North Kent Wind 1 Project
Natural Heritage Evaluation of Significance Report

Prepared for:
AECOM
105 Commerce Valley Drive West, 7th Floor
Markham, ON
L3T 7W3

Project No. 1612 l October 2015

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

North Kent Wind 1 Project
Natural Heritage Evaluation of Significance Report

Project Team:

Staff	Role
Andrew G. Ryckman	Project Advisor
Pamela Hammer	Project Manager/Biologist
Andrew Dean	Terrestrial and Wetland Biologist
Charlotte Moore	Terrestrial and Wetland Biologist
Christina Carter	Terrestrial and Wetland Biologist
Christy Humphrey	Terrestrial and Wetland Biologist
Lillian Knopf	Terrestrial and Wetland Biologist
Patrick Deacon	Terrestrial and Wetland Biologist
Victoria Rawls	Terrestrial and Wetland Biologist
Kaitlin Boddaert	GIS Technician

Report submitted on October 26, 2015

Andrew Ryckman
Senior Terrestrial & Wetland Biologist

225 Labrador Drive, Waterloo, Ontario, N2K 4M8 **Tel:** (519) 725-2227 **Fax:** (519) 725-257 **Web:** www.nrsi.on.ca **Email:** info@nrsi.on.ca

TABLE OF CONTENTS

List of Tables

List of Maps

1.0 Project Description

Natural Resource Solutions Inc. (NRSI) was retained in March 2015 by AECOM, on behalf of North Kent Wind 1 LP, by its general partner, North Kent Wind 1 GP Inc. (North Kent Wind 1), to conduct a Natural Heritage Assessment (NHA) in accordance with the Renewable Energy Approval (REA) Regulation, Ontario Regulation 359/09. This assessment includes a records review, site investigation, evaluation of significance, and environmental impact study of any potentially significant natural features or wildlife habitats at a proposed wind energy generating facility of up to 50 permitted wind turbines, with a nameplate capacity of up to 100 megawatts (MW).

The North Kent Wind 1 Project (Project) is being proposed by North Kent Wind 1. North Kent Wind 1 is a joint venture limited partnership owned by affiliates of Pattern Renewable Holdings Canada ULC (Pattern Development) and Samsung Renewable Energy Inc. (Samsung Renewable Energy). North Kent Wind 1 is proposing to develop the Project north of the City of Chatham in the Municipality of Chatham-Kent, Ontario. The Project Study Area is generally bounded by Oldfield Line to the north, Bear Line Road to the west, Pioneer Line and Pine Line / Darrell Line to the south, and Centre Sideroad and Caledonia Road to the east. The Project will be located primarily on privately owned land with some components (e.g., electrical collector lines) being placed along public right-of-ways, none of which are proposed on provincial Crown land.

According to Ontario Regulation (O. Reg.) 359/09, and as per the NHA Guide for Renewable Energy Projects (November 2012a), the Project Location is defined as "...*a part of land and all or part of any building or structure in, on or over which a person is engaging in or proposes to engage in the project and any air space in which a person is engaging in or proposes to engage in the project*". As described therein, the Project Location boundary is the outer limit of where site preparation and construction activities will occur (i.e., disturbance areas described below) and where permanent infrastructure will be located, including the air space occupied by turbine blades.

In accordance with Section 26 of the REA Regulation, O. Reg 359/09, NRSI has conducted a site investigation to identify any potentially significant natural features and wildlife habitats within 120m of the Project Location. This includes areas within 120m of

proposed turbines, measured from blade tip, as well as within 120m of any areas that may be used as temporary lay-down areas, crane pads, access roads, and collection, distribution, and transmission lines. For the purposes of this report, NRSI will refer to the areas within 120m of the Project Location as the 'Project Area'. See Map 1 for an illustration of the Project Area and natural features.

2.0 REA Requirements

Ontario Regulation (O. Reg.) 359/09 – *Renewable Energy Approvals* under *Part V.0.1 of the Act* (herein referred to as the REA Regulation), made under the *Environmental Protection Act*, identifies the requirements for the development of renewable energy projects in Ontario. In accordance with the REA Regulation, the North Kent Wind 1 Project is classified as a Class 4 wind facility and is required to complete a REA.

Section 27 of the REA Regulation requires that, if any candidate significant natural feature is identified within the Project Area, a natural heritage evaluation of significance should be undertaken. This evaluation of significance should utilize evaluation criteria or procedures established or accepted by the Ministry of Natural Resources and Forestry (MNRF). In conjunction with the evaluation of significance, Subsection 4 of the REA Regulation requires that a report be prepared that sets out the following:

1. For each natural feature shown on the map mentioned in paragraph 3 of subsection 26 (3), a determination of whether the natural feature is provincially significant, significant, not significant, or not provincially significant.
2. A summary of the evaluation criteria or procedures used to make the determinations mentioned in paragraph 1.
3. The name and qualifications of any person who applied the evaluation criteria or procedures mentioned in paragraph 2.
4. The dates of the beginning and completion of the evaluation.

This NHA report has been organized and prepared to satisfy the requirements of the evaluation of significance as outlined in the REA Regulation.

As part of this Project, NRSI has considered all aspects relating to provincially Threatened and Endangered species; however, since these species are addressed through a separate permitting process under the *Endangered Species Act* (2007), they have not been discussed within any of the NHA reports. These species will be addressed in full detail, including a description and results of field assessments, potential impacts, and recommended mitigation measures, as part of a separate reporting process to be addressed with the MNRF, as required.

3.0 Staff Roles

The requirements of the REA process indicate that the names and qualifications of all staff participating in the evaluation of significance should be included. As a result, the qualifications and roles of key staff participating in the evaluation of significance at the North Kent Wind 1 Project have been outlined below.

Andrew Ryckman, B.Sc.
Andrew is a Senior Terrestrial and Wetland Biologist with more than 9 years of experience working on a variety of environmental projects. He has considerable experience managing Environmental Assessments and NHAs for wind project developments across Canada, with experience including project management, report generation, data analysis, and considerable field monitoring. Andrew also has experience coordinating evaluation of significance surveys for numerous wildlife habitat types, including, but not limited to, waterfowl stopover and staging areas, amphibian woodland breeding habitats, bat maternity colonies, and open country bird breeding habitats. Andrew specializes in acoustic bat inventories and sonogram analysis, and has working experience with bat monitoring equipment and various bat analysis software. He routinely utilizes analysis software to identify bat species, and has helped create a reference call library using recorded bat calls.

Andrew's role in this Project was to act as the project advisor, overseeing all aspects of the NHA, including all associated field work and reporting.

Pamela Hammer, B.Sc.
Pamela is a Terrestrial and Wetland Biologist with more than 4 years of experience in the environmental field. She has managed several renewable energy projects, and routinely participates in and coordinates field investigations and reporting for renewable energy projects throughout Ontario. Pamela has experience mapping vegetation communities, conducting vegetation inventories and wildlife habitat assessments for birds, bats, herpetofauna and mammals. Pamela also has experience coordinating and conducting evaluation of significance surveys for numerous wildlife habitat types, including, but not limited to, waterfowl stopover and staging areas, amphibian woodland breeding habitats, bat maternity colonies, marsh bird breeding habitats, and habitats for species of conservation concern. She also has experience conducting tree inventories, risk assessments, implementing integrated pest management practices, and environmental monitoring. Pamela is a Certified Arborist (2011), is qualified as a Tree Risk Assessor (2013), and is certified in the Ecological Land Classification (ELC) System for Southern (2014) and Northeastern Ontario (2011). Pamela is also a certified Butternut Health Assessor (2014). She also has extensive experience with client and agency liaison through her project management involvement.

Pamela's role in this Project was to act as the project manager, overseeing all aspects of the NHA, including all associated field work and reporting. She was

the main contact point for agency staff and assisted with the preparation of all corresponding reports.

Andrew Dean, B.E.S
Andrew is a Terrestrial and Wetland Biologist with more than 5 years of experience in the environmental industry, working in both the non-profit and private sectors. His areas of expertise include the coordination of, and participation in, a wide variety of biological field surveys including vegetation mapping and vascular plant inventories, acoustic bat monitoring, bat habitat assessments and post-construction mortality monitoring at wind energy facilities. Andrew also has experience conducting evaluation of significance surveys for numerous wildlife habitat types, including, but not limited to, waterfowl stopover and staging areas, amphibian woodland breeding habitats, bat maternity colonies, marsh bird breeding habitats, and habitats for species of conservation concern. Andrew is trained and certified in both the ELC system for Southern Ontario (2011) and the Ontario Wetland Evaluation System (OWES) (2012), with considerable experience with tree identification, vegetation community classification, and botanical Species at Risk inventories. Andrew is also a certified Butternut Health Assessor (2014).

Andrew was a lead biologist, conducting ELC mapping, wetland assessments, and wildlife habitat assessment surveys within the Project Area.

Charlotte Moore, M.E.S.
Charlotte is a Terrestrial and Wetland Biologist with more than 5 years of experience in biological monitoring and conducts environmental impact assessments on a variety of project types. Charlotte has completed her Bachelor of Environmental Studies and has a Master of Environmental Studies from the University of Waterloo. Charlotte has managed a variety of environmental projects, and has coordinated numerous types of surveys, including ELC, bat surveys, breeding bird surveys and herpetofauna studies. Charlotte also has experience coordinating and conducting evaluation of significance surveys for numerous wildlife habitat types, including, but not limited to, amphibian woodland breeding habitats, bat maternity colonies, marsh bird breeding habitats, and habitats for species of conservation concern. She is OWES certified (2012) and certified in the ELC system for Southern Ontario (2013). Charlotte has managed numerous wind power projects throughout Ontario and Saskatchewan. She also has extensive experience with client and agency liaison through her project management involvement.

Charlotte was a lead biologist, conducting ELC mapping and wildlife habitat assessment surveys within the Project Area.

Christina Carter, M.E.S.
Christina is a Terrestrial and Wetland Biologist with over 6 years of environmental experience. She regularly manages a variety of environmental projects, including renewable energy projects of both wind and solar facilities. She has experience coordinating field work, attending client and staff meetings, collecting background information and reporting. Christina specializes in bird ecology and has experience coordinating and conducting natural area inventories

for birds, bats and other mammals, reptiles, amphibians, and vegetation. Christina also has experience conducting evaluation of significance surveys for numerous wildlife habitat types, including, but not limited to, amphibian woodland breeding habitats, bat maternity colonies, and habitats for species of conservation concern. Christina is also certified in the ELC system for Southern Ontario (2013).

Christina was a lead biologist, conducting wildlife habitat assessment surveys within the Project Area.

Christy Humphrey, B.E.S.
Christy is a Terrestrial and Wetland Biologist with more than 5 years of environmental consulting experience, working on a variety of project tasks. Her areas of expertise are vegetation mapping and floral inventories, visual and acoustic bat monitoring, and post-construction mortality monitoring; however, she also has experience conducting bird assessments, amphibian studies, and other fauna assessments. Christy also has experience conducting and coordinating evaluation of significance surveys for numerous wildlife habitat types, including, but not limited to, amphibian woodland breeding habitats, bat maternity colonies, open country bird breeding habitats, and marsh bird breeding habitats. Christy is experienced in conducting literature and background reviews, preparing NHAs, Environmental Effects Monitoring Plans, Environmental Impact Studies, and post-construction mortality monitoring reports. She has received training in Eastern Bat Acoustic Field Techniques (Bat Conservation and Management Inc. 2012), and is certified in the ELC system for Southern (2010) and Northeastern Ontario (2010), as well as OWES certified (2012).

Christy was a lead biologist, conducting ELC mapping, wetland assessments, and wildlife habitat assessment surveys within the Project Area. She also assisted with preparation of the report relating to wetlands.

Lillian Knopf, B.Sc.(Env.)
Lillian is a Terrestrial and Wetland Biologist with over 5 years of experience in the environmental field. She has experience coordinating and conducting field investigations, including surveys of birds, bats, reptiles, amphibians, and vegetation, sampling of benthic invertebrates, phytoplankton, and fish, and terrestrial and aquatic habitat assessments. Lillian has also participated in conducting evaluation of significance surveys for numerous wildlife habitat types, including, amphibian woodland breeding habitats, bat maternity colonies, marsh bird breeding habitats, and habitats for species of conservation concern. Lillian has prepared reports for consulting firms, academia, and governmental agencies. She is also a M.Sc. Candidate in biology at the University of Waterloo.

Lillian assisted with the preparation of this report.

Patrick Deacon, B.E.S.
Patrick is a Terrestrial and Wetland Biologist with 5 years of environmental consulting experience. He regularly conducts vegetation inventories and community mapping, and specializes in ecological restoration with particular focus on Species At Risk, tallgrass prairie ecosystems, and invasive species

management. Pat also has experience conducting evaluation of significance surveys for numerous wildlife habitat types, including, but not limited to, waterfowl stopover and staging areas, amphibian woodland breeding habitats, bat maternity colonies, and habitats for species of conservation concern. Pat is certified in the ELC system for Northeastern Ontario (2011) and is OWES certified (2012). Patrick is also a certified Butternut Health Assessor (2014).

Patrick was a lead biologist, conducting ELC mapping, wetland assessments, and wildlife habitat assessment surveys within the Project Area.

Victoria Rawls, B.Sc.
Victoria is a Terrestrial and Wetland Biologist with over one year of environmental consulting experience. She obtained her Bachelor of Science in Geography from Brock University and a Post Graduate Certificate in Environmental Management from Canadore College. She has experience coordinating field work, attending client meetings, collecting background information and reporting. Victoria has participated in many different types of environmental studies, including Environmental Impact Studies, Phase I and II Environmental Site Assessments, wildlife habitat assessments for birds, bats, herpetofauna and mammals, as well as post-construction mortality monitoring at wind energy facilities. Victoria has also participated in conducting evaluation of significance surveys for amphibian woodland breeding habitats.

Victoria assisted with the preparation of this report.

Kaitlin Boddaert, GIS & Urban Planning Diploma, GIS Analyst
Kaitlin is a GIS application specialist with 5 years of experience working in spatial technology for the production and publication of various digital maps and datasets. Kaitlin's academic background is in GIS and Urban Planning. Kaitlin's experience at NRSI includes, but is not limited to the collection and creation of datasets, spatial analysis of GIS data, the use of AutoCAD with integration into GIS, and the use of hard and soft data through scanning and georeferencing into digital format.

Kaitlin's role in the Project was as lead GIS technician responsible for map creation under the guidance and direction of the lead biologists, project manager and advisor. She reviewed and collected all available background mapping resources.

4.0 Summary of Site Investigation

In accordance with the REA Regulation, NRSI biologists have completed comprehensive site investigations of the North Kent Wind 1 Project Area. The site investigations included, but were not limited to, conducting ELC and wildlife habitat surveys. The results of the site investigations have been summarized in Table 1. This summary includes woodlands, wetlands, and wildlife habitat. This summary also includes whether an evaluation of significance is required for each of these natural features. Each feature that was carried forward to the evaluation of significance phase of this Project will be addressed in this report. Remaining features that were assessed as not requiring evaluation of significance will not be discussed further. As outlined in Appendix D of the NHA Guide for Renewable Energy Projects (OMNR 2012a), any habitats that are within 120m of a project component with no operational impact have been carried forward as generalized significant wildlife habitat (SWH).

Table 1. Summary of Candidate Natural Features and Wildlife Habitats Identified During Site Investigations for the North Kent Wind 1 Project

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Evaluation of Significance Required (Y/N)
Woodlands				
WOD-001	>120	CL, CA – Overlapping*	N/A	**Yes**
WOD-002	37 (T28)	CL, CA – Overlapping*	N/A	**Yes**
WOD-003	>120	CL, CA – Overlapping*	N/A	**Yes**
WOD-004	>120	AR, CL,CA – 86	N/A	**Yes**
WOD-005	>120	AR, CL, CA – 67	N/A	**Yes**
WOD-006	>120	AR, CL, CA – 85	N/A	**Yes**
WOD-007	>120	CL, CA – Overlapping*	N/A	**Yes**
WOD-008	>120	AR, CL, CA, SI – >0.1**	N/A	**Yes**
WOD-009	>120	AR, CL, CA, SI – >0.1**	N/A	**Yes**
WOD-010	>120	CL, CA – Overlapping*	N/A	**Yes**
WOD-011	92 (T31)	AR, CL, CA – >0.1**	N/A	**Yes**

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Evaluation of Significance Required (Y/N)
WOD-012	>120	CL, CA – Overlapping*	N/A	**Yes**
WOD-013	>120	CL, CA – Overlapping*	N/A	**Yes**
WOD-016	>120	CL, CA – 23	N/A	**Yes**
WOD-017	>120	CL, CA – Overlapping*	N/A	**Yes**
WOD-018	16 (T26)	AR, CL, CA – >0.1**	N/A	**Yes**
Wetlands				
WET-001	37 (T28)	CL, CA – Overlapping*	N/A	**Yes**
WET-002	>120	CL, CA – Overlapping*	N/A	**Yes**
WET-003	16 (T26)	AR, CL, CA – >0.1**	N/A	**No**
WET-004	>120	AR, CL, CA – 99	N/A	**Yes**
WET-005	>120	AR, CL, CA, SI – >0.1**	N/A	**Yes**
WET-006	92 (T31)	AR, CL, CA – >0.1**	N/A	**Yes**
WET-007	>120	CL, CA – Overlapping*	N/A	**No**
Candidate Significant Wildlife Habitats				
WST-001	>120	AR, CA, SI – Overlapping	WT – >120	**Yes**
WST-002	10 (T7)	CL, CA – >0.1**	WT – 10 (T7)	**Yes**
WST-003	>120	CL, CA – >0.1**	WT – >120	**Yes**
WST-004	Overlapping (T48)	AR, CL, CA – Overlapping	WT – Overlapping (T48)	**Yes**
WST-005	Overlapping (T48)	AR, CL, CA – Overlapping	WT – Overlapping (T48)	**Yes**
BMA-001	37 (T28)	CL, CA – Overlapping*	WT – 37 (T28)	**Yes**
BMA-002	92 (T31)	AR, CL, CA – >0.1**	WT – 92 (T31)	**Yes**
CBT-001	37 (T28)	CL, CA – Overlapping*	WT – 37 (T28) AR – 12	**Yes**
OGF-001	61 (T28)	AR, CL, CA – 12	AR – 12	**Yes**
ORV-001	>120	AR, CL, CA – 85	AR – 85	**Yes**
WFN-001	37 (T28)	CL, CA – Overlapping*	WT – 37(T28)	**Yes**
AWO-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes**
AWO-002	>120	AR, CL, CA – 85	AR – 85	**Yes**
MBB-001	37 (T28)	CL, CA – Overlapping*	WT – 37 (T28)	**Yes**
EWP-001	37 (T28)	CL, CA – Overlapping*	WT – 37 (T28)	**Yes**
EWP-002	92 (T31)	AR, CL, CA – >0.1**	WT – 92 (T31)	**Yes**

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Evaluation of Significance Required (Y/N)
EWP-003	16 (T26)	AR, CL, CA – >0.1**	WT – 16 (T26)	**Yes**
WTH-001	61 (T28)	AR, CL, CA – 12	WT – 61 (T28)	**Yes**
PMI-001	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes**
PAW-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes**
PAW-002	>120	AR, CL, CA – 85	AR – 85	**Yes**
MSE-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes**
MSE-002	>120	AR, CL, CA – 85	AR – 85	**Yes**
MSE-003	>120	AR, CL, CA – 86	AR – 86	**Yes**
MSE-004	>120	AR, CL, CA – 99	AR – 99	**Yes**
MSE-005	92 (T31)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes**
MSE-006	>120	AR, CL, CA, SI- >0.1**	AR – >0.1**	**Yes**
MSE-007	>120	AR, CL, CA, SI- >0.1**	AR – >0.1**	**Yes**
MSE-008	16 (T26)	AR, CL, SI – >0.1**	AR – >0.1**	**Yes**
RSE-001	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes**
RFP-001	>120	AR, CL, CA – 68	AR – 68	**Yes**
RFP-002	>120	AR, CL, CA – 67	AR – 67	**Yes**
BAS-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes**
BAS-002	>120	AR, CL, CA – 85	AR – 85	**Yes**
SRM-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes**
SRM-002	>120	AR, CL, CA, SI- >0.1**	AR – >0.1**	**Yes**
BGU-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes**
BGU-002	>120	AR, CL, CA – 85	AR – 85	**Yes**
BGU-003	>120	AR, CL, CA, SI- >0.1**	AR – >0.1**	**Yes**
NFO-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes**
NFO-002	>120	AR, CL, CA – 86	AR – 86	**Yes**
NFO-003	>120	AR, CL, CA – 99	AR – 99	**Yes**
NFO-004	>120	AR, CL, CA – 85	AR – 85	**Yes**
NFO-005	>120	AR, CL, CA, SI- >0.1**	AR – >0.1**	**Yes**
NFO-006	92 (T31)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes**
NFO-007	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes**
NFO-008	>120	AR, CL, CA, SI- >0.1**	AR – >0.1**	**Yes**

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Evaluation of Significance Required (Y/N)
SHU-001	>120	AR, CL, CA – 99	AR – 99	**Yes**
SHU-002	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes**
SHU-003	>120	AR, CL, CA – 85	AR – 85	**Yes**
GPC-001	>120	AR, CL, CA – 68	AR – 68	**Yes**
GPC-002	>120	AR, CL, CA – 67	AR – 67	**Yes**
CPR-001	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes**
LTA-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes**
LTA-002	>120	AR, CL, CA – 85	AR – 85	**Yes**
LTA-003	>120	AR, CL, CA – 86	AR – 86	**Yes**
LTA-004	>120	AR, CL, CA – 99	AR – 99	**Yes**
LTA-005	92 (T31)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes**
LTA-006	>120	AR, CL, CA, SI- >0.1**	AR – >0.1**	**Yes**
LTA-007	>120	AR, CL, CA, SI- >0.1**	AR – >0.1**	**Yes**
LTA-008	16 (T26)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes**
WSE-001	16 (T26)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes**
WSE-002	>120	AR, CL, CA – 85	AR – 85	**Yes**
WSE-003	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes**
WSE-004	>120	AR, CL, CA – 86	AR – 86	**Yes**
WSE-005	>120	AR, CL, CA – 99	AR – 99	**Yes**
WSE-006	>120	AR, CL, CA, SI- >0.1**	AR – >0.1**	**Yes**
WSE-007	>120	AR, CL, CA, SI- >0.1**	AR – >0.1**	**Yes**
WSE-008	92 (T28)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes**
WSE-009	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes**
CUP-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes**
CUP-002	>120	AR, CL, CA, SI- >0.1**	AR – >0.1**	**Yes**
CUP-003	92 (T31)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes**
CUP-004	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes**
RGL-001	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes**
SLT-001	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes**
WIS-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes**
WIS-002	>120	AR, CL, CA – 86	AR – 86	**Yes**

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Evaluation of Significance Required (Y/N)
WIS-003	>120	AR, CL, CA – 99	AR – 99	**Yes**
WIS-004	>120	AR, CL, CA – 85	AR – 85	**Yes**
WIS-005	>120	AR, CL, CA, SI – >0.1**	AR – >0.1**	**Yes**
WIS-006	>120	AR, CL, CA, SI – >0.1**	AR – >0.1**	**Yes**
WIS-007	92 (T31)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes**
WIS-008	16 (T26)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes**
GIW-001	>120	AR, CL, CA – 86	AR – 86	**Yes**
GIW-002	>120	AR, CL, CA – 99	AR – 99	**Yes**
GIW-003	92 (T31)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes**
GIW-004	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes**
GIW-005	>120	AR, CL, CA, SI- >0.1**	AR – >0.1**	**Yes**
GIW-006	>120	AR, CL, CA, SI- >0.1**	AR – >0.1**	**Yes**
GIW-007	>120	AR, CL, CA – 85	AR – 85	**Yes**
GIW-008	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes**
VCR-001	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes**
CVI-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes**
Generalized Candidate Significant Wildlife Habitats				
Waterfowl Stopover and Staging Areas (Terrestrial)	N/A	N/A	WT – >120	**Yes**
Bat Maternity Colonies	N/A	N/A	WT – >120	**Yes**
Turtle Wintering Areas	N/A	N/A	No development within habitat	**Yes**
Snake Hibernaculum	N/A	N/A	WT – >120 AR – >120	**Yes**
Colonially – Nesting Bird Breeding Habitat (Tree/Shrubs)	N/A	N/A	WT – >120 AR – >120	**Yes**
Amphibian Breeding Habitat (Woodland)	N/A	N/A	AR – >120	**Yes**

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Evaluation of Significance Required (Y/N)
Marsh Bird Breeding Habitat	N/A	N/A	WT – >120	**Yes**
Terrestrial Crayfish	N/A	N/A	No development within habitat	**Yes**
Grasshopper Sparrow	N/A	N/A	WT – >120	**Yes**
Common Nighthawk	N/A	N/A	WT – >120	**Yes**
Eastern Wood-Pewee	N/A	N/A	WT – >120	**Yes**
Wood Thrush	N/A	N/A	WT – >120	**Yes**
Red-headed Woodpecker	N/A	N/A	No development within habitat	**Yes**
Pawpaw	N/A	N/A	AR – >120	**Yes**
Muskingum Sedge	N/A	N/A	AR – >120	**Yes**
Rigid Sedge	N/A	N/A	AR – >120	**Yes**
Hoary Tick-trefoil	N/A	N/A	AR – >120	**Yes**
Round-Fruited Panic Grass	N/A	N/A	AR – >120	**Yes**
Blue Ash	N/A	N/A	AR – >120	**Yes**
Swamp Rose-mallow	N/A	N/A	AR – >120	**Yes**
American Lotus	N/A	N/A	AR – >120	**Yes**
Black Gum	N/A	N/A	AR – >120	**Yes**
Northern Fogfruit	N/A	N/A	AR – >120	**Yes**
Shumard Oak	N/A	N/A	AR – >120	**Yes**
Gray-headed Prairie Coneflower	N/A	N/A	AR – >120	**Yes**
Climbing Prairie Rose	N/A	N/A	AR – >120	**Yes**
Lizard's Tail	N/A	N/A	AR – >120	**Yes**
Wild Senna	N/A	N/A	AR – >120	**Yes**
Cup-Plant	N/A	N/A	AR – >120	**Yes**
Southern Slender Ladies' Tresses	N/A	N/A	AR – >120	**Yes**
Wing-stem	N/A	N/A	AR – >120	**Yes**
Giant Ironweed	N/A	N/A	AR – >120	**Yes**
Virginia Culver's-root	N/A	N/A	AR – >120	**Yes**
Cream Violet	N/A	N/A	AR – >120	**Yes**

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Evaluation of Significance Required (Y/N)
Blue-ringed Dancer	N/A	N/A	No development within habitat	**Yes**
Blue-tipped Dancer	N/A	N/A	No development within habitat	**Yes**
Variegated Meadowhawk	N/A	N/A	No development within habitat	**Yes**

** Directional drilling will be used to bore beneath this feature in order to avoid impacts to the feature itself.*
*** On the mapping, this woodland appears to be overlapped; however, all project components, including the construction disturbance area, will be located adjacent to the woodland (>0.1m).*

Legend
WT: Wind Turbine
AR: Access Road
CL: Collector Lines
CA: Construction Activity/Temporary Infrastructure/Balance of Operations
SI: Supporting Infrastructure - Building/Substation/Laydown Area/Point of Interconnect

5.0 Evaluation of Significance Methods

In accordance with the REA Regulation, NRSI biologists have completed a comprehensive records review and site investigations to confirm site-specific ecological functions of the North Kent Wind 1 Project. The results of these tasks have provided the information required to evaluate the significance of several features within the Project Area. NRSI has reviewed all natural features within the Project Area and compared the site-specific conditions and results of the field investigations to available evaluation criteria to determine the significance of each feature. The methods and evaluation criteria used to determine significance are outlined in the following sections.

5.1 Survey Dates

In accordance with the REA Regulation, NRSI recorded dates, times, duration, and weather conditions during each evaluation of significance. This information has been summarized in Table 2. Detailed descriptions of staff roles and qualifications can be found in Section 3.0 of this report. The crew(s) lead for each survey is indicated in bold font within the table.

