

COHEN & MASTER



TREE AND SHRUB SERVICES

ARBORIST REPORT & TREE PROTECTION PLAN

900 LAKESHORE ROAD WEST

MISSISSAUGA, ON L5H 1H9

Date: January 25, 2024

Revised: November 22, 2024

Cohen and Master Tree and Shrub Services Ltd.

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

Adam Walicki, B.ENVD. E.E.T.
ISA Certified Arborist - ON 2490A
adam@cmtrees.com



METHODOLOGY

Tree Diameter Measurements: All relevant trees were sized by measuring their trunk diameter at 1.4 meters above existing grade, diameter at breast height (DBH) as per accepted arboricultural standards.

Tree Condition: A generalized assessment system was employed to describe the overall condition of tree health categories for each inventoried tree. A three (3) level scale from "Good", "Fair", and "Poor", was used to quantify the range of tree conditions. "Good" condition refers to the tree health category being greater than eighty (80) percent of a perfect specimen. "Fair" condition refers to a category condition that is less than eighty (80) percent but more than twenty (20) percent. "Poor" refers to a tree health category that is less than twenty (20) percent.

Tree #: Refers to the tree number on the tree assessment plan.

Common Name: The common name for each tree inventoried.

Botanical Name: The botanical name for each tree inventoried.

Diameter: Refers to diameter (in centimeters) measured at 1.4m (diameter at breast height (DBH)) above finished grade.

Root Zone (R.Z.): This is a tree health category to assess the growing conditions within the root zone of the tree. It is measured on a scale of Good, Fair, Poor.

Trunk Integrity (T.I.): This is a tree health category to assess the trunk condition of the tree for any defects or weaknesses or other notable issues. It is measured on a scale of Good, Fair, Poor.

Canopy Structure (C.S.): This is a tree health category to assess the overall shape and condition of the tree canopy, including scaffold and other branch conditions. This is also measured on a scale of Good, Fair, Poor.

Canopy Vigour (C.V.): This is a tree health category to assess the canopy health of the tree, including the amount of deadwood, dieback and live growth in the canopy as compared to a 100% healthy tree. The size, colour and amount of foliage are also considered in this category. It is measured on a scale of Good, Fair, Poor.

Tree Protection Zone (TPZ): Tree Protection Zone (TPZ) as recommended by the City of Mississauga. This distance is based on the diameter of the tree at breast height and the tree protection zone is measured from the trunk outwards.

Site Plan Recommendations

preserve: The TPZ of the tree will be fully protected (based on the TPZ requirements) during demolition and construction activities and will remain unaltered throughout the duration of demolition and construction. No permit is required.

INJURY (P): Any situation where the TPZ of the tree cannot be maintained and will be encroached upon, but the tree will not sustain injuries severe enough to compromise long-term health and structural stability. This includes situations where the movement of machinery or storage of materials would require disturbance within the TPZ. Measures to mitigate damage to the root zone and canopy (pruning, root exploration, soil de-compaction, mulching, fertilizing, etc.) may be recommended. A tree injury permit is required.

REMOVE (P): Any tree that is over 15cm in diameter but is not dead, that requires a permit from the city for removal. This includes trees significantly impacted by proposed construction which would sustain an unacceptable level of injury that would be unavoidable and likely cause long-term health and structural defects. A tree removal permit is required.

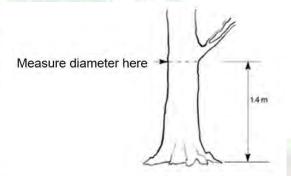
remove: Any tree that is dead, or that does not required a permit for removal. This also applies to trees less than 15cm in diameter that do not require a permit for removal.

Specifications for Tree Protection Hoarding/Fencing

It is necessary to protect all trees designated for preservation during both demolition and construction activities. This tree protection can be accomplished by installing tree protection hoarding or tree protection fencing (TPH or TPF). The TPZ for trees is based on the DBH of the tree.

Tree Protection Hoarding should be comprised of plywood mounted on $2 \times 4''$ wood frame (or t-bar if specified). Tree Protection Fencing should be comprised of orange plastic construction web fencing on $2 \times 4''$ wood frame (or t-bar if specified). Horizontal Root Protection Hoarding should be comprised of plywood sheets (for soft surfaces), steel plate (for hard surfaces), coarse wood chips, and $4 \times 4''$ wood frame (or equivalent) to retain wood chips.

Tree Protection Zone
1.8 m
2.4 m
3.0 m
3.6 m
4.2 m
4.8 m
5.4 m
6.0 m



SUMMARY

Cohen and Master Tree and Shrub Services have been retained to prepare this Arborist Report and Tree Protection Plan for proposed construction of a multi-storey residential building complex and landscaping at 900 Lakeshore Road West, Mississauga. The tree inventory and assessment were completed on November 9, 2023, with a follow-up site visit on March 13, 2024, according to the requirements set forth by the City of Mississauga.

The purpose of this report is to assess trees at and adjacent to 900 Lakeshore Road West that are 15cm in diameter or larger on private property, and trees within 6m of adjacent properties and proposed construction. Richard's Memorial Park is located directly adjacent to the property to the east, with wooded areas to the south and west of the property. Lakeshore Road West is located to the north. A total of eighty (80) trees were inventoried within the scope of work.

Construction Impact on Trees

Due to the proposed multi-storey residential building complex and landscape construction throughout the property, fourty-nine (49) trees are proposed for removal and will require removal permits and replacement plantings.

Seven (7) trees will be injured and will require injury permits due to encroachment into their TPZ's. A root exploration is recommended for these trees to determine impact of proposed construction and to provide preservation and injury mitigation recommendations.

Tree Removals

Due to the proposed construction, fourty-one (41) privately owned trees are proposed for removal, and eight (8) city owned trees. Twenty-eight (28) of the trees proposed for removal are in fair to poor condition. A permit is required for the removal of these trees.

Tree #	Tree Species	DBH (cm)	Overall Condition	Ownership	TPZ (m)	Action
388	Norway Maple	46	Good	Private	3.0m	REMOVE (P) - Due to location and proposed construction
389	Norway Spruce	34	Fair	Private	2.4m	REMOVE (P) - Due to location and proposed construction
390	Red Oak	79	Fair	Private	4.8m	REMOVE (P) - Due to location and proposed construction
391	Norway Spruce	49	Good	Private	3.0m	REMOVE (P) - Due to location and proposed construction

Tree #	Tree Species	DBH (cm)	Overall Condition	Ownership	TPZ (m)	Action
392	Norway Spruce	40	Fair	Private	2.4m	REMOVE (P) - Due to location and proposed construction
393	Norway Spruce	33	Fair	Private	2.4m	REMOVE (P) - Due to location and proposed construction
394	Black Walnut	41	Good	Private	3.0m	REMOVE (P) - Due to location and proposed construction
395	Norway Spruce	24,29	Fair	Private	1.8m	REMOVE (P) - Due to location and proposed construction
396	Butternut	58	Poor	Private	3.6m	REMOVE (P) - Due to location and proposed construction
397	Blue Spruce	52	Good	Private	3.6m	REMOVE (P) - Due to location and proposed construction
398	Juniper	18	Fair	Private	1.5m	REMOVE (P) - Due to location and proposed construction
399	Juniper	21	Fair	Private	1.8m	REMOVE (P) - Due to location and proposed construction
400	White Fir	31	Good	City	2.4m	REMOVE (P) - Due to location and proposed construction
401	Scots Pine	70	Good	City/Private	4.2m	REMOVE (P) - Due to location and proposed construction
402	Norway Spruce	32	Good	Private	2.4m	REMOVE (P) - Due to location and proposed construction
403	Norway Spruce	20	Poor	City	1.5m	REMOVE - Due to poor condition
404	Scots Pine	35	Fair	City	2.4m	REMOVE (P) - Due to location and proposed construction
405	White Birch	18	Good	City	1.5m	REMOVE (P) - Due to location and proposed construction

Tree #	Tree Species	DBH (cm)	Overall Condition	Ownership	TPZ (m)	Action
406	Norway Spruce	40	Good	Private	2.4m	REMOVE (P) - Due to location and proposed construction
407	Norway Spruce	30	Good	City	1.8m	REMOVE (P) - Due to location and proposed construction
408	Norway Spruce	23	Good	City/Private	1.8m	REMOVE (P) - Due to location and proposed construction
409	Scots Pine	43	Good	City/Private	3.0m	REMOVE (P) - Due to location and proposed construction
410	White Spruce	18	Good	Private	1.5m	REMOVE (P) - Due to location and proposed construction
411	Norway Spruce	42	Good	Private	3.0m	REMOVE (P) - Due to location and proposed construction
412	Scots Pine	70	Good	Private	4.2m	REMOVE (P) - Due to location and proposed construction
413	Scots Pine	46	Fair	Private	3.0m	REMOVE (P) - Due to location and proposed construction
414	Scots Pine	46	Fair	Private	3.0m	REMOVE (P) - Due to location and proposed construction
415	White Birch	18	Good	Private	1.5m	REMOVE (P) - Due to location and proposed construction
416	Norway Spruce	42	Good	Private	3.0m	REMOVE (P) - Due to location and proposed construction
417	Norway Spruce	38	Good	Private	2.4m	REMOVE (P) - Due to location and proposed construction
418	White Spruce	27	Good	Private	1.8m	REMOVE (P) - Due to location and proposed construction

Tree #	Tree Species	DBH (cm)	Overall Condition	Ownership	TPZ (m)	Action
419	Scots Pine	30	Good	Private	1.8m	REMOVE (P) - Due to location and proposed construction
420	Norway Spruce	42	Good	Private	3.0m	REMOVE (P) - Due to location and proposed construction
421	White Spruce	40	Good	Private	2.4m	REMOVE (P) - Due to location and proposed construction
422	Norway Spruce	29	Fair	Private	1.8m	REMOVE (P) - Due to location and proposed construction
423	White Birch	18	Fair	Private	1.5m	REMOVE (P) - Due to location and proposed construction
424	Norway Spruce	24	Poor	Private	1.8m	REMOVE - Due to poor condition
425	White Birch	21	Fair	Private	1.8m	REMOVE (P) - Due to location and proposed construction
426	Scots Pine	26	Fair	Private	1.8m	REMOVE (P) - Due to location and proposed construction
427	Norway Spruce	50	Good	Private	3.0m	REMOVE (P) - Due to location and proposed construction
428	White Fir	34	Poor	Private	2.4m	REMOVE (P) - Due to location and proposed construction
429	White Spruce	40	Fair	Private	2.4m	REMOVE (P) - Due to location and proposed construction
430	Norway Spruce	34	Good	Private	2.4m	REMOVE (P) - Due to location and proposed construction
431	White Birch	18	Good	Private	1.5m	REMOVE (P) - Due to location and proposed construction
432	Scots Pine	32,36,40,49	Good	Private	3.0m	REMOVE (P) - Due to location and proposed construction

Tree #	Tree Species	DBH (cm)	Overall Condition	Ownership	TPZ (m)	Action
443	Green Ash	26	Poor	Private	N/A	REMOVE - Dead and leaning against tree
454	Manitoba Maple	18	Poor	Private	1.5m	REMOVE (P) - Due to poor condition
460	American Elm	30	Poor	Private	N/A	REMOVE - Dead
464	Green Ash	56	Poor	Private	3.6m	Confirm if dead - REMOVE

Tree Injuries

Due to the proposed sidewalk construction, seven (7) park owned trees are proposed for injury. The majority of these trees are in good condition. A permit is required for the injury of these trees. A root exploration is recommended for these trees to determine impact of proposed construction and to provide preservation and injury mitigation recommendations. These trees will be protected with 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame.

