



December 7, 2021

Attention: Mr. Eriks Kalvins

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ALEXANDER BUDREVICS + ASSOCIATES LTD.

Landscape Architects
895 Don Mills Road, Second Tower, Suite 212
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Re: 11589 Highway 26 - Collingwood - Arborist Report and Tree Preservation Plan

Mr. Kalvins,

As per your request, I have completed a site visit to 11589 Hwy 26 - Collingwood, in preparation for an arborist report and tree preservation with regards to the proposed residential development.

The enclosed report inventories all trees located on and within 10m of the proposed work area. This inventory will include individual tag #s, both common and botanical names, DBH, condition and minimum tree protection zones. 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.

Eight hundred and seventy-eight (878) trees greater than 10cm were inventoried as part of this project, none of which are Town owned. Eight hundred and thirty-two (832) privately owned trees are in conflict with the proposed development and are recommended for removal. Additionally, two trees located on the adjacent property cannot maintain 100% of their prescribed TPZ and as such, are to be preserved with injury. Authorization from the Town is required prior to the removal or injury of these trees.

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



Arborist Report
&
Tree Protection Plan

11589 Highway 26
Collingwood, ON

Prepared for:

Mr. Eriks Kalvins

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INTRODUCTION:

I have been commissioned by Mr. Eriks Kalvins of *Alexander Budrevics & Associates.*, to complete an arborist report and tree protection plan for the proposed renovations located at 11589 Hwy 26 - Collingwood. The report will identify all trees regulated by the Town of Collingwood, provide a preservation strategy with recommendations and a tree protection plan depicting the trees locations, the existing conditions and any proposed work. All field work and data collection were completed by Cletus Gavin, RCA #613 on November 10-11, 2021.

HISTORY AND ASSIGNMENT:

Mr. Kalvins has provided a site plan for the proposed residential development as per the Tree Protection Plan – TPP-1 in Appendix I. 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 work area. 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 SURVEY AND RECOMMENDATIONS:

See TPP-1 plan in Appendix I for tree/zone locations, Table #1 for species identification, condition, and recommendations for tagged trees and Appendix II for corresponding Digital Images.

Table #1: 11589 Hwy 26 - Collingwood

Tree #	Species Common Name (Biological Name)	D ¹ B H (cm)	Condition ²	Category ³	Comments	Recommendation ⁴	M ⁵ T P Z (M)
501	Trembling Aspen <i>Populus tremuloides</i>	74	F	2	- lean, large deadwood, multiple storm breaks, in decline - clear of proposed construction - shall retain its prescribed TPZ	P	4.8
502	Trembling Aspen <i>Populus tremuloides</i>	71	P	2	- large cavity in trunk, deadwood, multiple storm breaks, in decline - clear of proposed construction - shall retain its prescribed TPZ	P	4.8
503	Trembling Aspen <i>Populus tremuloides</i>	75	P	2	- large deadwood, 40% dead, in decline - clear of proposed construction - shall retain its prescribed TPZ	P	4.8
504	Trembling Aspen <i>Populus tremuloides</i>	83	P	2	- lean, large deadwood, 30% dead, in decline - encroached upon by 4%	PI	5.4
505	Trembling Aspen <i>Populus tremuloides</i>	97	D	2	- 100% dead - encroached upon by 9%	PI	6.0
506	Trembling Aspen <i>Populus tremuloides</i>	69	F	2	- large deadwood, in decline - clear of proposed construction - shall retain its prescribed TPZ	P	4.2
507	Trembling Aspen <i>Populus tremuloides</i>	59	D	2	- 100% dead - clear of proposed construction - shall retain its prescribed TPZ	P	3.6
508	Trembling Aspen <i>Populus tremuloides</i>	49	D	2	- 100% dead - clear of proposed construction - shall retain its prescribed TPZ	P	3.0
509	Trembling Aspen <i>Populus tremuloides</i>	47	F	2	- large deadwood, in decline - clear of proposed construction - shall retain its prescribed TPZ	P	3.0
510	Trembling Aspen <i>Populus tremuloides</i>	49	F	2	- large deadwood, in decline - clear of proposed construction - shall retain its prescribed TPZ	P	3.0

¹ **DAB:** Diameter at base is a measurement in centimeters, using a caliper tape, at the base of the tree directly above the root flare.

² **Condition:** A rating of **Hazardous/Dead/Poor/Fair/Good/Excellent** 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.
2. Trees with diameters of 10 cm or more, situated on private property, within 6 m of the subject site.
3. Trees of all diameters situated on Town 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 (**Ps**), Preserve with Injury (**Pi**), Remove (**Rv**), Transplant (**Tp**)

⁵ **MTPZ:** Minimum tree protection zone distance as recommended by Canopy Consulting.

