



TECHNICAL MEMORANDUM

Subject: 893 & 911 Lockhart Road Environmental Impact Study Addendum

File No.: Birks NHC 02-018-2019

To: Mr. Soheil Fayaz, c/o Kayly Robbins, Planner, Jones Consulting Group

From: Brad Baker, H.B.Sc., Ecologist, Birks Natural Heritage Consultants, Inc.

Date: November 18, 2020

Dear Mr. Fayaz and Ms. Robbins:

A preliminary Environmental Impact Study (EIS) was produced and submitted by Birks Natural Heritage Consultants, Inc. (Birks NHC) in July 2020 for the properties identified as 893 and 911 Lockhart Road (the property) in the Town of Innisfil. It is our understanding that a Zoning By-law Amendment (ZBA) and Draft Plan of Subdivision is required to develop the property as planned, which includes a 27-lot subdivision, similar to the adjacent developed lands. An EIS is required due to the presence of naturalized conditions that have the potential to be considered significant within the overall landscape. This memorandum has been prepared to fulfill the requirement for EIS Addendum outlined in the preliminary EIS. This EIS addendum should be submitted and read in conjunction with the preliminary EIS which contains the bulk of the natural heritage information for the property. An updated Figure 2 has been included as Appendix A which should replace the Figure submitted with the preliminary EIS.

SITE DESCRIPTION

The property is within the Sandy Cove settlement area, with low density residential and commercial land use to the north and south. Beyond the settlement boundary, land use is predominately agricultural and rural in nature. The combined properties (893 and 911 Lockhart Road) measure approximately 2 hectares and encompass maintained lands, thicket, and forest

BIRKS Natural Heritage Consultants, Inc.
23 Herrell Avenue Barrie, Ontario L4N 6T5
705-790-1285



conditions. Three additional smaller vegetative communities were considered as swamp thicket inclusions within forest communities Figure 2 (Appendix A).

VEGETATION COMMUNITIES AND VASCULAR PLANTS

The vegetation present on the property is characteristic of anthropogenic influenced naturalized areas typical within settlement and urban settings. Rows of pine trees at the eastern property border suggest a past plantation that has been left unattended. White Cedar and Scots Pine trees have also been planted behind some of the existing residential properties with mowed areas extending beyond the existing residential properties into the naturalized areas. Evidence of yard waste and refuse was observed throughout the property. A vascular plant list is provided as Appendix B. All plant species identified on the study properties (893 and 911 Lockhart Road) are considered locally and provincially common, with the exception of one tree species. One Butternut tree (*Juglans cinerea*) was documented within the property and was determined to be a live tree. Given the status as an Endangered species, Butternut is protected under the provincial *Endangered Species Act* (ESA). The Ministry of Environment, Conservation and Parks (MECP) requires a Butternut Health Assessment (BHA) prior to any development or site alteration. Given the urban setting, hybridity testing may also be undertaken to determine whether the tree is a pure Butternut or a hybrid. If the tree is identified as a hybrid it would no longer receive protection under the ESA. The BHA should be completed one year prior to site works and was not done during the 2020 season as indicated in the preliminary EIS.

WILDLIFE HABITAT ASSESSMENT

A wildlife assessment within the property was completed by Birks NHC ecologists as part of the Preliminary EIS. Any incidental observations of wildlife were noted, as well as other wildlife evidence such as dens, tracks, and scat. Additionally, breeding bird surveys and evening amphibian call surveys were completed. Amphibian survey results were outlined in the preliminary EIS and a complete bird list obtained through breeding bird surveys is provided in Appendix C.

