Prepared By:

Tree Inventory and Interim Preservation Plan

496857 Grey Road 2

Town of The Blue Mountains, County of Grey

Project No. 03-009-2023

September 12, 2024

23 HERRELL AVENUE, BARRIE ON L4N 6T5
WWW.BIRKSNHC.CA

23 Herrell Ave
Barrie, Ontario
L4N 6T5

September 12, 2024

Homefield Management Ltd.
1202 -45 St. Clair Ave. West
Toronto, Ontario
M4V 1K9

Attention: Alex Hahn, Manager Development

RE: Birks NHC File No. 03-009-2023
Tree Inventory and Interim Protection Plan
496857 Grey Rd 2,
Town of Blue Mountains, County of Grey

Dear Mr. Hahn,

Thank you for retaining Birks Natural Heritage Consultants, Inc. ("Birks NHC") to prepare a Tree Inventory and Interim Protection Plan for the property identified as 496857 Grey Rd 2 in the Town of the Blue Mountains, County of Grey. We understand that this plan is being requested in support of a development application comprised of an Official Plan Amendment, Zoning By-law Amendment, Draft Plan of Subdivision and Common Elements Plan of Condominium.

In preparation of the recommendations outlined herein, Birks NHC staff attended the site in June 2024 to complete a tree inventory for the proposed area of alteration. This report presents the findings of the inventory, a preliminary woodland compensation strategy for those tree resources proposed for removal, in accordance with the requirements of the County of Grey and the Town of the Blue Mountains ("Town:). This report has also been prepared in consideration of the tree removal requirements of the Town of Blue Mountains Municipal Tree By-Law 2010-68.

If you have any questions or concerns regarding this report, please do not hesitate to contact the undersigned.

Birks Natural Heritage Consultants Inc.

Melissa Fuller, H.B.Sc.
Ecologist
ISA Certified Arborist ON-1992A

Table of Contents

Tables

Appendices

1 INTRODUCTION

Birks Natural Heritage Consultants, Inc. ('Birks NHC') was retained by Homefield Management Ltd. (the 'proponent') to undertake the preparation of a Tree Inventory and Protection Plan (TIPP) for the lands located at 496857 Grey Road 2 (the 'property') in the Town of The Blue Mountains (the 'Town'), County of Grey.

The property is within the Thornbury/Clarksburg settlement area of The Town of The Blue Mountains and is accessed by an existing driveway from Grey Road 2. The property is irregularly, rectangular shaped and measures approximately 36.5 hectares ('ha') in size, bordered by the Georgian Trail and residential lands to the east and Grey Road 2 to the west. The property contains natural heritage features mapped by the Town of the Blue Mountains Official Plan (2016) and the County of Grey Official Plan (2019) including Significant Woodlands and 'Other Wetlands'.

Birks NHC completed an Environmental Impact Study ('EIS') for the property based which would allow for residential development within the northern portion of the property (Birks NHC, 2024). A Tree Inventory and Protection Plan is a condition of acquiring development approvals for the property where tree clearing and grading operations are proposed to occur. This report has been prepared to satisfy requirements under the Town's Municipal Tree By-law 2010-68.

2 GENERAL SITE DESCRIPTION

The northern portion of the property is partially developed with man made ponds, an established entranceway and cabin. A number of foot and motorized vehicle trails transect the property; however the southern portion of the property remains relatively undisturbed. Indian Brook borders the north-east property line. Land uses associated with adjacent lands include agriculture to the west and south, established woodlands to the north and south, and an RV resort campground to the north.

A number of vegetation communities were identified on the property; deciduous and coniferous forests and deciduous and coniferous swamps communities are prevalent on site, interspersed with upland and wetland meadows (Figure 1). Vegetation communities were assessed using the Ecological Land Classification ('ELC') method described by Lee *et al.* (1998) as part of the Birks NHC EIS. Further details regarding the vegetation communities can be found in the August 2024 Birks NHC EIS report prepared in support of the development application.

3 PROPOSED DEVELOPMENT PLAN

Homefield Communities is proposing to develop a land lease community south of Indian Brook and adjacent to the Georgian Trail. The development is proposed to consist of 376 residential dwelling units

comprising 220 standard rowhouse units and 156 back-to-back rowhouse units for a net density of approximately 39 units per hectare. A significant number of the units are proposed to meet the Town's attainable housing cost threshold. Although the subject lands comprise 37.37 ha in total area, only 9.8 ha (26.2%) is developable due to environmental constraints as outlined within the EIS (Birks NHC 2024).

A multi-use trail connection to the Georgian Trail is proposed in the east, as well as a stormwater management pond ('SWMP') and numerous parks and green spaces. The site plan allows for a 30 m setback to the permanent water level Indian Brook and a minimum 15 m setback the retained wetland habitats. A recreational trail is proposed within the natural areas to the south of the development area (Appendix A). The site plan will result in the alteration of approximately 4.83 hectares ('ha') of the property's woodlands, specifically comprised of deciduous and coniferous forests and deciduous and coniferous swamps.

4 TREE INVENTORY

Birks NHC undertook a field inventory in the area of the proposed disturbance and extending a minimum of 6 metres ('m') from the proposed limits of disturbance, as understood at the time of survey (June 11 and 14, 2024). The surveyed area was densely forested and random plots (with 12.5 m diameter) within the forested areas were identified and inventoried to record:

- Species and species abundance;
- Condition of the trees; and,
- The number of trees within each of the plots. The trees were categorized into five different size categories, with minimum diameter at breast height ('DBH') recorded being 10 centimeters ('cm'). The size categories were assigned as follows:
    - 10 cm -15.9 cm DBH
    - 16 cm -20.9 cm DBH
    - 21 cm -25.9 cm DBH
    - >26 cm DBH

Areas that were devoid of large (>10 cm DBH) woody specimens were avoided when assigning the location of tree inventory plots. The location of the surveyed plots is provided in Appendix B.

Where individual tree specimens were identified within meadow communities, individual trees and/or tree groupings were documented where the following information was recorded:

- Location of the individual trees or groupings, as recorded with handheld GPS (3 m accuracy);
- Diameter of tree at 1.4m (DBH) above ground surface;
- Canopy size;
- Health, including but not limited to structural integrity, percent deadwood, crown vigor, pathogenical concerns, decay and potential for failure;
- Individual trees were assigned a unique identifier utilizing aluminum tags with an etched number.

The location of the inventoried trees is provided in Appendix B.

The methodology outlined above was confirmed to be acceptable by the County of Grey, who will be reviewing this report on behalf of the Town. Confirmation of the accepted Terms of Reference is provided in Appendix C.

