Tree Conservation Report
37 Wildpine Court, Stittsville, Ottawa

Draft Report

December 23, 2020

KILGOUR & ASSOCIATES LTD.
www.kilgourassociates.com

TABLE OF CONTENTS

List of Figures

List of Tables

List of Appendices

List of Acronyms and Abbreviations

CRZ – Critical root zone
DBH – Diameter at breast height
ESA – *Endangered Species Act*
KAL – Kilgour & Associates Ltd.
MNRF – Ministry of Natural Resources and Forestry
SAR – Species at risk
SARA – *Species at Risk Act*
TCR – Tree Conservation Report

1.0 INTRODUCTION

Kilgour & Associates Ltd. (KAL) was retained by Wildpine Trails Inc. to provide a Tree Conservation Report (TCR) for the proposed development of 37 Wildpine Court in Stittsville, Ottawa (herein the "Site"). The purpose of a TCR is to demonstrate how tree cover will be retained on sites subject to development using a "design with nature approach" to planning and engineering. A design with nature approach incorporates natural features of a site into the design and engineering of a proposed development. This TCR has been prepared following the City of Ottawa's guidelines (2018a). This report identifies and describes tree cover on the project site prior to its proposed development.

A TCR is required for all Plans of Subdivision, Site Plan Control Applications, Common Elements Condominium Applications, and Vacant Land Condominium Applications where there is a tree of 10 cm in diameter at breast height (DBH) or greater on a site and/or if there is a tree on an adjacent site that has a critical root zone (CRZ) extending onto a development site. A "tree" is defined as any species of woody perennial plant, including its root system, which has reached or can reach a minimum height of at least 450 cm at physiological maturity. The CRZ is calculated as DBH x 10 cm.

The removal of trees on a project site cannot occur until written approval of the TCR has been granted through a tree permit as per the City of Ottawa's Tree Protection By-law. The approval of the TCR will come in the form of a letter (the tree permit) from the General Manager[1] with conditions specific to the site, tree retention, and associated tree protection and tree removal. The approved TCR is a requirement for the approval of the development applications listed above. A copy of the report must be available on-site during tree removal, grading, construction, or any other site alteration activities, and for the duration of construction on the site.

2.0 PROPERTY INFORMATION

The Site is owned by Wildpine Trails Inc. It is approximately 2 ha and is zoned as *R3XX[1046] – Residential Third Density Zone*. At the time of writing this report, the Site was dominated by wooded areas including those part of the Stittsville Wetland Complex (not a provincially significant wetland). It also contained open lawn space, a paved cul de sac, a single detached home with a separate garage and shed, a small portion of Poole Creek, and regulated floodplain of Poole Creek (Figure 1).

The Site is surrounded by:

- A shopping plaza, a stormwater management pond, and the Stittsville Wetland Complex to the north.
- Poole Creek and the Stittsville Wetland Complex to the east.
- A residential community on Wildpine Court to the south.
- A residential community on Ravenscroft Court to the west.

[1] General Manager of the Public Works & Environmental Services Department or the General Manager of the Planning, Infrastructure and Economic Development Department of the City of Ottawa, or their designate.

