

PENN ENERGY – BRANTGATE

153 BISHOPSGATE ROAD, PART LOTS 1-2, CONCESSION 11

COUNTY OF BRANT, ONTARIO

SOLAR ENERGY FACILITY

Fit Contract No. F-001576-SPV-130-505
FIT Application No. FIT-FCELIHJ
COD: February 25, 2014

NATURAL HERITAGE ASSESSMENT

PART 1: RECORDS REVIEW

Report Prepared For:

Penn Energy Renewables, Ltd.
620 Righters Ferry Road, Bala Cynwyd, PA 19004

Report Prepared By:

Savanta Inc.
37 Bellevue Terrace
St. Catharines, Ontario
L2S 1P4 Canada

Date:

May 2012

Savanta File:

7067



TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	RECORDS REVIEW	1
2.1	Description of the Agencies Contacted and Records Searched	2
2.1.1	Ministry of Natural Resources (MNR)	2
2.1.2	Ministry of Municipal Affairs and Housing	5
2.1.3	Grand River Conservation Authority (GRCA).....	5
2.1.4	Long Point Region Conservation Authority (LPRCA).....	6
2.1.5	County of Brant	6
2.2	Results of Analysis of the Records	6
2.2.1	Ontario Breeding Bird Atlas.....	7
2.2.2	Candidate Significant Wildlife Habitat	10
2.3	Summary of Natural Features and Boundaries Identified	10
3.0	REFERENCES AND BACKGROUND MATERIAL.....	12

LIST OF APPENDICES

Appendix A *Figures*

- Figure 1.** Location of Subject Lands and Project Location
Figure 2. Documented Natural Heritage Features Designations (Records Review)

Appendix B *September 12, 2011 letter from MNR – “Brantgate Solar Project – Records Review Information Request County of Brant”*

Appendix C *1987 Fairfield Plain Wetland Evaluation Record (MNR)*

Appendix D *September 1, 2010 email from GRCA - “153 Bishopsgate Road”*

Appendix E *September 15, 2010 letter from LPRCA – “153 Bishopsgate Road Scotland, ON Assessment #29-20-011-040-15700”*

1.0 INTRODUCTION

Penn Energy Renewables, Ltd. (Penn) has executed a FIT contract with the Ontario Power Authority (OPA) for the construction of an 8 MW, ground-mounted, Class 3 solar energy facility approximately 14 kilometres southwest of the City of Brantford, in the County of Brant, Ontario. The Subject Lands are located in part of Lots 1 and 2 Concession 11, in the Count of Brant, geographic rural community of Burford. The proposed Renewable Energy Generation Facility (REGF) would consist of a collection of solar photovoltaic (PV) modules (each approximately 1.00 m x 1.67 m or 1.00 m x 2.00 m in dimension) that are grouped into arrays tilted and facing south. These stationary arrays are strung together forming a series of rows oriented east to west. The Environmental Protection Act (EPA) administered by the Ministry of the Environment (MOE) regulates Renewable Energy Approvals (REAs) under Part V.0.1 of the act, pursuant to Ontario Regulation 359/09 (O.Reg. 359/09). As part of this act, a Natural Heritage Assessment (NHA) is required in order to identify potential impacts to the natural area. Savanta Inc. (Savanta) has been retained by Penn to conduct the Natural Heritage Assessment (NHA). The Subject Lands occupy 35.6 ha, located on the west side of Bishopgates Road and north of Concession Road 12 (**Appendix A, Figure 1**). The “Project Location” is a subset of the Subject Lands, occupying 19.2 ha.

This Records Review Report is part 1 of the NHA reporting submitted. A Site Investigation Report – Part was also completed. Based on the results of the Records Review and the Site Investigation, an Evaluation of Significance Report was not triggered.

2.0 RECORDS REVIEW

A Records Review is required under Part IV, Section 25 of the REA Regulation to identify whether the Project Location is within any natural feature, within 50 m of an ANSI (earth science) within 120 m of any other natural feature or in a provincial park or conservation reserve or within 120 m of it.

“Natural Features” are defined under the Natural Heritage Assessment Guide for Renewable Energy Projects (July 2011) as:

- (a) an area of natural and scientific interest (earth science),
- (b) an area of natural and scientific interest (life science),
- (c) a coastal wetland,
- (d) a northern wetland,
- (e) a southern wetland,
- (f) a valleyland,
- (g) a wildlife habitat,
- (h) a woodland,
- (i) a sand barren, a savannah, a tallgrass prairie and an alvar in the Greenbelt Plan’s Protected Countryside Area, or
- (j) a sand barren, a savannah and a tallgrass prairie in the Oak Ridges Moraine Plan Area

A Records Review was completed for the Project Location on the Subject Lands and all lands within 120 metres of the Project Location.

It is noted that endangered and threatened species and their habitat are regulated under the Endangered Species Act (2007) and are excluded from the REA process, as per O. Reg. 359/09. A separate Species at Risk Habitat Assessment Summary Letter was completed for review by MNR's Species At Risk biologist.

2.1 Description of the Agencies Contacted and Records Searched

Records related to natural features were searched from the following sources:

- MNR's Natural Heritage Information Centre Database (April 2012);
- MNR's NRVIS Guelph MNR District Database (September 2011);
- MNR's Land Information Ontario Database (April 2012);
- Ministry of Municipal Affairs and Housing's Oak Ridges Moraine Area – Land Use Designation Map (Ontario Regulation 140/02) (May 2012);
- Ministry of Municipal Affairs and Housing's Detailed Mapping of the Greenbelt Plan Area (Ontario Regulation 59/05 (May 2012);
- Ontario Breeding Bird Atlas (OBBA) (2005);
- Ontario herpetofaunal summary atlas (April 2012);
- MNR Guelph District Office (September 2011);
- Grand River Conservation Authority (September 2010);
- Long Point Region Conservation Authority (2010); and,
- County of Brant Official Plan and Schedules (2010).

The Subject Lands, in the Project Location, is not located within the jurisdiction of any planning boards, local roads boards, local services board or the Niagara Escarpment Plan.

2.1.1 Ministry of Natural Resources (MNR)

In August 2011 the Natural Heritage Information Centre Database was queried for wildlife concentration areas, plant communities, and natural areas data within 1km² block of the Project Location.

On August 18, 2011 a pre-consultation meeting was held at MNR Guelph District Office with April Nix (Renewable Energy Planning Ecologist), Max Fable (Project Manager, Penn) and Heather Whitehouse (Ecologist, Savanta). At this time a request for relevant natural feature records housed within MNR Guelph District's office was made. On September 12, 2011 MNR provided a letter of their review of relevant records housed at the district's office; records were summarized in Table 1. NHA Records Review – MNR Information (See **Appendix B** for copy of letter). MNR's record review noted the presence of woodland and wetland within 120 metres of the Project Location. The Fairfield Plain Wetland was noted as being present within 120 m of the Project Location, as per MNR's review of wetland polygon location as per Land Information Ontario database.

In September 2011 various data layers from the Land Information Ontario (LIO), Ministry of Northern Development and Mines and Forestry and NRVIS Guelph MNR District were queried, see **Table 1** for details on layers reviewed, effective date of each layer and results. As documented by MNR in their September 12, 2011 letter, the Fairfield Plain Wetland boundary, as per LIO is within 120 metres of the Project Location. MNR's letter also documented woodlands within 120 m of the Subject Lands; our review of LIO database found

woodlands within 1 km of Project Location. Natural Resources and Values Information System (NRVIS) database has more current data than on LIO, and a query of NRVIS found that the Fairfield Plain Wetland was approximately 140 m away from the Project Location.

