of Toronto, Urban Forestry requires that trees within the following five categories be reported upon in arborist reports for development applications:

Ownership Category	Description
I - Private	Trees with diameters of 30 cm or greater, situated on private property on the subject site.
2 – Private Adjacent	Trees with diameters of 30 cm or greater, situated on private property within 6 meters of the subject site.
3 - City Parkland	Trees of all diameters situated on City owned parkland within 6 meters of the subject site, or within 10 meters of proposed development.
4 - Ravine	Trees of all diameters on lands designated under City Municipal Code, Chapter 658, Ravine Control By-law.
5 – City-owned	Trees of all diameters situated within the City road allowance adjacent to the subject site.

- 4. Trunk diameter was measured using a calibrated diameter tape. The measurement was taken at 1.4 meters above ground level, generally referred to as the diameter at breast height (DBH).
- 5. Trees were assessed by external visual inspection from the ground and assigned a condition rating ranging from good to poor in consideration of biological and structural condition.
- 6. The tree inventory is attached as Appendix I.
- 7. Cohen & Master created a Tree Protection Plan by adding tree protection comments to a landscape plan prepared by NAK Design Group dated May 21, 2021, and based on a survey prepared by J.D. Barnes Surveying dated July 15, 2019. The Tree Protection Plan was updated with a site plan by Eduardo Ortiz, Oct. 24, 2023. The Tree Protection Plan is found in Appendix II.
- 8. Examples of tree protection barriers approved by the City of Toronto are attached as Appendix III.

9. Assumptions and Limiting Conditions applicable to this report are described in Appendix IV.

Tree Inventory

See Appendix I.

Tree Protection Prescription

Pre-Construction Phase

TREE PROTECTION ZONES (TPZ) AND TREE PROTECTION BARRIERS

- The following tree protection measures must be read in conjunction with the Tree Protection Plan, Appendix II. Both documents must be provided to the site supervisor prior to any work commencing on the site.
- 2. No disturbance is allowed within the TPZ of protected trees without permission from the City of Toronto. Disturbance includes soil compaction from foot traffic and construction materials, excavation, trenching, grade changes, or storage or disposal of materials, including those toxic to plants.
- 3. There is to be no re-grading within the TPZs of any protected trees.
- 4. The minimum TPZ radius is specified by the City of Toronto, Urban Forestry and shown in the table below:

Trunk Diameter (DBH)	Tree Protection Zone - Minimum Protection Distances Required
< 10 cm	I.2 m
II – 29 cm	I.8 m
30 – 41 cm	2.4 m
41 – 50 cm	3.0 m
51 – 60 cm	3.6 m
61 – 70 cm	4.2 m
71 – 80 cm	4.8 m
81 – 90 cm	5.4 m
91-100 cm	6 m
>100 cm	0.06 m / cm trunk diameter

- 5. Tree protection barriers are required under the Private Tree Bylaw and City Street Tree Bylaw to be installed at the minimum distances noted in the table above for all trees 30 cm DBH or greater on private property and trees of all sizes located on municipal property.
- 6. The Tree Protection Zone radius must be measured from the outside edge of the base of the trunk.
- 7. Protective barriers are to be installed as shown on the Tree Protection Plan (Appendix II). The barriers are to be 1.2m (4 feet) high and built to the standards set out in the City of Toronto, Urban Forestry Division document entitled "Tree Protection Policy and Specifications for Construction Near Trees, Detail TP-1 Tree Protection Barriers", March 2016. On municipal property, barriers are to be constructed of plastic snow fencing on a wooden 2x4 frame; On private property, barriers are to be constructed of sheets of plywood on a wooden 2x4 frame. With approval from Urban Forestry, rigid and immovable construction fencing may be used to protect the full site and park trees.
- 8. Urban Forestry requires signs to be mounted on the construction-facing side of the tree protection barriers for the duration of the project. The signs are to be a minimum of 40 cm x 60 cm and made of white gator board or equivalent. The text of the signs should read: "Tree Protection Barrier: No grade change, storage of materials or equipment is permitted within this TPZ. The tree protection barrier must not be removed without the written authorization of City of Toronto, Urban Forestry. For information call Urban Forestry Services at 311." Signs are available from Urban Forestry offices.

TREE PERMIT APPLICATIONS

- 9. The client is required to submit an application to Urban Forestry, Tree Protection & Plan Review for a permit to remove Trees 1-5, 7, 9-20 and 27-30.
- 10. REMOVALS: See the Tree Inventory, Appendix I for the reason for removal.
- 11. Urban Forestry may post a notice on the property that an application for permits to remove trees has been submitted.
- 12. Tree 10 and other undersized trees are located on/over the property boundary with the adjacent hydro easement and a number of undersized boundary trees are located on the on/over the property boundary between the subject site and the adjacent school. As a boundary tree, it is protected by the Ontario Forestry Act and its removal is contingent upon the permission of all co-owner(s) of the tree.

