

ARBORIST REPORT & TREE PROTECTION PLAN

13 Mountain St. & 19 - 23 Elm St. GRIMSBY, ON L3M 1H2

Date: September 26, 2024

Cohen and Master Tree and Shrub Services Ltd.

42 Guardsman Road Thornhill, Ontario, L3T 6L4 416-932-0622

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Introduction

Cohen & Master Tree and Shrub Services Ltd. was retained by Valentine Coleman 1 Inc. and Valentine Coleman 2 Inc. in September 2024 to complete an arborist report and Tree Protection Plan for 13 Mountain St. & 19-23 Elm St., Grimsby. The report was requested relative redevelopment of the site, including mixed-use residential and commercial buildings with underground parking, and outdoor amenity space.

The purpose of this report is to:

- Establish species, size and condition of trees located on and adjacent to the subject site relative to the redevelopment.
- Provide a prescription for trees to be protected or removed during the project.

Key Item

A total of 28 trees were inventoried on and adjacent to the subject site. To accommodate the footprint of the proposed development, a total of 27 trees are proposed for removal. Of these trees, 25 are proposed for removal from the subject site (tree numbers 1-8; 10-22; 24 – 26 and 28); 1 tree is proposed for removal on a shared private property line (tree number 9); and 1 tree located on municipal property (tree number 23). In addition, tree number 27, located on adjacent private property is to be retained with recommended preservation measures to minimize damage to the tree inside the recommended Tree Protection Zone (TPZ).

Method

- The subject site was assessed by Megan Wain, ISA certified consulting arborist with Cohen & Master Tree and Shrub Services Ltd. on Sep. 16, 2024.
- 2. Photos were taken at the time and the most representative are attached as Appendix I.
- 3. Grimsby does not have specific tree protection guidelines for development within urban areas, therefore the City of Toronto's "Tree Protection Policy and Specifications for

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Construction Near Trees "1, March 2016, were used for reference for this report; the methods used to collect data and the information provided below are consistent with the details provided in that document.

- 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 II.
- 7. Cohen & Master created a Tree Protection Plan by adding tree protection and removal comments to a site plan provided by Castlepoint Numa, dated Sep. 5, 2024, and based on a topographic survey prepared by J.D. Barnes Ltd. dated Jun. 19, 2024. The Tree Protection Plan is found in Appendix III.
- 8. Limitations of the assessment applicable to this report are described in Appendix IV.

Tree Inventory

See Appendix II.

Tree Protection Prescription

- 1. The Tree Protection Plan, Appendix III, must be provided to the site supervisor prior to any work commencing on the site.
- 2. All trees proposed for removal and reviewed by the authorities based on approval of the site plan, are to be removed prior to excavation on the site. A total of 27 trees are proposed for removal (tree numbers 1 26 (inclusive) and 28).

¹ City of Toronto, Parks, Forestry & Recreation, Urban Forestry, (Mar. 2016), 'Tree Protection Policy and Specifications for Construction Near Trees'.

- 3. The removal of any trees located on adjacent private property, or over shared property lines, must be consented to by both owners. 'Boundary' trees (in which any part of the tree from the ground to the first branch crosses over a property boundary), are protected under the Provincial Forestry Act. The consent of all owners for the removal or injury of shared trees is required. On this project, Tree 9 requires the consent of property owner prior to its removal.
- 4. Prior to site disturbance, including vegetation removals, the owner must confirm that the works conform with the Migratory Bird Convention Act, 1994 and Migratory Birds Regulations, 2022. General provisions under these protect migratory birds, nests, eggs, and prohibit deposition of harmful substances. The Environmental and Climate Change Canada (ECCC) implements policies and guidelines to minimize effects to migratory birds (see https://www.canada.ca/en/services/environment/wildlife-plants-species/migratory-birds/migratory-birds-regulations.html). This includes the timing of vegetation removals during the primary nesting period (generally April 1 August 31 for this area, though it may extend beyond this period). If vegetation must be removed during this period, a bird survey is to be undertaken by a qualified person to confirm presence/absence of migratory bird activity. In general, vegetation removal is to be scheduled outside of this period.
- 5. Tree protection is specified to prevent damage to existing trees that are to be retained. Damage to trees is cumulative and often irreversible. Mature trees are especially sensitive to injury or changes in the environment.
- 6. As per the City of Toronto's tree protection guidelines, the Tree Protection Zone (TPZ) is an area around a tree where there is a high likelihood of encountering roots that are critical to the long-term health and stability of a tree. The TPZ radius is based on the trunk diameter, as follows.