Tree #	Tree Species	DBH (cm)	Overall Condition	Ownership	TPZ (m)	Action
433	Black Locust	31	Good	Park	2.4m	INJURY (P) - Due to sidewalk construction
434	Black Locust	27	Good	Park	1.8m	INJURY (P) - Due to sidewalk construction
435	Green Ash	32	Fair	Park	2.4m	INJURY (P) - Due to sidewalk construction
436	Black Locust	27	Good	Park	1.8m	INJURY (P) - Due to sidewalk construction
437	Black Locust	29	Good	Park	1.8m	INJURY (P) - Due to sidewalk construction
438	Black Locust	37	Good	Park	2.4m	INJURY (P) - Due to sidewalk construction
439	Black Locust	32	Good	Park	2.4m	INJURY (P) - Due to sidewalk construction

Air Spade & Air Vac

Cohen and Master Tree and Shrub Services recommends the Best Management Practice of day-lighting the tree roots using the Air Spade soil excavation system. Typically for an Air Spade excavation around tree roots, a maximum air stream pressure of 100 pounds per square inch (PSI) is utilized to minimize damage to the root bark. Furthermore, it is also recommended that an Air Vac be used in conjunction with the Air Spade, in order to remove

loose soil as part of the root exploration to the desired depth. The Air Vac is a portable compressed air powered vacuum system designed for safe and sensitive removal of excavated soil around tree roots and buried objects. The excavated parent soil should then be re-used to backfill the excavated areas. Using the Air Spade and Air Vac system is our preferred method to daylight roots without causing damage to the bark of the roots, and in order to minimize impact to the tree. All work should be done in the presence and under the supervision of an ISA Certified Arborist.

Replacement Tree Planting

As compensation for the proposed tree removals, one hundred and twelve (112) trees are required to be planted as compensation. Additionally a planting security deposit will be required. The amount will be determined by the City of Mississauga. For any tree replacement not able to be planted on private property, the replacement tree fee will be determined by the City of Mississauga. One replacement tree is required for every 15cm diameter of a private or public tree removed. Replacement trees should be at least a 6cm diameter deciduous tree, or 1.8m tall evergreen tree. If the replacement tree on private property is healthy after one (1) year of being planted, the deposit will be refunded.

Tree Protection

All remaining by-law protected trees will be protected as per TPP-1 – TPP-4 Tree Protection Plans. Tree Protection Hoarding/Fencing should be installed prior to any demolition or construction activities as outlined.

Tree #	Tree Species	DBH (cm)	Overall Condition	Ownership	TPZ (m)	Action
385	Juniper	23	Good	City	1.8m	Protect - 1.2m high orange plastic tree protection fence on t-bar and wood frame
386	Pussy Willow	34	Good	City	2.4m	Protect - 1.2m high orange plastic tree protection fence on t-bar and wood frame
387	Juniper	19	Good	City	1.5m	Protect - 1.2m high orange plastic tree protection fence on t-bar and wood frame
440	Red Oak	38	Good	Private	2.4m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
441	Black Walnut	56	Good	Private	3.6m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame

Tree #	Tree Species	DBH (cm)	Overall Condition	Ownership	TPZ (m)	Action
442	Black Walnut	48	Good	Private	3.0m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
444	Red Oak	61,92	Fair	Private	6.0m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
445	White Pine	53	Good	Private	3.6m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
446	White Pine	61	Good	Private	4.2m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
447	Red Maple	59	Good	Private	3.6m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
448	White Mulberry	17,28	Fair	Private	1.8m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
449	Pussy Willow	21	Fair	Private	1.8m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
450	White Mulberry	20	Fair	Private	1.5m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
451	White Mulberry	23	Fair	Private	1.8m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
452	Manitoba Maple	36	Poor	Private	2.4m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
453	Manitoba Maple	35	Fair	Private	2.4m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
455	Norway Spruce	27	Good	Private	1.8m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame

Tree #	Tree Species	DBH (cm)	Overall Condition	Ownership	TPZ (m)	Action
456	Willow	84	Fair	Neighbour	5.4m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
457	Norway Spruce	18	Good	Private	1.5m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
458	Norway Spruce	19	Good	Private	1.5m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
459	Willow	41,58,60	Fair	Neighbour	3.6m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
461	American Elm	24	Fair	City	1.8m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
462	American Elm	26	Fair	City	1.8m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
463	Scots Pine	38	Fair	Private	2.4m	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame

PRIVATE TREES PROPOSED FOR REMOVAL

Tree #388 – Norway Maple (46cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
388	Norway Maple	Acer platanoides	46	Fair	Good	Fair	Good	Good

Tree #388, a 46cm DBH Norway Maple (*Acer platanoides*) is a privately owned deciduous tree growing in the west portion of the property. This tree has exposed and girdling roots, is codominant at 1.7m with included bark, and has dieback. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #389 - Norway Spruce (34cm DBH)

Tree	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
389	Norway Spruce	Picea abies	34	Fair	Fair	Poor	Fair	Fair

Tree #389, a 34cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the west portion of the property. This tree has an uneven crown, unhealed trunk wounds, dieback and deadwood. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #390 - Red Oak (79cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
390	Red Oak	Quercus rubra	79	Fair	Poor	Fair	Fair	Fair

Tree #390, a 79cm DBH Red Oak (*Quercus rubra*) is a privately owned deciduous tree growing in the west portion of the property. This tree is growing on a lean, has unhealed trunk wounds, cavities with decay, and has been topped. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #391 - Norway Spruce (49cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
391	Norway Spruce	Picea abies	49	Good	Good	Good	Good	Good

Tree #391, a 49cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the west portion of the property. This tree has exposed and girdling roots, and unhealed pruning wounds. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.



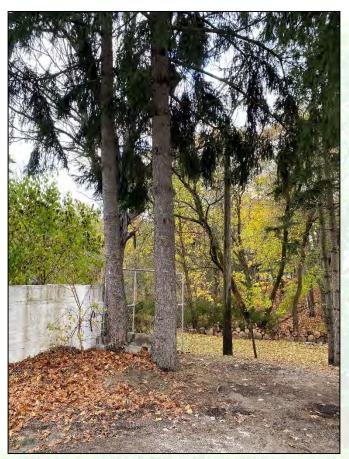


Tree #392 - Norway Spruce (40cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
392	Norway Spruce	Picea abies	40	Fair	Fair	Good	Good	Fair

Tree #392, a 40cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the west portion of the property. This tree is growing into a stone wall and has exposed and girdling roots, and unhealed pruning wounds. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #393 - Norway Spruce (33cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
393	Norway Spruce	Picea abies	33	Fair	Fair	Good	Good	Fair

Tree #393, a 33cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the west portion of the property. This tree is growing into a stone wall, has exposed and girdling roots, and unhealed pruning wounds. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #394 - Black Walnut (41cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
394	Black Walnut	Juglans nigra	41	Fair	Good	Good	Good	Good

Tree #394, a 41cm DBH Black Walnut (*Juglans nigra*) is a privately owned deciduous tree growing in the west portion of the property. This tree is growing on slope and has minor dieback. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.



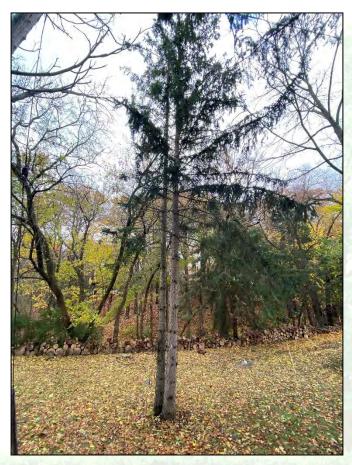


Tree #395 - Norway Spruce (24,29cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
395	Norway Spruce	Picea abies	24,29	Good	Fair	Fair	Fair	Fair

Tree #395, a 24,29cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the west portion of the property. This tree is co-dominant at base with included bark, dieback and deadwood. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #396 – Butternut (58cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
396	Butternut	Juglans cinerea	58	Fair	Fair	Poor	Poor	Poor

Tree #396, a 58cm DBH Butternut (*Juglans cinerea*) is a privately owned deciduous tree growing in the west portion of the property. This tree was previously ID'd as a Basswood. The majority of the crown appears to be dead, with significant deadwood throughout, some of which has also fallen and is scattered around the base of the tree. This tree also appears to have peeling bark, unhealed trunk wounds with decay, and canker.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #397 - Blue Spruce (52cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
397	Blue Spruce	Picea pungens	52	Fair	Good	Fair	Good	Good

Tree #397, a 52cm DBH Blue Spruce (*Picea pungens*) is a privately owned evergreen tree growing in the north portion of the property. This tree growing on a lean close to a retaining wall and has minor interior deadwood. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #398 – Juniper (18cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
398	Juniper	Juniperus sp.	18	Fair	Fair	Fair	Fair	Fair

