Tree Inventory and Preservation Plan
2172 Wyecroft Road
Oakville, Ontario

prepared for

O2 Planning and Design Inc.

prepared by

KUNTZ
FORESTRY
CONSULTING Inc.
146 Lakeshore Road West
PO Box 1267 Lakeshore W PO
Oakville ON L6K 0B3
t: 289.837.1871 f: 866.693.6390
e: consult@kuntzforestry.ca

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KUNTZ FORESTRY CONSULTING INC. Project P4579

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1.0 Introduction

Kuntz Forestry Consulting Inc. was retained by O2 Planning and Design Inc. to complete a Tree Inventory and Preservation Plan as part of a development application for the property located at 2172 Wyecroft Road in Oakville, Ontario. The subject property is located on the east side of Wyecroft Road within an industrial area.

The work plan for this tree preservation study included the following:

- Prepare an inventory of tree resources measuring 10cm diameter at breast height (DBH) and greater on and within six metres of the subject property and trees of all sizes within the road right-of-way;
- Evaluate potential tree saving opportunities based on the proposed development plans, and;
- Document the findings in a Tree Inventory and Preservation Plan.

The results of the evaluation are provided below.

2.0 Methodology

2.1 Tree Inventory

The tree inventory occurred on 12 March 2025. Trees measuring 10cm DBH and greater on and within six metres of the subject property and trees of all sizes within the road right-of-way were included in the inventory. Tree locations were estimated using the provided topographic survey. Individual trees included in the inventory were identified as Trees 301-309 and 482-500. One tree could not be tagged; as such, it was identified by the letter A.

Individual tree resources were assessed utilizing the following parameters:

Tree # – Number assigned to trees that corresponds to Figure 1.
Species – Common and botanical names provided in the inventory table.
DBH – Diameter (cm) at breast height, measured at 1.4m above the ground.
Condition – Condition of tree considering trunk integrity (TI), crown structure (CS) and crown vigor (CV). Condition ratings include poor (P), fair (F), and good (G).
Crown Dieback – Percentage of dead branches within the crown.
Dripline – Crown radius (m).
Comments – Any other relevant tree condition information.

Refer to Table 1 for the detailed tree inventory and Figure 1 for the locations of the trees and polygons.

2.2 Tree Valuation

A valuation was calculated for trees located within the road right-of-way. The value was calculated using the Trunk Formula Technique. This method is described in the Guide for Plant Appraisal, 10th Edition (CTLA 2018). The Ontario Supplement (2021) provides regionally relevant data pertaining to species-specific basic costs for trees.

Trunk Formula Technique

This method is used for trees that are larger than what is commonly available for transplant from a nursery. The Unit Tree Cost of the replacement tree is derived from a survey of nurseries or supplied by the Regional Plant Appraisal Council and published within the Ontario Supplement (2021). For Ontario, the species-specific Unit Tree Costs have been calculated within the Ontario Supplement (2021) and these Unit Tree Costs have been used for the calculation. Where a Unit Tree Cost was not specified by the Ontario Supplement for a species, a generic Unit Tree Cost of $6.51 was assigned.

The Basic Tree Cost is calculated by multiplying the Unit Tree Cost by the cross-sectional area of the subject tree. For multi-stemmed trees, the appraised trunk area considers the cross-sectional area of all stems. The Appraised Value is calculated by multiplying the Basic Reproduction Cost by the three depreciation factors (Condition Rating, Functional Limitation Rating, and External Limitation Rating, as described in the Guide).

The appraised value is therefore calculated using the following equation:

Basic Tree Cost = Appraised Tree Trunk Area X Unit Tree Cost

Appraised Value = Basic Tree Cost X Condition Rating X Functional Limitation Rating X External Limitation Rating

Functional Limitation Ratings and External Limitation Ratings are calculated according to the methods outlined in the guide. Condition Ratings were calculated based on the assessed condition of the trees on the site and in accordance with the guide. The final values were rounded to the nearest $100 for values greater than $2000, and to the nearest $5 for values less than $2000.