4.1 RESULTS

4.1.1 Forested Areas

The tree inventory was conducted on June 11 and 14, 2024. In total, 20 plots were surveyed (a total area of 1 ha surveyed), with 970 trees recorded within the plots. In addition, 5 tree groupings were identified; all individuals within these small groupings were tallied as well. Trees within the plots and groupings were assigned to size categories based on DBH, with the majority (70%) of the trees being 10 cm – 20.9 cm DBH in size (Table 1).

Table 1. Tree Size Representation within Forested Areas and Tree Goupings

	DBH (cm)			
	10 – 15.9	**16 – 20.9**	**21 – 25.9**	**> 26 – 30.9**
Number of Trees	444 (40%)	319 (29%)	212 (19%)	128 (12%)

The majority of trees documented within forested communities and tree groupings were White Cedar, with the species being present in 96% of the surveyed plots, and representing 71% of the total trees inventoried (Table 2). White Pine was also widely distributed through the property (present in 68% of the plots) however only 9% of the trees surveyed were White Pine. The remainder of the tree species were found in twenty to thirty percent of the surveyed plots, however species were observed in low numbers, each only representing two to three percent of those found on the property, in forested areas. A full list of species observed within each of the survey plots and tree groupings is provided in Appendix B.

Table 2. Species Representation Within Forested Areas

Species	Number of plots Containing the Species	% of plots	Total Number of trees recorded	% trees
Apple *(Malus* sp.)	8	32%	29	3%
Balsam Poplar (*Populus balsamifera*)	4	16%	20	2%
Basswood (*Tilia americana*)	1	4%	1	0%
Black Walnut (*Juglans nigra*)	3	12%	4	0%
Cherry species (*Prunus* sp.)	3	12%	8	1%
Eastern Hemlock (*Tsuga occidentalis*)	2	8%	9	1%
Eastern Redcedar *(Juniperus virginiana*)	3	12%	6	1%
Eastern White Cedar (*Thuja occidentalis*)	24	96%	783	71%
European Buckthorn (*Rhamnus cathartica*)	9	36%	25	2%
Green Ash (*Fraxinus pennsylvanica*)	7	28%	17	2%
Paper Birch *(Betlula papyifera*)	1	4%	9	1%
Red Maple (*Acer rubrum*)	1	4%	6	1%
Sugar Maple (*Acer saccharum*)	1	4%	1	0%
Scots Pine (*Pinus sylvestris*)	7	28%	67	6%
White Ash (*Fraxinus americana*)	5	20%	9	1%
White Elm (*Ulmnus americana*)	5	20%	11	1%
White Pine (*Pinus strobus*)	17	68%	95	9%
White Spruce (*Picea glauca*)	3	12%	4	0%

4.1.2 Open Areas

Within the open areas of the property, tree specimens were largely represented by conifers, specifically Red Pine, White Pine, White Spruce and Scots Pine (Table 3). The remainder of the trees were primarily deciduous trees, with Black Walnut, fruit trees and White Elm. The full inventory is presented in Appendix B.

Table 3. Species Representation Within Open Areas

Species	Number of Trees	Percentage Representation
Apple (*Malus* sp.)	1	1.32%
Austrian Pine (*Pinus nigra*)	1	1.32%
Black Walnut (*Juglans nigra*)	11	14.47%
Eastern White Cedar (*Thuja occidentalis*)	7	9.21%
Green Ash (*Fraxinus pennsylvanica*)	2	2.63%
Manitoba Maple (*Acer negundo*)	5	6.58%
Fruit Tree (*Prunus* sp.)	6	7.89%
Red Pine (*Pinus resinosa*)	15	19.74%
Scots Pine (*Pinus sylvestris*)	5	6.58%
White Pine (*Pinus strobus*)	9	11.84%
Sugar Maple (*Acer saccharum*)	1	1.32%
White Elm (*Ulmus americana*)	4	5.26%
White Spruce (*Picea glauca*)	8	10.53%
White Ash (*Fraxinus americana*)	1	1.32%

Overall, the trees were considered to be in good health, with the exception of Ash trees which were regularly determined to be dead and/or dying throughout the inventoried area, a result of Emerald Ash Borer activity.

5 TREE COMPENSATION AND REPLACEMENT

The completion of the tree inventory allows for an understanding of the tree resources present on the property, the species composition, the stem density present within forested areas, and the health of the species, all of which are considerations when determining compensation for tree removals.

For this property, there are invasive species (European Buckthorn), exotic species (Scots Pine, fruit trees) and failing trees (Green Ash, White Ash) that would not warrant replacement. Further, many of the forest plots were comprised of dense cedar stands, which have limited ecological function in the landscape and thus would not necessarily warrant replacement at a 1:1 ratio. Thus, our compensation and replacement calculations consider these factors in calculating the number of stems to be replaced.

Of the individual trees surveyed, only 40 of the specimens would be suitable for replacement (Appendix B).

Within the wooded areas, the vegetation communities identified for compensation include WOCM1, FOCM2-2, FOMM4-2 and SWCM1-1. The areas to be removed, stem density per ELC community and maximum stem compensation is presented in Table 4 below.

Table 4 Forest Compensation Calculations

ELC Community	Area to be Removed (ha)	Stem Density (stems/ha)[2]	Total Stem Compensation
WOCM1	0.25	1140	285
FOCM2-2	3.59	960	2584[1]
FOMM4-2	0.85	760	646
SWCM1-1	0.14	813	114
TOTAL	**4.83**		**3629**

[1]Assumes 0.75:1 Replacement Ratio
[2] Density calculations exclude European Buckthorn, Apple sp., Cherry Sp., White Ash, Green Ash, and Scot's Pine

5.1 Interim Tree Preservation and Protection Plan

Protective barriers prevent physical harm to the trunk, canopy, and root zone of a tree or other vegetation that may result from site alteration, construction, and demolition activities and prevent access to an established protection zone. All areas located outside of the development footprint are considered to comprise this protection zone.

Any activity which could result in injury or destruction of a protected tree or natural feature, or alteration of grade is prohibited within the protected areas including, but not limited to, any of the following examples:

- Demolition, construction, replacement or alteration of permanent or temporary buildings or structures, parking pads, driveways, sidewalks, dog runs, pools, retaining walls, patios, decks, terraces, sheds or raised gardens;
- Installation of large stones or boulders;
- Altering grade by adding or removing soil or fill, excavating, trenching, topsoil or fill scraping, compacting soil or fill, dumping or disturbance of any kind (excluding activities associated with future natural feature compensation initiatives);
- Storage of construction materials, equipment, wood, branches, leaves, soil or fill, construction waste or debris of any sort;
- Application, discharge or disposal of any substance or chemical that may adversely affect the health of a tree (*e.g.* concrete sluice, gas, oil, paint, pool water or backwash water from a swimming pool);
- Causing or allowing water or discharge, to flow over slopes or through natural areas;
- Access, parking or movement of vehicles, equipment (excluding those associated with future natural feature compensation initiatives);

- Cutting, breaking, tearing, crushing, exposing or stripping tree's roots, trunk and branches;
- Nailing or stapling into a tree, including attachment of fences, electrical wires or signs;
- Stringing of cables or installing lights on trees;
- Oil remediation, removal of contaminated fill; and
- Excavating for directional or micro-tunnelling and boring entering shafts.

