Tree Inventory and Preservation Plan Report
2163 & 2169 Sixth Line
Oakville, Ontario

prepared for

Bara Group

prepared by

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KUNTZ FORESTRY CONSULTING INC Project P2873 (P2254)

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1.0 Introduction

Kuntz Forestry Consulting Inc. was retained by Bara Group to complete a Tree Inventory and Preservation Plan in support of a proposed development application for the properties located at 2163 and 2169 Sixth Line in the Town of Oakville. The subject site is located northwest of the Sixth Line and River Oaks Boulevard intersection within a mixed-use area.

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

- Prepare an inventory of tree resources over 10cm DBH occurring on and within six metres of the subject properties, and trees of all sizes within the road right-of-way;
- Assess the woodland status of the Town-owned land north of the subject property;
- Evaluate potential tree saving opportunities based on proposed development plans; and
- Document the findings in a Tree Inventory and Preservation Plan Report.

2.0 Methodology

2.1 Tree Inventory and Preservation Plan

Field assessments for the tree inventory were conducted on 22 June 2021. Trees measuring over 10cm DBH on and within six metres of the subject properties and trees of all sizes within the road right-of-way were identified in the tree inventory. Trees were located using the topographic survey provided and estimates made in the field. Trees on the subject properties were tagged with the numbers 239 – 269, 425 – 427, 447, 458 – 468, and 601, while trees on neighbouring properties or within the Town right-of-way are identified with the numbers N1 – N19.

Tree resources included in the inventory were visually assessed for condition utilizing the following parameters:

Tree # - number assigned to tree that corresponds to Figure 1.
Species - common and botanical names provided in the inventory table.
DBH - diameter (centimetres) at breast height, measured at 1.4 metres above the ground.
Condition - condition of tree considering trunk integrity, crown structure, and crown vigour. Condition ratings include poor (P), fair (F), and good (G).
Drip Line – Crown radius (metres); and
Comments - additional relevant detail.

2.2 Woodland Evaluation

A woodland evaluation was conducted for the portion of Town-owned land (Nipigon Trail) adjacent to the north boundary of the subject property to determine whether this area is subject to the Halton Region Woodland Conservation By-law.

As per the Halton Region Woodland Conservation By-law, a Woodland is defined as an area with at least:

a) 1000 trees of any size, per hectare or 500 such trees per 0.5 hectare;
b) 750 trees, measuring over 5cm DBH, per hectare or 375 such trees per 0.5 hectare;

c) 500 trees, measuring over 12cm DBH, per hectare or 250 such trees per 0.5 hectare; or
d) 250 trees, measuring over 20cm DBH, per hectare or 125 such trees per 0.5 hectare.

The woodland assessment was conducted on 22 June 2021 and included all adjacent land north of the subject property and southwest of the existing trail. A 100% tally of live trees measuring over 5cm DBH was conducted within the area of assessment. Visual observations regarding tree regeneration under 5cm DBH supplemented the tally analysis. Refer to Figure 1 for the area assessed.

2.3 Tree Valuation

A tree valuation was calculated for the trees within the road right-of-way based on the information obtained by the tree inventory and stand tally analysis conducted in the field. The value was calculated using the Reproduction Cost Method – Trunk Formula Technique as described in the Guide for Plant Appraisal, 10th Edition (CTLA, 2019). The Ontario Supplement (2003) provides regionally relevant data pertaining to 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 (2003). For Ontario, the unit tree cost has been set at $\$6.51/cm^2$ within the Supplement and this value has been used for the calculation. For trees that were small enough in size to be replaced with nursery stock, the price of the nursery stock was obtained through wholesale price quotes from multiple nurseries throughout southern Ontario.

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 of trees 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.

Only live trees were included in the tree valuation. For trees in hedgerows or with multiple stems, the average DBH was used to calculate the appraisal value. For trees with appraisal values less than $744.00 (Town of Oakville's minimum value per tree), their values were set to $744.00.

