Tree Inventory and Preservation Plan Report
607 Dynes Road
Burlington, ON

prepared for

Metropolitan Consulting Inc.
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Burlington, ON L7L 5R2

prepared by

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KUNTZ FORESTRY CONSULTING INC Project P1133

Introduction

Kuntz Forestry Consulting was retained by Metropolitan Consulting Inc. to complete a Tree Inventory and Preservation Plan report in support of a site plan application for a property situated at 607 Dynes Road in Burlington, Ontario.

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

- Prepare inventory of tree resources with a diameter at breast height (DBH) greater than 15 cm on and within 6m of the subject property and trees of all sizes within the City road allowance;
- Evaluate potential tree saving opportunities based on proposed development plans; and
- Document the findings in a Tree Inventory and Preservation Plan Report.

Methodology

Tree resources were assessed 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 m 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).
Comments - additional relevant detail.

The tree inventory was conducted on 29 October 2015. Trees over 15cm DBH on and within six metres of the subject property and trees of all sizes within the City road allowance, were included in the tree inventory. Trees were numbered 1-28. Polygons (groups of trees) were identified with the prefix "P". Trees were located by the topographic survey available or aerial photo interpretation. Refer to Table 1 for the results of the inventory.

The results of the evaluation are provided below.

Existing Site Conditions

The subject property is composed of an existing school and gymnasium. Tree resources are composed of landscape trees and natural regeneration. Refer to Figure 1 for the existing conditions.

Tree Resources

The tree inventory documented a total of 25 trees and three tree polygons situated on subject property, on neighbouring property and within the City road allowance. Refer to Table 1 for the full tree inventory and Figure 1 for the location of the trees reported in the tree inventory.

Trees included in the inventory are comprised of Manitoba Maple (*Acer negundo*), Willow species (*Salix* sp.), White Mulberry (*Morus alba*), Siberian Elm (*Ulmus pumila*), Eastern White Cedar (*Thuja occidentalis*), Norway Maple (*Acer platanoides*), Austrian Pine (*Pinus*

nigra), Little-leaf Linden (*Tilia cordata*), Sugar Maple (*Acer saccharum*), Ivory Silk (*Syringa reticulate*), Elm species (*Ulmus* sp.), Silver Maple (*Acer saccharinum*), and White Pine (*Pinus strobus*).

Proposed Development

The proposed development includes the demolition of the existing school and gymnasium and the construction of 23 townhouse units and 1 semi-detached building for a total of 25 units. A private road will connect to Maplehill Drive to the southeast. Refer to Figure 1 for the proposed site plan.

Discussion

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

Development Impacts

The minimum Tree Preservation Zones (mTPZ) distances, as outlined in the City of Burlington's Specifications For Tree Protection and Preservation (Spec No. SS12A), were used in the preservation planning process to determine tree removal requirements. Where encroachment is required within the mTPZ there is the potential to damage tree roots, requiring tree removal.

Tree Removal

Removal of Trees 2, 4-8, 10, 13-19, 22-26 and tree polygon P9 is required to accommodate the proposed development, for a total of 19 trees and one tree polygon. Tree 10 and a portion of P9 are located within the City road allowance and will require authorization from the City prior to their removals. Trees 2, 4-8, 13, 18-20, 22, P21, and a portion of P9 are neighbouring or shared trees and will require permission from the neighbouring property owners prior to their removal. Refer to Figure 1 for the location of the required tree removals.

Tree Preservation

Preservation of the remaining 6 trees and two tree polygons, including Trees 1, 3, 11, 12, 20, 28 and tree polygons P21 and P27 will be possible with the use of appropriate tree protection measures. Refer to Figure 1 for the location of the required tree preservation fencing, the fence detail and fence signage. Tree protection fencing is not required for Trees 3 and 20 due to their distance away from the proposed development.

Summary and Recommendations

Kuntz Forestry Consulting was retained by Metropolitan Consulting Inc. to complete a Tree Inventory and Preservation Plan report in support of a site plan application for a property situated at 607 Dynes Road in Burlington, 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 25 trees and three tree polygon situated on subject property, on neighbouring property and in the road allowance within six metres of the subject property. The removal of 19 trees and one tree polygon will be required to accommodate the proposed development. All other trees may be saved provided appropriate tree protection measures are installed prior to construction.

The following recommendations are suggested to minimize impacts to trees identified for preservation. Refer to Figure 1 for additional tree preservation notes and the preservation fence detail.

- Tree protection barriers and fencing should be erected at locations prescribed on Figure 1.

- Tree protection measures will have to be implemented prior to construction to ensure the trees identified for preservation are not impacted by the development.

- Branches and roots that extend past 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 mitigation measures are implemented.

Respectfully Submitted,
Kuntz Forestry Consulting Inc.

