

July 25, 2022

Attention: Mr. Stephen O'Neill

ALEXANDER BUDREVICS + ASSOCIATES LTD.

Landscape Architects 895 Don Mills Road, Second Tower, Suite 212 Toronto, Ontario M3C 1W3 T. 416.444.5201

Re: 4099 Erin Mills Parkway - Mississauga - Tree Inventory & TPP

Mr. O'Neill,

As per your request, I have completed a site visit to 4099 Erin Mills Parkway – Mississauga, in preparation for an arborist report and tree preservation with regards to the proposed mixed-use residential development.

Stephen@budrevics.com

The enclosed report inventories all trees regulated by the City of Mississauga, both on and within 10m of the subject site. This inventory will include individual tag #s, both common and botanical names, DBH, and condition. Additionally, it will determine if any regulated trees are to be negatively impacted by the proposed development and provide a preservation strategy for all trees recommended for preservation.

One hundred and forty-three (143) regulated trees have been inventoried as part of this project, twenty-nine of which are City owned. One hundred and seven trees located on the subject site are in conflict with proposed construction and are to be removed. Additionally, five trees located on adjacent private property cannot maintain 100% of their prescribed TPZs and are to be injured. Pursuant to the City's Private Tree By-law, the client will submit a permit application to remove one hundred and seven trees and injure five.

I trust this report meets your needs, if you have any questions or concerns feel free to contact me at cgavin@canopyconsulting.ca.

Regards,

Cletus Gavin B.Sc. Earth Science & Biology

President & Consulting Arborist ASCA Registered Consulting Arborist #613 ISA Certified Arborist (ON-1576A) Butternut Health Assessor # 439

TRAQ Certified



Tree Inventory

4099 Erin Mills Parkway Mississauga, ON

Prepared for:

Attention: Mr. Stephen O'Neill ALEXANDER BUDREVICS + ASSOCIATES LTD.

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INTRODUCTION:

I have been commissioned by Mr. Stephen O'Neill of *Alexander Budrevics & Associates*, to complete a tree inventory with TPP for all trees located on and within 10m of the specified area. All field work and data collection has been completed by Cletus Gavin, RCA #613 on July 14, 2022.

HISTORY AND ASSIGNMENT:

Mr. O'Neill has provided a survey illustrating the existing conditions and a preliminary site plan of the proposed complex located at 4099 Erin Mills Parkway - Mississauga. Upon the request of the client or municipality, *Canopy Consulting*, can be further retained beyond the current scope of work to provide on-site monitoring services and to provide any remedial actions deemed necessary.

Scope of work:

- 1. Inventory all trees regulated by the municipality, both on and within 10m of the subject site. The inventory will include a tag #, species, DBH, condition, comments and recommendations.
- 2. Determine if any regulated trees are to be negatively impacted by the proposed development.
- 3. Provide a preservation strategy for all trees recommended for preservation.

ASSUMPTION AND LIMITING CONDITIONS:

- 1. Care has been taken to obtain all information from reliable sources. *Canopy Consulting* can neither guarantee nor be responsible for the accuracy of information provided by others.
- 2. This report may not be used for any expressed purpose other than its intended purpose and alteration of any part of this report invalidates the report. Excerpts or alterations to the report, without the authorization of the author or his company invalidates its intent and/or implied conclusions.
- 3. 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 was made using accepted arboricultural practices and is limited to visual examination of accessible items without climbing, dissection, probing or coring and detailed root examination involving excavation. While reasonable efforts have been made to assess trees outlined in this report, there is no warranty or guarantee, expressed or implied, that problems or deficiencies with the tree(s) or any part(s) of them may not arise in the future. All trees should be inspected and re-assessed periodically.
- 4. 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. A recommendation to remove or maintain tree(s) does not grant authority to encroach in any manner onto adjacent private properties.

TREE INVENTORY TABLE:

See TI-1 plan in Appendix I for tree location, Table #1 for species identification, size, condition, and minimum tree protection zones and Appendix II for corresponding Digital Images.

Table #1: 4099 Erin Mills Parkway – Mississauga

Table #1. 4079 Ettii Willis Tarkway – Wilssissauga								
Tree #	Species Common Name (<i>Biological Name</i>)	D ¹ B H (cm)	Condition ²	Category ³	Comments	Recommendation 4	M ⁵ T P Z (M)	
272	Honey Locust Gleditsia triacanthos	21	F	1	- deadwood, girdled roots - in conflict with proposed development	R	1.8	
273	Honey Locust Gleditsia triacanthos	26	F	1	- deadwood, roots disturbed, in decline - in conflict with proposed development	R	1.8	
274	Austrian Pine Pinus nigra	26	F	1	- deadwood, girdled roots, unbalanced, roots exposed, in decline - in conflict with proposed development	R	1.8	
275	Austrian Pine Pinus nigra	33	F	1	- deadwood, unbalanced, roots exposed - in conflict with proposed development	R	2.4	
276	Honey Locust Gleditsia triacanthos	27	F	1	- deadwood, in decline, fungus - in conflict with proposed development	R	1.8	
277	Honey Locust Gleditsia triacanthos	17	F	1	- deadwood - in conflict with proposed development	R	1.8	
278	Austrian Pine <i>Pinus nigra</i>	36	F	1	- deadwood, girdled roots, roots exposed - in conflict with proposed development	R	2.4	
279	Austrian Pine <i>Pinus nigra</i>	29	F	1	- deadwood, unbalanced, roots exposed - in conflict with proposed development	R	1.8	
280	Austrian Pine <i>Pinus nigra</i>	27	F	1	- deadwood, unbalanced - in conflict with proposed development	R	1.8	
281	Austrian Pine Pinus nigra	28	F	1	- deadwood, unbalanced, roots exposed - in conflict with proposed development	R	1.8	