For trees with appraisal values less than $744.00 (Town of Oakville's minimum value per tree), their values were set to $744.00. Refer to Table 2 for the individual tree value computation.

3.0 Existing Site Conditions

The subject property is currently occupied by three one-storey concrete block buildings and an asphalt parking area. A driveway provides access to Wyecroft Road. Tree resources exist in the form of landscape trees. Refer to Figure 1 for the existing site conditions.

4.0 Individual Tree Resources

A total of 29 trees were included in the inventory. The tree resources are comprised of Austrian Pine (*Pinus nigra*), Norway Maple (*Acer platanoides*), Scots Pine (*Pinus sylvestris*), Silver Maple (*Acer saccharinum*), Kentucky Coffeetree (*Gymnocladus dioicus*), Honey Locust (*Gleditsia triacanthos 'inermis'*), Black Locust (*Robinia pseudoacacia*), and Blue Spruce (*Picea pungens*).

Refer to Table 1 for the full tree inventory and Figure 1 for the location of trees reported in the inventory. See Appendix A for site photographs.

5.0 Proposed Works

The proposed development includes the demolition of the existing buildings, and the construction of two residential buildings. New public roadways are proposed as well. Refer to Figure 1 for the existing conditions and the proposed site plan.

6.0 Discussion

The following sections provide a discussion and analysis of tree impacts and tree preservation relative to the proposed development and existing conditions.

6.1 Development Impacts / Tree Removals

The removal of seven trees, including Trees 306-308 and 487-490, will be required to accommodate the proposed development. Trees 306 and 307 directly conflict with the proposed road. Minor encroachment into the minimum tree protection zone (mTPZ) of tree 308 will be required to accommodate the proposed road; although due to the tree's declining structural condition, we do not anticipate the tree can tolerate this level of injury. Significant encroachment into the mTPZ's of Trees 487-490 will be required to accommodate the proposed building and underground parking such that we do not anticipate these trees to tolerate this level of injury.

All trees identified for removal are 15cm DBH or greater and located on private property. As such, a permit will be required prior to their removal. Tree 390 is located on neighbouring property; therefore, permission from the neighbouring property owner should be obtained prior to its removal.

Refer to Figure 1 for the locations of the trees and polygons identified for removal.

6.2 Tree Preservation

The preservation of the remaining 22 trees, including Trees 301-305, 309, 482-486, 491-500 and A, will be possible with the use of appropriate tree protection measures. Refer to Figure 1 for the locations of the trees and polygons identified for preservation, the locations of the required tree preservation fencing, the tree preservation fencing specifications, and the general Tree Protection Plan Notes.

Where the minimum tree protection zone (mTPZ) of a tree cannot be fully respected, including for Trees 493 and 498, special mitigation measures have been prescribed and are outlined below.

<u>Trees 493 and 498</u>

Minor encroachment into the mTPZ's of Trees 493 and 498 will be required to accommodate the proposed walkway along the eastern boundary. Prior to construction, designated tree protection fencing must be installed as shown on Figure 1. Prior to the installation of the walkway, a trench must be excavated at the limit of the proposed walkway by hand or using Airspading technology under the supervision of a Certified Arborist. Any exposed roots must be pruned in accordance with Good Arboricultural Standards.

6.3 Tree Compensation

The Town of Oakville requires compensation plantings for healthy private tree removals. The ratio of required compensation plantings per individual tree is below:

DBH of Tree to Be Removed	Number of Compensation Plantings
First Tree 15cm – 24cm DBH	1
Second and + Trees 15cm – 24cm DBH	2
25cm – 34cm DBH	3
35cm – 44cm DBH	4
45cm – 54cm DBH	5
55cm – 64cm DBH	6
65cm – 74cm DBH	7
75cm – 84cm DBH	8
85cm – 94cm DBH	9
95cm – 104cm DBH	10
105cm – 114cm DBH	11
>115cm DBH	12

A total of 18 plantings will be required within the boundaries of the subject property to compensate for the removal of private trees. Refer to Table 1 for the number of compensation plantings required for each individual private tree removal.

