

August 23, 2023

ARBORIST REPORT
7301 Lundy's Lane, Niagara Falls, Ontario

BACKGROUND

MHBC was retained to conduct an inventory of the existing trees within the boundaries of the property known as 7301 Lundy's Lane, as they pertain to the City of Niagara Falls Tree By-laws. This investigation examined 47 trees within and around the subject property. Field work was completed August 15, 2023, this report relates to the condition of the trees at that time.

PROCEDURE

The on-site inventory of existing trees was carried out using the current survey of the property and relies on the accuracy of this survey. The inventory includes all trees within the site boundary, all trees within 6.0 metres of the site boundary and all Town owned trees along the adjacent boulevards.

This inventory is summarized graphically in the Tree Inventory Plan TI-1, which shall always be read in conjunction with this report and shall form part of this report. For the purposes of this report, trees and groupings of trees are identified in terms of species, size, condition, and recommendations.

The following rating system was used in describing the general condition of the trees inventoried:

- Good: Indicates a condition of vigor and no major concerns.
- Fair: Indicates an adequate tree, which may have some minor issues.
- Poor: Indicates declining health, bad form, or other more serious issues.
- Dead: Indicates a dead tree that should be removed.

ASSUMPTIONS AND LIMITING CONDITIONS

- Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible and is assumed to be correct; however MHBC can neither guarantee nor be responsible for the accuracy of information provided by others.
- It is assumed that the properties are not in violation of any applicable codes, ordinances, statutes, or other governmental regulations.
- Unless otherwise required by law, possession of this report or a copy thereof does not imply right of publication or use for any purpose in whole or in part by any other than the person or company by whom it was commissioned.
- The use of excerpts from this report or alterations to this report, without the authorization of MHBC Planning will invalidate the entire report. This report may not be used for any purpose other than its intended purpose as outlined.

- Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflect the condition of those items at the time of inspection; and 2) the inspection is limited to visual examination or accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies in the plants inventoried may not arise in the future.
- The determination of ownership of any subject tree(s) is the responsibility of the owner and any civil or common-law issues, which may exist between property owners with respect to trees, must be resolved by the owner. The recommendation to remove or maintain any tree(s) does not grant authority to encroach in any manner onto adjacent private properties.

SUMMARY OF TREES INVENTORIED

Tree #	Common Name	Botanical Name	DBH (CM)	Condition	Comments	Recommendation
922	Honey Locust	Gleditsia triacanthos	38	F	Moderate deadwood in canopy	Remove due to construction
923	Honey Locust	Gleditsia triacanthos	58	F	Moderate deadwood in canopy	Remove due to construction
924	Silver Maple	Acer saccharinum	66	F	3 stem at 0.9 metres, minor deadwood in canopy	Remove due to construction
925	Austrian Pine	Pinus nigra	59	F/P	Moderate to significant deadwood in canopy	Remove due to construction
926	White Spruce	Picea glauca	26	F/P	Elevated canopy, moderate to significant deadwood in canopy	Remove due to construction
927	Colorado Blue Spruce	Picea pungens var. glauca	43	F	Moderate deadwood in canopy	Remove due to construction
928	Colorado Blue Spruce	Picea pungens var. glauca	40	F/P	Moderate to significant deadwood in canopy	Remove due to construction
929	Austrian Pine	Pinus nigra	48	F/P	Significant deadwood in canopy	Remove due to construction
930	Austrian Pine	Pinus nigra	48	P	Significant deadwood in canopy	Remove due to construction
931	Austrian Pine	Pinus nigra	31	P	Significant deadwood in canopy	Remove due to construction
932	Honey Locust	Gleditsia triacanthos	52	F	Minor to moderate deadwood in canopy	Remove due to construction
933	Norway Maple	Acer platanoides	49	P/D	Tree is 85% dead, significant deadwood in canopy, cavity in trunk, internal rot evident	Remove due to condition
934	Honey Locust	Gleditsia triacanthos	58	F	Minor deadwood in canopy	Remove due to construction
935	Siberian Elm	Ulmus pumila	97	F/P	Co-dominant at 1.2 metres, multiple limbs previously failed, cavity in trunk, minor deadwood in canopy	Remove due to construction