¹ **DBH:** Diameter at Breast Height is a measurement in centimeters, using a caliper tape, of the tree stem at 1.37 meters above existing grade.

² **Condition:** A rating of **H**azardous/**D**ead/**P**oor/**F**air/**G**ood/**E**xcellent was determined for each tree by visually assessing all the above ground components of the tree, using acceptable arboricultural procedures as recommended in the "Guide for Plant Appraisal", prepared under contract by the "Council of Tree & Landscape Appraisers (CTLA), an official publication of the International Society of Arboriculture (I.S.A.), 9th Edition, 2000".

³ Category #:

^{1.} Trees with diameters of 10 cm or more, situated on private property on the subject site.

^{2.} Trees with diameters of 6 cm or more, situated on private property, within 6 m of the subject site.

^{3.} Trees of all diameters situated on City owned parkland within 6 m of the subject site.

^{4.} Trees of all diameters situated within the Municipal road allowance adjacent to the subject site.

⁴ **Recommendation**: Preserve (**P**), Preserve with Injury (**PI**), Remove (**R**), Transplant (**T**)

⁵ **MTPZ**: Minimum tree protection zone distance as mandated by City of Mississauga.

Tree #	Species Common Name (<i>Biological Name</i>)	D B H (cm)	Condition	Category	Comments	Recommendation	M T P Z (M)
282	Austrian Pine Pinus nigra	30	F	1	- deadwood, unbalanced - in conflict with proposed development	R	2.4
283	Austrian Pine Pinus nigra	31	F	1	- deadwood, unbalanced, roots exposed - in conflict with proposed development	R	2.4
284	Austrian Pine Pinus nigra	33	F	1	- deadwood, girdled roots exposed - in conflict with proposed development	R	2.4
285	Austrian Pine Pinus nigra	31	F	1	- deadwood, unbalanced - in conflict with proposed development	R	2.4
286	Austrian Pine Pinus nigra	34	F	1	- deadwood, unbalanced, roots exposed - in conflict with proposed development	R	2.4
287	Austrian Pine Pinus nigra	45	F	1	- deadwood, girdled roots - in conflict with proposed development	R	3.0
288	Colorado Spruce Picea pungens	26	F	1	- deadwood, girdled roots - in conflict with proposed development	R	1.8
289	Colorado Spruce Picea pungens	33	F	1	- deadwood, girdled roots, in decline - in conflict with proposed development	R	2.4
290	Colorado Spruce Picea pungens	31	F	1	- deadwood, roots exposed - in conflict with proposed development	R	2.4
291	Norway Maple Acer platanoides	27	F	1	- deadwood, girdled roots, in decline - in conflict with proposed development	R	1.8
292	Colorado Spruce Picea pungens	31	F	1	- deadwood, girdled exposed roots - in conflict with proposed development	R	2.4
293	Honey Locust Gleditsia triacanthos	25	F	1	- deadwood, unbalanced - in conflict with proposed development	R	1.8
294	Austrian Pine Pinus nigra	31	F	1	- deadwood, unbalanced, roots exposed - in conflict with proposed development	R	2.4
295	Austrian Pine Pinus nigra	32	F	1	- deadwood, unbalanced, in decline - in conflict with proposed development	R	2.4
296	Austrian Pine Pinus nigra	26	F	1	- deadwood, poor union, codominant, roots exposed - in conflict with proposed development	R	1.8
297	Austrian Pine Pinus nigra	35	F	1	- deadwood, unbalanced - in conflict with proposed development	R	2.4
298	Austrian Pine Pinus nigra	31	F	1	- deadwood, unbalanced, in decline - in conflict with proposed development	R	2.4
299	Honey Locust Gleditsia triacanthos	27	F	1	- deadwood, unbalanced, in decline - in conflict with proposed development	R	1.8
300	Honey Locust Gleditsia triacanthos	23	F	1	- deadwood, poor form and union - in conflict with proposed development	R	1.8
301	Austrian Pine Pinus nigra	31	F	1	- deadwood, girdled roots, diplodia tip blight - in conflict with proposed development	R	2.4