Table 2. Evaluation of Significance Survey Details

Staff Name(s)	Purpose	Date (2015)	Start Time (hrs)	Duration (hrs)	Weather Conditions		
					Temp. (ºC)	Beaufort Wind	Cloud Cover (%)
Christina Carter Ashley Cantwell	Waterfowl Stopover and Staging Area (Terrestrial) Survey	March 24	0938	6.5	-2	1	0
Patrick Deacon Heather Fotherby	Waterfowl Stopover and Staging Area (Terrestrial) Survey	April 1	0930	6.5	0	1	75
Christy Humphrey Ashley Cantwell	Waterfowl Stopover and Staging Area (Terrestrial) Survey	April 8	0935	6.25	6	2	100
Charlotte Moore Victoria Rawls	ELC	April 15	0830	6.5	22	1	10
Christy Humphrey Lillian Knopf	ELC/Wetland Assessments	April 23	1320	5.25	2.5	4	100
Christy Humphrey Lillian Knopf	ELC/Wetland Assessments	April 24	0800	9	7	3	5
Andrew Dean Christopher Law	ELC/Wetland Assessments	April 29	1135	4	18	2	40
Andrew Dean Christopher Law	ELC/Wetland Assessments	April 30	1030	6.5	11	4	90
Andrew Dean Christopher Law	ELC/Wetland Assessments	May 1	0815	7	11	3	5
Patrick Deacon Christopher Law	ELC/Wetland Assessments	May 4	1417	0.75	20	3	100
Patrick Deacon Christopher Law	ELC/Wetland Assessments	May 5	0840	7	12	3	100
Patrick Deacon Christopher Law	ELC/Wetland Assessments	May 7	0850	4	21	2	5
Andrew Dean Blair Baldwin	ELC/Wetland Assessments	May 28	0830	6.5	23.5	2	10
Andrew Dean	ELC/Wetland Assessments	June 9	1120	1	21	3	75
Christy Humphrey	Desktop evaluation of wetland significance	June 10	1645	2.75	N/A Desktop evaluation of significance of woodland		

Staff Name(s)	Purpose	Date (2015)	Start Time (hrs)	Duration (hrs)	Weather Conditions		
					Temp. (ºC)	Beaufort Wind	Cloud Cover (%)
Victoria Rawls	Desktop evaluation of woodland significance	June 11	1100	1.5	and wetland habitats		
Victoria Rawls	Desktop evaluation of wetland significance	June 11	1500	2.25			
Victoria Rawls	Desktop evaluation of woodland significance	June 12	0845	0.5			
Christy Humphrey	Desktop evaluation of wetland significance	June 13	1530	3			
Christy Humphrey	Desktop evaluation of wetland significance	June 14	1430	4			
Pamela Hammer	Desktop evaluation of woodland significance	June 17	1030	1.75			
Lillian Knopf	Desktop evaluation of woodland significance	June 18	1130	3.5			

5.2 Woodlands

NRSI biologists used modified ELC for southern Ontario, as outlined in the *North Kent Wind 1 Project Natural Heritage Site Investigation Report* (NRSI 2015), to identify woodlands within the Project Area (Lee *et al*. 1998). Through this vegetation mapping technique, 8 of these woodlands (WOD-001, WOD-002, WOD-003, WOD-007, WOD-010, WOD-012, WOD-013, and WOD-017) were confirmed to be overlapping the Project Location; however, directional drilling will be used to bore beneath these features and/or infrastructure will be placed outside of these features, in order to avoid impacts to the features themselves. An additional 8 woodlands are within 120m, but not overlapping, the North Kent Wind 1 Project.

For each candidate significant woodland, ecological characteristics were compared to the evaluation criteria for significant woodlands, as described in Table 11 of the NHA Guide for Renewable Energy Projects (OMNR 2012a). These evaluation criteria include 3 broad categories: woodland size, ecological functions, and uncommon characteristics. The evaluation criteria for significant woodlands have been summarized in Table 3. All of the criteria identified in Table 3 rely on meeting minimum area thresholds as outlined in the NHA Guide (OMNR 2012a). Information from the MNRF has indicated a woodland cover of less than 5% for this planning area (MNRF staff pers. comm. 2015). As such, NRSI has used a woodland cover of less than 5% in Table 11 of the NHA Guide to evaluate the significance of the 16 woodlands within the Project Area.

Table 3. Woodland Evaluation of Significance Criteria

Evaluation Criteria	Standards of Significance
Woodland Size Criteria	
Woodland Cover	- If woodlands account for less than 5% of the total land use, woodlands 2ha in size or greater are significant. - The largest woodland in the planning area (or sub-unit) is considered significant.
Ecological Functions Criteria	
Woodland Interior	- Woodlands with any size of interior habitat when woodland cover is less than 5% should be significant. - Interior habitat can be initially identified by any forested habitat no closer than 100m from any woodland edge.
Proximity to Other Significant Woodlands or Habitats	- Woodlands 0.5ha or greater, when woodland cover is less than 5%, that may provide ecological benefit to other nearby significant natural features or fish habitat may be considered significant.
Linkages	- Woodlands 0.5ha or greater, when woodland cover is less than 5%, that provide linkage functions between other significant features within a

	specified distance (e.g., 120m) may be considered significant.
Water Protection	- Woodlands 0.5ha or greater, when woodland cover is less than 5%, may be significant if they are within a sensitive watershed, or in close proximity to other hydrological features, including sensitive headwaters, fish habitat, and groundwater discharge.
Woodland Diversity Representation (Composition)	- A naturally occurring composition of native forest species that have shown significant decline south and east of the Canadian Shield may be significant when woodlands are 0.5ha or greater when woodland cover is less than 5%. - If high native diversity throughout forested features is noted, a woodland may be significant.
Uncommon Characteristics Criteria	
Woodland Characteristics	- A woodland may be significant if it contains a unique species composition. - A vegetation community with a provincial S-Rank of S1, S2, or S3 and 0.5ha or greater in size may be considered significant. - Woodlands containing habitat for a rare, uncommon, or restricted woodland plant species and that are 0.5ha or greater in size may be considered significant. - Native woodlands showing characteristics of old woodlands or those with large tree stems may be considered significant.

A woodland meeting a significance criterion in Table 11 of the NHA Guide (OMNR 2012a) must also have an average minimum width of 40m measured between crown edges where the criterion size threshold is 0.5 to 4 hectares, and 60m where the criterion size threshold is 10 hectares or more, to be considered significant (OMNR 2012a).

5.3 Wetlands

Wetlands within the Project Area were initially identified through the use of modified ELC for southern Ontario (Lee *et al*. 1998). This vegetation community classification system allows for the assessment of vegetation communities for preliminary delineations of upland, lowland, and wetland habitats among other community types. ELC communities identified as wetlands were then further delineated according to OWES.

The Project Location is within the boundaries of 3 wetlands (WET-001, WET-002, and WET-007); however, directional drilling will be used to bore beneath these features and/or infrastructure will be placed outside of the features, in order to avoid impacts to the features themselves. An additional 4 wetlands are located within 120m, but not overlapping, the North Kent Wind 1 Project. Two of these 7 wetlands do not meet the minimum size criteria of 2ha as per OWES, and as such, were not carried forward past the site investigation phase of this NHA. The remaining 5 wetlands have been assumed to be provincially significant, following Appendix C of the NHA Guide (OMNR 2012a). A

full wetland evaluation, following OWES for southern Ontario (OMNR 2013), would have been required if these wetlands were proposed to overlap with the North Kent Wind 1 Project by a method other than directional drilling.

Appendix C: Wetland Characteristics and Ecological Function Assessment for Renewable Energy Projects of the NHA Guide (OMNR 2012a) provides a set of evaluation criteria focused on wetland characteristics and ecological functions relevant to the preparation of an Evaluation of Significance Report and completion of an appropriate Environmental Impact Study (EIS) when wetlands have been assumed to be provincially significant. The Wetland Characteristics and Ecological Function Assessment ensures the relevant wetland attributes remain fully assessed, and that sufficient information regarding the wetland is generated to meet EIS requirements. This assessment can be completed mainly through desktop work. The assessment is not used to officially define the status of wetlands (either as provincially significant or not significant). Using this Appendix, NRSI biologists assessed the functions of these potential wetlands, including biological and hydrological characteristics, as well as special features of the community. These characteristics were collected, measured, and assessed using the OWES criteria and standards as a guideline.

5.4 Wildlife Habitat

For the review of candidate SWH, NRSI biologists have consulted the SWH Criteria Schedules for Ecoregion 7E (MNRF 2015) and SWH Technical Guide (OMNR 2000). These documents identify a wide variety of candidate SWH and criteria used to evaluate their respective significance. Evaluation criteria have been separated into the 4 broad groups of SWH: seasonal concentration areas, rare vegetation communities and specialized wildlife habitats, habitats for species of conservation concern, and animal movement corridors. Seasonal concentration areas, rare vegetation communities and specialized wildlife habitats, and habitats for species of conservation concern are described in more detail in the sub-sections below. As no animal movement corridors were identified during the site investigation, this wildlife habitat type was not carried forward to the evaluation of significance phase of this NHA and is not discussed further within this report.

All candidate SWHs carried forward from the site investigation are located within 120m of a project component with an operational impact. As there is an expected gradual increase in potential impacts as development occurs closer to wildlife habitats, it has been identified that for certain wildlife habitats, potential negative effects can be mitigated through site specific mitigation measures if certain candidate SWHs are located greater than 30m from the Project Location. In instances where amphibian breeding habitats (woodland) and plant species of conservation concern habitat are located greater than 30m from the Project Location, these habitats will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures outlined in the EIS.

5.4.1 Seasonal Concentration Areas

Several candidate seasonal concentration areas have been identified within the North Kent Wind 1 Project Area. The vegetation mapping has been compared with the criteria outlined in the documents mentioned above to evaluate the significance of seasonal concentration areas within the Project Area. The general evaluation criteria for the wildlife habitats that have been carried forward from the *North Kent Wind 1 Project Natural Heritage Site Investigation Report* (NRSI 2015), as well as methods used to evaluate the significance of these wildlife habitats, are outlined in Table 4.

Table 4. Seasonal Concentration Areas Evaluation of Significance Criteria

Seasonal Concentration Area	Evaluation Methods	Evaluation Criteria
Waterfowl Stopover and Staging Area (Terrestrial)	**Conducted** Surveys of field conditions were conducted as part of the site investigation phase of the project to determine the presence of seasonal flooding, as well as documenting the presence of waterfowl within the Project Area. Due to the large size of the Project Area, and following the Birds and Bird Habitat Guidelines for Wind Power Projects (OMNR 2011b), routes consisting of more than 100km in length were conducted throughout the Project Area. Driving surveys were conducted along these routes on 3 separate visits, spaced approximately 7 days apart between March and April 2015 when waterfowl were	Flooded areas with an annual mixed species aggregation concentration of 100 or more individuals of any of the following listed species: • American Black Duck • Northern Pintail • Gadwall • Blue-winged Teal • Green-winged Teal • American Wigeon • Northern Shoveler • Tundra Swan

Seasonal Concentration Area	Evaluation Methods	Evaluation Criteria
	expected to be present within the general vicinity of the Project Area. Surveys were carried out during daylight hours, for at least 6.25 hours per visit, between 8am and 5pm, when waterfowl are typically present using terrestrial staging areas. All individuals were recorded along with information on species, behaviour, and movement. All surveys were conducted from the roadside with a suitable vantage point of the habitat. All surveys were conducted using binoculars and/or a spotting scope. Roadside surveys were expected to be suitable for surveying this habitat type since these vantage points will readily allow for abundance and species of staging waterfowl to be identified within open fields. The objective of this wildlife survey was to estimate the total number of individuals of each species present in the area on a particular visit. The locations of each of the candidate significant habitats can be seen on Maps 5-1 to 5-9 of the *North Kent Wind 1 Project Natural Heritage Site Investigation Report* (NRSI 2015). The locations of waterfowl observed within candidate terrestrial waterfowl stopover and staging areas, as well as the routes used to conduct the surveys, are provided in the field notes in Appendix I of the *North Kent Wind 1 Project Natural Heritage Site Investigation Report* (NRSI 2015).	
Bat Maternity Colony	Two candidate bat maternity colonies were identified within the Project Area. The presence of suitable cavity trees within one candidate bat maternity colony (BMA-001) could not be verified during the site investigation phase of the project as site access was denied. As such, no further surveys will be conducted at BMA-001, and the habitat will be treated as significant; however, in the event that site access is granted prior to June 2016, a site investigation will be conducted to verify the presence of ≥10 wildlife trees per hectare,	Maternity Colonies with confirmed use by: • >10 Big Brown Bats • >5 Adult Female Silver-haired Bats.

Seasonal Concentration Area	Evaluation Methods	Evaluation Criteria
	measured at ≥25cm dbh. If candidate significant habitat is determined to be absent, the habitat will be confirmed not significant. If candidate significant habitat is determined to be present, proposed evaluation methods are identified below. **Proposed** Selection of monitoring sites: Monitoring sites will be selected within candidate bat maternity colony habitats identified through the site investigation. The tallest cavity/wildlife tree should be selected for surveys. Trees should exhibit cavities or crevices (higher on the tree is better). Trees with the largest diameter at breast height (dbh) are the most desirable. Survey sites should also be selected in areas of the highest snag density. The best trees for maternity colonies are white pine, maple, aspen, ash and oak. The canopy should also be more open and trees should exhibit early stages of tree decay. Once monitoring sites have been identified, ELC polygons will be delineated to the lowest level, where possible, to further refine the habitat. Up to 10 suitable cavity trees (less if 10 suitable trees aren't present) will be selected within BMA-002, since it is less than 10ha in size. A total of 12 suitable cavity trees will be selected within BMA-001 since it is 11.9ha in size. Surveys will be conducted in accordance with the Bat and Bat Habitats Guidelines for Wind Power Projects (OMNR 2011a). Monitoring: Exit surveys will be conducted during the month of June. Observers will choose a viewing station with a clear aspect of cavity opening or crevice, which will be monitored from 30 minutes before dusk until 60 minutes after dusk for evidence of bats exiting. An acoustic bat detector paired with a digital audio recorder will be used in conjunction with visual surveys to determine species. Each candidate tree will only be monitored once. Night-vision or infrared video equipment may be substituted for observers. Once an evening's monitoring is completed (60	

Seasonal Concentration Area	Evaluation Methods	Evaluation Criteria
	minutes after sunset), the cameras will be collected by the NRSI staff members conducting visual surveys in the same candidate significant habitat and the visual recordings for each video recorder will be reviewed for evidence of significant bat roosting activity. The locations of monitoring sites within the candidate significant habitats will be determined based on conditions of the site. The locations of the candidate significant habitats can be seen on Maps 4-1 to 4-9.	
Colonially – Nesting Bird Breeding Habitat (Tree/Shrubs)	The presence of nest bowls within the candidate colonially-nesting bird breeding habitat could not be identified during the site investigation phase of the project as site access was denied within a portion of WOD-002. As such, no further surveys will be conducted, and the habitat will be treated as significant; however, in the event that site access is granted prior to April 2016, a site investigation will be conducted to verify the presence of nest bowls within the candidate habitat. If candidate significant habitat is determined to be present, proposed evaluation methods are identified below. If candidate significant habitat is determined to be absent, the habitat will be confirmed not significant. **Proposed** Surveys will be conducted at the one candidate colonially-nesting bird breeding habitat within the Project Area. Surveys will consist of a 15 minute point count during the breeding season from a suitable vantage point located in close proximity to where nest bowls are located, and will occur once in each of April, June and August, at least 10 days apart. The objective of this survey is to determine if active heron nests are present within the candidate colonially-nesting bird breeding habitat. All individuals will be recorded along with information on species, behaviour, movement and time observed. The locations of monitoring sites within the	Studies will be carried out to confirm the presence of 2 or more active nests of any of the following listed species: • Great Blue Heron • Black-crowned Night-Heron • Great Egret • Green Heron

Seasonal Concentration Area	Evaluation Methods	Evaluation Criteria
	candidate significant habitat will be determined based on conditions of the site. The location of the candidate significant habitat can be seen on Maps 4-1 to 4-9.	

[1] SWH Criteria Schedules for Ecoregion 7E (MNRF 2015)

5.4.2 Rare Vegetation Communities and Specialized Wildlife Habitat

Rare vegetation communities, including savannah and tallgrass prairie, were identified using modified ELC for southern Ontario (Lee *et al*. 1998), and then compared with the evaluation criteria identified in the SWH Criteria Schedules for Ecoregion 7E (MNRF 2015). The criteria in these documents include references to size, age, and species composition recommended to represent a rare vegetation community.

Evaluation criteria for specialized wildlife habitat are identified in the SWH Criteria Schedules for Ecoregion 7E (MNRF 2015), and can include a variety of habitats that are required for the long-term survival of certain species, or species groups. General evaluation criteria used in the evaluation of significance of these candidate features, as well as methods used to evaluate the significance of these wildlife habitats, are outlined in Table 5.

Table 5. Rare Vegetation Communities and Specialized Wildlife Habitats Evaluation of Significance Criteria

Rare Vegetation Communities and Specialized Wildlife Habitats	Evaluation Methods	Evaluation Criteria
Old Growth Forest	The presence of an old growth forest within one woodland could not be confirmed during the site investigation phase of the Project as site access was denied. As such, no further surveys will be conducted and the habitat will be treated as significant; however, in the event that site access status changes prior to July 2016, a site investigation will be conducted to confirm the age estimate of tree species being >140 year old within the forest ecosite. If candidate significant habitat is determined to be absent, the habitat will be confirmed not significant.	Any forest where the dominant tree species of the ecosite are >140 years old.

Rare Vegetation Communities and Specialized Wildlife Habitats	Evaluation Methods	Evaluation Criteria
	The location of the candidate significant habitat can be seen on Maps 5-1 to 5-9.	
Other Rare Vegetation Communities	The presence of a rare vegetation community within one woodland could not be verified during the site investigation phase of the Project as site access was denied. As such, no further surveys will be conducted and the habitat will be treated as significant; however, in the event that site access status changes prior to July 2016, a site investigation will be conducted to verify the presence of a Fresh-Moist Sugar Maple-Black Maple Deciduous Forest Type (FOD6-2). If candidate significant habitat is determined to be absent, the habitat will be confirmed not significant. The location of the candidate significant habitat can be seen on Maps 5-1 to 5-9.	Any provincially rare S1, S2, and/or S3 vegetation communities listed in Appendix M of the SWHTG.
Waterfowl Nesting Areas	The presence of a waterfowl nesting area within one woodland could not be verified during the site investigation phase of the Project as site access was denied. As such, no further surveys will be conducted and the habitat will be treated as significant; however, in the event that site access changes prior to April 2016, a site investigation will be conducted to verify the presence of suitable permanent open water, in addition to shrubland/grassland or suitable cavity nesting trees in upland areas >40cm dbh. If candidate significant habitat is determined to be absent, the habitat will be confirmed not significant. If candidate significant habitat is determined to be present, proposed evaluation methods are identified below. The location of the candidate significant habitat can be seen on Maps 5-1 to 5-9. **Proposed** NRSI will conduct area searches within the one candidate waterfowl nesting area. This method will involve walking the perimeter of the wetland and counting all observable waterfowl using the wetlands.	Presence of ≥3 nesting pairs (excluding mallard) or ≥10 nesting pairs (including mallard) of any of the following species: • Northern Pintail • Northern Shoveler • Gadwall • Blue-winged Teal • Green-winged Teal • Wood Duck • Hooded Merganser • Mallard Any active nesting site of an American black duck is considered significant.

Rare Vegetation Communities and Specialized Wildlife Habitats	Evaluation Methods	Evaluation Criteria
	Surveys will be conducted on 3 separate visits, once in each of April, May, and June 2016, to capture both early and late nesting species. Surveys will be carried out during the early morning (sunrise to 4 hours after sunrise). All individuals will be recorded along with information on species, behaviour, movement and time observed. Optimal weather conditions for these surveys are clear, sunny days with little to no precipitation. Surveys will be postponed and re-scheduled if poor weather conditions are encountered, specifically if high winds or heavy precipitation is noted.	
Amphibian Breeding Habitat (Woodland)	**Proposed** NRSI will conduct 3 evening amphibian call surveys within the 2 candidate amphibian woodland breeding habitats, once in each of April, May and June 2016. Each survey will last 3 minutes, following the accepted Marsh Monitoring Program protocol, and will begin no earlier than one half hour after sunset and end before midnight. Semi-circular point counts will be conducted to monitor calling amphibians. Several point counts may be required in order to adequately survey the area. Point counts will be located at least 500m apart to prevent counting duplicate amphibian calls. These surveys will be conducted within habitats where site access has been granted. Where site access has not been granted, point counts will be conducted along the roadside or from an adjacent property. During each survey, biologists will record species and calling abundance codes, along with other appropriate information (date, time, weather, etc.). A UTM will be taken for each call location to ensure consistency between survey visits. Where site access is granted, two amphibian egg mass searches will also	Presence of breeding population of ≥1 of the following newt/salamander species or ≥2 of the following frog species with ≥20 individuals (adults or egg masses), or ≥2 of the following frog species with Call Level Codes of 3: • Eastern Newt • Blue-spotted Salamander • Spotted Salamander • Gray Treefrog • Spring Peeper • Western Chorus Frog • Wood Frog

Rare Vegetation Communities and Specialized Wildlife Habitats	Evaluation Methods	Evaluation Criteria
	be conducted during daylight hours. The exact timing of the surveys will be dependent on 2016 spring conditions and when amphibians are expected to be breeding within the general vicinity of the project area, but are expected to occur once in April and again in either May or June. A minimum search effort of 30 minutes will be used on each visit, and in each habitat. These area searches will include walking within the wetland or vernal pool along the perimeter, looking for egg masses. Due to the composition and attributes of the candidate amphibian breeding habitats, special equipment will not be required to identify egg masses; however, visual surveys conducted in breeding ponds with high water levels will require the use of chest waders. This approach is expected to effectively identify egg masses, while minimizing any disturbance effects caused by sampling. If candidate significant habitat (vernal pools) is determined to be not present during the first site visit, no specific studies will be conducted and the habitat(s) will be confirmed not significant. The locations of monitoring sites within the candidate significant habitat will be determined based on conditions of the site. The locations of the candidate significant habitats can be seen on Maps 5-1 to 5-9.	

[1] SWH Criteria Schedules for Ecoregion 7E (MNRF 2015)

5.4.3 Habitats for Species of Conservation Concern

Species of conservation concern include any species that has been designated as a species of Special Concern according to the Species At Risk in Ontario (SARO) or have been assigned a provincial S-Rank of S1, S2, or S3 (Critically Imperiled, Imperiled, or Vulnerable, respectively). They also include species listed as Endangered or Threatened by the Committee on the Status of Endangered Wildlife in Canada

(COSEWIC 2012), but which have not been designated as Threatened or Endangered in Ontario (OMNR 2012b). Habitats of provincially Endangered or Threatened species are addressed as part of a separate reporting process with the MNRF in accordance with *Appendix B Requirements of the Endangered Species Act, 2007* of the *Approval and Permitting Requirements Document for Renewable Energy Projects* to address the *Endangered Species Act* (2007), as required.

Habitats for species of conservation concern can include specific habitat associations, such as marsh breeding bird habitat or open country breeding bird habitat, but also include preferred habitats for any species of conservation concern within the Project Area.

Evaluation criteria used in the evaluation of significance of the wildlife habitat types carried forward from the site investigations, as well as methods used to evaluate the significance of these wildlife habitats, are outlined in Table 6.

Table 6. Habitats for Species of Conservation Concern Evaluation of Significance Criteria

Habitats for Species of Conservation Concern	Evaluation Methods	Evaluation Criteria
Marsh Bird Breeding Habitat	**Proposed** Surveys will be conducted at the one candidate significant marsh bird breeding habitat within the Project Area. Surveys will consist of a 15 minute point count during the breeding season, occurring twice between mid-May and early July 2016, occurring no less than 10 days apart, following the accepted Marsh Monitoring Program protocol (Bird Studies Canada 2009). Each survey will be conducted in the morning (beginning 30 minutes before sunrise and ending no later than 1000hrs) or evening (occurring no earlier than 4 hours before sunset and ending before dark), when marsh birds are actively nesting in wetland habitats. Each survey will be conducted under near optimal weather conditions, on clear, warm (at least 16°C), evenings, with no precipitation and little or no wind.	Presence of 5 or more nesting pairs of Sedge Wren or Marsh Wren or breeding by any combination of 4 or more of the following species: • American Bittern • Virginia Rail • Sora • Common Moorhen • American Coot • Pied-billed Grebe • Marsh Wren • Sedge Wren • Common Loon • Green Heron • Trumpeter Swan • Black Tern (Special Concern) • Yellow Rail (Special Concern) Any wetland with breeding of 1 or more Black Tern, Trumpeter

Habitats for Species of Conservation Concern	Evaluation Methods	Evaluation Criteria
	NRSI biologists will conduct point counts within the habitat where site access has been granted, or from the property adjacent to the habitat, where site access has not been granted. Each point count will last for 15 minutes, and will be sub-divided into three 5 minute components: a 5 minute passive (silent) observation period, a 5 minute call playback period, and a second 5 minute passive observation period. As identified through the site investigation phase of the Project, site access was denied at this location. In the event that site access changes prior to May 2016, and it is determined that shallow water with emergent aquatic vegetation is not present on the first site visit, no specific studies will be conducted and the habitat will be confirmed not significant. The locations of monitoring sites within the candidate significant habitat will be determined based on conditions of the site. The locations of the candidate significant habitat can be seen on Maps 6-1 to 6-9.	Swan, Green Heron or Yellow Rail is considered significant.

[1] SWH Criteria Schedules for Ecoregion 7E (MNRF 2015)

In conjunction with habitat for species of conservation concern, NRSI biologists have also considered the specific habitat requirements of several species of conservation concern that are known to occur within the vicinity of the North Kent Wind 1 Project. Habitat searches for these species were conducted as part of the site investigation. A total of 84 habitats for 24 unique species of conservation concern have been identified within the Project Area that have the potential to be impacted by the operation of this project. General evaluation criteria used in the evaluation of significance of the wildlife habitat types carried forward from the site investigation, as well as methods used to evaluate the significance of these wildlife habitats, are outlined in Table 7 below.

Table 7. Special Concern and Rare Wildlife Species Evaluation of Significance Criteria

Species of Conservation Concern	Evaluation Methods	Evaluation Criteria
Birds		
Eastern Wood-Pewee *(Contopus virens)*	**Proposed** NRSI will conduct 10 minute point count surveys within each of the 3 habitats for eastern wood-pewee in June and early July 2016. Each point count station will be surveyed 3 times, once during each of early, mid and late season (spring and early summer) no less than 10 days apart. The number of point counts required depends on the size and habitat diversity at each site. Following the Birds and Bird Habitat Guidelines for Wind Power Projects (OMNR 2011b), point counts will be spaced at least 250m apart in forests, ideally with the centre point at least 100m from the habitat edge. Where more than one point count will be conducted within each candidate habitat, a standardized transect will also be conducted between point count sites. Surveys will be conducted between dawn (one half hour before sunrise) and 3 hours after sunrise. These surveys will occur during a time period when males are expected to be actively singing and defending territories. Days with high wind speeds and rain will be avoided. During each visit, the highest observed breeding evidence will be recorded for each species. The monitoring site locations within these candidate significant habitats will be determined based on conditions of the site. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-9.	Presence of this species breeding (probable or confirmed breeding evidence) within the habitat identified will confirm significance.
Wood Thrush *(Hylocichla mustelina)*	**Proposed** NRSI will conduct 10 minute point count surveys within the 1 habitat identified for wood thrush in June and early July 2016. Each point count station will be surveyed 3 times, once during each of early, mid and late season (spring and early summer) no less than 10 days apart. The number of point counts required depends on the size and habitat diversity at each site. Following the Birds and Bird Habitat Guidelines (OMNR 2011b), point counts will be spaced at least 250m apart in forests, ideally with the centre point at least 100m from the habitat edge. Where more	Presence of this species breeding (probable or confirmed breeding evidence) within the habitat identified will confirm significance.