Table 1. MNR GIS Data Layers Reviewed

Title of Data Set	Layer name	Effective Date of Layer	Results - Project Location and area within 120 m of project location
Land Information Ontario Unrestricted Use Licence	Aquatic Resource Area Summary (ARASUMRY)	13-May-09	No Natural Features within Project Location or within 120 m of Project Location
Land Information Ontario Unrestricted Use Licence	Ecological Land Classification (ELC) of Ontario (ELC)	2002	Region 7E, District 7E-2, Name Carolinian Forest, Zone Mixedwood Plains
Land Information Ontario Unrestricted Use Licence	Fisheries Management Zone (FISHZONE)	12-Jan-07	Zone 27 No Restrictions
Land Information Ontario Unrestricted Use Licence	Natural Heritage Values Area (NHERVALA)	Jun-06	No Natural Features within Project Location or within 120 m of Project Location
Land Information Ontario Unrestricted Use Licence	OHN Waterbody (OHNWBDY)	10-Sep-98	No Natural Features within Project Location or within 120 m of Project Location
Land Information Ontario Unrestricted Use Licence	Source Protection Area Generalized (SPAGEN, SWP, SPP, SPPB, SPA, SPR, CA)	2004	No Natural Features within Project Location or within 120 m of Project Location
Land Information Ontario Unrestricted Use Licence	Staging Area, Wildlife (STAGAWLD)	2002	No Natural Features within Project Location or within 120 m of Project Location
Land Information Ontario Unrestricted Use Licence	Travel Corridor, Wildlife (TRAVCWLD)	2001	No Natural Features within Project Location or within 120 m of Project Location

Title of Data Set	Layer name	Effective Date of Layer	Results - Project Location and area within 120 m of project location
Land Information Ontario Unrestricted Use Licence	Wetland Unit (WETLANDU)	20-Jan-04	Fairfield Plan Wetland, non-sensitive, Last evaluated August 1987
Land Information Ontario Unrestricted Use Licence	Southern Ontario Land Resource Information System	Apr-08	No Natural Features within Project Location or within 120 m of Project Location
Land Information Ontario Unrestricted Use Licence	Wooded Area Data Layer	2006	No Natural Features within Project Location or within 120 m of Project Location
Land Information Ontario Unrestricted Use Licence	DEM version 2.0.0 Provincial Tiled Data Layer	2002	Resolution is not useful for this small project footprint
Land Information Ontario Unrestricted Use Licence	OHN - Watercourse Data Layer	Mar-10	No Natural Features within Project Location or within 120 m of Project Location
Land Information Ontario Unrestricted Use Licence	Significant Ecological Area Data layer	Jul-07	No Natural Features within Project Location or within 120 m of Project Location
Land Information Ontario Unrestricted Use Licence	Water Virtual Flow - Seamless Provincial Data Layer	2008	No Natural Features within Project Location or within 120 m of Project Location
MNR Natural Heritage Information Centre	NHIC Database	Current	No Natural Features within Project Location or within 120 m of Project Location
Land Information Ontario Unrestricted Use Licence	Provincial Park	1997-2002	None Present

Title of Data Set	Layer name	Effective Date of Layer	Results - Project Location and area within 120 m of project location
Ministry of Northern Development and Mines and Forestry	Bedrock Geology of Ontario Seamless Coverage (EDS006-REV)	2001	Limestone, dolostone, shale, sandstone, gypsum, salt
Ministry of Northern Development and Mines and Forestry	Ontario Physiography MRD228	1984	Till moraines and sand plains
Conservation Reserve Regulated (LIO)	Conservation Reserve Regulated Data Layer	2001-2002	None Present
Forest Resource Inventory Status (LIO)	Forest Cover – Forest Resources Inventory Unit	June 2011- January 2012	None Present
NRVIS Guelph MNR District	Wintering Area (WINTERNG)	20-Jan-04	No Natural Features within Project Location or within 120 m of Project Location
NRVIS Guelph MNR District	ANSI Database	10-Jan-07	No Natural Features within Project Location or within 120 m of Project Location
NRVIS	Wetland Unit & Evaluated Wetland (Consolidated)	2008	No Natural Features within Project Location or within 120 m of Project Location
NRVIS Guelph MNR District	Environmentally Sensitive Areas	1998	No Natural Features within Project Location or within 120 m of Project Location

2.1.2 Ministry of Municipal Affairs and Housing

The Project Location is not within the Oak Ridges Moraine Plan Area or within the Protected Countryside of the Greenbelt.

2.1.3 Grand River Conservation Authority (GRCA)

The southeastern corner of the Project Location is within the Grand River Watershed. On September 1, 2010 Andrew Herreman, Resource Planning Technician with GRCA was contacted by phone and email to provide any natural features information for the Records Review. On the same day Andrew provided an email response that there are no natural features of interest to the GRCA within the Records Review area (**Appendix D**)

2.1.4 Long Point Region Conservation Authority (LPRCA)

The majority of the Project Location is within the Big Creek above Kelvin subwatershed within the Lake Erie watershed and managed by the Long Point Region Conservation Authority. Between September 8 and 15, 2010 phone and email discussions were had with Jeff Shaughnessy, Planning Assistant and Bonnie Bravner, Resources Technician with LPRCA. On September 15, 2010 LPRCA provided an assessment letter and map noting that within the Subject Lands (Project Location is a subset) are within the eastern edge of the Fairfield Plain Wetland (non-PSW), and LPRCA regulation area (**Appendix E**).

2.1.5 County of Brant

The April 20, 2004 Official Plan is currently in place; the Draft September 2010 Official Plan was been approved by council and has gone to the Ministry of Municipal Affairs and Housing for review. As part of the Records Review the currently official plan, relevant schedules (i.e. Schedule A-Land Use Plan, and appendices (i.e. Appendix 1 – Natural Heritage Model) were reviewed.

2.2 Results of Analysis of the Records

Through review of the records described in Section 2.1 the following results were found:

- The Fairfield Plain Wetland, as recorded in NRVIS, is approximately 140 m away from the Project Location;
- Woodlands are 1 km away from Project Location;
- Project Location is not within 50 m of ANSI (Earth Science); and
- Project Location is not within 120 m of any natural features.

The Fairfield Plain Wetland is approximately 140 m away from the Project Location (**Figure 2, Appendix A**). Fairfield Plain Wetland is identified as a Locally Significant Wetland (County of Brant) and has been evaluated by MNR as a non-PSW (**Table 2**). A copy of the MNR wetland evaluation record on file was obtained from MNR Guelph District (**Appendix C**) and the NHIC database description of the Fairfield Plain Wetland reflects this evaluation. The NHIC database describes the Fairfield Plain Wetland as a non-PSW, isolated wetland comprised of 32% swamp and 68% marsh. The dominant vegetation forms are free-floating plants (40.2%), followed by robust emergents (27.7%), tall shrubs (25.2%), and deciduous trees (6.9%). tall shrubs. Ecological functions recorded in NHIC database for this wetland includes nesting of colonial waterbirds-active feeding area and waterfowl production of regional significance. Field observations recorded under NHIC include bullfrog, snapping turtle, muskrat and raccoon.

Table 2. Record Review Results

Feature Type	Feature Location in Relation to Project Location	Data/Information Used to ID Feature	Evaluation of Significance Status
Wetlands	No. Local wetland present approximately 140 m from the	MNR LIO wetlands layer MNR NHIC Database County of Brant Official Plan (Appendix 1 –	Evaluated and confirmed by MNR as non-PSW. Mapped by County of Brant as Locally

Feature Type	Feature Location in Relation to Project Location	Data/Information Used to ID Feature	Evaluation of Significance Status
	southwest corner of the Project Location boundary (see Figure 2).	Natural Heritage Model) LPRCA – MNR wetland	Significant Wetland Mapped MNR Wetland
Woodlands	No	As per records reviewed, as listed in Section 2.1	Not present
Valleylands	No	As per records reviewed, as listed in Section 2.1	Not present
ANSIs	No	As per records reviewed, as listed in Section 2.1	Not present
Wildlife Habitat	No	As per records reviewed, as listed in Section 2.1	Not present

2.2.1 Ontario Breeding Bird Atlas

The Project Location and lands within 120 metres of the Project Location, is within two Ontario Breeding Bird Atlas Squares; each square is 10 km x 10 km. The majority of the Project Location (89%) is within 17NH46. The southeast corner of the Project Location (11%) is within 17NH56. Table 3 summarizes 2001-2005 species atlas observation results for both of these Squares, excluding those designated Endangered or Threatened under the Endangered Species Act (2007). Between the two OBBA squares there are 108 bird species observations. Breeding bird evidence (possible, probable, confirmed) of species recorded in each square is also summarized in Table 3. Many of these species are associated with habitats not found on the Subject Lands, based on review of aerial photography. Habitats recorded in the OBBA square but not present on the Subject Lands include forested wetlands (Green Heron, Wood Duck, Hooded Merganser), open wetlands (Pied-billed Grebe, Virginia Rail, Sora), and mature forest (Ruffed Grouse, Pileated Woodpecker, White-breasted Nuthatch, Eastern Wood Pewee, Ovenbird).