- 13. It is the applicant's 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.
- 14. If approved for injury or removal, Urban Forestry will provide an Undertaking & Release agreement outlining the conditions of the permit. Trees 1-7, 9-20 and 27-30 are to be removed prior to construction.
- 15. No construction activity is permitted prior to approval from Urban Forestry

Construction Phase

- 16. It is the responsibility of the site supervisor to inspect the condition of the tree protection measures outlined on the plan and within this report each morning. If disturbance is observed, it is to be repaired prior to work commencing on site that day. To not do so is a breach of the tree protection bylaw and could result in an immediate "stop-work" order being issued for the project followed by an inspection fee and order to comply.
- 17. During construction, if any tree roots are exposed or disturbed outside the tree protection barriers, care is to be taken to minimize their disturbance. If roots must be removed outside the TPZ, they must be cleanly pruned. Tearing roots hinders wound closure and can increase risk of disease and root rot.

Post-Construction Phase

- 18. Urban Forestry is to be notified prior to removal of the tree protection barriers on the site. With approval, the barriers may be dismantled.
- 19. If Urban Forestry held a security deposit, a written request must be provided to initiate release of the deposit.
- 20. Urban Forestry typically requires compensation for the removal of trees on private property at a ratio of 3:1 and compensation for the removal of trees on municipal property at a ratio of 1:1 plus the amenity value of the tree, as well as removal costs. As compensation for the removals, the client is required to plant or pay cash in lieu of planting 56 trees (17 private trees and 5 City trees).
- 21. The planting plan is beyond the scope of this report.

On behalf of Cohen & Master,

Sennefer Gagré

Jennifer Gagné, M.F.C., I.S.A. Certified Arborist ON-1993A

APPENDICES

Attached.

Appendix I – Tree Inventory attached

Inventory date: Nov. 3, 2020

Chart Details:

Tree #: Inventoried trees were assigned an identification number.

Species: Includes the botanical name and common name of each tree.

DBH: Diameter in cm measured at 1.4 meters from the ground (diameter at breast

Condition Rating: Overall condition rating from good to fair to poor based on overall health and structure.

Condition Comments: Specific observations from the visual assessment that have informed the condition rating.

TPZ: Minimum required tree protection zone in meters.

Ownership Category: City of Toronto ownership category for protection: I-Private property, subject site; 2-Private property, adjacent property; 3-Municipal park; 4-Ravine tree; 5-Municipal road allowance; N/A-not protected by City of Toronto tree bylaws. **Action & Details:** Protect, preserve, injure or remove actions based on the site plans, and other actions to be taken.

Tree #	Species	DBH (cm)	Condition Rating	Condition Comments	TPZ (m)	Owner-ship Category	Action	Compens- ation trees
	Pinus nigra (Austrian pine)	43	fair	codominant stems with narrow angled union and included bark at 2m; moderate diplodia tip blight; fair health	3	I	Remove due to conflict with church building	3
2	Pinus nigra (Austrian pine)	40	fair	sparse lower crown due to shading; minor diplodia tip blight; good-fair health	2.4	I	Remove due to conflict with church building	3
3	Pinus nigra (Austrian pine)	47	fair	asymmetric crown; due to conflict with adjacent trees; crossing branches; good health	3	I	Remove due to conflict with church building	3
4	Pinus nigra (Austrian pine)	38	fair	sparse crown due to shading; minor diplodia tip blight; fair health	2.4	I	Remove due to conflict with church building	3

Tree #	Species	DBH (cm)	Condition Rating	Condition Comments	TPZ (m)	Owner-ship Category	Action	Compens- ation trees
5	Pinus nigra (Austrian pine)	42.5	fair	moderate diplodia tip blight; fair health	3	I	Remove due to conflict with church building	3
6	Pinus nigra (Austrian pine)	27.5	poor	leader removed; moderate to severe diplodia tip blight; fair to poor health	n/a	n/a	Remove (no permit required)	-
7	Pinus nigra (Austrian pine)	45	poor	severed diplodia tip blight; sparse crown; poor health	3	5	Remove due to proposed walkway	I
8	Quercus alba (white oak)	8	good	Memorial tree; good structure and health	n/a	I	Remove (no permit required)	-
9	<i>Picea abies</i> (Norway spruce)	32	fair	moderate spruce gall; fair health	2.4	I	Remove due to proposed laneway	3
10	Acer negundo (Manitoba maple)	43.5, 43	poor	growing into fence; codominant stems at 1.5m; 1 stem removed, sprouting at wound; 10x5cm wound cavity; decay; fair health	3	I	Remove due to poor condition	3
11	Acer negundo (Manitoba maple)	38, 32, 16	poor	5 stems at 1m; 1 stem growing into fence; 1 stem dead; poor health	2.4	I	Remove due to poor condition	3
12	Acer negundo (Manitoba maple)	31	fair	boundary tree; codominant stems at 4m; growing into fence; extensive sprouting; one 10cm diameter stem removed; moderate lean; fair health	2.4	l (boundary)	Remove due to construction access	3