Species of Conservation Concern	Evaluation Methods	Evaluation Criteria
	than one point count will be conducted within each candidate habitat, a standardized transect will also be conducted between point count sites. Surveys will be conducted between dawn (one half hour before sunrise) and 3 hours after sunrise. These surveys will occur during a time period when males are expected to be actively singing and defending territories. Days with high wind speeds and rain will be avoided. During each visit, the highest observed breeding evidence will be recorded for each species. The monitoring site locations within these candidate significant habitats will be determined based on conditions of the site. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-9.	
Vegetation		
Prairie Milkweed *(Asclepias sullivantii)*	**Proposed** One standardized area search will be conducted within the 1 candidate significant prairie milkweed habitat within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the flowering period of June and July. The location of the candidate significant habitat can be seen on Maps 6-1 to 6-9.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Pawpaw *(Asimina triloba)*	**Proposed** One standardized area search will be conducted within each of the 2 candidate significant pawpaw habitats within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the flowering or leaf-on period of April to September. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-9.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Muskingum Sedge *(Carex muskingumensis)*	**Proposed** One standardized area search will be conducted within each of the 8 candidate significant Muskingum sedge habitats within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a

Species of Conservation Concern	Evaluation Methods	Evaluation Criteria
	Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably after the plant has flowered in June or July. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-9.	significant species population.
Rigid Sedge (*Carex tetanica*)	**Proposed** One standardized area search will be conducted within the 1 candidate significant rigid sedge habitat within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the flowering period of June to July. The location of the candidate significant habitat can be seen on Maps 6-1 to 6-9.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Round-Fruited Panic Grass (*Dichanthelium sphaerocarpon*)	**Proposed** One standardized area search will be conducted within each of the 2 candidate significant round-fruited panic grass habitats within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the flowering period of July to September. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-9.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Blue Ash (*Fraxinus quadrangulata*)	**Proposed** One standardized area search will be conducted within each of the 2 candidate significant blue ash habitats within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys can be made year-round based on the presence of distinctively shaped branches and twigs. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-9.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Swamp Rose-mallow (*Hibiscus moscheutos*)	**Proposed** One standardized area search will be conducted within each of the 2 candidate significant swamp rose-mallow habitats within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys can be made year-round (in absence of heavy snow cover) based on the robust, distinctive, and persistent nature of the plant and dead stems. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-9.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Black Gum	**Proposed**	Presence of this

Species of Conservation Concern	Evaluation Methods	Evaluation Criteria
(*Nyssa sylvatica*)	One standardized area search will be conducted within each of the 3 candidate significant black gum habitats within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the flowering or leaf-on period of April to September. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-9.	species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Northern Fogfruit (*Phyla lanceolata*)	**Proposed** One standardized area search will be conducted within each of the 8 candidate significant northern fogfruit habitats within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the flowering period of July to August. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-9.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Shumard Oak *(Quercus shumardii)*	**Proposed** One standardized area search will be conducted within each of the 3 candidate significant Shumard oak habitats within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the period of October to December when leaves and fully-developed acorns are available. The absence of the species can also be confirmed year-round if no other similar oak species are present in a given habitat. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-9.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Gray-headed Prairie Coneflower (*Ratibida pinnata*)	**Proposed** One standardized area search will be conducted within each of the 2 candidate significant gray-headed prairie coneflower habitats within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the flowering period of June to September. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.

Species of Conservation Concern	Evaluation Methods	Evaluation Criteria
	9.	
Climbing Prairie Rose *(Rosa setigera)*	**Proposed** One standardized area search will be conducted within the 1 candidate significant climbing prairie rose habitat within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the leaf-on period of June to September. The location of the candidate significant habitat can be seen on Maps 6-1 to 6-9.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Lizard's Tail (*Saururus cernuus*)	**Proposed** One standardized area search will be conducted within each of the 8 candidate significant lizard's tail habitats within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the flowering period of June to August. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-9.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Wild Senna (*Senna hebecarpa*)	**Proposed** One standardized area search will be conducted within each of the 9 candidate significant wild senna habitats within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the flowering period of July to August. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-9.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Cup-Plant (*Silphium perfoliatum* var. *perfoliatum*)	**Proposed** One standardized area search will be conducted within each of the 4 candidate significant cup-plant habitats within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the flowering period of July to August. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-9.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Riddell's Goldenrod	**Proposed** One standardized area search will be conducted	Presence of this species within the

Species of Conservation Concern	Evaluation Methods	Evaluation Criteria
(*Solidago riddellii*)	within the 1 candidate significant Riddell's goldenrod habitat within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the flowering period of August to September. The location of the candidate significant habitat can be seen on Maps 6-1 to 6-9.	habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Southern Slender Ladies' Tresses (*Spiranthes lacera* var. *gracilis*)	**Proposed** One standardized area search will be conducted within the 1 candidate significant southern slender ladies' tresses habitat within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the flowering period of August to September. The location of the candidate significant habitat can be seen on Maps 6-1 to 6-9.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Wing-stem (*Verbesina alternifolia*)	**Proposed** One standardized area search will be conducted within each of the 8 candidate significant wing-stem habitats within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the flowering period of August to September. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-9.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Giant Ironweed *(Vernonia gigantea)*	**Proposed** One standardized area search will be conducted within each of the 8 candidate significant giant ironweed habitats within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the flowering period of July to October. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-9.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Virginia Culver's-root (*Veronicastrum virginicum*)	**Proposed** One standardized area search will be conducted within the 1 candidate significant Virginia culver's-root habitat within the Project Area. The UTM location of any individuals or clusters will be	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if

Species of Conservation Concern	Evaluation Methods	Evaluation Criteria
	recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the flowering period of June to September. The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-9.	this represents a significant species population.
Cream Violet (*Viola striata*)	**Proposed** One standardized area search will be conducted within the 1 candidate significant cream violet habitat within the Project Area. The UTM location of any individuals or clusters will be recorded and a stem count will be conducted. Surveys will be conducted during a time period when this species exhibits characteristics that allow for confident identification, preferably during the flowering period of April to May. The location of the candidate significant habitat can be seen on Maps 6-1 to 6-9.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.

6.0 Evaluation of Significance Results

6.1 Woodlands

Site-specific field investigations and basemapping have identified 16 candidate significant woodlands within the North Kent Wind 1 Project Area. Each of these woodlands requires an evaluation of significance in order to determine whether they need to be carried forward to the Environmental Impact Study (EIS). A summary of the evaluation of significance of these woodlands is provided in Table 8, which also details the specific location of these natural features in relation to project components.

After comparing site specific conditions to provincially established significance criteria, NRSI has identified 13 significant woodlands within the Project Area. These woodlands will be carried forward into the EIS. Most of these woodlands are dominated by deciduous trees in forest and swamp communities, and range in size from 0.60ha to 22.88ha. The evaluation of significance for each of these woodlands is provided in Table 8, which also details the specific location of these natural features in relation to project components. Maps 3-1 to 3-9 show the location of each of these significant woodlands in relation to the Project Location.

Table 8. Woodland Evaluation of Significance for North Kent Wind 1 Project

Feature ID	Size (ha)	Composition	Distance to Project Location (m)	Woodland Size (>2ha, Y/N)	Ecological Functions (Y/N)					Woodland Width (>40m, Y/N)	Uncommon Characteristics (Y/N)	Significant (Y/N)	Map(s)	EIS Required (Y/N)
					Interior	Proximity to Other Significant Woodlands or Habitats	Linkages	Water Protection	Woodland Diversity					
WOD-001 Woodland	1.46	FODM6-5	WT – >120 AR – >120 CL – Overlapping* CA –Overlapping* SI – >120	No	No	No	No	No	Yes	Yes	No	Yes	3-1	**Yes**
WOD-002 Woodland	22.88	FODM7-5 SWDM3-3 SWDM4-2 TAGM3 SWDM4	WT – 37 (T28) AR – 12 CL – Overlapping* CA – Overlapping* SI – >120	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes Occasionally occurring sycamore (*Platanus occidentalis)* (CC 8), and common hackberry (*Celtis occidentalis)* (CC 8); large tree size structure, with occasional trees >50cm dbh	Yes	3-6	**Yes**
WOD-003 Woodland	5.85	SWDM3-3 SWDM3-4	WT – >120 AR – >120 CL – Overlapping* CA – Overlapping* SI – >120	Yes	No	Yes	No	Yes	Yes	Yes	Yes Low abundance of common hackberry (CC 8)	Yes	3-1 3-5 3-6	**Yes**
WOD-004 Woodland	1.10	SWDM3-3	WT – >120 AR – 86 CL – 86 CA – 86 SI – >120	No	No	No	No	Yes	No	Yes	Yes Low abundance of common hackberry (CC 8)	Yes	3-5	**Yes**

Feature ID	Size (ha)	Composition	Distance to Project Location (m)	Woodland Size (>2ha, Y/N)	Ecological Functions (Y/N)					Woodland Width (>40m, Y/N)	Uncommon Characteristics (Y/N)	Significant (Y/N)	Map(s)	EIS Required (Y/N)
					Interior	Proximity to Other Significant Woodlands or Habitats	Linkages	Water Protection	Woodland Diversity					
WOD-005 Woodland	6.21	FODM4-1 SWDM3-3	WT – >120 AR – 67 CL – 67 CA – 67 SI – >120	Yes	No	No	No	Yes	Yes	Yes	Yes Occasional smaller enchanter's nightshade (*Circaea alpina)*; (CC 6), and rare bristle-stalked sedge (*Carex leptalea* ssp. *leptalea* (CC 8); large tree size structure, with occasional trees >50cm dbh	Yes	3-5	**Yes**
WOD-006 Woodland	2.54	FODM6-2	WT – >120 AR – 85 CL – 85 CA – 85 SI – >120	Yes	No	No	No	No	Yes	Yes	Yes Rare vegetation community (S3?); large tree size structure, with occasional trees >50cm dbh	Yes	3-5	**Yes**

Feature ID	Size (ha)	Composition	Distance to Project Location (m)	Woodland Size (>2ha, Y/N)	Ecological Functions (Y/N)					Woodland Width (>40m, Y/N)	Uncommon Characteristics (Y/N)	Significant (Y/N)	Map(s)	EIS Required (Y/N)
					Interior	Proximity to Other Significant Woodlands or Habitats	Linkages	Water Protection	Woodland Diversity					
WOD-007 Woodland	1.12	FODM12	WT – >120 AR – >120 CL – Overlapping* CA – Overlapping* SI – >120	No	No	No	No	Yes	No	Yes	No Several rare species have been identified in this woodland; however, since they are all confirmed to be planted by the landowner (Landowner pers. comm. 2015), it does not meet the uncommon characteristics criteria for woodland significance.	Yes	3-6	**Yes**
WOD-008 Woodland	4.19	SWDM3-3	WT – >120 AR – >0.1** CL – >0.1** CA – >0.1** SI – >0.1**	Yes	No	No	No	Yes	No	Yes	Yes Low abundance of common hackberry (CC 8) and Muskingum sedge (*Carex muskingumensis* (CC 9); large tree size structure, with occasional trees >50cm dbh	Yes	3-6	**Yes**

Feature ID	Size (ha)	Composition	Distance to Project Location (m)	Woodland Size (>2ha, Y/N)	Ecological Functions (Y/N)					Woodland Width (>40m, Y/N)	Uncommon Characteristics (Y/N)	Significant (Y/N)	Map(s)	EIS Required (Y/N)
					Interior	Proximity to Other Significant Woodlands or Habitats	Linkages	Water Protection	Woodland Diversity					
WOD-009 Woodland	1.04	SWDM3-3	WT – >120 AR – >0.1** CL – >0.1** CA – >0.1** SI – >0.1**	No	No	No	No	Yes	Yes	Yes	Yes Low abundance of Gray's Sedge (*Carex grayi)* (CC 8), and Muskingum sedge (CC 9); large tree size structure, with occasional trees >50cm dbh	Yes	3-5 3-6	**Yes**
WOD-010 Woodland	1.37	FODM7-7	WT – >120 AR – >120 CL – Overlapping* CA – Overlapping* SI – >120	No	No	No	No	Yes	No	No	No	No	N/A	**No**
WOD-011 Woodland	2.63	SWDM4-2 FODM5-5	WT – 92 (T31) AR – >0.1** CL – >0.1** CA – >0.1** SI – >120	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	3-6	**Yes**
WOD-012 Woodland	11.45	FODM12 FODM7-1 TAGM1 TAGM3 FODM5-11	WT – >120 AR –>120 CL – Overlapping* CA – Overlapping* SI – >120	Yes	No	No	No	No	No	Yes	Yes Low abundance of common hackberry (CC 8)	Yes	3-5 3-6 3-7 3-8	**Yes**
WOD-013 Woodland	0.79	SWDM3-4	WT – >120 AR – >120 CL – Overlapping* CA – Overlapping* SI – >120	No	No	Yes	No	Yes	No	No	No	No	N/A	**No**

Feature ID	Size (ha)	Composition	Distance to Project Location (m)	Woodland Size (>2ha, Y/N)	Ecological Functions (Y/N)					Woodland Width (>40m, Y/N)	Uncommon Characteristics (Y/N)	Significant (Y/N)	Map(s)	EIS Required (Y/N)
					Interior	Proximity to Other Significant Woodlands or Habitats	Linkages	Water Protection	Woodland Diversity					
WOD-016 Woodland	1.19	TAGM2	WT – >120 AR – >120 CL – 23 CA – 23 SI – >120	No	No	Yes	No	Yes	No	Yes	Yes Occasional sycamore (CC 8)	Yes	3-9	**Yes**
WOD-017 Woodland	0.60	SWDM3-3	WT – >120 AR – >120 CL – Overlapping* CA – Overlapping* SI – >120	No	No	Yes	No	Yes	No	Yes	Yes Low abundance of hackberry (CC 8)	Yes	3-6	**Yes**
WOD-018 Woodland	0.50	SWDM3-3	WT – 16 (T26) AR – >0.1** CL – >0.1** CA – >0.1** SI – >120	No	No	Yes	No	Yes	No	No	Yes Low abundance of hackberry (CC 8); large tree size structure, with occasional trees >50cm dbh	No	N/A	**No**

** Directional drilling will be used to bore beneath this feature in order to avoid impacts to the feature itself.*
*** On the mapping, this woodland appears to be overlapped; however, all project components, including the construction disturbance area, will be located adjacent to the woodland (>0.1m).*

Legend
WT: Wind Turbine
AR: Access Road
CL: Collector Line
CA: Construction Activity/Temporary Infrastructure/Balance of Operations
SI: Supporting Infrastructure - Building/Substation/Laydown Area/Point of Interconnect

6.2 Wetlands

NRSI biologists identified a total of 7 wetlands within the North Kent 1 Project Area during the site investigations. Except for WET-003 and WET-007, which are too small to be evaluated following the OWES (OMNR 2013) and therefore have not been considered further, each of the remaining wetlands requires an evaluation of significance in order to determine whether they need to be carried forward to the EIS.

As none of these wetlands overlap with the Project Location by a method other than directional drilling, NRSI has implemented the Appendix C evaluation process from the NHA Guide (OMNR 2012a) to treat each of these 5 wetlands as significant and apply appropriate mitigation measures as part of the EIS. The wetlands identified in the Project Area include individual wetlands, as well as wetland complexes, and range in size from 2.09ha to 12.59ha. These wetlands typically represent riverine lowland forests and/or treed swamps situated along drains or watercourses. The Project Area is generally represented by very flat land with loam soils. Drains and watercourses have very steep banks and are regularly dredged to maintain flow, and farm lands are heavily tile-drained. As a result, forests along drains and watercourses lack defined floodplains, as water is quickly carried off the land through these conduits, which can rise significantly in rain events. It is likely that these drains and watercourses very infrequently exceed their banks; many of the drains and watercourses are lined with berms caused by the dredging. Wetlands in the area are almost exclusively dominated by white elm (*Ulmus americana*) and Freeman's maple (*Acer* x *freemanii*).

The wetlands identified within the North Kent 1 Project Area are described in Table 9. Maps 3-1 to 3-9 show the location of each of these significant wetlands in relation to the Project Location.

Table 9. Wetland Evaluation of Significance for the North Kent Wind 1 Project

Feature ID	Size (ha)	Composition and Type	Distance to Project Location (m)	Biological Component	Hydrological Component	Special Features Component	Significance	Map(s)	EIS Required (Y/N)
WET-001 Wetland Little Bear Creek Watershed	12.59	Wetland Complex SWDM4-2 SWDM3-3 100% Swamp 5 Vegetation Communities 100% clay loam and sandy loam[1] soils 83% Riverine 17% Palustrine	WT – 37 (T28) AR – 12 CL – Overlapping* CA – Overlapping* SI – >120	• Wetland Type: Swamp • Site Type: Riverine, Palustrine • Vegetation Communities: S1 h S2 h, gc S3 h, ls S4 h, ts, ls S5 h, ts, ls, gc • Proximity to other Wetlands: 2.3km to WET-002 (swamp), hydrologically connected • Interspersion: estimated to be low; general linear shape, with several communities in 3 wetland units • Open Water: Type 2 (12%)	• Flood Attenuation: Moderate, no additional known wetlands upstream, wetland small in relation to catchment basin • Water Quality Improvement: Moderate to High - riverine; >50% agricultural landscape; dominated by deciduous trees; swamp with <50% coverage of organic soils; no indication of groundwater discharge • Shoreline Erosion Control: High –trees on banks, some submergent and emergent vegetation in watercourse • Groundwater Recharge: Low to Moderate – largely Riverine with loam soils	• Fish Habitat – Low, ~1.5ha of permanently flooded “swamp”, watercourse unvegetated	Treat as Significant	**3-6**	**Yes**

Feature ID	Size (ha)	Composition and Type	Distance to Project Location (m)	Biological Component	Hydrological Component	Special Features Component	Significance	Map(s)	EIS Required (Y/N)
WET-002 Wetland Little Bear Creek Watershed	6.26	Individual Wetland SWDM3-4 SWDM3-3 100% Swamp 2 Vegetation Communities 100% silt loam[1] and clay loam soils 100% Riverine	WT – >120 AR – >120 CL – Overlapping* CA – Overlapping* SI – >120	• Wetland Type: Swamp • Site Type: Riverine • Vegetation Communities: S1 h S2 h, ts, ls, gc • Proximity to other Wetlands: 2.3km from WET-002 (swamp), hydrologically connected • Interspersion: Estimated to be very low; simple linear shape, 2 communities • Open Water: Type 2 (21%)	• Flood Attenuation: Low, WET-001 upstream, wetland very small in relation to catchment basin • Water Quality Improvement: Moderate to High - riverine; >50% agricultural landscape; dominated by deciduous trees; swamp with <50% coverage of organic soils; no indication of groundwater discharge • Shoreline Erosion Control: High –trees on banks • Groundwater Recharge: Low to Moderate – largely Riverine with loam soils	• Habitat for locally significant plant species (*Hackelia virginiana*) • Fish Habitat: – Low, ~1.3ha of permanently flooded “swamp”, watercourse with duckweed	Treat as Significant	**3-1** **3-5** **3-6**	**Yes**
WET-004 Wetland Sylvester Drain Watershed	5.08	Individual Wetland SWDM3-3 100% Swamp 1 Vegetation Community	WT – >120 AR – 99 CL – 99 CA – 99 SI – >120	• Wetland Type: Swamp • Site Type: Isolated • Vegetation Communities: S1 h • Proximity to other Wetlands: ~1.2km from	• Flood Attenuation: High, no upstream detention areas, wetland is ~20% of the catchment • Water Quality Improvement: Moderate – isolated; >50%	• Habitat for locally significant plant species (*Circaea alpine, Carex leptalea* ssp. *leptalea*) • Fish Habitat: absent	Treat as Significant	**3-5**	**Yes**

Feature ID	Size (ha)	Composition and Type	Distance to Project Location (m)	Biological Component	Hydrological Component	Special Features Component	Significance	Map(s)	EIS Required (Y/N)
		100% clay loam soils 100% Isolated		WET-003 (swamp), not hydrologically connected • Interspersion: Estimated to be very low, simple shape, one community • Open Water: absent	agricultural landscape; dominated by deciduous trees; swamp with <50% coverage of organic soils; no indication of groundwater discharge • Shoreline Erosion Control: None • Groundwater Recharge: High – Isolated with loam soils				
WET-005 Wetland Little Bear Creek Watershed	5.24	Wetland Complex SWDM3-3 100% Swamp 1 Vegetation Community 100% silty clay loam and clay loam soils 80% Palustrine 20% Isolated	WT – >120 AR – >0.1** CL – >0.1** CA –>0.1** SI – >0.1**	• Wetland Type: Swamp • Site Type: Palustrine • Vegetation Communities: S1 h, ts, ls, gc • Proximity to other Wetlands: ~2.1km from WET-002 (swamp), hydrologically connected • Interspersion: Estimated to be low, simple community shapes, two communities • Open Water: absent	• Flood Attenuation: High, no wetlands upstream, wetland ~20% of the catchment basin • Water Quality Improvement: High – palustrine with inflows, >50% agricultural landscape; dominated by deciduous trees; swamp with <50% coverage of organic soils; no indication of groundwater discharge • Shoreline Erosion Control: None • Groundwater	• Habitat for provincially significant plant species (*Carex muskingumensis*) • Habitat for locally significant plant species (*Hackelia virginiana, Carex projecta, Carex muskingumensis*) • Fish Habitat: absent	Treat as Significant	**3-6**	**Yes**

Feature ID	Size (ha)	Composition and Type	Distance to Project Location (m)	Biological Component	Hydrological Component	Special Features Component	Significance	Map(s)	EIS Required (Y/N)
					Recharge: High – Palustrine / Isolated with loam soils				
WET-006 Wetland Henderson-Campbell Drain Watershed	2.09	Individual Wetland SWDM4-2 100% Swamp 1 Vegetation Community 100% silty clay soils 100% Riverine	WT – 92 (T31) AR – >0.1** CL – >0.1** CA – >0.1** SI – >120	• Wetland Type: Swamp • Site Type: Riverine • Vegetation Communities: S1 h, ts, ls, gc • Proximity to other Wetlands: ~1.2km to WET-005 (swamp), not hydrologically connected • Interspersion: Estimated to be very low, simple community shape, one community • Open Water: Type 2 (5%)	• Flood Attenuation: High, no known upstream detention areas, wetland is ~5% of the catchment • Water Quality Improvement: High – riverine; >50% agricultural landscape; dominated by deciduous trees; swamp with <50% coverage of organic soils; no indication of groundwater discharge • Shoreline Erosion Control: High – trees on banks • Groundwater Recharge: Low – Riverine with clay soils	• Habitat for locally significant plant species (*Cardamine concatenata*) • Fish Habitat: Low, 0.1ha of permanently flooded "swamp", watercourse unvegetated	Treat as Significant	**3-6**	**Yes**

** Directional drilling will be used to bore beneath this feature in order to avoid impacts to the feature itself.*
*** On the mapping, this woodland appears to be overlapped; however, all project components, including the construction disturbance area, will be located adjacent to the woodland (>0.1m).*

Legend
WT: Wind Turbine
AR: Access Road
CL: Collector Line

CA: Construction Activity/Temporary Infrastructure/Balance of Operations
SI: Supporting Infrastructure - Building/Substation/Laydown Area/Point of Interconnect

6.3 Wildlife Habitat

During the detailed site investigation of the North Kent Wind 1 Project, NRSI biologists examined natural features within the Project Area for the presence of wildlife habitats. Several candidate SWH types have been identified within the Project Area. Each of these wildlife habitats has been examined and compared with the standards of significance provided in the SWH Criteria Schedules for Ecoregion 7E (MNRF 2015) and the NHA Guide for Renewable Energy Projects (OMNR 2012a) to assist in the preparation of the EIS.

The following discussion has been divided into 3 categories of wildlife habitat, seasonal concentration areas, rare vegetation communities and specialized wildlife habitats, and habitat for species of conservation concern. Each wildlife habitat identified in the site investigation has been summarized, with more detailed information on survey methods and results provided in Table 10.

6.3.1 Seasonal Concentration Areas

Based on the results of the site investigation, NRSI biologists have identified 8 potentially significant seasonal concentration areas. Each of these seasonal concentration areas requires an evaluation of significance in order to determine whether they need to be carried forward to the EIS.

A total of 5 waterfowl stopover and staging areas (terrestrial), within the Project Area have been confirmed as not significant based on evaluation of significance surveys conducted by NRSI in 2015. The remaining seasonal concentration areas have not been confirmed as significant but instead have been treated as significant with a commitment for additional pre-construction surveys to be undertaken during the appropriate season prior to any construction activities. The general habitat characteristics and distance relative to the Project Location for each of these seasonal concentration areas can be found in Table 10 and are mapped on Maps 4-1 to 4-9.

In addition, the site investigation identified a number of seasonal concentration areas as generalized candidate SWH. The waterfowl stopover and staging area (terrestrial) surveys conducted by NRSI in 2015 throughout the Project Area confirmed that 120

tundra swans (*Cygnus columbianus*) were identified in an agricultural field containing waste grains and seasonal flooding. As this habitat is located within 120m from project components without a potential operational impact (i.e. greater than 120m from wind turbines), it has been considered as generalized candidate SWH and is not specifically discussed further in this report.

6.3.2 Rare Vegetation Communities and Specialized Wildlife Habitats

The results of the site investigation have identified 2 rare vegetation communities and 3 specialized wildlife habitats within the Project Area. Each of these specialized wildlife habitats require an evaluation of significance in order to determine whether they need to be carried forward to the EIS.

None of the rare vegetation communities or specialized wildlife habitats have been confirmed as significant. Both of the rare vegetation communities, and 2 of the specialized wildlife habitats (WFN-001 and AWO-001) have been treated as significant with a commitment for pre-construction surveys to be undertaken during the appropriate season prior to any construction activities, depending on site access. If site access is denied, no further surveys will be conducted, and the habitats will be treated as significant. The one remaining specialized wildlife habitat (AWO-002) is located greater than 30m from the Project Location, and as such, will be treated as significant, and potential negative effects will be mitigated through site specific construction mitigation measures in the EIS. The general habitat characteristics and distance relative to the Project Location for each of these specialized wildlife habitats can be found in Table 10 and are mapped on Maps 5-1 to 5-9.

6.3.3 Habitats for Species of Conservation Concern

The results of the site investigation have identified one habitat for species of conservation concern within the Project Area. This habitat of species of conservation concern requires an evaluation of significance in order to determine whether it needs to be carried forward to the EIS. This habitat has not been confirmed as significant but has been treated as significant with a commitment for additional pre-construction surveys to be undertaken during the appropriate season prior to any construction activities, depending on site access. If site access is denied, no further surveys will be conducted, and the habitat will be treated as significant. The general habitat characteristics and

distance relative to the Project Location for this habitat for species of conservation concern can be found in Table 10 and is mapped on Maps 6-1 to 6-9.

The results of the site investigation have also identified 80 candidate habitats for Special Concern and rare wildlife species within the Project Area. Each of these habitats requires an evaluation of significance in order to determine whether they need to be carried forward to the EIS. After comparing site specific conditions to provincially established significance criteria, NRSI has identified that 53 habitats for Special Concern and rare wildlife species have not been confirmed as significant but instead have been treated as significant with a commitment for additional pre-construction surveys to be undertaken during the appropriate season prior to any construction activities. The remaining 27 habitats for Special Concern and rare wildlife species are located greater than 30m from the Project Location, and as such, will be treated as significant, and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS. The general habitat characteristics and distance relative to the Project Location for each of these Special Concern and rare wildlife species can be found in Table 10 and are mapped on Maps 6-1 to 6-9.

In addition, the site investigation identified a number of habitats as generalized candidate SWH for Special Concern and rare wildlife species. Area searches in conjunction with ELC mapping was conducted by NRSI in 2015 and confirmed that a species of conservation concern, eastern wood-pewee (*Contopus virens*), was identified in some of these generalized candidate SWH. As these habitats are located within 120m from project components without a potential operational impact (i.e. greater than 120m from wind turbines), they have been considered as generalized candidate SWH and are not specifically discussed further in this report.