Tree #	Species Common Name (Biological Name)	D B H (cm)	Condition	Category	Comments and Recommendations	Recommendations	M T P Z (M)
511	Trembling Aspen <i>Populus tremuloides</i>	32	F	1	- deadwood, seam in trunk - in conflict with proposed development	R	2.4
512	Trembling Aspen <i>Populus tremuloides</i>	31	P	1	- 40% dead - in conflict with proposed development	R	2.4
513	Trembling Aspen <i>Populus tremuloides</i>	32	F	1	- in decline, 30% dead - in conflict with proposed development	R	2.4
514	Trembling Aspen <i>Populus tremuloides</i>	35	F	1	- deadwood - in conflict with proposed development	R	2.4
515	Trembling Aspen <i>Populus tremuloides</i>	41	F	1	- large deadwood - in conflict with proposed development	R	3.0
516	Trembling Aspen <i>Populus tremuloides</i>	32	D	1	- 100% dead - in conflict with proposed development	R	2.4
517	Trembling Aspen <i>Populus tremuloides</i>	33	F	1	- deadwood, in decline, severe lean - in conflict with proposed development	R	2.4
518	Trembling Aspen <i>Populus tremuloides</i>	47	F	1	- deadwood, in decline - in conflict with proposed development	R	3.0
519	Trembling Aspen <i>Populus tremuloides</i>	31	F	1	- deadwood, severe lean - in conflict with proposed development	R	2.4
520	Trembling Aspen <i>Populus tremuloides</i>	38	F	1	- deadwood, lean, poor form - in conflict with proposed development	R	2.4
521	Trembling Aspen <i>Populus tremuloides</i>	46	F	1	- deadwood, poor form - in conflict with proposed development	R	3.0
522	Trembling Aspen <i>Populus tremuloides</i>	48	F	1	- deadwood, poor form, lean - in conflict with proposed development	R	3.0
523	Trembling Aspen <i>Populus tremuloides</i>	31	F	1	- deadwood, vines - in conflict with proposed development	R	2.4
524	Trembling Aspen <i>Populus tremuloides</i>	33	F	1	- large deadwood - in conflict with proposed development	R	2.4
525	Trembling Aspen <i>Populus tremuloides</i>	32	P	1	- 60% dead - in conflict with proposed development	R	2.4
526	Trembling Aspen <i>Populus tremuloides</i>	43	G	1	- minor deadwood - in conflict with proposed development	R	3.0
527	Trembling Aspen <i>Populus tremuloides</i>	40	F	1	- deadwood - in conflict with proposed development	R	3.0
528	Trembling Aspen <i>Populus tremuloides</i>	45	F	1	- deadwood - in conflict with proposed development	R	3.0
529	Trembling Aspen <i>Populus tremuloides</i>	48	F	1	- deadwood - in conflict with proposed development	R	3.0
530	Trembling Aspen <i>Populus tremuloides</i>	36	D	1	- 100% dead - in conflict with proposed development	R	2.4

