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December 04, 2017 [*Revised November 05, 2021*]

ARBORIST REPORT
Owen Street, Barrie, Ontario

BACKGROUND

MHBC was retained to conduct an inventory of the existing trees within the boundaries of 55 and 57 McDonald St, 53, 55, 59, 61, and 67 Owen St and 70, 72, 74, 76, and 78 Worsley St, as they pertain to the City of Barrie's guidelines. Field work was completed on October 20th, 2017, this report relates to the condition of the trees as observed on that date. Additional Field work was conducted on June 10, 2021.

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 trees within the area of work and all trees within 6.0 meters of the area of work as per City of Barrie's guidelines.

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 (G): Indicates a condition of vigour and no major concerns;
Fair (F): Indicates an adequate tree, which may have some minor issues;
Poor (P): Indicates declining health, bad form, or other more serious issues;
Dead (D): 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

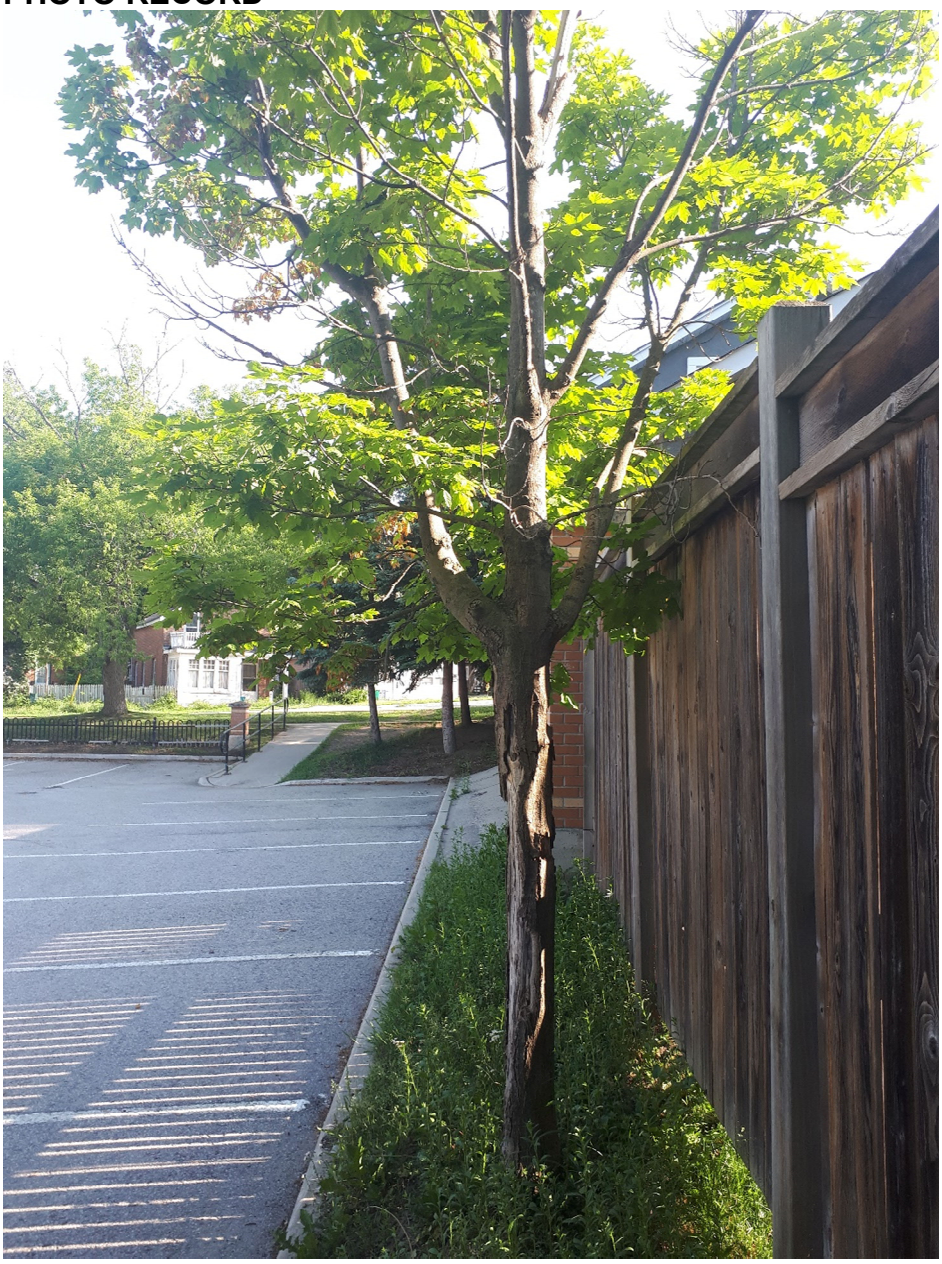
The following table summarizes our findings and comments. The trees shown with a tone are recommended for removal due to conflicts with the proposed development or due to condition