During the site investigation conducted on May 7, 2015 NRSI staff heard a singing wood thrush *(Hylocichla mustelina)* within WOD-012. This however, is not considered generalized or candidate SWH as the wood thrush was heard in a Deciduous Plantation (TAGM3) which is not a preferred habitat for the species. The site investigation also revealed numerous plant species of conservation concern within WOD-007, including pawpaw (*Asimina triloba*); however, all species have been confirmed to be planted by

the landowner and as such, are not considered as generalized candidate SWH or candidate SWH.

Table 10. Wildlife Habitat Evaluation of Significance for the North Kent Wind 1 Project

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
WST-001 Waterfowl Stopover and Staging Habitat (Terrestrial)	35.91	OAGM1 Annual Row Crop Communities (corn) SWDM3-3 Swamp Maple Mineral Deciduous Swamp May provide foraging and resting habitat for migrating waterfowl (Tundra Swan)	WT – >120 AR – Overlapping CL – Overlapping CA – Overlapping SI – Overlapping	Number of Indicator Species Observations: Visit 1: None Visit 2: None Visit 3: None	Not Significant	N/A	**No**
WST-002 Waterfowl Stopover and Staging Habitat (Terrestrial)	26.79	OAGM1 Annual Row Crop Communities (soybeans) FODM7-7 Fresh-Moist Manitoba Maple Lowland Deciduous Forest May provide foraging and resting habitat for migrating waterfowl (Tundra Swan)	WT – 10 (T7) AR – 16 CL – >0.1* CA – >0.1* SI – >120	Number of Indicator Species Observations: Visit 1: None Visit 2: None Visit 3: None	Not Significant	N/A	**No**
WST-003 Waterfowl Stopover and	26.29	OAGM1 Annual Row Crop Communities	WT – >120 AR – 9 CL – >0.1*	Number of Indicator Species Observations: Visit 1: None	Not Significant	N/A	**No**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
Staging Habitat (Terrestrial)		(soybeans) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan)	CA – >0.1* SI – >120	Visit 2: None Visit 3: None			
WST-004 Waterfowl Stopover and Staging Habitat (Terrestrial)	38.85	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan)	WT – Overlapping (T48) AR – Overlapping CL – Overlapping CA – Overlapping SI – >120	Number of Indicator Species Observations: Visit 1: None Visit 2: None Visit 3: None	Not Significant	N/A	**No**
WST-005 Waterfowl Stopover and Staging Habitat (Terrestrial)	45.66	OAGM1 Annual Row Crop Communities (corn) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan)	WT – Overlapping (T48) AR – Overlapping CL – Overlapping CA – Overlapping SI – >120	Number of Indicator Species Observations: Visit 1: Tundra Swan (18) Visit 2: None Visit 3: None	Not Significant	N/A	**No**
BMA-001 Bat Maternity Colony	11.91	FODM7-5 Fresh-Moist Black Maple Lowland Deciduous Forest SWDM4-2 White Elm Mineral Deciduous Swamp	WT – 37 (T28) AR – 12 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 4 for full survey methodology.	Treated as Significant	4-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		May provide roosting habitat and shelter for raising young.					
BMA-002 Bat Maternity Colony	2.63	SWDM4-2 White Elm Mineral Deciduous Swamp FODM5-5 Dry-Fresh Sugar Maple-Hickory Deciduous Forest May provide roosting habitat and shelter for raising young	WT – 92 (T31) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	To be confirmed through pre-construction surveys. See Table 4 for full survey methodology.	Treated as Significant	4-6	**Yes**
CBT-001 Colonially-Nesting Breeding Bird Habitat (Trees/Shrubs)	5.37	SWDM4-2 White Elm Mineral Deciduous Swamp May provide nesting and breeding habitat for colonial birds using trees or shrubs	WT – 37 (T28) AR – 12 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 4 for full survey methodology	Treated as Significant	4-6	**Yes**
OGF-001 Old Growth Forest	6.54	FODM7-5 Fresh Moist Black Maple Lowland Deciduous Forest May provide habitat for species and increase vegetation diversity	WT – 61 (T28) AR – 12 CL – 12 CA – 12 SI – >120	To be confirmed through pre-construction surveys. See Table 5 for full survey methodology.	Treated as Significant	5-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
ORV-001 Other Rare Vegetation Communities Habitat	2.53	FODM6-2 Fresh-Moist Sugar Maple-Black Maple Deciduous Forest May provide habitat for species and increase vegetation diversity	WT – >120 AR – 85 CL – 85 CA – 85 SI – >120	To be confirmed through pre-construction surveys. See Table 5 for full survey methodology.	Treated as Significant	5-5	**Yes**
WFN-001 Waterfowl Nesting Area	13.20	FODM7-5 Fresh-Moist Black Maple Lowland Deciduous Forest SWDM4-2 White Elm Mineral Deciduous Swamp May provide nesting habitat for waterfowl	WT – 37 (T28) AR – 12 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 5 for full survey methodology.	Treated as Significant	5-6	**Yes**
AWO-001 Amphibian Breeding Habitat (Woodland)	11.91	FODM7-5 Fresh-Moist Black Maple Lowland Deciduous Forest SWDM4-2 White Elm Mineral Deciduous Swamp May be used for egg laying, breeding and feeding habitat.	WT – 37(T28) AR – 12 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 5 for full survey methodology.	Treated as Significant	5-6	**Yes**
AWO-002 Amphibian	2.53	FODM6-2 Fresh-Moist Sugar	WT – >120 AR – 85	This habitat is located greater than 30m from	Treated as Significant	5-5	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
Breeding Habitat (Woodland)		Maple-Black Maple Deciduous Forest May be used for egg laying, breeding and feeding habitat.	CL – 85 CA – 85 SI – >120	the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.			
MBB-001 Marsh Bird Breeding Habitat	5.37	SWDM4 Mineral Deciduous Swamp May be used for breeding or nesting habitat.	WT – 37 (T28) AR – 12 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 6 for full survey methodology.	Treated as Significant	6-6	**Yes**
EWP-001 Eastern Wood-Pewee Habitat	14.00	FODM7-5 Fresh-Moist Black Maple Lowland Deciduous Forest SWDM3-3 Swamp Maple Mineral Deciduous Swamp SWDM4-2 White Elm Mineral Deciduous Swamp May be used for breeding, nesting or foraging habitat.	WT – 37 (T28) AR – 12 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-A (1) 6-6	**Yes**
EWP-002 Eastern Wood-Pewee Habitat	2.63	FODM5-6 Dry-Fresh Sugar Maple-Basswood Deciduous Forest	WT – 92 (T31) AR – >0.1* CL – >0.1* CA – >0.1*	To be confirmed through pre-construction surveys. See Table 7 for full	Treated as Significant	SCC-M (1) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		SWDM4-2 White Elm Mineral Deciduous Swamp May be used for breeding, nesting or foraging habitat.	SI – >120	survey methodology.			
EWP-003 Eastern Wood-Pewee Habitat	0.50	SWDM3-3 Swamp Maple Mineral Deciduous Swamp May be used for breeding, nesting or foraging habitat.	WT – 16 (T26) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-G (1) 6-5	**Yes**
WTH-001 Wood Thrush Habitat	6.54	FODM7-5 Fresh-Moist Black Maple Lowland Deciduous Forest May be used for breeding, nesting or foraging habitat.	WT – 61 (T28) AR – 12 CL – 12 CA – 12 SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-C (2) 6-6	**Yes**
PMI-001 Prairie Milkweed Habitat	2.02	MEMM4 Fresh-Moist Mixed Meadow Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 102 (T30) AR – 62 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-P (23) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
PAW-001 Pawpaw Habitat	11.91	FODM7-5 Fresh-Moist Black Maple Lowland Deciduous Forest SWDM4-2 White Elm Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 37 (T28) AR – 12 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-B (4) 6-6	**Yes**
PAW-002 Pawpaw Habitat	2.53	FODM6-2 Fresh-Moist Sugar Maple-Black Maple Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 85 CL – 85 CA – 85 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-J (4) 6-5	**Yes**
MSE-001 Muskingum Sedge Habitat	14.00	FODM7-5 Fresh-Moist Black Maple Lowland Deciduous Forest SWDM3-3	WT – 37 (T28) AR – 12 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-A (5) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		Swamp Maple Mineral Deciduous Swamp SWDM4-2 White Elm Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.					
MSE-002 Muskingum Sedge Habitat	2.53	FODM6-2 Fresh-Moist Sugar Maple-Black Maple Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 85 CL – 85 CA – 85 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-J (5) 6-5	**Yes**
MSE-003 Muskingum Sedge Habitat	1.09	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime,	WT – >120 AR – 86 CL – 86 CA – 86 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through	Treated as Significant	SCC-F (5) 6-5	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		light levels, and soil properties that promote optimal growth and fecundity of this species.		site specific mitigation measures as outlined in the EIS.			
MSE-004 Muskingum Sedge Habitat	5.08	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 99 CL – 99 CA – 99 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-H (5) 6-5	**Yes**
MSE-005 Muskingum Sedge Habitat	2.09	SWDM4-2 White Elm Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 92 (T31) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-N (5) 6-6	**Yes**
MSE-006 Muskingum Sedge Habitat	1.04	SWDM3-3 Swamp Maple Mineral Deciduous Swamp	WT – >120 AR – >0.1* CL – >0.1* CA – >0.1* SI – >0.1*	This species was confirmed to be present in the candidate habitat during area searched conducted with ELC	Treated as Significant	SCC-L (5) 6-5 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.		mapping on May 28, 2015. This species was identified as rarely occurring within the habitat. Typically, rarely occurring individuals would not necessarily deem the candidate habitat as significant; however, since surveys were conducted outside of the optimal time of year for when a confident identification of this species can be made, the significance of this habitat will be confirmed through additional pre-construction surveys when a better assessment of population size can be determined. See Table 7 for full survey methodology.			
MSE-007 Muskingum Sedge Habitat	4.19	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil	WT – >120 AR – >0.1* CL – >0.1* CA – >0.1* SI – >0.1*	This species was confirmed to be present in the candidate habitat during area searched conducted with ELC mapping on May 28, 2015. This species was identified as rarely	Treated as Significant	SCC-K (5) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		properties that promote optimal growth and fecundity of this species.		occurring within the habitat. Typically, rarely occurring individuals would not necessarily deem the candidate habitat as significant; however, since surveys were conducted outside of the optimal time of year for when a confident identification of this species can be made, the significance of this habitat will be confirmed through additional pre-construction surveys when a better assessment of population size can be determined. See Table 7 for full survey methodology.			
MSE-008 Muskingum Sedge Habitat	0.50	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and	WT – 16 (T26) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-G (5) 6-5	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		fecundity of this species.					
RSE-001 Rigid Sedge Habitat	2.02	MEMM4 Fresh-Moist Mixed Meadow Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 102 (T30) AR – 62 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-P (6) 6-6	**Yes**
RFP-001 Round-Fruited Panic Grass Habitat	0.54	FODM5-6 Dry-Fresh Sugar Maple-Basswood Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 68 CL – 68 CA – 68 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-O (7) 6-6	**Yes**
RFP-002 Round-Fruited Panic Grass Habitat	1.12	FODM4-1 Dry-Fresh Beech Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal	WT – >120 AR – 67 CL – 67 CA – 67 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in	Treated as Significant	SCC-I (7) 6-5	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		growth and fecundity of this species.		the EIS.			
BAS-001 Blue Ash Habitat	11.91	FODM7-5 Fresh-Moist Black Maple Lowland Deciduous Forest SWDM4-2 White Elm Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 37 (T28) AR – 12 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-B (8) 6-6	**Yes**
BAS-002 Blue Ash Habitat	2.53	FODM6-2 Fresh-Moist Sugar Maple-Black Maple Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 85 CL – 85 CA – 85 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-J (8) 6-5	**Yes**
SRM-001 Swamp Rose-mallow Habitat	5.37	SWDM4-2 White Elm Mineral Deciduous Swamp	WT – 37 (T28) AR – 12 CL – Overlapping**	To be confirmed through pre-construction surveys.	Treated as Significant	SCC-E (9) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	CA – Overlapping** SI – >120	See Table 7 for full survey methodology.			
SRM-002 Swamp Rose-mallow Habitat	4.19	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – >0.1* CL – >0.1* CA – >0.1* SI – >0.1*	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-K (9) 6-6	**Yes**
BGU-001 Black Gum Habitat	14.00	FODM7-5 Fresh-Moist Black Maple Lowland Deciduous Forest SWDM3-3 Swamp Maple Mineral Deciduous Swamp SWDM4-2 White Elm Mineral Deciduous Swamp	WT – 37 (T28) AR – 12 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-A (10) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.					
BGU-002 Black Gum Habitat	2.53	FODM6-2 Fresh-Moist Sugar Maple-Black Maple Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 85 CL – 85 CA – 85 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-J (10) 6-5	**Yes**
BGU-003 Black Gum Habitat	4.19	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – >0.1* CL – >0.1* CA – >0.1* SI – >0.1*	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-K (10) 6-6	**Yes**
NFO-001 Northern	14.00	FODM7-5 Fresh-Moist Black	WT – 37 (T28) AR – 12	To be confirmed through pre-construction surveys.	Treated as Significant	SCC-A (11) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
Fogfruit Habitat		Maple Lowland Deciduous Forest SWDM3-3 Swamp Maple Mineral Deciduous Swamp SWDM4-2 White Elm Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	CL – Overlapping** CA – Overlapping** SI – >120	See Table 7 for full survey methodology.			
NFO-002 Northern Fogfruit Habitat	1.09	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 86 CL – 86 CA – 86 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-F (11) 6-5	**Yes**
NFO-003 Northern Fogfruit	5.08	SWDM3-3 Swamp Maple Mineral Deciduous	WT – >120 AR – 99 CL – 99	This habitat is located greater than 30m from the Project Location. As	Treated as Significant	SCC-H (11) 6-5	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
Habitat		Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	CA – 99 SI – >120	such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.			
NFO-004 Northern Fogfruit Habitat	2.53	FODM6-2 Fresh-Moist Sugar Maple-Black Maple Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 85 CL – 85 CA – 85 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-J (11) 6-5	**Yes**
NFO-005 Northern Fogfruit Habitat	1.04	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – >0.1* CL – >0.1* CA – >0.1* SI – >0.1*	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-L (11) 6-5 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
NFO-006 Northern Fogfruit Habitat	2.09	SWDM4-2 White Elm Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 92 (T31) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-N (11) 6-6	**Yes**
NFO-007 Northern Fogfruit Habitat	2.02	MEMM4 Fresh-Moist Mixed Meadow Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 102 (T30) AR – 62 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-P (11) 6-6	**Yes**
NFO-008 Northern Fogfruit Habitat	4.19	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this	WT – >120 AR – >0.1* CL – >0.1* CA – >0.1* SI – >0.1*	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-K (11) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		species.					
SHU-001 Shumard Oak Habitat	5.08	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 99 CL – 99 CA – 99 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-H (12) 6-5	**Yes**
SHU-002 Shumard Oak Habitat	5.37	SWDM4-2 White Elm Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 37 (T28) AR – 12 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-D (12) 6-6	**Yes**
SHU-003 Shumard Oak Habitat	2.09	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal	WT – >120 AR – 85 CL – 85 CA – 85 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-E (12) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		growth and fecundity of this species.					
GPC-001 Gray-headed Prairie Coneflower Habitat	0.54	FODM5-6 Dry-Fresh Sugar Maple-Basswood Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 68 CL – 68 CA – 68 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-O (13) 6-6	**Yes**
GPC-002 Gray-headed Prairie Coneflower Habitat	1.12	FODM4-1 Dry-Fresh Beech Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 67 CL – 67 CA – 67 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-I (13) 6-5	**Yes**
CPR-001 Climbing Prairie Rose Habitat	2.02	MEMM4 Fresh-Moist Mixed Meadow Provides suitable moisture regime, light levels, and soil properties that	WT – 102 (T30) AR – 62 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-P (14) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		promote optimal growth and fecundity of this species.					
LTA-001 Lizard's Tail Habitat	14.00	FODM7-5 Fresh-Moist Black Maple Lowland Deciduous Forest SWDM3-3 Swamp Maple Mineral Deciduous Swamp SWDM4-2 White Elm Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT –37 (T28) AR – 12 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-A (15) 6-6	**Yes**
LTA-002 Lizard's Tail Habitat	2.53	FODM6-2 Fresh-Moist Sugar Maple-Black Maple Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal	WT – >120 AR – 85 CL – 85 CA – 85 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-J (15) 6-5	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		growth and fecundity of this species.					
LTA-003 Lizard's Tail Habitat	1.09	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 86 CL – 86 CA – 86 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-F (15) 6-5	**Yes**
LTA-004 Lizard's Tail Habitat	5.08	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 99 CL – 99 CA – 99 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-H (15) 6-6	**Yes**
LTA-005 Lizard's Tail Habitat	2.09	SWDM4-2 White Elm Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil	WT – 92 (T31) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-N (15) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		properties that promote optimal growth and fecundity of this species.					
LTA-006 Lizard's Tail Habitat	1.04	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – >0.1* CL – >0.1* CA – >0.1* SI – >0.1*	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-L (15) 6-5 6-6	**Yes**
LTA-007 Lizard's Tail Habitat	4.19	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – >0.1* CL – >0.1* CA – >0.1* SI – >0.1*	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-K (15) 6-6	**Yes**
LTA-008 Lizard's Tail Habitat	0.50	SWDM3-3 Swamp Maple Mineral Deciduous Swamp	WT – 16 (T26) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-G (15) 6-5	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.					
WSE-001 Wild Senna Habitat	0.50	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 16 (T26) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-G (16) 6-5	**Yes**
WSE-002 Wild Senna Habitat	2.09	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 85 CL – 85 CA – 85 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-E (16) 6-6	**Yes**
WSE-003 Wild Senna	5.37	SWDM4-2 White Elm Mineral	WT – 37 (T28) AR – 12	To be confirmed through pre-construction surveys.	Treated as Significant	SCC-D (16) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
Habitat		Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	CL – Overlapping** CA – Overlapping** SI – >120	See Table 7 for full survey methodology.			
WSE-004 Wild Senna Habitat	1.09	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 86 CL – 86 CA – 86 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-F (16) 6-5	**Yes**
WSE-005 Wild Senna Habitat	5.08	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 99 CL – 99 CA – 99 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-H (16) 6-5	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
WSE-006 Wild Senna Habitat	4.19	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – >0.1* CL – >0.1* CA – >0.1* SI – >0.1*	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-K (16) 6-6	**Yes**
WSE-007 Wild Senna Habitat	1.04	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – >0.1* CL – >0.1* CA – >0.1* SI – >0.1*	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-L (16) 6-5 6-6	**Yes**
WSE-008 Wild Senna Habitat	2.09	SWDM4-2 White Elm Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and	WT – 92 (T31) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-N (16) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		fecundity of this species.					
WSE-009 Wild Senna Habitat	2.02	MEMM4 Fresh-Moist Mixed Meadow Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 102 (T30) AR – 62 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-P (16) 6-6	**Yes**
CUP-001 Cup-Plant Habitat	5.37	FODM4-2 Dry-Fresh White Ash- Hardwood Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 37 (T28) AR – 12 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-D (17) 6-6	**Yes**
CUP-002 Cup-Plant Habitat	4.19	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that	WT – >120 AR – >0.1* CL – >0.1* CA – >0.1* SI – >0.1*	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-K (17) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		promote optimal growth and fecundity of this species.					
CUP-003 Cup-Plant Habitat	2.09	SWDM4-2 White Elm Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 92 (T31) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-N (17) 6-6	**Yes**
CUP-004 Cup-Plant Habitat	2.02	MEMM4 Fresh-Moist Mixed Meadow Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 102 (T30) AR – 62 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-P (17) 6-6	**Yes**
RGL-001 Riddell's Goldenrod Habitat	2.02	MEMM4 Fresh-Moist Mixed Meadow Provides suitable moisture regime, light levels, and soil properties that	WT – 102 (T30) AR – 62 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-P (18) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		promote optimal growth and fecundity of this species.					
SLT-001 Southern Slender Ladies' Tresses Habitat	2.02	MEMM4 Fresh-Moist Mixed Meadow Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 102 (T30) AR – 62 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-P (19) 6-6	**Yes**
WIS-001 Wing-stem Habitat	14.00	FODM7-5 Fresh-Moist Black Maple Lowland Deciduous Forest SWDM3-3 Swamp Maple Mineral Deciduous Swamp SWDM4-2 White Elm Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and	WT – 37 (T28) AR – 12 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-A (20) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		fecundity of this species.					
WIS-002 Wing-stem Habitat	1.09	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 86 CL – 86 CA – 86 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-F (20) 6-5	**Yes**
WIS-003 Wing-stem Habitat	5.08	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 99 CL – 99 CA – 99 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-H (20) 6-5	**Yes**
WIS-004 Wing-stem Habitat	2.53	FODM6-2 Fresh-Moist Sugar Maple-Black Maple Deciduous Forest Provides suitable moisture regime, light levels, and soil	WT – >120 AR – 85 CL – 85 CA – 85 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation	Treated as Significant	SCC-J (20) 6-5	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		properties that promote optimal growth and fecundity of this species.		measures as outlined in the EIS.			
WIS-005 Wing-stem Habitat	4.19	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – >0.1* CL – >0.1* CA – >0.1* SI – >0.1*	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-K (20) 6-6	**Yes**
WIS-006 Wing-stem Habitat	1.04	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – >0.1* CL – >0.1* CA – >0.1* SI – >0.1*	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-L (20) 6-5 6-6	**Yes**
WIS-007 Wing-stem Habitat	2.09	SWDM4-2 White Elm Mineral Deciduous Swamp Provides suitable	WT – 92 (T31) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-N (20) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.					
WIS-008 Wing-stem Habitat	0.50	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 16 (T26) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-G (20) 6-5	**Yes**
GIW-001 Giant Ironweed Habitat	1.09	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – 86 CL – 86 CA – 86 SI – >120	This habitat is located greater than 30m from the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.	Treated as Significant	SCC-F (3) 6-5	**Yes**
GIW-002 Giant Ironweed	5.08	SWDM3-3 Swamp Maple Mineral Deciduous	WT – >120 AR – 99 CL – 99	This habitat is located greater than 30m from the Project Location. As	Treated as Significant	SCC-H (3) 6-5	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
Habitat		Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	CA – 99 SI – >120	such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.			
GIW-003 Giant Ironweed Habitat	2.09	SWDM4-2 White Elm Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 92 (T31) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-N (3) 6-6	**Yes**
GIW-004 Giant Ironweed Habitat	14.00	FODM7-5 Fresh-Moist Black Maple Lowland Deciduous Forest SWDM3-3 Swamp Maple Mineral Deciduous Swamp SWDM4-2 White Elm Mineral Deciduous Swamp	WT – 37 (T28) AR – 12 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-A (3) 6-6	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.					
GIW-005 Giant Ironweed Habitat	1.04	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – >0.1* CL – >0.1* CA – >0.1* SI – >0.1*	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-L (3) 6-5 6-6	**Yes**
GIW-006 Giant Ironweed Habitat	4.19	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – >120 AR – >0.1* CL – >0.1* CA – >0.1* SI – >0.1*	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-K (3) 6-6	**Yes**
GIW-007 Giant	2.53	FODM6-2 Fresh-Moist Sugar	WT – >120 AR – 85	This habitat is located greater than 30m from	Treated as Significant	SCC-J (3) 6-5	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
Ironweed Habitat		Maple-Black Maple Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	CL – 85 CA – 85 SI – >120	the Project Location. As such, this habitat will be treated as significant and potential negative effects will be mitigated through site specific mitigation measures as outlined in the EIS.			
GIW-008 Giant Ironweed Habitat	2.02	MEMM4 Fresh-Moist Mixed Meadow Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 102 (T30) AR – 62 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-P (3) 6-6	**Yes**
VCR-001 Virginia Culver's-root Habitat	2.02	MEMM4 Fresh-Moist Mixed Meadow Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 102 (T30) AR – 62 CL – Overlapping** CA – Overlapping** SI – >120	To be confirmed through pre-construction surveys. See Table 7 for full survey methodology.	Treated as Significant	SCC-P (22) 6-6	**Yes**
CVI-001	11.91	FODM7-5	WT – 37 (T28)	To be confirmed through	Treated as	SCC-B (21)	**Yes**

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
Cream Violet Habitat		Fresh-Moist Black Maple Lowland Deciduous Forest SWDM3-3 Swamp Maple Mineral Deciduous Swamp SWDM4-2 White Elm Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	AR – 12 CL – Overlapping** CA – Overlapping** SI – >120	pre-construction surveys. See Table 7 for full survey methodology.	Significant	6-6	

** On the mapping, this candidate SWH appears to be overlapped; however, all project components, including the construction disturbance area, will be located adjacent to the candidate SWH (>0.1m).*
*** Directional drilling will be used to bore beneath this feature in order to avoid impacts to the feature itself.*

Legend
WT: Wind Turbine
AR: Access Road
CL: Collector lines
CA: Construction Activity/Temporary Infrastructure/Balance of Operations
SI: Supporting Infrastructure - Building/Substation/Laydown Area/Point of Interconnect

7.0 Evaluation of Significance Summary

In accordance with the REA Regulation, NRSI biologists have completed a comprehensive evaluation of significance of the North Kent Wind 1 Project. The results of the evaluation have been discussed in the preceding sections, and have been summarized in Table 11 below. This summary includes woodlands, wetlands, and SWH, some of which will be carried forward to the EIS, as noted in the table.

Based on a comprehensive evaluation of significance, following provincial guidelines and standards, NRSI biologists have determined that several significant features, including 13 woodlands, 5 wetlands, and 89 SWH, are present within the Project Area. Several additional wildlife habitats have been considered generalized SWH, indicating they are within 120m of (but not overlapping) a project component that will not have an impact on this wildlife habitat during the operational phase of the project. Each of these significant or generalized SWH are listed in Table 11 below, and will be discussed in detail in the EIS to be prepared under a separate cover.