Tree #398, an 18cm DBH Juniper (*Juniperus sp.*) is a privately owned evergreen tree growing in the north portion of the property. This tree has trunk seams and unhealed pruning wounds. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #399 – Juniper (21cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
399	Juniper	Juniperus sp.	21	Fair	Fair	Fair	Fair	Fair

Tree #399, an 21cm DBH Juniper (*Juniperus sp.*) is a privately owned evergreen tree growing in the north portion of the property. This tree has trunk seams and unhealed pruning wounds. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #399 – Juniper (21cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
399	Juniper	Juniperus sp.	21	Fair	Fair	Fair	Fair	Fair

Tree #399, an 21cm DBH Juniper (*Juniperus sp.*) is a privately owned evergreen tree growing in the north portion of the property. This tree has trunk seams, included bark, and unhealed pruning wounds. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #400 – White Fir (31cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
400	White Fir	Abies concolor	31	Good	Good	Fair	Good	Good

Tree #400, a 31cm DBH White Fir (*Abies concolor*) is a privately owned evergreen tree growing in the north portion of the property. This tree an uneven crown and minor interior deadwood. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #401 - Scots Pine (70cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
401	Scots Pine	Pinus sylvestris	70	Fair	Good	Good	Fair	Good

Tree #401, a 70cm DBH Scots Pine (*Pinus sylvestris*) is a privately owned evergreen tree growing in the north portion of the property. This tree has unhealed pruning wounds, dieback and deadwood. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.



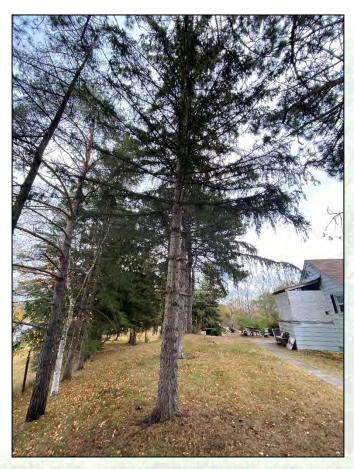


Tree #402 - Norway Spruce (32cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
402	Norway Spruce	Picea abies	32	Fair	Good	Good	Fair	Good

Tree #402, a 32cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the north portion of the property. This tree has exposed and girdling roots and unhealed pruning wounds. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #403 - Norway Spruce (20cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
403	Norway Spruce	Picea abies	20	Fair	Fair	Poor	Poor	Poor

Tree #403, a 20cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the north portion of the property. This tree has significant dieback and deadwood, and is almost dead. Overall this tree is in poor condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #404 – Scots Pine (35cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
404	Scots Pine	Pinus sylvestris	35	Good	Good	Fair	Fair	Fair

Tree #404, a 35cm DBH Scots Pine (*Pinus sylvestris*) is a privately owned evergreen tree growing in the north portion of the property. This tree has an uneven crown, unhealed pruning wounds, dieback and deadwood. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.



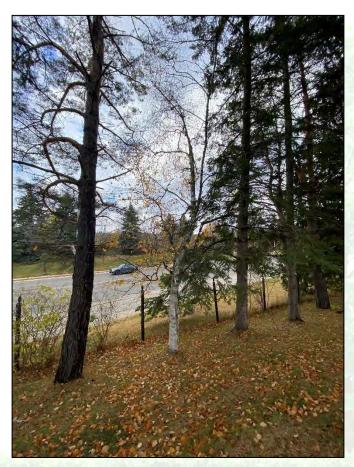


Tree #405 – White Birch (18cm DBH)

Tro		Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
40)5	White Birch	Betula papyrifera	18	Good	Good	Good	Fair	Good

Tree #405, an 18cm DBH White Birch (*Betula papyrifera*) is a privately owned deciduous tree growing in the north portion of the property. This tree has a bent trunk, unhealed trunk wounds, frost cracks, dieback and deadwood. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #406 - Norway Spruce (40cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
406	Norway Spruce	Picea abies	40	Fair	Good	Good	Fair	Good

Tree #406, a 40cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the north portion of the property. This tree has exposed roots, unhealed pruning wounds, dieback and deadwood. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #407 - Norway Spruce (30cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
407	Norway Spruce	Picea abies	30	Fair	Good	Fair	Fair	Good

Tree #407, a 30cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the north portion of the property. This tree has exposed roots and an uneven crown. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #408 – Norway Spruce (23cm DBH)

Tree	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
408	Norway Spruce	Picea abies	23	Fair	Good	Fair	Fair	Good

Tree #408, a 23cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the north portion of the property. This tree has exposed roots and an uneven crown. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #409 – Scots Pine (43cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
409	Scots Pine	Pinus sylvestris	43	Good	Good	Fair	Fair	Good

Tree #409, a 43cm DBH Scots Pine (*Pinus sylvestris*) is a privately owned evergreen tree growing in the north portion of the property. This tree has unhealed trunk wounds, dieback, and deadwood. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.



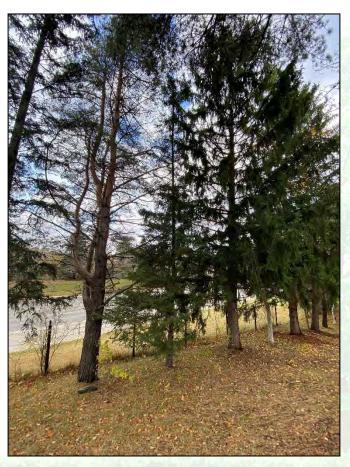


Tree #410 – White Spruce (18cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
410	White Spruce	Picea glauca	18	Good	Good	Fair	Fair	Good

Tree #410, an 18cm DBH White Spruce (*Picea glauca*) is a privately owned evergreen tree growing in the north portion of the property. This tree has minor deadwood. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #411 - Norway Spruce (42cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
411	Norway Spruce	Picea abies	42	Fair	Good	Good	Good	Good

Tree #411, a 42cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the east portion of the property. This tree has exposed roots and unhealed pruning wounds. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #412 - Scots Pine (70cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
412	Scots Pine	Pinus sylvestris	70	Good	Good	Fair	Good	Good

Tree #412, a 70cm DBH Scots Pine (*Pinus sylvestris*) is a privately owned evergreen tree growing in the east portion of the property. This tree is co-dominant at 7m, has unhealed trunk wounds, dieback and deadwood. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #413 – Scots Pine (46cm DBH)

	ree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
4	13	Scots Pine	Pinus sylvestris	46	Good	Good	Fair	Fair	Fair

Tree #413, a 46cm DBH Scots Pine (*Pinus sylvestris*) is a privately owned evergreen tree growing in the east portion of the property. This tree has unhealed trunk wounds, a sparse crown, dieback and deadwood. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #414 - Scots Pine (46cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
414	Scots Pine	Pinus sylvestris	46	Good	Good	Fair	Fair	Fair

Tree #414, a 46cm DBH Scots Pine (*Pinus sylvestris*) is a privately owned evergreen tree growing in the east portion of the property. This tree has a bent trunk, unhealed trunk wounds, a sparse crown, dieback and deadwood. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #415 - White Birch (18cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
415	White Birch	Betula papyrifera	18	Good	Good	Good	Fair	Good

Tree #415, an 18cm DBH White Birch (*Betula papyrifera*) is a privately owned deciduous tree growing in the north portion of the property. This tree has an uneven crown, dieback and deadwood. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #416 – Norway Spruce (42cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
416	Norway Spruce	Picea abies	42	Good	Good	Good	Good	Good

Tree #416, a 42cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the east portion of the property. This tree has minor interior deadwood. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.



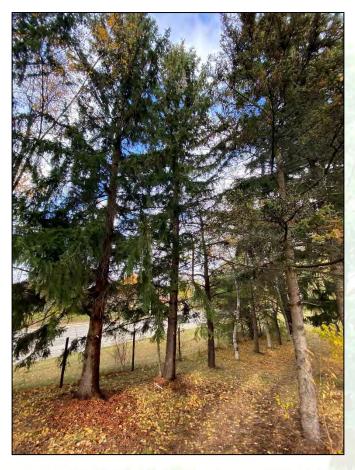


Tree #417 – Norway Spruce (38cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
417	Norway Spruce	Picea abies	38	Good	Good	Good	Fair	Good

Tree #417, a 38cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the east portion of the property. This tree has minor dieback and deadwood. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.



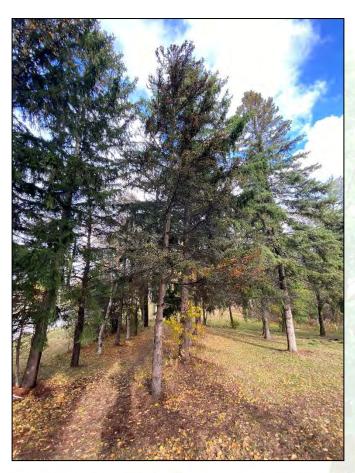


Tree #418 – White Spruce (27cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
418	White Spruce	Picea glauca	27	Good	Good	Good	Fair	Good

Tree #418, a 27cm DBH White Spruce (*Picea glauca*) is a privately owned evergreen tree growing in the east portion of the property. This tree has dieback, deadwood, and a sparse crown. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #419 - Scots Pine (30cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
419	Scots Pine	Pinus sylvestris	30	Good	Good	Good	Fair	Good

Tree #419, a 30cm DBH Scots Pine (*Pinus sylvestris*) is a privately owned evergreen tree growing in the east portion of the property. This tree has dieback, deadwood, and a sparse crown. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #420 - Norway Spruce (42cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
420	Norway Spruce	Picea abies	42	Fair	Good	Good	Fair	Good

Tree #420, a 42cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the east portion of the property. This tree has exposed roots, dieback and deadwood. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #421 – White Spruce (40cm DBH)

	Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
Ī	421	White Spruce	Picea glauca	40	Fair	Good	Good	Fair	Good

Tree #421, a 40cm DBH White Spruce (*Picea glauca*) is a privately owned evergreen tree growing in the east portion of the property. This tree has exposed roots and deadwood. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #422 - Norway Spruce (29cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
422	Norway Spruce	Picea abies	29	Fair	Good	Fair	Fair	Fair

Tree #422, a 29cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the east portion of the property. This tree has exposed and girdling roots, dieback, deadwood, and a sparse crown. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #423 – White Birch (18cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
423	White Birch	Betula papyrifera	18	Good	Fair	Fair	Fair	Fair

Tree #423, a 18cm DBH White Birch (*Betula papyrifera*) is a privately owned deciduous tree growing in the east portion of the property. This tree has a bent trunk, is co-dominant at 5m with included bark, unhealed trunk wounds, dieback and deadwood. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.



