

## **Tree Inventory and Preservation Plan Report**

Subject Property:

# **4170 & 4190 Sixth Concession Road** Windsor, ON

Prepared For:

#### **Goodban Ecological Consulting Inc.** 879 Cabot Trail

Milton, ON L9T 3W4

Prepared By:

## Jackson Arboriculture Inc. 118 Pleasant Ridge Road

Brantford, ON N3R 0B8

16 February 2024

Jackson Arboriculture Inc. Project No. P319

## 1.0 Introduction

Jackson Arboriculture Inc. was retained by Goodban Ecological Consulting Inc. to complete a Tree Inventory and Preservation Plan report for a property situated at 4170 and 4190 Sixth Concession Road in the City of Windsor, Ontario, hereby referred to as the subject property. It is understood that an application will be filed with the City for the construction of a residential development.

## 2.0 Methodology

At the onset of the project the scope of work was coordinated with the client and the consulting team. Prior to conducting a site visit, the topographic survey and current aerial photography were overlaid utilizing geographic information system software for use on site during the completion of the tree inventory. The tree locations and the site plan were then overlaid and a tree preservation analysis was completed to determine the impacts to the trees included in the inventory.

#### 2.1 Tree Inventory

A site visit was conducted on the 30<sup>th</sup> of June 2022 to complete the tree inventory. All trees 10 cm in diameter and larger situated on subject property, on neighbouring property within 6 m and within the road allowance were included in the tree inventory. A visual assessment was completed on each tree included in the inventory and the following information is provided in the tree inventory table (Table 1):

- **Tree #**: A number assigned to each tree corresponding to the tree inventory (Table 1) and the Tree Preservation Plan (Sheet 1).
- **Species**: Common and scientific (Latin) species names.
- **DBH**: The trunk diameter at breast height, measured in centimeters at 1.4 m from the ground.
- **Condition**: The health of the tree considering the trunk integrity, the crown structure and the crown vigour; each rated as good, fair or poor. The condition ratings are based on the signs, symptoms and defects exhibited by each tree, considering the surroundings in which it is growing.
- Dripline: The distance from the trunk to the tips of the live branches.
- Location: The property where the tree is situated, based on the topographic survey and gps locations taken on site.
- **Comments**: Any additional notes relevant to the tree's health or growing conditions.
- **Recommendation**: The recommended removal or preservation of each tree based on the results of the impact assessment.

The trees included in the inventory are identified with numbers 1-65. Trees were located using the topographic survey provided and a tablet computer with a GPS receiver.

#### 2.2 Impact Assessment

A tree preservation analysis was completed on each tree included in the inventory considering the impacts from the proposed development and many other factors including, but not limited to, tree condition, species, DBH and the existing site conditions. The impacts from the proposed development will occur where tree roots and branches conflict with machinery during demolition, pre-grading and construction.

During the tree preservation analysis the distance of dripline was used to assess the impacts to the trees included in the tree inventory. Where considerable encroachment is required within the dripline tree removal may be required.

## **3.0 Existing Conditions**

The subject property is currently occupied by two residential dwellings and two outbuildings. The property is bound by residential development to the north, east and south and Sixth Concession Road to the west.

## 4.0 Tree Inventory Results

The results of the tree inventory indicate that a total of 65 trees reside on subject property, on neighbouring property within 6 m and within the road allowance. The trees included in the inventory appear to be comprised of landscape plantings and naturally occurring trees.

No rare, threatened or endangered tree species were documented in the tree inventory. Refer to Table 1 for the complete tree inventory and Sheet 1 for the tree locations.

## **5.0 Proposed Development**

The proposed development is comprised of a 27-unit townhouse complex including a private laneway and stormwater retention area. Access to the complex is proposed from Spago Crescent to the south.

## 6.0 Discussion

The following sections discuss the tree removal requirements, tree preservation opportunities and tree preservation recommendations based on the results of the impact assessment.

#### 6.1 Tree Removal

The removal of Trees 3-11, 13, 15, 16, 22, 23, 25-29, 38, 40-50, 55-58 and 61-64 will be required to accommodate the proposed development.