The study area provides habitat for common wildlife species and habitat generalists such as Eastern Cottontail Rabbit, Grey Squirrel, Raccoon, American Robin, and Black-capped Chickadee. No amphibians and/or reptile use was observed within the thicket swamp areas. The open areas of the study area are small and naturalized and therefore do not function as open meadow habitat. Further, the forested area does not provide interior forest habitat or a large number of cavity trees for nesting or protection to wildlife. There is no expectation that the woodland areas of the property provide suitable conditions to support maternity roosts for bat species. However, it can be expected that select trees within this community may be used as day roosts by various bat species. A visual inspection of the existing residential dwelling and accessory buildings did not reveal any obvious access points, however a subsequent inspection should be undertaken prior to the demolition which should involve a combination of visual



inspection of the interior (*i.e.*, attic) of the structures as well as exit surveys following the *Technical Note for SAR Bats* (MNRF 2015).

CONCLUSIONS

Information gathered since the release of the preliminary EIS does not alter the conclusions discussed in the preliminary report. Natural heritage features identified within the property are not expected to be deemed to be significant within the overall landscape as per provincial and municipal criteria. The mitigation measures recommended in the preliminary EIS report were developed to avoid and mitigate any potential negative ecological impacts associated with the proposed development. Overall, potential ecological impacts expected to be minimal and mitigable provided the listed mitigation measures are applied accordingly. The proposed development appears to conform with the Township and County Official Plans and the Provincial Policy Statement and comply with the *Endangered Species Act* and the federal *Fisheries Act*. As previously noted, this EIS addendum should be read in conjunction with the Birks NHC Preliminary EIS report which details environmental policy framework, impact assessment, recommendations and mitigation measures.

CLOSURE

We trust the information provided within this addendum, along with the Preliminary EIS report, will be sufficient to meet submission requirements for the proposed residential development. If you have any questions or require further information, please do not hesitate to contact the undersigned.

Yours truly,

Birks Natural Heritage Consultants Inc.

Brad Baker, H.B.Sc.
Ecologist

APPENDIX A

Revised Figure 2. Existing Conditions and Survey Locations





911 & 893 LOCKHART ROAD EIS

BIRKS NHC 02-018-2019

FIGURE 2. EXISTING CONDITIONS AND SURVEY LOCATION

Properties Limit

Butternut Location

25m Setback

50m Setback

Amphibian Calling Survey Location

Dawn Breeding Bird Survey Location

Vegetation Communities

1) FODM7-2 Fresh -Moist Green Ash-Hardwood Lowland Deciduous Forest

2) FOCM4-1 Fresh-Moist White Cedar Coniferous Forest

3) THMM2 Fresh-Moist Mixed Thicket

4) THDM2-1 Sumach Deciduous Shrub Thicket

5) FOCM1-2 Dry-Fresh White Pine - Red Pine Coniferous Forest

6) Maintained Area

7) SWTM2-1 Red-osier Dogwood Mineral Deciduous Thicket Swamp

120m Study Area

Watercourse (LIO)

LEGEND

MAP DRAWING INFORMATION:
DATA PROVIDED BY SIMCOE COUNTY
MAP CREATED BY SB
MAP CHECKED BY BB
MAP PROJECTION NAD 1983 UTM ZONE 17N
STATUS FINAL
DATE 10/09/2020