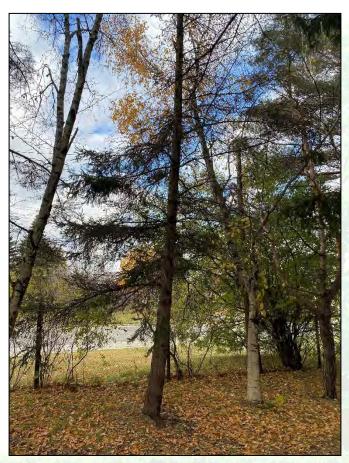


Tree #424 – Norway Spruce (24cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
424	Norway Spruce	Picea abies	24	Fair	Good	Fair	Poor	Poor

Tree #424, a 24cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the east portion of the property. This tree has girdling roots, significant dieback and deadwood and is 70% dead. Overall this tree is in poor condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.



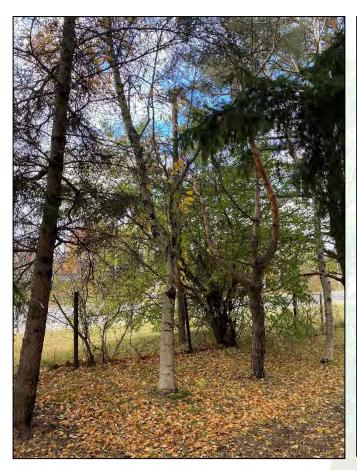


Tree #425 – White Birch (21cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
425	White Birch	Betula papyrifera	21	Good	Good	Fair	Fair	Fair

Tree #425, a 21cm DBH White Birch (*Betula papyrifera*) is a privately owned deciduous tree growing in the east portion of the property. This tree has an uneven crown, dieback and deadwood. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.



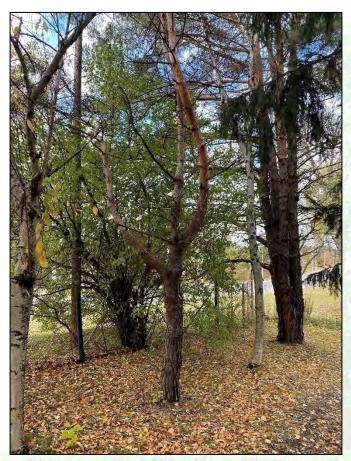


Tree #426 – Scots Pine (26cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
426	Scots Pine	Pinus sylvestris	26	Good	Fair	Fair	Fair	Fair

Tree #426, a 26cm DBH Scots Pine (*Pinus sylvestris*) is a privately owned evergreen tree growing in the east portion of the property. This tree has a bent trunk, unhealed trunk wounds, a cavity, dieback and deadwood. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #427 – Norway Spruce (50cm DBH)

	Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
Ī	427	Norway Spruce	Picea abies	50	Fair	Good	Good	Good	Good

Tree #427, a 50cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the east portion of the property. This tree has exposed roots and minor interior deadwood. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #428 – White Fir (34cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
428	White Fir	Abies concolor	34	Good	Good	Fair	Poor	Poor

Tree #428, a 34cm DBH White Fir (*Abies concolor*) is a privately owned evergreen tree growing in the east portion of the property. This tree has significant dieback and deadwood. Overall this tree is in poor condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #429 – White Spruce (40cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
429	White Spruce	Picea glauca	40	Fair	Good	Fair	Good	Fair

Tree #429, a 50cm DBH White Spruce (*Picea glauca*) is a privately owned evergreen tree growing in the east portion of the property. This tree has exposed and girdling roots, unhealed pruning wounds, dieback, deadwood and has been topped. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #430 – Norway Spruce (34cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
430	Norway Spruce	Picea abies	34	Good	Good	Good	Fair	Good

Tree #430, a 34cm DBH Norway Spruce (*Picea abies*) is a privately owned evergreen tree growing in the east portion of the property. This tree has an uneven root flare, dieback, deadwood and sparse crown. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #431 - White Birch (18cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
431	White Birch	Betula papyrifera	18	Good	Good	Fair	Good	Good

Tree #431, an 18cm DBH White Birch (*Betula papyrifera*) is a privately owned deciduous tree growing in the east portion of the property. This tree is co-dominant at 7m, has unhealed trunk wounds, dieback and deadwood. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.



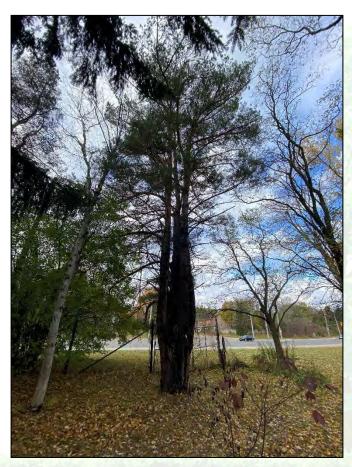


Tree #432 – Scots Pine (32,36,40,49cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
432	Scots Pine	Pinus sylvestris	32,36,40,49	Good	Good	Fair	Good	Good

Tree #432, a 32,36,40,49cm DBH Scots Pine (*Pinus sylvestris*) is a privately owned evergreen tree growing in the east portion of the property. This tree is co-dominant at 1.5m with included bark, dieback and deadwood. Overall this tree is in good condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #443 - Green Ash (26cm DBH)

Tre	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
443	Green Ash	Fraxinus pennsylvanica	26	Good	Poor	Poor	Poor	Poor

Tree #443, a 26cm DBH Green Ash (*Fraxinus pennsylvanica*) is a privately owned deciduous tree growing in the south portion of the property. This tree has fallen over and is leaning against another tree. This hanger needs attention and should be cut to lay the tree down on grade to make it safe. Overall this tree is in poor condition.

Due to the condition of this tree, this tree is recommended for removal. A permit is required for the removal of this tree.



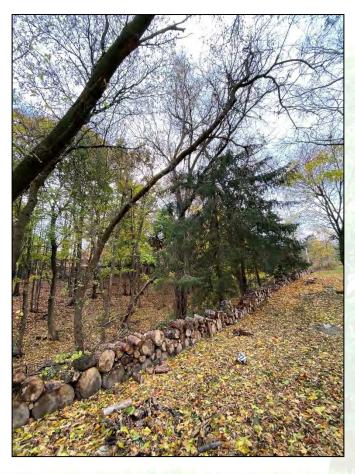


Tree #454 - Manitoba Maple (18cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
454	Manitoba Maple	Acer negundo	18	Fair	Fair	Fair	Fair	Fair

Tree #454, an 18cm DBH Manitoba Maple (*Acer negundo*) is a privately owned deciduous tree growing in the south portion of the property. This tree growing on a lean, and has girdling roots and epicormic growth. Overall this tree is in fair condition.

Due to the location that this tree is growing and the proposed construction, this tree is recommended for removal. A permit is required for the removal of this tree.



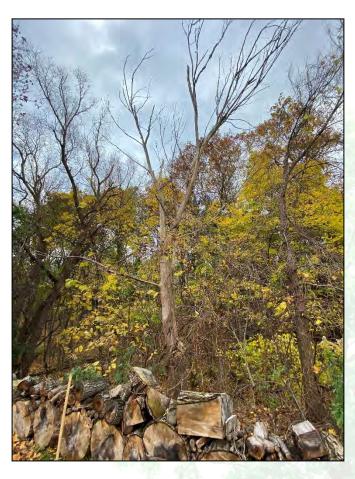


Tree #460 – American Elm (30cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
460	American Elm	Ulmus americana	30	Poor	Poor	Poor	Poor	Poor

Tree #460, an 30cm DBH American Elm (*Ulmus americana*) is a privately owned deciduous tree growing in the west portion of the property. This tree dead.

Due to condition of this tree, this tree is recommended for removal. A permit is required for the removal of this tree.





Tree #464 – Green Ash (56cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition
464	Green Ash	Fraxinus pennsylvanica	56	Good	Fair	Fair	Poor	Poor

Tree #464, a 56cm DBH American Elm (*Ulmus americana*) is a privately owned deciduous tree growing in the south portion of the property. This tree has an unhealed trunk wound at base, decay at base, and is possibly dead. Overall this tree is in poor condition.

Due to the poor condition of this tree, this tree is recommended for removal. A permit is required for the removal of this tree.





TREES PROPOSED FOR INJURY - RICHARD'S MEMORIAL PARK

Tree #433 – Black Locust (31cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition	TPZ (m)
433	Black Locust	Robinia pseudoacacia	31	Good	Good	Good	Fair	Good	2.4m

Tree #433, a 31cm DBH Black Locust (*Robinia pseudoacacia*) is a park owned deciduous tree growing adjacent to the east portion of the property in Richard's Memorial Park. This tree has unhealed trunk wounds, dieback and deadwood. Overall this tree is in good condition.

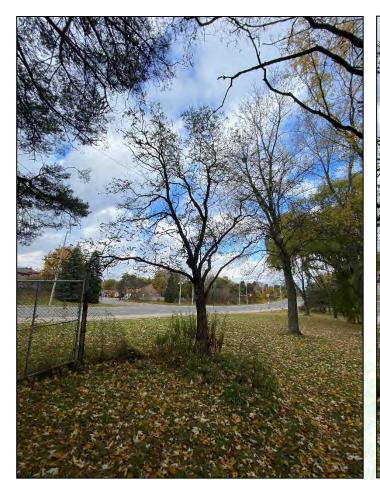
Due to the proposed construction of a sidewalk west of the tree, there will be a 9% encroachment into the west portion of the 2.4m TPZ of Tree #433. The base of the walkway should be granite sand and/or 3/4" clear washed granite gravel to minimize impact to the root zone. Limestone should not be used as a base, as to not alter the pH of the soil.