936	Colorado Blue Spruce	<i>Picea pungens</i> var. <i>glauca</i>	34	P	Moderate to significant deadwood in canopy	Remove due to construction
937	Austrian Pine	<i>Pinus nigra</i>	43	P	Significant deadwood in canopy	Remove due to construction
938	Austrian Pine	<i>Pinus nigra</i>	46	F/P	Moderate to significant deadwood in canopy	Remove due to construction
939	Little Leaf Linden	<i>Tilia cordata</i>	66	F		Remove due to construction
940	Norway Maple	<i>Acer</i> <i>platanoides</i>	35	F		Remove due to construction
941	Honey Locust	<i>Gleditsia</i> <i>triacanthos</i>	50	F	Moderate deadwood in canopy	Remove due to construction
942	Honey Locust	<i>Gleditsia</i> <i>triacanthos</i>	67	F	Moderate to significant deadwood in canopy	Remove due to construction
943	Little Leaf Linden	<i>Tilia cordata</i>	57	F		Remove due to construction
944	Honey Locust	<i>Gleditsia</i> <i>triacanthos</i>	36	F	Minor deadwood in canopy	Remove due to construction
945	Norway Maple	<i>Acer</i> <i>platanoides</i>	35	F		Retain
946	Norway Maple	<i>Acer</i> <i>platanoides</i>	31	F	Minor deadwood in canopy	Retain
947	Norway Maple	<i>Acer</i> <i>platanoides</i>	34	F	Minor deadwood in canopy	Retain
948	Norway Maple	<i>Acer</i> <i>platanoides</i>	39	F		Retain
949	Manitoba Maple	<i>Acer negundo</i>	31	F	4 stem at 0.3 metres, growing through fence, minor deadwood in canopy	Remove due to construction
950	Norway Maple	<i>Acer</i> <i>platanoides</i>	23	F/P	Mildew disease evident, moderate deadwood in canopy, growing through fence	Remove due to construction
951	Norway Maple	<i>Acer</i> <i>platanoides</i>	20	P	Mildew disease evident, growing through fence, significant deadwood in canopy	Remove due to construction
952	Norway Maple	<i>Acer</i> <i>platanoides</i>	24	F/P	Growing through fence, moderate deadwood in canopy	Remove due to construction
953	Norway Maple	<i>Acer</i> <i>platanoides</i>	20	F	Growing through fence	Remove due to construction
954	Norway Maple	<i>Acer</i> <i>platanoides</i>	22	F	2 stem at base, moderate deadwood in upper canopy	Remove due to construction
955	Honey Locust	<i>Gleditsia</i> <i>triacanthos</i>	71	F/P	Moderate to significant deadwood in canopy	Retain

956	Norway Maple	Acer platanoides	15	F		Retain
957	Black Walnut	Juglans nigra	92	F	Minor deadwood in canopy, co-dominant limbs fused at 2.0 metres	Retain
958	Norway Maple	Acer platanoides	20	F	Minor deadwood in canopy	Retain
959	Norway Maple	Acer platanoides	15	P/D	Growing through fence, tree is 50% dead	Remove due to construction
960	Norway Maple	Acer platanoides	15	F/P	Growing through fence, moderate lean, moderate deadwood in canopy	Retain
961	Norway Maple	Acer platanoides	37	P	Moderate to significant deadwood in canopy, mildew disease evident, 2 stem at base	Retain
962	Black Walnut	Juglans nigra	13	F		Retain
963	Black Walnut	Juglans nigra	37	F	Minor deadwood in canopy	Retain
964	Black Walnut	Juglans nigra	15	F/P	Elevated canopy, vines growing throughout	Retain
965	Manitoba Maple	Acer negundo	36	F	Vines growing throughout	Retain
966	White Mulberry	Morus alba	17	F		Retain
967	Siberian Elm	Ulmus pumila	62	F	Minor deadwood in canopy, vines growing throughout	Retain
968	Black Walnut	Juglans nigra	39	F	Minor deadwood in canopy	Retain

The above table summarizes the on-site trees. The trees shown with a tone are recommended for removal. The remaining trees will be subject to tree protection per City of Niagara Falls standards as outlined on drawing 2-TI-1. It is noted that not all trees marked for retention require tree protection hoarding. Refer to TI-1 for size and layout of tree protection hoarding.