2.4 Canopy Cover Analysis

Based on the driplines reported in the inventory, a canopy cover analysis was completed to determine the amount of canopy identified for preservation and the proposed amount of canopy based on new plantings. The canopy cover analysis was completed using the Town of Oakville's guidelines for canopy cover plans.

Where trees are situated together and their canopies form continuous cover, the canopy area was determined for the group of trees such that overlapping canopy areas were omitted. Trees situated on the subject property and are being retained had a bonus factor of 1.5 applied to their canopy areas. The canopy areas of trees situated on adjacent properties whose overhang the subject property were calculated; however, a bonus factor was not applied to the canopy areas of these trees. Trees located within the road right-or-way and on adjacent properties whose canopies do not overhang the subject property were not included in the canopy cover analysis.

The results of the evaluations are provided below.

3.0 Existing Site Conditions

The subject property is currently occupied by multiple commercial buildings with an associated above-ground parking lot. Nipigon Trail borders the property along the north side. Tree resources exist in the form of landscape trees, natural regeneration, and woodland trees. Refer to Figure 1 for the existing site conditions.

4.0 Individual Tree Resources

The tree inventory documented 66 trees on and within six metres of the subject properties and within the road right-of-way. Tree resources are composed of Norway Maple (*Acer platanoides*), Silver Maple (*Acer saccharinum*), Honey Locust (*Gleditsia triacanthos*), White Mulberry (*Morus alba*), Blue Spruce (*Picea pungens*), Austrian Pine (*Pinus nigra*), Scots Pine (*Pinus sylvestris*), White Oak (*Quercus alba*), Swamp White Oak (*Quercus bicolor*), Black Locust (*Robinia pseudoacacia*), Ivory Silk Lilac (*Syringa reticulata* 'Ivory Silk'), White Elm (*Ulmus americana*), and Accolade Elm (*Ulmus* 'Morton'). Refer to Table 1 for the detailed tree inventory and Figure 1 for the location of trees reported in the tree inventory.

5.0 Proposed Works

The proposed development includes the demolition of the existing buildings and the construction of a multi-storey building with associated amenity areas, above-ground parking, and below-ground parking. Vehicle access will be permitted from Sixth Line. Refer to Figure 1 for the existing conditions and proposed site plan.

6.0 Discussion

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

6.1 Development Impacts / Tree Removals

The removal of Trees 241 – 260, 263 – 269, 426, 427, 447, 458 – 468, 601, N2, N6, N11, and N12 will be required to accommodate the proposed development. Trees 242, 243, and N2 have trunks that conflict with the proposed vehicle entranceway. Trees 241, 244, and N6 are located close to the vehicle entranceways such that their roots and / or crowns would be significantly impacted by construction. Trees 245 – 249, 258, and 259 have trunks that conflict with the proposed parking lot. Trees 250 – 257, 264 – 269, 426, 427, 447, 458 – 468, and 601 conflict with the proposed building. Trees 260 and 263 are located close to the proposed building such that their roots and / or crowns would be impacted by construction. Trees 426, 427, N11, and N12 are dead and their removal is advised regardless of the site plan.

Trees 241 – 260, 263 – 269, 426, 427, 447, and 458 – 468 are greater than 15cm DBH, therefore a permit will be required prior to their removal. Trees N2, N6, N11, and N12 are owned by the Town of Oakville and a permit will be required prior to their removal.

6.2 Tree Preservation

Preservation of Trees 239, 240, 261, 262, 425, N1, N3 – N5, N7 – N10, N13, and N14 – N19 will be possible with the use of appropriate tree protection measures as indicated on Figure 1. Tree protection measures must be implemented prior to the proposed work to ensure tree resources designated for retention are not impacted by the proposed development. Tree protection fencing been prescribed along the north boundary of the property to protect trees under 10cm DBH from the proposed development. Refer to Figure 1 for the location of required tree preservation fencing, general Tree Protection Plan Notes, and tree preservation fence details. Special mitigation measures have been prescribed for Trees 261, 262, N5, and N15 – N17, as described below.

Trees N5

Encroachment into the minimum Tree Protection Zone (mTPZ) of Tree N5 will be required to accommodate the construction of a proposed vehicle entranceway. If the following protection and mitigation measures are employed before, during and after construction, long-term adverse effects are not anticipated to these trees.