All work within the TPZ is to be done by hand and in the presence and under the supervision of an ISA Certified Arborist. Within the edge of the proposed sidewalk, and to mitigate tree injury, the Best Management Practice of day-lighting the tree roots using the Air Spade system is recommended. It is our preferred method to daylight roots without causing damage to the bark of the roots. The line of root exploration should be along the limits of the proposed sidewalk closest to the tree.

The root exploration trench should be 30cm wide by 90cm deep. Typically for an Air Spade excavation around tree roots, a maximum air stream pressure of 100 pounds per square inch (PSI) is utilized to minimize damage to the root bark. If a dense mat of roots is encountered, a large number of smaller feeder roots, or significant roots larger than 5cm diameter are encountered, no roots larger than 5cm in diameter are to be cut. Any root pruning required should follow ISA Best Management Practices.

The 2.4m TPZ of this tree will be protected with 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame. Tree Protection should be installed prior to any demolition or construction activities as outlined.

Tree #433 - PHOTOS





Tree #434 – Black Locust (27cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition	TPZ (m)
434	Black Locust	Robinia pseudoacacia	27	Good	Good	Good	Fair	Good	1.8m

Tree #434, a 27cm DBH Black Locust (*Robinia pseudoacacia*) is a park owned deciduous tree growing adjacent to the east portion of the property in Richard's Memorial Park. This tree has co-dominant at 3m, has unhealed trunk wounds, dieback and deadwood. Overall this tree is in good condition.

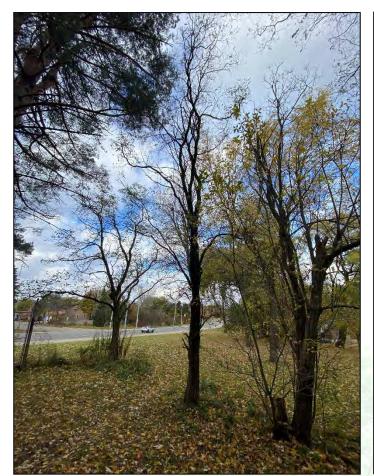
Due to the proposed construction of a sidewalk west of the tree, there will be a 4% encroachment into the west portion of the 1.8m TPZ of Tree #434. The base of the walkway should be granite sand and/or ¾" clear washed granite gravel to minimize impact to the root zone. Limestone should not be used as a base, as to not alter the pH of the soil.

All work within the TPZ is to be done by hand and in the presence and under the supervision of an ISA Certified Arborist. Within the edge of the proposed sidewalk, and to mitigate tree injury, the Best Management Practice of day-lighting the tree roots using the Air Spade system is recommended. It is our preferred method to daylight roots without causing damage to the bark of the roots. The line of root exploration should be along the limits of the proposed sidewalk closest to the tree.

The root exploration trench should be 30cm wide by 90cm deep. Typically for an Air Spade excavation around tree roots, a maximum air stream pressure of 100 pounds per square inch (PSI) is utilized to minimize damage to the root bark. If a dense mat of roots is encountered, a large number of smaller feeder roots, or significant roots larger than 5cm diameter are encountered, no roots larger than 5cm in diameter are to be cut. Any root pruning required should follow ISA Best Management Practices.

The 1.8m TPZ of this tree will be protected with 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame. Tree Protection should be installed prior to any demolition or construction activities as outlined.

Tree #434 - PHOTOS





Tree #435 - Green Ash (32cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition	TPZ (m)
435	Green Ash	Fraxinus pennsylvanica	32	Good	Fair	Fair	Fair	Fair	2.4m

Tree #435, a 32cm DBH Green Ash (*Fraxinus pennsylvanica*) is a park owned deciduous tree growing adjacent to the east portion of the property in Richard's Memorial Park. This tree has sucker growth, epicormic growth, unhealed trunk wounds, and deadwood. Overall this tree is in fair condition.

Due to the proposed construction of a sidewalk west of the tree, there will be a 5% encroachment into the west portion of the 2.4m TPZ of Tree #435. The base of the walkway should be granite sand and/or ¾" clear washed granite gravel to minimize impact to the root zone. Limestone should not be used as a base, as to not alter the pH of the soil.

All work within the TPZ is to be done by hand and in the presence and under the supervision of an ISA Certified Arborist. Within the edge of the proposed sidewalk, and to mitigate tree injury, the Best Management Practice of day-lighting the tree roots using the Air Spade system is recommended. It is our preferred method to daylight roots without causing damage to the bark of the roots. The line of root exploration should be along the limits of the proposed sidewalk closest to the tree.

The root exploration trench should be 30cm wide by 90cm deep. Typically for an Air Spade excavation around tree roots, a maximum air stream pressure of 100 pounds per square inch (PSI) is utilized to minimize damage to the root bark. If a dense mat of roots is encountered, a large number of smaller feeder roots, or significant roots larger than 5cm diameter are encountered, no roots larger than 5cm in diameter are to be cut. Any root pruning required should follow ISA Best Management Practices.

The 2.4m TPZ of this tree will be protected with 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame. Tree Protection should be installed prior to any demolition or construction activities as outlined.

Tree #435 - PHOTOS





Tree #436 – Black Locust (27cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition	TPZ (m)
436	Black Locust	Robinia pseudoacacia	27	Good	Good	Fair	Fair	Good	1.8m

Tree #436, a 27cm DBH Black Locust (*Robinia pseudoacacia*) is a park owned deciduous tree growing adjacent to the east portion of the property in Richard's Memorial Park. This tree is co-dominant at 7m, has unhealed trunk wounds, epicormic growth, dieback and deadwood. Overall this tree is in good condition.

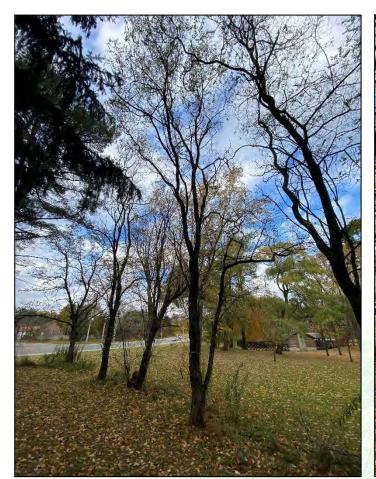
Due to the proposed construction of a sidewalk west of the tree, there will be a 4% encroachment into the west portion of the 1.8m TPZ of Tree #436. The base of the walkway should be granite sand and/or ¾" clear washed granite gravel to minimize impact to the root zone. Limestone should not be used as a base, as to not alter the pH of the soil.

All work within the TPZ is to be done by hand and in the presence and under the supervision of an ISA Certified Arborist. Within the edge of the proposed sidewalk, and to mitigate tree injury, the Best Management Practice of day-lighting the tree roots using the Air Spade system is recommended. It is our preferred method to daylight roots without causing damage to the bark of the roots. The line of root exploration should be along the limits of the proposed sidewalk closest to the tree.

The root exploration trench should be 30cm wide by 90cm deep. Typically for an Air Spade excavation around tree roots, a maximum air stream pressure of 100 pounds per square inch (PSI) is utilized to minimize damage to the root bark. If a dense mat of roots is encountered, a large number of smaller feeder roots, or significant roots larger than 5cm diameter are encountered, no roots larger than 5cm in diameter are to be cut. Any root pruning required should follow ISA Best Management Practices.

The 1.8m TPZ of this tree will be protected with 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame. Tree Protection should be installed prior to any demolition or construction activities as outlined.

Tree #436 - PHOTOS





Tree #437 – Black Locust (29cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition	TPZ (m)
437	Black Locust	Robinia pseudoacacia	29	Good	Good	Fair	Fair	Good	1.8m

Tree #437, a 29cm DBH Black Locust (*Robinia pseudoacacia*) is a park owned deciduous tree growing adjacent to the east portion of the property in Richard's Memorial Park. This tree is co-dominant at 6m, has unhealed trunk wounds, dieback and deadwood. Overall this tree is in good condition.

Due to the proposed construction of a sidewalk west of the tree, there will be a 3% encroachment into the west portion of the 1.8m TPZ of Tree #437. The base of the walkway should be granite sand and/or ¾" clear washed granite gravel to minimize impact to the root zone. Limestone should not be used as a base, as to not alter the pH of the soil.

All work within the TPZ is to be done by hand and in the presence and under the supervision of an ISA Certified Arborist. Within the edge of the proposed sidewalk, and to mitigate tree injury, the Best Management Practice of day-lighting the tree roots using the Air Spade system is recommended. It is our preferred method to daylight roots without causing damage to the bark of the roots. The line of root exploration should be along the limits of the proposed sidewalk closest to the tree.

The root exploration trench should be 30cm wide by 90cm deep. Typically for an Air Spade excavation around tree roots, a maximum air stream pressure of 100 pounds per square inch (PSI) is utilized to minimize damage to the root bark. If a dense mat of roots is encountered, a large number of smaller feeder roots, or significant roots larger than 5cm diameter are encountered, no roots larger than 5cm in diameter are to be cut. Any root pruning required should follow ISA Best Management Practices.

The 1.8m TPZ of this tree will be protected with 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame. Tree Protection should be installed prior to any demolition or construction activities as outlined.

Tree #437 - PHOTOS





Tree #438 - Black Locust (37cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition	TPZ (m)
438	Black Locust	Robinia pseudoacacia	37	Good	Good	Fair	Fair	Good	2.4m

Tree #438, a 37cm DBH Black Locust (*Robinia pseudoacacia*) is a park owned deciduous tree growing adjacent to the east portion of the property in Richard's Memorial Park. This tree has unhealed trunk wounds, dieback and deadwood. Overall this tree is in good condition.

Due to the proposed construction of a sidewalk west of the tree, there will be a 7% encroachment into the west portion of the 2.4m TPZ of Tree #438. The base of the walkway should be granite sand and/or 3/4" clear washed granite gravel to minimize impact to the root zone. Limestone should not be used as a base, as to not alter the pH of the soil.