Table 3. OBBA 2001-2005 Species List for Square 17NH46 & Square 17NH56

Common Name	17NH46	17NH56
	Highest Breeding Evidence Recorded	Highest Breeding Evidence Recorded
Acadian Flycatcher	POSSIBLE	PROBABLE
American Crow	CONFIRMED	CONFIRMED
American Goldfinch	CONFIRMED	CONFIRMED
American Kestrel	POSSIBLE	CONFIRMED
American Redstart	PROBABLE	PROBABLE
American Robin	CONFIRMED	CONFIRMED
American Woodcock	Not Observed	CONFIRMED
Baltimore Oriole	CONFIRMED	CONFIRMED
Bank Swallow	CONFIRMED	CONFIRMED
Belted Kingfisher	POSSIBLE	CONFIRMED
Black-and-white Warbler	POSSIBLE	PROBABLE

Common Name	17NH46 Highest Breeding Evidence Recorded	17NH56 Highest Breeding Evidence Recorded
Black-billed Cuckoo	PROBABLE	POSSIBLE
Black-capped Chickadee	CONFIRMED	CONFIRMED
Black-throated Green Warbler	Not Observed	POSSIBLE
Black/Yellow-billed Cuckoo	Not Observed	PROBABLE
Blue Jay	CONFIRMED	CONFIRMED
Blue-gray Gnatcatcher	PROBABLE	PROBABLE
Blue-winged Teal	Not Observed	CONFIRMED
Blue-winged Warbler	Not Observed	PROBABLE
Broad-winged Hawk	Not Observed	POSSIBLE
Brown Creeper	Not Observed	PROBABLE
Brown Thrasher	CONFIRMED	CONFIRMED
Brown-headed Cowbird	CONFIRMED	CONFIRMED
Canada Goose	CONFIRMED	CONFIRMED
Canada Warbler	Not Observed	PROBABLE
Carolina Wren	CONFIRMED	PROBABLE
Cedar Waxwing	CONFIRMED	CONFIRMED
Chestnut-sided Warbler	PROBABLE	PROBABLE
Chipping Sparrow	CONFIRMED	CONFIRMED
Common Grackle	CONFIRMED	CONFIRMED
Common Snipe	POSSIBLE	Not Observed
Common Yellowthroat	CONFIRMED	CONFIRMED
Cooper's Hawk	Not Observed	CONFIRMED
Dark-eyed Junco	Not Observed	POSSIBLE
Downy Woodpecker	CONFIRMED	CONFIRMED
Eastern Bluebird	Not Observed	CONFIRMED
Eastern Kingbird	CONFIRMED	CONFIRMED
Eastern Phoebe	CONFIRMED	CONFIRMED
Eastern Screech-Owl	CONFIRMED	CONFIRMED
Eastern Towhee	CONFIRMED	PROBABLE
Eastern Wood-Pewee	PROBABLE	CONFIRMED
European Starling	CONFIRMED	CONFIRMED
Field Sparrow	CONFIRMED	CONFIRMED
Gray Catbird	CONFIRMED	PROBABLE
Great Blue Heron	POSSIBLE	POSSIBLE
Great Crested Flycatcher	PROBABLE	CONFIRMED
Great Horned Owl	CONFIRMED	CONFIRMED
Green Heron	PROBABLE	PROBABLE
Hairy Woodpecker	POSSIBLE	CONFIRMED
Hooded Merganser	CONFIRMED	Not Observed
Horned Lark	CONFIRMED	PROBABLE
House Finch	CONFIRMED	CONFIRMED
House Sparrow	CONFIRMED	CONFIRMED
House Wren	CONFIRMED	CONFIRMED
Indigo Bunting	CONFIRMED	CONFIRMED
Killdeer	CONFIRMED	CONFIRMED

Common Name	17NH46 Highest Breeding Evidence Recorded	17NH56 Highest Breeding Evidence Recorded
Least Flycatcher	POSSIBLE	CONFIRMED
Magnolia Warbler	Not Observed	POSSIBLE
Mallard	CONFIRMED	CONFIRMED
Mourning Dove	CONFIRMED	CONFIRMED
Northern Cardinal	CONFIRMED	CONFIRMED
Northern Flicker	CONFIRMED	CONFIRMED
Northern Harrier	Not Observed	POSSIBLE
Northern Rough-winged Swallow	PROBABLE	POSSIBLE
Northern Waterthrush	PROBABLE	PROBABLE
Orchard Oriole	POSSIBLE	PROBABLE
Ovenbird	PROBABLE	PROBABLE
Pied-billed Grebe	CONFIRMED	Not Observed
Pileated Woodpecker	CONFIRMED	CONFIRMED
Pine Warbler	POSSIBLE	PROBABLE
Purple Finch	Not Observed	CONFIRMED
Purple Martin	Not Observed	CONFIRMED
Red-bellied Woodpecker	CONFIRMED	PROBABLE
Red-breasted Nuthatch	Not Observed	PROBABLE
Red-eyed Vireo	PROBABLE	CONFIRMED
Red-shouldered Hawk	Not Observed	PROBABLE
Red-tailed Hawk	CONFIRMED	CONFIRMED
Red-winged Blackbird	CONFIRMED	CONFIRMED
Ring-necked Pheasant	Not Observed	CONFIRMED
Rock Pigeon	PROBABLE	CONFIRMED
Rose-breasted Grosbeak	CONFIRMED	CONFIRMED
Ruby-throated Hummingbird	PROBABLE	POSSIBLE
Ruffed Grouse	PROBABLE	Not Observed
Ruffed Grouse	Not Observed	CONFIRMED
Savannah Sparrow	CONFIRMED	PROBABLE
Scarlet Tanager	PROBABLE	PROBABLE
Sharp-shinned Hawk	CONFIRMED	CONFIRMED
Song Sparrow	CONFIRMED	CONFIRMED
Sora	CONFIRMED	Not Observed
Spotted Sandpiper	CONFIRMED	CONFIRMED
Swamp Sparrow	CONFIRMED	CONFIRMED
Tree Swallow	CONFIRMED	CONFIRMED
Turkey Vulture	CONFIRMED	CONFIRMED
Veery	CONFIRMED	CONFIRMED
Vesper Sparrow	CONFIRMED	PROBABLE
Virginia Rail	PROBABLE	Not Observed
Warbling Vireo	PROBABLE	CONFIRMED
White-breasted Nuthatch	CONFIRMED	CONFIRMED
White-throated Sparrow	POSSIBLE	CONFIRMED
Wild Turkey	CONFIRMED	POSSIBLE

Common Name	17NH46 Highest Breeding Evidence Recorded	17NH56 Highest Breeding Evidence Recorded
Willow Flycatcher	PROBABLE	PROBABLE
Winter Wren	POSSIBLE	Not Observed
Wood Duck	CONFIRMED	CONFIRMED
Wood Thrush	CONFIRMED	CONFIRMED
Yellow Warbler	CONFIRMED	CONFIRMED
Yellow-bellied Sapsucker	POSSIBLE	POSSIBLE
Yellow-billed Cuckoo	CONFIRMED	Not Observed
Yellow-throated Vireo	POSSIBLE	Not Observed

2.2.2 Candidate Significant Wildlife Habitat

Review of aerial photography found the Project Location and lands within 120 metres of the Project Location to be under active agricultural management. There is no forest cover present, and a sparse number of hedgerows are present. Based on aerial photo review of land use and OBBA Square records for the general area, the Project Location and lands within 120 metres of the Project Location may provide limited habitat for open country breeding bird habitat and/or shrub/early successional bird breeding habitat.

Within OBBA Square 17NH46 and 17NH56 the following open country bird species were recorded: Vesper Sparrow (confirmed, probable), Savannah Sparrow (confirmed, probable), and American Kestrel (possible, confirmed). The two sparrows are indicator species, while American Kestrel is a common species for open country bird breeding habitat. The Site Investigation will determine whether at or within 120 m of the Project Location there is any open country bird breeding habitat – that is - natural or cultural fields (>30 ha) that is not Class 1 or 2 agricultural lands and that is not being actively used for farming. If habitat is present at or within 120 m of the Project Location then an assessment will be made to determine whether the habitat meet criteria for Candidate Significant Wildlife Habitat.

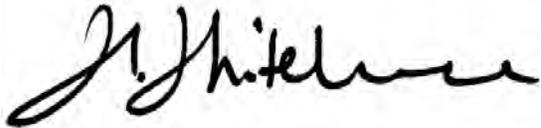
Bird species associated with shrub/early successional bird breeding habitat were also recorded within both OBBA Squares. Brown Thrasher (confirmed, confirmed) an indicator bird species was recorded. Common bird species for this habitat include Field Sparrow (confirmed, confirmed), Eastern Towhee (confirmed, probable) and Willow Flycatcher (probable, probable). The Site Investigation will determine whether at or within 120 m of the Project Location there is any shrub/early successional bird breeding habitat – that is - natural or cultural fields (>30 ha) that is not Class 1 or 2 agricultural lands and that is not being actively used for farming. If habitat is present at or within 120 m of the Project Location then an assessment will be made to determine whether the habitat meet criteria for Candidate Significant Wildlife Habitat.

2.3 Summary of Natural Features and Boundaries Identified

The Records Review found that the Fairfield Plain Wetland was approximately 140 m from the Project Location. Through the site investigation, the Fairfield Plain Wetland (Locally Significant, County of Brant; Non-PSW, MNR) will be confirmed that it is >120 m from the Project Location. In the site investigation Ecological Land Classification (ELC) will be conducted to determine whether there is any open country bird breeding habitat and

shrub/early successional bird breeding habitat present at or within 120 m of the Project Location.