Table 11. Summary of Candidate Natural Features and Wildlife Habitats within the North Kent Wind 1 Project

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Significant/ EIS Required (Y/N)
Woodlands				
WOD-001	>120	CL, CA – Overlapping*	N/A	**Yes**
WOD-002	37 (T28)	CL, CA – Overlapping*	N/A	**Yes**
WOD-003	>120	CL, CA – Overlapping*	N/A	**Yes**
WOD-004	>120	CA – 86	N/A	**Yes**
WOD-005	>120	CA – 67	N/A	**Yes**
WOD-006	>120	CA – 85	N/A	**Yes**
WOD-007	>120	CL, CA – Overlapping*	N/A	**Yes**
WOD-008	>120	AR, CL, CA, SI – >0.1**	N/A	**Yes**
WOD-009	>120	AR, CL, CA, SI – >0.1**	N/A	**Yes**

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Significant/ EIS Required (Y/N)
WOD-010	>120	CL, CA – Overlapping*	N/A	**No**
WOD-011	92 (T31)	AR, CL, CA – >0.1**	N/A	**Yes**
WOD-012	>120	CL, CA – Overlapping*	N/A	**Yes**
WOD-013	>120	CL, CA – Overlapping*	N/A	**No**
WOD-016	>120	CL, CA – 23	N/A	**Yes**
WOD-017	>120	CL, CA – Overlapping*	N/A	**Yes**
WOD-018	16 (T26)	AR, CL, CA – >0.1**	N/A	**No**
Wetlands				
WET-001	37 (T28)	CL, CA – Overlapping*	N/A	**Yes**
WET-002	>120	CL, CA – Overlapping*	N/A	**Yes**
WET-004	>120	AR, CL, CA – 99	N/A	**Yes**
WET-005	>120	CA, SI – >0.1**	N/A	**Yes**
WET-006	92 (T31)	AR, CL, CA – >0.1**	N/A	**Yes**
Candidate Significant Wildlife Habitats				
WST-001	>120	AR, CA, SI – Overlapping	WT- >120	**No**
WST-002	10 (T7)	CL, CA – >0.1**	WT – 10 (T7)	**No**
WST-003	>120	CL, CA – >0.1**	WT – >120	**No**
WST-004	Overlapping (T48)	AR, CL, CA – Overlapping	WT – Overlapping (T48)	**No**
WST-005	Overlapping (T48)	AR, CL, CA – Overlapping	WT – Overlapping (T48)	**No**
BMA-001	37 (T28)	CL, CA – Overlapping*	WT – 37 (T28)	**Yes (Treated as Significant)**
BMA-002	92 (T31)	AR, CL, CA – >0.1**	WT – 92 (T31)	**Yes (Treated as Significant)**
CBT-001	37 (T28)	CL, CA – Overlapping*	WT – 37 (T28) AR – 12	**Yes (Treated as Significant)**
OGF-001	61 (T28)	AR, CL, CA – 12	AR – 12	**Yes (Treated as Significant)**
ORV-001	>120	AR, CL, CA – 85	AR – 85	**Yes (Treated as Significant)**

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Significant/ EIS Required (Y/N)
WFN-001	37 (T28)	CL, CA – Overlapping*	WT – 37(T28)	**Yes (Treated as Significant)**
AWO-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes (Treated as Significant)**
AWO-002	>120	AR, CL, CA – 85	AR – 85	**Yes (Treated as Significant)**
MBB-001	37 (T28)	CL, CA – Overlapping*	WT – 37 (T28)	**Yes (Treated as Significant)**
EWP-001	37 (T28)	CL, CA – Overlapping*	WT – 37 (T28)	**Yes (Treated as Significant)**
EWP-002	92 (T31)	AR, CL, CA – >0.1**	WT – 92 (T31)	**Yes (Treated as Significant)**
EWP-003	16 (T26)	AR, CL, CA – >0.1**	WT – 16 (T26)	**Yes (Treated as Significant)**
WTH-001	61 (T28)	AR, CL, CA – 12	WT – 61 (T28)	**Yes (Treated as Significant)**
PMI-001	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes (Treated as Significant)**
PAW-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes (Treated as Significant)**
PAW-002	>120	AR, CL, CA – 85	AR – 85	**Yes (Treated as Significant)**
MSE-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes (Treated as Significant)**
MSE-002	>120	AR, CL, CA – 85	AR – 85	**Yes (Treated as Significant)**
MSE-003	>120	AR, CL, CA – 86	AR – 86	**Yes (Treated as Significant)**
MSE-004	>120	AR, CL, CA – 99	AR – 99	**Yes (Treated as Significant)**

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Significant/ EIS Required (Y/N)
MSE-005	92 (T31)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
MSE-006	>120	AR, CL, CA, SI – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
MSE-007	>120	AR, CL, CA, SI – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
MSE-008	16 (T26)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
RSE-001	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes (Treated as Significant)**
RFP-001	>120	AR, CL, CA – 68	AR – 68	**Yes (Treated as Significant)**
RFP-002	>120	AR, CL, CA – 67	AR – 67	**Yes (Treated as Significant)**
BAS-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes (Treated as Significant)**
BAS-002	>120	AR, CL, CA – 85	AR – 85	**Yes (Treated as Significant)**
SRM-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes (Treated as Significant)**
SRM-002	>120	AR, CL, CA, SI – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
BGU-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes (Treated as Significant)**
BGU-002	>120	AR, CL, CA – 85	AR – 85	**Yes (Treated as Significant)**
BGU-003	>120	AR, CL, CA, SI – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
NFO-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes (Treated as Significant)**

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Significant/ EIS Required (Y/N)
NFO-002	>120	AR, CL, CA – 86	AR – 86	**Yes (Treated as Significant)**
NFO-003	>120	AR, CL, CA – 99	AR – 99	**Yes (Treated as Significant)**
NFO-004	>120	AR, CL, CA – 85	AR – 85	**Yes (Treated as Significant)**
NFO-005	>120	AR, CL, CA, SI – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
NFO-006	92 (T31)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
NFO-007	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes (Treated as Significant)**
NFO-008	>120	AR, CL, CA, SI – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
SHU-001	>120	AR, CL, CA – 99	AR – 99	**Yes (Treated as Significant)**
SHU-002	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes (Treated as Significant)**
SHU-003	>120	AR, CL, CA – 85	AR – 85	**Yes (Treated as Significant)**
GPC-001	>120	AR, CL, CA – 68	AR – 68	**Yes (Treated as Significant)**
GPC-002	>120	AR, CL, CA – 67	AR – 67	**Yes (Treated as Significant)**
CPR-001	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes (Treated as Significant)**
LTA-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes (Treated as Significant)**
LTA-002	>120	AR, CL, CA – 85	AR – 85	**Yes (Treated as Significant)**

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Significant/ EIS Required (Y/N)
LTA-003	>120	AR, CL, CA – 86	AR – 86	**Yes (Treated as Significant)**
LTA-004	>120	AR, CL, CA – 99	AR – 99	**Yes (Treated as Significant)**
LTA-005	92 (T31)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
LTA-006	>120	AR, CL, CA, SI – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
LTA-007	>120	AR, CL, CA, SI – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
LTA-008	16 (T26)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
WSE-001	16 (T26)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
WSE-002	>120	AR, CL, CA – 85	AR – 85	**Yes (Treated as Significant)**
WSE-003	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes (Treated as Significant)**
WSE-004	>120	AR, CL, CA – 86	AR – 86	**Yes (Treated as Significant)**
WSE-005	>120	AR, CL, CA – 99	AR – 99	**Yes (Treated as Significant)**
WSE-006	>120	AR, CL, CA, SI – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
WSE-007	>120	AR, CL, CA, SI – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
WSE-008	92 (T28)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
WSE-009	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes (Treated as Significant)**

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Significant/ EIS Required (Y/N)
CUP-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes (Treated as Significant)**
CUP-002	>120	AR, CL, CA, SI – >0.1**	AR – >0.1*	**Yes (Treated as Significant)**
CUP-003	92 (T31)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
CUP-004	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes (Treated as Significant)**
RGL-001	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes (Treated as Significant)**
SLT-001	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes (Treated as Significant)**
WIS-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes (Treated as Significant)**
WIS-002	>120	AR, CL, CA – 86	AR – 86	**Yes (Treated as Significant)**
WIS-003	>120	AR, CL, CA – 99	AR – 99	**Yes (Treated as Significant)**
WIS-004	>120	AR, CL, CA – 85	AR – 85	**Yes (Treated as Significant)**
WIS-005	>120	AR, CL, CA, SI – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
WIS-006	>120	AR, CL, CA, SI – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
WIS-007	92 (T31)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
WIS-008	16 (T26)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
GIW-001	>120	AR, CL, CA – 86	AR – 86	**Yes (Treated as Significant)**

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Significant/ EIS Required (Y/N)
GIW-002	>120	AR, CL, CA – 99	AR – 99	**Yes (Treated as Significant)**
GIW-003	92 (T31)	AR, CL, CA – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
GIW-004	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes (Treated as Significant)**
GIW-005	>120	AR, CL, CA, SI – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
GIW-006	>120	AR, CL, CA, SI – >0.1**	AR – >0.1**	**Yes (Treated as Significant)**
GIW-007	>120	AR, CL, CA – 85	AR – 85	**Yes (Treated as Significant)**
GIW-008	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes (Treated as Significant)**
VCR-001	102 (T30)	CL, CA – Overlapping*	AR – 62	**Yes (Treated as Significant)**
CVI-001	37 (T28)	CL, CA – Overlapping*	AR – 12	**Yes (Treated as Significant)**
Generalized Candidate Significant Wildlife Habitats				
Waterfowl Stopover and Staging Areas (Terrestrial)	N/A	N/A	WT – >120	**Yes**
Bat Maternity Colonies	N/A	N/A	WT – >120	**Yes**
Turtle Wintering Areas	N/A	N/A	No development within habitat	**Yes**
Snake Hibernaculum	N/A	N/A	WT – >120 AR – >120	**Yes**
Colonially – Nesting Bird Breeding Habitat (Tree/Shrubs)	N/A	N/A	WT – >120 AR – >120	**Yes**
Amphibian Breeding Habitat (Woodland)	N/A	N/A	AR – >120	**Yes**

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Significant/ EIS Required (Y/N)
Marsh Bird Breeding Habitat	N/A	N/A	WT – >120	**Yes**
Terrestrial Crayfish	N/A	N/A	No development within habitat	**Yes**
Grasshopper Sparrow	N/A	N/A	WT – >120	**Yes**
Common Nighthawk	N/A	N/A	WT – >120	**Yes**
Eastern Wood-Pewee	N/A	N/A	WT – >120	**Yes**
Wood Thrush	N/A	N/A	WT – >120	**Yes**
Red-headed Woodpecker	N/A	N/A	No development within habitat	**Yes**
Pawpaw	N/A	N/A	AR – >120	**Yes**
Muskingum Sedge	N/A	N/A	AR – >120	**Yes**
Rigid Sedge	N/A	N/A	AR – >120	**Yes**
Hoary Tick-trefoil	N/A	N/A	AR – >120	**Yes**
Round-Fruited Panic Grass	N/A	N/A	AR – >120	**Yes**
Blue Ash	N/A	N/A	AR – >120	**Yes**
Swamp Rose-mallow	N/A	N/A	AR – >120	**Yes**
American Lotus	N/A	N/A	AR – >120	**Yes**
Black Gum	N/A	N/A	AR – >120	**Yes**
Northern Fogfruit	N/A	N/A	AR – >120	**Yes**
Shumard Oak	N/A	N/A	AR – >120	**Yes**
Gray-headed Prairie Coneflower	N/A	N/A	AR – >120	**Yes**
Climbing Prairie Rose	N/A	N/A	AR – >120	**Yes**
Lizard's Tail	N/A	N/A	AR – >120	**Yes**
Wild Senna	N/A	N/A	AR – >120	**Yes**
Cup-Plant	N/A	N/A	AR – >120	**Yes**
Southern Slender Ladies' Tresses	N/A	N/A	AR – >120	**Yes**
Wing-stem	N/A	N/A	AR – >120	**Yes**
Giant Ironweed	N/A	N/A	AR – >120	**Yes**
Virginia Culver's-root	N/A	N/A	AR – >120	**Yes**
Cream Violet	N/A	N/A	AR – >120	**Yes**

Feature ID	Distance to Closest Turbine (from blade tip) (m)	Distance to Closest Other Project Infrastructure (m)	Distance to Project Infrastructure With a Potential Operational Effect (m)	Significant/ EIS Required (Y/N)
Blue-ringed Dancer	N/A	N/A	No development within habitat	**Yes**
Blue-tipped Dancer	N/A	N/A	No development within habitat	**Yes**
Variegated Meadowhawk	N/A	N/A	No development within habitat	**Yes**

**Directional drilling will be used to bore beneath this feature in order to avoid impacts to the feature itself*
***On the mapping, this feature appears to be overlapped; however, all project components, including the construction disturbance area, will be located adjacent to the feature (>0.1m)*

Legend
WT: Wind Turbine
AR: Access Road
CL: Collector lines
CA: Construction Activity/Temporary Infrastructure/Balance of Operations
SI: Supporting Infrastructure - Building/Substation/Laydown Area/Point of Interconnect

8.0 References

Publications

Bird Studies Canada. 2009. Marsh Monitoring Program Participant's Handbook for Surveying Marsh Birds. 2009 Edition. 17 pages. Published by Bird Studies Canada in cooperation with Environment Canada and the U.S. Environmental Protection Agency. February 2009.

Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification (ELC) for Southern Ontario: First Approximation and its Application. Ontario Ministry of Natural Resources, Southcentral Science Section, Science Development and Transfer Branch. SCSS Field Guide FG-02.

Ministry of Natural Resources and Forestry (MNRF). 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E. January 2015.

Natural Resource Solutions Inc (NRSI). 2015. North Kent Wind 1 Project: Natural Heritage Site Investigation Report. June 2015.

Ontario Ministry of Natural Resources (OMNR). 2013. Ontario Wetland Evaluation System: Southern Manual. 3rd Edition, Version 3.2.

Ontario Ministry of Natural Resources (OMNR). 2012a. Natural Heritage Assessment (NHA) Guide for Renewable Energy Projects. November 2012.

Ontario Ministry of Natural Resources (OMNR). 2011a. Bat and Bat Habitats: Guidelines for Wind Power Projects. July 2011.

Ontario Ministry of Natural Resources (OMNR). 2011b. Birds and Bird Habitats: Guidelines for Wind Power Projects. December 2011.

Internet Sources

Committee on the Status of Endangered Wildlife In Canada (COSEWIC). 2012. Species information. Available at: http://www.cosewic.gc.ca/eng/sct5/index_e.cfm

Ontario Ministry of Natural Resources (OMNR). 2012b. Species at Risk in Ontario (SARO). Available at: http://www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/246809.html

Personal Communications

Landowner. 2015. Site Investigation with NRSI on May 4, 2015.

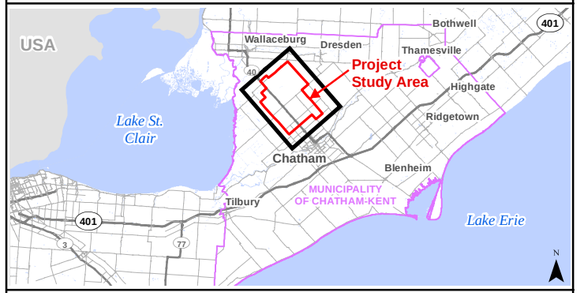
Ministry of Natural Resources and Forestry (MNRF) Staff. District NHA Records Review Template for Renewable Energy Projects – Ecoregion 7E. May 28, 2015.

Map 1
Project Area and Natural Features

Map 1

North Kent Wind 1 Project

Project Area and Natural Features



Legend

- Utility Line
- Highway
- Primary Road
- Secondary Road

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Meteorological Tower
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/ Substation/ Laydown/ O&M Building
- Proposed Laydown Area

Natural Features

- Permanent Watercourse
- Intermittent Watercourse
- Open Water
- Woodland
- Important Bird Area (IBA)

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:55,000**

0 1 2 3 Kilometers

N

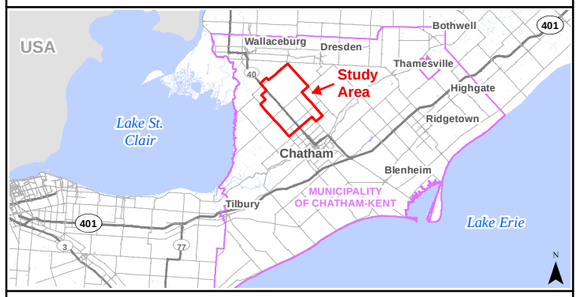
Path: X:\1612_NorthKentWP\NRSI_1612_Map1_ProjectAreaNaturalFeatures_55K_2015_07_21_LEH.mxd

Map 2
Key Map

Map 2

North Kent Wind 1 Project

Key Map



Legend

- Map Extent
- Utility Line
- Highway
- Primary Road
- Secondary Road

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Meteorological Tower
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/ Substation/ Laydown/ O&M Building
- Proposed Laydown Area

Natural Features

- Permanent Watercourse
- Intermittent Watercourse
- Open Water
- Woodland

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612
Date: July 21, 2015

NAD83 - UTM Zone 17
Size: 11x17"
1:75,000

0 1 2 3 Kilometers

N

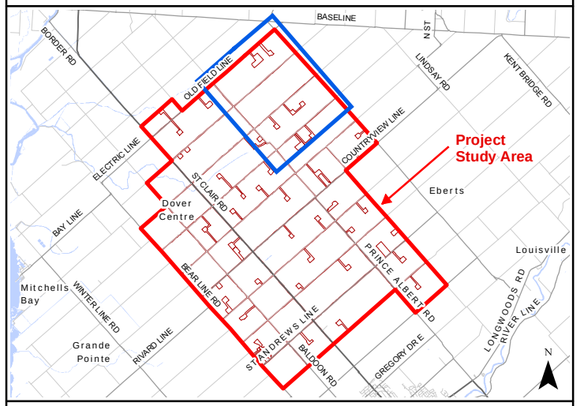
Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map2_KeyMap_60K_2015_07_21_LEH.mxd

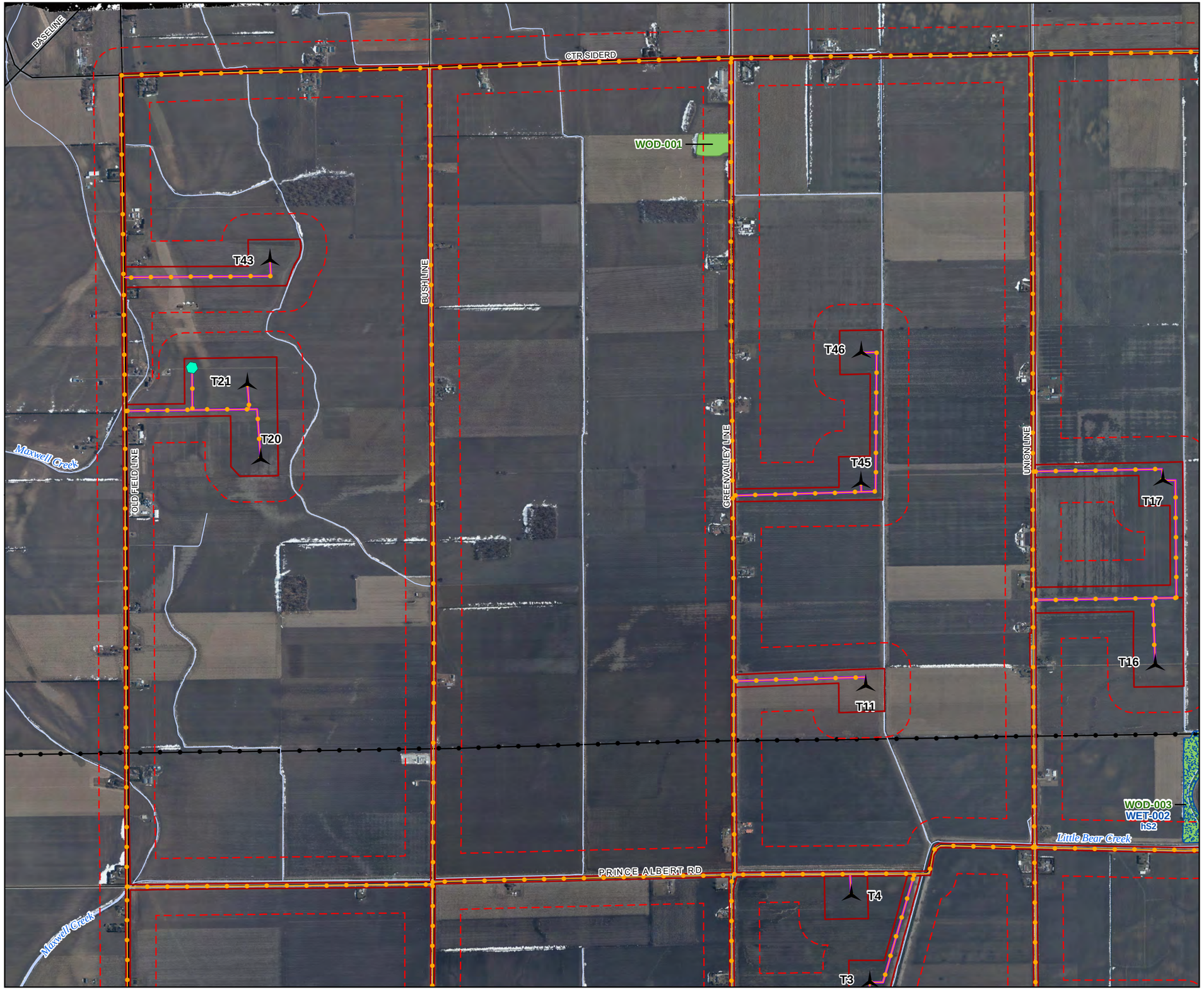
Maps 3-1 to 3-9
Significant Woodlands and Wetlands

Map 3 - 1

North Kent Wind 1 Project

Significant Woodlands and Wetlands





Legend

- Utility Line
- Primary Road
- Secondary Road
- Permanent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Meteorological Tower
- Proposed Collection Line
- Proposed Access Road

Significant Natural Features

- Significant Woodland (WOD)
- Significant Wetland (WET)

The distances from the project location to significant woodlands and wetlands are outlined within the body of the report in Tables 8 and 9.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

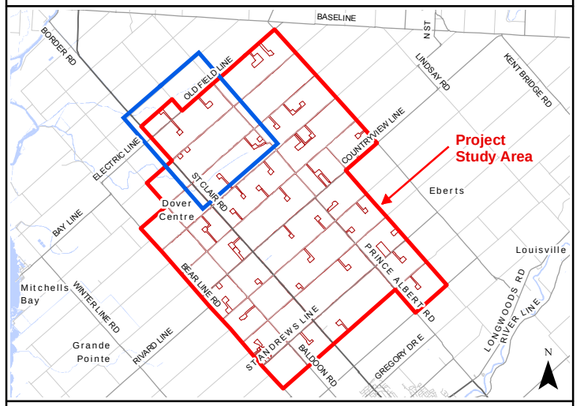
N

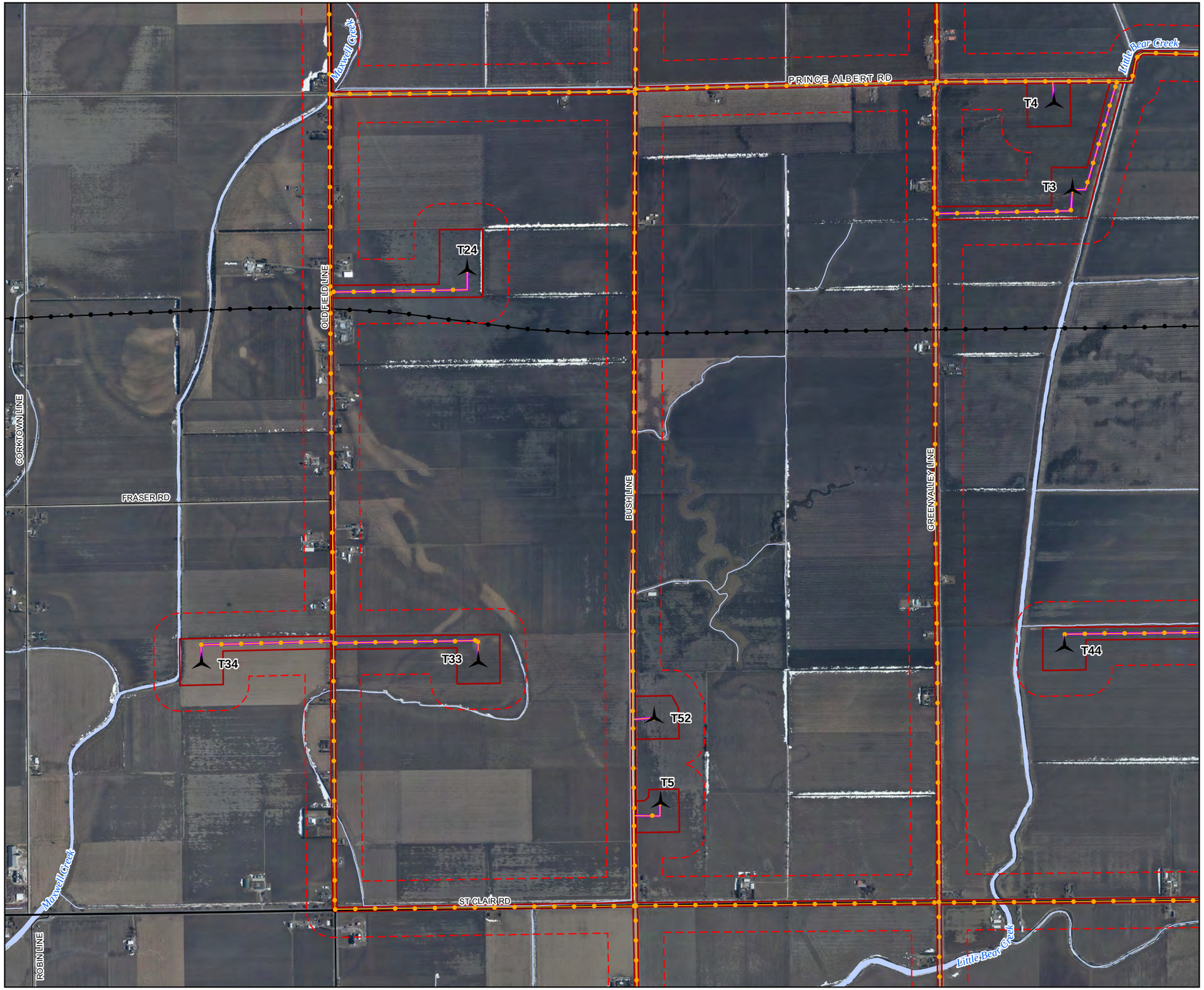
Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map3-1toMap3-9_WOD_WET_18K_2015_07_21_LEH.mxd

Map 3 - 2

North Kent Wind 1 Project

Significant Woodlands and Wetlands





Legend

- Utility Line
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road

The distances from the project location to significant woodlands and wetlands are outlined within the body of the report in Tables 8 and 9.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

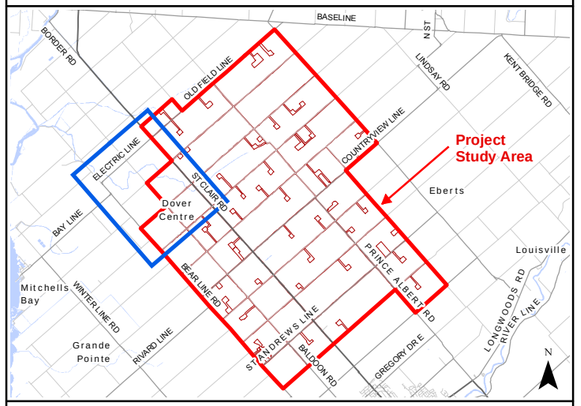
N

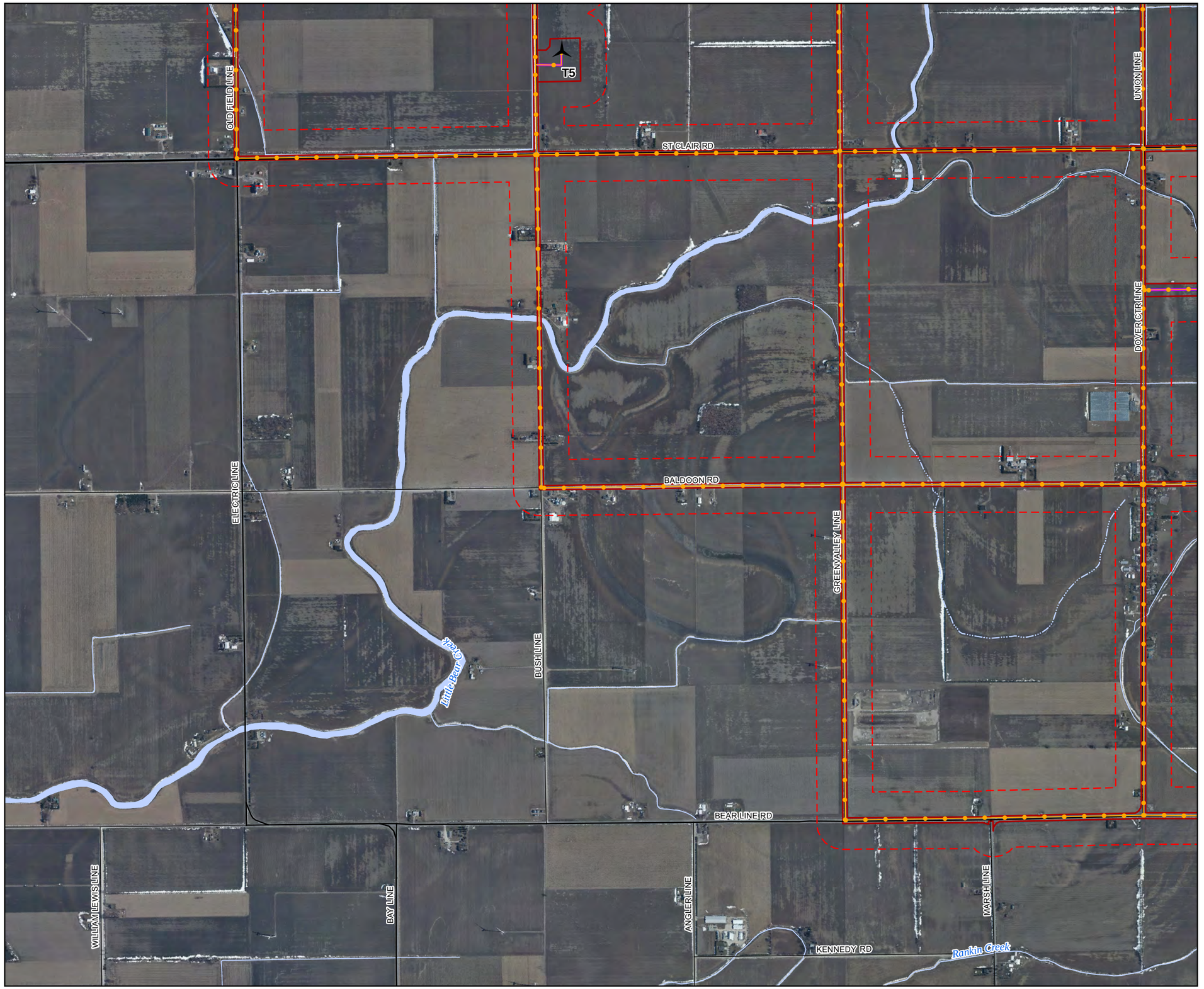
Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map3-1toMap3-9_WOD_WET_18K_2015_07_21_LEH.mxd