APPENDIX B

Plant List



Table 1. Vascular Plant List

Scientific Name	Common Name	Provincial Ranking		
		S_Rank	G_Rank	ESA
<i>Acer negundo</i>	Manitoba Maple	S5	G5	
<i>Acer platanoides</i>	Norway Maple	SNA	GNR	
<i>Acer saccharum</i>	Sugar Maple	S5	G5	
<i>Achillea millefolium</i>	Common Yarrow	SNA	G5	
<i>Aegopodium podagraria</i>	Goutweed	SNA	GNR	
<i>Alliaria petiolata</i>	Garlic Mustard	SNA	GNR	
<i>Ambrosia artemisiifolia</i>	Common Ragweed	S5	G5	
<i>Betula alleghaniensis</i>	Yellow Birch	S5	G5	
<i>Betula papyrifera</i>	Paper Birch	S5	G5	
<i>Circaea canadensis</i>	Broad-leaved Enchanter's Nightshade	S5	G5	
<i>Clematis virginiana</i>	Virginia Clematis	S5	G5	
<i>Convallaria majalis</i>	European Lily-of-the-valley	SNA	G5	
<i>Cornus alternifolia</i>	Alternate-leaved Dogwood	S5	G5	
<i>Cornus racemosa</i>	Grey Dogwood	S5	G5	
<i>Cornus sericea</i>	Red-osier Dogwood	S5	G5	
<i>Dactylis glomerata</i>	Orchard Grass	SNA	GNR	
<i>Daucus carota</i>	Wild Carrot	SNA	GNR	
<i>Echium vulgare</i>	Common Viper's Bugloss	SNA	GNR	
<i>Epipactis helleborine</i>	Broad-leaved Helleborine	SNA	GNR	
<i>Equisetum pratense</i>	Meadow Horsetail	S5	G5	
<i>Erythronium americanum</i>	Yellow Trout-lily	S5	G5	
<i>Eupatorium perfoliatum</i>	Common Boneset	S5	G5	
<i>Euphorbia cyparissias</i>	Cypress Spurge	SNA	G5	
<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod	S5	G5	
<i>Fragaria virginiana</i>	Wild Strawberry	S5	G5	
<i>Fraxinus americana</i>	White Ash	S4	G5	
<i>Fraxinus pennsylvanica</i>	Red Ash	S4	G5	
<i>Galium odoratum</i>	Sweet-scented Bedstraw	SNA	GNR	
<i>Geranium robertianum</i>	Herb-Robert	S5	G5	

Table 1

Scientific Name	Common Name	Provincial Ranking		
		S_Rank	G_Rank	ESA
<i>Geum aleppicum</i>	Yellow Avens	S5	G5	
<i>Geum laciniatum</i>	Rough Avens	S4	G5	
<i>Hesperis matronalis</i>	Dame's Rocket	SNA	G4G5	
<i>Hieracium sp.</i>	Hawkweed	---	---	
<i>Hydrophyllum virginianum</i>	Virginia Waterleaf	S5	G5	
<i>Hypericum perforatum</i>	Common St. John's-wort	SNA	GNR	
<i>Impatiens capensis</i>	Spotted Jewelweed	S5	G5	
<i>Juglans cinerea</i>	Butternut	S2?	G3	END
<i>Juglans nigra</i>	Black Walnut	S4?	G5	
<i>Lactuca canadensis</i>	Canada Lettuce	S5	G5	
<i>Lonicera tatarica</i>	Tatarian Honeysuckle	SNA	GNR	
<i>Maianthemum canadense</i>	Wild Lily-of-the-valley	S5	G5	
<i>Matteuccia struthiopteris</i>	Ostrich Fern	S5	G5	
<i>Medicago lupulina</i>	Black Medick	SNA	GNR	
<i>Medicago sativa</i>	Alfalfa	SNA	GNR	
<i>Myosotis scorpioides</i>	True Forget-me-not	SNA	G5	
<i>Onoclea sensibilis</i>	Sensitive Fern	S5	G5	
<i>Oxalis stricta</i>	Upright Yellow Wood-sorrel	S5	G5	
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	S4?	G5	
<i>Parthenocissus vitacea</i>	Thicket Creeper	S5	G5	
<i>Phalaris arundinacea</i>	Reed Canarygrass	S5	G5	
<i>Pinus strobus</i>	Eastern White Pine	S5	G5	
<i>Pinus sylvestris</i>	Scots Pine	SNA	GNR	
<i>Plantago lanceolata</i>	English Plantain	SNA	G5	
<i>Populus balsamifera</i>	Balsam Poplar	S5	G5	
<i>Populus tremuloides</i>	Trembling Aspen	S5	G5	
<i>Potentilla simplex</i>	Old-field Cinquefoil	S5	G5	
<i>Prunella vulgaris</i>	Common Self-heal	S5	G5	
<i>Prunus serotina</i>	Black Cherry	S5	G5	
<i>Prunus virginiana</i>	Chokecherry	S5	G5	
<i>Ranunculus acris</i>	Common Buttercup	SNA	G5	
<i>Rhamnus cathartica</i>	European Buckthorn	SNA	GNR	