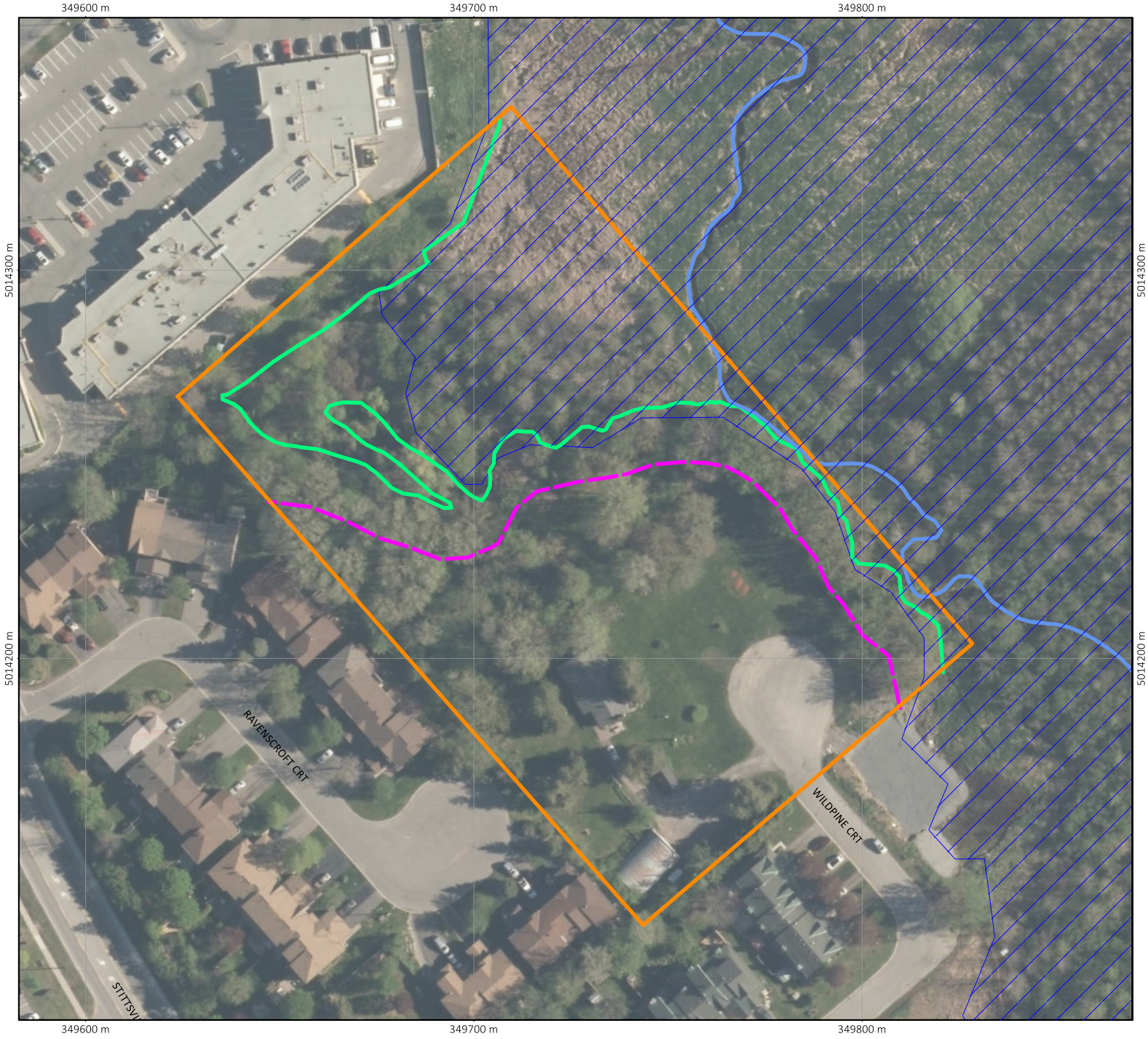

Figure 1 Existing conditions on the Site

Legend

- Property Lines
- Floodplain
- Poole Creek - Top of Bank
- Wetland Boundary
- Top Edge of Fill

N

0 50 m

Map File: 37 Wildpine6
MTM Zone 9
(NAD 83)
Printed on: 2020-12-21

KILGOUR & Associates

2.1 Property Owner and Applicant Contact Information

Table 1 Organization, role, contact person, phone number, and email address for property owner and applicant

Organization	Role	Contact Person	Phone Number	Email Address
Wildpine Trails Inc.	Property Owner and Applicant	Carmine Zayoun	**(305) 607-8749**	carmine.zayoun@gmail.com

2.2 Arborist Contact Information and Qualifications

Table 2 Organization, role, contact person, phone number, and email address for arborists

Organization	Role	Contact Person	Phone Number	Email Address
KAL	Biologist	Katherine Black, MSc	**(613) 260-5555**	kblack@kilgourassociates.com
KAL	Biologist	Anthony Francis, PhD	**(613) 260-5555**	afrancis@kilgourassociates.com
KAL	Biologist	Robert Hallett, Tech. Dipl.	**(613) 260-5555**	rhallett@kilgourassociates.com

Katherine Black (MSc) has over six years of comprehensive field, laboratory, and report-writing experience in biology. She has worked in a variety of field settings, including natural environments, construction sites, and greenhouses. Ms. Black's background is predominantly in vegetation ecology; she has performed vegetation surveys in a variety of natural and disturbed environments, including wetland, tundra, field, and forest environments. Since joining KAL in 2019, Ms. Black has contributed to numerous Environmental Impact Statements and TCRs. Ms. Black is also a certified Butternut Health Assessor (BHA #731).

Anthony Francis (PhD) is a Senior Ecologist with 20 years' consulting experience to both government agencies and private industry. He has worked on a diversity of projects relating to species at risk (SAR), invasive species, terrestrial and aquatic habitat, environmental effects monitoring and mitigation, and fate/effects of contaminants. Within each of these subject areas, Dr. Francis has completed projects addressing specific site concerns and broader policy initiatives. Dr. Francis' academic background is in spatial ecology with a focus on tree species diversity. As a Senior Ecologist at KAL, he regularly completes TCRs, Environmental Impact Statements, and Integrated Environmental Reviews for land development projects throughout Ottawa and eastern Ontario. He is also a certified Butternut Health Assessor (BHA #104).

Robert Hallett (Tech. Dipl.) has a broad background in monitoring both terrestrial and aquatic environments. Rob has 10 years of experience conducting tree surveys in support of TCRs and is a certified Butternut Health Assessor (BHA 546).

2.3 Additional Planning Applications

Not applicable.

3.0 EXSITING CONDITIONS

3.1 Tree Inventory

A detailed inventory of all trees on the Site was performed on June 19, 2020 following the City of Ottawa's TCR guidelines (2018a):

- Clusters and hedgerows of trees of the same species were demarcated as such. The number of individuals within a cluster/hedgerow was counted and the size range in diameter at breast height (DBH) of trees within a cluster/hedgerow was determined.
    - "Distinctive" trees (i.e., those with DBH ≥ 50 cm), uncommon species, and protected species that occurred within a cluster or hedgerow were individually mapped and not counted in the aggregate metrics for the cluster/hedgerow.
- All other trees (i.e., not in clusters or hedgerows of all the same species) with DBH ≥ 10 cm were individually mapped.
- Butternut trees (listed as Endangered under the *Endangered Species Act* (ESA) and *Species at Risk Act* (SARA)) were specifically searched for. The health of live Butternuts that fell within 50 m of the proposed development footprint were assessed by a qualified Butternut Health Assessor[2].

The detailed results of the tree inventory are presented in Appendix A and are shown in Figure 2. In general, 197 trees with DBH ≥ 10 cm were identified on the Site, with the most dominant species being Manitoba Maple (*Acer negundo*), Eastern White Cedar (*Thuja occidentalis*), and Bitternut Hickory (*Carya cordiformis*; Table 3). Eleven distinctive trees (DBH ≥ 50) cm were identified.

[2] For most activities that would involve killing or harming a Butternut, a person's eligibility for an exemption under Ontario Regulation 242/08 under the ESA is dependent on the category to which a tree is assigned following a Butternut health assessment and the details of the proposed activity (e.g., the number of trees to be affected; MNR, 2014).

