

Bornish Wind Energy Centre
Natural Heritage Environmental Impact Study

Prepared for:
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Project No. 1231

Date: April 2012



NATURAL RESOURCE SOLUTIONS INC.

Aquatic, Terrestrial and Wetland Biologists

Bornish Wind Energy Centre
Natural Heritage Environmental Impact Study

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Report submitted on April 1, 2012



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1.0 Project Description

Natural Resource Solutions Inc. (NRSI) was retained in April 2011 by GL-Garrad Hasson, on behalf of NextEra Energy Canada, ULC (NextEra) to conduct a natural environment resource assessment in accordance with the Renewable Energy Approval (REA) Regulation. This assessment includes a records review, site investigation, and evaluation of significance and impact assessment of any potentially significant natural features at a proposed 72.9 MW wind energy facility in North Middlesex, Middlesex County Ontario. The analysis of the natural heritage features and biological factors affecting the proposed site is one issue being considered. Other factors, such as land ownership, social impacts, and cultural impacts are also being assessed by other team members.

The Bornish Wind Energy Centre ('the Project') will be owned and operated by Bornish Wind, LP, a wholly-owned subsidiary of NextEra. The Project is located in northwestern Middlesex County in the Township of North Middlesex, Ontario. The Bornish Wind Energy Centre is approximately 3.3km south of the Town of Parkhill, Ontario, with the general project area bound to the north by Nairn/Elginfield Road, to the south by Townsend Line, and to the east and west by Broken Front/Scout Road and Fort Rose Road. A transmission line is proposed to run north along Kerwood Road from the substation to Elginfield Road/Nairn Road. This transmission line is then proposed to continue eastward along Nairn Road to an existing 500kV line and interconnection point located west of Petty Street. The location of the project area was defined early in the planning process for the proposed wind energy facility, based on the availability of wind resources, approximate area required for the proposed project, and availability of existing infrastructure for connection to the electrical grid. The project area was used to facilitate information collection the Records Review and inform the site investigation.

The Bornish Wind Energy Centre is proposed to consist of forty-five GE 1.6-100 (1.62 MW) turbines installed for a total installed capacity of 72.9 MW. However, locations for up to forty-eight turbines will be permitted. The proposed GE 1.6-100 turbine is a 3-bladed, upwind, horizontal-axis turbine. The turbine has a total rotor diameter of 100m, which results in a swept area of 7,854 m² and is designed to operate at between 9.75 and 16.18 revolutions per minute (rpm). The turbine rotor and nacelle are mounted on

top of an 80m tubular tower that is manufactured in sections from steel plates. Each turbine is mounted on a steel reinforced concrete foundation and equipped with a transformer, which is located outside the base of the tower.

As identified in the REA Regulation, the proposed layout of these features is collectively referred to as the 'project location'. The project location is defined as per the Natural Heritage Assessment Guide for Renewable Energy Projects (July 2011) 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 herein, the project location boundary is the outer limit of where site preparation and construction activities will occur (i.e. temporary disturbance areas), and where permanent infrastructure will be located, including the air space occupied by turbine blades.

In accordance with Section 25 of the REA Regulation, NRSI has conducted a thorough records review of available background resources to identify any potentially significant natural features within 120m of the project location. This includes areas within 120m of turbine blade tip as well as any areas that may be used as temporary lay-down areas, crane pads, access roads, 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'.

Current land uses within the project area consists mainly of agriculture, with major crops including soybeans, corn, wheat, hay as well as existing residential and farm buildings. Natural features are generally small and isolated from other features; however, several large contiguous woodlands are present within the Bornish project area. Habitats within the project area also include woodlands, swamps, meadows, thickets, drainage ditches, ponds, creeks and hedgerows. See Figure 1 for a map of the project area and natural features.

As part of this project, NRSI has considered all aspects relating to provincially Threatened and Endangered species. However, since these species are addressed as part of the *Endangered Species Act* (2007), they have not been discussed within any of