Trunk Diameter (DBH)	Tree Protection Zone - Minimum Protection Distances Required
< 10 cm	1.2 m
II – 29 cm	1.8 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

- 7. Disturbance within the TPZ is to be avoided for trees that are to be retained. 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. Work that encroaches too far into the TPZ necessitates removal of the tree due to the health and structural stability impacts of such disturbance.
- 8. Where there is minimal encroachment into the TPZ, retention of the tree may be possible depending on the amount of root disturbance. On this project, there is a minor encroachment into the TPZ of Tree 27 for the removal of an existing deck and excavation for the underground parking garage up to the property line.
- 9. To minimize disturbance to Tree 27, the excavation along the perimeter of the subject site at the northwest corner of the property line, is to be carried out using root-sensitive methods to a depth of 90 cm inside the TPZ (refer to Appendix III, Tree Protection Plan). Root-sensitive methods include hand-digging, AirSpade, or low-pressure hydrovac excavation. It is recommended that this work be completed under the supervision of a qualified arborist. Any exposed roots are to be cleanly pruned to prevent tearing, subject to the arborist's review that such pruning will not affect the health or structure of the tree. Due to the minimal encroachment into the TPZ, significant root impacts are not anticipated. There are no conflicts with the overhead branches of this tree.
- 10. Tree protection barriers are not prescribed on the Tree Protection Plan, as all trees are being removed from the subject site. A construction fence must be installed around the perimeter of the work area.

On behalf of Cohen & Master Tree and Shrub Services Ltd.,

Sarah Lamon, HBSc, MFC

Consulting Arborist - ISA Certification: ON 1220A Cohen and Master Tree and Shrub Services Ltd.

sarah@cmtrees.com

Appendices

Attached

Appendix I - Photographs



Photo 1. Trees 1-3.



Photo 3. Trees 7 and 8.



Photo 2. Trees 4-6.



Photo 4. Tree 9.







Photo 7. Trees 11 and 12.

Photo 6. Trees 3 and 10.



Photo 8. Tree 13.



Photo 9. Trees 14 and 15.



Photo 11. Trees 20 and 21.



Photo 10. Trees 16-19.



Photo 12. Trees 22 and 23.



Photo 13. Trees 27.



Photo 14. Trees 28.

Appendix II - Tree Inventory

Inventory Date: Aug. 30 2024

TABLE DETAILS

Tree #- this number refers to the number on the tree assessment and plan

Species- the common name and Latin/scientific name for each inventoried tree.

DBH - refers to diameter at breast height (in centimeters) measured at 1.4 m above finished grade

Trunk Integrity- An assessment of the trunk for any defects or weaknesses. It is measured on a scale of Good, Fair, Poor

Crown Structure - An assessment of the scaffold branches and the canopy of the tree. Measured on a scale of Good, Fair, Poor

Crown Vitality An assessment of the health of the tree and assesses the amount of deadwood and live growth in the crown as compared to a 100% healthy tree. The size, colour and amount of foliage are also considered in this category. Measured on a scale of Good, Fair, Poor

Overall Tree Condition An assessment of the overall condition of the tree based on all parts of the tree. Measured on a Good, Fair, Poor. An > means more than, an < means less than.

Ownership - Subject site; adjacent private property; boundary; municipal.