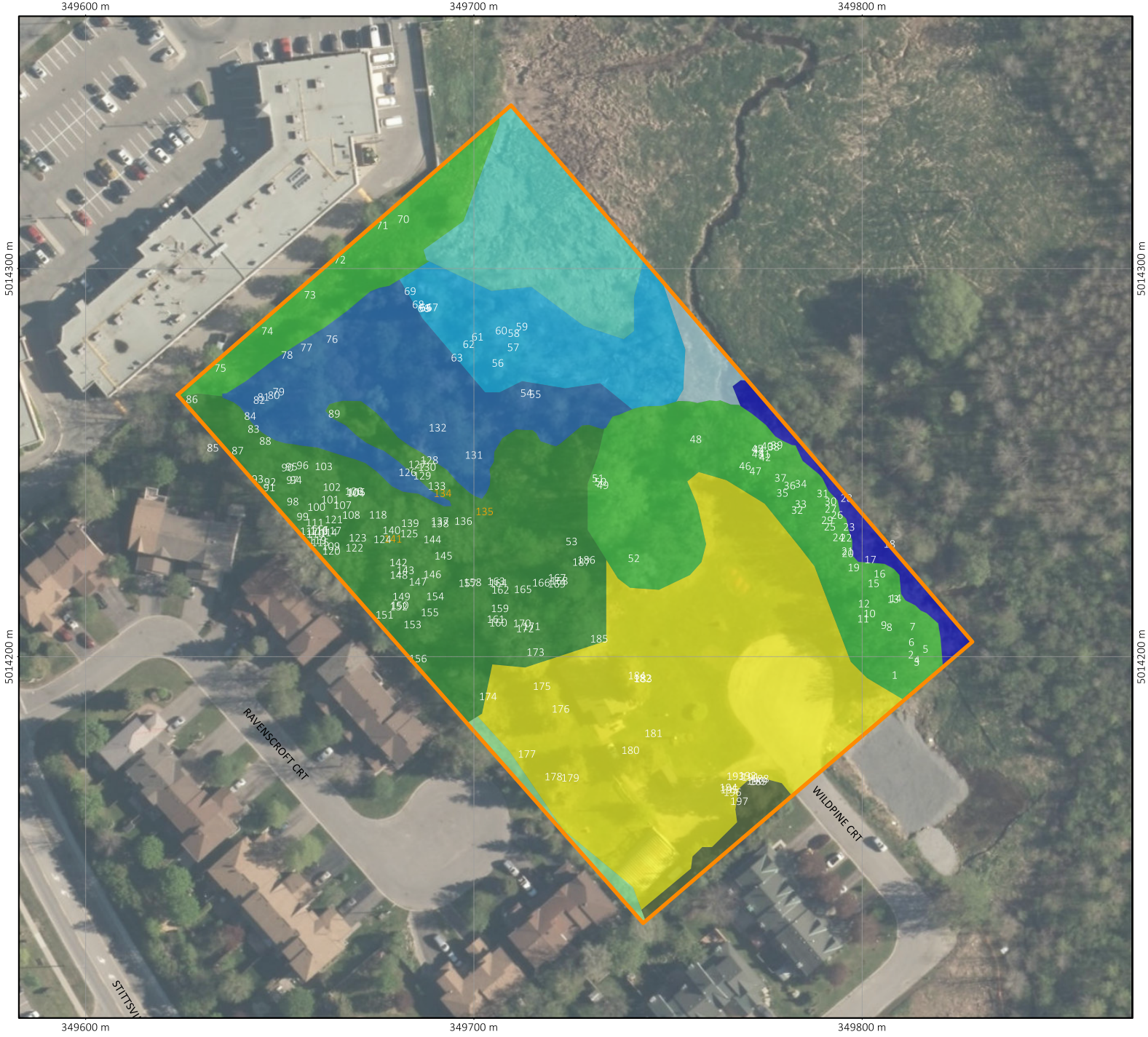

Figure 2 Existing trees on the Site

Legend

Property Lines

Site Trees

Tree (>10cm DBH)

Butternut

ELC

- FODM11
- FODM4-5
- FODM9-5
- Cedar Hedge
- Lawn
- MASO1-4
- MAS3-1
- SWT3-2
- SWM4-1
- SWD6

N

0 50 m

Map File: 37 Wildpine6
MTM Zone 9
(NAD 83)
Printed on: 2020-12-21

KILGOUR & Associates

Table 3 Tree species count and percent composition for the Site

Species	Count	Percent Composition
American Elm (*Ulmus americana*)	14	7.1
Basswood (*Tilia americana*)	9	4.6
Bitternut Hickory (*Carya cordiformis*)	43	21.8
Black Ash (*Fraxinus americana*)	9	4.6
Butternut (*Juglans cinerea*)	3	1.5
Crack Willow (*Salix fragilis*)	5	2.5
Eastern Cottonwood (*Populus deltoides*)	3	1.5
Eastern White Cedar (*Thuja occidentalis*)	44	22.3
Ironwood (*Ostrya virginiana*)	5	2.5
Manitoba Maple (*Acer negundo*)	45	22.8
Siberian Elm (*Ulmus pumila*)	2	1.0
Silver Maple (*Acer saccharinum*)	1	0.5
Sugar Maple (*Acer saccharum*)	5	2.5
Trembling Aspen (*Populus tremuloides*)	5	2.5
White Oak (*Quercus alba*)	1	0.5
White Pine (*Pinus strobus*)	1	0.5
White Spruce (*Picea glauca*)	1	0.5
Yellow Birch (*Betula alleghaniensis*)	1	0.5
SUM	197	100.0

3.1.1 Ecological Significance of Trees on the Site

The Site contains three Butternuts (two dead and one live), a federally and provincially significant tree species that is listed as Endangered under the ESA and SARA. The live Butternut was assessed as a Category 3 Butternut, meaning that it exhibited evidence that it may be resistant to or tolerant of infection by Butternut canker (*Ophiognomonia clavigignenti-juglandacearum*). Category 3 trees are especially important to the recovery of Butternut because they may be useful in determining sources of resistance to Butternut canker (MNR, 2014).

The Site also contains one White Oak (*Quercus alba*) and one Siberian Elm (*Ulmus pumila*), both of which are regionally significant (rare) species in the Ottawa area (Brunton, 2005), though Siberian Elm is non-native.

Ecological functions of the trees on-site include:

- Providing terrestrial and riparian habitat for wildlife such as common mammals and birds.
- Providing a vegetated buffer between Poole Creek and the Stittsville Wetland Complex and the adjacent developed areas, including:
    - Regulation of relative humidity and other microclimatic variables.
    - Sequestration of carbon.

- Removal of pollutants.
- Wind-shielding.
- Shading and reduction of urban heat island effects.