Tree #	Species Common Name (Biological Name)	D B H (cm)	Condition	Category	Comments and Recommendations	Recommendations	M T P Z (M)
531	Scots Pine <i>Pinus sylvestris</i>	30	P	1	- 70% dead - in conflict with proposed development	R	2.4
532	Trembling Aspen <i>Populus tremuloides</i>	39	G	1	- in conflict with proposed development	R	2.4
533	Trembling Aspen <i>Populus tremuloides</i>	42	D	1	- 100% dead - in conflict with proposed development	R	3.0
534	Trembling Aspen <i>Populus tremuloides</i>	45	G	1	- clear of proposed development - shall retain its prescribed TPZ	R	3.0
535	Trembling Aspen <i>Populus tremuloides</i>	32	P	1	- 90% dead - clear of proposed development - shall retain its prescribed TPZ	R	2.4
536	Trembling Aspen <i>Populus tremuloides</i>	35	F	1	- deadwood - clear of proposed development - shall retain its prescribed TPZ	R	2.4
537	Trembling Aspen <i>Populus tremuloides</i>	30	F	1	- large deadwood, in decline - clear of proposed development - shall retain its prescribed TPZ	R	2.4
538	Trembling Aspen <i>Populus tremuloides</i>	32	P	1	- large deadwood, in decline, insect activity - clear of proposed development - shall retain its prescribed TPZ	R	2.4
539	Trembling Aspen <i>Populus tremuloides</i>	33	F	1	- deadwood - clear of proposed development - shall retain its prescribed TPZ	R	2.4
540	Green Ash <i>Fraxinus pennsylvanica</i>	34	F	1	- deadwood, in decline, EAB? - clear of proposed development - shall retain its prescribed TPZ	R	2.4
541	Trembling Aspen <i>Populus tremuloides</i>	39	F	1	- deadwood - clear of proposed development - shall retain its prescribed TPZ	R	2.4
542	Trembling Aspen <i>Populus tremuloides</i>	37	P	1	- storm break, large deadwood, in decline - clear of proposed development - shall retain its prescribed TPZ	R	3.0
543	Trembling Aspen <i>Populus tremuloides</i>	31	F	1	- deadwood, in decline, vines - in conflict with proposed development	R	2.4
544	Green Ash <i>Fraxinus pennsylvanica</i>	48	F	1	- deadwood, in decline, EAB? - in conflict with proposed development	R	3.0
545	Trembling Aspen <i>Populus tremuloides</i>	33	F	1	- large deadwood, in decline - in conflict with proposed development	R	2.4
546	Trembling Aspen <i>Populus tremuloides</i>	47	F	1	- deadwood, storm break - in conflict with proposed development	R	3.0
547	Trembling Aspen <i>Populus tremuloides</i>	31	G	1	- in conflict with proposed development	R	2.4
548	Trembling Aspen <i>Populus tremuloides</i>	31	F	1	- deadwood - in conflict with proposed development	R	2.4
549	Trembling Aspen <i>Populus tremuloides</i>	32	G	1	- in conflict with proposed development	R	2.4
550	Green Ash <i>Fraxinus pennsylvanica</i>	34	F	1	- deadwood, in decline, EAB? - in conflict with proposed development	R	2.4

Tree #	Species Common Name (Biological Name)	D B H (cm)	Condition	Category	Comments and Recommendations	Recommendations	M T P Z (M)
551	Trembling Aspen <i>Populus tremuloides</i>	32	F	1	- deadwood, lean, unbalanced - in conflict with proposed development	R	2.4
552	Trembling Aspen <i>Populus tremuloides</i>	36	G	1	- minor deadwood - in conflict with proposed development	R	2.4
553	Trembling Aspen <i>Populus tremuloides</i>	31	P	1	- 40% dead, severe lean, poor form - in conflict with proposed development	R	2.4
554	Trembling Aspen <i>Populus tremuloides</i>	39	F	1	- deadwood, unbalanced - in conflict with proposed development	R	2.4
555	Trembling Aspen <i>Populus tremuloides</i>	34	F	1	- deadwood, unbalanced - in conflict with proposed development	R	2.4
556	Trembling Aspen <i>Populus tremuloides</i>	43	F	1	- deadwood, unbalanced - in conflict with proposed development	R	3.0
557	Trembling Aspen <i>Populus tremuloides</i>	32	D	1	- 100% dead - in conflict with proposed development	R	2.4
558	Trembling Aspen <i>Populus tremuloides</i>	33	F	1	- deadwood, lean - in conflict with proposed development	R	2.4
559	Trembling Aspen <i>Populus tremuloides</i>	31	F	1	- deadwood, lean - in conflict with proposed development	R	2.4
560	Trembling Aspen <i>Populus tremuloides</i>	35	G	1	- minor deadwood - in conflict with proposed development	R	2.4
561	Trembling Aspen <i>Populus tremuloides</i>	33	F	1	- deadwood, lean - in conflict with proposed development	R	2.4
562	Trembling Aspen <i>Populus tremuloides</i>	39	F	1	- deadwood, lean, unbalanced - in conflict with proposed development	R	2.4
563	Trembling Aspen <i>Populus tremuloides</i>	31	F	1	- deadwood, unbalanced - in conflict with proposed development	R	2.4
564	Trembling Aspen <i>Populus tremuloides</i>	30	F	1	- deadwood, in decline - in conflict with proposed development	R	2.4
565	Trembling Aspen <i>Populus tremuloides</i>	33	F	1	- deadwood - in conflict with proposed development	R	2.4
566	Trembling Aspen <i>Populus tremuloides</i>	33	F	1	- deadwood, vines - in conflict with proposed development	R	2.4
567	Trembling Aspen <i>Populus tremuloides</i>	39	F	1	- deadwood - in conflict with proposed development	R	2.4
568	Trembling Aspen <i>Populus tremuloides</i>	37	F	1	- deadwood, unbalanced - in conflict with proposed development	R	2.4
569	Trembling Aspen <i>Populus tremuloides</i>	38	F	1	- deadwood, unbalanced - in conflict with proposed development	R	2.4
570	Trembling Aspen <i>Populus tremuloides</i>	34	F	1	- deadwood, lean, unbalanced - in conflict with proposed development	R	2.4