Tree #	Species Common Name (<i>Biological Name</i>)	D B H (cm)	Condition	Category	Comments	Recommendation	M T P Z (M)
302	Austrian Pine <i>Pinus nigra</i>	35	F	1	- deadwood, poor form, in decline - in conflict with proposed development	R	2.4
303	Austrian Pine <i>Pinus nigra</i>	31	F	1	- deadwood, unbalanced, in decline - in conflict with proposed development	R	2.4
304	Austrian Pine Pinus nigra	29	F	1	- deadwood, unbalanced - in conflict with proposed development	R	1.8
305	Austrian Pine Pinus nigra	27	F	1	- deadwood, unbalanced - in conflict with proposed development	R	1.8
306	Austrian Pine Pinus nigra	32	F	1	- deadwood, poor union - in conflict with proposed development	R	2.4
307	Austrian Pine <i>Pinus nigra</i>	37	G	1	- deadwood - in conflict with proposed development	R	2.4
308	White Spruce <i>Picea glauca</i>	15	F	1	- deadwood, in decline, unbalanced - in conflict with proposed development	R	1.8
309	Norway Spruce <i>Picea abies</i>	29	F	1	- deadwood - in conflict with proposed development	R	1.8
310	White Spruce <i>Picea glauca</i>	16	P	1	- deadwood, in decline, poor union - in conflict with proposed development	R	1.8
311	White Spruce <i>Picea glauca</i>	15	F	1	- deadwood, in decline - in conflict with proposed development	R	1.8
312	Norway Spruce <i>Picea abies</i>	31	F	1	- deadwood, roots exposed - in conflict with proposed development	R	2.4
313	Norway Spruce Picea abies	26	F	1	- deadwood, lean - in conflict with proposed development	R	1.8
314	Norway Spruce Picea abies	22	F	1	- deadwood, poor union - in conflict with proposed development	R	1.8
315	Norway Spruce Picea abies	30	F	1	- deadwood - in conflict with proposed development	R	2.4
316	Norway Spruce Picea abies	27	F	1	- deadwood, roots exposed - in conflict with proposed development	R	1.8
317	Amur Maple Acer ginnala	19	F	1	- deadwood, poor form and union, against fence - in conflict with proposed development	R	1.8
318	Norway Spruce Picea abies	22	F	1	- deadwood, roots exposed - in conflict with proposed development	R	1.8
319	Norway Spruce <i>Picea abies</i>	19	F	1	- deadwood - in conflict with proposed development	R	1.8
320	Norway Spruce Picea abies	21	F	1	- deadwood - in conflict with proposed development	R	1.8
321	Norway Spruce Picea abies	22	F	1	- deadwood - in conflict with proposed development	R	1.8

Tree #	Species Common Name (<i>Biological Name</i>)	D B H (cm)	Condition	Category	Comments	Recommendation	M T P Z (M)
322	Norway Spruce Picea abies	20	F	1	- deadwood - in conflict with proposed development	R	1.8
323	Norway Spruce Picea abies	21	P	1	- 60% dead - in conflict with proposed development	R	1.8
324	Norway Spruce Picea abies	22	F	1	- deadwood, vines - in conflict with proposed development	R	1.8
325	Norway Spruce Picea abies	20	F	1	- deadwood, vines - in conflict with proposed development	R	1.8
326	Norway Spruce Picea abies	18	P	1	- deadwood, in decline, vines - in conflict with proposed development	R	1.8
327	Norway Spruce <i>Picea abies</i>	17	F	1	- deadwood, vines - in conflict with proposed development	R	1.8
328	Norway Spruce <i>Picea abies</i>	29	G	1	- deadwood - in conflict with proposed development	R	1.8
329	Black Walnut Juglans nigra	31	G	1	- minor deadwood - in conflict with proposed development	R	2.4
330	Norway Spruce <i>Picea abies</i>	23	G	1	- deadwood - in conflict with proposed development	R	1.8
331	Norway Spruce <i>Picea abies</i>	19	F	1	- deadwood - in conflict with proposed development	R	1.8
332	Norway Spruce <i>Picea abies</i>	23	F	1	- deadwood, in decline - in conflict with proposed development	R	1.8
333	Norway Spruce <i>Picea abies</i>	26	F	1	- deadwood - in conflict with proposed development	R	1.8
334	Norway Spruce <i>Picea abies</i>	20	P	1	- 70% dead - in conflict with proposed development	R	1.8
335	Norway Spruce <i>Picea abies</i>	25	F	1	- deadwood, roots exposed - in conflict with proposed development	R	1.8
336	Norway Spruce <i>Picea abies</i>	23	P	1	- deadwood, in decline, roots exposed - in conflict with proposed development	R	1.8
337	Austrian Pine Pinus nigra	20	F	1	- deadwood, roots exposed - in conflict with proposed development	R	1.8
338	Siberian Elm <i>Ulmus pumila</i>	22	P	1	- deadwood, unbalanced, lean, poor union with included bark - in conflict with proposed development	R	1.8
339	Russian Olive Elaeagnus angustifolia	16	P	1	- poor form, lean, 40% dead - in conflict with proposed development	R	1.8
340	Russian Olive Elaeagnus angustifolia	16	P	1	- poor form, lean, 30% dead - in conflict with proposed development	R	1.8
341	Black Locust Robinia pseudoacacia	18	F	1	- poor union, deadwood, cavity in trunk - in conflict with proposed development	R	1.8