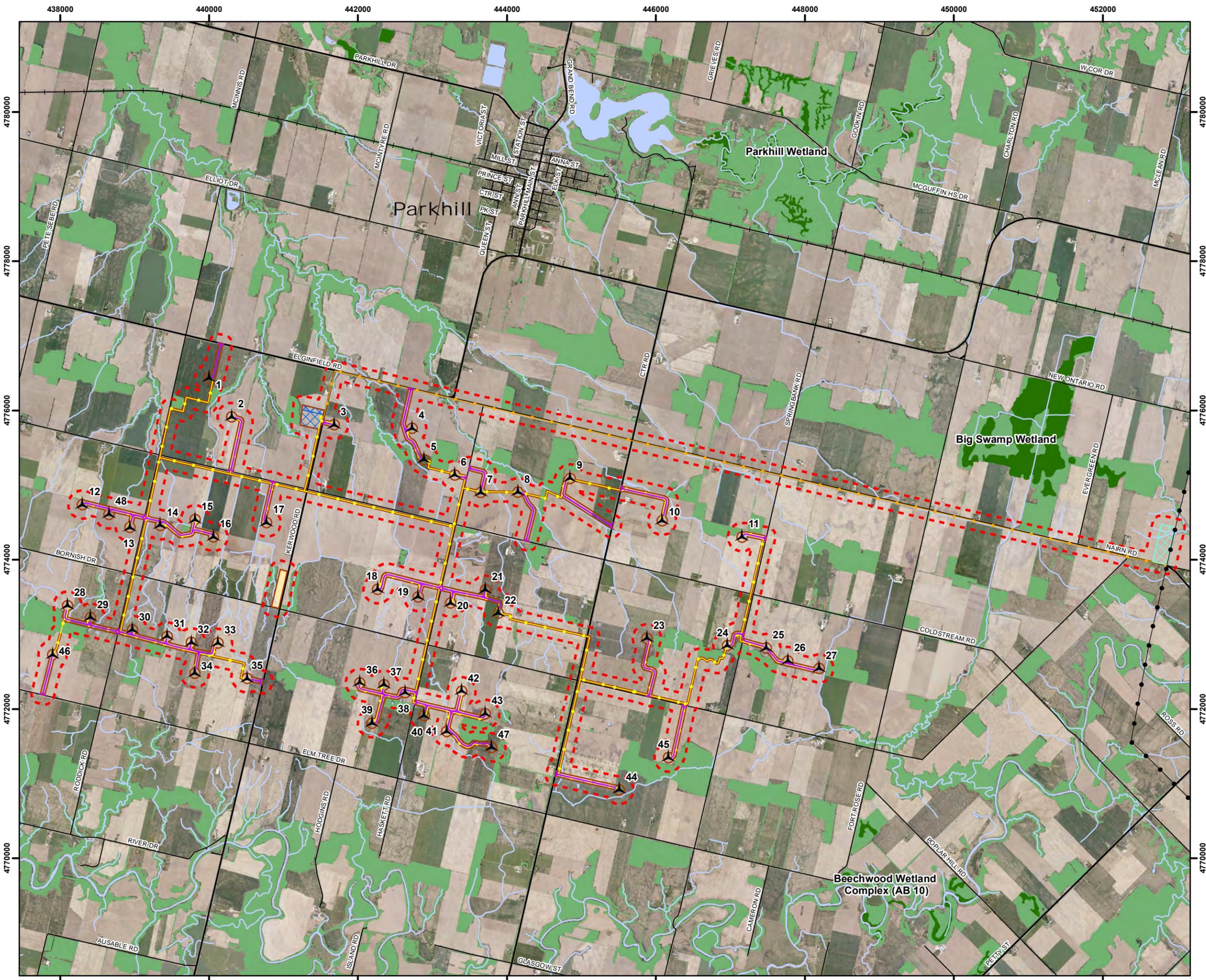
these Natural Heritage Assessment reports. These species will be address in full detail, including a description and results of field assessments, potential impacts, and recommended mitigation measures, as part of a separate *Approval and Permitting Requirements Document (APRD)* to be submitted to the MNR under a separate cover, where necessary.

Figure 1

Bornish Wind Energy Centre Project Area and Natural Features

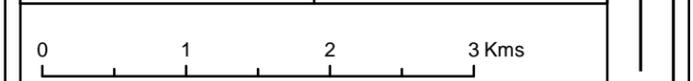
Legend

- Project Area (120m Buffer)
- Turbine
- Access Road
- Collector System
- Interconnection Line
- Project Location
- Staging Area
- Interconnection Facilities
- Substation
- Existing Transmission Line
- Railroad
- Primary Road
- Secondary Road
- Intermittent Watercourse
- Permanent Watercourse
- Waterbody
- Provincially Significant Wetland (PSW)
- Other Wetland
- Wooded
- ANSI, Life Science
- ANSI, Earth Science



Map Produced by Natural Resource Solutions Inc. This map is proprietary and confidential and must not be duplicated or distributed by any means without express written permission of NRSI. Source: Data provided by MNR. Copyright: Queen's Printer Ontario. Imagery: GL Garrad Hassan, 2011.

Project: 1231 March 30, 2012	NAD83 - UTM Zone 17 Scale: 1:50,000 (11x17")
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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 Bornish Wind Energy Centre is classified as a Class 4 wind facility, and is required to complete a REA.

Section 38 of the REA Regulation specifies that no development activities shall be permitted within 120m of a significant natural feature unless an environmental impact study report is prepared in accordance with any procedures established by the Ministry of Natural Resources. As per Subsection 2, this report should:

1. Identify and assess any negative environmental effects of the project on a natural feature, provincial park or conservation reserve,
2. Identify mitigation measures in respect of any negative environmental effects mentioned in the subclause above,
3. Describe how the environmental effects monitoring plan...addresses any negative environmental effects mentioned in subclause 1, and
4. Describe how the construction plan report...addresses any negative environmental effects mentioned in subclause 1.

This Natural Heritage Assessment report has been organized and prepared to satisfy the requirements of the environmental impact study as outlined in the REA Regulation.

3.0 Summary of Records Review

In accordance with the REA Regulation, an area of at least 120m beyond the project location was examined during the Records Review for natural heritage features, including Areas of Natural and Scientific Interest (ANSI), wetlands, woodlands, valleylands, and wildlife habitat (NRSI 2012a). Numerous agencies were contacted to compile a comprehensive records review, including the Ministry of Natural Resources' (MNR) Renewable Energy Operations Team (REOT) and the Ausable Bayfield Conservation Authority. NRSI also utilized numerous background review sources, such as the Biodiversity Explorer, Ontario Breeding Bird Atlas (OBBA), Ontario Herpetofauna Atlas, and the Atlas of the Mammals of Ontario (OMNR 2010c; Cadman et al. 2007; Oldham & Weller 2000; Dobbyn 1994). The comprehensive results of the records review have been summarized in Table 1 and Table 2. Summary of Records Review of the Bornish Wind Energy Centre, below, outlines the presence of natural areas and wildlife habitat that have the potential to overlap with, or occur within 120m of, the project location.