3.2 Other Natural Environment Elements

3.2.1 Surface Water Features

The Site includes a portion of the Stittsville Wetland Complex. The total wetland area on the Site is approximately 0.6 ha and consists of several types of wetland: meadow marsh (Ecological Land Classification code MASO1-4), cattail marsh (MAS3-1), deciduous thicket (tall shrub) swamp (SWT3-2), mixed swamp (SWM4-1), and deciduous swamp (SWD6; Figure 2). The upland edge of the wetland on the Site contains a considerable amount of fill that extends approximately 15 m out from the wetland. This upland edge of the wetland is degraded as indicated by the presence of rubble, trash, and non-native and/or invasive species.

The southeastern corner of the Site contains a small portion of the channel of Poole Creek and the eastern edge of the Site contains floodplain associated with Poole Creek.

Mitigation measures to prevent impacts to these surface water features are provided in the Environmental Impact Statement prepared for the project (KAL, 2020).

3.2.2 Steep Slopes

The Site does not contain any steep slopes, valleys, or escarpments.

3.2.3 Valued Woodlots

The Site does not contain any woodlots designated as Urban Natural Features or Natural Environment Areas, areas evaluated in the *City of Ottawa Urban Natural Areas Environmental Evaluation Study* (UNAEES; Muncaster Environmental Planning Inc. and Brunton Consulting Services, 2005), or other areas that meet the criteria used in the UNAEES.

3.2.4 Significant Woodlands

The Site does not contain any significant woodlands per the City of Ottawa's significant woodland guidelines (2018b).

3.2.5 Greenspace Linkages

The Site does not contain any greenspace linkages identified in the Greenspace Master Plan (City of Ottawa, 2016) or as may occur in the larger landscape.

3.2.6 Distinctive Trees

The Site contains 11 distinctive trees (Appendix A).

3.2.7 Unique Ecological Features

The Fresh-Moist Deciduous Bitternut Hickory Deciduous Forest (FODM9-5; Figure 2) on the Site is Significant Wildlife Habitat for Special Concern and Rare Wildlife Species (MNRF, 2015a) due to an observation of Eastern Wood-pewee (*Contopus virens*; Special Concern under ESA and SARA) here by KAL in 2020. All treed communities on-site are candidate Significant Wildlife Habitat for Bat Maternity Colonies because they are treed ecosites in which more than 10 Big Brown Bats (*Eptesicus fuscus*) and five adult female Silver-Haired Bats (*Lasionycteris noctivagans*) may occur (MNRF, 2015a). Big Brown Bats and Silver-Haired Bats were detected on the Site via acoustic monitoring by KAL in 2020, but the number and/or gender of each bat species could not be discerned from the acoustic data. It is therefore possible that Significant Wildlife Habitat for Bat Maternity Colonies exists on the Site but this cannot be confirmed with the acoustic data that were collected (KAL, 2020).

The Site does not contain other unique ecological features as may be identified in the Natural Heritage Information Centre (MNRF, 2020), Ecological Land Classification (Lee et al., 1998), or other Ministry of Natural Resources and Forestry data.

3.2.8 Species at Risk

The potential for SAR to occur on the Site and interact with the proposed development was assessed based on KAL's review of existing information, Ecological Land Classification (in-field habitat assessment), and field surveys conducted in 2020 (KAL, 2020). A total of ten species were assessed as having a moderate to high potential to interact with the proposed development (Table 4). Mitigation measures to prevent impacts to SAR listed as Endangered and Threatened are provided in the Environmental Impact Statement prepared for the project (KAL, 2020).

Table 4 Summary of species at risk assessed as having a moderate to high potential to interact with the proposed development (KAL, 2020)

Species Name (*Taxonomic Name*)	Status under ESA	Status under Schedule 1 of SARA	Potential to Interact with Development of the Site
Birds			
Barn Swallow (*Hirundo rustica*)	Threatened	Threatened	Moderate
Eastern Wood-pewee (*Contopus virens*)	Special Concern	Special Concern	High
Rusty Blackbird (*Euphagus carolinus*)	Special Concern	Special Concern	Moderate
Wood Thrush (*Hylocichla mustelina*)	Special Concern	Threatened	Moderate
Reptiles			
Blanding's Turtle (*Emydoidea blandingii*)	Threatened	Threatened	High

Species Name (*Taxonomic Name*)	Status under ESA	Status under Schedule 1 of SARA	Potential to Interact with Development of the Site
Milksnake (*Lampropeltis triangulum*)	Not Listed	Special Concern	Moderate
Snapping Turtle (*Chelydra serpentina*)	Special Concern	Special Concern	Moderate
Mammals			
Little Brown Myotis (*Myotis lucifugus*)	Endangered	Endangered	Moderate
Arthropods			
Monarch (Danaus *plexippus*)	Special Concern	Special Concern	Moderate
Vascular Plants			
Butternut (*Juglans cinerea*)	Endangered	Endangered	High

4.0 PROPOSED DEVELOPMENT

The proposed development is limited to the southern half of the Site and consists of 29 single detached houses with front and rear yard space (Figure 3). The proposed development also includes extending Wildpine Court to connect with Ravenscroft Court.

Development will respect a setback of 15 m from wetland areas. It will also respect a 30 m setback from the top of bank of Poole Creek, except for the rear lot lines of four units to be located at the southeast corner of the Site. These four units require their rear lot lines to extend up to 2 m beyond the 30 m setback to permit a minimal yard length of 4 m. At their closest point to the creek, these rear lot lines are 28 m from the top of bank, but will be situated along the existing paved edge of the cul de sac on the Site. These proposed setbacks were determined in consultation with the City of Ottawa and Mississippi Valley Conservation Authority.

Site preparation is anticipated to begin in the spring of 2021 with building construction anticipated to begin in mid-2021. Site preparation would require the removal of all vegetation within the proposed development footprint, including 42 trees with DBH ≥ 10 cm (3 of which are distinctive trees with DBH ≥ 50 cm; Appendix A).

The pathway to the northwest corner of the Site is proposed to be an unpaved trail. The final route for the pathway will be established as part of the detailed design and Site landscape plan, but will adjusted as required to avoid removing trees. Worn foot paths are currently present within that portion of the Site.