1. Prior to construction, air-spading technology should be used to excavate a trench at the limit of the proposed vehicle entranceway within the mTPZ of Tree N5.
2. The depth of the trench adjacent to Tree N5 is determined by the depth required to facilitate the installation of the proposed vehicle entranceway.
3. The roots of Tree N5 are to be pruned inside the trenches by a Certified Arborist in accordance with Good Arboricultural Standards.
4. The trench is to be backfilled in with clean topsoil.
5. Vertical tree protection fencing should be placed adjacent to the backfilled trench, as shown in Figure 1.
6. All works should be supervised by a Certified Arborist in accordance with Good Arboricultural Standards.

Trees 261, 262, and N15 – N17

Encroachment into the minimum Tree Protection Zones (mTPZs) of Trees 261, 262, and N15 – N17 will be required to accommodate the construction of the wooden decks at the rear of the proposed building along the north side of the property. The construction of these decks should occur during the final phase of construction. The tree protection fencing may be adjusted to facilitate the installation of the wooden decks. If the following protection and mitigation measures are employed before, during and after construction, long-term adverse effects are not anticipated for these trees.

1. Prior to construction, air-spading technology should be used to excavate holes in the locations required for the deck footings within the mTPZs of Trees 261, 262, and N15 – N17.
2. If structural roots are encountered, the hole should be filled and relocated.
3. Smaller roots encountered are to be pruned inside the holes by a Certified Arborist in accordance with Good Arboricultural Standards.
4. The grades within the mTPZs of Trees 261, 262, and N15 – N17 are to remain unchanged.
5. Any softscaping within the mTPZs of Trees 261, 262, and N15 – N17 should occur by hand.
6. All works should be supervised by a Certified Arborist in accordance with Good Arboricultural Standards.

6.3 Woodland Evaluation

Refer to Table 2 for a tally of all trees over 5cm DBH within the area of assessment. A total of 24 trees above 5cm DBH were tallied within the area of assessment. Given that the area is approximately 0.09 hectares in size, the stems per hectare density is approximately 267 trees over 5cm DBH per hectare. This does not meet the density requirements of 750 trees over 5cm DBH per hectare set out in the Halton Region Woodlands By-law. While moderate amounts of tree regeneration were observed within the subject area, it is not believed that there was enough regeneration to constitute 1000 trees per hectare (Woodland Status).

Although the area of assessment does not meet the definition of a “woodland” in accordance with the Halton Region Woodland Conservation By-law, it is contiguous with the greater valleyland woodland feature located northeast of the existing trail. As such, this area is subject to the Halton Region Woodland Conservation By-law and the removal of trees within this area due to the proposed development will require a permit from the Region of Halton.

6.4 Tree Valuation

Refer to Table 3 for the results of the tree valuation. The total value of all Town right-of-way trees is $14,278.42.

6.5 Canopy Cover Analysis

The results of the analysis indicate that there is a total of 1145.6m² of existing canopy area situated on subject property, including existing trees overhanging the subject property. Preservation of 304.9m² of canopy area will be possible with appropriate tree protection measures. A total of 129.0m² of canopy area is being preserved from trees that occur on the subject site. A bonus factor of 1.5 applied to canopy cover to be preserved on the

existing property, resulting in an existing canopy area of 194m². A total of 176m² of canopy area is being preserved from trees that occur on properties adjacent to the subject site but overhang the subject property. Proposed landscape plantings account for a proposed increase of 1120m² of canopy area. The total canopy area is 1490m² within a subject property area of 7195m², resulting in a canopy coverage of 20.7%. This exceeds the canopy cover target of 15% for the proposed land use.

Refer to Figure 2 for the canopy area identified for preservation and removal, the proposed canopy cover, and the canopy cover calculation table.

Summary and Recommendations

Kuntz Forestry Consulting Inc. was retained by Bara Group to complete a Tree Inventory and Preservation Plan in support of a development application for the properties located at 2163 and 2169 Sixth Line in Oakville. A tree inventory was conducted and reviewed in the context of the proposed site plan.