Report Prepared by:



Heather Whitehouse
Ecologist, Savanta Inc.

3.0 REFERENCES AND BACKGROUND MATERIAL

- Bakowsky, W.D. 1996 (draft). Natural heritage resources in Ontario: S-ranks for communities in Site Regions 6 and 7. Natural Heritage Information Centre, Ontario Ministry of Natural Resources, Peterborough. 11 pp.
- COSEWIC. 2011. Species at Risk Registry. Available online: <http://www.sararegistry.gc.ca/>.
- Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological land classification for Southwestern Ontario: first approximation and its application. Ontario Ministry of Natural Resources, South Central Region, Science Development and Transfer Branch. Technical Manual ELC-005.
- Natural Heritage Information Centre (NHIC). 2012. Provincial status of plants, wildlife and vegetation communities databases. Ontario Ministry of Natural Resources, Peterborough. Available online: <http://www.mnr.gov.on.ca/MNR/nhic/nhic.html/>.
- Newmaster, S.G., A. Lehela, P.W.C. Uhlig, S. McMurray and M.J. Oldham. 1998. Ontario plant list. Ontario Ministry of Natural Resources, Ontario Forest Research Institute, Sault Ste. Marie, ON. Forest Research Information Paper No. 123. 550 pp. + appendices.
- Oldham, M. J., W. D. Bakowsky and D. A. Sutherland. 1995. Floristic quality assessment for southern Ontario. Natural Heritage Information Centre, Peterborough. 68 pp.
- Oldham, M.J. 1993. Distribution and status of the vascular plants of Southwestern Ontario. Draft. Aylmer District, Ontario Ministry of Natural Resources. 149 pp.
- Oldham, M.J., and S.R. Brinker. 2009. Rare Vascular Plants of Ontario, Fourth Edition. Natural Heritage Information Centre, Ontario Ministry of Natural Resources. Peterborough, Ontario. 188 pp.
- Ontario Ministry of Natural Resources. 2012. Species at Risk in Ontario website.
- Ontario Ministry of Natural Resources. 2011. Natural Heritage Assessment Guide for Renewable Energy Projects. First Edition. July 2011. Available online: <http://www.mnr.gov.on.ca/en/Business/Renewable/index.html>
- Ontario Ministry of Natural Resources. March 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. Second Edition. Toronto: Queen's Printer for Ontario. 248 pp.
- Ontario Ministry of Municipal Affairs and Housing. 2005. Provincial Policy Statement. Ontario Ministry of Municipal Affairs and Housing. Toronto: Queens Printer for Ontario 37 pp.
- Ontario Ministry of Natural Resources. 2002. Ontario Wetland Evaluation System. Southern Manual. Ontario Ministry of Natural Resources. 178pp.

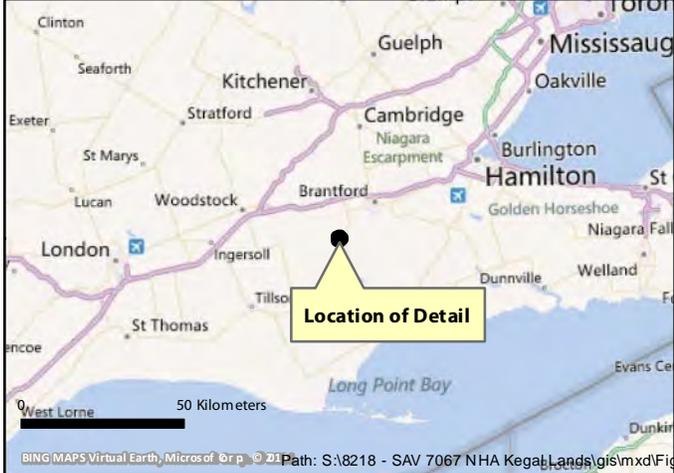
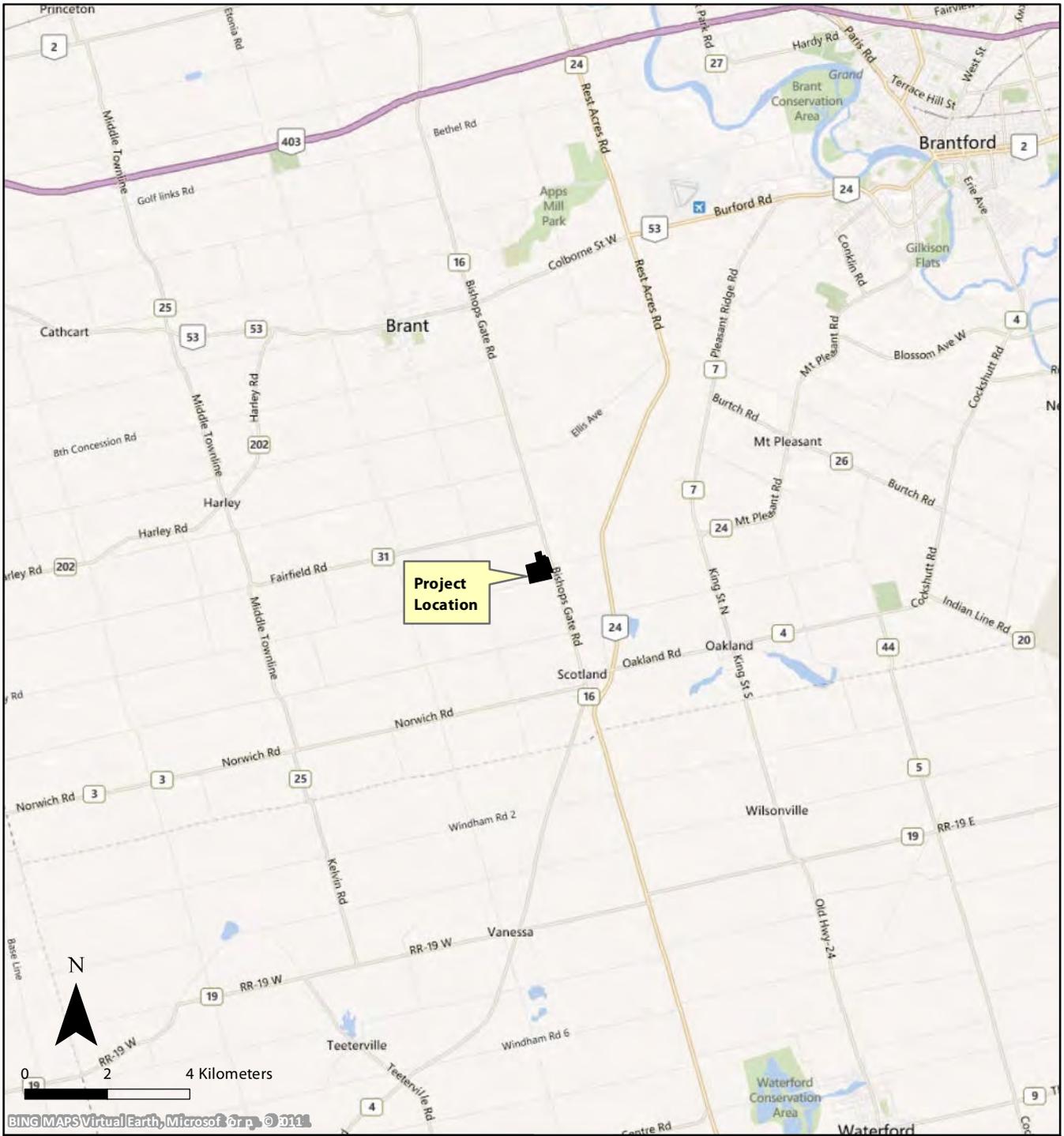
Royal Ontario Museum. 2012. Ontario's Biodiversity: Species at Risk Site.
www.rom.on.ca/ontario/risk.