All work within the TPZ is to be done by hand and in the presence and under the supervision of an ISA Certified Arborist. Within the edge of the proposed sidewalk, and to mitigate tree injury, the Best Management Practice of day-lighting the tree roots using the Air Spade system is recommended. It is our preferred method to daylight roots without causing damage to the bark of the roots. The line of root exploration should be along the limits of the proposed sidewalk closest to the tree.

The root exploration trench should be 30cm wide by 90cm deep. Typically for an Air Spade excavation around tree roots, a maximum air stream pressure of 100 pounds per square inch (PSI) is utilized to minimize damage to the root bark. If a dense mat of roots is encountered, a large number of smaller feeder roots, or significant roots larger than 5cm diameter are encountered, no roots larger than 5cm in diameter are to be cut. Any root pruning required should follow ISA Best Management Practices.

The 2.4m TPZ of this tree will be protected with 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame. Tree Protection should be installed prior to any demolition or construction activities as outlined.

Tree #438 - PHOTOS





Tree #439 – Black Locust (32cm DBH)

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition	TPZ (m)
439	Black Locust	Robinia pseudoacacia	32	Good	Good	Fair	Fair	Good	2.4m

Tree #439, a 32cm DBH Black Locust (*Robinia pseudoacacia*) is a park owned deciduous tree growing adjacent to the east portion of the property in Richard's Memorial Park. This tree is co-dominant at 4m, has unhealed trunk wounds, dieback and deadwood. Overall this tree is in good condition.

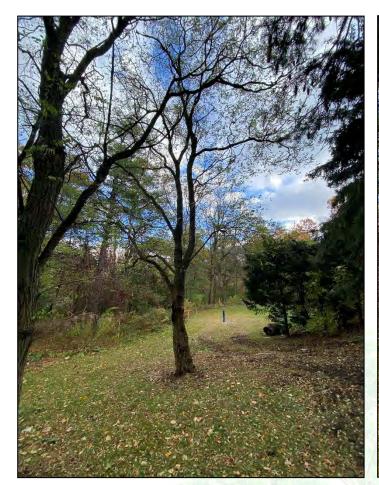
Due to the proposed construction of a sidewalk west of the tree, there will be a 6% encroachment into the west portion of the 2.4m TPZ of Tree #439. The base of the walkway should be granite sand and/or ¾" clear washed granite gravel to minimize impact to the root zone. Limestone should not be used as a base, as to not alter the pH of the soil.

All work within the TPZ is to be done by hand and in the presence and under the supervision of an ISA Certified Arborist. Within the edge of the proposed sidewalk, and to mitigate tree injury, the Best Management Practice of day-lighting the tree roots using the Air Spade system is recommended. It is our preferred method to daylight roots without causing damage to the bark of the roots. The line of root exploration should be along the limits of the proposed sidewalk closest to the tree.

The root exploration trench should be 30cm wide by 90cm deep. Typically for an Air Spade excavation around tree roots, a maximum air stream pressure of 100 pounds per square inch (PSI) is utilized to minimize damage to the root bark. If a dense mat of roots is encountered, a large number of smaller feeder roots, or significant roots larger than 5cm diameter are encountered, no roots larger than 5cm in diameter are to be cut. Any root pruning required should follow ISA Best Management Practices.

The 2.4m TPZ of this tree will be protected with 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame. Tree Protection should be installed prior to any demolition or construction activities as outlined.

Tree #439 - PHOTOS





ROOT ZONE/SOIL RESTORATION/PLANT HEALTH CARE

Root Zone/Soil Restoration includes soil aeration, decompaction, and the addition of mycorrhizae and other organics. This will increase the likelihood of compensatory roots growing to increase the health/stability of trees and landscape plants, as well as helping newly planted trees and landscape plants health and recovery. The following recommendations are for preparing and remediating soils to promote healthy rooting environments.

Air Spade

The Air Spade System is a specialized pneumatic air tool with a supersonic nozzle that is strong enough to blow away soil from roots, but is gentle enough not to harm the roots. This system can be used for both root exploration and for soil renovation. Typically for Air Spading around tree roots, a maximum air stream pressure of 100 pounds per square inch (PSI) is utilized to minimize damage to the root bark. The process of air spading soil helps with soil decompaction and aeration, while minimizing damage to existing root systems. This results in increased viable rooting areas for existing trees and new landscape plants.

Vertical Mulching

Vertical mulching is process of making a grid pattern of holes and back filling them with our custom compost mix. This will reduce soil compaction and improve soil structure and chemistry and improve water drainage. Tree roots respond very well to this process, having room to grow and nutrients to take advantage of. This is hugely beneficial for overall tree health. This process works well on lawns as it only makes a small hole on the surface and grass will grow in over the top onto the nutrient rich compost.

Inoculating Trees and Landscape Plants

It is recommended that the new topsoil be drenched with ArborGain and mycorrhizal solution. This allows for spores to be transported in the water suspension that comes in contact with new emerging root grow. These spores will germinate and attach to developing root tips and finer roots. The goal of inoculating trees and new landscape plants is to bring the mycorrhizal spores in contact with the root system efficiently, and to promote new root growth. It may take several applications to successfully inoculate a large/established root system. With large caliper trees, the root system will be at least 25% wider in diameter than the canopy of the tree. This makes inoculating the entirety of an established root system a considerable challenge. However, existing trees and new landscape plants will always benefit from any new mycorrhizal symbiosis, therefore repeated inoculations will always be beneficial.

Construction Activities and Excavation Around Trees and Landscape Plants

Any soil disturbances around existing trees and landscape plants will result in damages to root systems. Damaged roots will begin recovery by producing a new phase of emerging root tips and root hairs where root systems have been stripped of fine roots. These areas of root damage and disturbance are the ideal location where new mycorrhizal symbiosis will be of greatest benefit. A thorough drenching of ArborGain will be of greatest benefit in such circumstances.

Compacted Soils for Established Trees and Landscape Plants

Remediation and decompaction of soils often requires air-spading and vertical mulching. These procedures are both necessary and recommended to help remediate rooting environments. However, both activities will damage/strip fine roots or break lateral roots. Inoculating with ArborGain will assist the roots in their recovery from these necessary but disruptive procedures. When the root systems of established trees and landscape plants do recover, the result is a larger available rooting area for roots to establish and grow.

ArborGain

ArborGain is a custom mix of humates, sea kelp and microbial food sources. Applied to the soil within the landscape, ArborGain stimulates root development, increases drought tolerance and improves soil health. Applied directly to the foliage, ArborGain improves cell structure of the leaf and boosts canopy health.

Kelp: These underwater forests of the ecosystem host a whopping 70 vitamins and minerals at their disposal. Kelp packs a powerhouse of macro & micronutrients, trace elements and natural growth hormones that allow plants to thrive, grow healthier and stronger with heightened growth rates, and boosts the plants immune system to ward off diseases and pests.

Humic Acid: Comprised of plant and animal matter found deep in the earth's crust, this prehistoric, fossilized by-product is known as Humic Acid. It naturally enhances biomass production (plant growth), increases water holding capacity and optimizes the nutrient supply of plants (especially Iron which is also readily available in ArborGain) just to name a few of its benefits.

Yucca: These hearty desert plants are used to dealing with drought and overall stress on an astronomical level. By feeding your crops, trees and turf the harvested yucca, those benefits of combatting weather stress are passed along to crops, trees and turf. Yucca also makes water more readily available for plants, reduces salt build-up and improves root growth.

TREE PRESERVATION AND PLANT HEALTH CARE FOR CONSTRUCTION AROUND TREES

Current ISA Best Management Practices for preserving trees in close proximity to construction activities indicate that trees should not be fertilized during construction or following the first year of construction activities. This is due to urban soils often being sterile and compacted, reducing water and nutrient uptake and causing a built up of fertilizer salts that may burn roots and reduce water uptake by the tree.

Therefore, we recommend saturating the soils around trees with ArborGain, and applying a layer of wood chips that are soaked with ArborGain to provide a slow release food source to help the tree during and after construction. This will stimulate microbial soil activity and root development, and provide a carbohydrate food source for trees to increase vigor and foliage growth. This will also help alleviate some tree stress due to construction activities, and increase drought tolerance. Individual tree needs should be assessed by a qualified arborist prior to construction and in addition to tree health and condition, soil analysis is also recommended to determine soil health and condition.

Pre-construction Phase

The following tree preservation measures should occur prior to construction:

- Tree Protection Hoarding/Fencing should be installed and be in place prior to demolition and construction activities.
- All contractors should be informed of the tree preservation measures and guidelines and any
 questions or inquiries should be addressed before demolition and construction begins.
- Trees that are proposed for removal (and after receiving the appropriate removal permits) should be removed prior to demolition and construction activities.
- Trees that are to be preserved should be properly pruned prior to construction.
- Watering within the Tree Protection Zones may be required during drought periods or as the season dictates.
- If injury should occur to retained trees during construction, the consulting arborist should reevaluate the trees so that appropriate treatments can be recommended and performed.
- No excavation or demolition should occur until all tree preservation requirements have been met.
- These recommendations should be used as a <u>minimum</u> requirement for the survival of the retained trees and the consulting arborist should be included in all decisions regarding activities in and around Tree Protection Zones.

Construction Phase

The following tree preservation measures should occur during construction:

- Maintain and respect Tree Protection Zone (TPZ) fencing and Tree Protection Guidelines throughout each construction phase. Do not store or dump materials in the TPZ area.
- Branches that are required to be pruned during construction for clearance, should be done so by a qualified Arborist.
- Watering within the TPZ's may be required during dry periods.
- Preserved trees should be monitored by a qualified Arborist to evaluate construction injury/stress and make recommendations if necessary.

Post-Construction Phase

The following tree preservation measures should occur after construction:

- Remove Tree Protection Fencing/Hoarding only after receiving permission.
- Continue watering trees if necessary.
- Supplemental soil care and fertilization if required.
- Post-construction monitoring of all trees by a qualified Arborist.

Post-Construction Monitoring

Construction injury to trees may not be immediately apparent and could take several years to become evident. All preserved trees should be inspected by a qualified Arborist on a semi-annual basis for a period of up to 2 years to monitor any tree health related issues as they occur and take appropriate measures.

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.