It is understood that Trees 18-21, 31, 32, 37, 39 and 65 have previously been removed from the property.

Trees 3, 62, 64 and 65 appear to reside within the road allowance. Permission from the appropriate municipal department will be required prior to their removal.

#### 6.2 Tree Preservation

The preservation of Trees 1, 2, 12, 14, 17, 24, 30, 33-36, 51-54, 59 and 60 will be possible with the use of appropriate tree protection measures.

Encroachment within the driplines of Tree 59 will be required to accommodate the proposed development. If any roots are exposed during construction they must be pruned by a Certified Arborist in accordance with good arboricultural practice to ensure that the root systems are not damaged during construction.

Tree protection fence must be installed at the dripline unless noted otherwise in this report and on Sheet 1. Tree protection fence must be installed prior to the commencement of construction (pre-grading) to ensure that the trees identified for preservation are not impacted by the proposed development.

Refer to Sheet 1 for the prescribed tree protection fence locations, additional tree protection plan notes and the tree protection fence detail.

#### 6.3 Tree Preservation Recommendations

The following recommendations are made in attempts to reduce the impacts to trees identified for preservation:

- Tree protection fence must be installed at the locations outlined on Sheet 1 prior to the commencement of pre-grading, unless noted otherwise in this report and on Sheet 1.
- Once tree protection fence has been installed it must not be moved, relocated or altered in any way (unless repairing fallen fence etc.) for the duration of the construction period.
- No intrusion into an area identified on Sheet 1 as a tree preservation zone (TPZ) is allowed at anytime during construction unless noted otherwise in this report and on Sheet 1.
- No storage of machinery, construction debris, materials, waste or any other items is allowed within a TPZ.
- Any tree branches and roots that conflict with the proposed development must be pruned by a Certified Arborist in accordance with good arboricultural practice.
- Tree protection fencing should be inspected by a Certified Arborist prior to and during construction to ensure that the fencing remains intact and in good repair throughout the stages of development.

## 7.0 Summary

Jackson Arboriculture Inc. was retained by Goodban Ecological Consulting Inc. to complete a Tree Inventory and Preservation Plan report for a property situated at 4170 and 4190 Sixth Concession Road in the City of Windsor, Ontario. A tree inventory was conducted and an impact assessment was completed in the context of the proposed development plan.

The tree inventory documented a total of 65 trees situated on subject property, in the road allowance and on neighbouring property within 6 m. The results of the impact assessment indicate that the removal of 48 trees will be required to accommodate the proposed development, including the trees that have previously been removed.

Respectfully submitted, **Jackson Arboriculture Inc.** 

Jeremy Jackson

Jeremy Jackson, H.B.Sc., ISA Certified Arborist #ON-1089A GIS Analyst

## **Limitations of Assessment**

It is our policy to attach the following limitations of assessment to ensure that the client, municipalities and agencies are fully aware of what is technically and professionally realistic when visually assessing and retaining trees.

The assessment of the trees presented in this report has been made using accepted arboricultural techniques. These include a visual examination of the above ground parts of each 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 and direction of any lean, the general condition of the trees and the surrounding site, and the proximity of property and people.

Notwithstanding the recommendations and conclusions made in this report, it must be realized that trees are living organisms and their health and vigour constantly change. They are not immune to changes in site conditions, or seasonal variations in the weather conditions, including severe storms with high-speed winds.

While reasonable efforts have been made to ensure that the trees recommended for retention are healthy no guarantees are offered, or implied, that these trees, or any parts of them, will remain standing. It is both professionally and practically impossible to predict with absolute certainty the behaviour of any single tree of group of trees or their component parts in al circumstances. Inevitably a standing tree will always pose some risk. Most trees have the potential for failure under adverse weather conditions, and the risk can only be eliminated if the tree is removed.