6.4 Tree Valuation

A valuation was calculated for Trees 482-486 as they are located within the Wyecroft Road right-of-way. The total appraised value of these Town-owned trees was calculated to be **$3,720**.

Refer to Table 2 for the individual tree valuation calculations.

7.0 Summary and Recommendations

Kuntz Forestry Consulting Inc. was retained by O2 Planning and Design Inc. to complete a Tree Inventory and Preservation Plan as part of a development application for the property located at 2172 Wyecroft Road in Oakville, Ontario. A tree inventory was conducted and reviewed in the context of the proposed site plan.

The findings of the study indicate a total of 29 trees and on and adjacent to the subject property. The removal of seven trees will be required to accommodate the proposed development. The remaining trees can be preserved with the use of appropriate tree protection measures.

The following recommendations are suggested to minimize impacts to trees identified for preservation. Refer to Figure 1 for the general Tree Protection Plan Notes.

- Tree protection barriers and fencing should be erected at locations as prescribed on Figure 1. All tree protection measures should follow the guidelines as set out in the tree preservation plan notes and the tree preservation fencing detail.

- No construction activity including surface treatments, excavations of any kind, storage of materials or vehicles, unless specifically outlined above, is permitted within the area identified on Figure 1 as a tree protection zone (TPZ) at any time during or after construction.

- Special mitigation measures have been prescribed for select trees, as outlined in the *Tree Preservation* section of this report.

- Branches and roots that extend beyond prescribed tree protection zones that require pruning must be pruned by a qualified Arborist or other tree professional. All pruning of tree roots and branches must be in accordance with Good Arboricultural Standards.

- Site visits pre, during, and post construction are recommended by either a certified consulting arborist (I.S.A.) or registered professional forester (R.P.F.) to ensure proper utilization of tree protection barriers. Trees should also be inspected for damage incurred during construction to ensure appropriate pruning or other measures are implemented.

Respectfully Submitted,
Kuntz Forestry Consulting Inc.

Natasha Brooks

Natasha Brooks, B.B.R.M.(EM), CERPIT
Ecologist, ISA Certified Arborist #ON-2906A, TRAQ
Email: natasha.brooks@kuntzforestry.ca
Phone: 289-837-1871 ext.108

Kaylee Harper

Kaylee Harper, B.Sc.Env. Ecology
Ecologist, ISA Certified Arborist #ON-2749A
Tree Risk Assessment Qualified
Email: kaylee.harper@kuntzforestry.ca
Office: 289-837-1871 ext. 105

Limitations of Assessment

Only the tree(s) identified in this report were included in the inventory. The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These may include a visual examination taken from the ground of all the above-ground parts of the tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of attack by insects, discoloured foliage, the condition of any visible root structures, the degree of lean (if any), the general condition of the trees and the identification of potentially hazardous trees or recommendations for removal (if applicable). Where trees could not be directly accessed (i.e. due to obstructions, and/or on neighbouring properties), trees were assessed as accurately as possible from nearby vantage points.

Locations of trees provided in the report are determined as accurately as possible based on the best information available. If official survey information is not provided, tree locations in the report may not be exact. Where KFCI's in-house GPS unit is used (if applicable), tree locations are accurate only to the extent that the technology allows, which can be variable based on satellite available, RTK network / cell coverage, canopy coverage, and/or projection transformation limitations. In this case, if trees occur on or near property boundaries, an official site survey may be required to determine ownership utilizing specialized survey protocol to gain precise location.

Furthermore, recommendations made in this report are based on the development plans that have been provided at the time of reporting. These recommendations may no longer be applicable should changes be made to the development plan and/or grading, servicing, or landscaping plans following report submission.