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Table 1. Detailed Tree Inventory Table

Location: 607 Dynes Road, Burlington									Date: 29 October 2015 Surveyors: AC	
Tree #	**Common Name**	**Scientific Name**	**DBH**	**TI**	**CS**	**CV**	**CDB**	**mTPZ**	**Comments**	**Action**
1	Manitoba Maple	*Acer negundo*	~16	F	F	F		2.4m	Lean(H) away from subject property, asymmetrical crown(L)	Retain
2	Manitoba Maple	*Acer negundo*	~45,45,17,18	PF	F	F		4.2m	Poor form(H), union at base with included bark(H), included chain link fence(H), stem wound(L), two stems removed	Remove
3	Willow species	*Salix sp.*	~8-15, avg. 10	PF	F	F		2.4m	Union at base with included bark(M), 8 stems, epicormic branches(M), sweep(L), asymmetrical crown(L)	Retain
4	White Mulberry	*Morus alba*	~2-60, avg. 25	PF	F	PF		-	Union at base with included bark(H) and rot, 8 stems, included chain link fence(L), wetwood(L), dead branches(M)	Remove
5	Siberian Elm	*Ulmus pumila*	~80	F	F	F		-	Included chain link fence(L) at root flare, co-dominant at 1.7m with included bark(L), dead branches(L), epicormic branches(L)	Remove
6	Siberian Elm	*Ulmus pumila*	~32,35	F	F	PF		-	Dead and broken branches(L), co-dominant at base with included bark(H), epicormic branches(M), small crown(L)	Remove
7	Siberian Elm	*Ulmus pumila*	~75	F	F	PF		-	Sweep(M) towards subject property, conflict with chain link fence, included chain link fence(L), co-dominant at 2m with included bark(L) and rot(L), dead and broken branches(M)	Remove
8	Manitoba Maple	*Acer negundo*	~14,18.5	F	F	F		-	Multi-stemmed, union at base, epicormic branches(M), grapevine competition(H), asymmetrical crown(M), understorey tree, included chain link fence(L)	Remove
P9	Eastern White Cedar	*Thuja occidentalis*	~5-15, avg.10	FG	FG	FG		-	~41 stems, chlorosis(L)	Remove
10	Norway Maple	*Acer platanoides*	38.5	F	F	F		-	Girdling root(M), growth deficit(L), branch wound with rot, dead branches(L), pruning wounds(M)	Remove
11	Norway Maple	*Acer platanoides*	51	FG	F	FG		3.6m	Pruning wounds(L), asymmetrical crown(L), vertical scaffold limbs with included bark(M)	Retain
12	Austrian Pine	*Pinus nigra*	57	F	F	FG		3.6m	Pruning wounds(M), vertical scaffold limbs(L), co-dominant at 3m with included bark(L), asymmetrical crown(L)	Retain
13	White Mulberry	*Morus alba*	45,37	PF	F	F		-	Co-dominant at 0.1m with included bark(H) and rot(M), with cavity, wetwood(M), asymmetrical crown(M), included chain link fence(L), lean(L)	Remove
14	Siberian Elm	*Ulmus pumila*	~50,40	PF	F	F		-	Coppice growth(L), conflict with ashphalt and roots, included chain link fence(M), co-dominant at 0.5m with included bark(H), asymmetrical crown(L), dead branches(L)	Remove
15	Little-leaf Linden	*Tilia cordata*	43	F	G	G		-	Burl(H), growth deficit(L)	Remove
16	Little-leaf Linden	*Tilia cordata*	46	FG	G	G		-	Asymmetrical crown(L), burls(M), sweep(L)	Remove
17	Little-leaf Linden	*Tilia cordata*	51	F	G	G		-	Burl(H), co-dominant at 2.5m with included bark(L)	Remove
18	Siberian Elm	*Ulmus pumila*	118,30	F	FG	FG		-	Exposed roots(H),root wounds(M), union at 0.2m with included bark(H)	Remove
19	Sugar Maple	*Acer saccharum*	49.5	F	PF	PF		-	Top of crown dead, small root flare, pruning wounds(L), rot(L), stem wound/seams(M)	Remove
20	Ivory Silk	*Syringa reticulata*	5-18, avg. 12	PF	F	F		2.4m	13 stems, union at base with rot and coppice growth(H), shared tree, stem wound(M), asymmetrical crown(L)	Retain

P21	Eastern White Cedar	*Thuja occidentalis*	~2-14, avg. 6	F	F	FG		1.8m	~34 trees, multi-stemmed at base, pruning wounds(L), chlorosis(L)	Retain
22	Elm species	*Ulmus sp.*	~25	PF	PF	PF		2.4m	Shared tree, included chain link fence(H), topped at 4m, epicormic branches(H)	Remove
23	Silver Maple	*Acer saccharinum*	101	F	FG	FG		-	Pruning wounds(M), epicormic branches(L), growth deficit(L), cavity(M) with rot(H), union at 2.75m with included bark(H), asymmetrical crown(L)	Remove
24	Silver Maple	*Acer saccharinum*	56	FG	F	F		-	Lean/sweep(L) towards the east, co-dominant at 2m, asymmetrical crown(M)	Remove
25	Silver Maple	*Acer saccharinum*	56	F	F	F		-	Spiralling stem, lean(L), asymmetrical crown(L), crook(L), epicormic branches(L), union at 3m	Remove
26	Manitoba Maple	*Acer negundo*	42.5	F	FG	FG		-	Lean(M), epicormic branches(M), stem wound(L)	Remove
P27	White Pine	*Pinus strobus*	~15	G	G	FG		2.4m	3 trees, chlorosis(L)	Retain
28	Manitoba Maple	*Acer negundo*	~25	F	F	F		2.4m	Lean(M), epicormic branches(M), co-dominant at 2.25m, poor form(M)	Retain
END										

Legend		
DBH	Diameter at Breast Height	*(cm); ~ = estimate*
TI	Trunk Integrity	*G=good, F=fair, P=poor*
CS	Crown Structure	*G=good, F=fair, P=poor*
CV	Crown Vigor	*G=good, F=fair, P=poor*
CDB	Crown Die Back	*(%)*
Comments	Relevant comments to health and condition of the tree (L) = light; (M) = moderate; (H) = heavy	
Action	Retain or Remove	