Tree #	Species Common Name (<i>Biological Name</i>)	D B H (cm)	Condition	Category	Comments	Recommendation	M T P Z (M)
342	White Spruce <i>Picea glauca</i>	17	D	1	- 100% dead - in conflict with proposed development	R	1.8
343	Mulberry <i>Morus alba</i>	22	F	1	- deadwood, in decline, poor union, vines - in conflict with proposed development	R	1.8
344	Black Walnut Juglans nigra	22	F	1	- deadwood, roots exposed - in conflict with proposed development	R	1.8
345	Austrian Pine Pinus nigra	30	F	1	- deadwood, in decline, low live crown ratio - in conflict with proposed development	R	2.4
346	Austrian Pine Pinus nigra	27	F	1	- deadwood, unbalanced - in conflict with proposed development	R	1.8
347	Austrian Pine Pinus nigra	33	F	1	- deadwood, unbalanced - in conflict with proposed development	R	2.4
348	Austrian Pine Pinus nigra	33	F	1	- deadwood, unbalanced, roots exposed - in conflict with proposed development	R	2.4
349	Austrian Pine Pinus nigra	28	F	1	- deadwood - in conflict with proposed development	R	1.8
350	Norway Maple Acer platanoides	26	F	1	- deadwood, girdled exposed roots, epicormic shoots - in conflict with proposed development		1.8
351	Norway Maple Acer platanoides	22	P	1	- in conflict with proposed development - 45% dead, root injury - in conflict with proposed development		1.8
352	Honey Locust Gleditsia triacanthos	28	F	1	- deadwood - in conflict with proposed development	R	1.8
353	Austrian Pine Pinus nigra	34	F	1	- deadwood - in conflict with proposed development	R	2.4
354	Austrian Pine Pinus nigra	33	F	1	- deadwood, unbalanced - in conflict with proposed development	R	2.4
355	Austrian Pine Pinus nigra	31	F	1	- deadwood, in decline, low live crown ratio - in conflict with proposed development	R	2.4
356	Norway Maple Acer platanoides	28	F	1	- deadwood, in decline, poor form - in conflict with proposed development	R	1.8
357	Norway Maple Acer platanoides	33	F	1	deadwood, girdled exposed roots, poor union in conflict with proposed development	R	2.4
358	Norway Maple Acer platanoides	34	P	1	- deadwood, half removed, in decline, lean - in conflict with proposed development	R	2.4
359	Austrian Pine Pinus nigra	38	F	1	- deadwood, unbalanced, roots exposed - in conflict with proposed development	R	2.4
360	Honey Locust Gleditsia triacanthos	31	G	1	- roots exposed - in conflict with proposed development	R	2.4
361	Honey Locust Gleditsia triacanthos	31	F	1	- deadwood, roots exposed - in conflict with proposed development	R	2.4

Tree #	Species Common Name (<i>Biological Name</i>)	D B H (cm)	Condition	Category	Comments	Recommendation	M T P Z (M)
362	Austrian Pine Pinus nigra	32	F	1	- deadwood, roots exposed - in conflict with proposed development	R	2.4
363	Austrian Pine Pinus nigra	27	F	1	- deadwood, poor form - in conflict with proposed development	R	1.8
364	Austrian Pine Pinus nigra	42	F	1	- deadwood, unbalanced - in conflict with proposed development	R	3.0
365	Austrian Pine Pinus nigra	47	F	1	 poor union with included bark, codominant, girdled roots exposed in conflict with proposed development 	R	3.0
366	Austrian Pine Pinus nigra	46	F	1	 poor union with included bark, codominant, girdled roots in conflict with proposed development 	R	3.0
367	Austrian Pine Pinus nigra	31	P	1	- 30% dead, roots exposed - in conflict with proposed development	R	2.4
368	Austrian Pine <i>Pinus nigra</i>	48	F	1	 deadwood, roots exposed, poor form, in decline in conflict with proposed development 	R	3.0
369	Honey Locust Gleditsia triacanthos	16	F	1	- deadwood, in decline - in conflict with proposed development	R	1.8
370	Austrian Pine Pinus nigra	34	F	1	- deadwood, roots exposed - in conflict with proposed development	R	2.4
371	Honey Locust Gleditsia triacanthos	22	F	1	 deadwood, , roots exposed, epicormic shoots in conflict with proposed development 	R	1.8
372	Honey Locust Gleditsia triacanthos	27	F	1	- deadwood, epicormic shoots - in conflict with proposed development	R	1.8
373	Honey Locust Gleditsia triacanthos	23	F	1	 deadwood, in decline, dieback, roots exposed in conflict with proposed development 	R	1.8
374	Honey Locust Gleditsia triacanthos	22	F	1	- deadwood, in decline - in conflict with proposed development	R	1.8
375	Honey Locust Gleditsia triacanthos	26	F	1	- deadwood, in decline - in conflict with proposed development	R	1.8
376	Honey Locust Gleditsia triacanthos	16	F	1	- deadwood, epicormic shoots - in conflict with proposed development	R	1.8
377	Honey Locust Gleditsia triacanthos	21	P	1	- 50% dead - in conflict with proposed development	R	1.8
378	Honey Locust Gleditsia triacanthos	28	F	1	- deadwood, in decline, lean - in conflict with proposed development	R	1.8
C1	Little Leaf Linden Tilia cordata	24	P	4	- 95% dead - clear of the proposed development - shall retain their prescribed TPZ	P	1.8
C2	Honey Locust Gleditsia triacanthos	4	F	4	- deadwood, in decline - clear of the proposed development - shall retain their prescribed TPZ	P	1.2
СЗ	Honey Locust Gleditsia triacanthos	5	F	4	- deadwood - clear of the proposed development - shall retain their prescribed TPZ	P	1.2