Appendix A

Figures

Figure 1. Location of Subject Lands

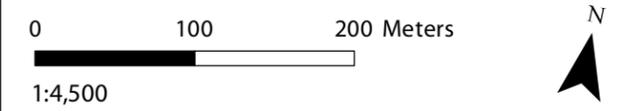
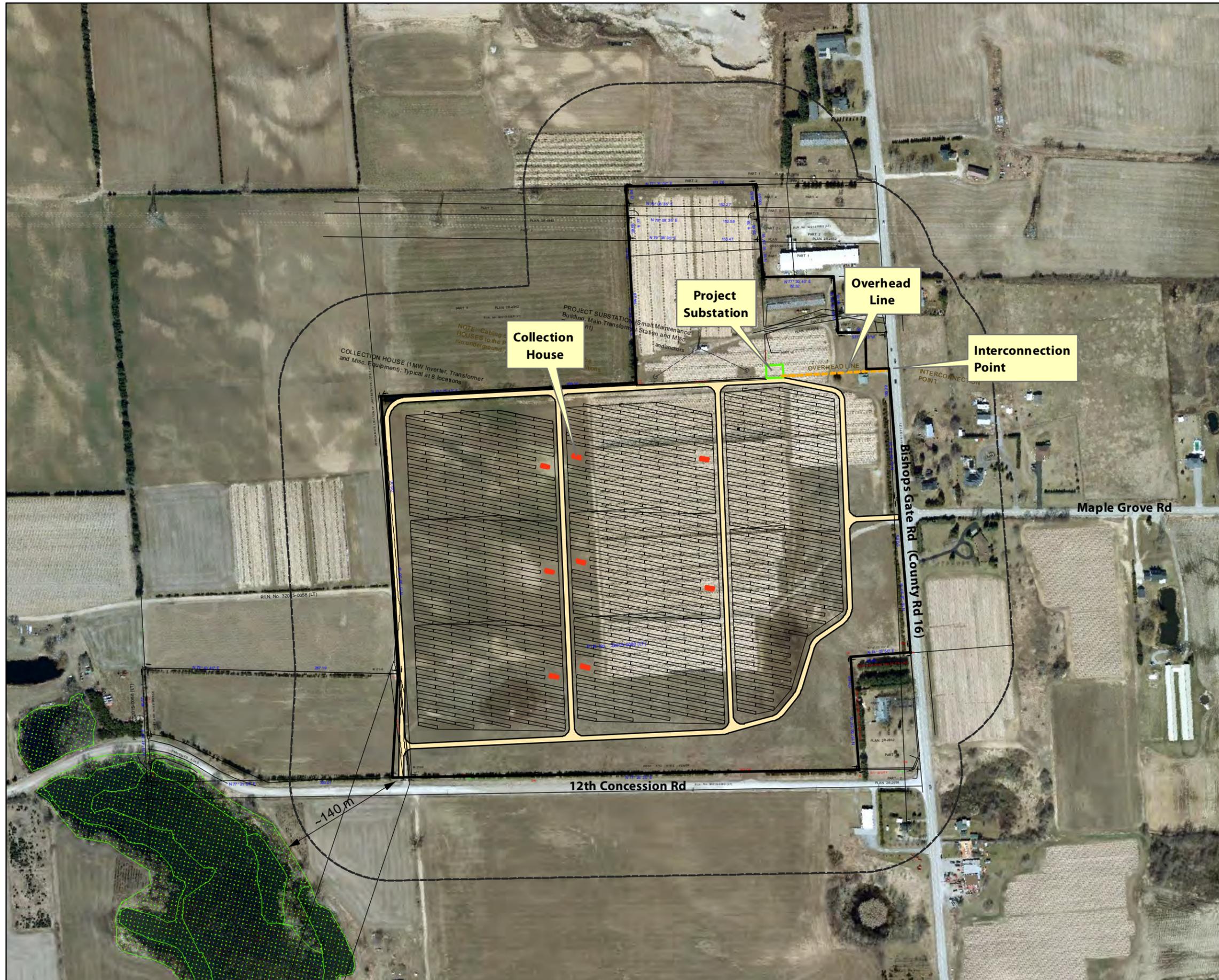
Figure 2. Documented Natural Heritage Features Designations
(Records Review)



Penn Energy Renewables, Ltd. - Records Review
 153 Bishopsgate Road, County of Brant, Ontario

Figure 1
Location of Subject Lands
and Project Location





- Map Legend**
- Project Location
 - Study Area and Adjacent Lands (120m from Project Location)
 - Fairfield Plain Wetland (NRVIS)
 - Collection House
 - Overhead Transmission Line
 - Project Substation
 - Roads On-site
 - Solar Array

Source: Aerial Orthophoto, Grand River Conservation Authority; photo date 2010.

Penn Energy Renewables, Ltd. - Records Review
153 Bishopsgate Road, County of Brant, Ontario

Figure 2
Documented Natural Heritage
Feature Designations
(Records Review)



Date Saved: 5/29/2012 2:40:42 PM

Appendix B

September 12, 2011 letter from MNR – “Brantgate Solar Project – Records Review Information Request County of Brant”



September 12, 2011

Max Frable
Penn Energy Renewables Ltd.
620 Righters Ferry Road
Bala Cynwyd, PA 19004

Dear Mr. Frable

Re: **Brantgate Solar Project – Records Review Information Request
County of Brant**

Thank you for your information request and the submitted work plan for review and comment. It is understood that the identified study area is for Penn Energy Renewables Ltd. proposed Brantgate Solar project under the renewable energy approvals (REA) process. With respect to the area of interest, Ministry staff provide the following for your consideration.

About the Renewable Energy Approvals Process

Under the Ministry of the Environment's regulation for Renewable Energy Approvals (359/09) under the Environmental Protection Act there are several requirements for Renewable Energy projects that must be met/addressed pertaining to the protection of natural heritage features as part of the application process. You can find the Regulation online at:

http://www.e-laws.gov.on.ca/html/regis/english/elaws_regs_090359_e.htm

Sections 23-28 of O. Reg 359/09, and as amended by O. Reg 521/10 outline the natural heritage requirements for renewable energy projects. Section 38 also outlines natural heritage prohibitions and Environment Impact Study (EIS) requirements.

The Ministry has also recently released the Natural Heritage Assessment Guide for Renewable Energy Projects - First Edition - July 2011. This version of the document and the decision notice for this guideline has been posted to the Environmental Registry website (#011-1845). Ministry staff recommend considering this guideline when developing your NHA and EIS (if required).

Both of these documents included updated information and guidance from earlier versions and should be referred to when preparing an NHA and EIS (if required).

Information relating to the NHA and EIS (Section 24-28 and 38 of O. Reg. 359/09)

District staff have conducted a review of available information based on the preliminary study area provided within the data request. Should the study area change to include additional areas, there may be other additional information available for these areas which should be gathered as part of the records review in accordance with Section 25 of O. Reg 359/09.

Please see the attached Table 1 below for a summary of the natural heritage information available from MNR Guelph District. PDFs referred to in Table 1 have been uploaded to the FTP site.

Information relating to Water Bodies Report (Section 29-31 of O. Reg. 359/09)

Please note that this information is provided solely for the purposes of MOE's Water Assessment/ Water Bodies Report as required under O. Reg. 359/09, but is not to be included within the NHA for MNR review.

There are no Lake Trout Lakes within 300m of the project location. Only those lakes listed in the Inland Ontario Lakes Designated for Lake Trout Management, May 2006 (as amended and revised from time to time) are considered Lake Trout Lakes for the purpose of the regulation (see document attached).

Information Relating to APRD Requirements

Requirements outlined within the Ministry's Approval and Permitting Requirements Document (APRD) also need to be addressed and completed as part of a complete submission to the Province for a renewable energy facility. The document outlines the requirements for the application, review and decisions regarding the approval of a renewable energy facility where MNR has a legislative responsibility. This document can be found online at:

<http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@renewable/documents/document/277097.pdf>.

As the APRD requirements are separate from the NHA requirements under the REA regulation Ministry staff recommend compiling APRD information into separate reports that should be submitted to MNR directly.

Species At Risk

District staff have provided a separate response regarding information pertaining to species listed as threatened or endangered under the Endangered Species Act.

Petroleum Resources

Also, due to possible safety concerns when selecting turbine locations, it is also recommended that you review the Ontario Oil, Gas and Salt Resources Library for information about known well and pool locations (<http://www.ogsrlibrary.com/>) of petroleum in the study area. Additional information pertaining to set back requirements from petroleum resource operations is included within the Ministry's APRD document. Once you have accessed the information available on the library the Petroleum Operations Section of the MNR can review information collected from the library to verify if the MNR has any other information relating to petroleum resources operations in proximity to the proposed project.

I trust this information will be of assistance. If you have any questions about this information or about the preparation of the natural heritage assessment or related materials, you can contact me at april.nix@ontario.ca or at (519)826-4939.

Sincerely,

Original signed by

April Nix

Renewable Energy Planning Ecologist
Ministry of Natural Resources, Guelph District
1 Stone Road West
Guelph, ON, N1G 4Y2
(519) 826-4939

Appendix C

1987 Fairfield Plain Wetland Evaluation Record (MNR)

WETLAND DATA RECORD

Class 6

(i). WETLAND NAME AND/OR NUMBER ~~BE~~ Fairfield Plain Wetland

(ii). ADMINISTRATIVE REGION Southwest, AND DISTRICT Simcoe
OF ONTARIO MINISTRY OF NATURAL RESOURCES

(iii). CONSERVATION AUTHORITY JURISDICTION Long Point Region CA

If not within a designated Conservation Authority, check here ___

(iv). COUNTY OR REGIONAL MUNICIPALITY Brant Co.