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

#### Table 1. Tree Inventory

Location: <u>4170 & 4190 Sixth Concession Rd,</u> <u>Windsor</u>

Date: 30 June 2022 Surveyors: JJJ

Tree #	Common Name	Scientific Name	DBH	ті	CS	с٧	DL	Location	Comments	Recom.
1	Tree-of-heaven	Ailanthus altissima	27	G	G	G	4	ROW		Preserve
2	White Elm	Ulmus americana	36	G	F	F	8	ROW	20% crown dieback	Preserve
3	White Elm	Ulmus americana	37	Р	Р	Р	6	ROW	90% crown dieback	Remove
4	Manitoba Maple	Acer negundo	38	F	G	G	7	Subject Property	Stem wound at flare	Remove
5	Manitoba Maple	Acer negundo	44	FG	Р	Р	8	Subject Property	Union at 2.5 m, light lean, 40% crown dieback	Remove
6	Harlequin Maple	Acer platanoides 'Drummondii'	16	FG	F	F	3	Subject Property	Union at 1.6 m, poor form, understorey	Remove
7	Bur Oak	Quercus macrocarpa	51	G	G	G	6	Subject Property		Remove
8	Manitoba Maple	Acer negundo	16	FG	G	G	5	Subject Property	Lean	Remove
9	Manitoba Maple	Acer negundo	19, 16	F	FG	FG	7	Subject Property	Union at ground, understorey, lean north	Remove
10	Honey Locust cultivar	Gleditsia triacanthos var. 'inermis'	27	G	G	G	5	Subject Property		Remove
11	Norway Maple	Acer platanoides	14	G	G	G	3	Subject Property		Remove
12	Blue Spruce	Picea pungens	~13	G	G	G	2	Neighbouring		Preserve
13	Manitoba Maple	Acer negundo	11, 13	FG	G	G	3	Subject Property	Union at 1.2 m	Remove
14	Blue Spruce	Picea pungens	~13	G	G	G	2	Neighbouring		Preserve
15	Norway Maple	Acer platanoides	13	G	G	G	3	Subject Property		Remove
16	Red Oak	Quercus rubra	17	G	G	G	3	Subject Property		Remove
17	Blue Spruce	Picea pungens	~13	G	G	G	2	Neighbouring		Preserve
18	White Spruce	Picea glauca	15	G	G	G	2	Subject Property		Removed
19	White Mulberry	Morus alba	29	F	FG	G	4	Subject Property	Union at 1.4 m	Removed
20	Manitoba Maple	Acer negundo	14, 12	F	G	G	4	Subject Property	Union at ground	Removed
21	Manitoba Maple	Acer negundo	10, 8	FG	G	G	2	Subject Property	Union at ground	Removed
22	Manitoba Maple	Acer negundo	16, 12, 7	F	FG	G	3	Subject Property		Remove
23	Manitoba Maple	Acer negundo	10	G	G	G	3	Subject Property		Remove
24	Tree-of-heaven	Ailanthus altissima	12, 12	F	FG	G	4	Neighbouring	Union at 0.2 m	Preserve
25	White Elm	Ulmus americana	13	FG	G	G	3	Subject Property	Bacterial wetwood	Remove
26	Manitoba Maple	Acer negundo	10, 7	FG	G	G	3	Subject Property		Remove
27	Manitoba Maple	Acer negundo	10	G	G	G	3	Subject Property		Remove
28	Manitoba Maple	Acer negundo	10	G	G	G	3	Subject Property		Remove
29	Manitoba Maple	Acer negundo	11	FG	G	G	3	Subject Property	Lean/bowed	Remove
30	White Mulberry	Morus alba	~30	F	FG	G	5	Neighbouring	Union at 1.5 m	Preserve