The findings of the study indicate a total of 66 trees on and within six metres of the subject properties and within the right-of-way. A total of 46 trees are required for removal to accommodate the proposed development and / or due to condition. All other trees can be saved provided appropriate tree protection measures are installed prior to development.

The following recommendations are suggested to minimize impacts to trees identified for preservation. Refer to Figure 1 for the location of the required tree protection fencing, general Tree Protection Plan Notes, and tree preservation details.

- 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.

- 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.

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

- Site visits, pre, during and post construction is 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,

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7.0 References

Council of Tree & Landscape Appraisers, 2019. Guide for Plant Appraisal, 10th Edition.

Ontario Supplement to the Guide for Plant Appraisal – 8th Edition, 2003. ISA Ontario. International Society of Arboriculture, Champaign, Illinois. 26 pp. Updated 2003.

The Regional Municipality of Halton By-law No. 121-05. 15pp.

The Town of Oakville's Development Application Guidelines: Canopy Cover Plan and Canopy Calculation Chart, 2016. 6pp.

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 location in the report may not be exact. 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 site plans that have been provided at the time of reporting. These recommendations may no longer be applicable should changes be made to the site 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: 2163 & 2169 Sixth Line Road, Oakville

Date: 22 June 2021

Surveyors: KD

Tree #	Common Name	Scientific Name	DBH	TI	CS	CV	CDB	DL	mTPZ	A. mTPZ	Oakville Tree No.	Comments	Ownership	Action
239	Honey Locust	*Gleditsia triacanthos*	23	F-G	F-G	F-G	15	3	2.4	2.2	-	Deadwood (L), pruning wounds (L), co-dominant stems at 2 metres	Private	Retain
240	Honey Locust	*Gleditsia triacanthos*	31	F-G	F	F-G	10	3	3	2.3	-	Epicormic branching (M), co-dominant stems at 3 metres, fused bark, stem wound (L) at base	Private	Retain
241	Honey Locust	*Gleditsia triacanthos*	21	F-G	F-G	F-G		3	2.4	-	-	Pruning wounds (M), asymmetrical crown (L), epicormic branching (L), stem wound (L) at base	Private	Remove
242	Honey Locust	*Gleditsia triacanthos*	26	F-G	F-G	F-G	15	3	2.4	-	-	Co-dominant stems at 3 metres, epicormic branching (L), stem wound (L) at base, deadwood (L)	Private	Remove
243	Honey Locust	*Gleditsia triacanthos*	19	F-G	G	F-G	15	2.5	2.4	-	-	Stem wound (M) at base, epicormic branching (L)	Private	Remove
244	Honey Locust	*Gleditsia triacanthos*	22	G	G	F	10	3	2.4	-	-	Epicormic branching (H), deadwood (L)	Private	Remove