Tree #	Species Common Name (<i>Biological Name</i>)	D B H (cm)	Condition	Category	Comments	Recommendation	M T P Z (M)
C4	Honey Locust Gleditsia triacanthos	4	F	4	 deadwood clear of the proposed development shall retain their prescribed TPZ 	P	1.2
C5	Honey Locust Gleditsia triacanthos	5	F	4	 deadwood, scorch clear of the proposed development shall retain their prescribed TPZ 	P	1.2
C6	Honey Locust Gleditsia triacanthos	5	F	4	deadwoodclear of the proposed developmentshall retain their prescribed TPZ	P	1.2
С7	Honey Locust Gleditsia triacanthos	16	G	4	- clear of the proposed development - shall retain their prescribed TPZ	P	1.8
C8	Honey Locust Gleditsia triacanthos	6	F	4	deadwood, scorchclear of the proposed developmentshall retain their prescribed TPZ	P	1.2
С9	Honey Locust Gleditsia triacanthos	6	G	4	- clear of the proposed development - shall retain their prescribed TPZ	P	1.2
C10	Honey Locust Gleditsia triacanthos	6	G	4	- clear of the proposed development - shall retain their prescribed TPZ	P	1.2
C11	Honey Locust Gleditsia triacanthos	16	G	4	- clear of the proposed development - shall retain their prescribed TPZ	P	1.8
C12	Honey Locust Gleditsia triacanthos	8	F	4	- clear of the proposed development - shall retain their prescribed TPZ	P	1.2
C13	Little Leaf Linden Tilia cordata	5	P	4	 - 80% dead - clear of the proposed development - shall retain their prescribed TPZ 	P	1.2
C14	Little Leaf Linden <i>Tilia cordata</i>	4	D	4	- 100% dead - clear of the proposed development - shall retain their prescribed TPZ	P	1.2
C15	Serviceberry <i>Amelachier spp.</i>	3	P	4	- 60% dead - clear of the proposed development - shall retain their prescribed TPZ	P	1.2
C16	Serviceberry <i>Amelachier spp.</i>	4	D	4	- 100% dead - clear of the proposed development - shall retain their prescribed TPZ	P	1.2
C17	Serviceberry Amelachier spp.	4	F	4	- deadwood, in decline - clear of the proposed development - shall retain their prescribed TPZ	P	1.2
C18	Silk Ivory Lilac Syringa reticulata	4	P	4	- cavity in leader, deadwood, in decline - clear of the proposed development - shall retain their prescribed TPZ	P	1.2
C19	Silk Ivory Lilac Syringa reticulata	3	P	4	- deadwood, in decline - clear of the proposed development - shall retain their prescribed TPZ	P	1.2
C20	Little Leaf Linden Tilia cordata	7	F	4	- deadwood - clear of the proposed development - shall retain their prescribed TPZ	P	1.2
C21	Sugar Maple Acer saccharum	12	F	4	- deadwood, in decline, poor form - clear of the proposed development - shall retain their prescribed TPZ	P	1.8
C22	Norway Maple Acer platanoides	28	F	4	- deadwood, in decline - clear of the proposed development - shall retain their prescribed TPZ	P	1.8
C23	Colorado Spruce Picea pungens	5	P	4	- needlecast - clear of the proposed development - shall retain their prescribed TPZ	P	1.2