Tree Protection Zone (TPZ) Minimum Tree Protection Zone as recommended by the City of Toronto. This distance is based on the diameter of the tree and the protection zone is measured from the trunk.

Condition Comments- Observations that inform the condition rating.

Action- Protect, injure or remove recommendations based on the proposed site plans.

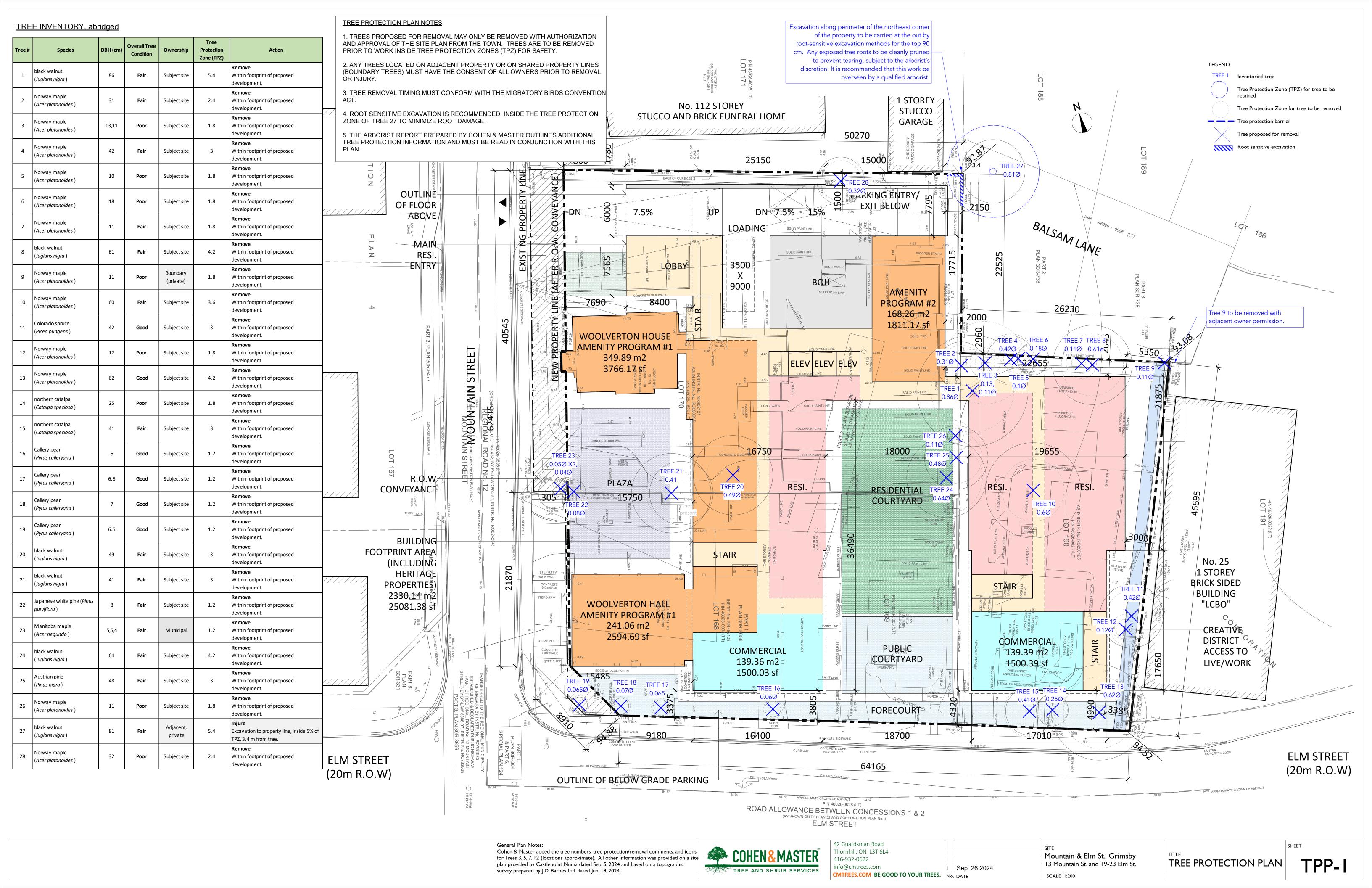
Tree #	Species	DBH (cm)	Trunk Integrity	Crown Structure	Crown Vitality	Overall Tree Condition	Ownership	Tree Protection Zone (TPZ)	Condition Comments	Action
1	black walnut (Juglans nigra)	86	Good	Good	Fair	Fair	Subject site	5.4	Asphalt driveway right up the trunk base; large ~20cm dead branch mid crown (recommend pruning); other minor deadwood.	Remove Within footprint of proposed development.
2	Norway maple (Acer platanoides)	31	Fair	Fair	Good	Fair	Subject site	2.4	Poor root flare; growing against property fence; suppressed by adjacent walnut tree; minor bend in trunk; additional stem removed at ground; narrow crack on leader.	Remove Within footprint of proposed development.
3	Norway maple (Acer platanoides)	13,11	Poor	Poor	Fair	Poor	Subject site	1.8	Codominant with narrow union; large cavity at base; suppressed by other trees; poor structure.	Remove Within footprint of proposed development.
4	Norway maple (Acer platanoides)	42	Poor	Fair	Fair	Fair	Subject site	3	Significant bend in trunk; growing against fence;; leaf scorch affecting 40% of foliage; poor trunk flare.	Remove Within footprint of proposed development.
5	Norway maple (Acer platanoides)	10	Poor	Poor	Fair	Poor	Subject site	1.8	Lacking central leader; poor form (limited scaffold branches); suppressed by surrounding trees.	Remove Within footprint of proposed development.
6	Norway maple (Acer platanoides)	18	Poor	Poor	Fair	Poor	Subject site	1.8	Top dead; bend in trunk; 40% live foliage; growing close to fence.	Remove Within footprint of proposed development.
7	Norway maple (Acer platanoides)	11	Fair	Fair	Fair	Fair	Subject site	1.8	Growing against fence; large exposed roots; bend in trunk extending towards adjacent parking lot.	Remove Within footprint of proposed development.