Notwithstanding the recommendations and conclusions made in this report, it must be recognized that trees are living organisms, and their health and vigor constantly change over time. They are not immune to changes in site conditions or seasonal variations in the weather conditions. Any tree will fail if the forces applied to the tree exceed the strength of the tree or its parts.

Although every effort has been made to ensure that this assessment is reasonably accurate, the trees should be re-assessed periodically. The assessment presented in this report is valid at the time of inspection.

Table 1. Tree Inventory

Location: 2172 Wyecroft Road Oakville

Date: 12 March 2025 Surveyors: KNH

Tree #	Common Name	Scientific Name	DBH	Multistem DBH	TI	CS	CV	CDB	DL	mTPZ	A. mTPZ	Oakville Tree #	Comments	Action	Owner	Comp.
301	Austrian Pine	*Pinus nigra*	29		F	F	F	10	4.5	2.4	3.7		Lean (M), epicormic branching (L), pruning wounds (L)	Preserve	Subject property	
302	Austrian Pine	*Pinus nigra*	28		F	P-F	P-F	30	4.5	2.4	2.4		Lean (L), crook (M), asymmetrical crown (L), epicormic branching (L)	Preserve	Subject property	
303	Austrian Pine	*Pinus nigra*	33		G	F	F	30	5.5	3.0	3.8		Epicormic branching (L), pruning wounds (L)	Preserve	Subject property	
304	Norway Maple	*Acer platanoides*	26.5		F-G	P-F	P-F	30	4.5	2.4	4.0		Multiple branch attachments, asymmetrical crown (L), epicormic branching (L), broken branch (L)	Preserve	Subject property	
305	Norway Maple	*Acer platanoides*	29.5		G	F	F	20	5.0	2.4	3.5		Epicormic branching (L), broken branches (L)	Preserve	Subject property	
306	Scots Pine	*Pinus sylvestris*	28		P-F	F	F	10	4.0	2.4			Lean (L), crook (H), pruning wounds (L), poor form (L)	Remove	Subject property	3
307	Scots Pine	*Pinus sylvestris*	29		F	F-G	F-G	10	4.0	2.4			Crook (L)	Remove	Subject property	3
308	Scots Pine	*Pinus sylvestris*	39		F	F	F	10	5.5	3.0			Crook (M), sweep (L), broken branch (L), pruning wounds (L), asymmetrical crown (L)	Remove	Subject property	4

309	Silver Maple	*Acer saccharinum*	39, 16.5	42.3	P	P-F	P-F	20	5.0	3.0	5.0		Union at 2m with cavity (H), pruning wounds (H), multiple branch attachment, poor branch unions, epicormic branching (M), poor form (M)	Preserve	Subject property	
482	Kentucky Coffeetree	*Gymnocladus dioicus*	11.5		G	G	G		2.5	2.4	2.5	466196		Preserve	Town	
483	Honey Locust (shademaster)	*Gleditsia triacanthos inermis*	7		G	G	G		2.0	1.8	2.8	592780		Preserve	Town	
484	Norway Maple	*Acer platanoides*	18.5		F	F-G	F		3.0	2.4	3.0	466194	Epicormic branching (L), pruning wounds (M) with decay (L)	Preserve	Town	
485	Norway Maple	*Acer platanoides*	19		P-F	P-F	F		3.0	2.4	3.0	466193	Asymmetrial crown (M), epicormic branching (M), stem wound (M) with decay (L), poor form (L), pruning wound (M) with decay (L)	Preserve	Town	
486	Norway Maple	*Acer platanoides*	13		P-F	P-F	P-F	30	3.0	2.4	3.0	466192	Asymmetrial crown (M), seam (M) with decay (M), epicormic branching (L)	Preserve	Town	
487	Norway Maple	*Acer platanoides*	23.5		P-F	P-F	P-F	30	3.5	2.4			Lean (M), stem wound (L), with decay (L), poor branch unions	Remove	Subject property	1
488	Norway Maple	*Acer platanoides*	31		F	F	F	20	4.5	3.0			Multiple branch attachment with poor branch unions, epicormic branching (L)	Remove	Subject property	3
489	Norway Maple	*Acer platanoides*	23		F	F	F	20	3.5	2.4			Growth deficit (L), multiple branch attachment with poor branch unions, epicormic branching (L)	Remove	Subject property	2