Tree #	Common Name	Botanical Name	DBH (CM)	Condition	Comments	Recommendation
1	Colorado Blue Spruce	Picea pungens	24	F/G		Remove
2	Norway Maple	Acer platanoides	42	P	90% dead; Significant deadwood in canopy	Retain
3	Colorado Blue Spruce	Picea pungens	21	F/G		Remove
4	Colorado Blue Spruce	Picea pungens	18	F/G		Remove
5	Manitoba Maple	Acer negundo	72	F	Moderate to significant deadwood in canopy	Remove
6	Linden sp.	Tilia sp.	65	F	Minor deadwood in canopy	Remove
7	Linden sp.	Tilia sp.	95	F	Moderate to significant deadwood in canopy; Crown has significant dieback	Remove
8	Little Leaf Linden	Tilia cordata	21	F	Signs of Gypsy moth	Remove
9	Little Leaf Linden	Tilia cordata	25	F	Base of trunk is leaning, Signs of Gypsy moth	Remove
10	Little Leaf Linden	Tilia cordata	24	F	Signs of Gypsy moth	Remove
11	Little Leaf Linden	Tilia cordata	25	F	Signs of Gypsy moth	Remove
12	Little Leaf Linden	Tilia cordata	24	F	Signs of Gypsy moth	Remove
13	Black Walnut	Juglans nigra	20	F	Moderate lean	Remove
14	Norway Maple	Acer platanoides	19	F		Remove
15	Manitoba Maple	Acer negundo	21	F		Remove
16	Manitoba Maple	Acer negundo	21	F		Remove

17	Manitoba Maple	Acer negundo	73	F	Tree is leaning over adjacent tree	Remove
18	Elm sp.	Ulmus sp.	53, 62	F	Co-dominant stems; Growing out of porch, signs of gypsy moth	Remove
19	Apple sp.	Malus sp.	18	F/P	Deadwood, signs of urban stress	Remove
20	Manitoba Maple	Acer negundo	36	F	Tree is located on development property and is leaning west towards development	Remove
21	Manitoba Maple	Acer negundo	27	F	Tree is located on development property and is leaning west towards development	Remove
22	Norway Maple	Acer platanoides	22	F	Tree is located on development property and is not leaning.	Remove
23	Cedar sp.	Thuja sp.	26	F/P		Remove
24	Cedar sp.	Thuja sp.	19	F/P		Remove
25	Cedar sp.	Thuja sp.	26	F/P		Remove
26	Cedar sp.	Thuja sp.	26	F/P		Remove
27	Manitoba Maple	Acer negundo	16	F		Remove
28	Manitoba Maple	Acer negundo	28	F		Remove
29	Manitoba Maple	Acer negundo	99	F	Moderate to significant deadwood in canopy	Remove
30	Norway Maple	Acer platanoides	19	F		Remove
31	Maple sp.	Acer sp.	23	F/P	Showing significant signs of stress	Remove
32	Red Maple	Acer rubra	83	F	Significant deadwood in canopy; Signs of rot; Grown into fence line	Retain
33	Maple sp.	Acer sp.	11	D		Tree has been previously removed
34	Silver Maple	Acer saccharinum	13	P/D	Tree is in decline	Remove
35	Norway Maple	Acer platanoides	22	F		Remove
36	Norway Maple	Acer platanoides	29	F		Remove
37	Norway Maple	Acer platanoides	20	P	Significant damage to trunk; Significant deadwood;	Remove
38	Manitoba Maple	Acer negundo	13	F		Tree has been previously removed

39	Silver Maple	Acer saccharinum	-	P/D	In decline, crown 90% dead, signs of gypsy moth	Remove

PHOTO RECORD



Tree # 27



Tree # 28



Tree # 34



Trees # 9 - 11



Trees # 6 - 7



Trees # 12 - 13



Trees # 1 - 5



Tree # 18



Tree # 19



Trees # 20 - 22

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 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 centimetres 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, Woundscribers
- 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, all trees within the property boundaries require removal to facilitate the proposed development. Trees #2, are City Trees and #32 are on neighbouring private property and shall be retained. Tree # 5 is proposed for removal. These trees are far enough removed from the proposed work that they should not be adversely impacted by the proposed development It is noted that's trees 33 and 38 were removed prior to the submission of this updated report. Special care shall be taken when working within or near the tree protection zones of trees that are to be retained.

Kindly direct any questions regarding this report to the undersigned.

Respectfully submitted,
MHBC Planning, Urban Design & Landscape Architecture



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