Tree #	Species	DBH (cm)	Trunk Integrity	Crown Structure	Crown Vitality	Overall Tree Condition	Ownership	Tree Protection Zone (TPZ)	Condition Comments	Action
8	black walnut (Juglans nigra)	61	Good	Good	Fair	Fair	Subject site	4.2	Chlorosis affecting 25% of foliage; poor trunk flare; minor tip dieback; multiple large (15, 20, 30 cm) diameter pruning wounds; closed over branch stump; old branch tear outs; asphalt near base.	Remove Within footprint of proposed development.
9	Norway maple (Acer platanoides)	11	Poor	Poor	Fair	Poor	Boundary (private)	1.8	Growing intertwined with chain-link fence; limited growth space due to fence and adjacent parking lot; poor structure.	Remove Within footprint of proposed development.
10	Norway maple (Acer platanoides)	60	Good	Fair	Fair	Fair	Subject site	3.6	Buttress roots upheaving patio stocks; poor root growing environment; tip dieback and moderate deadwood; several old pruning wounds.	Remove Within footprint of proposed development.
11	Colorado spruce (Picea pungens)	42	Good	Good	Good	Good	Subject site	3	Good health and structure; minor deadwood due to shading.	Remove Within footprint of proposed development.
12	Norway maple (Acer platanoides)	12	Poor	Poor	Good - Fai	Poor	Subject site	1.8	Suppressed by other vegetation; one stem dead; poor structure.	Remove Within footprint of proposed development.
13	Norway maple (Acer platanoides)	62	Good	Good	Good	Good	Subject site	4.2	Large surface roots with minor mower damage; well-balanced crown; good branch unions.	Remove Within footprint of proposed development.
14	northern catalpa (Catalpa speciosa)	25	Poor	Poor	Fair	Poor	Subject site	1.8	Near-hollow trunk being tied together with cloth (very little holding wood); fruiting bodies at the base; major epicormic growth.	Remove Within footprint of proposed development.
15	northern catalpa (Catalpa speciosa)	41	Poor	Poor	Fair	Fair	Subject site	3	Major epicormic growth; minor cavities in the upper trunk; chlorosis affecting 60% of foliage.	Remove Within footprint of proposed development.
16	Callery pear (<i>Pyrus calleryana</i>)	6	Good	Good	Good	Good	Subject site	1.2	Good health and structure.	Remove Within footprint of proposed development.
17	Callery pear (Pyrus calleryana)	6.5	Good	Good	Good	Good	Subject site	1.2	Good health and structure.	Remove Within footprint of proposed development.
18	Callery pear (Pyrus calleryana)	7	Good	Good	Good	Good	Subject site	1.2	Good health and structure.	Remove Within footprint of proposed development.
19	Callery pear (<i>Pyrus calleryana</i>)	6.5	Good	Fair	Good	Good	Subject site	1.2	Codominant structure.	Remove Within footprint of proposed development.