Map 3 - 3

North Kent Wind 1 Project

Significant Woodlands and Wetlands





Legend

- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road

The distances from the project location to significant woodlands and wetlands are outlined within the body of the report in Tables 8 and 9.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

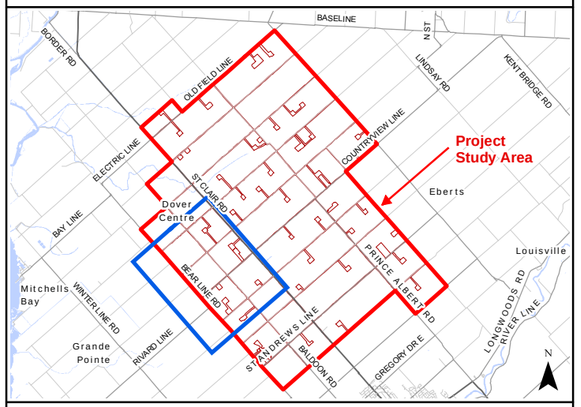
N

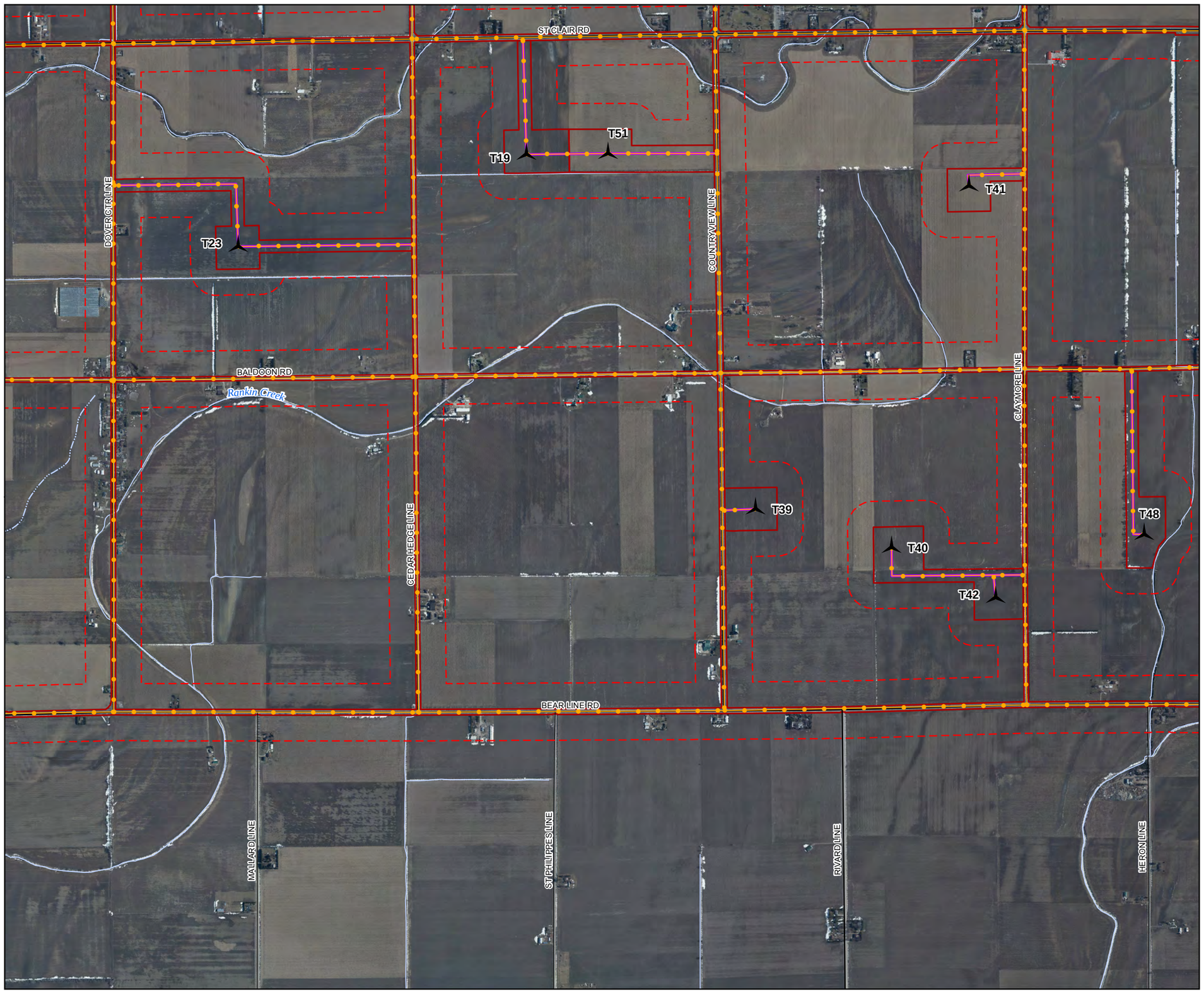
Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map3-1toMap3-9_WOD_WET_18K_2015_07_21_LEH.mxd

Map 3 - 4

North Kent Wind 1 Project

Significant Woodlands and Wetlands





Legend

- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road

The distances from the project location to significant woodlands and wetlands are outlined within the body of the report in Tables 8 and 9.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

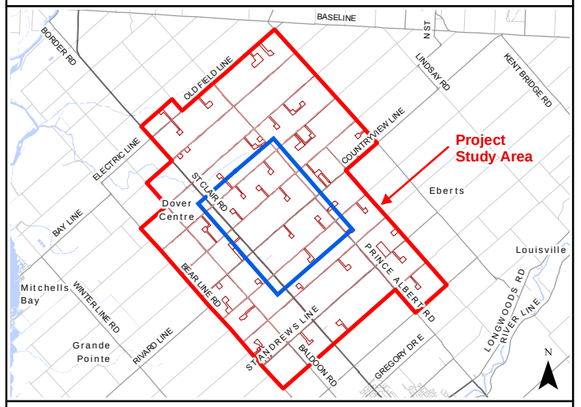
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map3-1toMap3-9_WOD_WET_18K_2015_07_21_LEH.mxd

Map 3 - 5

North Kent Wind 1 Project

Significant Woodlands and Wetlands



Legend

- Utility Line
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/ Substation/ Laydown/ O&M Building

Significant Natural Features

- Significant Woodland (WOD)
- Significant Wetland (WET)

The distances from the project location to significant woodlands and wetlands are outlined within the body of the report in Tables 8 and 9.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

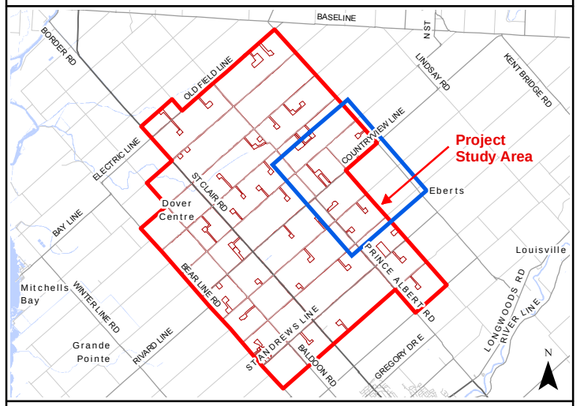
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map3-1toMap3-9_WOD_WET_18K_2015_07_21_LEH.mxd

Map 3 - 6

North Kent Wind 1 Project

Significant Woodlands and Wetlands



Legend

- Utility Line
- Primary Road
- Secondary Road
- Permanent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/ Substation/ Laydown/ O&M Building

Significant Natural Features

- Significant Woodland (WOD)
- Significant Wetland (WET)

The distances from the project location to significant woodlands and wetlands are outlined within the body of the report in Tables 8 and 9.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

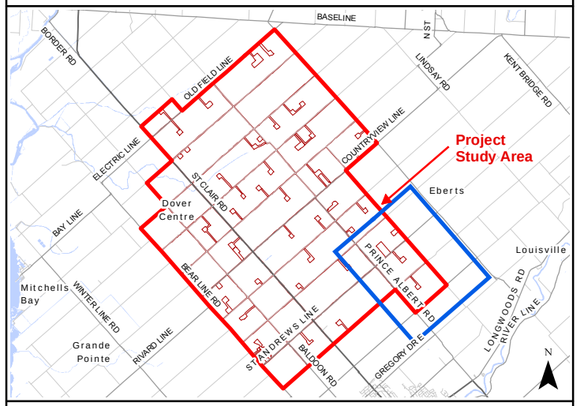
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map3-1toMap3-9_WOD_WET_18K_2015_07_21_LEH.mxd

Map 3 - 7

North Kent Wind 1 Project

Significant Woodlands and Wetlands



Legend

- Utility Line
- Primary Road
- Secondary Road
- Permanent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/ Substation/ Laydown/ O&M Building

Significant Natural Features

- Significant Woodland (WOD)

The distances from the project location to significant woodlands and wetlands are outlined within the body of the report in Tables 8 and 9.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

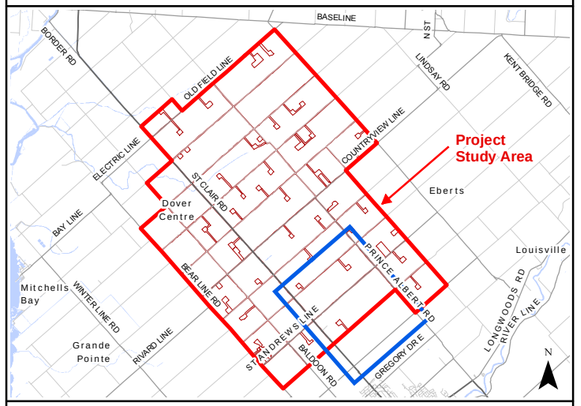
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map3-1toMap3-9_WOD_WET_18K_2015_07_21_LEH.mxd

Map 3 - 8

North Kent Wind 1 Project

Significant Woodlands and Wetlands



Legend

- Utility Line
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road

Significant Natural Features

- Significant Woodland (WOD)

The distances from the project location to significant woodlands and wetlands are outlined within the body of the report in Tables 8 and 9.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

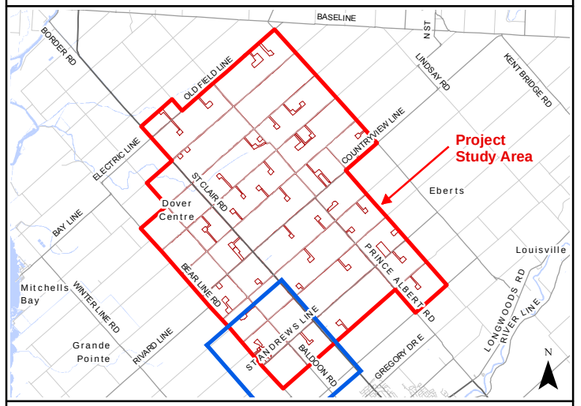
N

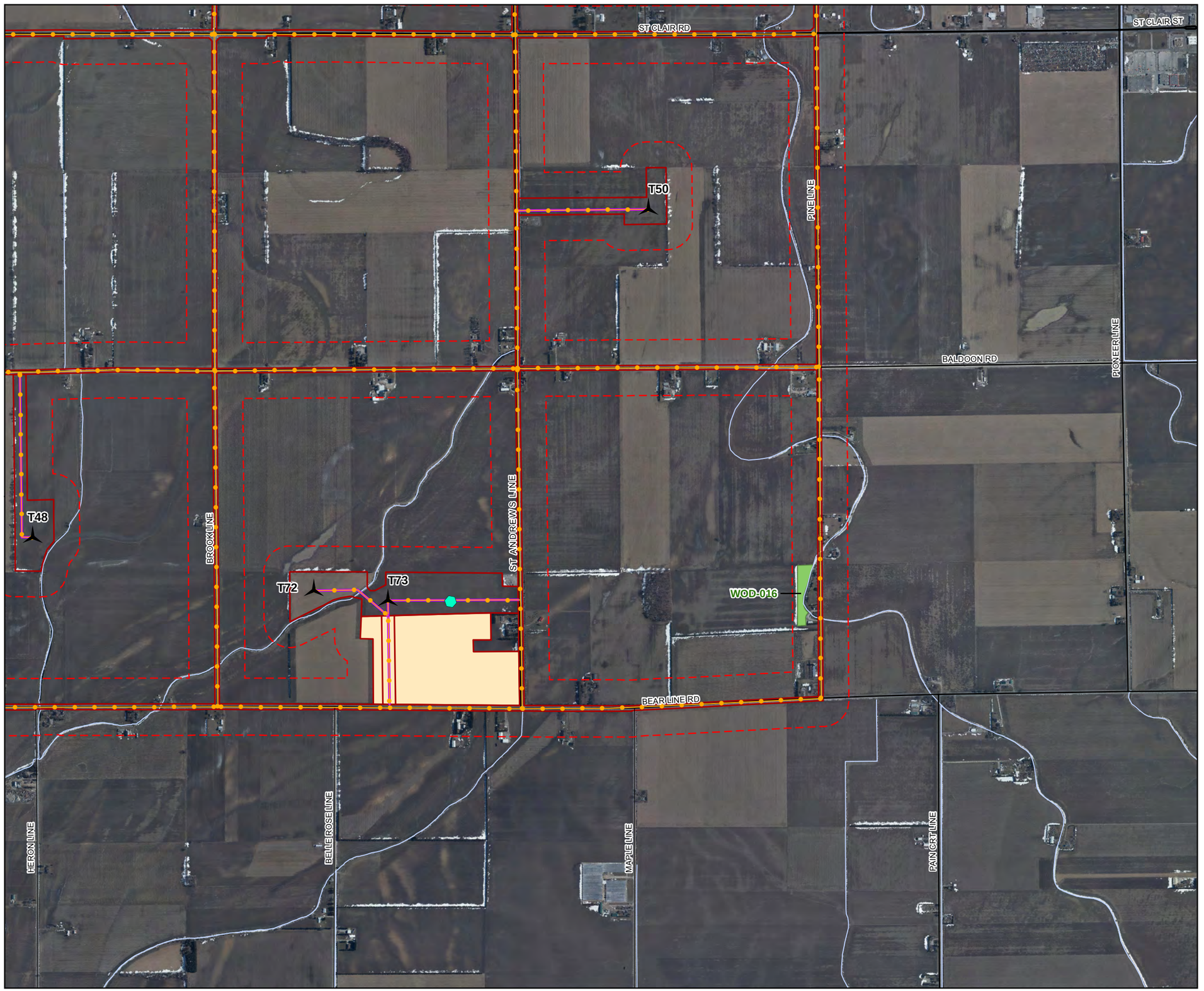
Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map3-1toMap3-9_WOD_WET_18K_2015_07_21_LEH.mxd

Map 3 - 9

North Kent Wind 1 Project

Significant Woodlands and Wetlands





Legend

- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Meteorological Tower
- Proposed Collection Line
- Proposed Access Road
- Proposed Laydown Area

Significant Natural Features

- Significant Woodland (WOD)

The distances from the project location to significant woodlands and wetlands are outlined within the body of the report in Tables 8 and 9.

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

N

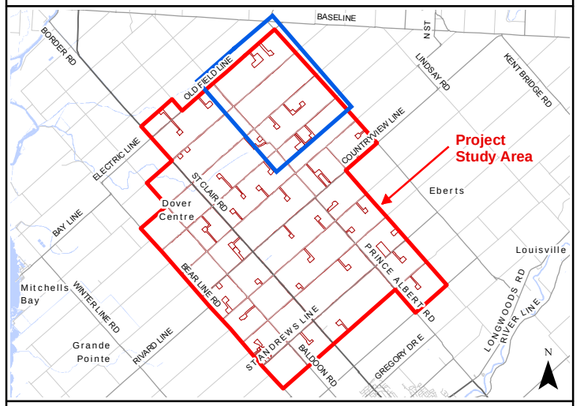
Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map3-1toMap3-9_WOD_WET_18K_2015_07_21_LEH.mxd

Maps 4-1 to 4-9
Significant Seasonal Concentration Areas

Map 4 - 1

North Kent Wind 1 Project

Significant Seasonal Concentration Areas



Legend

- Utility Line
- Primary Road
- Secondary Road
- Permanent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Meteorological Tower
- Proposed Collection Line
- Proposed Access Road

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

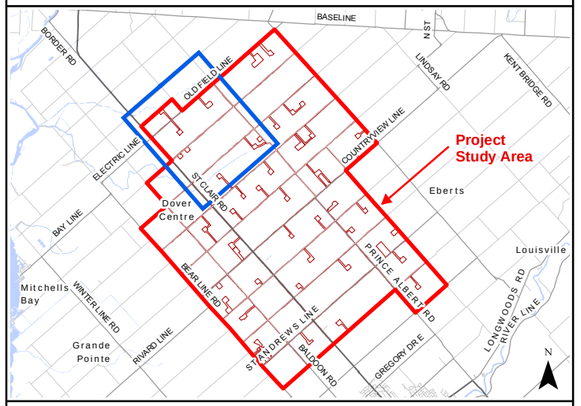
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map4-1toMap4-9_SCA_18K_2015_07_21_LEH.mxd

Map 4 - 2

North Kent Wind 1 Project

Significant Seasonal Concentration Areas



Legend

- Utility Line
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

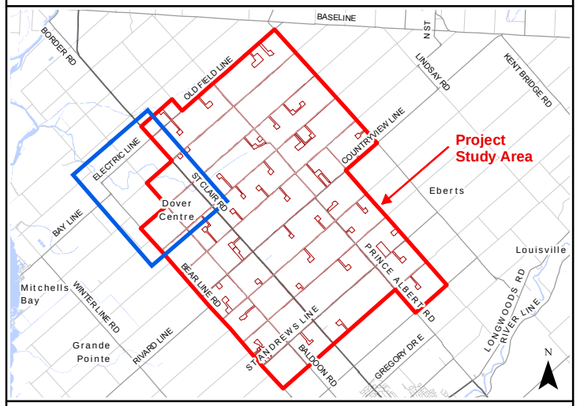
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map4-1toMap4-9_SCA_18K_2015_07_21_LEH.mxd

Map 4 - 3

North Kent Wind 1 Project

Significant Seasonal Concentration Areas



Legend

- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

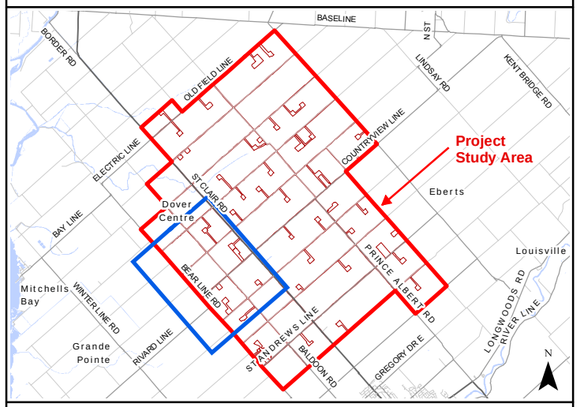
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map4-1toMap4-9_SCA_18K_2015_07_21_LEH.mxd

Map 4 - 4

North Kent Wind 1 Project

Significant Seasonal Concentration Areas



Legend

- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

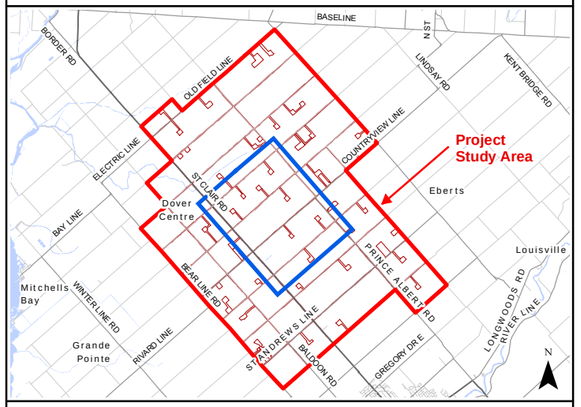
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map4-1toMap4-9_SCA_18K_2015_07_21_LEH.mxd

Map 4 - 5

North Kent Wind 1 Project

Significant Seasonal Concentration Areas



Legend

- Utility Line
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/ Substation/ Laydown/ O&M Building

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

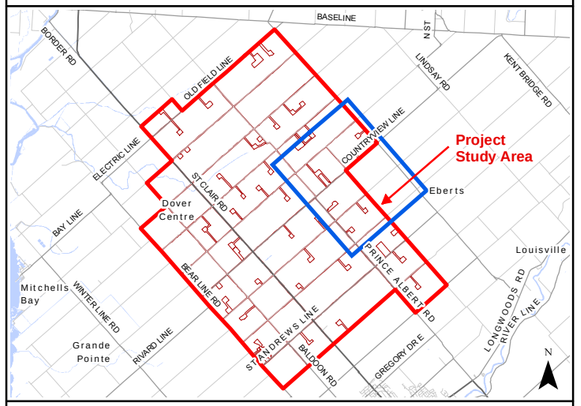
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map4-1toMap4-9_SCA_18K_2015_07_21_LEH.mxd

Map 4 - 6

North Kent Wind 1 Project

Significant Seasonal Concentration Areas



Legend

- Utility Line
- Primary Road
- Secondary Road
- Permanent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/ Substation/ Laydown/ O&M Building

Significant Seasonal Concentration Areas

- Bat Maternity Colony (BMA)
- Colonially – Nesting Bird Breeding Habitat (Tree/Shrubs) (CBT)

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

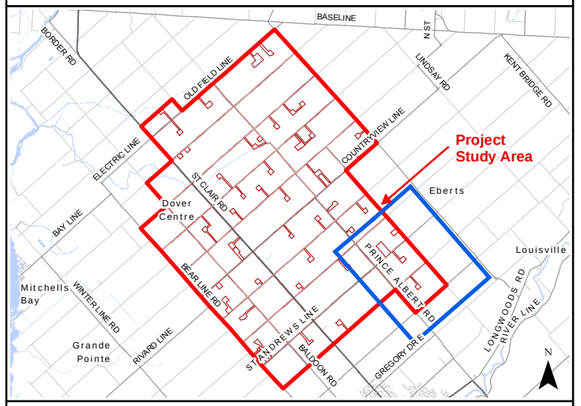
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map4-1toMap4-9_SCA_18K_2015_07_21_LEH.mxd

Map 4 - 7

North Kent Wind 1 Project

Significant Seasonal Concentration Areas



Legend

- Utility Line
- Primary Road
- Secondary Road
- Permanent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/ Substation/ Laydown/ O&M Building

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

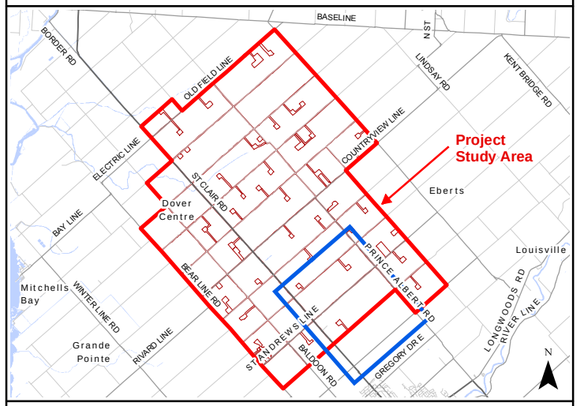
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map4-1toMap4-9_SCA_18K_2015_07_21_LEH.mxd

Map 4 - 8

North Kent Wind 1 Project

Significant Seasonal Concentration Areas



Legend

- Utility Line
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

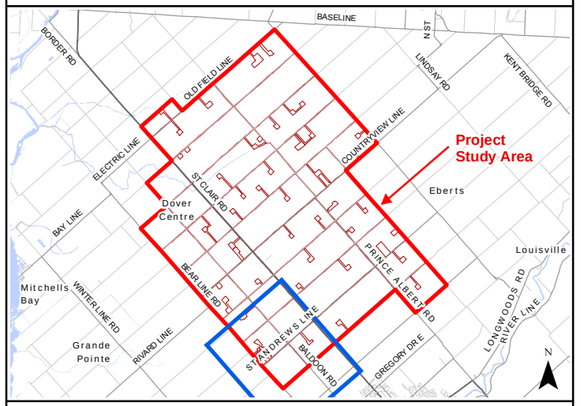
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map4-1toMap4-9_SCA_18K_2015_07_21_LEH.mxd

Map 4 - 9

North Kent Wind 1 Project

Significant Seasonal Concentration Areas



Legend

- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Meteorological Tower
- Proposed Collection Line
- Proposed Access Road
- Proposed Laydown Area

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

N

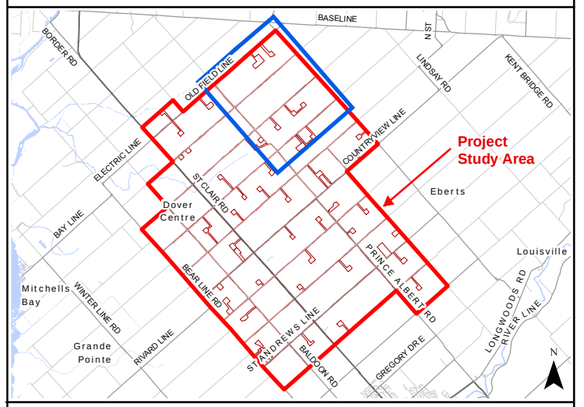
Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map4-1toMap4-9_SCA_18K_2015_07_21_LEH.mxd

Maps 5-1 to 5-9
Significant Rare Vegetation Communities and Specialized Wildlife Habitats

Map 5 - 1

North Kent Wind 1 Project

Significant Rare Vegetation Communities & Specialized Wildlife Habitats



Legend

- Utility Line
- Primary Road
- Secondary Road
- Permanent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Meteorological Tower
- Proposed Collection Line
- Proposed Access Road

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

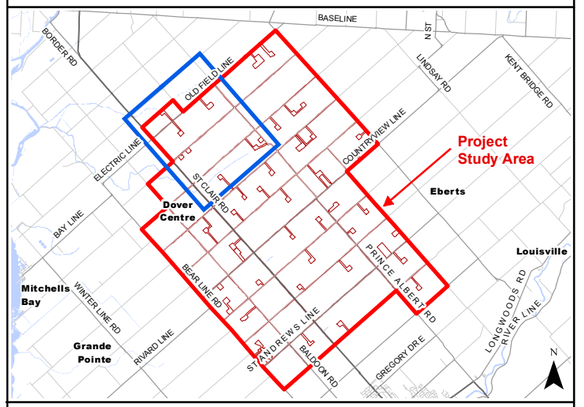
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map5-1toMap5-9_RareVegCommunties_18K_2015_07_21_LEH.mxd