This report is property of Cohen and Master Tree and Shrub Services Ltd. and/or its agents and may not be used until payment is made in full unless written permission is granted. Cohen and Master Tree and Shrub Services reserves the right to withdraw this report and its recommendations, if any requirements are not met. All details and graphics are copyright of Cohen and Master Tree and Shrub Services Ltd.

On behalf of Cohen and Master Tree and Shrub Services,

Adam Walicki B.ENVD. E.E.T.
Consulting Arborist - ISA Certification: ON 2490A
Environmental Engineering Technologist
Cohen and Master Tree and Shrub Services Ltd.
adam@cmtrees.com

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition	Ownership	TPZ (m)	Condition Comments	Action
385	Juniper	Juniperus sp.	23	Good	Good	Good	Good	Good	City	1.8m	minor interior deadwood	Protect - 1.2m high orange plastic tree protection fence on t-bar and wood frame
386	Pussy Willow	Salix discolor	34	Good	Fair	Fair	Good	Good	City	2.4m	suckers at base, epicormic growth, unhealed pruning wounds	Protect - 1.2m high orange plastic tree protection fence on t-bar and wood frame
387	Juniper	Juniperus sp.	19	Good	Good	Good	Good	Good	City	1.5m	minor interior deadwood	Protect - 1.2m high orange plastic tree protection fence on t-bar and wood frame
388	Norway Maple	Acer platanoides	46	Fair	Good	Fair	Good	Good	Private	3.0m	exposed and girdling roots, co-dominant at 1.7m, included bark, dieback	REMOVE (P) - Due to location and proposed construction
389	Norway Spruce	Picea abies	34	Fair	Fair	Poor	Fair	Fair	Private	2.4m	uneven crown, unhealed trunk wounds, dieback, deadwood	REMOVE (P) - Due to location and proposed construction
390	Red Oak	Quercus rubra	79	Fair	Poor	Fair	Fair	Fair	Private	4.8m	growing on a lean, unhealed trunk wounds, cavities with decay, topped	REMOVE (P) - Due to location and proposed construction
391	Norway Spruce	Picea abies	49	Good	Good	Good	Good	Good	Private	3.0m	exposed and girdling roots, unhealed pruning wounds	REMOVE (P) - Due to location and proposed construction
392	Norway Spruce	Picea abies	40	Fair	Fair	Good	Good	Fair	Private	2.4m	exposed and girdling roots, growing into wall, unhealed pruning wounds	REMOVE (P) - Due to location and proposed construction
393	Norway Spruce	Picea abies	33	Fair	Fair	Good	Good	Fair	Private	2.4m	exposed and girdling roots, growing into wall, unhealed pruning wounds	REMOVE (P) - Due to location and proposed construction
394	Black Walnut	Juglans nigra	41	Fair	Good	Good	Good	Good	Private	3.0m	growing on slope, minor dieback	REMOVE (P) - Due to location and proposed construction
395	Norway Spruce	Picea abies	24,29	Good	Fair	Fair	Fair	Fair	Private	1.8m	co-dominant at base, included bark, dieback, deadwood	REMOVE (P) - Due to location and proposed construction
396	Butternut	Juglans cinerea	58	Fair	Fair	Poor	Poor	Poor	Private	3.6m	This tree was previously ID'd as a Basswood. The majority of the crown appears to be dead, with significant deadwood throughout, some of which has also fallen and is scattered around the base of the tree. This tree also appears to have peeling bark, unhealed trunk wounds with decay, and canker.	REMOVE (P) - Due to location and proposed construction
397	Blue Spruce	Picea pungens	52	Fair	Good	Fair	Good	Good	Private	3.6m	growing on a lean close to retaining wall, minor interior deadwood	REMOVE (P) - Due to location and proposed construction
398	Juniper	Juniperus sp.	18	Fair	Fair	Fair	Fair	Fair	Private	1.5m	trunk seams, unhealed pruning wounds	REMOVE (P) - Due to location and proposed construction
399	Juniper	Juniperus sp.	21	Fair	Fair	Fair	Fair	Fair	Private	1.8m	trunk seams, unhealed pruning wounds, included bark	REMOVE (P) - Due to location and proposed construction
400	White Fir	Abies concolor	31	Good	Good	Fair	Good	Good	City	2.4m	uneven crown, minor interior deadwood	REMOVE (P) - Due to location and proposed construction
401	Scots Pine	Pinus sylvestris	70	Fair	Good	Good	Fair	Good	City/Private	4.2m	unhealed pruning wounds, dieback, deadwood	REMOVE (P) - Due to location and proposed construction
402	Norway Spruce	Picea abies	32	Fair	Good	Good	Fair	Good	Private	2.4m	exposed and girdling roots, unhealed pruning wounds	REMOVE (P) - Due to location and proposed construction
403	Norway Spruce	Picea abies	20	Fair	Fair	Poor	Poor	Poor	City	1.5m	significant dieback, deadwood, almost dead	REMOVE - Due to poor condition
404	Scots Pine	Pinus sylvestris	35	Good	Good	Fair	Fair	Fair	City	2.4m	uneven crown, unhealed pruning wounds, dieback, deadwood	REMOVE (P) - Due to location and proposed construction
405	White Birch	Betula papyrifera	18	Good	Good	Good	Fair	Good	City	1.5m	bent trunk, unhealed trunk wounds, frost cracks, dieback, deadwood	REMOVE (P) - Due to location and proposed construction
406	Norway Spruce	Picea abies	40	Fair	Good	Good	Fair	Good	Private	2.4m	exposed roots, unhealed pruning wounds, dieback, deadwood	REMOVE (P) - Due to location and proposed construction

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition	Ownership	TPZ (m)	Condition Comments	Action
407	Norway Spruce	Picea abies	30	Fair	Good	Fair	Fair	Good	City	1.8m	exposed roots, uneven crown	REMOVE (P) - Due to location and proposed construction
408	Norway Spruce	Picea abies	23	Fair	Good	Fair	Fair	Good	City/Private	1.8m	girdling roots, uneven crown	REMOVE (P) - Due to location and proposed construction
409	Scots Pine	Pinus sylvestris	43	Good	Good	Fair	Fair	Good	City/Private	3.0m	unhealed trunk wounds, dieback, deadwood	REMOVE (P) - Due to location and proposed construction
410	White Spruce	Picea glauca	18	Good	Good	Fair	Fair	Good	Private	1.5m	minor interior deadwood	REMOVE (P) - Due to location and proposed construction
411	Norway Spruce	Picea abies	42	Fair	Good	Good	Good	Good	Private	3.0m	exposed roots, unhealed pruning wounds	REMOVE (P) - Due to location and proposed construction
412	Scots Pine	Pinus sylvestris	70	Good	Good	Fair	Good	Good	Private	4.2m	co-dominant at 7m, unhealed trunk wounds, dieback, deadwood	REMOVE (P) - Due to location and proposed construction
413	Scots Pine	Pinus sylvestris	46	Good	Good	Fair	Fair	Fair	Private	3.0m	unhealed trunk wounds, sparse crown, dieback, deadwood	REMOVE (P) - Due to location and proposed construction
414	Scots Pine	Pinus sylvestris	46	Good	Good	Fair	Fair	Fair	Private	3.0m	bent trunk, unhealed trunk wounds, sparse crown, dieback, deadwood	REMOVE (P) - Due to location and proposed construction
415	White Birch	Betula papyrifera	18	Good	Good	Good	Fair	Good	Private	1.5m	uneven crown, dieback, deadwood	REMOVE (P) - Due to location and proposed construction
416	Norway Spruce	Picea abies	42	Good	Good	Good	Good	Good	Private	3.0m	minor interior deadwood	REMOVE (P) - Due to location and proposed construction
417	Norway Spruce	Picea abies	38	Good	Good	Good	Fair	Good	Private	2.4m	dieback, deadwood	REMOVE (P) - Due to location and proposed construction
418	White Spruce	Picea glauca	27	Good	Good	Good	Fair	Good	Private	1.8m	dieback, deadwood, sparse crown	REMOVE (P) - Due to location and proposed construction
419	Scots Pine	Pinus sylvestris	30	Good	Good	Good	Fair	Good	Private	1.8m	dieback, deadwood, sparse crown	REMOVE (P) - Due to location and proposed construction
420	Norway Spruce	Picea abies	42	Fair	Good	Good	Fair	Good	Private	3.0m	exposed roots, dieback, deadwood	REMOVE (P) - Due to location and proposed construction
421	White Spruce	Picea glauca	40	Fair	Good	Good	Fair	Good	Private	2.4m	exposed roots, deadwood	REMOVE (P) - Due to location and proposed construction
422	Norway Spruce	Picea abies	29	Fair	Good	Fair	Fair	Fair	Private	1.8m	exposed and girdling roots, dieback, deadwood, sparse crown	REMOVE (P) - Due to location and proposed construction
423	White Birch	Betula papyrifera	18	Good	Fair	Fair	Fair	Fair	Private	1.5m	bent trunk, co-dominant at 5m, included bark, unhealed trunk wounds, dieback, deadwood	REMOVE (P) - Due to location and proposed construction
424	Norway Spruce	Picea abies	24	Fair	Good	Fair	Poor	Poor	Private	1.8m	girdling roots, significant dieback, deadwood, 70% dead	REMOVE - Due to poor condition
	White Birch	Betula papyrifera	21	Good	Good	Fair	Fair	Fair	Private	1.8m	uneven crown, dieback, deadwood	REMOVE (P) - Due to location and proposed construction
426	Scots Pine	Pinus sylvestris	26	Good	Fair	Fair	Fair	Fair	Private	1.8m	bent trunk, unhealed trunk wounds, cavity, dieback, deadwood	REMOVE (P) - Due to location and proposed construction
427	Norway Spruce	Picea abies	50	Fair	Good	Good	Good	Good	Private	3.0m	exposed roots, minor interior deadwood	REMOVE (P) - Due to location and proposed construction
428	White Fir	Abies concolor	34	Good	Good	Fair	Poor	Poor	Private	2.4m	significant dieback, deadwood	REMOVE (P) - Due to location and proposed construction
429	White Spruce	Picea glauca	40	Fair	Good	Fair	Good	Fair	Private	2.4m	exposed and girdling roots, unhealed pruning wounds, dieback, deadwood, topped	REMOVE (P) - Due to location and proposed construction
430	Norway Spruce	Picea abies	34	Good	Good	Good	Fair	Good	Private	2.4m	uneven root flare, dieback, deadwood, sparse crown	REMOVE (P) - Due to location and proposed construction
431	White Birch	Betula papyrifera	18	Good	Good	Fair	Good	Good	Private	1.5m	co-dominant at 7m, unhealed trunk wounds, dieback, deadwood	REMOVE (P) - Due to location and proposed construction
432	Scots Pine	Pinus sylvestris	32,36,40,4	Good	Good	Fair	Good	Good	Private	3.0m	co-dominant at 1.5m, included bark, dieback, deadwood	REMOVE (P) - Due to location and proposed construction