Figure 3 Proposed development of the Site

Legend

Property Lines

Proposed Developement

Block Plan
Other
Pathway
Townhome

Site Trees

\# Retained
\# Removed
\# Butternut (Retained)

N

0 50 m

Map File: 37 Wildpine6
MTM Zone 9
(NAD 83)
Printed on: 2020-12-21

KILGOUR & Associates

5.0 MITIGATION MEASURES

5.1 Site Preparation and Construction

To effectively minimize impacts on site trees, the following mitigation measures must be applied during site preparation and construction (City of Ottawa, 2018a; City of Ottawa, 2015):

- Tree removal should be limited to that which is necessary to accommodate construction.

- Tree and vegetation clearing should not take place during sensitive times of the year for wildlife (breeding season; early spring throughout summer) unless mitigation measures are implemented and/or the habitat has been inspected by a qualified biologist.
    - The *Migratory Birds Convention Act*, 1994 protects the nests and young of migratory breeding birds in Canada. No clearing of vegetation shall occur during the breeding bird window (April 15 and August 15) to prevent impacts to birds. Combining the breeding bird window with the bat roosting season (May to September; MNRF, 2015b), no clearing of vegetation shall occur between April 15 and September 30 inclusive to prevent impacts to both birds and bats. If vegetation clearing is to occur between April 1 and 15, a pre-clearing survey for active stick nests and cavity nests must be conducted to identify and protect early-nesting owls and raptors.

- To minimize impacts to remaining trees during development:
    - Erect a fence beyond the critical root zone (CRZ; equivalent to ten times the diameter of trunk) of retained trees that have roots that may extend into the project area. The fence should be highly visible (orange construction fence) and paired with erosion and sediment control fencing. Pruning of branches is recommended in areas of potential conflict with construction equipment;
    - Do not place any material or equipment within the CRZ of trees unless otherwise approved by the General Manager;
    - Do not attach any signs, notices, or posters to any trees unless otherwise approved by the General Manager;
    - Do not raise or lower the existing grade within the CRZ of trees unless otherwise approved by the General Manager;
    - Do not extend any hard surface or significantly change landscaping within the CRZ of trees unless otherwise approved by the General Manager;
    - Do not damage the root system, trunk, or branches of any remaining trees unless otherwise approved by the General Manager;
    - Use tunneling or boring when digging within the CRZ of a tree; and

- Ensure that exhaust fumes from equipment are not directed towards any tree's canopy.

5.2 Tree Planting Recommendations

To offset vegetation loss, native tree and shrub species must be planted, with a minimum of one tree per lot. Landscaping plans must be prepared to the satisfaction of the City of Ottawa. The following tree and shrub species are recommended for planting and should be used to direct the development of the landscape plan for the Site. These species are appropriate given site conditions and are native and non-invasive: Alternate-leaf Dogwood (*Cornus alternifolia*), American Beech (*Fagus grandifolia*), Balsam Poplar (*Populus balsamifera*), Basswood (*Tilia americana*), Bitternut Hickory, Black Cherry (*Prunus serotina*), Black Walnut (*Juglans nigra*), Bur Oak (*Quercus macrocarpa*), Chokecherry (*Prunus virginiana*), Eastern White Cedar, Hawthorns (*Crataegus* spp.), Ironwood (*Ostrya virginiana*), Largetooth Aspen (*Populus grandidentata*), Maple-leaf Viburnum (*Viburnum acerifolium*), Nannyberry (*Viburnum lentago*), Northern Bush-honeysuckle (*Diervilla lonicera*), Peachleaf Willow (*Salix amygdaloides*), Pin Cherry (*Prunus pensylvanica*), Red Maple, Red Oak (*Quercus rubra*), Serviceberries (*Amelanchier* spp.), Silver Maple, Sugar Maple (*Acer saccharum*), Tamarack (*Larix laricina*), Trembling Aspen (*Populus tremuloides*), White Birch (*Betula papyrifera*), Yellow Birch (*Betula alleghaniensis*), White Oak, White Pine (*Pinus strobus*), and White Spruce (*Picea glauca*).

6.0 CLOSURE

This report was prepared for exclusive use by Wildpine Trails Inc. and may be distributed only by or in accordance with the express instructions of Wildpine Trails Inc. Questions relating to the data and interpretation can be addressed to the undersigned.

Respectfully submitted,

KILGOUR & ASSOCIATES LTD.

_____
Katherine Black, MSc
Biologist

_____
Anthony Francis, PhD
Project Director and Senior Ecologist

_____
Ed Malindzak, MSc
Senior Biologist

7.0 LITERATURE CITED

Brunton, D.F. 2005. City of Ottawa Urban Natural Areas Environmental Evaluation Study Appendix A – Vascular Plants of the City of Ottawa, with Identification of Significant Species. Available online at: https://app06.ottawa.ca/calendar/ottawa/citycouncil/ec/2005/05-24/AppendixA%20-%20OTTAWA%20FLORA%20(APR%2005).htm

City of Ottawa. 2015. Environmental Impact Statement Guidelines. Available online at: https://documents.ottawa.ca/sites/documents/files/documents/eis_guidelines2015_en.pdf

City of Ottawa. 2016. Greenspace Master Plan. Available online at: https://ottawa.ca/en/planning-development-and-construction/official-plan-and-master-plans/greenspace-master-plan

City of Ottawa. 2018a. By-law No. 2009-200. Available online at: https://ottawa.ca/en/living-ottawa/laws-licences-and-permits/laws/law-z/tree-conservation-urban-law-no-2009-200

City of Ottawa. 2018b. Significant Woodlands: Guidelines for Identification, Evaluation, and Impact Assessment. Available online at: http://ottwatch.ca/meetings/file/572913

Government of Canada. 1984. *Migratory Birds Convention Act*, 1994 (S.C. 1994, c. 22). Available online at: https://laws-lois.justice.gc.ca/eng/acts/m-7.01/

Government of Canada. 2002. *Species at Risk Act*. 2002. S.C. 2002, c. 29. Available online at: https://laws.justice.gc.ca/eng/acts/S-15.3/

Government of Ontario. 2007. *Endangered Species Act*. 2007. S.O. 2007, c.6. Available online at: https://www.ontario.ca/laws/statute/07e06

Lee, H.R., W. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig, and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and its Application. Ontario Ministry of Natural Resources, North Bay.