Tree #	Species Common Name (Biological Name)	D B H (cm)	Condition	Category	Comments and Recommendations	Recommendations	M T P Z (M)
571	Trembling Aspen <i>Populus tremuloides</i>	41	P	1	- 80% dead - in conflict with proposed development	R	3.0
572	Trembling Aspen <i>Populus tremuloides</i>	37	F	1	- deadwood, in decline - in conflict with proposed development	R	2.4
573	Trembling Aspen <i>Populus tremuloides</i>	33	F	1	- deadwood - in conflict with proposed development	R	2.4
574	Trembling Aspen <i>Populus tremuloides</i>	30	F	1	- deadwood - in conflict with proposed development	R	2.4
575	Trembling Aspen <i>Populus tremuloides</i>	35	F	1	- deadwood, unbalanced - in conflict with proposed development	R	2.4
576	Trembling Aspen <i>Populus tremuloides</i>	30	F	1	- deadwood, unbalanced - in conflict with proposed development	R	2.4
577	Trembling Aspen <i>Populus tremuloides</i>	49	P	1	- 40% dead, in decline - in conflict with proposed development	R	3.0
578	Trembling Aspen <i>Populus tremuloides</i>	46	F	1	- deadwood, in decline - in conflict with proposed development	R	3.0
579	Trembling Aspen <i>Populus tremuloides</i>	45	F	1	- deadwood, in decline, poor form - in conflict with proposed development	R	3.0
580	Trembling Aspen <i>Populus tremuloides</i>	30	F	1	- deadwood - in conflict with proposed development	R	2.4
581	Trembling Aspen <i>Populus tremuloides</i>	30	F	1	- deadwood - in conflict with proposed development	R	2.4
582	Trembling Aspen <i>Populus tremuloides</i>	47	F	1	- deadwood, poor union, vines - in conflict with proposed development	R	3.0
583	Trembling Aspen <i>Populus tremuloides</i>	31	P	1	- 60% dead - in conflict with proposed development	R	2.4
584	Trembling Aspen <i>Populus tremuloides</i>	30	P	1	- 55% dead - in conflict with proposed development	R	2.4
585	Trembling Aspen <i>Populus tremuloides</i>	35	F	1	- deadwood, vines - in conflict with proposed development	R	2.4
586	Trembling Aspen <i>Populus tremuloides</i>	38	F	1	- large deadwood, in decline - in conflict with proposed development	R	2.4
587	Trembling Aspen <i>Populus tremuloides</i>	35	F	1	- large deadwood, in decline - in conflict with proposed development	R	2.4
588	Trembling Aspen <i>Populus tremuloides</i>	36	P	1	- 80% dead - in conflict with proposed development	R	2.4
589	Trembling Aspen <i>Populus tremuloides</i>	34	P	1	- 35% dead - in conflict with proposed development	R	2.4
590	Trembling Aspen <i>Populus tremuloides</i>	30	P	1	- 30%, in decline, poor form - in conflict with proposed development	R	2.4

Tree #	Species Common Name (Biological Name)	D B H (cm)	Condition	Category	Comments and Recommendations	Recommendations	M T P Z (M)
591	Trembling Aspen <i>Populus tremuloides</i>	37	F	1	- deadwood, vines - in conflict with proposed development	R	2.4
592	Trembling Aspen <i>Populus tremuloides</i>	33	G	1	- vines - in conflict with proposed development	R	2.4
593	Trembling Aspen <i>Populus tremuloides</i>	66	F	1	- deadwood, vines - in conflict with proposed development	R	4.2
594	White Birch <i>Betula papyrifera</i>	48	G	1	- minor deadwood - in conflict with proposed development	R	3.0
595	Eastern White Cedar <i>Thuja occidentalis</i>	31	F	1	- deadwood, unbalanced - in conflict with proposed development	R	2.4
596	Green Ash <i>Fraxinus pennsylvanica</i>	34	F	1	- deadwood, in decline - in conflict with proposed development	R	2.4
597	Trembling Aspen <i>Populus tremuloides</i>	31	F	1	- deadwood, poor union - in conflict with proposed development	R	2.4
598	Green Ash <i>Fraxinus pennsylvanica</i>	36	P	1	- 50% dead, EAB? - in conflict with proposed development	R	2.4
599	Willow <i>Salix spp.</i>	66	F	1	- deadwood, storm break - in conflict with proposed development	R	4.2
600	Green Ash <i>Fraxinus pennsylvanica</i>	33	P	1	- 60% dead, EAB? - in conflict with proposed development	R	2.4
601	Green Ash <i>Fraxinus pennsylvanica</i>	32	P	1	- 55% dead, EAB? - in conflict with proposed development	R	2.4
602	Green Ash <i>Fraxinus pennsylvanica</i>	30	P	1	- 80% dead, EAB? - in conflict with proposed development	R	2.4
603	Trembling Aspen <i>Populus tremuloides</i>	32	P	1	- 50% dead - in conflict with proposed development	R	2.4
604	Green Ash <i>Fraxinus pennsylvanica</i>	31	P	1	- deadwood, in decline, EAB? - in conflict with proposed development	R	2.4
605	Green Ash <i>Fraxinus pennsylvanica</i>	33	P	1	- 40% dead, EAB? - in conflict with proposed development	R	2.4
606	Green Ash <i>Fraxinus pennsylvanica</i>	30	P	1	- 50% dead, EAB? - in conflict with proposed development	R	2.4
607	Willow <i>Salix spp.</i>	71	F	1	- deadwood, storm break, in decline, poor union - in conflict with proposed development	R	4.8
N1	Apple <i>Malus baccata</i>	17	F	2	- deadwood - clear of proposed construction - shall retain its prescribed TPZ	P	1.8
N2	Trembling Aspen <i>Populus tremuloides</i>	29	D	2	- 100% dead - clear of proposed construction - shall retain its prescribed TPZ	P	1.8
N3	Trembling Aspen <i>Populus tremuloides</i>	28	F	2	- deadwood - clear of proposed construction - shall retain its prescribed TPZ	P	1.8