The following considerations are pertinent to the protection of the retained trees and vegetation communities:

- Protective fencing surrounding the perimeter of the development is to remain in place until all site works have been completed and the risk of damage is no longer a concern.
- Protective fencing shall be provided in a continuous manner at the edge of the development limit.
- Sediment and erosion controls along the limits of the protection zone are be installed prior to all construction activities.
- All fencing is to remain in good condition throughout construction and until vegetation is established post-construction.
- Signs are to be mounted on the construction side of the tree protection fencing for the duration of the project to identify the development limits and vegetation protection areas.
- Where the roots of retained trees are exposed within the grade alteration areas, root cuts should be completed quickly and efficiently, completed under the supervision of a qualified professional.
- Root cutting, canopy trimming, limb pruning, tree structure enhancement of retained trees is to be monitored by a Certified Arborist.

6 TREE REMOVALS TIMING

Migratory birds, nests, and eggs are protected by the *Migratory Birds Convention Act*, 1994 and the *Fish and Wildlife Conservation Act*, 1997. Environment Canada outlines dates when activities in any region have potential to impact nests at the Environment Canada Website (https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds.html). In addition, tree removal on the property shall consider the active season for bats, in order to ensure that Endangered Bat Species are not incidentally harmed during removals, in accordance with the *Endangered Species Act*, 2007. Therefore, tree removal should occur between November 1 and March 15 of the following year. No tree removals should occur outside that period, unless proceeded by inspection by a qualified Ecologist knowledgeable in bat and avian behaviour.

7 DUMPING POLICIES

Section 5 of Ontario Regulation 151/06 under the *Conservation Authority Act*, 1990 states:

> *"no person shall straighten, change, divert or interfere in any way with the existing channel of a river, creek, stream or watercourse or change or interfere in any way with a wetland."*

Additionally, Section 2 of by-law 99-10 for the Town of Blue Mountains states:

> *"No person shall place or cause to be placed by any action or inaction litter or debris within the Town of The Blue Mountains."*

Therefore, no dumping of yard waste, garbage or other unwanted debris of any kind shall occur within the retained Significant Woodland and 'Other Wetland' going forward. These materials can pose a significant risk to the ecological integrity and function of these features by introducing various pollutants that can severely impact water quality and the overall health of wildlife and other organisms.

Yard waste, garbage, and unwanted debris should be disposed in a manner that conforms to municipal guidelines and regulations. For information on how to dispose of unwanted debris, please contact the Town of Blue Mountains' Operations Department at 519-599-3131 ext. 276 or visit their website at https://www.thebluemountains.ca/resident-services/garbage-recycling-waste.

8 CONCLUSION

This Tree Inventory and Preservation Plan was prepared in accordance with the Town of the Blue Mountains Municipal Tree By-law and in consultation with the County of Grey. The Plan aims to identify compensation requirements for tree removals and measures to protect retained specimen. The report includes a summary site description, a tree inventory, and interim tree protection plan.

Should the plan presented herein be initiated and followed through, it is expected that the potential impacts associated with the tree removal and grade alteration will be offset.

We trust that this restoration plan meets the requirements of local land-use authorities, including the Town of the Blue Mountains and County of Grey.

9 REFERENCES

Birks Natural Heritage Consultants, Inc. (Birks NHC). 2024. Environmental Impact Study – 496857 Grey Road 2, Town of the Blue Mountains. August 2024

Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and Its Application.

Town of the Blue Mountains. 2010. Town of the Blue Mountains Official Plan. Tree Preservation By-Law 2010-68

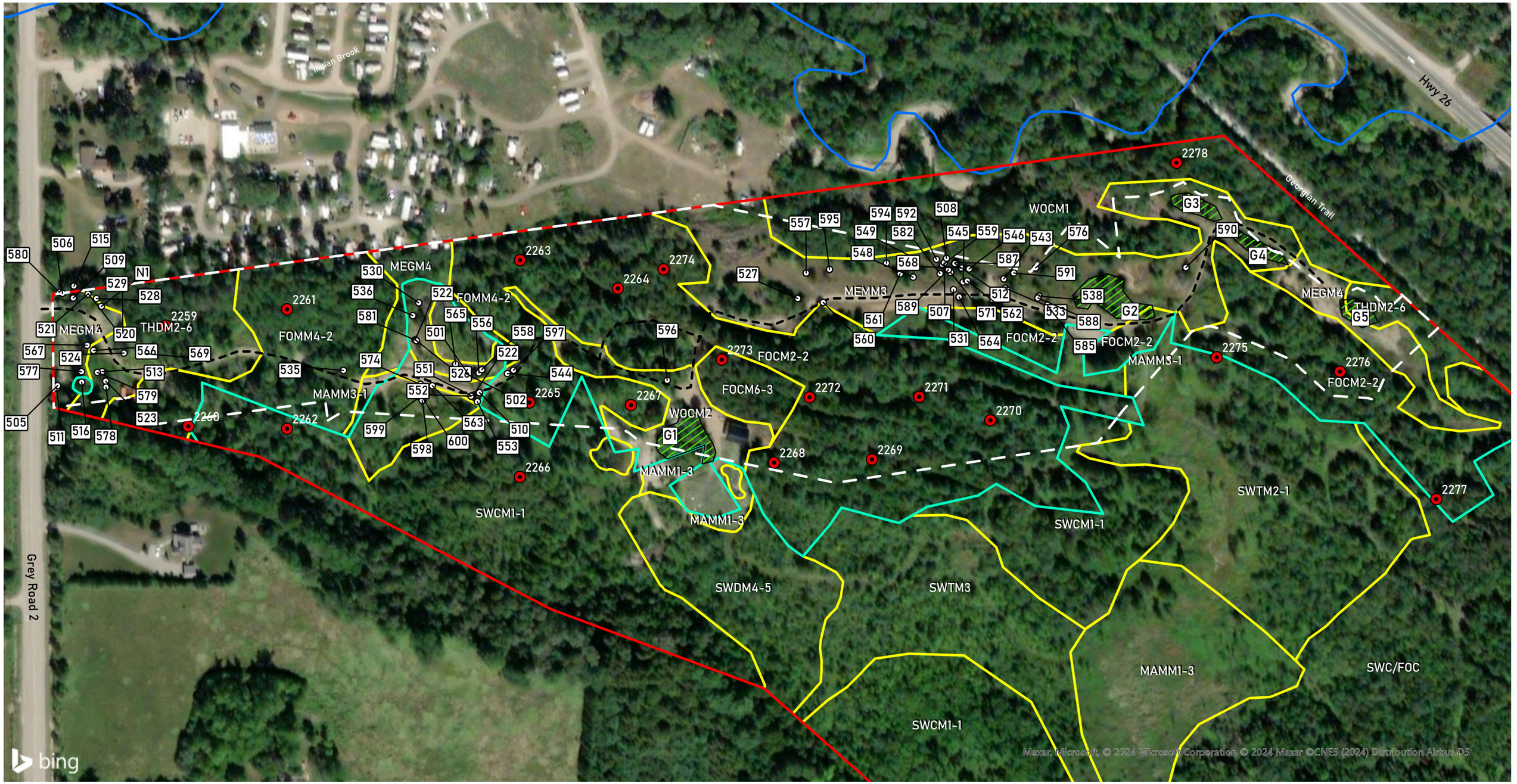
Town of the Blue Mountains. 2016. Town of the Blue Mountains Official Plan. https://www.thebluemountains.ca/planning-building-construction/land-use-planning/official-plan