(v). TOWNSHIP Burford

(vi). LOTS AND CONCESSIONS Conc. II Lots 2,3 Conc. 12 Lot 2

(vii). MAP AND AIR PHOTO REFERENCES

(a) Longitude and Latitude 80°24'00"W 43°02'S0"N

(b) U.T.M. Grid Reference Zone: 17T ; Grid: 489661

(c) National Topographic Series Scale and Map Number(s) & Name
Series A851 1:25,000 40 P/1D Burford

(d) Air Photos

(1) Date photo taken 1978

(2) Scale of air photos 1:10,000

(3) Flight and plate numbers 4304 Roll 183 #255, 256

(viii). WETLAND SIZE AND BOUNDARIES

(a) Single contiguous wetland area: _____ hectares

OR

(b) "Wetland Complex" comprised of 2 individual wetlands as follows:

Wetland Number (for reference purposes)	Size of each wetland in the complex
Wetland No. 1	1.9 hectares
Wetland No. 2	14.0 "
Wetland No. 3	"
Wetland No. 4	"
Wetland No. 5	"
Wetland No. 6	"
Total size of wetland complex:	15.9 "

1.0. BIOLOGICAL COMPONENT

1.1. PRODUCTIVITY VALUES

1.1.1. Growing Degree-Days

Number of accumulated growing degree-days (check one)

_____	<2800
_____	2800 to 3200
<u> x </u>	3200 to 3600
_____	>3600

1.1.2. Soils

- Clays, loams or silts (mineral)
- Organic
- Undesignated

Estimated % of Area

_____	16
_____	84

1.1.3. Type of Wetland

(check one or more)

- | | |
|--------------|-----------------------------------|
| _____ | Bog |
| _____ | Fen |
| <u> x </u> | Swamp |
| <u> x </u> | Marsh (includes Open Water Marsh) |

Estimated % of Area

_____	32
_____	68

1.1.4. Site

(check one or more)

- | | |
|--------------|--|
| <u> x </u> | Isolated |
| _____ | Palustrine (permanent or intermittent outflow) |
| _____ | Riverine |
| _____ | Riverine (at rivermouth) |
| _____ | Lacustrine (at rivermouth) |
| _____ | Lacustrine (on enclosed bay) |
| _____ | Lacustrine (exposed to lake) |

Estimated % of Area

_____	100

1.1.5. Nutrient Status of Surface Water

(a) Write conductivity bridge reading and calculate T.D.S. at 25°C as per tables in Appendix VIII.

Location Sampled (ie. inflow, outflow, etc.)	Initial Specific Conductance (umhos/cm)	Temperature (°C)	Total Dissolved Solids (T.D.S.) (mg/l)
_____	_____	_____	_____
_____	425	27	= 272.2
_____	490	21	= 351.2
_____	_____	_____	= _____
_____	_____	_____	= _____
Average T.D.S.			= 311.7

(b) Check appropriate category (from (a))

Average T.D.S. (mg/l)	
<100	_____
100-500	_____ X _____
501-1500	_____
>1500	_____
NO READING	_____

1.2. DIVERSITY VALUES

1.2.1. Number of Wetland Types
(check one)

- _____ One
- _____ X Two
- _____ Three
- _____ Four

1.2.2. Vegetation Communities

(enter form and map code if available, or enter dominant species if known, and appropriate code/symbol)

a) One form

Code	
W ₂ ff	duckweed
_____	_____
_____	_____
_____	_____

% form dominant
 ff 40.2
 re 27.7
 ts 25.2
 h 6.9

1.2.3. Diversity of Surrounding Habitat

(check all appropriate items)

- row crops
- pasture
- abandoned agricultural land
- deciduous forest
- coniferous forest
- urban or cottage development
- pits, quarries or mining waste disposal
- open lake or deep river
- fence rows with cover, or shelterbelts
- terrain undulating or hilly with ravines
- creek(s)

Enter Total = 5

1.2.4. Proximity to Other Wetlands

(check first appropriate category)

- i) Hydrologically connected by surface water to other wetlands (different dominant type) or open water within 1.5 km.
- ii) Hydrologically connected by surface water to other wetlands (same dominant type) within 0.5 km.
- iii) Hydrologically connected by surface water to other wetlands (different dominant type) or open water body from 1.5 to 4 km away.
- iv) Hydrologically connected by surface water to other wetlands (same dominant type) from 0.5 to 1.5 km away.
- v) Within 0.75 km of other wetlands (different dominant type) or open water body, but not hydrologically connected by surface water.
- vi) Within 1 km of other wetlands, but not hydrologically connected by surface water. x
- vii) No wetland within 1.5 km.

1.2.5. Interspersion

(check one)

- Type 1
- Type 2 x
- Type 3
- Type 4

1.2.6. Open Water Types
(check one)

- No open water _____
- Type 1 _____
- Type 2 _____
- Type 3 x _____
- Type 4 _____
- Type 5 _____
- Type 6 _____
- Type 7 _____
- Type 8 _____

1.3. SIZE (Biological Component)
(refer to viii)

 15.4 hectares

2.0. SOCIAL COMPONENT

2.1. RESOURCE PRODUCTS WITH CASH VALUE

2.1.1. Timber (lumber and firewood)

- (1) _____ 51 to 100% of wetland area has mature trees (>10 cm dbh, >25% cover)
- (2) _____ 10 to 50% of wetland area has mature trees (as above)
- (3) x Wetland has few, immature or no trees

Source of information: field obs.

2.1.2. Wild Rice

- (1) _____ Present
- (2) x Absent

Source of Information: field obs.

2.1.3. Commercial Fish (Bait Fish and/or Coarse Fish)

- (1) _____ Fish harvested from the wetland (as per MNR)
- (2) _____ Abundant during at least part of the year
- (3) x Not abundant or only occasional
- (4) _____ Habitat not suitable for fish

Source of Information: field obs.

2.1.4. Bullfrogs

- (1) x Present
- (2) _____ Absent

Source of Information: field obs.

2.1.5. Snapping Turtles

(1) Present

(2) Absent

Source of Information: field obs.

2.1.6. Furbearers

(check if present)

muskrat

raccoon

beaver

mink

other

Source of Information: landowner

2.2. RECREATIONAL ACTIVITIES

(check appropriate spaces)

Intensity of Use	Type of Wetland Associated Use			
	Hunting	Nature Appreciation or Study	Fishing	Canoeing/Boating
High	X			
Moderate				
Low				
None Known		X		
Not Possible			X	X
Source of Information	<u>Jim Greenwood</u>	<u>C.O.-MNR Simcoe</u>	<u>Field Obs.</u>	<u>field obs. 84 crew</u>

2.3. AESTHETICS

2.3.1. Landscape Distinctness

(1) Clearly distinct

(2) Indistinct

2.3.2. Absence of Human Disturbances

2.3.2.1. Level of Disturbance

- (1) _____ Human disturbances absent or nearly so
- (2) x One or several singular or localized disturbances
- (3) _____ Moderate disturbance or localized water pollution
- (4) _____ Impairment of natural quality intense in some areas or severe localized water pollution
- (5) _____ Extremely intense disturbance or water pollution severe and widespread.

2.3.2.2. Types of Disturbances

- x roads
- x utility corridor
- _____ buildings
- _____ channelization
- _____ drainage
- _____ filling
- _____ water pollution
- _____ other: _____

2.4. EDUCATION AND PUBLIC AWARENESS

2.4.1. Educational Uses

- (1) _____ Frequent - an average of 2 or more visits per year by one or more school groups, local clubs for the purpose of studying the animals, plants, environment, etc.
- (2) _____ Infrequent - use by organized groups (one visit or less per year or only casual visits)
- (3) x No known visits

List groups utilizing the wetland

<u>Name of Group(s)</u>	<u>Source of Information</u>
_____	_____
_____	_____
_____	_____

2.4.2. Facilities and Programs

(check one)

- (1) _____ Staffed interpretation center with shelters, trails, literature
- (2) _____ No interpretation center or staff, but a system of self-guiding trails and observation points or brochures available
- (3) x No facilities or programs

2.4.3. Research and Studies

(check one)

- (1) _____ One or more wetland-related scientific research papers published in a scientific journal;
- (2) _____ One or more reports written outlining some aspect of the wetland's natural resources;
- (3) x No reports or papers.

List scientific papers, reports, etc.

2.5. PROXIMITY TO URBAN AREAS

(check one)

- (1) _____ In an urban or suburban area
- (2) _____ <10 km from a population center greater than 10,000
- (3) x 10 to 60 km from a population center greater than 10,000
- (4) _____ Isolated or relatively remote

2.6. OWNERSHIP/ACCESSIBILITY

Estimate % of area and enter in the appropriate space(s)

<u>ACCESSIBILITY</u>	<u>OWNERSHIP</u>				
	Public, unrestricted activities	Public, restricted activities	Private, open to public for limited activities	Private Club, closed to public	Private or Private and posted
1) Easy at most times by road/waterway					84
2) Easy only at certain times of the year					16
3) Limited, moderate effort required					
4) Difficult*					

* Requires extended effort due to distance from roads, navigable waterways or isolated geographical position.

