Tree Inventory and Preservation Plan 6285 & 6289 Main Street Niagara Falls, Ontario

prepared for

Zeljko Holdings Ltd., Main-Murray c/o Horn Design Consulting Inc. 4724 Dorchester Road, Unit 11B (2nd Floor) Niagara Falls, Ontario L2E 7H9

prepared by



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KUNTZ FORESTRY CONSULTING INC. Project P3604

Introduction

Kuntz Forestry Consulting Inc. was retained by Zeljko Holdings Ltd., Main-Murray to complete a Tree Inventory and Preservation Plan as part of a development application for the properties located at 6285 & 6289 Main Street in the City of Niagara Falls, Ontario. The subject site is located on the south side of Main Street, the north side of Murray Street, west of Allendale Avenue, and east of Finlay Avenue, within a residential area.

The work plan for this study included the following:

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

The results of the evaluation are provided below.

Methodology

Trees greater than 10cm DBH on and within six metres of the subject site and trees of all sizes within the road right-of-way were included in the inventory. Trees were located using the topographic survey provided, aerial imagery, and estimations made from known points in the field. Trees included in the inventory were identified as Trees 563 - 575 and A - U. Where appropriate, trees were tagged with their identification numbers. Trees that were not tagged were identified using the alphabetic sequence. Tree locations are shown on Figure 1. See Table 1 for the results of the inventory. See Appendix A for photographs of the trees.

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.

Existing Site Conditions

At the time the tree inventory took place, the subject site was occupied by four dwellings, multiple driveways and walkways, and outdoor amenity areas. The dwellings have since been demolished and the subject site has been regraded. A stretch of asphalt connecting to Murray Street exists along the south side of the subject site. Refer to Figure 1 for the existing site conditions.

Individual Tree Resources

The tree inventory was conducted on 11 January 2023. The inventory documented a total of 34 trees on and within six metres of the subject site. Refer to Table 1 and for the full tree inventory, Figure 1 for the location of trees reported in the tree inventory, and Appendix A for photographs of the trees.

Tree resources were comprised of Black Walnut (*Juglans nigra*), Blue Spruce (*Picea pungens*), Eastern White Cedar (*Thuja occidentalis*), Magnolia species (*Magnolia sp.*), Mountain Ash species (*Sorbus sp.*), Norway Spruce (*Picea abies*), Serviceberry species (*Amelanchier sp.*), Silver Maple (*Acer saccharinum*), Sycamore Maple (*Acer pseudoplatanus*), and White Ash (*Fraxinus americana*).

Proposed Development

The proposed development includes the demolition of all existing structures and the construction of a 20-storey condominium building with multiple levels of subsurface parking. Vehicular access is proposed from Main Street. Refer to Figure 1 for the proposed development.

Results

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

Development Impacts / Tree Removal

The removal of 13 trees will be required to accommodate the proposed development. The required tree removals include Trees 563 – 575.

Trees 566 and 575 are located on a neighbouring property and as such, written permission from the respective neighbouring property owner will be required prior to the removal of these trees. Trees 571 – 574 are located within the Main Street right-of-way and as such, permission from the City of Niagara Falls will be required prior to the removal of these trees. All other trees identified for removal are located within the boundaries of the subject site.

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

Tree Preservation

The preservation of the remaining 21 trees will be possible with the use of appropriate tree protection measures as indicated on Figure 1. The trees identified for preservation include Trees A – U. Tree protection measures must be implemented prior to the commencement of the proposed works to ensure tree resources designated for preservation are not impacted. Refer to Figure 1 for the location of required tree preservation fencing, the tree preservation fencing detail, and general Tree Protection Plan Notes.

Tree preservation fencing has been prescribed adjacent to Trees O-T, along the boundary of the subject site. Should the subject site be bound by construction fence,

designated tree preservation fencing may not be required adjacent to these trees, pending approval by the City of Niagara Falls.

Tree preservation fencing has not been prescribed for Trees A - N or U. These trees are located sufficiently far (i.e. more than six metres) from the anticipated limit of disturbance such that tree preservation fencing will not be required.

Summary and Recommendations

Kuntz Forestry Consulting Inc. was retained by Zeljko Holdings Ltd., Main-Murray to complete a Tree Inventory and Preservation Plan as part of a development application for the properties located at 6285 & 6289 Main Street in the City of Niagara Falls, 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 34 trees on and within six metres of the subject site and within the road right-of-way. The removal of 13 trees is required to accommodate the proposed development. The remaining 21 trees can be saved provided appropriate tree protection measures are installed prior to the commencement of the proposed works.

The following recommendations are suggested to minimize impacts to trees identified for preservation. Refer to Figure 1 for the location of required tree preservation fencing and 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.
- 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.