Tree #	Species	DBH (cm)	Trunk Integrity	Crown Structure	Crown Vitality	Overall Tree Condition	Ownership	Tree Protection Zone (TPZ)	Condition Comments	Action
20	black walnut (<i>Juglans nigra</i>)	49	Good	Good	Fair	Fair	Subject site	3	Minor chlorosis affecting 60% of foliage; minor tip dieback; growing near patio.	Remove Within footprint of proposed development.
21	black walnut (Juglans nigra)	41	Good	Fair	Fair	Fair	Subject site	3	Somewhat asymmetrical structure due to recently removed tree; limited inner branching.	Remove Within footprint of proposed development.
22	Japanese white pine (Pinus parviflora)	8	Fair	Fair	Good	Fair	Subject site	1.2	Meandering trunk; growing in restricted space (small rocky planter bed).	Remove Within footprint of proposed development.
23	Manitoba maple (<i>Acer negundo</i>)	5,5,4	Fair	Fair	Fair	Fair	Municipal	1.2	Multi-stemmed with all stems under 10cm diameter; competition from surrounding vegetation; fair structure.	Remove Within footprint of proposed development.
2/	black walnut (<i>Juglans nigra</i>)	64	Fair	Fair	Fair	Fair	Subject site	4.2	Multiple large pruning wounds; fair health (chlorosis affecting 30% of foliage); trunk growing very close to parking space edge.	Remove Within footprint of proposed development.
25	Austrian pine (<i>Pinus nigra</i>)	48	Fair	Fair	Fair	Fair	Subject site	3	Growing against fence; bend in trunk towards top of crown; minor Diplodia blight; unbalanced crown to the west.	Remove Within footprint of proposed development.
26	Norway maple (Acer platanoides)	11	Fair	Poor	Fair	Poor	Subject site	1.8	Growing against fence; suppressed by nearby pine; old tear out at 2m (closed over); minor lean; good health.	Remove Within footprint of proposed development.
27	black walnut (<i>Juglans nigra</i>)	81	Fair	Fair	Fair	Fair	Adjacent, private	5.4	Roots upheaving asphalt (very limited root growth space); moderate deadwood; well-balanced structure; minor chlorosis.	Injure Excavation to property line, inside 5% of TPZ, 3.4 m from tree.
1 /X	Norway maple (Acer platanoides)	32	Poor	Poor	Fair	Poor	Subject site	2.4	Major longitudinal trunk wound not healed; large (>10cm) pruning wound; growing against fence in confined area; dieback and leaf scorch on branches over fence.	Remove Within footprint of proposed development.

Appendix III - Tree Protection Plan

Attached



Appendix IV - LIMITATIONS OF ASSESSMENTS

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