APPENDIX A

Site Development Plan

BIRKS

NATURAL HERITAGE CONSULTANTS



496857 Grey Road 2

Town of The Blue Mountains

Figure 1:

Tree Inventory and Preservation Plan

- Property Limit
- Watercourse (LIO)
- Access Driveway
- Birks NHC Wetland Limit (July 2023)
- ELC Vegetation Community
- Tree Inventory Plots
- Tree Inventory (Birks NHC)
- Tree Grouping
- Grading Limit

THDM2-6 Buckthorn Deciduous Shrub Thicket
WOCM1 Dry-Fresh Coniferous Woodland
WOCM2 Fresh-Moist Coniferous Woodland
FOCM2-2 Dry-Fresh White Cedar Coniferous Forest
FOCM6-3 Dry-Fresh Scots Pine Naturalized Coniferous Plantation
FOMM4-2 Dry-Fresh White Cedar-Poplar Mixed Forest
MEMM3 Dry-Fresh Mixed Meadow
MEGM4 Fresh-Moist Graminoid Meadow
MAMM3-1/SWT Mixed Mineral Meadow Marsh/Thicket Swamp
MAMM1-3 Reed-canary Grass Graminoid Mineral Meadow Marsh
SWTM3 Willow Mineral Deciduous Thicket Swamp
SWTM2-1 Red-osier Dogwood Mineral Deciduous Thicket Swamp
SWDM4-5 Poplar Mineral Deciduous Swamp
SWCM1-1 White Cedar Coniferous Swamp
SWC/FOC Coniferous Swamp/Coniferous Forest

MAP DRAWING INFORMATION:
IMAGERY DATA PROVIDED BY: BING MAPS

MAP CREATED BY: SB
MAP CHECKED BY: MF
MAP PROJECTION: NAD 1983 UTM ZONE 17N

0 25 50 100 150 Meters

FILE LOCATION:

Path: C:\Users\S_Brady\BirksNHC\Birks NHC Team for all - Documents\Project Folders\04 - SBrady Projects\ArcGIS - Projects here\Projects - here\03-009-2023 Grey Rd 2

PROJECT: 03-009-2023 STATUS: DRAFT DATE: 13/08/2024

Tag Number	Species		Canopy (diameter in m)	DBH (cm)	Notes	Replacement Recommended (Y/N)
	Common Name	Latin Name				
548	Apple	*Malus* sp.	6	11	Good	N
510	Austrian Pine?	*Pinus* sp.	10	37	Fair	N
506	Black Walnut	*Juglans nigra*	20	38	Good health	Y
N1	Black Walnut	*Juglans nigra*	8	20	Good, 2 m north of property line	N
513	Black Walnut	*Juglans nigra*	1	14, 10, 13, 14	Multi stem, suckering on stem, nearly dead	N
579	Black Walnut	*Juglans nigra*	3	23	Multi stem, poor condition 40% canopy	N
523	Black Walnut	*Juglans nigra*	14	32	Good health, 80% canopy, lower branches dying	Y
516	Black Walnut	*Juglans nigra*	6	25	Good health	Y
577	Black Walnut	*Juglans nigra*	8	36	Good health	Y
566	Black Walnut	*Juglans nigra*	10	32	Good	Y
567	Black Walnut	*Juglans nigra*	20	44	Failing health, dying branches, 65% canopy	N
569	Black Walnut	*Juglans nigra*	10	22	Failing, 70% canopy	N
524	Black Walnut	*Juglans nigra*	12	31	Good condition	Y
522	Eastern White Cedar	*Thuja occidentalis*	4	17	Good condition	Y
551	Eastern White Cedar	*Thuja occidentalis*	1	16	Fair	Y
552	Eastern White Cedar	*Thuja occidentalis*	1	10	Peeling bark, poor condition	N
553	Eastern White Cedar	*Thuja occidentalis*	2	12	Fair	N
545	Eastern White Cedar	*Thuja occidentalis*	5	19, 14	2 stems	Y
543	Eastern White Cedar	*Thuja occidentalis*	4	15	Good	Y
522	Eastern White Cedar	*Thuja occidentalis*	1	12	Fair	Y
558	Green Ash	*Fraxinus pennsylvanica*	1	23	Dying	N
536	Green Ash	*Fraxinus pennsylvanica*	1	10	Dying	N
509	Manitoba Maple	*Acer negundo*	8	20	Good condition, fruit set in abundance	N
520	Manitoba Maple	*Acer negundo*	6	22	Good health	N
521	Manitoba Maple	*Acer negundo*	10	19, 13	Two stems, good condition	N

Tag Number	Species		Canopy (diameter in m)	DBH (cm)	Notes	Replacement Recommended (Y/N)
	Common Name	Latin Name				
511	Manitoba Maple	*Acer negundo*	8	50	Poor health, ROW tree, upper canopy diying back	N
505	Manitoba Maple	*Acer negundo*	3	14	Poor health, row tree	N
571	Fruit Tree	Prunus sp	6	14, 11	2 stems	N
589	Fruit Tree	Prunus sp	10	13, 14, 16	Three stem, mystery fruit tree	N
580	Fruit Tree	Prunus sp.	4	30	Two leaders, peeling bark, poor condition	N
515	Fruit Tree	Prunus sp.	4	12	Leaning, growing on bank.	N
585	Fruit Tree	Prunus sp.	4	13	Good	N
590	Fruit Tree	Prunus sp.	6	15, 16, 10, 13	Four stems. Good	N
568	Red Pine	*Pinus resinosa*	7	20	Poor	N
557	Red Pine	*Pinus resinosa*	6	29	Good	Y
595	Red Pine	*Pinus resinosa*	6	27	Fair health	Y
527	Red Pine	*Pinus resinosa*	8	26	Good	Y
560	Red Pine	*Pinus resinosa*	8	28	Good	Y
592	Red Pine	*Pinus resinosa*	4	24	Good	Y
559	Red Pine	*Pinus resinosa*	6	22	Good	Y
508	Red Pine	*Pinus resinosa*	8	23	Good	Y
587	Red Pine	*Pinus resinosa*	4	17	Fair	Y
546	Red Pine	*Pinus resinosa*	7	24	Fair	Y
564	Red Pine	*Pinus resinosa*	5	23	Fair	Y
531	Red Pine	*Pinus resinosa*	7	22, 22	2 stems, poor	N
576	Red Pine	*Pinus resinosa*	6	17	Good	Y
538	Red Pine	*Pinus resinosa*	8	21	Fair	Y
588	Red Pine	*Pinus resinosa*	6	24	Fair	Y
591	Scots Pine	*Pinus sylvestris*	4	16	Good	N
581	Scots Pine	*Pinus sylvestris*	6	13	Poor health	N
526	Scots Pine	*Pinus sylvestris*	4	23	Fair health	N
549	Scots Pine	*Pinus sylvestris*	3	12	Fair	N
582	Scots Pine	*Pinus sylvestris*	4	18	Fair	N