Tree #	Species Common Name (Biological Name)	D B H (cm)	Condition	Category	Comments and Recommendations	Recommendations	M T P Z (M)
N4	Trembling Aspen <i>Populus tremuloides</i>	103	P	2	- large storm break, deadwood, multiple failures - clear of proposed construction - shall retain its prescribed TPZ	P	6.18
N5	Trembling Aspen <i>Populus tremuloides</i>	53	F	2	- deadwood - clear of proposed construction - shall retain its prescribed TPZ	P	3.6
N6	Trembling Aspen <i>Populus tremuloides</i>	67	F	2	- deadwood, poor union - clear of proposed construction - shall retain its prescribed TPZ	P	4.2
N7	Trembling Aspen <i>Populus tremuloides</i>	61	F	2	- deadwood, poor union - clear of proposed construction - shall retain its prescribed TPZ	P	4.2
N8	Trembling Aspen <i>Populus tremuloides</i>	64	P	2	- 33% dead - clear of proposed construction - shall retain its prescribed TPZ	P	4.2
N9	Trembling Aspen <i>Populus tremuloides</i>	56	F	2	- large deadwood, multiple storm breaks - clear of proposed construction - shall retain its prescribed TPZ	P	3.6
N10	Trembling Aspen <i>Populus tremuloides</i>	51	P	2	- large deadwood, poor union, in decline - clear of proposed construction - shall retain its prescribed TPZ	P	3.6
N11	Trembling Aspen <i>Populus tremuloides</i>	63	F	2	- deadwood, poor union - clear of proposed construction - shall retain its prescribed TPZ	P	4.2
N12	Trembling Aspen <i>Populus tremuloides</i>	56	F	2	- deadwood - clear of proposed construction - shall retain its prescribed TPZ	P	3.6
N13	Trembling Aspen <i>Populus tremuloides</i>	83	F	2	- deadwood, poor union, multi stem - clear of proposed construction - shall retain its prescribed TPZ	P	5.4
N14	Trembling Aspen <i>Populus tremuloides</i>	59	F	2	- deadwood, poor union, in decline - clear of proposed construction - shall retain its prescribed TPZ	P	3.6
N15	Trembling Aspen <i>Populus tremuloides</i>	46	F	2	- deadwood, in decline - clear of proposed construction - shall retain its prescribed TPZ	P	3.0
N16	Trembling Aspen <i>Populus tremuloides</i>	70	P	2	- 45% dead - clear of proposed construction - shall retain its prescribed TPZ	P	4.8
N17	Trembling Aspen <i>Populus tremuloides</i>	81	F	2	- deadwood, poor union, in decline - clear of proposed construction - shall retain its prescribed TPZ	P	5.4
N18	Trembling Aspen <i>Populus tremuloides</i>	69	P	2	- 45% dead - clear of proposed construction - shall retain its prescribed TPZ	P	4.2
N19	Trembling Aspen <i>Populus tremuloides</i>	96	F	2	- deadwood, poor union, multi stem, in decline - clear of proposed construction - shall retain its prescribed TPZ	P	6.0
N20	Trembling Aspen <i>Populus tremuloides</i>	81	F	2	- deadwood, poor union, multi stem - clear of proposed construction - shall retain its prescribed TPZ	P	5.4
N21	Trembling Aspen <i>Populus tremuloides</i>	76	F	2	- deadwood, poor union, multi stem - clear of proposed construction - shall retain its prescribed TPZ	P	4.8
N22	Trembling Aspen <i>Populus tremuloides</i>	32	P	2	- deadwood, in decline, vines - clear of proposed construction - shall retain its prescribed TPZ	P	2.4
N23	Trembling Aspen <i>Populus tremuloides</i>	34	F	2	- deadwood - clear of proposed construction - shall retain its prescribed TPZ	P	2.4

