

Romney Wind Energy Centre Natural Heritage Evaluation of Significance Report



Prepared for: DNV-GL Suite 100, 4100 Rue Molson Montreal, Canada H1Y 3N1







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Romney Wind Energy Centre **Natural Heritage Evaluation of Significance Report**

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Report submitted on June 30, 2017

Charlotte Teat Terrestrial & Wetland Biologist

Charlotte Teat

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1.0 Project Description

Natural Resource Solutions Inc. (NRSI) was retained in April 2016 by DNV-GL, on behalf of Romney Energy Centre Limited Partnership (the "Proponent"), to conduct a Natural Heritage Assessment (NHA) in accordance with the Renewable Energy Approval (REA) Regulation, Ontario Regulation (O. Reg.) 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.

The Proponent is proposing to develop the Romney Wind Energy Centre (the "Project"). This Project, with a total nameplate capacity of up to 60 megawatts (MW), is considered to be a Class 4 wind facility. A total of 18 wind turbine locations are being permitted.

The Romney Wind Energy Centre is located in southwestern Ontario, Town of Lakeshore and the Municipality of Chatham Kent, Ontario. More specifically, the Project is located south of Highway 401, and extends along Richardson Side Road and Wheatley Road near the community of Wheatley, ON. The Project is located entirely within Ecoregion 7E (MNRF 2016a).

Project components will be installed primarily on privately-owned agricultural lots within this area. It is anticipated that the electrical collector lines will be partially located within public road allowances. It is planned to connect to the existing Hydro One Networks Inc. (HONI) 230 kV transmission line located within the Town of Lakeshore, close to Richardson Side Road. A small section of transmission line (less than 1km) is proposed for the Project, to be built by HONI from the Point of Common Coupling (PCC) to the Point of Interconnect (POI).

According to O. Reg. 359/09, as amended, and as per the Natural Heritage Assessment Guide for Renewable Energy Projects (OMNR 2012), 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 27 of the REA Regulation, O. Reg. 359/09, NRSI has conducted an evaluation of significance to identify any significant natural features and wildlife habitats in and within 120m of the Project Location. This includes areas within 120m of proposed wind 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, PCC, operations and maintenance (O&M) building, meteorological tower, substation, and electrical collector lines. Junction boxes may also be installed below or above ground where more than one circuit must be connected together. See Map 1 for an illustration of the Project Location and natural features.

2.0 REA Requirements

Ontario Regulation 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 Romney WEC 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 in or within 120m of the Project Location, 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 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 Romney WEC have been outlined below.

Andrew Ryckman, B.Sc.

Andrew is a Senior Terrestrial and Wetland Biologist with more than 11 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, including experience with 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.

Charlotte Teat, M.E.S.

Charlotte is a Terrestrial and Wetland Biologist with more than 7 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 Ecological Land Classification (ELC), bat surveys, breeding bird surveys, vegetation monitoring and herpetofauna studies. She is certified in the Ontario Wetland Evaluation System (OWES) (2012) and certified in the ELC system for southern Ontario (2013). Charlotte has managed the biological monitoring and reporting for numerous wind power projects throughout Ontario and Saskatchewan, and has extensive experience with client and agency liaison through her project management role on similar projects.

Charlotte'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. Charlotte was also a lead biologist during the evaluation of significance surveys, conducting bald eagle behaviour surveys within the Project.

Andrew Dean, B.E.S.

Andrew is a Terrestrial and Wetland Biologist with more than 6 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 is trained and certified in both the ELC system for southern Ontario (2011) and OWES (2012), with considerable experience in tree identification, vegetation community classification, and botanical Species at Risk (SAR) inventories. Andrew is also a certified Butternut Health Assessor (2014).

Andrew was a lead biologist, collecting site-specific habitat characteristics of woodlands and wetlands within the Project.

Christina Carter, M.E.S.

Christina is a Terrestrial and Wetland Biologist with over 7 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 completing 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, bald eagle habitats and habitats for species of conservation concern. Christina is also certified in the ELC system for southern Ontario (2013).

Christina was a lead biologist during the evaluation of significance surveys, conducting bald eagle behaviour surveys within the Project.

Christy Humphrey, B.E.S.

Christy is a Terrestrial and Wetland Biologist with more than 7 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 is experienced in conducting literature and background reviews, preparing NHAs, Environmental Effects Monitoring Plans, Environmental Impact Studies, and post-construction mortality monitoring reports. She is certified in the ELC system for southern (2010) and northeastern Ontario (2010), as well as in OWES (2012).