Map 5 - 2

North Kent Wind 1 Project

Significant Rare Vegetation Communities & Specialized Wildlife Habitats



Legend

- Utility Line
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

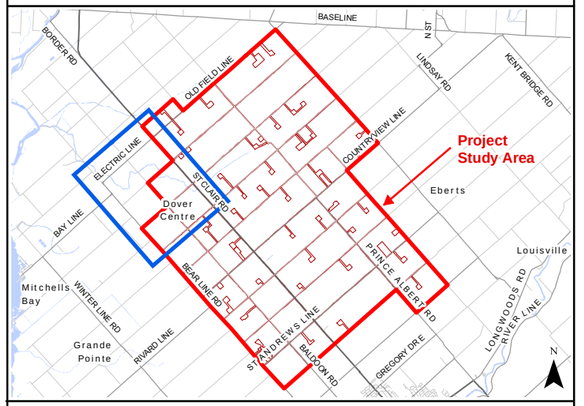
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map5-1toMap5-9_RareVegCommunties_18K_2015_07_21_LEH.mxd

Map 5 - 3

North Kent Wind 1 Project

Significant Rare Vegetation Communities & Specialized Wildlife Habitats



Legend

- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

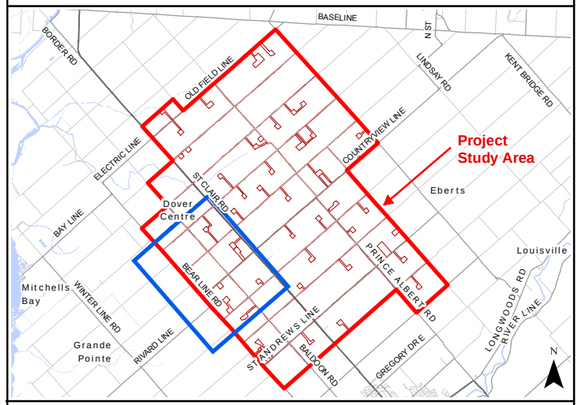
N

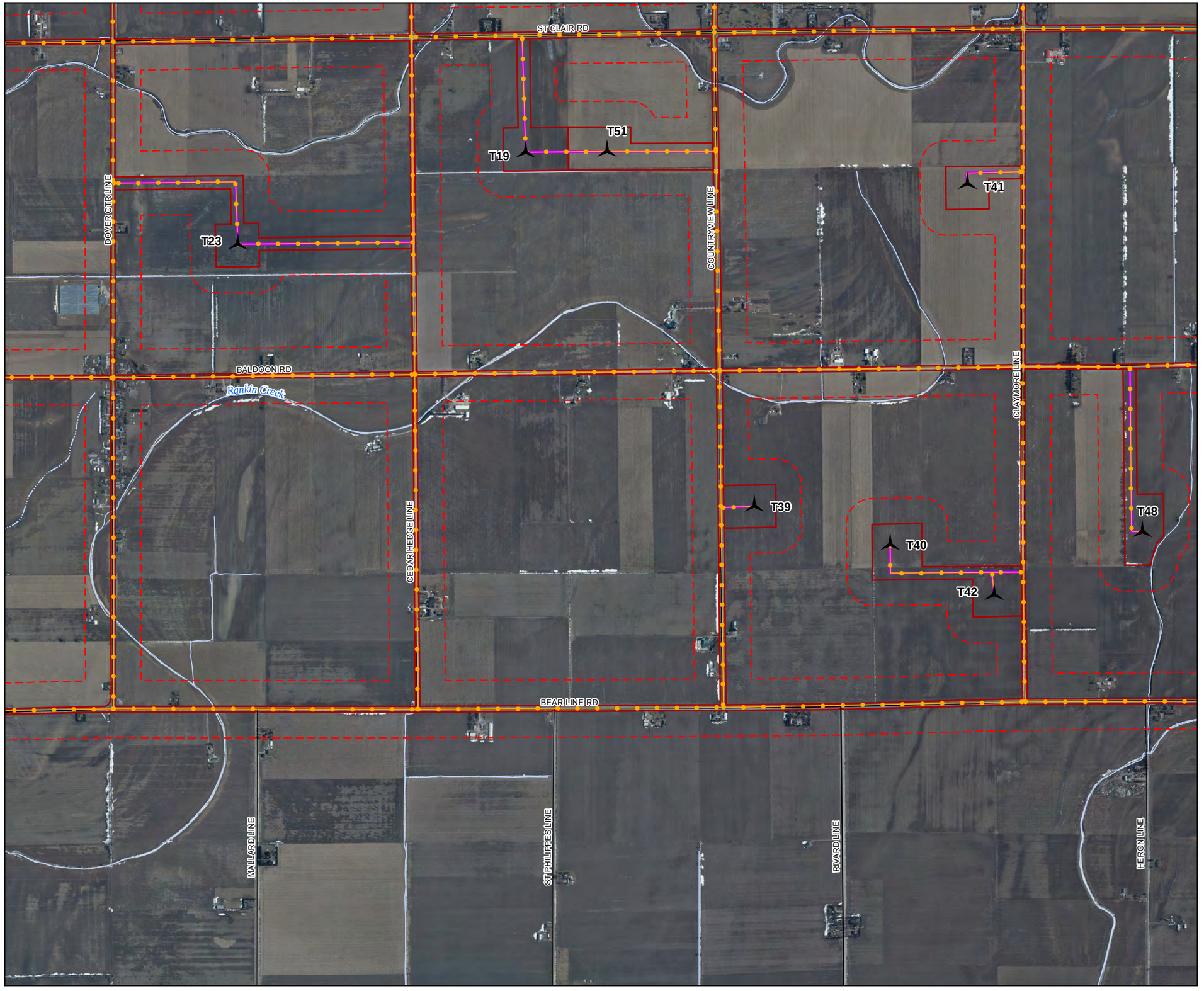
Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map5-1toMap5-9_RareVegCommunties_18K_2015_07_21_LEH.mxd

Map 5 - 4

North Kent Wind 1 Project

Significant Rare Vegetation Communities & Specialized Wildlife Habitats





Legend

- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

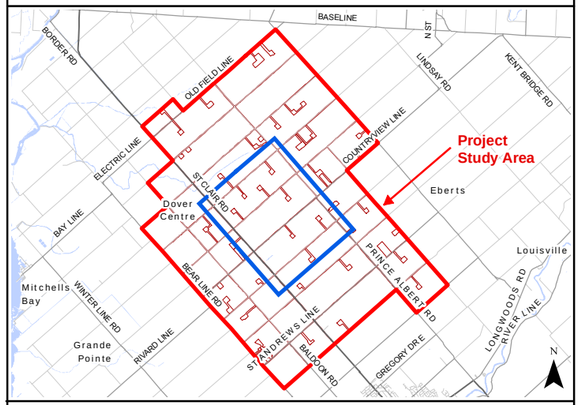
N

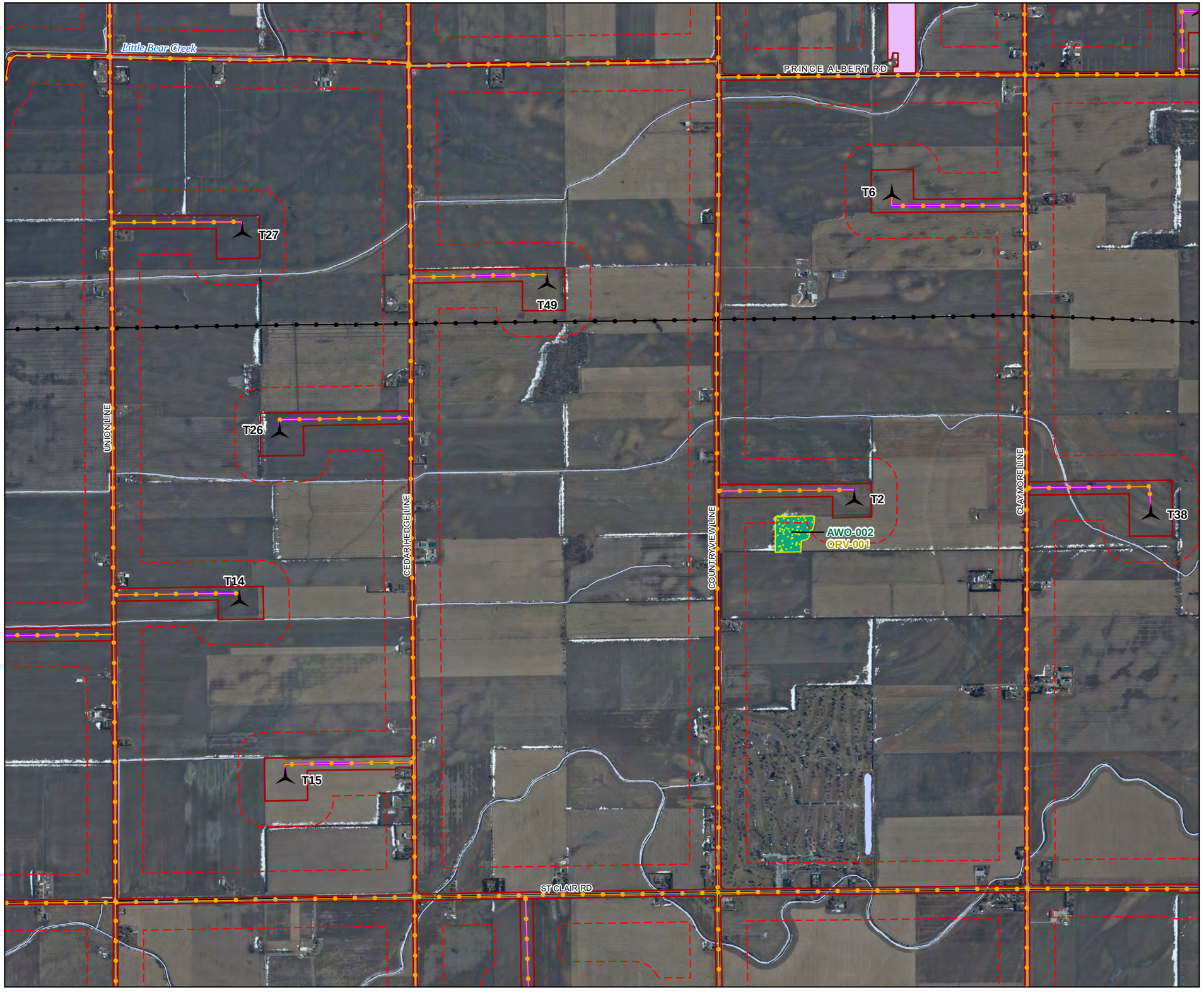
Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map5-1toMap5-9_RareVegCommunties_18K_2015_07_21_LEH.mxd

Map 5 - 5

North Kent Wind 1 Project

Significant Rare Vegetation Communities & Specialized Wildlife Habitats





Legend

- Utility Line
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/ Substation/ Laydown/ O&M Building

Significant Rare Vegetation Communities

- Other Rare Vegetation Communities (ORV)

Significant Specialized Wildlife Habitats

- Amphibian Breeding Habitat (Woodland)(AWO)

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

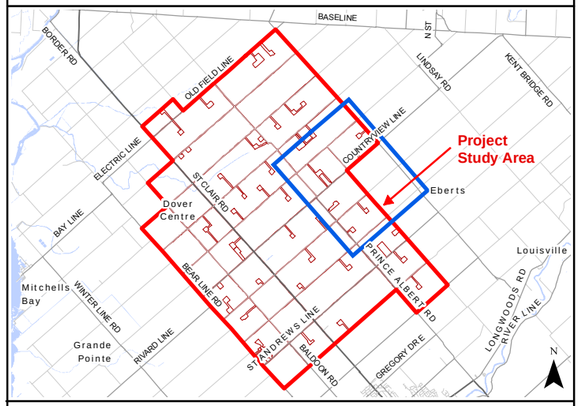
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map5-1toMap5-9_RareVegCommunties_18K_2015_07_21_LEH.mxd

Map 5 - 6

North Kent Wind 1 Project

Significant Rare Vegetation Communities & Specialized Wildlife Habitats



Legend

- Utility Line
- Primary Road
- Secondary Road
- Permanent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/ Substation/ Laydown/ O&M Building

Significant Rare Vegetation Communities

- Old Growth Forest (OGF)

Significant Specialized Wildlife Habitats

- Amphibian Breeding Habitat (Woodland)(AWO)
- Waterfowl Nesting Area (WFN)

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

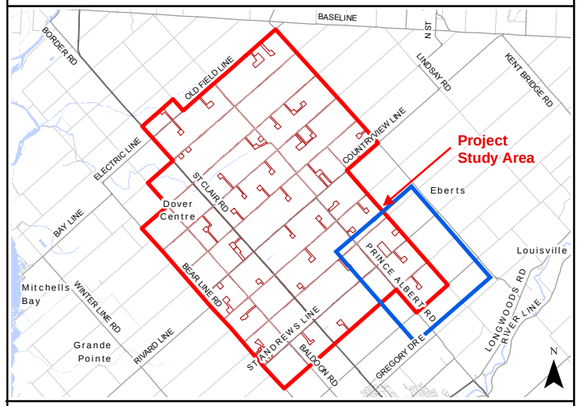
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map5-1toMap5-9_RareVegCommunties_18K_2015_07_21_LEH.mxd

Map 5 - 7

North Kent Wind 1 Project

Significant Rare Vegetation Communities & Specialized Wildlife Habitats



Legend

- Utility Line
- Primary Road
- Secondary Road
- Permanent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/ Substation/ Laydown/ O&M Building

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

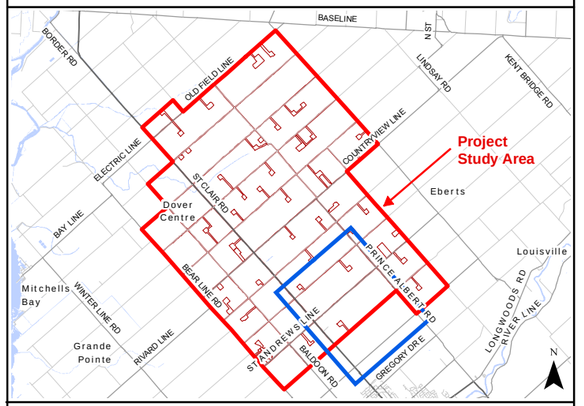
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map5-1toMap5-9_RareVegCommunties_18K_2015_07_21_LEH.mxd

Map 5 - 8

North Kent Wind 1 Project

Significant Rare Vegetation Communities & Specialized Wildlife Habitats



Legend

- Utility Line
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

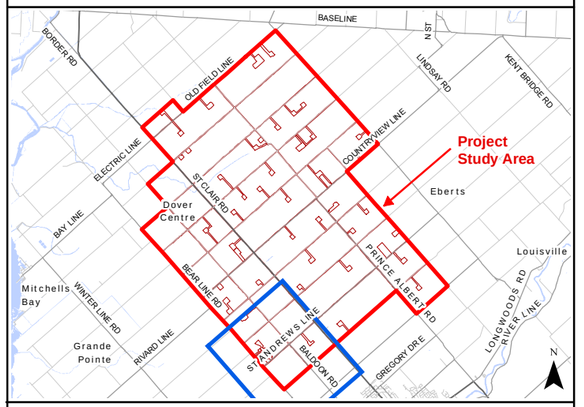
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map5-1toMap5-9_RareVegCommunties_18K_2015_07_21_LEH.mxd

Map 5 - 9

North Kent Wind 1 Project

Significant Rare Vegetation Communities & Specialized Wildlife Habitats



Legend

- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Meteorological Tower
- Proposed Collection Line
- Proposed Access Road
- Proposed Laydown Area

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

N

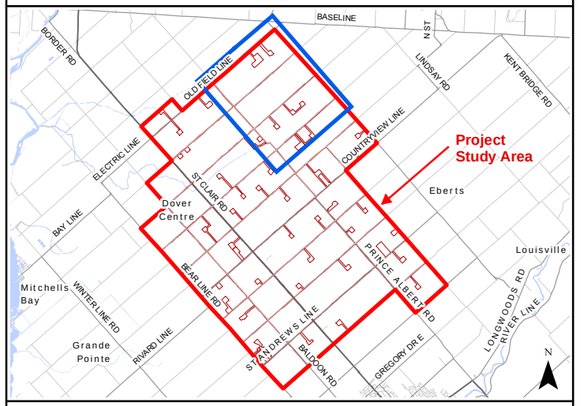
Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map5-1toMap5-9_RareVegCommunties_18K_2015_07_21_LEH.mxd

Maps 6-1 to 6-9
Significant Habitats for Species of Conservation Concern

Map 6 - 1

North Kent Wind 1 Project

Significant Habitats for Species of Conservation Concern



Legend

- Utility Line
- Primary Road
- Secondary Road
- Permanent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Meteorological Tower
- Proposed Collection Line
- Proposed Access Road

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

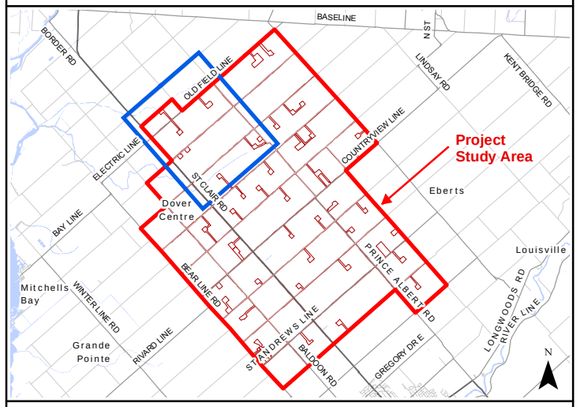
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map6-1toMap6-9_SCC_18K_2015_07_21_LEH.mxd

Map 6 - 2

North Kent Wind 1 Project

Significant Habitats for Species of Conservation Concern



Legend

- Utility Line
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

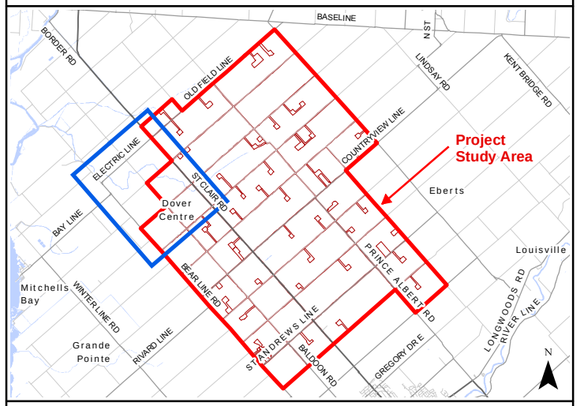
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map6-1toMap6-9_SCC_18K_2015_07_21_LEH.mxd

Map 6 - 3

North Kent Wind 1 Project

Significant Habitats for Species of Conservation Concern



Legend

- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

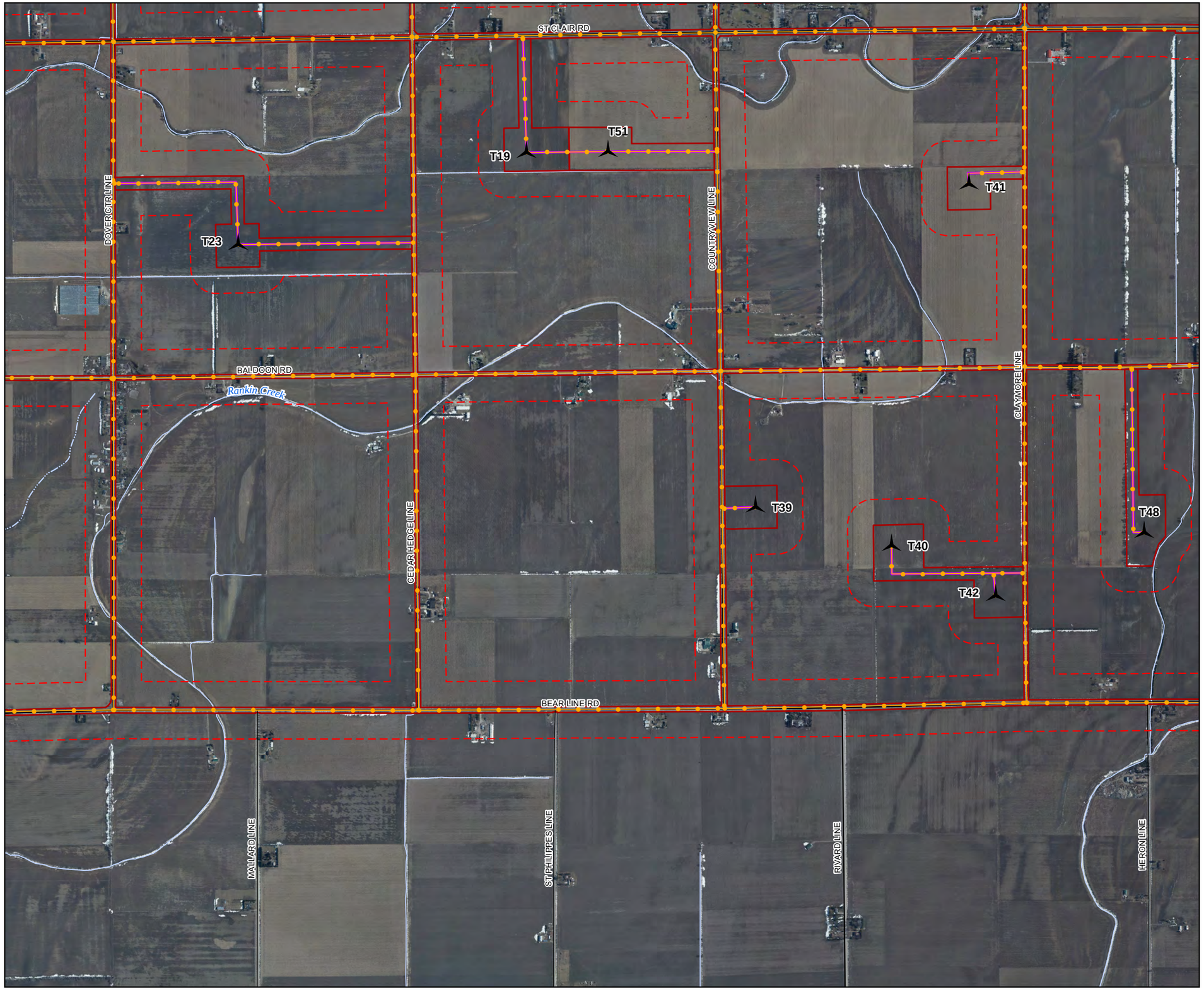
NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map6-1toMap6-9_SCC_18K_2015_07_21_LEH.mxd

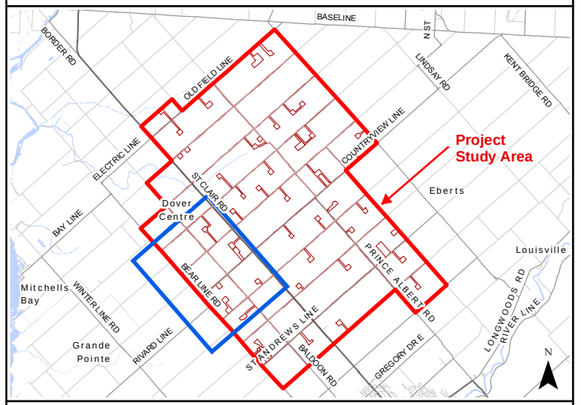


Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map6-1toMap6-9_SCC_18K_2015_07_21_LEH.mxd

Map 6 - 4

North Kent Wind 1 Project

Significant Habitats for Species of Conservation Concern



Legend

- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

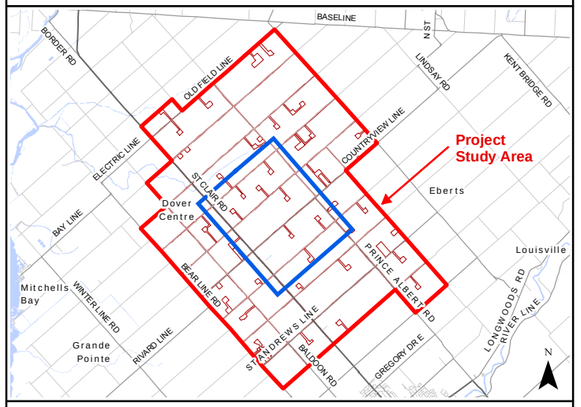
0 250 500 750 1,000 Meters

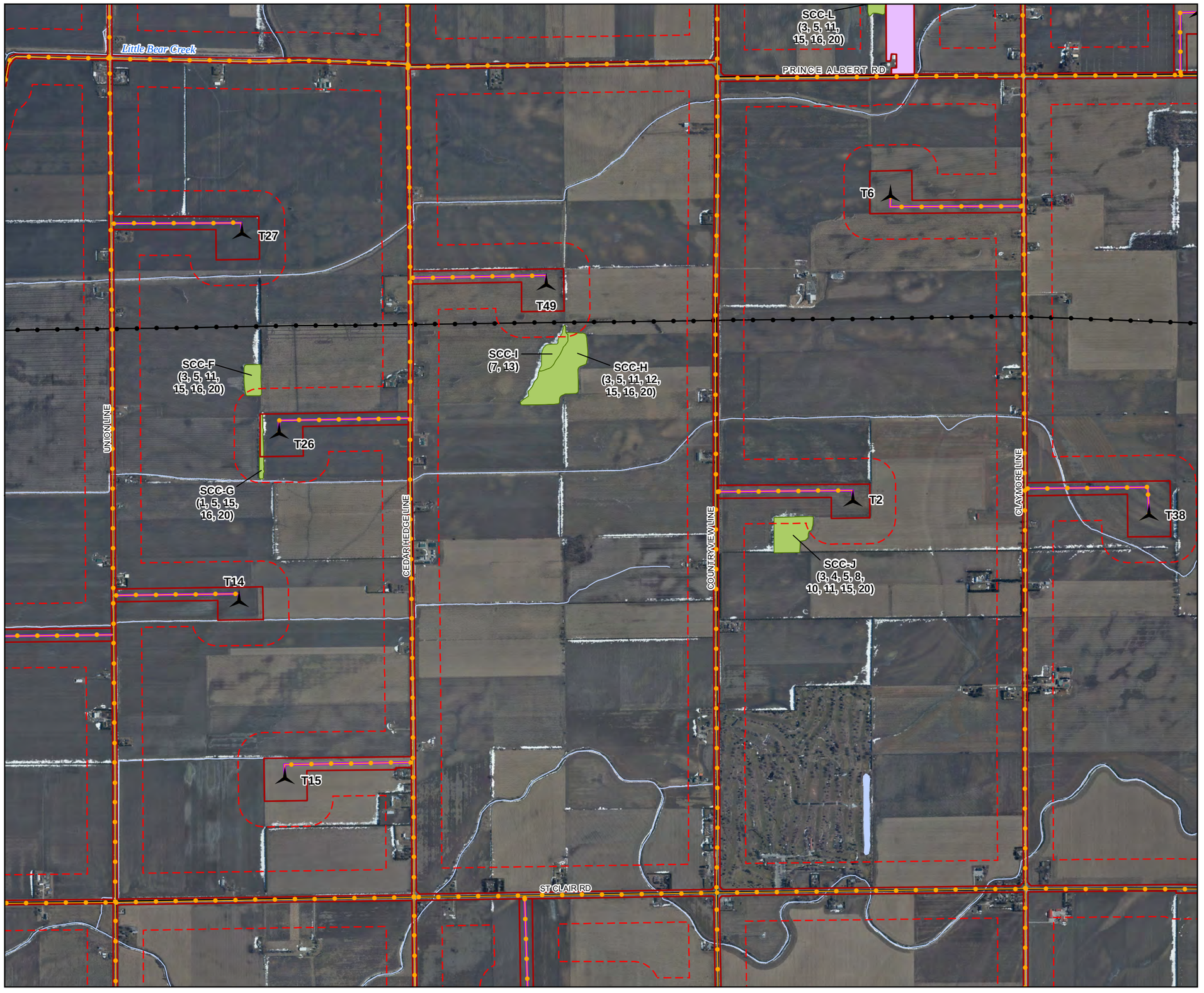
N

Map 6 - 5

North Kent Wind 1 Project

Significant Habitats for Species of Conservation Concern





Legend

- Utility Line
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/Substation/Laydown/ O&M Building

