

March 10, 2021 [Revised July 31, 2024]

ARBORIST REPORT 1012 Yonge Street, Barrie, Ontario

INTRODUCTION AND BACKGROUND OF PROPOSED DEVELOPMENT

MHBC was retained to conduct an inventory of the existing trees within the boundaries of 1012 Yonge Street, as they pertain to the City of Barrie's guidelines. Field work was completed on November 23rd, 2018, and this report relates to the condition of the trees as observed on that date.

The Site is situated west of Yonge Street in between Mapleview Dr E (to its north), and Lockhart Road (to its south), surrounded by agricultural uses. The Site is currently being used as an apple orchard and private residence. Much of the Site is currently being used for apple picking with an approximate total of 3800 Domestic Fruiting Apple trees on site.

The current proposed development for the site is a residential development.

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

This inventory is summarized graphically in the Tree Inventory Plans TI-1 – TI-2, 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.
- 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 INDIVIDUAL TREES INVENTORIED - The following table summarizes the on-site trees that were individually tagged on site.

Tree #	Common Name	Botanical Name	DBH (CM)	Condition	Comments	Recommendation
201	White Pine	Pinus strobus	40	Fair		Remove
202	Cedar sp.	Thuja sp.	17	Fair		Remove
203	White Pine	Pinus strobus	46	Fair		Remove
204	White Pine	Pinus strobus	25	Fair		Remove
205	Maple sp.	Acer sp.	23	Fair		Remove
206	Maple sp.	Acer sp.	40	Fair		Remove
207	Maple sp.	Acer sp.	31	Fair		Remove
208	Spruce sp.	Picea sp.	38	Fair		Remove
209	Mountain Ash	Sorbus aucuparia	26	Fair		Remove
210	White Pine	Pinus strobus	40	Fair		Remove
211	Maple sp.	Acer sp.	37	Fair		Remove
212	Apple sp.	Malus sp.	22	Fair		Remove
213	White Pine	Pinus strobus	36	Fair		Remove
214	Maple sp.	Acer sp.	36	Fair		Remove
215	Maple sp.	Acer sp.	34	Fair		Remove
216	Maple sp.	Acer sp.	55	Fair		Remove
217	White Pine	Pinus strobus	32	Fair		Remove
218	Maple sp.	Acer sp.	45	Fair		Remove
219	Horse Chestnut	Aesculus hippo.	32	Fair		Remove
220	Ash sp.	Fraxinus sp.	40	Fair		Remove

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221	White Pine	Pinus strobus	31	Fair		Remove
222	Mountain Ash	Sorbus aucuparia	25	Fair		Remove
223	Maple sp.	Acer sp.	44	Fair		Remove
224	Mountain Ash	Sorbus aucuparia	35	Fair		Remove
225	Mountain Ash	Sorbus aucuparia	31	Fair	Suspected trunk	Remove
					rot	
226	Spruce sp.	Picea sp.	40	Fair		Remove
227	Maple sp.	Acer sp.	40	Fair		Remove
228	Maple sp.	Acer sp.	47	Fair		Remove
229	Mountain Ash	Sorbus aucuparia	28	Fair		Remove
230	Elm sp.	Ulmus sp.	23	Fair/Poor	Moderate to significant deadwood	Retain
231	White Pine	Pinus strobus	45	Fair	Minor deadwood	Retain
232	Mountain Ash	Sorbus aucuparia	21	Fair		Retain
233	Maple sp.	Acer sp.	48	Fair		Retain
234	Mountain Ash	Sorbus aucuparia	20	Poor	Co-dominant stem was cut. Moderate to significant signs of rot	Retain
235	Scots Pine	Pinus sylvestris	38	Fair		Retain
236	Mountain Ash	Sorbus aucuparia	20	Fair		Retain
237	Scots Pine	Pinus sylvestris	33	Fair		Retain
238	Maple sp.	Acer sp.	49	Fair		Retain
239	Maple sp.	Acer sp.	40	Fair		Retain
240	Maple sp.	Acer sp.	38	Fair		Retain
241	Horse Chestnut	Aesculus hippo.	38	Fair/Poor	Suspected trunk rot. Structural defects and poor form	Retain
242	Maple sp.	Acer sp.	51	Fair	Suspected trunk rot.	Retain
243	Oak sp.	Quercus sp.	35	Fair		Retain
244	Maple sp.	Acer sp.	25	Fair		Retain
245	Oak sp.	Quercus sp.	45	Fair		Retain
246	Mountain Ash	Sorbus aucuparia	19, 25	Fair	2 stem	Retain
247	Mountain Ash	Sorbus aucuparia	16, 23	Fair/Poor	2 stem. Significant deadwood	Retain
248	Scots Pine	Pinus sylvestris	31	Fair		Retain
249	Mountain Ash	Sorbus aucuparia	24	Poor	Signs of rot. Significant deadwood	Retain
250	White Pine	Pinus strobus	36	Fair		Retain