Tree #	Species Common Name (Biological Name)	D B H (cm)	Condition	Category	Comments and Recommendations	Recommendations	M T P Z (M)
N24	Trembling Aspen <i>Populus tremuloides</i>	33	P	2	- 80% dead - clear of proposed construction - shall retain its prescribed TPZ	P	2.4
N25	Trembling Aspen <i>Populus tremuloides</i>	33	F	2	- deadwood, vines - clear of proposed construction - shall retain its prescribed TPZ	P	4.2
N26	Willow <i>Salix spp.</i> (clump)	<30	F	2	- clear of proposed construction - shall retain its prescribed TPZ	P	1.8
N27	Green Ash <i>Fraxinus pennsylvanica</i> (clump)	<30	F	2	- clear of proposed construction - shall retain its prescribed TPZ	P	1.8

Table #2: Zone 1 - Trees 10cm-30cm DBH to be **removed** as part of the proposed development.

Species	10-20cm	21-30cm	Total
Eastern White Cedar <i>Thuja occidentalis</i>	202	17	219
White Birch <i>Betula Papyrifera</i>	6	7	13
Green Ash <i>Fraxinus pennsylvanica</i>	132	43	175
Trembling Aspen <i>Populus tremuloides</i>	174	154	328
Scots Pine <i>Pinus sylvestris</i>	2	2	4
White Pine <i>Pinus strobus</i>	1	0	1
Willow <i>Salix spp.</i>	3	1	4
Subtotal	520	224	744

Discussion:

Town Owned Trees:

1. Eight hundred and seventy-eight (878) trees were inventoried as part of this project, none of which are Town owned.

Privately Owned Trees Located on the Subject Site:

1. There are eight hundred and forty-one (841) trees located on the subject site, being trees no. 511-607 and those found in Zone 1. Trees no. 534, 535, 536, 537, 538, 539, 540, 541 and 542 are clear of the proposed work and if protected by tree protection hoarding as outlined in Appendix I, these trees will not be disturbed during construction.

2. The remaining eight hundred and thirty-two (832) trees are in conflict with the proposed development and are to be removed. Authorization from Town is required prior to the removal of these trees.