PHOTO RECORD



Trees 922, 923



Tree 924



Trees 925 – 928



Trees 929 – 932



Trees 933, 934



Tree 935



Trees 936 – 939



Tree 940



Trees 941, 942



Tree 943



Tree 944



Tree 945



Tree 946



Tree 947



Tree 948



Tree 949



Trees 950 – 957



Trees 955 – 957



Trees 958 – 962



Trees 961 – 963



Trees 964, 965



Tree 966



Trees 967, 968

TREE PROTECTION RECOMMENDATIONS

The following standards shall apply to any trees that are identified to be retained. Where the municipality enforces its own standards, those of the governing municipality shall supersede the recommendations contained herein. In all other instances, the following recommendations shall be treated as minimum standards for tree protection and retention.

1.0 ESTABLISH A TREE PROTECTION ZONE

The purpose of the tree protection zone is to prevent root damage, soil compaction and soil contamination during construction activities. Workers and machinery shall not disturb the tree protection zone in any way. In order to prevent access, the following recommendations are offered.

- Install tree protection hoarding as per City of Niagara Falls detail 2-TI-1.
- Allow no fill, equipment, supplies, or waste within the tree protection zone.
- Maintain the tree protection hoarding in good condition for the duration of construction.
- Tree protection hoarding is not to be removed until all construction activities have been completed.

2.0 ROOT PRUNING

Where possible, hand dig areas closest to each tree to prevent any unnecessary tearing or pulling of roots. Removal of roots that are greater than 2.5 centimeters in diameter or roots that are injured or diseased should be performed as follows:

- Preserve the root bark ridge (similar in structure to the branch bark ridge). Directional Root Pruning (DRP) is the recommended technique and should be employed during hand excavation around tree roots. Roots are similar to branches in their response to pruning practices. With DRP, objectionable and severely injured roots are properly cut to a lateral root that is growing downward or in a favorable direction.
- All roots needing to be pruned or removed shall be cut cleanly with sharp hand tools, by a Certified Arborist.
- No wound dressings or pruning paint shall be used to cover the ends of each cut.
- All roots requiring pruning shall be cut using any of the following tools:
Large or small loppers, Hand pruners, Small hand saws, Wound scribes
- Avoid prolonged exposure of tree roots during construction - keep exposed roots moist and dampened with mulching materials, irrigation or wrap in burlap if exposed for longer than 4 hours.

3.0 FERTILIZATION AND IRRIGATION

The following measures are recommended:

- Aeration and deep root fertilize to ensure that all trees receive the appropriate nutrients for healthy growth.
- Fertilizer must be a low nitrogen formula such as 5-30-30 to promote root growth rather than shoot growth.
- If construction occurs during July and / or August, roots must be irrigated during conditions of drought.

4.0 ESTABLISH MAINTENANCE PROGRAM

Pre-Construction:

- Prune all trees to remove any deadwood and obstruction prune as required.

During Construction:

- Irrigate tree preservation zones during drought conditions (June through September), in an attempt to reduce the effects of drought stress.
- Inspect the site every month to ensure that all tree protection fence / hoarding is in place and in good condition, inspect the trees to monitor condition.

Post-Construction:

- Prune crowns to remove any newly developed deadwood only. Do not remove any live growth.
- Inspect the trees three times per year (May, July, and September) to monitor condition for a minimum period of 2 additional years.

5.0 LANDSCAPING

Any landscaping completed within the tree preservation zones, after construction is completed and tree protection fencing / hoarding has been removed, is to be carried out in such a way that it will not cause damage to any of the trees or their roots. The trees must be protected to the same standards listed earlier in this report, but without the use of tree protection fence or hoarding.

The following guidelines are recommended:

- **No grade changes** are permitted which include adding and/or removing soil.
- **No excavation** is permitted that can cause damage to the roots of the tree.
- **No heavy equipment** can be used to compact the soil within the tree preservation zone.
- Where possible, hard surface paving around trees to be protected should be constructed using permeable products such as interlocking stone. Areas to be paved must be hand dug when encroaching within the tree protection zone.

CONCLUSIONS

Based on our investigations, we are of the opinion that two (2) trees will require removal due to their poor state of health, and twenty-eight (28) trees to accommodate the proposed development. All other trees can be successfully retained if the recommendations within this report are followed. No tree shall be harmed or removed prior to applying for and receiving the requisite permits from the City of Niagara Falls.

Trees which are to remain shall be protected according to the tree protection details and the required protection hoarding shall be installed, inspected and approved prior to the commencement of any construction activities.

Should you have any questions regarding this report, please contact the undersigned directly.

Respectfully submitted,

MHBC Planning, Urban Design & Landscape Architecture



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