Ministry of Natural Resources. 2014. Butternut Assessment Guidelines – Assessment of Butternut Tree Health for the Purposes of the *Endangered Species Act*, 2007. Available online at: https://www.ontario.ca/document/2019-review-progress-towards-protection-and-recovery-ontarios-species-risk/butternut

Ministry of Natural Resources and Forestry. 2015a. Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E. OMNRF Regional Operations Division: Southern Region Resources Section, Peterborough, Ontario. 39 pp.

Ministry of Natural Resources and Forestry. 2015b. Technical Note: Species at Risk (SAR) Bats. OMNRF Regional Operations Division. 37 pp.

Ministry of Natural Resources and Forestry (MNRF). 2020. Natural Heritage Information Centre: Make Natural Heritage Map. Available online at: https://www.ontario.ca/page/make-natural-heritage-area-map

Muncaster Environmental Planning Inc. and Brunton Consulting Services. 2005. City of Ottawa Urban Natural Areas Environmental Evaluation Study Final Report. A report prepared for the Environmental Management Division, Planning & Growth Management Department, City of Ottawa. Available online at: https://app06.ottawa.ca/calendar/ottawa/citycouncil/pdc/2005/05-24/Final%20Report_UNAEES.htm

Appendix A Tree Inventory Table

Appendix A: Tree inventory table

Tree	Waypoint	Common Name	Latin Name	DBH (cm)	Notes	Fate
1	409	Manitoba Maple	*Acer negundo*	33	Multistemmed	Retained
2	410	Manitoba Maple	*Acer negundo*	21		Retained
3	411	Manitoba Maple	*Acer negundo*	20		Retained
4	412	Manitoba Maple	*Acer negundo*	24		Retained
5	413	Manitoba Maple	*Acer negundo*	20		Retained
6	414	Manitoba Maple	*Acer negundo*	42	Multistemmed	Retained
7	415	Manitoba Maple	*Acer negundo*	31	Multistemmed	Retained
8	416	Manitoba Maple	*Acer negundo*	26	Multistemmed	Retained
9	417	Manitoba Maple	*Acer negundo*	23	Multistemmed	Retained
10	418	Manitoba Maple	*Acer negundo*	20	Multistemmed	Retained
11	419	Manitoba Maple	*Acer negundo*	20	Multistemmed	Retained
12	420	Manitoba Maple	*Acer negundo*	38	Multistemmed	Retained
13	421	Manitoba Maple	*Acer negundo*	23		Retained
14	422	Manitoba Maple	*Acer negundo*	22	Multistemmed	Retained
15	423	Manitoba Maple	*Acer negundo*	23	Multistemmed	Retained
16	424	Manitoba Maple	*Acer negundo*	16	Multistemmed	Retained
17	425	American Elm	*Ulmus americana*	15		Retained
18	426	Black Ash	*Fraxinus americana*	15	Evidence of Emerald Ash Borer	Retained
19	427	Manitoba Maple	*Acer negundo*	30	Multistemmed	Retained
20	428	Manitoba Maple	*Acer negundo*	30		Retained
21	429	Manitoba Maple	*Acer negundo*	30		Retained
22	430	Manitoba Maple	*Acer negundo*	27	Multistemmed	Retained
23	431	Manitoba Maple	*Acer negundo*	20	Multistemmed	Retained
24	432	Manitoba Maple	*Acer negundo*	23	Multistemmed	Retained
25	433	Manitoba Maple	*Acer negundo*	20	Multistemmed	Retained
26	434	Manitoba Maple	*Acer negundo*	48		Retained
27	435	Manitoba Maple	*Acer negundo*	22		Retained
28	436	American Elm	*Ulmus americana*	28		Retained
29	437	Manitoba Maple	*Acer negundo*	13	Multistemmed	Retained
30	438	Manitoba Maple	*Acer negundo*	24	Multistemmed	Retained
31	439	Manitoba Maple	*Acer negundo*	37		Retained
32	440	Manitoba Maple	*Acer negundo*	29	Multistemmed	Retained
33	441	Manitoba Maple	*Acer negundo*	19	Multistemmed	Retained
34	442	Manitoba Maple	*Acer negundo*	22	Multistemmed	Retained
35	443	Manitoba Maple	*Acer negundo*	20	Multistemmed	Retained
36	444	Manitoba Maple	*Acer negundo*	20	Multistemmed	Retained
37	445	Manitoba Maple	*Acer negundo*	14	Multistemmed	Retained
38	446	Manitoba Maple	*Acer negundo*	21	Multistemmed	Retained
39	447	Manitoba Maple	*Acer negundo*	12	Multistemmed	Retained
40	448	Manitoba Maple	*Acer negundo*	12	Multistemmed	Retained
41	449	Manitoba Maple	*Acer negundo*	20	Multistemmed	Retained
42	450	Manitoba Maple	*Acer negundo*	18	Multistemmed	Retained
43	451	Manitoba Maple	*Acer negundo*	22	Multistemmed	Retained
44	452	Manitoba Maple	*Acer negundo*	18	Multistemmed	Retained
45	453	Manitoba Maple	*Acer negundo*	22	Multistemmed	Retained
46	454	Manitoba Maple	*Acer negundo*	24		Retained
47	455	Manitoba Maple	*Acer negundo*	30		Retained
48	456	American Elm	*Ulmus americana*	22		Retained
49	457	Eastern Cottonwood	*Populus deltoides*	55		Retained
50	457	Eastern Cottonwood	*Populus deltoides*	48		Retained
51	457	Eastern Cottonwood	*Populus deltoides*	40		Retained
52	458	Siberian Elm	*Ulmus pumila*	34	Some branch dieback	Removed
53	459	American Elm	*Ulmus americana*	18		Removed
54	460	American Elm	*Ulmus americana*	10		Retained
55	461	Eastern White Cedar	*Thuja occidentalis*	40	Multistemmed; some dead stems	Retained
56	462	Eastern White Cedar	*Thuja occidentalis*	50	Multistemmed; some dead stems	Retained
57	463	Black Ash	*Fraxinus americana*	12	Evidence of Emerald Ash Borer	Retained
58	464	Black Ash	*Fraxinus americana*	18	Evidence of Emerald Ash Borer	Retained
59	465	Black Ash	*Fraxinus americana*	13	Evidence of Emerald Ash Borer	Retained
60	466	Black Ash	*Fraxinus americana*	15	Evidence of Emerald Ash Borer	Retained
61	467	Black Ash	*Fraxinus americana*	14	Evidence of Emerald Ash Borer	Retained
62	468	Eastern White Cedar	*Thuja occidentalis*	35	Exposed roots	Retained
63	469	Black Ash	*Fraxinus americana*	18	Evidence of Emerald Ash Borer	Retained
64	470	Eastern White Cedar	*Thuja occidentalis*	45	Exposed roots; some branch dieback	Retained
65	471	Eastern White Cedar	*Thuja occidentalis*	40	Exposed roots; some branch dieback	Retained
66	472	Eastern White Cedar	*Thuja occidentalis*	30	Exposed roots; some branch dieback	Retained
67	473	Eastern White Cedar	*Thuja occidentalis*	32	Exposed roots; some branch dieback	Retained