Table 1. Summary of Records Review of the Bornish Wind Energy Centre

Criteria	Result
1. Within 120m of a Provincial Park or Conservation Reserve	The Bornish Wind Energy Centre is not located within 120m of a Provincial Park or Conservation Reserve.
2. In a Natural Feature	The results of this records review indicate that project components (i.e. disturbance area, cabling, access roads etc...) of the Bornish Wind Energy Centre overlap with 9 woodlands. Based on review of air photos, these woodlands are expected to consist of deciduous forest with vegetation associations that are representative of this region of southwestern Ontario. The extent to which project locations overlap with natural areas is variable and will be further examined and addressed in the site investigation phase of the project.
3. Within 50m of a ANSI-ES	No ANSI-ES is located within 50m of the project location.
4. Within 120m of a Natural Feature	
a) ANSI-LS	No ANSI-LS is located within 120m of the project location.
b) Coastal Wetland	No coastal wetlands are located within 120m of the project location.
c) Northern Wetland	No northern wetlands are found within 120m of the project location.
d) Southern Wetland	Three unevaluated southern wetlands within designated Environmentally Significant Areas have been identified within 120m of the project location. Wetlands may also be located within woodland boundaries.
e) Valleyland	No known valleylands are located within 120m of the project location.
f) Wildlife Habitat	40 woodlands are located within 120m of the project location, which could potentially provide several types of Significant

	<p>Wildlife Habitat (SWH).</p> <p>Other natural features such as naturalized drainage ditches and hedgerows have been identified within 120m of the project location and could also provide SWH. These features will be surveyed to determine if they are used as animal movement corridors or provide habitat for species of conservation concern.</p> <p>Several species of conservation concern were identified as potentially occurring within the Bornish project area. Candidate habitats for these species will be investigated for potential Significant Wildlife Habitat.</p> <p>All of these wildlife habitats should be examined during the site investigation phase and/or the evaluation of significance phase of this project to identify other habitat features and identify the significance of each natural feature.</p>
g) Woodland	<p>40 woodlands are located within 120m of the project location, including 9 that may overlap with the project location. Basemapping indicate these wooded areas range in size from <1 ha to 137.2 ha. These woodlands are expected to be primarily dominated by mid-aged to mature deciduous tree species; however young woodlands, treed plantations, or occasional coniferous woodlands may also be present within 120m of the project location.</p>

As part of the records review, a detailed review of potential significant wildlife habitats which could occur within the project area was undertaken (Table 2). This information was used to guide the site investigation phase of the NHA. Wildlife habitats were confirmed to be either not applicable to the project area or known to not occur within the project area based on criteria set out by the Ministry of Natural Resources (OMNR 2000; 2011a), and therefore are not discussed further.

Table 2. Summary of Significant Wildlife Habitats Identified during the Records Review

Significant Wildlife Habitat	Present Within 120 m of Project Location	Present Within Project Location	Site Investigation Required (Y/N)
Seasonal Concentration Areas			
Winter Deer Yards	No	No	No
Colonial-Nesting Bird Breeding Habitat (swallows)	Unknown	Unknown	Yes
Colonial-Nesting Bird Breeding Habitat (tree/shrub)	Unknown	Unknown	Yes
Colonial-Nesting Bird Breeding Habitat (ground)	Unknown	Unknown	Yes
Waterfowl Stopover and Staging Areas (terrestrial)	Unknown	Unknown	Yes
Waterfowl Stopover and Staging Areas (aquatic)	Unknown	Unknown	Yes
Waterfowl Nesting Habitat	Unknown	Unknown	Yes
Shorebird Migratory Stopover Areas	N/A	N/A	No