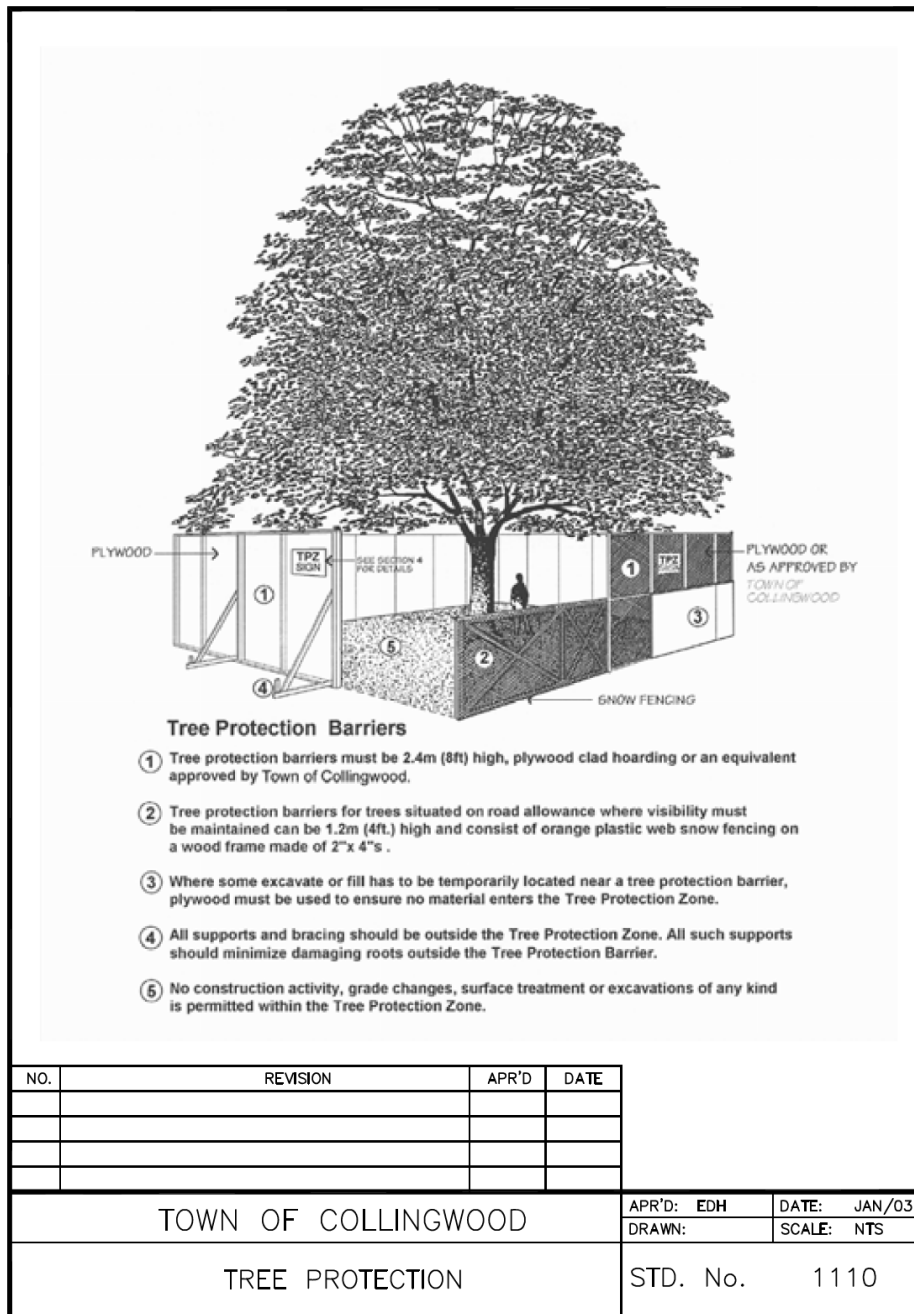
Privately Owned Trees Located within 10m of the Subject Site:

1. There are thirty-seven trees located on private property within 10m of the subject site, being trees no. 501-510 and N1-N27. Trees no. 501-503, 506-510 and N1-N27 are clear of the proposed development, shall retain their prescribed TPZ and as such, will not be disturbed during construction.
2. Trees no. 504 and 505 are encroached upon by the proposed development by 4% and 9% respectively. Tree no. 504 is in poor declining condition and tree no. 505 is 100% dead. Additionally, these trees are on the east side of the existing watercourse, and it is very unlikely that their roots have extended to the subject site. As such, the proposed work will not affect the trees current conditions. Authorization from the Town is required prior to the injury of these trees.
3. To further protect each 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 Town**, 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 the Town of Collingwood.

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.

3.0 ESTABLISH MAINTENANCE PROGRAM

All maintenance work must be completed by the approved Project Consulting Arborist or an equivalent qualified arborist.

Pre-Construction:

- 3.1 Prune trees to remove deadwood, objectionable limbs while maintaining crown form.

During- Construction:

- 3.2 Irrigate tree preservation zones during drought conditions, June – September, to reduce drought stress.

- 3.3 Inspect the site every month to ensure that all hoarding is in place and in good condition. Inspect the trees to monitor condition.

Post-Construction:

- 3.4 Inspect the trees two times per year – May and September – to monitor condition for a minimum of 2 additional years.

4.0 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.

- 4.1 **No grade changes** are permitted which include adding and/or removing soil.

- 4.2 **No excavation** is permitted that can cause damage to the roots of the tree.

- 4.3 **No heavy equipment** can be used to compact the soil within the tree preservation zone.

- 4.4 Any hard -surface sidewalks, paths, etc. should be constructed using permeable products such as interlocking stone, etc.

SUMMARY TABLE:

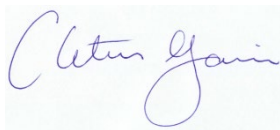
Tree Category	Total	Preserve	Preserve with Injury	Remove	Transplant
1 Tree located on the subject site	841	9	0	832	0
2 Tree located on adjacent private property	37	35	2	0	0
Total	878	44	2	832	0

CONCLUSIONS:

As listed in the Summary Table above, eight hundred and seventy-eight (878) trees greater than 10cm were inventoried as part of this project, none of which are Town owned. Eight hundred and thirty-two (832) privately owned trees are in conflict with the proposed development and are recommended for removal. Additionally, two trees located on the adjacent property cannot maintain 100% of their prescribed TPZ and as such, are to be preserved with injury. Authorization from the Town is required prior to the removal or injury of these trees. 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 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.