68	474	Eastern White Cedar	*Thuja occidentalis*	50	Overturned roots	Retained
69	475	Eastern White Cedar	*Thuja occidentalis*	48		Retained
70	476	Manitoba Maple	*Acer negundo*	20		Retained
71	477	Sugar Maple	*Acer saccharum*	25	Over fence	Retained
72	478	Sugar Maple	*Acer saccharum*	25	Over fence	Retained
73	479	Sugar Maple	*Acer saccharum*	25	Over fence	Retained
74	480	Sugar Maple	*Acer saccharum*	20	Over fence	Retained
75	481	Sugar Maple	*Acer saccharum*	20	Over fence	Retained
76	482	Siberian Elm	*Ulmus pumila*	22		Retained
77	483	Yellow Birch	*Betula alleghaniensis*	30	Multistemmed	Retained
78	484	Basswood	*Tilia americana*	20		Retained
79	485	Trembling Aspen	*Populus tremuloides*	18		Retained
80	486	Trembling Aspen	*Populus tremuloides*	15		Retained
81	487	Trembling Aspen	*Populus tremuloides*	20		Retained
82	488	American Elm	*Ulmus americana*	10		Retained
83	489	Trembling Aspen	*Populus tremuloides*	24		Retained
84	490	Trembling Aspen	*Populus tremuloides*	18		Retained
85	491	Silver Maple	*Acer saccharinum*	24		Retained
86	492	White Pine	*Pinus strobus*	10		Retained
87	493	Eastern White Cedar	*Thuja occidentalis*	44		Retained
88	494	Basswood	*Tilia americana*	36	Multistemmed	Retained
89	495	Crack Willow	*Salix fragilis*	66	Multistemmed; large cavities	Retained
90	496	Bitternut Hickory	*Carya cordiformis*	39		Retained
91	497	Basswood	*Tilia americana*	15		Retained
92	498	Basswood	*Tilia americana*	20	Multistemmed	Retained
93	499	American Elm	*Ulmus americana*	15		Retained
94	500	Basswood	*Tilia americana*	23	Multistemmed	Retained
95	501	Ironwood	*Ostrya virginiana*	13		Retained
96	502	Bitternut Hickory	*Carya cordiformis*	26		Retained
97	503	Basswood	*Tilia americana*	28		Retained
98	504	Ironwood	*Ostrya virginiana*	14		Retained
99	505	Bitternut Hickory	*Carya cordiformis*	48	Multistemmed	Retained
100	506	Bitternut Hickory	*Carya cordiformis*	18		Retained
101	507	Bitternut Hickory	*Carya cordiformis*	22		Retained
102	508	Bitternut Hickory	*Carya cordiformis*	22		Retained
103	509	Bitternut Hickory	*Carya cordiformis*	36		Retained
104	510	Ironwood	*Ostrya virginiana*	10		Retained
105	511	American Elm	*Ulmus americana*	15		Retained
106	512	Ironwood	*Carya cordiformis*	18		Retained
107	513	Bitternut Hickory	*Carya cordiformis*	21		Retained
108	514	Bitternut Hickory	*Carya cordiformis*	26		Retained
109	515	Bitternut Hickory	*Carya cordiformis*	16		Retained
110	516	Bitternut Hickory	*Carya cordiformis*	15		Retained
111	517	Bitternut Hickory	*Carya cordiformis*	24		Retained
112	518	Bitternut Hickory	*Carya cordiformis*	20		Retained
113	519	Bitternut Hickory	*Carya cordiformis*	21		Retained
114	520	Bitternut Hickory	*Carya cordiformis*	17		Retained
115	521	Bitternut Hickory	*Carya cordiformis*	19		Retained
116	522	Bitternut Hickory	*Carya cordiformis*	33		Retained
117	523	Bitternut Hickory	*Carya cordiformis*	10		Retained
118	524	Bitternut Hickory	*Carya cordiformis*	24		Retained
119	525	Bitternut Hickory	*Carya cordiformis*	54		Retained
120	526	Bitternut Hickory	*Carya cordiformis*	12		Retained
121	527	Bitternut Hickory	*Carya cordiformis*	21		Retained
122	528	Bitternut Hickory	*Carya cordiformis*	24		Retained
123	529	Bitternut Hickory	*Carya cordiformis*	16		Retained
124	530	Bitternut Hickory	*Carya cordiformis*	20	Multistemmed	Retained
125	531	American Elm	*Ulmus americana*	16		Retained
126	532	Black Ash	*Fraxinus americana*	20	Evidence of Emerald Ash Borer	Retained
127	533	Crack Willow	*Salix fragilis*	22		Retained
128	534	Crack Willow	*Salix fragilis*	50		Retained
129	535	Black Ash	*Fraxinus americana*	18		Retained
130	536	Crack Willow	*Salix fragilis*	38		Retained
131	537	Basswood	*Tilia americana*	55	Multistemmed	Retained
132	538	Eastern White Cedar	*Thuja occidentalis*	46	Cavities	Retained
133	539	Crack Willow	*Salix fragilis*	33		Retained
134	540	Butternut	*Juglans cinerea*	8	Dead	Retained
135	541	Butternut	*Juglans cinerea*	59	Healthy crown; open and sooty cankers	Retained
136	542	Bitternut Hickory	*Carya cordiformis*	48		Retained
137	543	Bitternut Hickory	*Carya cordiformis*	12		Retained