Table 1

Scientific Name	Common Name	Provincial Ranking		
		S_Rank	G_Rank	ESA
<i>Rhus typhina</i>	Staghorn Sumac	S5	G5	
<i>Ribes hirtellum</i>	Swamp Gooseberry	S5	G5	
<i>Rubus idaeus</i>	Red Raspberry	S5	G5	
<i>Rubus occidentalis</i>	Black Raspberry	S5	G5	
<i>Rubus pubescens</i>	Dwarf Raspberry	S5	G5	
<i>Salix cordata</i>	Heart-leaved Willow	S4	G4	
<i>Salix lucida</i>	Shining Willow	S5	G5	
<i>Saponaria officinalis</i>	Bouncing-bet	SNA	GNR	
<i>Solidago altissima</i>	Tall Goldenrod	S5	G5	
<i>Solidago canadensis</i>	Canada Goldenrod	S5	G5	
<i>Solidago rugosa</i>	Rough-stemmed Goldenrod	S5	G5	
<i>Sorbus aucuparia</i>	European Mountain-ash	SNA	G5	
<i>Symphyotrichum lateriflorum</i>	Calico Aster	S5	G5	
<i>Symphyotrichum novae-angliae</i>	New England Aster	S5	G5	
<i>Symphyotrichum puniceum</i>	Purple-stemmed Aster	S5	G5	
<i>Syringa vulgaris</i>	Common Lilac	SNA	GNR	
<i>Taraxacum officinale</i>	Common Dandelion	SNA	G5	
<i>Thuja occidentalis</i>	Eastern White Cedar	S5	G5	
<i>Tilia americana</i>	Basswood	S5	G5	
<i>Toxicodendron radicans</i>	Poison Ivy	S5	G5	
<i>Ulmus americana</i>	White Elm	S5	G5	
<i>Verbascum thapsus</i>	Common Mullein	SNA	GNR	
<i>Viburnum opulus ssp. trilobum</i>	Highbush Cranberry	S5	G5TNR	
<i>Vicia sativa</i>	Common Vetch	SNA	GNR	
<i>Vincetoxicum rossicum</i>	European Swallowwort	SNA	GNR	
<i>Vitis riparia</i>	Riverbank Grape	S5	G5	