Tag Number	Species		Canopy (diameter in m)	DBH (cm)	Notes	Replacement Recommended (Y/N)
	Common Name	Latin Name				
596	Sugar maple	*Acer saccharinum*	12	85	Surviving limb looks health. Half of crown has been cut off. Leaning. Remove	N
533	White Ash	*Fraxinus americana*	3	17	Dying	N
574	White Elm	*Ulmnus americana*	4	13	Fair health, upper canopy dying back	Y
565	White Elm	*Ulmnus americana*	3	19	Poor dying	N
556	White Elm	*Ulmnus americana*	3	15	Poor health	N
528	White Elm	*Ulmnus americana*	20	42	Good condition	Y
535	White Pine	*Pinus strobus*	8	32	Failing health, poor, sparse canopy,	N
599	White Pine	*Pinus strobus*	6	16	Good	Y
600	White Pine	*Pinus strobus*	10	16	Good	Y
594	White Pine	*Pinus strobus*	8	33	Good	Y
561	White Pine	*Pinus strobus*	9	34	Good	Y
507	White Pine	*Pinus strobus*	6	22	Good	Y
512	White Pine	*Pinus strobus*	5	26	F Good	Y
562	White Pine	*Pinus strobus*	4	30	Good	Y
598	White Pine	*Pinus strobus*	8	10	Good	Y
563	White Spruce	*Picea glauca*	8	27	Fair health, canopy die back	N
529	White Spruce	*Picea glauca*	4	54	EPoor condition, one dead leader, 30% canopy remains. Remove.	N
578	White Spruce	*Picea glauca*	8	50	Poor health, dying, only upper 3 is healthy	N
530	White Spruce	*Picea glauca*	3	14	Fair health	Y
502	White Spruce	*Picea glauca*	8	27	Good health	Y
501	White Spruce	*Picea glauca*	6	28	Good health	Y
544	White Spruce	*Picea glauca*	10	41	Good	Y
597	White Spruce	*Picea glauca*	8	52	Good	Y

Location	ELC Community	Species		Diameter at Breast Height (DBH) Tally (cm)					Notes
		Common Name	Latin Name	10 - 15.9	16 - 20.9	21 - 25.9	>26	Total	
2259	THDM2-6	Apple	*Malus sp.*	5	3			8	Green ash is failing, high representation of planted and non native species, represents 73 percent of individuals in this plot.
		Black Walnut	*Juglans nigra*	2				2	
		European Buckthorn	*Rhamnus cathartica*	2				2	
		Green Ash	*Fraxinus pennsylvanica*	5	1	1		7	
		White Elm	*Ulmnus americana*	1			1	2	
		White Spruce	*Picea glauca*				2	2	
2260	FOMM4-2/ SWCM1-1	Apple	*Malus sp.*	1				1	Representative of hill slope forest community, all species is fair and good health
		Black Walnut	*Juglans nigra*				1	1	
		Eastern Hemlock	*Tsuga canadesis*	1		2	1	4	
		Eastern White Cedar	*Thuja occidentalis*	10	6	4	1	21	
		Red Maple	*Acer rubrum*			1	5	6	
		White Elm	*Ulmnus americana*	2	1			3	
		White Pine	*Pinus strobus*	1			3	4	
2261	FOMM4-2	Apple	*Malus sp.*	2		2		4	Specimens in good health
		Balsam Poplar	*Populus balsamifera*	1	7	1		9	
		Basswood	*Tilia americana*	1				1	
		Eastern White Cedar	*Thuja occidentalis*	12	7	2	1	22	
		White Pine	*Pinus strobus*	1			4	5	
2262	SWCM1-1	Apple	*Malus sp.*	4	2	1	3	10	All ash trees had evidence of Emerald Ash Borer. Hi representation of fruit trees within this plot. Remaining species were in good health.
		Cherry sp.	*Prunus sp.*				1	1	
		Eastern White Cedar	*Thuja occidentalis*	9	1	2		12	
		European Buckthorn	*Rhamnus cathartica*	2				2	
		Green Ash	*Fraxinus pennsylvanica*	1	1			2	
		White Ash	*Fraxinus americana*	2				2	
		White Elm	*Ulmnus americana*		1			1	
		White Pine	*Pinus strobus*		3			3	
2263	FOCM2-2	Eastern White Cedar	*Thuja occidentalis*	30	22	11	1	64	Plot was heavily represented by White Cedar, with densely packed stems. Limited undergrowth. Limited viable branches within the understory.
		European Buckthorn	*Rhamnus cathartica*	2				2	
		Scots Pine	*Pinus sylvestris*	3				3	
		White Pine	*Pinus strobus*	1	2		2	5	