Tree #	Common Name	Scientific Name	DBH	ТІ	CS	с٧	DL	Location	Comments	Recom.
31	Manitoba Maple	Acer negundo	10	FG	G	G	2	Subject Property	Lean west	Removed
32	Black Walnut	Juglans nigra	10	G	G	G	2	Subject Property		Removed
33	Eastern Red Cedar (Juniper)	Juniperus virginiana	~15	G	G	G	2	Neighbouring		Preserve
34	Eastern Red Cedar (Juniper)	Juniperus virginiana	~20	G	G	G	2	Neighbouring	Union at 2 m	Preserve
35	Eastern Red Cedar (Juniper)	Juniperus virginiana	~14, 16	G	G	G	2	Neighbouring	Union at 1.5 m	Preserve
36	Eastern Red Cedar (Juniper)	Juniperus virginiana	~16	G	G	G	2	Neighbouring		Preserve
37	Apple species	Malus sp.	15	G	G	G	3	Subject Property		Removed
38	White Mulberry	Morus alba	87	F	FG	G	9	Subject Property	Union at 2 m, bacterial wetwood	Remove
39	Willow species	Salix sp.	30	Ρ	Ρ	Ρ	3	Subject Property	70% crown dieback	Remove
40	Honey Locust cultivar	Gleditsia triacanthos var. 'inermis'	30	G	G	G	5	Subject Property		Removed
41	Norway Maple	Acer platanoides	14	FG	FG	FG	3	Subject Property	Stem wound at base of crown, 10% crown dieback	Remove
42	Red Maple	Acer rubrum	10	G	F	F	2	Subject Property	Union at 1.2 m, chlorotic	Remove
43	Eastern Redbud	Cercis canadensis	11, 13	FG	G	G	3	Subject Property	Union at ground	Remove
44	Copper Beech	Fagus sylvatica	17	G	G	G	3	Subject Property		Remove
45	American Beech	Fagus grandifolia	18	FG	FG	G	3	Subject Property	Poor form	Remove
46	Copper Beech	Fagus sylvatica	13	Р	FG	G	3	Subject Property	Heavy stem wound with fruiting bodies	Remove
47	Red Maple	Acer rubrum	13	FG	FG	F	2	Subject Property	Pruning wounds, chlorotic	Remove
48	Pin Oak	Quercus palustris	28	G	G	G	5	Subject Property		Remove
49	Eastern Redbud	Cercis canadensis	12, 10, 8	F	FG	G	3	Subject Property	Union at ground, swtem wound with heavy crook	Remove
50	Little-leaf Linden	Tilia cordata	22	FG	G	G	3	Subject Property	Union at 1.6 m	Remove
51	White Elm	Ulmus americana	20, 17, 19	F	F	F	4	ROW	Union at ground, stem wound, 10% crown dieback	Preserve
52	Bur Oak	Quercus macrocarpa	93	G	G	G	9	Subject Property		Preserve
53	Bur Oak	Quercus macrocarpa	52	G	G	G	6	ROW	Union at 3 m	Preserve
54	Bur Oak	Quercus macrocarpa	57	G	G	G	6	ROW		Preserve
55	White Elm	Ulmus americana	48	G	G	G	8	Subject Property	Union at base of crown	Remove
56	Crab Apple species	Malus sp.	12	G	G	G	2	Subject Property	Epicormic branching	Remove
57	Blue Spruce	Picea pungens	33	G	G	G	2	Subject Property		Remove
58	White Birch	Betula papyrifera	9, 6, 10, 8	F	FG	G	3	Subject Property	Union at ground	Remove
59	Black Walnut	Juglans nigra	35	G	G	G	5	Boundary	Pruning wounds	Preserve
60	Hackberry	Celtis occidentalis	~20	G	G	G	4	ROW		Preserve
61	Black Walnut	Juglans nigra	21	G	G	G	4	Subject Property		Remove
62	Columnare Norway Maple	Acer platanoides 'Columnare'	22	G	G	G	2	ROW		Remove

Tree Inventory and Preservation Plan Report 4170 & 4190 Sixth Concession Rd., Windsor, ON

Tree #	Common Name	Scientific Name	DBH	ТІ	CS	с٧	DL	Location	Comments	Recom.
63	Blue Spruce	Picea pungens	33	G	G	G	3	Subject Property		Remove
64	Manitoba Maple	Acer negundo	80	F	PF	PF	7	ROW	Union at 2 m, 30% crown dieback	Remove
65	Norway Maple	Acer platanoides	13	G	G	G	4	ROW		Removed

#### Table Legend

DBH Diameter at Breast Height (cm)

TI Trunk Integrity (G, F, P)

- CS Crown Structure (G, F, P)
- CV Crown Vigor (G, F, P)
- DL Dripline (m)
- G Good
- F Fair
- P Poor
- ~ Estimate