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251	Mountain Ash	Sorbus aucuparia	32	Poor	Signs of rot. Significant deadwood	Retain
252	Oak sp.	Quercus sp.	44	Fair		Retain
253	Scots Pine	Pinus sylvestris	16	Fair/Poor	Significant loss of needles	Retain
254	Mountain Ash	Sorbus aucuparia	40	Poor	Signs of rot. Significant deadwood	Retain
255	Mountain Ash	Sorbus aucuparia	33	Fair		Retain
256	Mountain Ash	Sorbus aucuparia	30	Fair		Retain
257	Mountain Ash	Sorbus aucuparia	34	Fair		Retain
258	Mountain Ash	Sorbus aucuparia	22	Fair/Poor	Suspected trunk rot	Retain
259	Mountain Ash	Sorbus aucuparia	24	Fair		Retain
260	Mountain Ash	Sorbus aucuparia	31	Fair/Poor	Suspected trunk rot	Retain
261	Mountain Ash	Sorbus aucuparia	30	Fair/Poor	Suspected trunk rot	Retain
262	Mountain Ash	Sorbus aucuparia	19	Fair/Poor	Suspected trunk rot	Retain
263	Mountain Ash	Sorbus aucuparia	20	Fair		Retain
264	Mountain Ash	Sorbus aucuparia	24, 25	Fair	2 stems. Signs of rot	Retain
265	Oak sp.	Quercus sp.	49	Fair	Moderate deadwood	Retain
266	Oak sp.	Quercus sp.	49	Fair	Minor deadwood	Retain
267	Mountain Ash	Sorbus aucuparia	24	Fair		Retain
268	Mountain Ash	Sorbus aucuparia	25	Fair		Retain
269	Oak sp.	Quercus sp.	36	Fair		Retain
270	Oak sp.	Quercus sp.	40	Fair		Retain
271	Mountain Ash	Sorbus aucuparia	24, 24	Fair	2 stem	Retain
272	Oak sp.	Quercus sp.	43	Fair		Retain
273	Oak sp.	Quercus sp.	44	Fair	Moderate deadwood	Retain
274	Mountain Ash	Sorbus aucuparia	20, 22	Fair	2 stem	Retain
275	Mountain Ash	Sorbus aucuparia	36	Fair	Moderate to significant deadwood	Remove
276	Oak sp.	Quercus sp.	47	Fair		Remove
277	Oak sp.	Quercus sp.	50	Fair	Moderate to significant deadwood	Remove
278	Mountain Ash	Sorbus aucuparia	39	Fair		Remove