Landbird (including songbird) Migratory Stopover Areas	N/A	N/A	No
Raptor Winter Feeding and Roosting Areas	Unknown	Unknown	Yes
Wild Turkey Winter Range	N/A	N/A	No
Turkey Vulture Summer Roosting Areas	N/A	N/A	No
Reptile Hibernacula (snakes)	Unknown	Unknown	Yes
Bat Hibernacula	Unknown	Unknown	Yes
Bat Maternity Colonies	Unknown	Unknown	Yes
Amphibian Breeding Habitat (woodland)	Unknown	Unknown	Yes
Amphibian Breeding Habitat (wetland)	Unknown	Unknown	Yes
Migratory Butterfly Stopover Areas	N/A	N/A	No
Rare Vegetation Communities and Specialized Wildlife Habitat			
Alvars	Unknown	Unknown	Yes
Tall-grass Prairies	Unknown	Unknown	Yes
Savannahs	Unknown	Unknown	Yes
Rare Forest Types	Unknown	Unknown	Yes
Talus Slopes	Unknown	Unknown	Yes
Rock Barrens	Unknown	Unknown	Yes
Sand Barrens	Unknown	Unknown	Yes
Great Lakes Dunes	N/A	N/A	No
Forests Providing High Diversity of Habitats	N/A	N/A	No
Old-growth or Mature Forest Stands	Unknown	Unknown	Yes
Foraging Areas with Abundant Mast	N/A	N/A	No
Turtle Nesting Habitat	Unknown	Unknown	Yes
Turtle-Over-wintering Habitat	Unknown	Unknown	Yes
Woodland Raptor Nesting Habitat	Unknown	Unknown	Yes
Osprey Nesting/Bald Eagle, Foraging, and Perching Habitat	Unknown	Unknown	Yes
Moose Calving Areas	N/A	N/A	No
Moose Aquatic Feeding Zone	N/A	N/A	No
Mineral Licks	N/A	N/A	No
Mink, Otter, Marten, and Fisher Denning Sites	Unknown	Unknown	Yes (Mink Only)
Highly Diverse Areas	N/A	N/A	No
Cliffs	No	No	No
Seeps and Springs	Unknown	Unknown	Yes
Amphibian Movement Corridors	Unknown	Unknown	Yes
Habitats of Species of Conservation Concern			
Marsh Bird Breeding Habitat	Unknown	Unknown	Yes
Woodland Area Sensitive Breeding Birds	Unknown	Unknown	Yes
Open Country Breeding Bird Habitat	Unknown	Unknown	Yes
Shrub/Early Successional Bird Breeding Habitat	Unknown	Unknown	Yes
Terrestrial Crayfish	Unknown	Unknown	Yes
Habitat for Special Concern Species	Unknown	Unknown	Yes
Habitat for S1-S3, and SH (Possibly Extirpated Historically) Species and Communities	Unknown	Unknown	Yes

4.0 Site Investigation Summary

In accordance with the REA Regulation, NRSI biologists have completed a comprehensive site investigation of the Bornish Wind Energy Centre project area. The site investigation included, but was not limited to, conducting Ecological Land Classification (ELC) and wildlife habitat surveys. The results of the investigation have been discussed in detail within the *Bornish Wind Energy Centre: Natural Heritage Site Investigation Report* (NRSI 2012b), and have been summarized in Table 3 below. This table summary includes woodlands, wetlands, valleylands, species of conservation concern and significant wildlife habitat, and whether each of these potential features or wildlife habitats require further consideration as part of the evaluation of significance.

Table 3. Summary of Natural Features and Wildlife Habitat Site Investigation for the Bornish Wind Energy Centre

Feature ID	Distance to Closest Turbine (from blade tip)	Distance to Other Project Infrastructure	EOS Required (Y/N/Generalized)
WOD-001 Woodland	>120	5	Yes
WOD-002 Woodland	78	6	Yes
WOD-003 Woodland	42	6	Yes
WOD-004 Woodland	56	>0.1	Yes
WOD-006 Woodland	93	Overlapping	Yes
WOD-007 Woodland	49	5	Yes
WOD-008 Woodland	44	Overlapping	Yes
WOD-009 Woodland	42	4	Yes
WOD-010 Woodland	55	>0.1	Yes
WOD-012/WOD 021 Woodland	47	92	Yes
WOD-013 Woodland	>120	28	Yes
WOD-014 Woodland	57	>0.1	Yes
WOD-015 Woodland	76	5	Yes
WOD-016	48	0.4	Yes
WOD-018 Woodland	40	7	Yes
WOD-020 Woodland	>120	110	Yes
WOD-022 Woodland	48	82	Yes

WOD-023 Woodland	63	14	Yes
WOD-024 Woodland	21	9	Yes
WOD-025 Woodland	>120	35	Yes
WOD-027 Woodland	>120	6	Yes
WOD-028 Woodland	90	6	Yes
WOD-029 Woodland	82	2	Yes
WOD-030 Woodland	89	73	Yes
WOD-031 Woodland	70	64	Yes
WOD-038 Woodland	>120	72	Yes
WOD-039 Woodland	>120	37	Yes
WOD-045 Woodland	>120	15	Yes
WOD-046 Woodland	>120	12	Yes
WOD-047 Woodland	>120	20	Yes
WOD-048 Woodland	>120	5	Yes
WOD-050 Woodland	>120	3	Yes
WOD-051 Woodland	>120	51	Yes
WOD-052 Woodland	>120	10	Yes
WOD-053 Woodland	>120	15	Yes
WET-002 Wetland	A: >120	A: 91	Yes
WET-002 Wetland	B: 45	B: 12	Yes
WET-002 Wetland	C: 109	C: 24	Yes
WET-003 Wetland	100	6	Yes
WET-008 Wetland	>120	92	Yes
WET-010 Wetland	55	>0.1	Yes
WET-014 Wetland	70	5	Yes
WET-018 Wetland	115	50	Yes
WET-025 Wetland	>120	35	Yes
WET-030 Wetland	88	>120	Yes
VAL- 004 Valleyland	56	>0.1	Yes