Tree #	Species Common Name (<i>Biological Name</i>)	D B H (cm)	Condition	Category	Comments	Recommendation	M T P Z (M)
C24	Colorado Spruce Picea pungens	9	F	4	- deadwood- clear of the proposed development- shall retain their prescribed TPZ	P	1.2
C25	White Spruce <i>Picea glauca</i>	4	F	4	- clear of the proposed development - shall retain their prescribed TPZ	P	1.2
C26	White Spruce <i>Picea glauca</i>	3	G	4	- clear of the proposed development - shall retain their prescribed TPZ	P	1.2
C27	Colorado Spruce <i>Picea pungens</i>	30	F	4	deadwood, leanclear of the proposed developmentshall retain their prescribed TPZ	P	2.4
C28	Little Leaf Linden Tilia cordata	20	P	4	- deadwood, in decline, scorch, 25% dead - clear of the proposed development - shall retain their prescribed TPZ	P	1.8
C29	Little Leaf Linden Tilia cordata	21	P	4	- 40% dead, in decline - clear of the proposed development - shall retain their prescribed TPZ	P	1.8
N1	Amur Maple <i>Acer ginnala</i>	39	F	1	- multi-stem, in decline, deadwood, large storm break - encroached upon by 8%	PI	2.4
N2	Amur Maple Acer ginnala	11	F	1	- deadwood - encroached upon by 3%	PI	1.8
N3	Amur Maple Acer ginnala	25	F	1	 deadwood, in decline clear of the proposed development shall retain their prescribed TPZ 	P	1.8
N4	Amur Maple Acer ginnala	26	F	1	- deadwood, poor union with included bark - encroached upon by 8%	PI	1.8
N5	Norway Maple Acer platanoides	11	F	1	- deadwood, unbalanced - encroached upon by 7%	PI	1.8
N6	Norway Maple Acer platanoides	20	F	1	- deadwood, unbalanced - encroached upon by 8%	PI	1.8
N7	Colorado Spruce Picea Pungens	30	F	1	deadwood, leanclear of the proposed developmentshall retain their prescribed TPZ	P	2.4

Discussion:

City Owned Trees:

- 1. As listed above, there are one hundred and forty-three regulated trees involved with this project, twenty-nine of which are located within the City road allowance, being trees no. C1-C29. All twenty-nine trees are clear of proposed development, shall retain their prescribed TPZs and as such, will not be disturbed during construction.
- 2. The appraised value of trees no. C1, C7, C11, C21, C22, C24, C28, C29 and C30 is \$14,500.00. The Trunk Formula Method (TFM) was used to appraise the tree as described in the "Guide for Plant Appraisal", prepared under contract by the "Council of Tree and Landscape Appraisers, an official publication of the International Society of Arboriculture (I.S.A.), 9th Edition, 2000", see Appendix III for Key Inputs and Trunk Formula Summary. Due to their size, the remaining twenty City owned trees were valued using the replacement method. As per City of Mississauga standards, compensation in the form of cash-in-lieu is \$522.75 (x16) for deciduous trees and \$549.40 (x4) for coniferous for a total of \$10,561.60.

Privately Owned Trees Located on or within 6.0m of the Subject Site:

- 1. There are seven regulated trees located on the adjacent private property, being trees no. N1-N7. Trees no. N3 and N7 are clear of the proposed development, shall retain their prescribed TPZs and as such, will not be disturbed during construction.
- 2. Trees no. N1, N2, N4, N5 and N6 are encroached upon by the proposed development by 8%, 3%, 8%, 7% and %5 respectively. Such an encroachment is located outside the critical root zone, on the outside of the tree protection zone. Roots in this area are likely to range from 2-5cm. It is recommended that a qualified arborist be on site to supervise excavation, root prune as required and to provide any other remedial actions deemed necessary. These trees are healthy and have an abundance of stored energy (carbohydrates) to recover from this disturbance. Pursuant to the City's Private Tree Protection By-law, the client will submit a permit application to injure five trees.

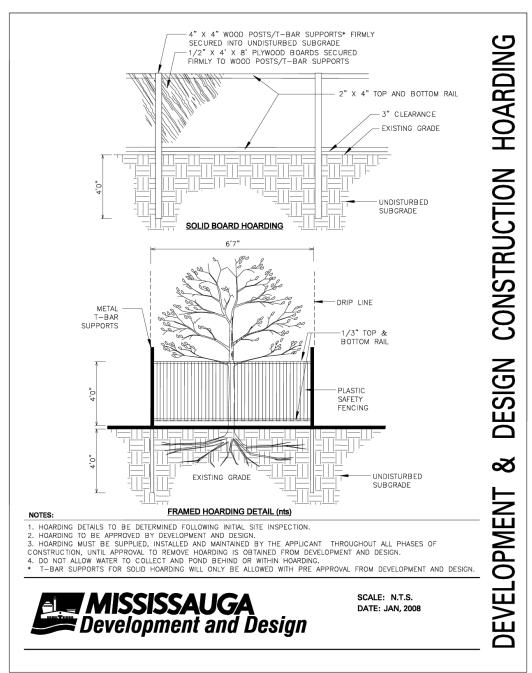
Privately Owned Trees Located on the Subject Site:

- 1. There are one hundred and seven regulated trees located on the subject site, being trees no. 272-378. These trees are in conflict with the proposed develoment and as such, are to be removed. Please note tree no. 342 is 100% dead. Pursuant to the City's Private Tree By-law, the client will submit a permit application to remove one hundred and seven trees.
- 2. All other trees located on or within 6.0m of the subject site have a DBH of less than 6cm, are non-regulated trees and as such, were not included in this report.
- 3. To further protect this tree scheduled for preservation from the potential of construction disturbance, it is recommended that the below listed tree preservation recommendations are implemented.