490	Black Locust	*Robinia pseudoacacia*	15, 11.5, 11, 10	24.0	F	F	F		3.0	2.4			Union and v-union at base, epicormic branching (M), stem wound (L) with decay (L), broken branches (L)	Remove	Neighbouring	2
491	Blue Spruce	*Picea pungens*	21.5		F-G	F	F	20	3.0	2.4	2.4		Pruning wounds (M), buried root flare	Preserve	Neighbouring	
492	Blue Spruce	*Picea pungens*	27.5		F	F	F	20	3.0	2.4	4.9		Sweep (M), pruning wounds (L)	Preserve	Neighbouring	
493	Blue Spruce	*Picea pungens*	18.5		P-F	P-F	P-F	40	2.5	2.4	2.0		Sweep (M), pruning wounds (M), codominant crown	Preserve (Injure)	Neighbouring	
494	Norway Maple	*Acer platanoides*	35.5		F	F	F	30	6.5	3.0	3.8		Multiple branch attachment with poor branch unions, epicormic branching (L), girdled roots (L)	Preserve	Neighbouring	
495	Norway Maple	*Acer platanoides*	29.5		F-G	F	F	30	5.5	2.4	6.5		Poor branch union, epicormic branching (L), broken branch (L)	Preserve	Neighbouring	
496	Norway Maple	*Acer platanoides*	33		F	F	F	30	5.5	3.0	4.0		Multiple branch attachment, poor branch unions, exposed roots M(), with wounds (M), epicormic branching (L)	Preserve	Neighbouring	
497	Scots Pine	*Pinus sylvestris*	22, 18	28.4	P-F	F	F	20	4.5	2.4	4.3		V-union at 1, crook (M), pruning wounds (M)	Preserve	Neighbouring	
498	Austrian Pine	*Pinus nigra*	12		F-G	G	G		2.0	2.4	2.1		Crook (L)	Preserve (Injure)	Neighbouring	
499	Silver Maple	*Acer saccharinum*	23		F	F	F	10	5.0	2.4	3.5		Epicormic branching (M), asymmetrical crown (L), bowing (L), decay (L) in trunk	Preserve	Subject property	

500	Austrian Pine	*Pinus nigra*	30.5		F-G	F	F	20	4.5	3.0	4.1		Lean (L), epicormic branching (L), poor form (L), pruning wounds (L)	Preserve	Subject property	
A	Blue Spruce	*Picea pungens*	~44		F	G	F		4.5	3.0	3.5		Sap ooze (M), lean (L)	Preserve	Neighbouring	
															Comp. TOTAL	18

Codes		
DBH	Diameter at Breast Height	*(cm)*
TI	Trunk Integrity	*(G, F, P)*
CS	Crown Structure	*(G, F, P)*
CV	Crown Vigor	*(G, F, P)*
CDB	Crown Dieback	*(%)*
DL	Dripline	*(m)*
mTPZ	Minimum Tree Protection Zone	*TPZ (m) based on Town of Oakville's Tree Protection During Construction (Procedure EN-TRE-001-001), as measured from base of tree*
A. mTPZ	Actual Minimum Tree Protection Zone	*Actual TPZ (m) achievable during construction, as measured from base of tree*
Owner	Ownership of Tree	*Subject, Neighbour, Town*
Comp.	Number of Compensation Plantings Required	*# of trees*
~ = estimate; (L) = light; (M) = moderate; (H) = heavy; G = good; F = fair; P = poor		