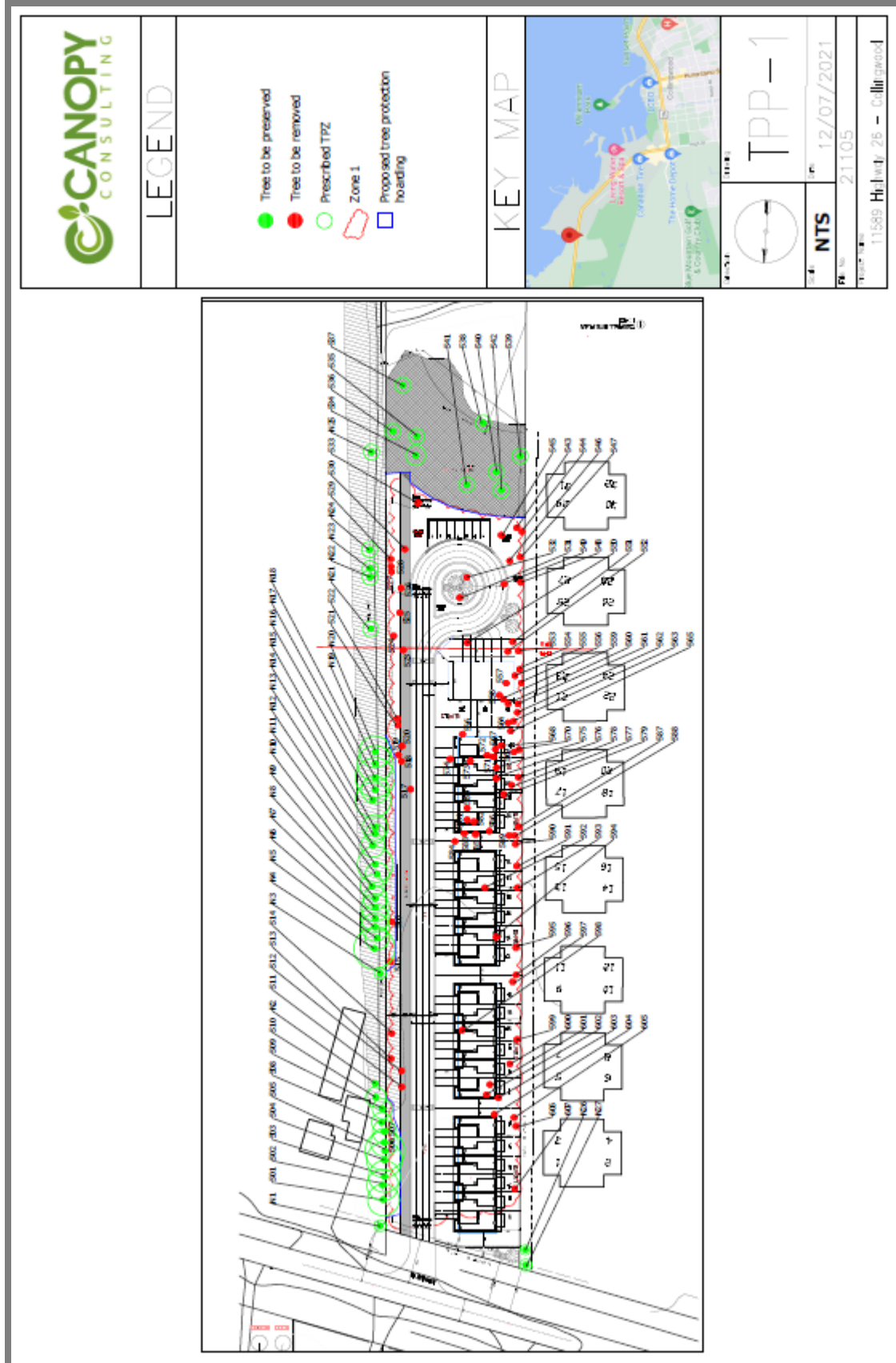
Trusting this report meets your needs. For further information, you may contact me directly at (416) 300-2957 or by email at cgavin@canopyconsulting.ca.

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 Protection Plan – TPP-1



Appendix II: Digital Images



Photo #1: Trees no. 501-505 and Zone 1 looking southeast.



Photo #2: Trees no. 601-607 and Zone 1 looking southwest.



Photo #3: Zone 1 looking south.



Photo #4: Zone 1 looking south.



Photo #5: Trees no. N26-N27 looking northwest.