245	Honey Locust	*Gleditsia triacanthos*	26	G	F-G	F-G	10	4	2.4	-	-	Co-dominant stems at 2.5 metres, deadwood (L)	Private	Remove
246	Honey Locust	*Gleditsia triacanthos*	23	F-G	G	F-G	15	2.5	2.4	-	-	Deadwood (L), pruning wounds (L)	Private	Remove
247	Honey Locust	*Gleditsia triacanthos*	19	F-G	G	F	15	1.5	2.4	-	-	Epicormic branching (M), deadwood (L), pruning wounds (L), stem wound (M) at base	Private	Remove
248	Honey Locust	*Gleditsia triacanthos*	25	G	G	F-G	15	3.5	2.4	-	-	Deadwood (L)	Private	Remove
249	Honey Locust	*Gleditsia triacanthos*	~30	G	G	F-G	20	3	2.4	-	-	Pruning wounds (L), deadwood (L), co-dominant stems at 2.5 metres	Private	Remove
250	Blue Spruce	*Picea pungens*	26	F-G	F-G	F	15	2	2.4	-	-	Pruning wounds (H), deadwood (L), top-down dieback	Private	Remove
251	Norway Maple	*Acer platanoides*	27	F-G	F-G	P-F	40	3.5	2.4	-	-	Epicormic branching (H), deadwood (M), top-down dieback, broken branches (L)	Private	Remove
252	Norway Maple	*Acer platanoides*	23	F-G	F	F	30	3	2.4	-	-	Asymmetrical crown (H), deadwood (M), co-dominant stems at 2 metres, pruning wounds (H)	Private	Remove
253	Norway Maple	*Acer platanoides*	30	F-G	F-G	F	20	3	2.4	-	-	Branch cracks (M), pruning wounds (L), epicormic branching (L), deadwood (L), leaf scorch (L)	Private	Remove
254	Norway Maple	*Acer platanoides*	22	F-G	F-G	F	25	2.5	2.4	-	-	Deadwood (M), stem wound (L) at base	Private	Remove
255	Austrian Pine	*Pinus nigra*	37	F-G	G	F-G		3.5	3	-	-	Pruning wounds (L), browning needles (M)	Private	Remove
256	Austrian Pine	*Pinus nigra*	42	G	G	G		4	3	-	-		Private	Remove
257	Austrian Pine	*Pinus nigra*	43	G	G	G		4	3	-	-	Browning needles (L)	Private	Remove
258	Honey Locust	*Gleditsia triacanthos*	22	F-G	F-G	F-G		3	2.4	-	-	Co-dominant stems at 2 metres, cracks (L), pruning wounds (L)	Private	Remove
259	Honey Locust	*Gleditsia triacanthos*	23	F-G	G	G		2.5	2.4	-	-	Cracks (L)	Private	Remove
260	Austrian Pine	*Pinus nigra*	24	G	G	G		2	2.4	-	-		Private	Remove
261	Austrian Pine	*Pinus nigra*	32	G	G	G		3.5	3	3	-	Sweep (L)	Shared	Retain
262	Austrian Pine	*Pinus nigra*	30	G	G	G		3.5	3	3	-		Shared	Retain
263	Austrian Pine	*Pinus nigra*	23	F-G	F-G	G		2.5	2.4	-	-		Private	Remove
264	Austrian Pine	*Pinus nigra*	20	F-G	F-G	G		2.5	2.4	-	-	Cavities (L), crooks (M)	Private	Remove
265	Austrian Pine	*Pinus nigra*	23	G	G	G		2.5	2.4	-	-		Private	Remove
266	Austrian Pine	*Pinus nigra*	32	G	F-G	G		3	3	-	-	Asymmetrical crown (L)	Private	Remove
267	Austrian Pine	*Pinus nigra*	33	G	G	G		3	3	-	-		Private	Remove
268	Austrian Pine	*Pinus nigra*	36	G	G	G		4	3	-	-	Asymmetrical crown (L)	Private	Remove
269	Austrian Pine	*Pinus nigra*	41	G	F-G	G		4	3	-	-	Crooks (M)	Private	Remove
425	Honey Locust	*Gleditsia triacanthos*	31	G	F-G	G	10	3	3	1.9	-	Pruning wounds (L), asymmetrical crown (L)	Private	Retain
426	White Elm	*Ulmus americana*	-	-	-	-	-	-	-	-	-	Dead	Private	Remove (Condition)
427	White Elm	*Ulmus americana*	-	-	-	-	-	-	-	-	-	Dead	Private	Remove (Condition)