VAL-047 Valleyland	>120	20	Yes
RWA 002 Raptor Wintering Area	>120	>0.1	Yes
BMA 002 Bat Maternity Colony	42	4	Yes
BMA 003 Bat Maternity Colony	44	>0.1	Yes
BMA 008 Bat Maternity Colony	57	>0.1	Yes
BMA 009 Bat Maternity Colony	49	5	Yes
BMA 010 Bat Maternity Colony	76	5	Yes
BMA 011 Bat Maternity Colony	48	0.4	Yes
BMA 012 Bat Maternity Colony	93	>0.1	Yes
BMA 013 Bat Maternity Colony	48	82	Yes
BMA 016 Bat Maternity Colony	63	14	Yes
BMA 017 Bat Maternity Colony	21	9	Yes
AWO 001 Amphibian Breeding Habitat (Woodland)	88	10	Yes
AWO 002 Amphibian Breeding Habitat (Woodland)	93	>0.1	Yes
AWO 003 Amphibian Breeding Habitat (Woodland)	100	6	Yes
Bat Maternity Colony	>120	N/A	Generalized
Snake Hibernaculum	>120	<120 to UL	Generalized
Amphibian Breeding Habitat (Woodland)	N/A	>120 to AR	Generalized
SCC: Woodland Vole	N/A	N/A	Generalized
SCC: Carey's Sedge	N/A	N/A	Generalized
SCC: Awnless Wild Rye	N/A	N/A	Generalized
SCC: Yellow Stargrass	N/A	N/A	Generalized
SCC: Winged Loosestrife	N/A	N/A	Generalized
SCC: Slim-flowered Muhly	N/A	N/A	Generalized
SCC: Woodland Bulrush	N/A	N/A	Generalized
SCC: Blue-ringed Dancer	N/A	N/A	Generalized
SCC: Double-striped Bluet	N/A	N/A	Generalized
SCC: Pronghorn Clubtail	N/A	N/A	Generalized

5.0 Evaluation of Significance Summary

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 Bornish Wind Energy Centre. The results of the investigation have been discussed in detail within the *Bornish Wind Energy Centre: Natural Heritage Evaluation of Significance Report* (NRSI 2012a), and have been summarized in Table 4 below.

This table summary includes the results of the evaluation of significance for the woodlands, wetlands, valleylands, species of conservation concern and significant wildlife habitat, and whether each of these features or wildlife habitats require detailed consideration as part of this Environmental Impact Study. All significant features (woodlands, wetlands, and valleylands) have been mapped on Figures 3 to 7, with significant wildlife habitat mapped on Figures 8 to 12 and generalized wildlife habitat on Figures 13-17.

Table 4. Summary of Evaluation of Significance of Natural Features and Wildlife Habitat within the Bornish Wind Energy Centre Project Area

Feature ID	Feature Type	Distance to Closest Turbine (from blade tip) (m)	Distance to Other Project Infrastructure (m)	Environmental Impact Study Required (Y/N/Generalized)
WOD-001	Woodland	>120	5	Yes
WOD-002	Woodland	78	6	Yes
WOD-003	Woodland	42	6	Yes
WOD-004	Woodland	56	>0.1	Yes
WOD-006	Woodland	93	Overlapping	Yes
WOD-007	Woodland	49	5	Yes
WOD-008	Woodland	44	Overlapping	Yes
WOD-009	Woodland	42	4	Yes
WOD-010	Woodland	55	>0.1	Yes
WOD-012/WOD 021	Woodland	47	92	Yes
WOD-013	Woodland	>120	28	Yes
WOD-014	Woodland	57	>0.1	Yes
WOD-015	Woodland	76	5	No
WOD-016	Woodland	48	0.4	No
WOD-018	Woodland	40	7	Yes
WOD-020	Woodland	>120	110	No
WOD-022	Woodland	48	82	Yes
WOD-023	Woodland	63	14	Yes
WOD-024	Woodland	21	9	Yes
WOD-025	Woodland	>120	35	Yes
WOD-027	Woodland	>120	6	Yes
WOD-028	Woodland	90	6	Yes
WOD-029	Woodland	82	2	Yes
WOD-030	Woodland	89	73	Yes

Feature ID	Feature Type	Distance to Closest Turbine (from blade tip) (m)	Distance to Other Project Infrastructure (m)	Environmental Impact Study Required (Y/N/Generalized)
WOD-031	Woodland	70	64	Yes
WOD-038	Woodland	>120	72	Yes
WOD-039	Woodland	>120	37	Yes
WOD-045	Woodland	>120	15	Yes
WOD-046	Woodland	>120	12	Yes
WOD-047	Woodland	>120	20	Yes
WOD-048	Woodland	>120	5	Yes
WOD-050	Woodland	>120	3	No
WOD-051	Woodland	>120	51	Yes
WOD-052	Woodland	>120	10	Yes
WOD-053	Woodland	>120	15	No
WET-002	Wetland	A: >120	A: 91	Yes
WET-002	Wetland	B: 45	B: 12	Yes
WET-002	Wetland	C: 109	C: 24	Yes
WET-003	Wetland	100	6	Yes
WET-008	Wetland	>120	92	Yes
WET-010	Wetland	55	>0.1	Yes
WET-014	Wetland	70	5	Yes
WET-018	Wetland	115	50	Yes
WET-025	Wetland	>120	35	Yes
WET-030	Wetland	88	>120	Yes
VAL- 004	Valleyland	56	>0.1	Yes
VAL-047	Valleyland	>120	20	Yes
RWA 002	Raptor Wintering Area	93	>0.1	Yes
BMA 002	Bat Maternity Colony	42	4	No
BMA 003	Bat Maternity Colony	44	>0.1	No
BMA 008	Bat Maternity Colony	57	>0.1	Yes
BMA 009	Bat Maternity Colony	49	5	Yes
BMA 010	Bat Maternity Colony	76	5	Yes
BMA 011	Bat Maternity Colony	48	0.4	Yes
BMA 012	Bat Maternity Colony	93	>0.1	No
BMA 013	Bat Maternity Colony	48	82	Yes
BMA 016	Bat Maternity Colony	63	14	Yes
BMA 017	Bat Maternity Colony	21	9	Yes
AWO 001	Amphibian Breeding Habitat (Woodland)	88	10	Yes
AWO 002	Amphibian Breeding Habitat (Woodland)	93	>0.1	Yes