Christy assisted with the preparation of this report, specific to the description of wetland habitats.

Erin Bannon, B.E.S.

Erin is a Terrestrial and Wetland Biologist with more than 5 years of experience in the environmental field. She routinely completes natural resource inventories, surveys of amphibians, plants, and mammals, and research and impact studies. Her background in wind energy engineering has also allowed her to gain experience in natural heritage studies. Erin has worked on projects focusing on the identification of important natural features and the evaluation of the significance and sensitivity of these features. During her consulting experience, Erin has conducted bird and bat assessments, amphibian studies, and other flora and fauna assessments throughout Ontario. She is certified in the ELC system for southern Ontario (2013), and has participated in field investigations and reporting for wind power projects throughout Ontario.

Erin assisted with the preparation of this report.

Jennifer Pedersen, B.Sc.

Jennifer is a Terrestrial and Wetland Biologist with over 5 years of experience in the environmental field working in both the federal and private sectors. She has experience managing and coordinating projects and programs for the federal government, including, but not limited to, Environmental Assessments and SAR Assessments. She also has experience in the management of environmental and archaeological components of renewable energy projects. Jennifer has prepared various reports for consulting firms and governmental agencies.

Jennifer assisted with the preparation of this report, specific to the description of woodland habitats.

Kathryn Hoo, B.Sc.

Kathryn is a Field Biologist with over 5 years of experience in the biological field. She has extensive experience conducting biological monitoring fieldwork, specifically bird surveys. Kathryn is experienced in both visual and auditory bird identification, and has completed bird surveys at numerous locations across Ontario and Canada, including leading mist-netting surveys, banding birds, and performing migration surveys, among a variety of other bird surveys.

Kathryn was a lead biologist during the evaluation of significance surveys, conducting bald eagle behaviour surveys within the Project.

Ken Burrell, M.E.S.

Ken is a Terrestrial and Wetland Biologist with over 8 years of experience in terrestrial ecology, with a strong background in avian research. Ken is regarded as one of the leading amateur ornithologists in Ontario, having developed his skills through a wide range of avian surveys and from his extensive background volunteering for numerous organizations and working as a field biologist. Ken has conducted spring and fall migration studies as well as breeding bird surveys in the form of point counts, transects, and inventories involving a wide range of species. He has extensive migration monitoring experience throughout Ontario, as well as in Canada and the United States and is well-versed in SAR in Ontario and Canada, specifically having published several papers on SAR. Ken is also certified in the ELC system for northeastern Ontario (2011).

Ken was a lead biologist during the evaluation of significance surveys, completing waterfowl stopover and staging area (terrestrial) surveys and bald eagle behaviour surveys within the Project.

Nathan Miller, M.Sc.

Nathan is a Terrestrial and Wetland Biologist with more than 6 years of experience in environmental consulting. Nathan has carried out numerous avian studies utilizing a wide range of research techniques including point counts, transects, standardized area searches, nest searches as well as mortality monitoring for avian and bat species at wind energy projects. Nathan also has extensive experience identifying and monitoring avian significant wildlife habitats both pre, during and post-construction for numerous wind energy projects across Ontario and Canada.

Nathan was a lead biologist during the evaluation of significance surveys, conducting bald eagle behaviour surveys within the Project.

Pat Deacon, B.E.S.

Pat is a Terrestrial and Wetland Biologist with 6 years of environmental consulting experience. He regularly conducts vegetation inventories and community mapping, as well as bird surveys, and specializes in ecological restoration with particular focus on SAR, tallgrass prairie ecosystems, and invasive species management. He is certified in the ELC system for northeastern Ontario (2011) and is OWES certified (2012). He is also a certified Butternut Health Assessor (2014).

Pat was a lead biologist during the evaluation of significance surveys, collecting site-specific habitat characteristics of woodlands and wetlands, and conducting bald eagle behaviour surveys within the Project.

Todd Hagedorn, B.Sc.

Todd is a Terrestrial and Wetland Biologist, specializing in avian ecology, with more than 4 field seasons of experience developing and coordinating ecological studies and monitoring programs. Todd specializes in natural resource inventories and evaluations, research and impact studies as part of Environmental Impact Studies, Environmental Assessments and monitoring programs. He routinely completes studies on breeding and migrating birds, and evaluations of their significance and sensitivity. Todd is a member of the Wildlife Society (2013-2016) and volunteers for both Christmas Bird Counts (2011-2016) and the Cardan Alvar Bird Counts (2014-2015).