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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: 6285 & 6289 Main Street, Niagara Falls Date: 11 January 2023 Surveyors: KNH

Tree #	Common Name	Scientific Name	DBH	TI	cs	CV	CDB	DL	Comments	Action
563	White Ash	Fraxinus americana	18	F	FG	PF		3.0	Fill piled at base, epicormic branching (L), Emerald Ash Borer (M)	Remove
564	White Ash	Fraxinus americana	12.5, 11.5	F	FG	PF		2.0	Union at 0.5m, Emerald Ash Borer (M), fill piled at base, epicormic branching (L)	Remove
565	Black Walnut	Juglans nigra	22	F	G	F		3.0	Fill piled at base	Remove
566	Black Walnut	Juglans nigra	19	F	G	F		3.0	Fill piled at base	Remove
567	White Ash	Fraxinus americana	53.5	Р	Р	Р	95	5.0	Emerald Ash Borer (H), moribund, only epicormic branching alive, epicormic branching (H), deadwood (H)	Remove
568	Sycamore Maple	Acer pseudoplatanus	49.5	F	F	F	15	6.0	Union at 1.5m, pruning wounds (M), deadwood (L), decay (M) in crown, asymmetrical crown (L)	Remove
569	Norway Spruce	Picea abies	35	G	G	F		5.0		Remove
570	Eastern White Cedar	Thuja occidentalis	36	F	F	F		4.0	Lean (L), pruning wounds (M), epicormic branching (L), stem wounds (L)	Remove
571	Blue Spruce	Picea pungens	39	F	F	F		4.0	Lean (L), poor form (L), crook (M) in crown	Remove
572	Blue Spruce	Picea pungens	37	F	F	F		4.0	Lean (L), poor form (L), crook (M) in crown	Remove
573	Silver Maple	Acer saccharinum	55	PF	PF	F	10	7.0	Burls (L), lean (L), poor unions, multiple branch attachments, cavities (M) in crown, deadwood (L), poor form (L), asymmetrical crown (L)	Remove
574	Eastern White Cedar	Thuja occidentalis	32.5	F	FG	FG		4.0	Lean (L), asymmetrical crown (L), pruning wounds (L), stem wounds (L)	Remove
575	Eastern White Cedar	Thuja occidentalis	10, 6, 6	FG	F	PF	15	1.0	Sweep (L), browning foliage, deadwood (L)	Remove
А	Blue Spruce	Picea pungens	42.5	G	G	F		3.0		Preserve
В	Blue Spruce	Picea pungens	38.5	G	G	F		3.0		Preserve
С	Blue Spruce	Picea pungens	31	G	G	F		3.0		Preserve
D	Blue Spruce	Picea pungens	34	G	G	F		3.0		Preserve
Е	Blue Spruce	Picea pungens	32.5	G	G	F		3.0		Preserve
F	Blue Spruce	Picea pungens	30.5	G	FG	F		3.0	Codominance in crown	Preserve

G	Blue Spruce	Picea pungens	36	G	G	F		3.0		Preserve
Н	Blue Spruce	Picea pungens	35	FG	FG	F		3.0	Lean (L), crook (L) in crown	Preserve
ı	Blue Spruce	Picea pungens	31	G	G	F		3.0		Preserve
J	Blue Spruce	Picea pungens	37.5	FG	FG	F		3.0	Lean (L), codominance in crown	Preserve
K	Blue Spruce	Picea pungens	37	G	G	F		3.0		Preserve
L	Sycamore Maple	Acer pseudoplatanus	22	F	FG	F		3.0	Lean (M), epicormic branching (L), pruning wounds (L) with decay (L), multiple branch attachments	Preserve
М	Blue Spruce	Picea pungens	40.5	G	G	F		3.0		Preserve
N	Blue Spruce	Picea pungens	39	FG	FG	F		4.0	Crook (L) in crown	Preserve
0	Serviceberry species	Amelanchier sp.	16, 11.5, 10.5	PF	PF	PF	40	3.0	V-union at base, union at 0.2m, decay (H) in trunk, epicormic branching (H), deadwood (M)	Preserve
Р	Serviceberry species	Amelanchier sp.	12, 11.5, 10	PF	FG	F	10	3.0	V-union at base, union at 0.2m, decay (H) in trunk, deadwood (L), spiral leaders	Preserve
Q	Serviceberry species	Amelanchier sp.	17, 13, 11, 11, 8	PF	FG	F	10	3.0	Epicormic branching (M), deadwood (L), v-union at 0.1m, union at 1m, decay (H) in trunk	Preserve
R	Mountain Ash species	Sorbus sp.	33	PF	PF	PF	40	4.0	Multiple branch attachments, decay (H) in trunk, epicormic branching (H), deadwood (M)	Preserve
S	Magnolia species	Magnolia sp.	29.5	G	FG	F		3.0	Epicormic branching (M), pruning wounds (L)	Preserve
Т	Magnolia species	Magnolia sp.	26, 24	F	FG	F		3.0	V-union at 1m (codominance) with included bark, epicormic branching (M), pruning wounds (L), included brick (M) between leaders	Preserve
U	Magnolia species	Magnolia sp.	25, 24.5	FG	FG	F		4.0	V-union at 1m (codominance) with included bark, epicormic branching (M), pruning wounds (L)	Preserve

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 (Radius)	(m)				
$P = poor, F = fair, G = good, \sim = estimate,$						
(VL) = very light, (L) = light, (M) = moderate, (H) = heavy						

Appendix A. Site Photographs









Image 4. Tree 568

Image 5. Trees 567 (right) and 568 (left)

Image 6. Trees 571 (far) and 572 (near)



Image 7. Trees 573 (near) and 574 (far)



Image 8. Tree 575



Image 9. Facing south towards Trees A - N



Image 10. From left to right, Trees O - R



Image 11. Trees S (left) and T (right)



Image 12. Tree U