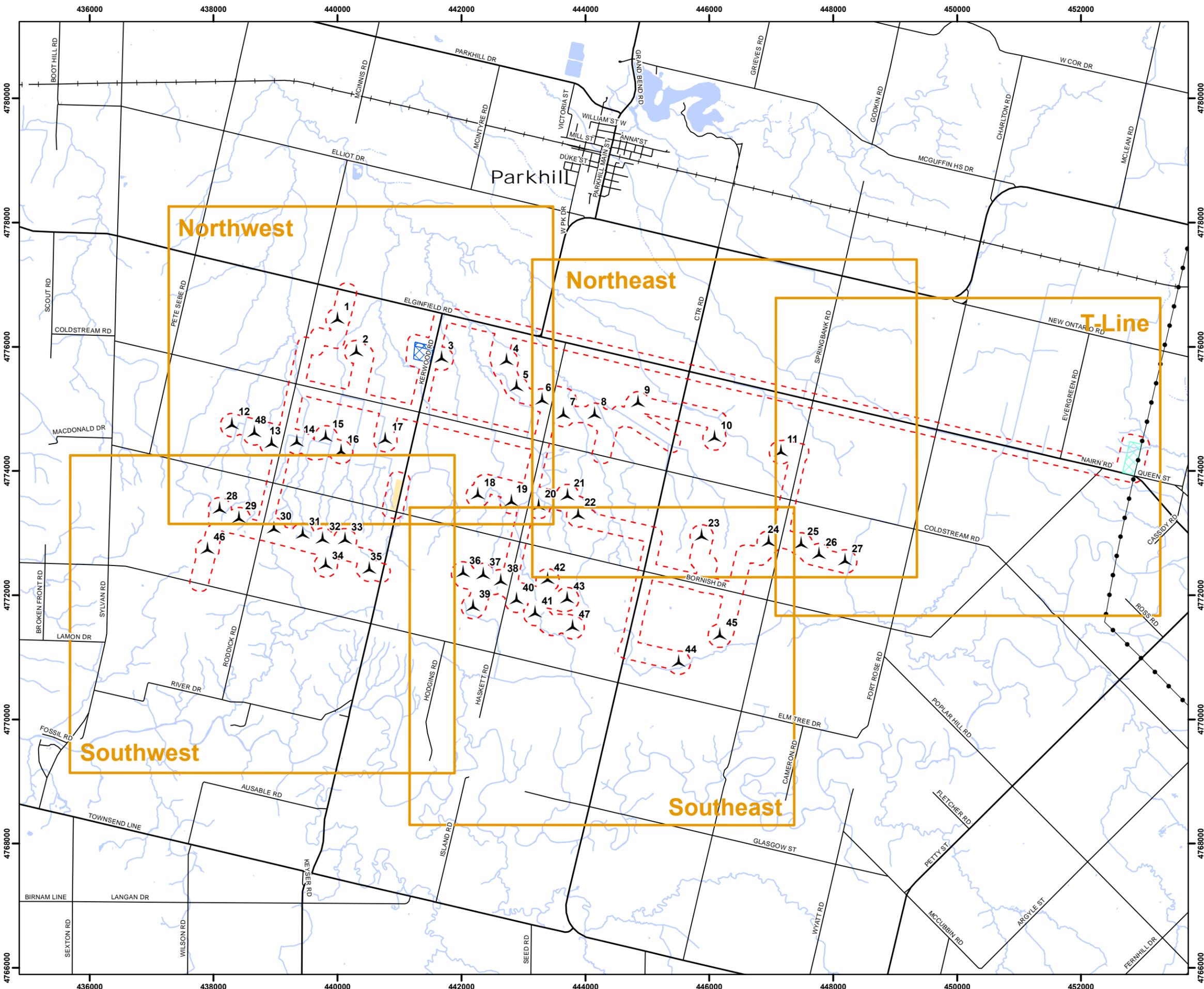
Feature ID	Feature Type	Distance to Closest Turbine (from blade tip) (m)	Distance to Other Project Infrastructure (m)	Environmental Impact Study Required (Y/N/Generalized)
AWO 003	Amphibian Breeding Habitat (Woodland)	100	6	Yes
BMA	Bat Maternity Colony	>120	N/A	Generalized
SNH	Snake Hibernaculum	>120	<120 to UL	Generalized
AWO	Amphibian Breeding Habitat (woodland)	N/A	>120 to AR	Generalized
Woodland Vole	Species of Conservation Concern	N/A	N/A	Generalized
Carey's Sedge	Species of Conservation Concern	N/A	N/A	Generalized
Awnless Wild Rye	Species of Conservation Concern	N/A	N/A	Generalized
Yellow Stargrass	Species of Conservation Concern	N/A	N/A	Generalized
Winged Loosestrife	Species of Conservation Concern	N/A	N/A	Generalized
Slim-flowered Muhly	Species of Conservation Concern	N/A	N/A	Generalized
Woodland Bulrush	Species of Conservation Concern	N/A	N/A	Generalized
Blue-ringed Dancer	Species of Conservation Concern	N/A	N/A	Generalized
Double-striped Bluet	Species of Conservation Concern	N/A	N/A	Generalized
Pronghorn Clubtail	Species of Conservation Concern	N/A	N/A	Generalized