Source of information landowner

2.7. Size (Social Component)

154 _____ hectares (refer to viii)

3.0. HYDROLOGICAL COMPONENT

3.1. EFFECT OF ADJOINING LARGE WATER BODY
(check one)

- (1) _____ Wetland located on the Ottawa, St. Lawrence, Niagara, Detroit or St. Clair Rivers (Go to 3.3)
- (2) _____ Wetland bordering on one of the Great Lakes (Go to 3.3)
- (3) x _____ Wetland not located as above (Go to 3.2)

If (1) or (2), omit Section 3.2, FLOW STABILIZATION. Continue with Section 3.3, WATER QUALITY IMPROVEMENT. If (3), proceed to Section 3.2.

3.2. FLOW STABILIZATION (All wetlands except those bordering on the Great Lakes or the 5 large rivers)

3.2.1. Detention Due to Surface Area

3.2.1.1. Size of Catchment Basin above Wetland Outflow

Catchment Basin Size 1.3 sq. km

3.2.1.2. Total Size of all Detention Areas (Lakes, Reservoirs and Wetlands) Draining into the Wetland (sq. km)

List Detention Areas	Size
None	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
Total	_____ sq. km

3.2.1.3. Size of Adjoining Lake (Lacustrine wetlands only)

NA hectares

3.2.1.4. Size of Adjoining River (Riverine wetlands only)
(not assessed)

3.2.1.5. Location and Size of Detention Areas (Lakes, Reservoirs and Wetlands) within 30 km above and below the wetland

(NOTE: 1 sq. km = 100 ha)

(a) Detention areas above the wetland (within 30 km)

Name and/or Number of Detention Area	Distance upstream from wetland (in km)	Size (hectares)	For Scoring Use
--------------------------------------	--	-----------------	-----------------

None

(b) Detention areas below the wetland (within 30 km)

Name and/or Number of Detention Area	Distance downstream from wetland (in km)	Size (hectares)	For Scoring Use
--------------------------------------	--	-----------------	-----------------

None

3.2.1.6. Land Use along River or Stream Shoreline for 20 km Below the Wetland
(Palustrine and all Riverine wetlands except those located along the 5 large rivers).

(check one)

- (1) Wetland outflow exits into a deep ravine _____
- (2) A village, town or urban area is located along outflow within 20 km _____
- (3) Not as above, and actively farmed agricultural land borders onto outflow, and _____
 - length of agricultural border = <1 km _____
 - (sum of shoreline 1-3 _____
 - on both sides of 4-8 _____
 - river within 20 km) >8 _____
- (4) Not as above, (eg. lands bordering outflow within 20 km are forested, or abandoned by agriculture, or outflow enters another wetland or lake, etc.) _____

3.2.1.7. Size (Hydrological Component)
(see viii)

15.9 _____ ha

3.2.2. Flow Augmentation (Palustrine wetlands only)

NA Size of Catchment basin _____ sq. km (See 3.2.1.1)
Wetland Area as a % of Catchment Basin Size _____ %
(Note: convert wetland area to sq. km before calculating %)

3.3. WATER QUALITY IMPROVEMENT (All wetlands)

3.3.1. Short Term Removal of Nutrients from Surface Water

3.3.1.1. Site Type (see 1.1.4 and check dominant site)

- Isolated
- _____ Palustrine (with permanent or intermittent outflow)
- _____ Riverine
- _____ Riverine (at rivermouth)
- _____ Lacustrine (at rivermouth)
- _____ Lacustrine (on enclosed bay)
- _____ Lacustrine (exposed to lake)

3.3.1.2. Actual Wetland Area Dominated by Robust Emergents and Submergents
(check one)

- <5
- 5 - 50
- 51 - 100
- 101 - 250
- 251 - 500
- 501 - 1000
- >1000 hectares

3.3.1.3. Land Use in Catchment Basin
(check one)

- (1) Mainly agriculture and/or urban
- (2) Roughly 40-60% agriculture; remainder forested or abandoned agriculture
- (3) Mainly forested and/or less than 40% agriculture

3.2.2. Long Term Nutrient Trap
(check one)

- (1) Wetland located on an active delta
- (2) Wetland rivermouth but without obvious delta
- (3) Wetland with organic soils occupying 50% or more of the area
- (4) Wetland with organic soils occupying less than 50% of the area (i.e. mainly mineral or undesignated soils)

3.4. EROSION CONTROL

3.4.1. Erosion Buffer (Lacustrine and Riverine wetlands only)

NOTE: Assess for the dominant site type (see 3.3.1.1)

3.4.1.1. Riverine Wetlands (shoreland and flood plain)
(check principal vegetation form)

- NA
- (1) Trees or Shrubs
 - (2) Emergents
 - (3) Non-vegetated or nearly so

3.4.1.2. Lacustrine Wetlands (with or without barrier beach)
(check principal vegetation form)

- NA
- (1) Trees or Shrubs
 - (2) Emergents
 - (3) Submergents and Floating
 - (4) Non-vegetated or nearly so

3.4.1.3. Fetch (Lacustrine wetlands or Riverine wetlands on any of the 5 large rivers)

- Maximum distance
- NA (1) _____ barrier beach present
- (2) _____ <2 km
- (3) _____ 2 to 8 km
- (4) _____ >8 km

3.4.2 Sheet Erosion (All except Lacustrine wetlands)
(check the appropriate space)

Wetland Size (ha)	R FACTOR VALUE			
	<50	50-75	75-100	>100
<2				
2-5				
6-10				
11-15				
16-20			X	
>20				

4.0. SPECIAL FEATURES COMPONENT

4.1. RARITY AND/OR SCARCITY

4.1.1. Individual Wetlands

Name of Physiographic Unit: Lake Erie Plain
Unit Number: 2

4.1.2. Wetland Type Representation (minimum size 0.5 ha)
(check one or more)

Marsh
 Swamp
 Fen
 Bog

4.1.3. Individual Species

4.1.3.1. Breeding Habitat for an Endangered Animal or Plant Species

	<u>Name of Species</u>	<u>Source of Information</u>
(1)	_____	_____
(2)	_____	_____

4.1.3.2. Traditional Migration or Feeding Habitat for an Endangered Animal Species

	<u>Name of Species</u>	<u>Source of Information</u>
(1)	_____	_____
(2)	_____	_____

4.1.3.3. Breeding or Feeding Habitat for a Provincially Significant Animal Species

	<u>Name of Species</u>	<u>Source of Information</u>
(1)	_____	_____
(2)	_____	_____

4.1.3.4. Provincially Significant Plant Species

	<u>Name of Species</u>	<u>Source of Information</u>
(1)	_____	_____
(2)	_____	_____

4.1.3.5. Regionally Significant Species

	<u>Name of Species</u>	<u>Source of Information</u>
(1)	_____	_____
(2)	_____	_____
(3)	_____	_____
(4)	_____	_____

4.2. SIGNIFICANT FEATURES AND/OR FISH AND WILDLIFE HABITAT

4.2.1. Nesting of Colonial Waterbirds
(check one)

- (1) _____ Currently nesting; species name(s) _____
- (2) _____ Known to have nested within past 5 years;
species name(s) _____
- (3) Active feeding area
- (4) _____ None known

Source of Information: Jim Greenwood C.O. Simcoe MNR Jan. 13/87

4.2.2. Winter Cover for Wildlife

(check only highest level of significance)

- (1) _____ Provincial significance for Deer _____, Moose _____
- (2) _____ Regional significance for Deer _____, Moose _____
- (3) _____ Local significance for Deer _____, Moose _____
- (4) _____ Good winter cover for other species (list): _____

- (5) Poor winter cover

Source of Information: field obs.

4.2.3. Waterfowl Staging

(check only highest level of significance)

- (1) _____ National significance
- (2) _____ Provincial significance
- (3) _____ Regional significance
- (4) Local or no significance

Source of Information: field obs. 84

4.2.4. Waterfowl Production

(check only highest level of significance)

- (1) _____ Provincial significance
- (2) Regional significance
- (3) _____ Local significance
- (4) _____ Little or no significance

Source of Information: Jim Collins, Res. Plan. Sup. MNR Simcoe
Jan. 19, 1987.