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279	Maple sp.	Acer sp.	16	Fair		Remove
280	Maple sp.	Acer sp.	15	Fair		Remove
281	Maple sp.	Acer sp.	14	Fair		Remove
282	Maple sp.	Acer sp.	17	Fair		Remove
283	Maple sp.	Acer sp.	19	Fair		Remove
284	Maple sp.	Acer sp.	20	Fair		Remove
285	Birch sp.	Betula sp.	39	Fair/Poor		Remove
286	Birch sp.	Betula sp.	46	Fair/Poor		Remove
287	White Pine	Pinus strobus	45	Fair		Remove
288	Larch sp.	Larix sp.	17	Fair		Remove
289	White Pine	Pinus strobus	34	Fair		Remove
290	Weeping False Cypress	Chamaecyparis nootkatensis	25	Fair		Remove
291	Weeping False	Chamaecyparis	25	Fair		Remove
	Cypress	nootkatensis				
292	Larch sp.	Larix sp.	16	Fair		Remove
293	Spruce sp.	Picea sp.	29	Fair		Remove
294	Spruce sp.	Picea sp.	49	Fair		Remove
295	Birch sp.	Betula sp.	~22	Fair/Poor	6 stem. Fruiting bodies	Remove
296	Carolina Poplar	Populus canadensis	83	Fair	Moderate deadwood	Remove
297	Manitoba Maple	Acer negundo	33	Fair		Remove
298	Manitoba Maple	Acer negundo	38	Fair	Suckers evident	Remove
299	Carolina Poplar	Populus canadensis	38	Fair	Root girdling	Remove
300	Carolina Poplar	Populus canadensis	20	Fair		Remove
301	Carolina Poplar	Populus canadensis	53	Fair	Moderate deadwood	Remove
302	Carolina Poplar	Populus canadensis	63	Fair/Poor	Rot in trunk evident	Remove
303	White Pine	Pinus strobus	19	Fair		Remove
304	Spruce sp.	Picea sp.	19	Fair		Retain
305	Austrian Pine	Pinus nigra	22	Fair		Retain
306	Spruce sp.	Picea sp.	25	Fair		Retain
307	Spruce sp.	Picea sp.	18	Fair		Retain
308	Carolina Poplar	Populus canadensis	25	Fair		Retain
309	Spruce sp.	Picea sp.	19	Fair		Retain
310	Carolina Poplar	Populus canadensis	45	Fair		Retain
311	Carolina Poplar	Populus canadensis	53	Fair		Retain

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312	Carolina Poplar	Populus	18	Fair		Retain
		canadensis				
313	Carolina Poplar	Populus	38	Fair		Retain
		canadensis				
314	Carolina Poplar	Populus	36	Fair		Retain
245	Canalina Danlan	canadensis	20	Fair.		Datain
315	Carolina Poplar	Populus canadensis	30	Fair		Retain
316	Scots Pine	Pinus sylvestris	36	Fair		Retain
317	Scots Pine	Pinus sylvestris	38	Fair		Retain
318	White Pine	Pinus strobus	46	Fair		Retain
319	White Pine	Pinus strobus	46	Fair		Retain
320	White Pine	Pinus strobus	53	Fair		Retain
321	White Pine	Pinus strobus	54	Fair		Remove
322	Scots Pine	Pinus sylvestris	29	Fair		Remove
323	White Pine	Pinus sylvestris Pinus strobus	43	Fair		Remove
324	White Pine	Pinus strobus	46	Fair		Remove
325	White Pine	Pinus strobus	40	Fair		Remove
326	Scots Pine	Pinus sylvestris	28	Fair		Remove
327	White Pine	Pinus strobus	43	Fair		Remove
328	White Pine	Pinus strobus	46	Fair		Remove
329	Scots Pine	Pinus sylvestris	25	Fair		Remove
330	Scots Pine	Pinus sylvestris	37	Fair	Vine throughout	Remove
331	Scots Pine	Pinus sylvestris	25	Fair		Remove
332	Scots Pine	Pinus sylvestris	29	Fair		Remove
333	White Pine	Pinus strobus	38	Dead	Tree is dead	Remove
334	White Pine	Pinus strobus	52	Fair		Remove
335	Scots Pine	Pinus sylvestris	30	Fair		Remove
336	Scots Pine	Pinus sylvestris	39	Fair		Remove
337	Scots Pine	Pinus sylvestris	30	Fair		Remove
338	Scots Pine	Pinus sylvestris	29	Fair		Remove
339	Scots Pine	Pinus sylvestris	35	Fair		Remove
340	Scots Pine	Pinus sylvestris	19	Fair		Remove
341	Scots Pine	Pinus sylvestris	33	Fair		Remove
342	Scots Pine	Pinus sylvestris	36	Fair		Remove
343	Scots Pine	Pinus sylvestris	40	Fair		Remove
344	White Pine	Pinus strobus	33	Fair		Remove
345	White Pine	Pinus strobus	36	Fair		Remove