138	544	Bitternut Hickory	*Carya cordiformis*	20		Retained
139	545	Bitternut Hickory	*Carya cordiformis*	13		Retained
140	546	American Elm	*Ulmus americana*	13		Retained
141	547	Butternut	*Juglans cinerea*	16	Dead	Retained
142	548	Bitternut Hickory	*Carya cordiformis*	18		Retained
143	549	Bitternut Hickory	*Carya cordiformis*	24		Retained
144	550	Bitternut Hickory	*Carya cordiformis*	24		Retained
145	551	Ironwood	*Ostrya virginiana*	17		Retained
146	552	Bitternut Hickory	*Carya cordiformis*	26		Retained
147	553	Bitternut Hickory	*Carya cordiformis*	24		Retained
148	554	Basswood	*Tilia americana*	17		Retained
149	555	Bitternut Hickory	*Carya cordiformis*	22		Retained
150	556	Bitternut Hickory	*Carya cordiformis*	26		Retained
151	557	American Elm	*Ulmus americana*	12		Retained
152	558	American Elm	*Ulmus americana*	10		Retained
153	559	Eastern White Cedar	*Thuja occidentalis*	20	Multistemmed; cavities	Retained
154	560	Eastern White Cedar	*Thuja occidentalis*	24	Woodpecker holes	Retained
155	561	Bitternut Hickory	*Carya cordiformis*	24		Retained
156	562	Eastern White Cedar	*Thuja occidentalis*	26	Multistemmed; woodpecker holes	Removed
157	563	American Elm	*Ulmus americana*	12		Retained
158	564	American Elm	*Ulmus americana*	36	Dying crown	Retained
159	565	Bitternut Hickory	*Carya cordiformis*	16		Removed
160	566	Bitternut Hickory	*Carya cordiformis*	24		Removed
161	566	Bitternut Hickory	*Carya cordiformis*	22		Removed
162	567	Eastern White Cedar	*Thuja occidentalis*	22-28	Hedgerow	Removed
163	568	Eastern White Cedar	*Thuja occidentalis*	22-28	Hedgerow	Removed
164	569	Eastern White Cedar	*Thuja occidentalis*	22-28	Hedgerow	Removed
165	570	Eastern White Cedar	*Thuja occidentalis*	22-28	Hedgerow	Removed
166	571	Eastern White Cedar	*Thuja occidentalis*	22-28	Hedgerow	Removed
167	572	Eastern White Cedar	*Thuja occidentalis*	22-28	Hedgerow	Removed
168	573	Eastern White Cedar	*Thuja occidentalis*	22-28	Hedgerow	Removed
169	574	Eastern White Cedar	*Thuja occidentalis*	22-28	Hedgerow	Removed
170	575	Eastern White Cedar	*Thuja occidentalis*	26		Removed
171	576	Bitternut Hickory	*Carya cordiformis*	30		Removed
172	577	Bitternut Hickory	*Carya cordiformis*	43		Removed
173	578	Eastern White Cedar	*Thuja occidentalis*	38	Multistemmed	Removed
174	579	White Oak	*Quercus alba*	74		Removed
175	580	Eastern White Cedar	*Thuja occidentalis*	39		Removed
176	581	Eastern White Cedar	*Thuja occidentalis*	66		Removed
177	582	Eastern White Cedar	*Thuja occidentalis*	50		Removed
178	583	Eastern White Cedar	*Thuja occidentalis*	41	Multistemmed	Removed
179	584	Eastern White Cedar	*Thuja occidentalis*	36	Multistemmed	Removed
180	585	Eastern White Cedar	*Thuja occidentalis*	42	Multistemmed	Removed
181	587	Eastern White Cedar	*Thuja occidentalis*	38		Removed
182	588	Eastern White Cedar	*Thuja occidentalis*	42		Removed
183	589	Eastern White Cedar	*Thuja occidentalis*	42		Removed
184	590	Eastern White Cedar	*Thuja occidentalis*	44		Removed
185	591	Bitternut Hickory	*Carya cordiformis*	41		Removed
186	592	Basswood	*Tilia americana*	46		Removed
187	593	White Spruce	*Picea glauca*	46		Removed
188	594	Eastern White Cedar	*Thuja occidentalis*	20-30	Hedgerow; poor health	Removed
189	595	Eastern White Cedar	*Thuja occidentalis*	20-30	Hedgerow; poor health	Removed
190	596	Eastern White Cedar	*Thuja occidentalis*	20-30	Hedgerow; poor health	Removed
191	597	Eastern White Cedar	*Thuja occidentalis*	20-30	Hedgerow; poor health	Removed
192	598	Eastern White Cedar	*Thuja occidentalis*	20-30	Hedgerow; poor health	Removed
193	599	Eastern White Cedar	*Thuja occidentalis*	20-30	Hedgerow; poor health	Removed
194	600	Eastern White Cedar	*Thuja occidentalis*	20-30	Hedgerow; poor health	Removed
195	601	Eastern White Cedar	*Thuja occidentalis*	20-30	Hedgerow; poor health	Removed
196	602	Eastern White Cedar	*Thuja occidentalis*	20-30	Hedgerow; poor health	Removed
197	603	Eastern White Cedar	*Thuja occidentalis*	20-30	Hedgerow; poor health	Removed