Todd was a lead biologist during the evaluation of significance surveys, conducting bald eagle behaviour surveys within the Project.

4.0 Summary of Site Investigation

In accordance with the REA Regulation, NRSI biologists have completed comprehensive site investigations in and within 120m of the Romney WEC Project Location. The site investigations included, but were not limited to, conducting ELC and wildlife habitat surveys to determine the presence of candidate significant natural features in and within 120m of the Project Location. The candidate significant natural features and wildlife habitats identified as a result of the site investigations have been summarized in Table 1. This summary includes woodlands, wetlands, and wildlife habitat. 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 have not been included in the summary below, and will not be discussed further. In accordance with Appendix D of the NHA Guide for Renewable Energy Projects (OMNR 2012), some habitats are not required to be individually identified and evaluated within 50m or 120m of a project component and have been grouped together as generalized candidate Significant Wildlife Habitat (SWH).

Table 1. Summary of Natural Features and Candidate Wildlife Habitat Site Investigation for the Project

Feature ID	Feature Within Project Location (Y/N)	Feature Within 120m of Project Location (Y/N)	Feature Individually Delineated* (Y/N)	Evaluation of Significance Required (Y/N)
Woodlands				
WOD-001	No	Yes	Yes	Yes
WOD-002	No	Yes	Yes	Yes
WOD-003	No	Yes	Yes	Yes
WOD-004	No	Yes	Yes	Yes
WOD-005	No	Yes	Yes	Yes
WOD-006	No	Yes	Yes	Yes
WOD-007	No	Yes	Yes	Yes
WOD-008	No	Yes	Yes	Yes
WOD-009	No	Yes	Yes	Yes
WOD-011	No	Yes	Yes	Yes
WOD-012	No	Yes	Yes	Yes
WOD-013	No	Yes	Yes	Yes
WOD-014	No	Yes	Yes	Yes
Wetlands				
WET-001	No	Yes	Yes	Yes
WET-002	No	Yes	Yes	Yes
WET-003	No	Yes	Yes	Yes
WET-004	No	Yes	Yes	Yes
WET-005	No	Yes	Yes	Yes
WET-006	No	Yes Yes		Yes
WET-008	No	Yes	Yes	Yes
WET-009	No	Yes	Yes	Yes

Table 1. Summary of Natural Features and Candidate Wildlife Habitat Site Investigation for the Project

Feature ID	Feature Within Project Location (Y/N)	Feature Within 120m of Project Location (Y/N)	Feature Individually Delineated* (Y/N)	Evaluation of Significance Required (Y/N)
Individually Delineated Ca	andidate Significant W	ildlife Habitats		-
WST-001	Yes	Yes	Yes	Yes
WST-002	Yes	Yes	Yes	Yes
WST-003	Yes	Yes	Yes	Yes
WST-004	Yes	Yes	Yes	Yes
WST-005	Yes	Yes	Yes	Yes
WST-006	Yes	Yes	Yes	Yes
WST-007	Yes	Yes	Yes	Yes
WST-008	Yes	Yes	Yes	Yes
WST-009	Yes	Yes	Yes	Yes
WST-010	Yes	Yes	Yes	Yes
WST-011	Yes	Yes	Yes	Yes
WST-012	Yes	Yes	Yes	Yes
WST-013	Yes	Yes	Yes	Yes
WST-014	Yes	Yes	Yes	Yes
WST-015	Yes	Yes	Yes	Yes
WST-016	Yes	Yes	Yes	Yes
WST-017	Yes	Yes	Yes	Yes
WST-018	Yes	Yes	Yes	Yes
WST-019	Yes	Yes	Yes	Yes
WST-020	Yes	Yes	Yes	Yes
WST-021	Yes	Yes	Yes	Yes
WST-022	Yes	Yes	Yes	Yes
WST-023	Yes	Yes	Yes	Yes
WST-024	Yes	Yes	Yes	Yes
WST-025	Yes	Yes	Yes	Yes
WST-026	Yes	Yes	Yes	Yes
WST-027	Yes	Yes	Yes	Yes
WST-028	Yes	Yes	Yes	Yes
WST-029	Yes	Yes	Yes	Yes
BMA-001	No	Yes	Yes	Yes
BMA-002	No	Yes	Yes	Yes
BMA-003	No	Yes	Yes	Yes
CBT-001	No	Yes	Yes	Yes
CBT-002	No	Yes	Yes	Yes
CBT-003	No	Yes	Yes	Yes
LMS-001 LMS-002	No No	Yes	Yes	Yes Yes
	No No	Yes	Yes	
ORV-001	No No	Yes	Yes	Yes Yes
AWO-001 EWP-001	No No	Yes Yes	Yes Yes	Yes
EWP-001	No	Yes	Yes	Yes
EWP-002	No	Yes	Yes	Yes
EWP-003	No	Yes	Yes	Yes
EWP-005	No	Yes	Yes	Yes
BAL-001	Yes	Yes	Yes	Yes
BAL-001	Possible**	Possible**	Yes	Yes
WTH-001	No	Yes	Yes	Yes
SHS-001	No	Yes	Yes	Yes
SHS-002	No	Yes	Yes	Yes
SHS-003	No	Yes	Yes	Yes