1.0 ESTABLISH TREE PROTECTION ZONE

The purpose of the tree protection zone (TPZ) is to prevent root damage, soil compaction and soil contamination. Workers and machinery shall not disturb the tree protection zone in any way. To prevent access, the following is required:

- 1.1 Install hoarding as per attached Tree Protection Plan in Appendix I.
- 1.2 Hoarding shall consist of the following:



- 1.3 When visibility is a consideration and **upon approval from the City**, 1.2-meter-high orange plastic web snow fencing on a 2"X4" frame is recommended.
- 1.4 No fill, equipment or supplies are to be stored within the tree protection zone.
- 1.5 Activities, which are likely to injure or destroy tree(s), are not permitted within the TPZ.
- 1.6 No objects may be attached to tree(s) within the TPZ.
- 1.7 Tree protection barriers are to be erected prior to the commencement of any construction or grading activities on the site and are to remain in place in good condition throughout the entire duration of the project.
- 1.8 Once all tree/site protection measures have been installed you must notify Urban Forestry staff to arrange for an inspection of the site and approval of the site protection requirements.
- 1.9 All Hoarding shall not be removed until all construction activity is complete.
- 1.10 A sign that is similar to the illustration below must be mounted on all sides of a tree protection barrier for the duration of the project. The sign should be a minimum of 40cm x 60cm and made of white gator board, laminates or equivalent material.

TREE PROTECTION ZONE (TPZ)

No grade change, storage of materials or equipment is permitted within the TPZ. The tree protection barrier must not be removed without the written authorization of City of Mississauga, Urban Forestry.

2.0 ROOT PRUNING

When working within the tree protection zone, 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:

2.1 Preserve the root bark ridge (similar in structure to the branch bark ridge). Directional Root Pruning (DRP) is the recommended technique and should be used during hand excavation around tree roots. Roots are like 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.

- 2.2 All roots needing to be pruned or removed shall be cut cleanly with sharp hand tools, by a Certified Arborist or by the PCA.
- 2.3 No wound dressings\pruning paint shall be used to cover the ends of each cut.
- 2.4 All roots requiring pruning shall be cut using any of the following tools:
 - Large or small loppers
 - Hand pruners
 - Small hand saws
 - Wound scribers
- 2.5 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.

a. LANDSCAPING

Any landscaping completed within the tree preservation zones, after construction is completed and hoarding has been removed, cannot cause damage to any of the trees or their roots. The trees must be protected for the same reasons listed above but without using hoarding.

- b. No grade changes are permitted which include adding and/or removing soil.
 - c. **No excavation** is permitted that can cause damage to the roots of the tree.
 - d. **No heavy equipment** can be used to compact the soil within the tree preservation zone.
 - e. Any hard -surface sidewalks, paths, etc. should be constructed using permeable products such as interlocking stone, etc.

SUMMARY TABLE:

Tree Category	Total	Preserve	Preserve with Injury	Remove	Transplant
(Tree located on the subject site)	107	0	0	107	0
(Tree located on adjacent property)	7	2	5	0	0
4 (City owned tree)	29	29	0	0	0
Total	143	31	5	107	0

CONCLUSIONS:

As listed in the Summary Table above, one hundred and forty-three (143) regulated trees have been inventoried as part of this project, twenty-nine of which are City owned. One hundred and seven trees located on the subject site are in conflict with proposed construction and are to be removed. Additionally, five trees located on adjacent private property cannot maintain 100% of their prescribed TPZs and are to be injured. Pursuant to the City's Private Tree By-law, the client will submit a permit application to remove one hundred and seven trees and injure five. Finally, with the above in mind, it is the consultant's opinion that if the above tree preservation recommendations are implemented, which includes installing tree protection hoarding as mandated by the City of Mississauga as outlined in this report, proposed construction will not adversely affect the long-term health, safety and/or existing condition of all trees scheduled for preservation.

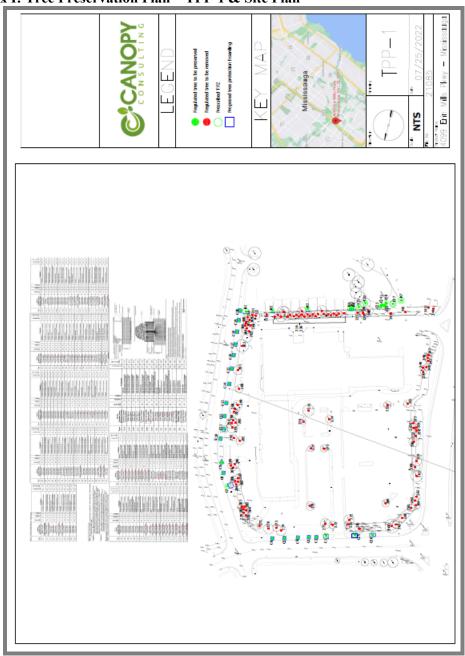
Trusting this report meets your needs. For further information, you may contact me directly at (416) 300-2957 or by email at cgavin@canopyconsulting.ca.