Figure 2

Bornish Wind Energy Centre Key Map

Legend

-  Map Extent
-  Project Area (120m Buffer)
-  Turbine
-  Staging Area
-  Interconnection Facilities
-  Substation
-  Existing Transmission Line
-  Railroad
-  Primary Road
-  Secondary Road
-  Intermittent Watercourse
-  Permanent Watercourse
-  Waterbody



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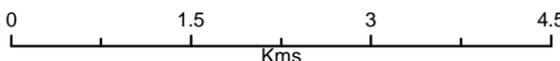
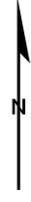
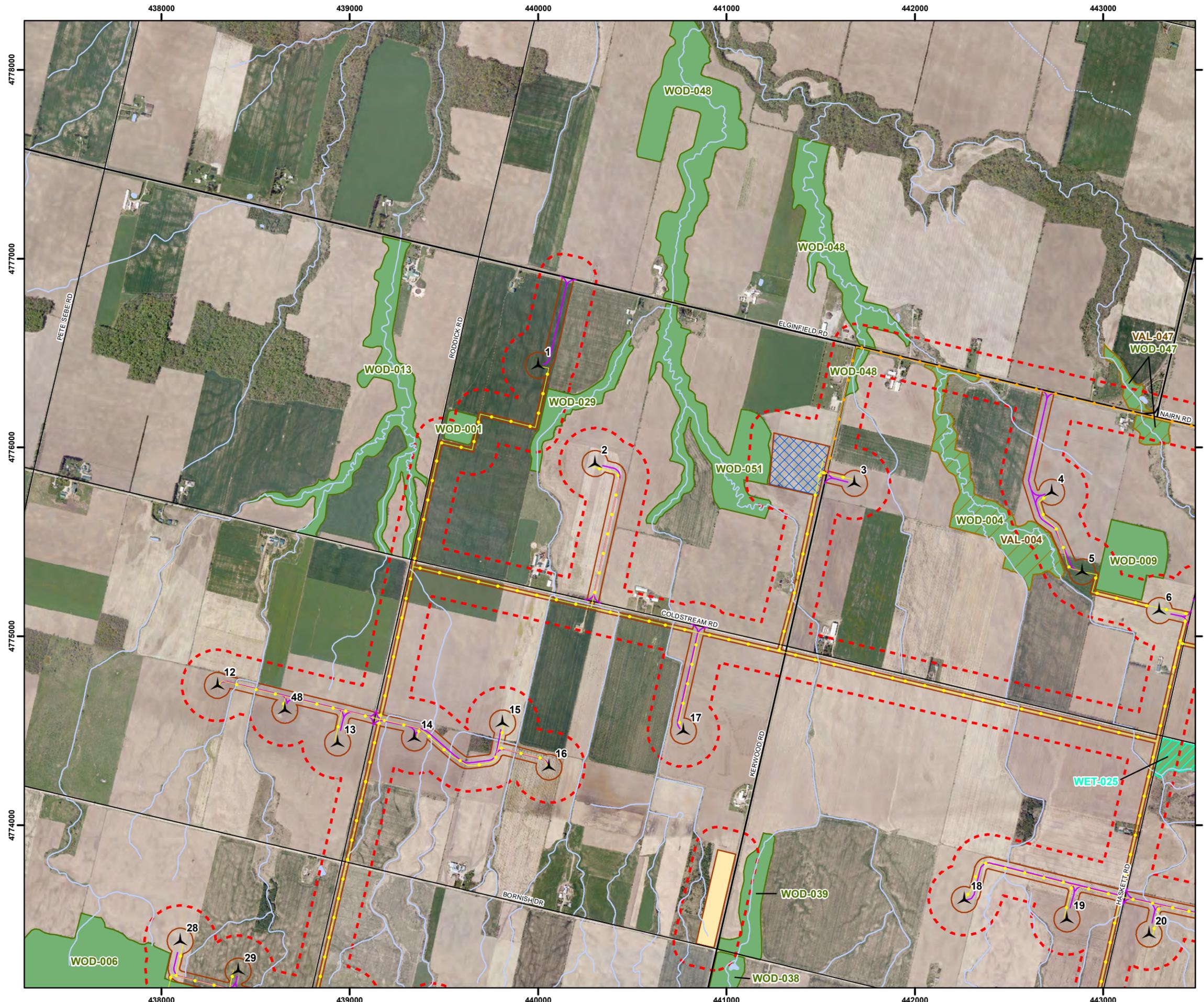
Project: 1231 April 2, 2012	NAD83 - UTM Zone 17 Scale: 1:50,000 (11x17")
	
	