Tree #	Species	DBH (cm)	Condition Rating	Condition Comments	TPZ (m)	Owner-ship Category	Action	Compens- ation trees
13	Acer saccharinum (silver maple)	71	good to fair	codominant stems at 3m; large surface roots with wounds; multiple pruning wounds with minimal decay; good to fair health	4.8	I	Remove due to proposed building	3
14	Acer platanoides (Norway maple)	49.5	fair	growing into fence; multi-stem at 3m; minimal deadwood; fair health	3	I	Remove due to proposed building	3
15	Acer platanoides (Norway maple)	30	poor	asymmetric crown; conflict with wires; poor health	2.4	I	Remove due to proposed building and over dig	3
16	Gleditsia triacanthos (honeylocust)	51	fair	codominant stems at 4.5m; 2 stems removed (~20cm and 10cm); fair health	3.6	I	Remove due to proposed building	3
17	Picea pungens (Colorado spruce)	35	good to fair	asymmetric crown due to conflict with building; good health	2.4	I	Remove due to proposed building	3
18	Pinus nigra (Austrian pine)	52.5	fair to poor	multiple pruning wounds (5-15cm diameter); moderate diplodia tip blight; asymmetric crown; good health	3.6	I	Remove due to proposed hardscape and building canopy	3
19	Pinus nigra (Austrian pine)	56	fair	codominant stems at 5m with narrow angled union and included bark; multiple pruning wounds (5-10cm diameter); moderate diplodia tip blight; fair health	3.6		Remove due to proposed hardscape and building canopy	3

Tree #	Species	DBH (cm)	Condition Rating	Condition Comments	TPZ (m)	Owner-ship Category	Action	Compens- ation trees
20	Pinus nigra (Austrian pine)	52	fair	multiple pruning wounds (5-10cm diameter); minimal diplodia tip blight; asymmetric crown; fair health	3.6	I	Remove due to proposed site servicing	3
21	Picea pungens (Colorado spruce)	10	good	Memorial tree; no significant defects; good health	n/a	n/a	Remove (no permit required)	-
22	Fagus sylvatica (European beech)	11	good	Memorial tree; no significant defects; good health	n/a	n/a	Remove (no permit required)	-
23	Acer palmatum (Japanese maple)	9.5	fair	Memorial tree; measured at base; bark removed around 1/3 of trunk; good health	n/a	n/a	Remove (no permit required)	-
24	Gleditsia triacanthos (honeylocust)	22	good to fair	Memorial tree; small diameter crack, no wound wood; good health	n/a	n/a	Remove (no permit required)	-
25	Amelanchier sp. (serviceberry)	7, 6, 6	fair	Memorial tree; no significant defects; good health	n/a	n/a	Remove (no permit required)	-
26	Picea pungens (Colorado spruce)	6	good	Memorial tree; no significant defects; good health	n/a	n/a	Remove (no permit required)	-
27	Syringa reticulata (Japanese lilac)	11	good	old mower damage at base; good health	I .8	5	Remove due to construction access	I

Tree #	Species	DBH (cm)	Condition Rating	Condition Comments	TPZ (m)	Owner-ship Category	Action	Compens- ation trees
28	Syringa reticulata (Japanese lilac)	17.5	good	codominant stems at 2m; old mower damage at base; good health	1.8	5	Remove due to walkway and construction access	I
29	Syringa reticulata (Japanese lilac)	10.5	good	small trunk crack; crowssing branches; good to fair health	1.8	5	Remove due to walkway and construction access	I
30	Syringa reticulata (Japanese lilac)	13	good	old mower damage at base; good health	1.8	5	Remove due to underground parking	I
31	Acer platanoides (Norway maple)	25	fair	multi-stem at 3m; asymmetric crown due to shading; good health	1.8	n/a	Remove (permit not required)	-
32	Tilia cordata (littleleaf linden)	37.5	good	large surface roots; limited deadwood; good health	2.4	3	Protect	-
33	Liquidambar styraciflua (sweetgum)	8	fair	small wound at base; limited deadwood; fair health	1.2	3	Protect	-
34	Ulmus sp. (elm)	14	good	small wound at base, ~1/8 of trunk; good health	1.8	3	Protect	-
35	Liriodendron tulipfera (tuliptree)	5	good	no significant defects; good health	1.2	3	Protect	-

Tree #	Species	DBH (cm)	Condition Rating	Condition Comments	TPZ (m)	Owner-ship Category	Action	Compens- ation trees
36	Aesculus hipocastanum (horsechestnut)	9	poor	significant mower damage and cracks along bark; fair health	1.2	3	Protect	-
37	Liriodendron tulipfera (tuliptree)	3.5	poor	Uprooted; top pruned	I.2	3	Recommend City remove and replace	-

Total replacement trees: 56

Appendix II - Tree Protection Plan attached

Appendix III - Tree Protection Barrier Photos



Example of a tree protection barrier for a tree on municipal property.



Example of a tree protection barrier for a tree on private property

Appendix IV – LIMITATIONS OF ASSESSMENTS

It is the policy of Cohen and Master Tree and Shrub Services 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.

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