447	Scots Pine	*Pinus sylvestris*	~14, ~14, ~14	F	P-F	G		4	2.4	-	-	Multi-stem at base, sweep (H)	Private	Remove
458	Austrian Pine	*Pinus nigra*	33	G	G	G		3	3	-	-		Private	Remove
459	Austrian Pine	*Pinus nigra*	36	G	F-G	G		3.5	3	-	-	Sweep (L), asymmetrical crown (L)	Private	Remove
460	Austrian Pine	*Pinus nigra*	29	G	G	G		3	2.4	-	-	Pruning wounds (L)	Private	Remove
461	Austrian Pine	*Pinus nigra*	25	G	F-G	F-G		3	2.4	-	-	Bow (L), no leader	Private	Remove
462	Austrian Pine	*Pinus nigra*	44	G	G	G		3.5	3	-	-	Pruning wounds (L)	Private	Remove
463	Blue Spruce	*Picea pungens*	32	G	F-G	F-G		2.5	3	-	-	Sweep (L)	Private	Remove
464	Blue Spruce	*Picea pungens*	40	G	G	G	5	3	3	-	-	Deadwood (L)	Private	Remove
465	Blue Spruce	*Picea pungens*	32	G	F-G	F-G	15	2.5	3	-	-	Deadwood (L)	Private	Remove
466	Blue Spruce	*Picea pungens*	36	FG	F-G	F-G	5	3	3	-	-	Deadwood (L)	Private	Remove
467	Blue Spruce	*Picea pungens*	~33	F-G	F-G	F-G	10	2.5	3	-	-	Epicormic branching (M), pruning wounds (M)	Private	Remove
468	Blue Spruce	*Picea pungens*	27	F-G	F	F-G	10	2.5	2.4	-	-	Sweep (M), deadwood (L), epicormic branching (M)	Private	Remove
601	White Elm	*Ulmus americana*	10	G	G	G		1.5	2.4	-	-		Private	Remove
N1	Swamp White Oak	*Quercus bicolor*	4	F-G	F-G	P-F	60	0.5	1.8	1.8	594819	Top-down dieback, gypsy moth (H)	Town	Retain
N2	Accolade Elm	*Ulmus* 'Morton'	4	G	G	F-G	10	0.5	1.8	-	689228	Top-down dieback	Town	Remove
N3	Honey Locust	*Gleditsia triacanthos*	6	F-G	F	F	10	0.5	1.8	1.8	-	Epicormic branching (M)	Town	Retain
N4	Honey Locust	*Gleditsia triacanthos*	6	F-G	F	F	10	0.5	1.8	1.8	567625	Epicormic branching (H)	Town	Retain
N5	Silver Maple	*Acer saccharinum*	31	G	G	G		5	3	2.4	38010	Girdling roots (L)	Town	Retain
N6	Ivory Silk Lilac	*Syringa reticulata* 'Ivory Silk'	6	F	F-G	F	25	0.75	1.8	-	512862	Deadwood (M)	Town	Remove
N7	Swamp White Oak	*Quercus bicolor*	4	F	F-G	P-F	75	5	1.8	1.8	591818	Defoliation (L), deadwood (H)	Town	Retain
N8	Silver Maple	*Acer saccharinum*	23	G	F-G	G		4	2.4	2	21218	Co-dominant stems at 2 metres, sweep (L) on one stem	Town	Retain
N9	Silver Maple	*Acer saccharinum*	34	F-G	G	G		4	3	2.1	107682	Exposed roots (H), root damage (L) from lawn mower	Town	Retain
N10	Norway Maple	*Acer platanoides*	19	F-G	G	G		2.5	2.4	2.2	9282		Town	Retain
N11	White Elm	*Ulmus americana*	~12	-	-	-	-	-	-	-	-	Dead	Town	Remove (Condition)
N12	White Elm	*Ulmus americana*	~16	-	-	-	-	-	-	-	-	Dead	Town	Remove (Condition)
N13	Silver Maple	*Acer saccharinum*	~25, ~10	F	F	P-F	40	4	2.4	2.4	-	Union at 0.75 metres, small stem dead	Town	Retain
N14	White Oak	*Quercus alba*	~10	G	G	G		1.5	2.4	2.4	-	Asymmetrical crown (L)	Town	Retain
N15	White Mulberry	*Morus alba*	~37, ~23	F-G	F	F-G		4	3	3	-	Co-dominant stems at base, included bark (M), fused bark (L), deadwood (L)	Town	Retain
N16	Silver Maple	*Acer saccharinum*	~20, ~20, ~15	F-G	F-G	F-G	10	4	2.4	2.4	-	Co-dominant stems at base and 1 metre, included bark (L), deadwood (L)	Town	Retain
N17	White Oak	*Quercus alba*	~12	G	G	G		2	2.4	2.4	-		Town	Retain
N18	Black Locust	*Robinia pseudoacacia*	~10	G	G	G	10	2	2.4	2.4	-		Town	Retain
N19	White Oak	*Quercus alba*	~11	F-G	F-G	G		1.5	2.4	2.4	-		Town	Retain