Figure 3

Bornish Wind Energy Centre Significant Natural Features - Northwest



- Legend**
- Project Area (120m)
 - Project Location
 - Turbine
 - Access Road
 - Transmission Line
 - Collector System
 - Staging Area
 - Interconnection Facilities
 - Substation
 - Existing Transmission Line
 - Primary Road
 - Secondary Road
 - Railroad
 - Intermittent Watercourse
 - Permanent Watercourse
 - Waterbody
 - Valleyland (VAL)
 - Wetland (WET)
 - Woodland (WOD)



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Project: 1231 Date: February 24, 2012	NAD83 - UTM Zone 17 Scale: 1:20,000 (11x17")
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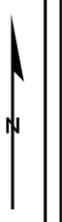
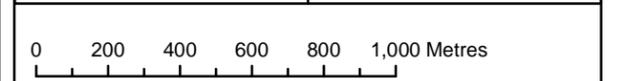
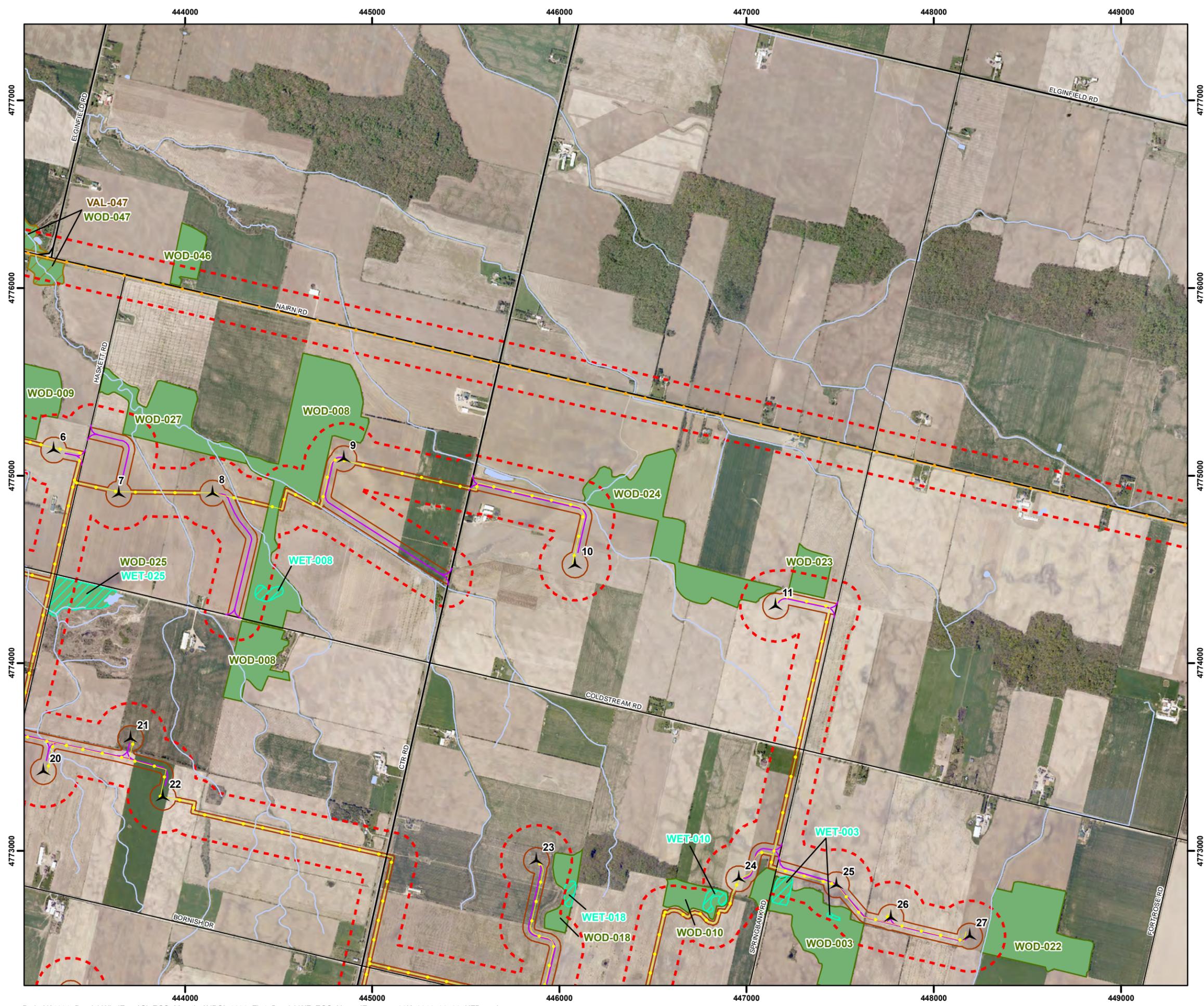


Figure 4

Bornish Wind Energy Centre Significant Natural Features - Northeast



- Legend**
- Project Area (120m)
 - Project Location
 - Turbine
 - Access Road
 - Transmission Line
 - Collector System
 - Staging Area
 - Interconnection Facilities
 - Substation
 - Existing Transmission Line
 - Primary Road
 - Secondary Road
 - Railroad
 - Intermittent Watercourse
 - Permanent Watercourse
 - Waterbody
 - Valleyland (VAL)
 - Wetland (WET)
 - Woodland (WOD)



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Project: 1231 Date: February 24, 2012	NAD83 - UTM Zone 17 Scale: 1:20,000 (11x17")
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