Location	ELC Community	Species		Diameter at Breast Height (DBH) Tally (cm)					Notes
		Common Name	Latin Name	10 - 15.9	16 - 20.9	21 - 25.9	>26	Total	
2264	FOCM2-2	Eastern Hemlock	*Tsuga canadesis*			2	3	5	Trees in fair to good condition
		Eastern White Cedar	*Thuja occidentalis*	2	21	14	1	38	
		White Pine	*Pinus strobus*		1		2	3	
2265	FOCM2-2	Cherry sp.	*Prunus sp.*		1			1	High anthropogenic influence, almost half of the plot is comprised of planting or invasive species.
		Eastern White Cedar	*Thuja occidentalis*	11			5	16	
		European Buckthorn	*Rhamnus cathartica*		6	6		12	
		White Pine	*Pinus strobus*					0	
2266	SWCM1-1	Eastern White Cedar	*Thuja occidentalis*	17	22	16	12	67	Tree in good health
		European Buckthorn	*Rhamnus cathartica*	1				1	
		Green Ash	*Fraxinus pennsylvanica*	1				1	
2267	FOCM2-2	Black Walnut	*Juglans nigra*				1	1	Trees in good to fair condition. Some evidence of die back in walnut trees and pine trees
		Eastern White Cedar	*Thuja occidentalis*	6	4	4	1	15	
		White Pine	*Pinus strobus*	1	2	1	9	13	
		White Spruce	*Picea glauca*		1			1	
2268	FOCM2-2	Eastern White Cedar	*Thuja occidentalis*	24	12	17	3	56	Trees in fair health, dense growth with minimal lower branch viability
		White Pine	*Pinus strobus*		2		2	4	
2269	FOCM2-2	Apple	*Malus sp.*	1				1	Trees in fair health, dense growth with minimal lower branch viability
		Eastern White Cedar	*Thuja occidentalis*	41	14	3	7	65	
		White PIne	*Pinus strobus*				1	1	
2270	FOCM2-2	Apple	*Malus sp.*	2				2	Trees in good to poor health (ash) with some buckthorn and apple.
		Eastern White Cedar	*Thuja occidentalis*	11	10	1	4	26	
		European Buckthorn	*Rhamnus cathartica*	1	1			2	
		White Ash	*Fraxinus americana*	1	1			2	
		White Elm	*Ulmnus americana*	1	1	1		3	
		White Pine	*Pinus strobus*		1	4	2	7	
2271	FOCM2-2	Apple	*Malus sp.*	1				1	Trees in fair health, dense growth with minimal lower branch viability
		Eastern White Cedar	*Thuja occidentalis*	34	15	26	5	80	
		White Ash	*Fraxinus americana*		1			1	
		White Pine	*Pinus strobus*	1	1	1	3	6	

Location	ELC Community	Species		Diameter at Breast Height (DBH) Tally (cm)					Notes
		Common Name	Latin Name	10 - 15.9	16 - 20.9	21 - 25.9	>26	Total	
2272	FOCM2-2	Eastern White Cedar	*Thuja occidentalis*	16	18	22	13	69	Trees in poor health, very dense growth with only canopy branches viable.
2273	FOCM6-3	Apple	*Malus sp.*	2				2	Trees in fair health but plot is comprised largely of exotic and planted species.
		Eastern White Cedar	*Thuja occidentalis*	4	6	3		13	
		Scots Pine	*Pinus sylvestris*	7	22	6		35	
2274	FOCM2-2	Balsam Poplar	*Populus balsamifera*				1	1	Trees in fair to good condition
		Eastern White Cedar	*Thuja occidentalis*		6	2	1	9	
		European Buckthorn	*Rhamnus cathartica*	2				2	
		Scots Pine	*Pinus sylvestris*	2	6	9		17	
		White Pine	*Pinus strobus*		4	1	2	7	
2275	FOCM2-2	Eastern White Cedar	*Thuja occidentalis*	16	7	2	1	26	Ash in failing health. Other trees in good condition.
		Green Ash	*Fraxinus pennsylvanica*	1				1	
		White Ash	*Fraxinus americana*	1	1		1	3	
		White Pine	*Pinus strobus*		3			3	
2276	FOCM2-2	Eastern White Cedar	*Thuja occidentalis*	21	6	11	3	41	Trees in good condition
		European Buckthorn	*Rhamnus cathartica*	1				1	
		Scots Pine	*Pinus sylvestris*	3	5			8	
		White Ash	*Fraxinus americana*	1				1	
		White Pine	*Pinus strobus*		1		1	2	
2277	FOCM2-2/SWC	Balsam Poplar	*Populus balsamifera*		2	2	5	9	Trees in good condition
		Eastern White Cedar	*Thuja occidentalis*	3	7	2	8	20	
		European Buckthorn	*Rhamnus cathartica*	1				1	
		White Elm	*Ulmnus americana*		2			2	
2278	WOCM1	Balsam Poplar	*Populus balsamifera*				1	1	Trees in fair to good condition. Where light is limited, lower branch dieback was observed
		Eastern White Cedar	*Thuja occidentalis*	24	13	5		42	
		Scots Pine	*Pinus sylvestris*		2			2	
		White Birch	*Betula papyrifera*	2	3	4		9	
		White Pine	*Pinus strobus*				1	1	
		White Pine	*Pinus strobus*	5	7	13		25	

Location	ELC Community	Species		Diameter at Breast Height (DBH) Tally (cm)					Notes
		Common Name	Latin Name	10 - 15.9	16 - 20.9	21 - 25.9	>26	Total	
G1	WOCM2	Scots Pine	*Pinus sylvestris*			1		1	Trees in good condition
		White Spruce	*Picea glauca*		1			1	
		Sugar Maple	*Acer saccharum*	1				1	
		Eastern White Cedar	*Thuja occidentalis*	35				35	
G2	MEMM3	White Pine	*Pinus strobus*			5	1	6	Trees in good condition. Many exotic, planted specimens observed.
		Eastern White Cedar	*Thuja occidentalis*	7	8			15	
		Green Ash	*Fraxinus pennsylvanica*		3			3	
		Cherry species	*Prunus* sp.		6			6	
		Red Cedar	*Juniperus virginiana*	2	1			3	
G3	MEMM3	Red Cedar	*Juniperus virginiana*	1				1	Trees in good condition, excluding ash (emerald ash borer evidence)
		White Cedar	*Thuja occidentalis*	16	1			17	
		Green Ash	*Fraxinus pennsylvanica*	1				1	
G4	MEMM3	Red Cedar	*Juniperus virginiana*	2				2	Trees in good condition, excluding ash (emerald ash borer evidence)
		Green Ash	*Fraxinus pennsylvanica*	1	1			2	
		White Cedar	*Thuja occidentalis*	8	3	1		12	
G5	MEGM4	White Cedar	*Thuja occidentalis*	0			2	2	Two Multistem white cedars. Six to 7 stems on each cedar, ranging from 17 to 35 cm DBH

APPENDIX B

Tree Inventory Data

BIRKS

NATURAL HERITAGE CONSULTANTS

HINDS BROOK
SITE DEVELOPMENT PLAN

496857 GREY RD. 2
PART OF LOT 29
CONCESSION 8
TOWN OF THE BLUE MOUNTAINS
COUNTY OF GREY

KEY PLAN (n.t.s)