Table 2. Tree Valuation

Location: 2172 Wyecroft Road Oakville					*Appraised Trunk Area (cm^2)*	*Unit Tree Cost (RPAC) ($/cm^2$)*	*Basic Tree Cost ($)*	Depreciation			***Number of Trees***	***Appraised Tree Value (Individual)***	***Adjusted Tree Value (Individual)***	***Adjusted Tree Value (Final)***
								Condition Rating (%)	*Functional Limitation Rating (%)*	*External Limitation Rating (%)*				
Tree #	**Common Name**	**Scientific Name**	**DBH**	**OC**										
482	Kentucky Coffeetree	*Gymnocladus diocus*	11.5	G	104	8.50	882.89	0.9	0.6	0.6	1	$ 286.06	$ 285.00	$ 744.00
483	Honey Locust (shademaster)	*Gleditsia tricanthos 'inermis'*	7	G	38	8.31	319.81	0.9	0.6	0.7	1	$ 120.89	$ 120.00	$ 744.00
484	Norway Maple	*Acer platanoides*	18.5	F	269	4.77	1282.19	0.55	0.6	0.7	1	$ 296.19	$ 295.00	$ 744.00
485	Norway Maple	*Acer platanoides*	19	P-F	284	4.77	1352.44	0.375	0.6	0.7	1	$ 213.01	$ 215.00	$ 744.00
486	Norway Maple	*Acer platanoides*	13	P-F	133	4.77	633.13	0.375	0.6	0.7	1	$ 99.72	$ 100.00	$ 744.00
													Total	**$ 3,720.00**

Appendix A: Site Photographs


Image 1. Trees 301-303 (Right to left)


Image 2. Tree 304


Image 3. Trees 306-308 (Right to left)

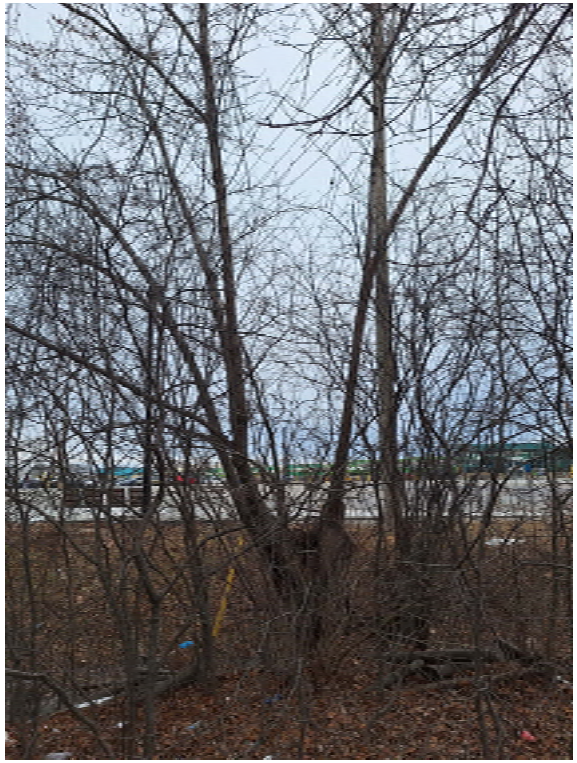
Image 4. Tree 309


Image 5. Tree 482


Image 6. Tree 483


Image 7. Tree 484


Image 8. Tree 485


Image 9. Tree 486

Image 10. Tree 487

Image 11. Tree 488

Image 12. Tree 489


Image 13. Tree 490


Image 14. Trees 491 and 492 (Right to left)


Image 15. Tree 493


Image 16. Tree 494


Image 17. Tree 495


Image 18. Tree 496


Image 19. Tree 497


Image 20. Tree 498


Image 21. Tree 499


Image 22. Tree 500


Image 23. Tree A