Table 1. Summary of Natural Features and Candidate Wildlife Habitat Site Investigation for the Project

Feature ID	Feature Within Project Location (Y/N)	Feature Within 120m of Project Location (Y/N)	Feature Individually Delineated* (Y/N)	Evaluation of Significance Required (Y/N)
SHS-004	No	Yes	Yes	Yes
SHS-005	No	Yes	Yes	Yes
SHS-006	No	Yes	Yes	Yes
SHS-007	No	Yes	Yes	Yes
SQS-001	No	Yes	Yes	Yes
SQS-002	No	Yes	Yes	Yes
SQS-003	No	Yes	Yes	Yes
SQS-004	No	Yes	Yes	Yes
SQS-005	No	Yes	Yes	Yes
SQS-006	No	Yes	Yes	Yes
SQS-007	No	Yes	Yes	Yes
CSE-001	No	Yes	Yes	Yes
CSE-002	No	Yes	Yes	Yes
CSE-003	No	Yes	Yes	Yes
CSE-004	No	Yes	Yes	Yes
CSE-005	No	Yes	Yes	Yes
CSE-006	No	Yes	Yes	Yes
CSE-007	No	Yes	Yes	Yes
SHH-001	No	Yes	Yes	Yes
SHH-002	No	Yes	Yes	Yes
SHH-003	No	Yes	Yes	Yes
SHH-004	No	Yes	Yes	Yes
SHH-005	No	Yes	Yes	Yes
SHH-006	No	Yes	Yes	Yes
SHH-007	No	Yes	Yes	Yes
PAS-001	No	Yes	Yes	Yes
PAS-002	No	Yes	Yes	Yes
PAS-003	No	Yes	Yes	Yes
PAS-004	No	Yes	Yes	Yes
PAS-005	No	Yes	Yes	Yes
PAS-006	No	Yes	Yes	Yes
PAS-007	No	Yes	Yes	Yes
BGU-001	No	Yes	Yes	Yes
BGU-002	No	Yes	Yes	Yes
BGU-003	No	Yes	Yes	Yes
BGU-004	No	Yes	Yes	Yes
BGU-005	No	Yes	Yes	Yes
BGU-006	No	Yes	Yes	Yes
BGU-007	No	Yes	Yes	Yes
HLS-001	No	Yes	Yes	Yes
HLS-002	No	Yes	Yes	Yes
HLS-003	No	Yes	Yes	Yes
HLS-004	No	Yes	Yes	Yes
HLS-005	No	Yes	Yes	Yes
HLS-006	No	Yes	Yes	Yes
SHO-001	No	Yes	Yes	Yes
SHO-002	No	Yes	Yes	Yes
SHO-003	No	Yes	Yes	Yes
SHO-004	No	Yes	Yes	Yes
SHO-005	No	Yes	Yes	Yes
SHO-006	No	Yes	Yes	Yes

Table 1. Summary of Natural Features and Candidate Wildlife Habitat Site Investigation for the Project