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 Die Back	*(%)*
DL	Dripline	*(m)*
mTPZ	minimum Tree Protection Zone	*TPZ (m) based on Town of Oakville's Tree Protection During Construction (Prcedure EN-TRE-001-001) from base of tree*
A. mTPZ	Actual minimum Tree Protection Zone	*Actual TPZ (m) achievable during construction from base of tree*
~ = estimate; (L) = light; (M) = moderate; (H) = heavy		

Table 2. 100% Tally of Trees within the Area of Assessment

Stand Analysis Tally (by Species, Size Class and Quality Class)

Tree Size Class >	Regeneration (5 - 9 cm DBH)	Polewood (10 - 24 cm DBH)	Small (26 - 36 cm DBH)	Medium (38 - 48 cm)	Large (50 cm +)	Total All Sizes
Species						
White Ash (*Fraxinus americana*)	1	0	0	0	0	**1**
Green Ash (*Fraxinus pennsylvanica*)	4	0	0	0	0	**4**
White Elm (*Ulmus americana*)	2	1	0	0	0	**3**
White Oak (*Quercus bicolor*)	4	3	0	0	0	**7**
Norway Maple (*Acer platanoides*)	2	0	0	0	0	**2**
White Mulberry (*Morus alba*)	0	0	0	1	0	**1**
Red Oak (*Quercus rubra*)	0	1	0	0	0	**1**
Cherry species (*Prunus* sp.)	2	0	0	0	0	**2**
Silver Maple (*Acer saccharinum*)	0	0	2	0	0	**2**
Black Locust (*Robinia pseudoacacia*)	0	1	0	0	0	**1**
Total Number of Trees	**15**	**6**	**2**	**1**	**0**	**24**

Table 3. Tree Valuation of Town Right-of-Way Trees

2163 & 2169 Sixth Line, Oakville				*Appraised Trunk Area (cm^2)*	*Unit Tree Cost (RPAC)*	*Basic Tree Cost ($)*	Depreciation			*Appraised Tree Value*	*Minimum Value Per Tree ($)*	*Final Appraised Tree Value*
Tree	**Common Name**	**DBH**	**OC**				*Condition Rating (%)*	*Functional Limitation Rating (%)*	*External Limitation Rating (%)*			
N1	Swamp White Oak	4	P-F	13	6.51	81.81	0.25	0.8	0.75	$ 12.27	$ 744.00	$ 744.00
N2	Accolade Elm	4	F-G	13	6.51	81.81	0.75	0.8	1	$ 49.08	$ 744.00	$ 744.00
N3	Honey Locust	6	F	28	6.51	184.07	0.5	0.8	1	$ 73.63	$ 744.00	$ 744.00
N4	Honey Locust	6	F	28	6.51	184.07	0.5	0.8	1	$ 73.63	$ 744.00	$ 744.00
N5	Silver Maple	31	G	755	6.51	4913.55	0.9	0.8	1	$ 3,537.76	$ 744.00	$ 3,537.76
N6	Ivory Silk Lilac	6	F	28	6.51	184.07	0.5	0.8	1	$ 73.63	$ 744.00	$ 744.00
N7	Swamp White Oak	4	P-F	13	6.51	81.81	0.25	0.8	0.75	$ 12.27	$ 744.00	$ 744.00
N8	Silver Maple	23	F-G	415	6.51	2704.75	0.75	0.8	1	$ 1,622.85	$ 744.00	$ 1,622.85
N9	Silver Maple	34	F-G	908	6.51	5910.57	0.75	0.8	1	$ 3,546.34	$ 744.00	$ 3,546.34
N10	Norway Maple	19	F-G	284	6.51	1845.78	0.75	0.8	1	$ 1,107.47	$ 744.00	$ 1,107.47
												$ 14,278.42