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

Significant Habitats for Species of Conservation Concern

- Species of Conservation Concern Habitat (SCC)

1 - Eastern Wood-Pewee
3 - Giant Ironweed
4 - Pawpaw
5 - Muskingum Sedge
7 - Round-Fruited Panic Grass
8 - Blue Ash
10 - Black Gum
11 - Northern Fogfruit
12 - Shumard Oak
13 - Gray-headed Prairie Coneflower
15 - Lizard's Tail
16 - Wild Senna
20 - Wing-stem

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

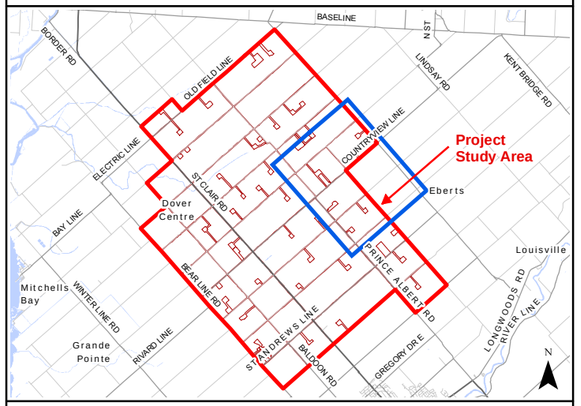
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map6-1toMap6-9_SCC_18K_2015_07_21_LEH.mxd

Map 6 - 6

North Kent Wind 1 Project

Significant Habitats for Species of Conservation Concern



Legend

- Utility Line
- Primary Road
- Secondary Road
- Permanent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/Substation/Laydown/ O&M Building

Significant Habitats for Species of Conservation Concern

- Marsh Bird Breeding Habitat (MBB)
- Species of Conservation Concern Habitat (SCC)

1 - Eastern Wood-Pewee
2 - Wood Thrush
3 - Giant Ironweed
4 - Pawpaw
5 - Muskingum Sedge
6 - Rigid Sedge
7 - Round-Fruited Panic Grass
8 - Blue Ash
9 - Swamp Rose-mallow
10 - Black Gum
11 - Northern Fogfruit
12 - Shumard Oak
13 - Gray-headed Prairie Coneflower
14 - Climbing Prairie Rose
15 - Lizard's Tail
16 - Wild Senna
17 - Cup-Plant
18 - Riddell's Goldenrod
19 - Southern Slender Ladies' Tresses
20 - Wing-stem
21 - Cream Violet
22 - Virginia Culver's-root
23 - Prairie Milkweed

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

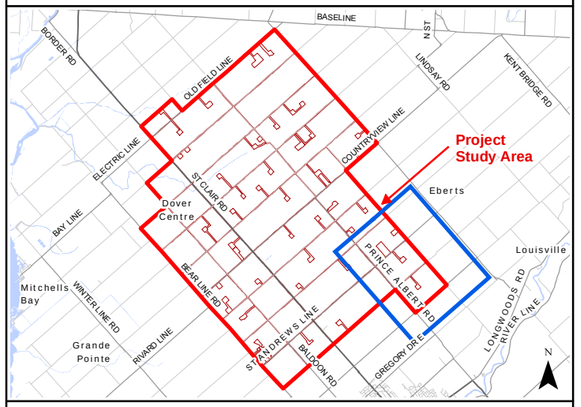
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map6-1toMap6-9_SCC_18K_2015_07_21_LEH.mxd

Map 6 - 7

North Kent Wind 1 Project

Significant Habitats for Species of Conservation Concern



Legend

- Utility Line
- Primary Road
- Secondary Road
- Permanent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/Substation/Laydown/ O&M Building

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

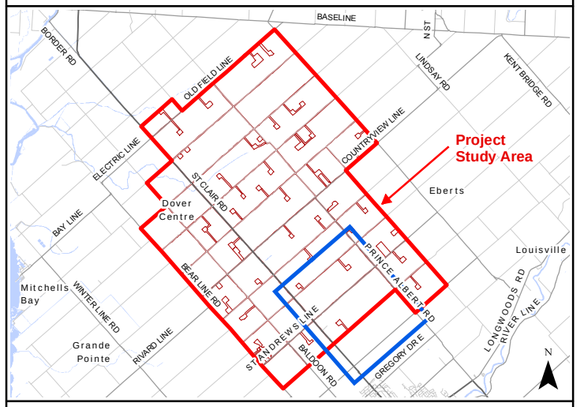
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map6-1toMap6-9_SCC_18K_2015_07_21_LEH.mxd

Map 6 - 8

North Kent Wind 1 Project

Significant Habitats for Species of Conservation Concern



Legend

- Utility Line
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

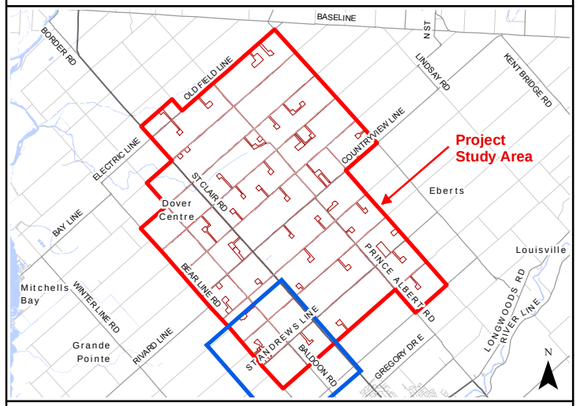
N

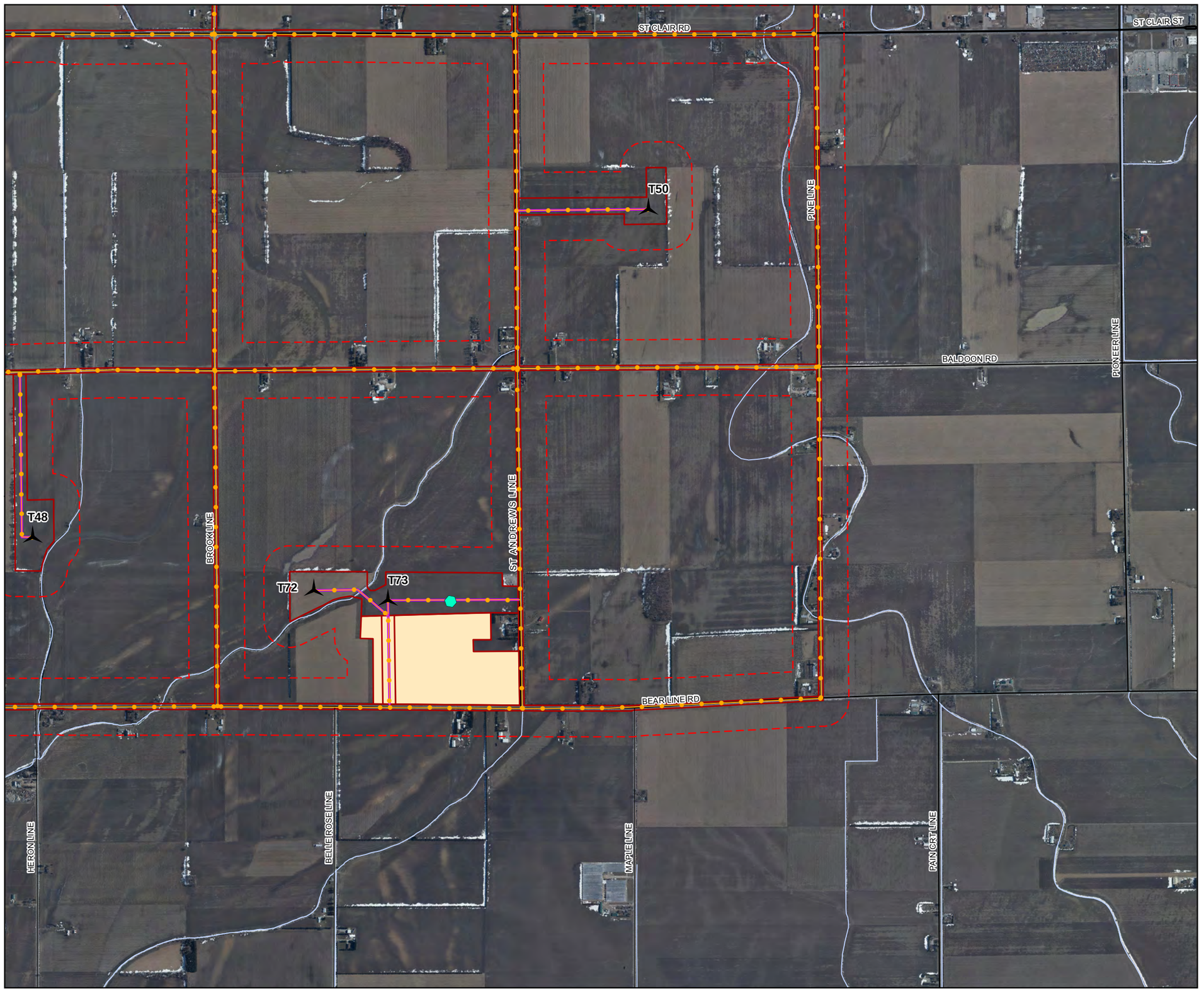
Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map6-1toMap6-9_SCC_18K_2015_07_21_LEH.mxd

Map 6 - 9

North Kent Wind 1 Project

Significant Habitats for Species of Conservation Concern





Legend

- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Meteorological Tower
- Proposed Collection Line
- Proposed Access Road
- Proposed Laydown

** The distances from the project location to significant wildlife habitats are outlined within the body of the report in Table 10.*

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

N

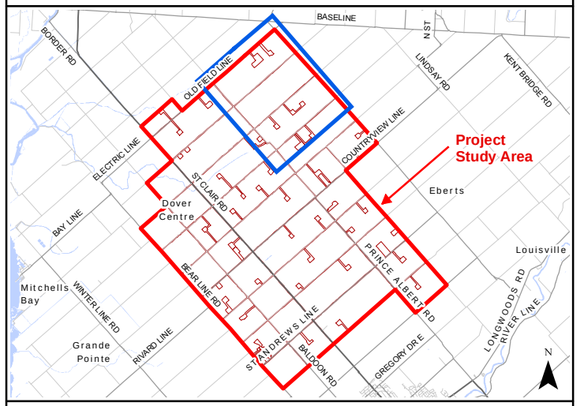
Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map6-1toMap6-9_SCC_18K_2015_07_21_LEH.mxd

Maps 7-1 to 7-9
Generalized Significant Wildlife Habitat

Map 7 - 1

North Kent Wind 1 Project

Generalized Significant Wildlife Habitat



Legend

- Utility Line
- Primary Road
- Secondary Road
- Permanent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Meteorological Tower
- Proposed Collection Line
- Proposed Access Road
- **Generalized Significant Wildlife Habitat**

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

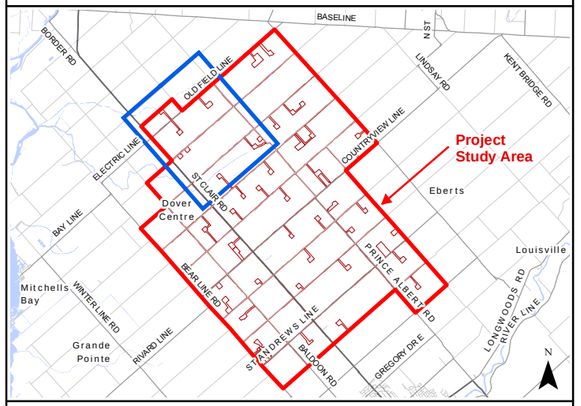
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map7-1toMap7-9_GeneralizedSigHabitat_18K_2015_07_21_LEH.mxd

Map 7 - 2

North Kent Wind 1 Project

Generalized Significant Wildlife Habitat



Legend

- Utility Line
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- **Generalized Significant Wildlife Habitat**

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

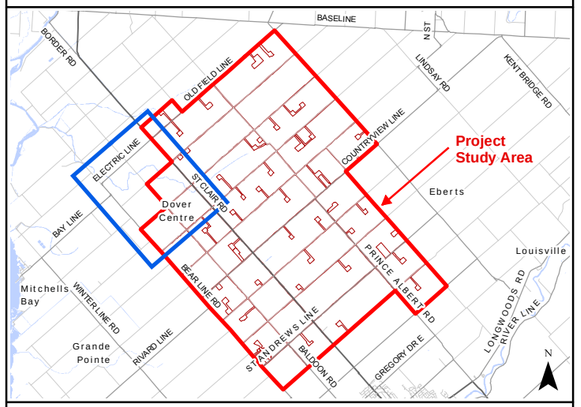
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map7-1toMap7-9_GeneralizedSigHabitat_18K_2015_07_21_LEH.mxd

Map 7 - 3

North Kent Wind 1 Project

Generalized Significant Wildlife Habitat



Legend

- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- **Generalized Significant Wildlife Habitat**

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

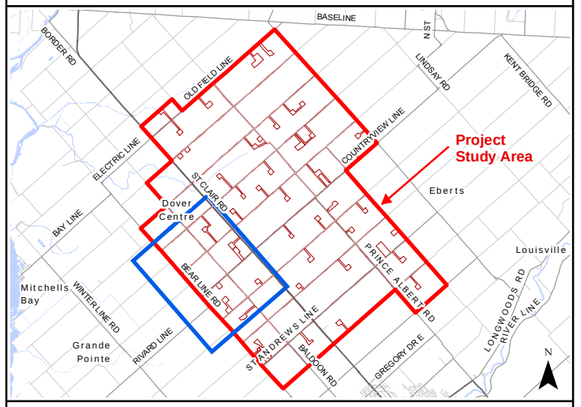
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map7-1toMap7-9_GeneralizedSigHabitat_18K_2015_07_21_LEH.mxd

Map 7 - 4

North Kent Wind 1 Project

Generalized Significant Wildlife Habitat



Legend

- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- **Generalized Significant Wildlife Habitat**

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

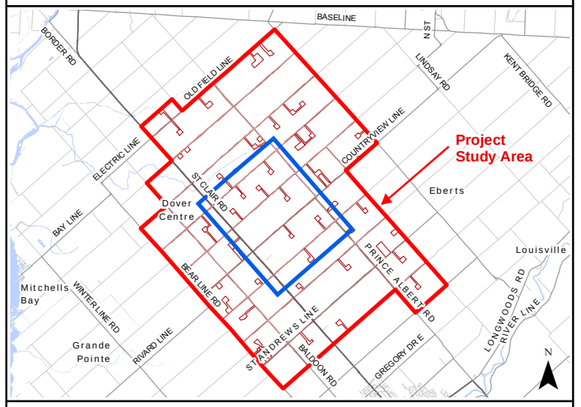
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map7-1toMap7-9_GeneralizedSigHabitat_18K_2015_07_21_LEH.mxd

Map 7 - 5

North Kent Wind 1 Project

Generalized Significant Wildlife Habitat



Legend

- Utility Line
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Open Water

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/ Substation/ Laydown/ O&M Building
- **Generalized Significant Wildlife Habitat**

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612
Date: July 21, 2015

NAD83 - UTM Zone 17
Size: 11x17"
1:17,500

0 250 500 750 1,000 Meters

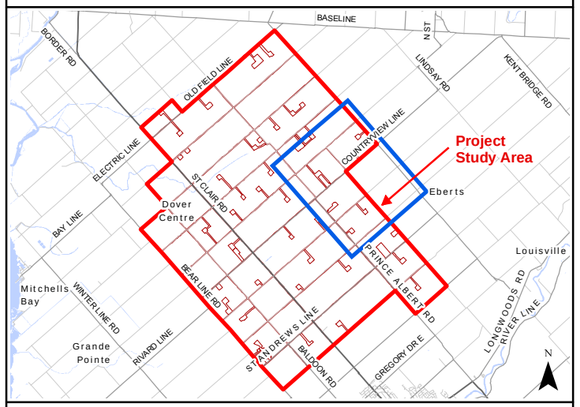
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map7-1toMap7-9_GeneralizedSigHabitat_18K_2015_07_21_LEH.mxd

Map 7 - 6

North Kent Wind 1 Project

Generalized Significant Wildlife Habitat



Legend

- Utility Line
- Primary Road
- Secondary Road
- Permanent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/ Substation/ Laydown/ O&M Building
- **Generalized Significant Wildlife Habitat**

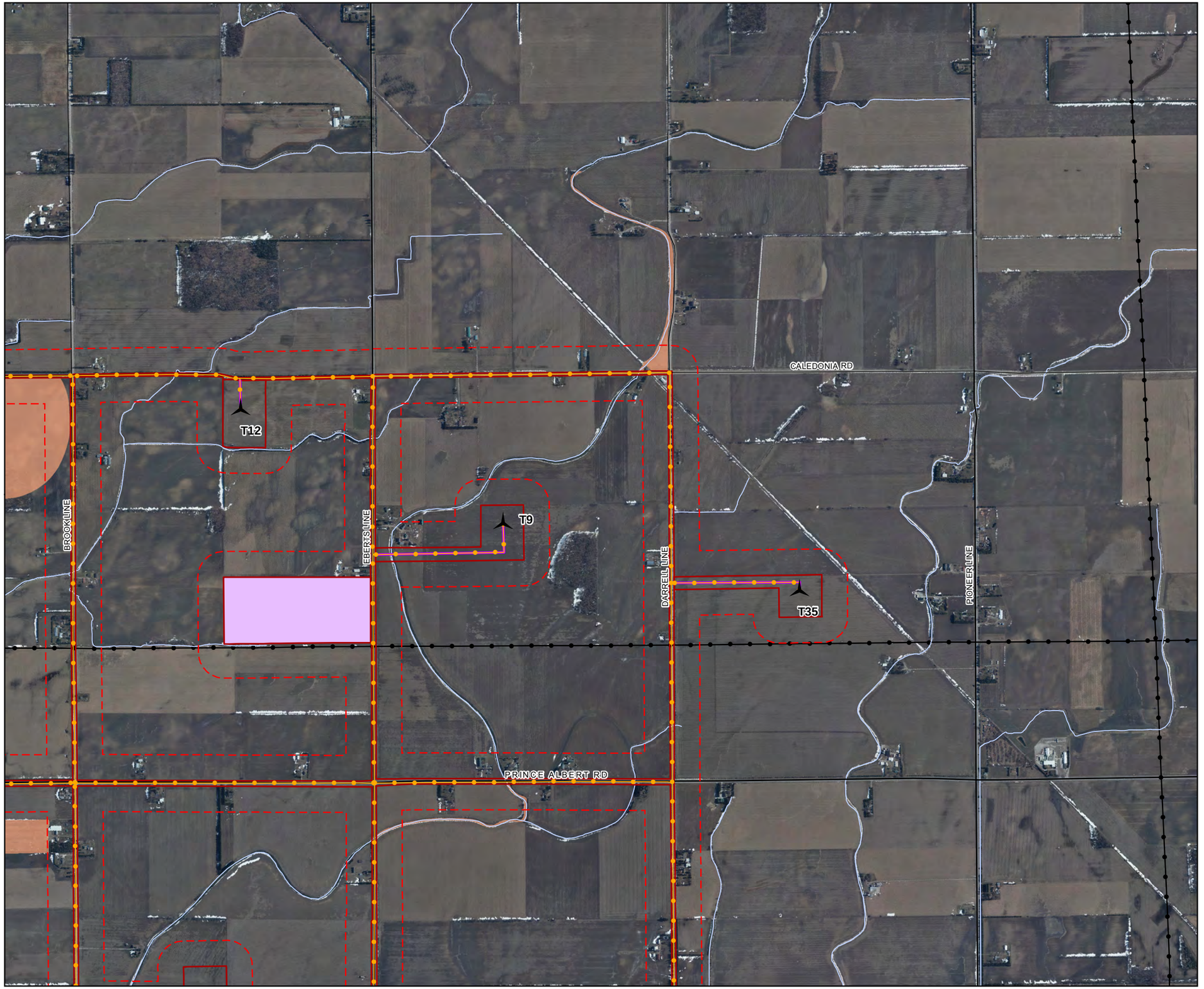
NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

N

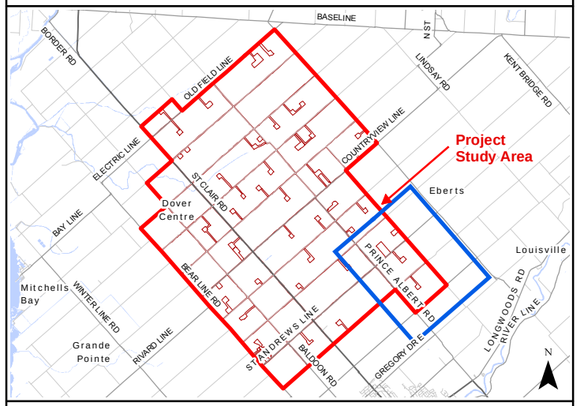
Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map7-1toMap7-9_GeneralizedSigHabitat_18K_2015_07_21_LEH.mxd



Map 7 - 7

North Kent Wind 1 Project

Generalized Significant Wildlife Habitat



Legend

- Utility Line
- Primary Road
- Secondary Road
- Permanent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- Proposed POI/ Substation/ Laydown/ O&M Building
- **Generalized Significant Wildlife Habitat**

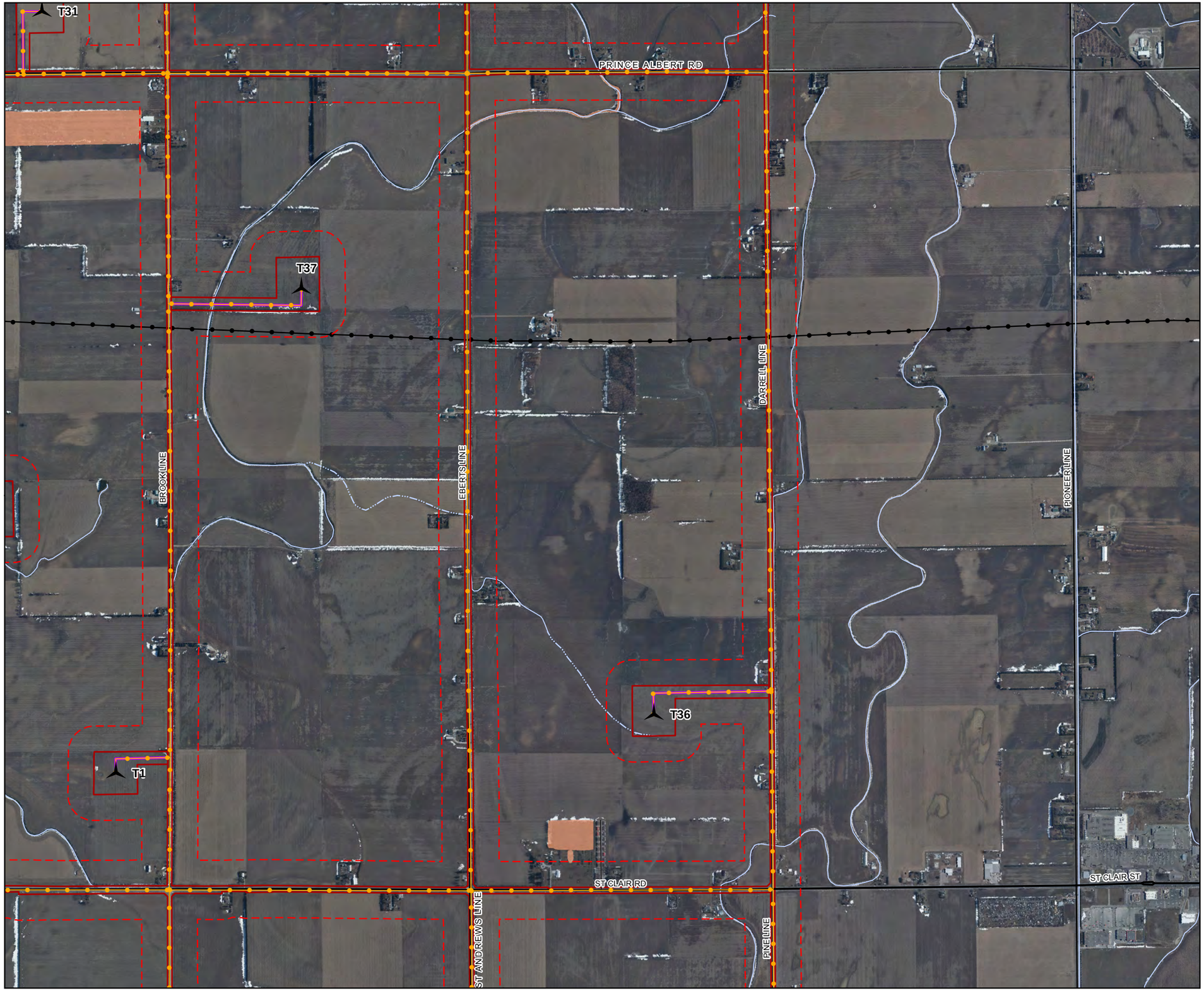
NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

N

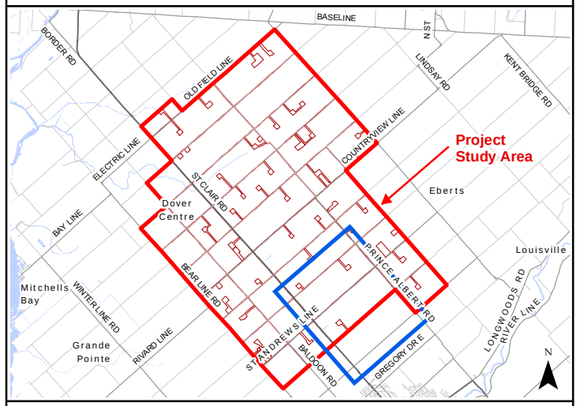
Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map7-1toMap7-9_GeneralizedSigHabitat_18K_2015_07_21_LEH.mxd



Map 7 - 8

North Kent Wind 1 Project

Generalized Significant Wildlife Habitat



Legend

- Utility Line
- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse
- Intermittent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Collection Line
- Proposed Access Road
- **Generalized Significant Wildlife Habitat**

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

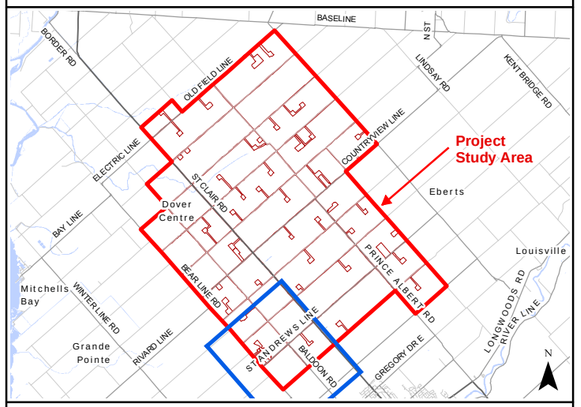
N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map7-1toMap7-9_GeneralizedSigHabitat_18K_2015_07_21_LEH.mxd

Map 7 - 9

North Kent Wind 1 Project

Generalized Significant Wildlife Habitat



Legend

- Highway
- Primary Road
- Secondary Road
- Permanent Watercourse

Project Location

- Project Area (120m Buffer)
- Construction Disturbance Area
- Proposed Turbine
- Proposed Meteorological Tower
- Proposed Collection Line
- Proposed Access Road
- Proposed Laydown Area
- **Generalized Significant Wildlife Habitat**

NATURAL RESOURCE SOLUTIONS INC.
Aquatic, Terrestrial and Wetland Biologists

Project: 1612 Date: July 21, 2015	NAD83 - UTM Zone 17 Size: 11x17" **1:17,500**

0 250 500 750 1,000 Meters

N

Path: X:\1612_NorthKentWP\NRSI_1612_EOS_Map7-1toMap7-9_GeneralizedSigHabitat_18K_2015_07_21_LEH.mxd