Appendix D

September 1, 2010 email from GRCA - "153 Bishopsgate Road"

From: Andrew Herreman <aherreman@grandriver.ca>
Subject: 153 Bishopsgate Road
Date: September 1, 2010 11:51:43 AM EDT
To: Heather Whitehouse <heatherwhitehouse@savanta.ca>

Hi Heather, please find attached a copy of our resource mapping for the subject property. A portion of the property, the SE corner is within the GRCA Watershed but the portion of the property within the GRCA Watershed does not contains any features of interest to the GRCA. I recommend you contact Bonnie at Long Point Region Conservation Authority for information regarding the remainder of the property.

Andrew Herreman, CPT
Resource Planning Technician
Grand River Conservation Authority
400 Clyde Rd.
Cambridge ON N1R 5W6
(519) 621-2763 x 2320

From: Heather Whitehouse [mailto:heatherwhitehouse@savanta.ca]
Sent: Wednesday, September 01, 2010 11:38 AM
To: Andrew Herreman
Subject: Property boundary - north of Scotland ON

Andrew,

Attached is an aerial photo with the property boundary shown. The property is located at the northwest corner of Regional Road 16 (Bishopsgate Road) and Concession 12. Would you let me know if any of the property is within GRCA jurisdiction and if so provide a map showing constraint features (i.e. GRCA Regulation limit, floodlines, PSW, etc).

Many thanks for your help,

Heather

Missing Plug-in

Missing Plug-in

Heather Whitehouse
Savanta Inc.

Direct Phone: 416 568-7284
fax: 1 866 728-7986
heatherwhitehouse@savanta.ca
www.savanta.ca



153 Bishopsgate Road

LEGEND

- WATERSHED BOUNDARY (GRCA)
- UTILITY LINE (NRVIS)
- ROADS-ADDRESSED (MNR)
- RAILWAY (NRVIS)
- MUNICIPAL BOUNDARY (GRCA)
- CLASSIFIED STREAMS - NEW (NRVIS)
- COLD WATER
- COOL WATER
- UNKNOWN
- WARM WATER
- DRAINAGE-NETWORK (GRCA)
- PARCELS-ASSESSMENT (MPAC)
- LOTS (NRVIS)
- FLOODPLAIN-SPECIAL POLICY AREA (GRCA)
- FLOODPLAIN (GRCA)
- ENGINEERED
- APPROXIMATE
- ESTIMATED
- WETLAND (GRCA)
- SLOPE VALLEY (GRCA)
- STEEP
- OVERSTEEP
- SLOPE EROSION (GRCA)
- STEEP
- OVERSTEEP
- TOE
- WETLAND (NRVIS)
- PROVINCIALLY SIGNIFICANT
- OTHER
- PARKS (GRCA)
- REGULATION LIMIT (GRCA)
- DRAINAGE-POLY (NRVIS)

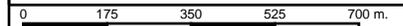


GRCA Disclaimer

This map is for illustrative purposes only. Information contained hereon is not a substitute for professional review or a site survey and is subject to change without notice. The Grand River Conservation Authority takes no responsibility for, nor guarantees, the accuracy of the information contained on this map. Any interpretations or conclusions drawn from this map are the sole responsibility of the user.

The source for each data layer is shown in parentheses in the map legend. For a complete listing of sources and citations go to:

<http://grims.grandriver.ca/docs/SourcesCitations1.htm>



NAD 1983, UTM Zone 17

Scale 1:15,676



Appendix E

September 15, 2010 letter from LPRCA – “153 Bishopsgate Road Scotland, ON Assessment
#29-20-011-040-15700”

LONG POINT REGION CONSERVATION AUTHORITY

4 Elm St. Tillsonburg, Ontario, Canada, N4G 0C4

1-519-842-4242 Fax: 1-519-842-7123

E-mail: jshaughnessy@lprca.on.ca Web Site: <http://www.lprca.on.ca>

To: Savanta Inc.
Attention: Heather Whitehouse

Date: September 15, 2010

From: Jeff Shaughnessy
Resource Planning Assistant

Subject: 153 Bishopsgate Road
Scotland, ON
Assessment # 29-20-011-040-15700

A portion of this property is regulated by this Authority, under Ontario Regulation 178/06 and staff should be contacted prior to any alteration or interference with a watercourse or wetland or "development" taking place. For the purpose of our regulation, "development" is defined in the Conservation Authorities Act, (R.S.O.1990, c.C.27) as;

- a) The construction, reconstruction, erection or placing of a building or structure of any kind,
- b) Any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure or increasing the number of dwelling units in the building or structure,
- c) Site grading, or
- d) The temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere.

Other controls, which address Conservation Authority issues, may exist through the local Zoning By-Law, Official Plan, site-specific development agreements and/or other legislation. You are advised to consult these documents for possible restrictions.

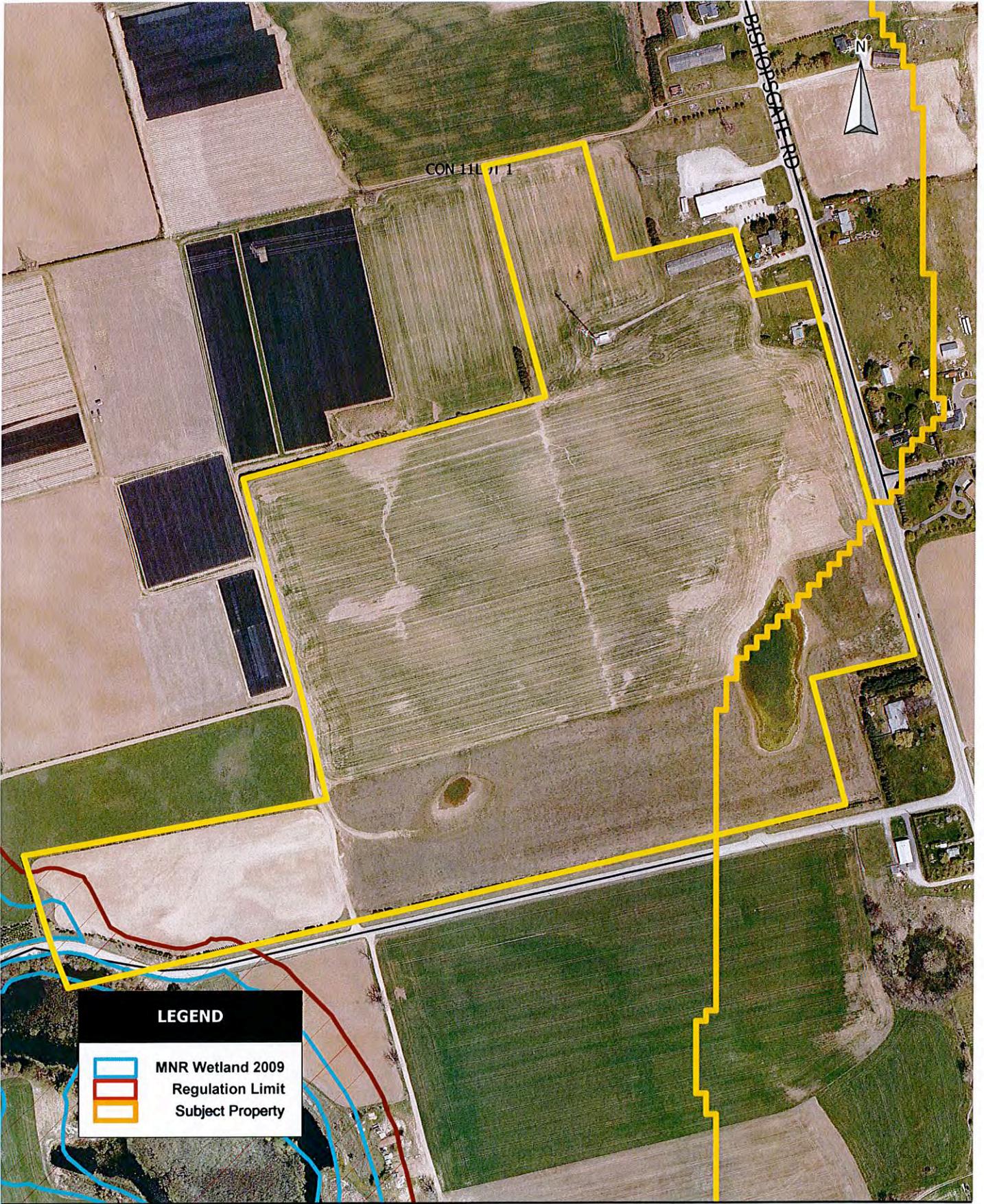
For your information we have no record of any outstanding work orders or violations affecting the subject lands.

Please contact me if you have any questions in this regard.

Yours truly,



Jeff Shaughnessy



153 Bishopsgate Road
 Scotland, ON
 29-20-011-040-15700

Universal Transverse Mercator - Zone 17 (N)
 Map centre: East 549745.74 m North 4766393.96 m
 Created : 15/09/2010 10:34:59 AM
 ©LPRCA GIS SERVICES 2010