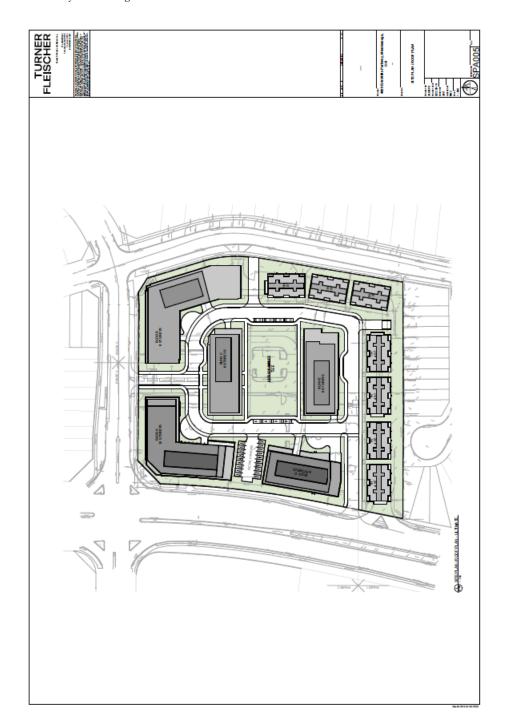
Sincerely,

Cletus Gavin B.Sc. Earth Science & Biology

President & Consulting Arborist ASCA Registered Consulting Arborist #613 ISA Certified Arborist (ON-1576A) Butternut Health Assessor # 439 TRAQ Certified

Appendix I: Tree Preservation Plan – TPP-1 & Site Plan





Appendix II: Digital Images



Photo #1: Trees no. 272-273, 278, C1 and C2 looking west.



Photo #2: Tree no. 274-283 looking northeast.



Photo #3: Tree no. 291-2994 looking southeast.



Photo #4: Tree no. 300-313 trees looking southeast.



Photo #5: Tree no. 314-336 looking southwest.



Photo #6: Tree no. 337-344 looking southwest.



Photo #7: Tree no. 345-350 looking west.



Photo #8: Tree no. 351, 353-358 looking southwest.



Photo #9: Tree no. 359-368 looking northwest.



Photo #10: Tree no. 370-372 and C28-C29 looking southwest.

TRUNK FORMULA METHOD

The method that will be used to appraise the tree is the Trunk Formula Method (TFM) as described in the "Guide for Plant Appraisal", prepared under contract by the "Council of Tree and Landscape Appraisers, an official publication of the International Society of Arboriculture (I.S.A.), 9th Edition, 2000". The trunk formula method is used to appraise the monetary value of trees considered too large to be replaced with nursery or field-grown stock. Determination of the value of a tree is based on the cost of the largest commonly available transplantable tree and it's cost of installation, plus the increase in value due to the larger size of the tree being appraised. These values are adjusted according to the species, health and location. This method of appraisal is endorsed by several reputable organizations including the American Society of Consulting Arborist, the I.S.A. and the Tree Care Industry.

TABLE 1: KEY INPUTS

Replacement Cost	\$815.00
Species factor ⁶	
 Little Leaf Linden (Tilia cordata) 	72%
 Honey Locust (Gleditsia triacanthos) 	68%
 Norway Maple (Acer platanoides) 	68%
 Colorado Spruce (Picea pungens) 	72%
■ Sugar Maple (Acer saccharum)	78%
Basic Price ⁷	\$6.51 cm ²
Location Factor considers the following:	
■ Site Rating – (75%)	77%
■ Contributing Rating – (77%)	1170
■ Placement Rating – (78%)	

TABLE 2: TRUNK FORMULA SUMMARY FOR TREES > 20CM

TREE	DBH	Replacement	BASIC	TRUNK	SPECIES	CONDITION	LOCATION	APPRAISED
#	(CM)	Cost	PRICE	AREA	%	%	%	VALUE
				DIFFERENCE				\$
C1	24	524	19.55	402	0.72	0.20	0.77	950
C7	16	524	19.55	151	0.68	0.75	0.77	1460
C11	16	524	19.55	151	0.68	0.75	0.77	1460
C21	12	524	19.55	63	0.78	0.60	0.77	690
C22	28	524	19.55	565	0.68	0.65	0.77	4020
C24	9	524	19.55	14	0.72	0.65	0.77	360
C28	30	391	13.79	657	0.72	0.60	0.77	3190
C29	20	391	13.79	264	0.72	0.40	0.77	920
C30	21	524	19.55	296	0.72	0.40	0.77	1450
							TOTAL	\$14,500

⁶ Ontario Supplement to the Guide for Plant Appraisal, 8th Edition

⁷ See above.