SITE DEVELOPMENT CONCEPT SUMMARY

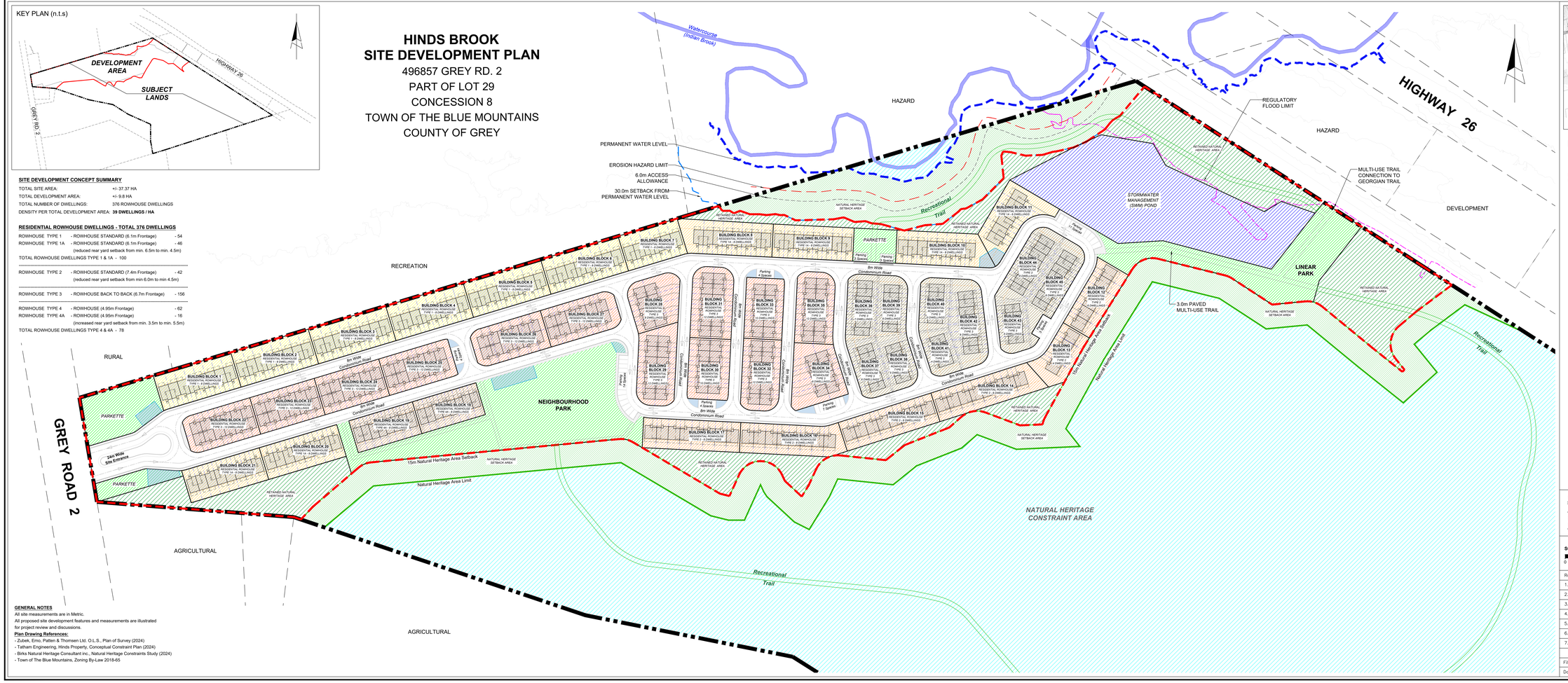
TOTAL SITE AREA:	+/- 37.37 HA
TOTAL DEVELOPMENT AREA:	+/- 9.8 HA
TOTAL NUMBER OF DWELLINGS:	376 ROWHOUSE DWELLINGS
DENSITY PER TOTAL DEVELOPMENT AREA:	**39 DWELLINGS / HA**

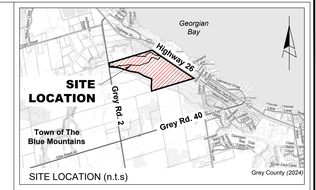
RESIDENTIAL ROWHOUSE DWELLINGS - TOTAL 376 DWELLINGS

ROWHOUSE TYPE 1	- ROWHOUSE STANDARD (6.1m Frontage)	- 54
ROWHOUSE TYPE 1A	- ROWHOUSE STANDARD (6.1m Frontage) (reduced rear yard setback from min. 6.5m to min. 4.5m)	- 46
TOTAL ROWHOUSE DWELLINGS TYPE 1 & 1A - 100		
ROWHOUSE TYPE 2	- ROWHOUSE STANDARD (7.4m Frontage) (reduced rear yard setback from min 6.0m to min 4.5m)	- 42
ROWHOUSE TYPE 3	- ROWHOUSE BACK TO BACK (6.7m Frontage)	- 156
ROWHOUSE TYPE 4	- ROWHOUSE (4.95m Frontage)	- 62
ROWHOUSE TYPE 4A	- ROWHOUSE (4.95m Frontage) (increased rear yard setback from min. 3.5m to min. 5.5m)	- 16
TOTAL ROWHOUSE DWELLINGS TYPE 4 & 4A - 78		

GENERAL NOTES
All site measurements are in Metric.
All proposed site development features and measurements are illustrated for project review and discussions.

Plan Drawing References:
- Zubek, Emo, Patten & Thomsen Ltd. O.L.S., Plan of Survey (2024)
- Tatham Engineering. Hinds Property, Conceptual Constraint Plan (2024)
- Birks Natural Heritage Consultant inc., Natural Heritage Constraints Study (2024)
- Town of The Blue Mountains, Zoning By-Law 2018-65





SITE LOCATION (n.t.s)

LEGEND

- Property Boundary (+/-37.37 ha)
- Development Area (+/-9.8 ha) - per Natural Features Constraints
- Residential Rowhouse - Standard / Type 1 & 1A (100 Dwellings)
- Residential Rowhouse - Standard / Type 2 (42 Dwellings)
- Residential Rowhouse - Back To Back / Type 3 (156 Dwellings)
- Residential Rowhouse - Narrow / Type 4 & 4A (78 Dwellings)
- Neighbourhood Park & Parkette Areas (+/-1.22 ha or 12.4% of the Total Development Area)
- Retained Natural Heritage Areas - No Disturbance (+/-1.43 ha or 14.6% of the Total Development Area)
- SWM Pond (+/- 0.77 ha or 7.7% of the Total Development Area)
- Natural Heritage Constraint Area
- Natural Heritage Setback Area
- Temporary Snow Storage Areas
- Watercourse
- Natural Heritage Constraint Area Limit
- 15m Natural Heritage Area Setback
- Recreational Trail *(Alignment to be confirmed during construction)*
- 8m Wide Condominium Road
- Condominium Road Centerline *(6m R.O.W, 12m Radius on Curb Centerline)*
- Sidewalk *(1.5m)*

Additional On-Site Parking 55 Spaces *(Min. 2.75m x 5.5m)*

travis & associates
planning consultants
approvals facilitators
development managers
PO Box 323
Thornbury, ON
N0H 2P0
T.705-446-9917

homefield
COMMUNITIES

SCALE 1:750 *(24" x 60" Page Format)*
0 10 20 40 60 80 Metres

METRIC
DISTANCES ON THIS PLAN ARE IN METRIC AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

Revision #	Date D/M/Y	Description / Notes
1.	31/01/2024	PRELIMINARY DRAFT / ISSUED FOR REVIEW
2.	07/02/2024	REVISED DRAFT / ISSUED FOR REVIEW
3.	23/02/2024	REVISED DRAFT / ISSUED FOR REVIEW
4.	04/06/2024	REVISED DRAFT / ISSUED FOR REVIEW
5.	14/08/2024	REVISED DRAFT / ISSUED FOR REVIEW
6.	30/08/2024	REVISED DRAFT / ISSUED FOR REVIEW
7.	06/09/2024	REVISED DRAFT / ISSUED FOR REVIEW

File/CAD: T&A_HindsBrook-SitePlan.dwg
Date(d/m/y): 06/09/2024 Drafted by: D.C. Checked by: A.H./R.A./C.T.