SUMMARY OF TREE GROUPINGS INVENTORIED - The following table summarizes the on-site tree groupings that were identified on site. These correspond with the clouded areas as labeled on the Tree Inventory Plan TI-1. This method of identification is used in areas where trees are clustered in groups

<u>GROUP A</u> - Remove due to construction Cedars (*Thuja*): 4 trees 25-30cm DBH

GROUP B - Retain

Cedars (Thuja): 2 trees 10-20cm; 2 tress 20-30cm; 1 tree 30-40cm DBH

GROUP C - Retain

Scots Pine (Pinus sylvestris): 20 trees 10-20cm; 45 trees 20-30cm; 18 trees 30-40cm DBH

GROUP D - Retain

Cedars (Thuja): 1 tree 20-30cm DBH

GROUP E - Retain

Cedars (Thuja): 4 trees 30-40cm DBH

GROUP F - Retain

Cedars (Thuja): 1 tree 20-30cm; 1 tree 30-40cm DBH

<u>GROUP G</u> – Partially remove to accommodate proposed development Cedars (*Thuja*): 7 trees 10-20cm; 2 trees 20-30cm; 1 tree 30-40cm DBH

<u>GROUP H</u> - Partially remove to accommodate access road and proposed development Cedars (*Thuja*): 16 trees 10-20cm; 13 trees 20-30cm; 6 trees 30-40cm DBH

<u>GROUP I</u> - Partially remove to accommodate access road Cedars Hedgerow (*Thuja*): 15-20m DBH. ±5-6m Height.

<u>GROUP J</u> - Partially remove to accommodate access road Cedars Hedgerow (*Thuja*): 10-15cm DBH. ±4m Height.

GROUP K - Partially remove to accommodate access road Cedars Hedgerow (*Thuja*): 10-15cm DBH. ±4m Height. (Volunteer saplings, 1 Maple ±8cm, 2 Honeylocusts 10-15cm DBH)

<u>GROUP L</u> - Partially remove to accommodate access road and proposed development Domestic Fruiting Apple trees as part of commercial orchard. Approximately 3800 Trees, mostly older growth.

PHOTO RECORD



Trees 201-218 looking South East



Trees 218-236 looking East



Trees 236-254 and 255-279 looking East



Trees 280-289 looking North



Trees 290-295 and Group A looking North East



Trees 296-315 looking East



Tree Group B looking South West



Tree Group C looking West



Tree Group D and E looking North West



Trees 316-317 and Group F looking North



Trees 318-321 and Group G looking North



Trees 322-331 and Group H looking West

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Trees 331-339 and Group H looking West

Trees 339-345 and Group H, I and J looking East





Tree Group K and L looking South East

Tree Group L looking South East

TREE PROTECTION RECOMMENDATIONS

The following standards shall apply to any trees that are identified to be retained. The City of Barrie's Municipal standards as contained within the **Tree Preservation Manual** 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 1 / Tl-2. This shall apply to tree protection areas within or adjacent to current phase works. Trees slated for retention that are far enough removed from the current work phase will not require hoarding until such time that work would be performed in their vicinity.
- 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 construction for current phase has been completed or until it is determined that construction activities will no longer impact the subject tree(s).

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.

OBSERVATIONS AND CONCLUSIONS

Given the proposal for this site, the majority of trees will be affected due to conflicts with the proposed development. The removal of any trees located on or bordering neighbouring property will require coordination with the adjacent landowner in addition to the requisite City permit prior to such removal.

Special care shall be taken when working within or near the tree protection zones of trees that are to be retained. No removals shall take place in the absence of a City approved Tree Removal Permit.

Kindly direct any questions regarding this report to the undersigned.

Respectfully submitted,

MHBC Planning, Urban Design & Landscape Architecture

Nick A. Miele BLA, OALA, CSLA, ISA Partner | Landscape Architect | Arborist

ISA Certified Arborist No. ON-1251A