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition	Ownership	TPZ (m)	Condition Comments	Action
433	Black Locust	Robinia pseudoacacia	31	Good	Good	Good	Fair	Good	Park	2.4m	unhealed trunk wounds, dieback, deadwood	INJURY (P) - Due to sidewalk construction
434	Black Locust	Robinia pseudoacacia	27	Good	Good	Good	Fair	Good	Park	1.8m	co-dominant at 3m, unhealed trunk wounds, dieback, deadwood	INJURY (P) - Due to sidewalk construction
435	Green Ash	Fraxinus pennsylvanica	32	Good	Fair	Fair	Fair	Fair	Park	2.4m	sucker growth, epicormic growth, unhealed trunk wounds, deadwood	INJURY (P) - Due to sidewalk construction
436	Black Locust	Robinia pseudoacacia	27	Good	Good	Fair	Fair	Good	Park	1.8m	co-dominant at 7m, unhealed trunk wounds, epicormic growth, dieback, deadwood	INJURY (P) - Due to sidewalk construction
437	Black Locust	Robinia pseudoacacia	29	Good	Good	Fair	Fair	Good	Park	1.8m	co-dominant at 6m, unhealed trunk wounds, dieback, deadwood	INJURY (P) - Due to sidewalk construction
438	Black Locust	Robinia pseudoacacia	37	Good	Good	Fair	Fair	Good	Park	2.4m	unhealed trunk wounds, dieback, deadwood	INJURY (P) - Due to sidewalk construction
439	Black Locust	Robinia pseudoacacia	32	Good	Good	Fair	Fair	Good	Park	2.4m	co-dominant at 4m, unhealed trunk wounds, dieback, deadwood	INJURY (P) - Due to sidewalk construction
440	Red Oak	Quercus rubra	38	Good	Good	Fair	Good	Good	Private	2.4m	elevated crown, minor deadwood	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
441	Black Walnut	Juglans nigra	56	Good	Good	Fair	Good	Good	Private	3.6m	growing on a lean, unhealed trunk wounds	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
442	Black Walnut	Juglans nigra	48	Good	Good	Fair	Good	Good	Private	3.0m	growing on a lean, bent trunk, unhealed trunk wounds, deadwood	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
443	Green Ash	Fraxinus pennsylvanica	26	Good	Poor	Poor	Poor	Poor	Private	1.8m	tree has fallen over and is leaning against another tree. This hanger needs attention and should be cut to lay the tree down on grade to make it safe	REMOVE - Dead and leaning against tree
444	Red Oak	Quercus rubra	61,92	Good	Fair	Fair	Fair	Fair	Private	6.0m	co-dominant at base, cavity at base, unhealed trunk wounds, dieback, deadwood	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
445	White Pine	Pinus strobus	53	Good	Good	Fair	Good	Good	Private	3.6m	unhealed trunk wound at base, deadwood, elevated crown	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
446	White Pine	Pinus strobus	61	Good	Good	Fair	Good	Good	Private	4.2m	growing on a lean, deadwood, elevated crown	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
447	Red Maple	Acer rubrum	59	Good	Good	Good	Good	Good	Private	3.6m	unhealed trunk wounds, deadwood	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
448	White Mulberry	Morus alba	17,28	Good	Fair	Fair	Fair	Fair	Private	1.8m	co-dominant at base, included bark, unhealed trunk wounds	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
449	Pussy Willow	Salix discolor	21	Good	Good	Fair	Fair	Fair	Private	1.8m	unhealed trunk wounds, topped	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
450	White Mulberry	Morus alba	20	Fair	Fair	Fair	Fair	Fair	Private	1.5m	growing on a lean, cavity at base, epicormic growth	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame
451	White Mulberry	Morus alba	23	Fair	Fair	Fair	Fair	Fair	Private	1.8m	exposed and girdling roots, bacterial wetwood, deadwood	Protect - 1.2m high plywood tree protection hoarding with silt control on t-bar and wood frame

Tree #	Tree Species	Botanical Name	DBH (cm)	Root Zone	Trunk Integrity	Crown Structure	Crown Vitality	Overall Condition	Ownership	TPZ (m)	Condition Comments	Action
											Two trunks cut, with only one upright trunk remaining	Protect - 1.2m high plywood tree
452	Manitoba Maple	Acer negundo	36	Fair	Poor	Poor	Fair	Poor	Private	2.4m	(36cm DBH). The rest of the trunks that were previously	protection hoarding with silt
											growing on a lean have been cut	control on t-bar and wood frame
												Protect - 1.2m high plywood tree
453	Manitoba Maple	Acer negundo	35	Fair	Fair	Fair	Fair	Fair	Private	2.4m	growing on a lean, girdling roots, epicormic growth	protection hoarding with silt
												control on t-bar and wood frame
45.4	NA		40	F			F.11	6	D.:	4.5		REMOVE (P) - Due to poor
454	Manitoba Maple	Acer negundo	18	Fair	Poor	Poor	Fair	Poor	Private	1.5m	growing on a lean, girdling roots, epicormic growth	condition
												Protect - 1.2m high plywood tree
455	Norway Spruce	Picea abies	27	Fair	Good	Good	Good	Good	Private	1.8m	exposed and girdling roots, deadwood	protection hoarding with silt
	, ,											control on t-bar and wood frame
												Protect - 1.2m high plywood tree
456	Willow	Salix sp.	84	Good	Fair	Fair	Fair	Fair	Neighbour	5.4m	unhealed trunk wounds, cavities, epicormic growth,	protection hoarding with silt
		,							Ü		dieback, deadwood	control on t-bar and wood frame
												Protect - 1.2m high plywood tree
457	Norway Spruce	Picea abies	18	Fair	Good	Good	Fair	Good	Private	1.5m	dieback, deadwood	protection hoarding with silt
	.,.,.											control on t-bar and wood frame
												Protect - 1.2m high plywood tree
458	Norway Spruce	Picea abies	19	Fair	Good	Good	Fair	Good	Private	1.5m	dieback, deadwood, sparse crown	protection hoarding with silt
	, ,										, , , ,	control on t-bar and wood frame
												Protect - 1.2m high plywood tree
459	Willow	Salix sp.	41,58,60	Fair	Fair	Fair	Fair	Fair	Neighbour	3.6m	growing on a lean, co-dominant at base, unhealed trunk	protection hoarding with silt
		,	, ,						Ü		wounds, epicormic growth, dieback, deadwood	control on t-bar and wood frame
460	American Elm	Ulmus americana	30	Poor	Poor	Poor	Poor	Poor	Private	N/A	DEAD	REMOVE - Dead
												Protect - 1.2m high plywood tree
461	American Elm	Ulmus americana	24	Fair	Fair	Fair	Fair	Fair	City	1.8m	bent trunk, vines, supressed growth	protection hoarding with silt
						1 411		-	,		a,, 8	control on t-bar and wood frame
												Protect - 1.2m high plywood tree
462	American Elm	Ulmus americana	26	Fair	Fair	Fair	Fair	Fair	City	1.8m	bent trunk, vines, supressed growth	protection hoarding with silt
.02	7 IIII CI I COIT LIIII	omias americana							S.Ly	2.0	bent trank, vines, supressed growth	control on t-bar and wood frame
												Protect - 1.2m high plywood tree
463	Scots Pine	Pinus sylvestris	38	Good	Good	Fair	Fair	Fair	Private	2.4m	co-dominant at 8m, included bark, dieback, deadwood	protection hoarding with silt
403	1000011110	riiius syivestiis	30	Good	Good	i dii	rdii	FdII	Private	27111	de de l'illiant de em, meidded bark, dieback, deadwood	control on t-bar and wood frame
											unhealed trunk wound at base, decay at base, possibly	
464	Green Ash	Fraxinus pennsylvanica	56	Fair	Poor	Fair	Poor	Poor	Private	3.6m	dead	Confirm if dead - REMOVE
TOTAL			l								ucau	

TOTAL TREES: 80
TREES TO BE PRESERVED: 15
TREES TO BE INJURED: 8

TREES PROPOSED FOR REMOVAL: 57

TREE INVENTORY AND ASSESSMENT 900 LAKESHORE ROAD WEST - NOVEMBER 2023

Tree # - this number refers to the number on the tree assessment and plan - only the last three numbers on the tree tag are referenced.

Common Name - the common name for each tree.

Botanical Name - the botanical name for each tree.

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

Root Zone - this is an assessment of the growing conditions and the root zone of the tree. Measured on a scale of Good, Fair, Poor.

Trunk Integrity - this is an assessment of the trunk for any defects. Measured on a scale of Good, Fair, Poor.

Crown Structure - this is an assessment of the scaffold branches and the crown of the tree. Measured on a scale of Good, Fair, Poor.

Crown Vitality - this is an assessment of the health of the tree and assesses the amount of deadwood and live growth in the canopy 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 Condition - this is an assessment of the overall condition of genetic vigour, biological condition and structural integrity. Measured on a scale of Good, Fair, Poor.

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

Condition Comments - condition comments pertinent to supporting trunk, crown, and canopy ratings and decisions to protect, injure or remove.

Good - refers to the tree Good - refers to the tree health category being greater than eighty (80) percent of a perfect specimen.

Fair - refers to a category Fair - refers to a category condition that is less than eighty (80) percent but more than twenty (20) percent.

Poor - refers to a tree health category that is less than twenty (20) percent.

protect - tree proposed to be protected (not being injured or removed)

INJURY (P) - tree proposed to be injured - permit required

remove - tree to be removed - no permit required

REMOVE (P) - tree proposed to be removed - permit required