D-1

Date Plotted: September 6, 2024

APPENDIX C

Terms of Reference

BIRKS

NATURAL HERITAGE CONSULTANTS

Melissa Fuller

From: Michael Cook <Michael.Cook@grey.ca>
Sent: June 13, 2024 9:43 AM
To: Melissa Fuller
Cc: Alex Hahn; Colin Travis; Rob Armstrong; Adam Farr
Subject: RE: Terms of Reference - Tree Inventory, P3325, Homefield 496857 Grey Rd 2

Thank you, Melissa,

My comments in red text:

Site Assessment:

- *Undertake a field inventory to identify/assess all trees [>10 centimeters at breast height (DBH)] within 6 meters (m) of the proposed limit of work. Individual inventory will be limited to open areas of the proposed footprint. The trees will be assessed to define the following:*
  - *Approximate location. A land survey may be required to identify exact tree locations of individual specimens, the cost of which has not been included within the fees outlined below;*
  - *Species;*
  - *Diameter of tree at 1.4m (DBH) above ground surface for all trees greater than 15 cm at DBH;* - 10 cm and greater at DBH would be preferred.
  - *Health, including but not limited to structural integrity, percent deadwood, crown vigor, pathogenical concerns, decay and potential for failure (as conditions allow);*
- *Within heavily forested areas, the communities will be surveyed utilizing a 12 m radius plots will be identified and surveyed as above, to obtain a representation of the treed communities (woodlands, forests). All trees >10 cm DBH within the plots will be inventoried.*
- *Within open areas the individual trees will be assigned a unique identifier and their location as well as canopy will be plotted on aerial photography.*

One Tree Inventory and Preservation Plan will be completed which will include the following:

- *The scope of development, where the proposed extent of alteration (grading, excavation, site alteration, clearing) will be illustrated;* - please do clearly mark any trees proposed for removal.
- *The existing conditions, relevant mapping, and information regarding inventoried specimens as obtained during the field studies;*
- *Recommendations for preservation of those trees identified for retention;* - Please do clearly mark any tree proposed for retention.

- *Preparation of one digital copy of the tree inventory and preservation plan.*

Please note that a community design report, edge management plan, landscape plan/analysis, and visual impact assessment should be completed in conjunction with the Tree Inventory and Protection Plan (TIPP).

Additional/specific requirements:

- Erosion and sediment control fencing should be mapped (if needed).
- For trees selected for protection/retention, the development of area specific tree protection and mitigation measures will be required.
- Recognize any applicable tree removal restriction windows relative to such matters as SAR and migratory birds.

- ***Confirm compensation numbers, form, distribution and provisions in site specific Open Space Zones, Environmental Protection, site specific Zoning provisions i.e. new, retained and enhancement landscape plantings.***
- ***Describe how trees will be retained where prescribed if the subject lands can accommodate the fulsome extent of tree replacement plantings, or if alternative methods of compensation will be required.***
- ***Clarification should also be provided regarding the size of the replacement planting stock. Where woodland is removed, compensation should be provided to recreate woodland elsewhere, including suitable understory and groundcover.***

Please note, if a separate natural heritage compensation/offsetting plan is being created separate to the TIPP, the final 3 ***italicized and bolded*** requirements can be disregarded if included in the forthcoming compensation/offsetting plan.

If you have any questions or concerns, feel free to reach out.

Kind regards,

Michael Cook
Planning Ecologist
Grey County

From: Melissa Fuller <mfuller@birksnhc.ca>
Sent: Thursday, June 13, 2024 9:09 AM
To: Michael Cook <Michael.Cook@grey.ca>
Cc: Alex Hahn <a.hahn@homefieldcommunities.com>; Colin Travis <colint@travisinc.ca>; Rob Armstrong <roba@travisinc.ca>; Adam Farr <afarr@thebluemountains.ca>
Subject: Terms of Reference - Tree Inventory, P3325, Homefield 496857 Grey Rd 2

[EXTERNAL EMAIL]

Good Morning Michael,

In accordance with the 2nd preconsultation comments provided by the Town of the Blue Mountains, we are providing our proposed Terms of Reference for a tree inventory and preservation plan for the Grey Rd 2 (Hinds) property. Our proposed scope of work is as follows:

Site Assessment:

- Undertake a field inventory to identify/assess all trees [>10 centimeters at breast height (DBH)] within 6 meters (m) of the proposed limit of work. Individual inventory will be limited to open areas of the proposed footprint. The trees will be assessed to define the following:
    - Approximate location. A land survey may be required to identify exact tree locations of individual specimens, the cost of which has not been included within the fees outlined below;
    - Species;
    - Diameter of tree at 1.4m (DBH) above ground surface for all trees greater than 15 cm at DBH;

    - Health, including but not limited to structural integrity, percent deadwood, crown vigor, pathogenical concerns, decay and potential for failure (as conditions allow);
- Within heavily forested areas, the communities will be surveyed utilizing a 12 m radius plots will be identified and surveyed as above, to obtain a representation of the treed communities (woodlands, forests). All trees >10 cm DBH within the plots will be inventoried.
- Within open areas the individual trees will be assigned a unique identifier and their location as well as canopy will be plotted on aerial photography.

One Tree Inventory and Preservation Plan will be completed which will include the following:

- The scope of development, where the proposed extent of alteration (grading, excavation, site alteration, clearing) will be illustrated;
- The existing conditions, relevant mapping, and information regarding inventoried specimens as obtained during the field studies;
- Recommendations for preservation of those trees identified for retention;
- Preparation of one digital copy of the tree inventory and preservation plan.

Thank you for your attention to this matter Michael,

Melissa Fuller, H.B.Sc/Ecologist & Consulting Arborist
Birks Natural Heritage Consultants, Inc.
p. (705)994-4824
w. www.birksnhc.ca
a. 23 Herrell Avenue, Barrie L4N 6T5