Table 1

APPENDIX C
Bird Species Observed



Table 2. Bird Species Documented

Family	Scientific Name	English Common Name	Point Count Station A, B			Breeding Evidence ^C	Conservation Rank ^D		
			1	2	Incidental		G-rank ^E	S-rank ^F	SARO Status ^G
Bombycillidae	<i>Bombycilla cedrorum</i>	Cedar Waxwing	C ^A , S ^B	C		Possible	G5	S5B	NAR
Cardinalidae	<i>Cardinalis cardinalis</i>	Northern Cardinal	S	S ^B	X	Probable	G5	S5	NAR
Columbidae	<i>Zenaida macroura</i>	Mourning Dove	S ^B	S ^B	X	Possible	G5	S5	NAR
Corvidae	<i>Corvus brachyrhynchos</i>	American Crow	FO ^A , C ^B	C		Possible	G5	S5B	NAR
Corvidae	<i>Cyanocitta cristata</i>	Blue Jay	C	C		Possible	G5	S5	NAR
Emberizidae	<i>Melospiza melodia</i>	Song Sparrow	S	S ^B		Probable	G5	S5B	NAR
Emberizidae	<i>Spizella passerina</i>	Chipping Sparrow	S	S		Probable	G5	S5B	NAR
Fringillidae	<i>Carduelis tristis</i>	American Goldfinch	FO/S ^A	S		Probable	G5	S5B	NAR
Fringillidae	<i>Carpodacus mexicanus</i>	House Finch		S ^A		Possible	G5	SNA	NAR
Icteridae	<i>Molothrus ater</i>	Brown-headed Cowbird	C ^B	H ^B		Possible	G5	S4B	NAR
Icteridae	<i>Icterus galbula</i>	Baltimore Oriole	S ^A	S		Probable	G5	S4B	NAR
Icteridae	<i>Quiscalus quiscula</i>	Common Grackle	H ^A	H		Possible	G5	S5B	NAR
Laridae	<i>Fratercula arctica</i>	Ring-billed Gull	FO ^A	FO ^B		Observed	G5	S5B, S4N	NAR
Mimidae	<i>Dumetella carolinensis</i>	Gray Catbird	C ^B	S ^A , C ^B	X	Possible	G5	S4B	NAR
Paridae	<i>Poecile atricapillus</i>	Black-capped Chickadee	S ^B	S	X	Probable	G5	S5	NAR
Parulidae	<i>Geothlypis trichas</i>	Common Yellowthroat	S ^B	S ^B		Possible	G5	S5B	NAR
Parulidae	<i>Dendroica petechia</i>	Yellow Warbler	S ^B	S ^A		Possible	G5	S5B	NAR
Picidae	<i>Colaptes auratus</i>	Northern Flicker	H ^B			Possible	G5	S4B	NAR
Picidae	<i>Picoides villosus</i>	Hairy Woodpecker		H ^B		Possible	G5	S5	NAR
Sturnidae	<i>Sturnus vulgaris</i>	European Starling	H ^A	H		Possible	G5	SNA	NAR
Troglodytidae	<i>Troglodytes aedon</i>	House Wren			X	Observed	G5	S5B	NAR
Turdidae	<i>Turdus migratorius</i>	American Robin	S	S	X	Probable	G5	S5B	NAR
Tyrannidae	<i>Sayornis phoebe</i>	Eastern Phoebe			X	Observed	G5	S5B	NAR
Vireonidae	<i>Vireo olivaceus</i>	Red-eyed Vireo	S		X	Probable	G5	S5B	NAR
Vireonidae	<i>Vireo gilvus</i>	Warbling Vireo	S ^A	S	X	Probable	G5	S5B	NAR

Surveys Conditions:

^A June 1, 2020; Start Time 0600hr/ End Time 0630hr; Temperature +19°C; Wind B0; Cloud Cover 0%; Precipitation Nil; B. Baker

^B June 17, 2020; Start Time 0630hr/ End Time 0700hr; Temperature +25°C; Wind B0; Cloud Cover 10%; Precipitation Nil; Observer B. Baker

Family	Scientific Name	English Common Name	Point Count Station A, B			Breeding Evidence ^C	Conservation Rank ^D		
			1	2	Incidental		G-rank ^E	S-rank ^F	SARO Status ^G

^COBBA Breeding Evidence Codes:

H - Species observed in its breeding season in suitable nesting habitat

C - Call heard (male or female), in suitable nesting habitat in nesting season.

S - Singing male Present, or breeding calls heard, in suitable nesting habitat in nesting season.

N - Nest Building or excavation of nest hole

P - Pair observed in suitable nesting habitat in nesting season

^DConservation Rank - from MECP, NHIC, SAR and SARO Lists

^FS-rank - S1 - Extremely Rare, S2 - Very Rare, S3 - Rare to Uncommon, S4 - Common, S5 - Very Common

^EG-Rank - G1 - Critically Imperiled, G2 - Imperiled, G3 - Vulnerable, G4 - Apparently Secure, G5 - Secure

^GSARO - EXP (Extirpated), END (Endangered), THR (Threatened), SC (Special Concern), NAR (Not At Risk)