Feature ID	Feature Within Project Location (Y/N)	Feature Within 120m of Project Location (Y/N)	Feature Individually Delineated* (Y/N)	Evaluation of Significance Required (Y/N)
SHO-007	No	Yes	Yes	Yes
CPR-001	No	Yes	Yes	Yes
Generalized Candidate Signifi	cant Wildlife Habit			
Raptor Wintering Areas	No	Yes	No	Yes
Bat Maternity Colonies	No	Yes	No	Yes
Turtle Wintering Areas	No	Yes	No	Yes
Colonially – Nesting Bird Breeding Habitat (Tree/Shrub)	No	Yes	No	Yes
Colonially – Nesting Bird Breeding Habitat (Ground)	No	Yes	No	Yes
Migratory Butterfly Stopover Area	No	Yes	No	Yes
Landbird Migratory Stopover Areas	No	Yes	No	Yes
Deer Winter Congregation Area	No	Yes	No	Yes
Other Rare Vegetation Communities	No	Yes	No	Yes
Waterfowl Nesting Area	No	Yes	No	Yes
Amphibian Breeding Habitat (Woodland)	No	Yes	No	Yes
Open Country Bird Breeding Habitat	No	Yes	No	Yes
Terrestrial Crayfish	No	Yes	No	Yes
Eastern Wood-Pewee	No	Yes	No	Yes
Wood Thrush	No	Yes	No	Yes
Red-headed Woodpecker	No	Yes	No	Yes
Slightly Hirsute Sedge	No	Yes	No	Yes
Squarrose Sedge	No	Yes	No	Yes
Cattail Sedge	No	Yes	No	Yes
Shellbark Hickory	No	Yes	No	Yes
Pumpkin Ash	No	Yes	No	Yes
Black Gum	No	Yes	No	Yes
Halberd-leaved Smartweed	No	Yes	No	Yes
Shumard Oak	No	Yes	No	Yes
Climbing Prairie Rose	No	Yes	No	Yes
Hackberry Emperor	No	Yes	No	Yes
Monarch	No	Yes	No	Yes
Common Sootywing	No	Yes	No	Yes

^{*}All woodlands and wetlands were individually delineated. Candidate SWH was individually delineated as per Table 19 of the NHA Guide (OMNR 2012).

^{**}The possible bald eagle nest record is located greater than 120m from the Project Location, but has the potential to overlap with Project Infrastructure if an up to 800m buffer is applied to the habitat, which will be determined by the site investigation completed as part of pre-construction commitments for this feature.

5.0 Evaluation of Significance Methods

In accordance with the REA Regulation, NRSI biologists have completed a comprehensive records review and site investigation to confirm site-specific ecological functions of the features in and within 120m of the Romney WEC. The results of these tasks have provided the information required to evaluate the significance of several features in and within 120m of the Project Location. NRSI has reviewed all natural features in and within 120m of the Project Location 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 survey. 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 lead for each survey is indicated in bold font within the table.

Table 2. Evaluation of Significance Survey Details

	Start Time D		Duration	Weather Conditions			
Staff Name(s)	Purpose	Date (2016)	(hrs)	(hrs)	Temp. (°C)	Beaufort Wind	Cloud Cover (%)
Ken Burrell	Waterfowl Stopover and Staging Area (Terrestrial) Survey	March 10	0950	4.5	13	1	100
Ken Burrell	Waterfowl Stopover and Staging Area (Terrestrial) Survey	March 17	0920	4.25	9	4	0
Ken Burrell	Waterfowl Stopover and Staging Area (Terrestrial) Survey	March 25	0908	4.25	-1	3	100
Ken Burrell	Bald Eagle Behaviour Survey	April 5	0739	4.0	-4	2	10
Kathryn Hoo	Bald Eagle Behaviour Survey	April 7	0945	4.0	5	3	100
Kathryn Hoo	Bald Eagle Behaviour Survey	April 12	0858	4.0	1	4	25
Charlotte Teat	Bald Eagle Behaviour Survey	April 15	1055	4.0	13	4	10
Nathan Miller	Bald Eagle Behaviour Survey	April 19	1002	4.0	9-11	3	25
Christina Carter	Bald Eagle Behaviour Survey	April 21	1122	4.0	8	2	95
Ken Burrell	Bald Eagle Behaviour Survey	April 25	0819	4.0	11	4	60
Kathryn Hoo	Bald Eagle Behaviour Survey	April 28	0902	4.0	5	4	100
Pat Deacon	Bald Eagle Behaviour Survey	May 2	1202	4.5	10	2	100
Kathryn Hoo	Bald Eagle Behaviour Survey	May 4	0928	4.0	10	3	95
Christina Carter	Bald Eagle Behaviour Survey	May 9	1118	4.0	13	2	80
Andrew Dean Carlene Perkin	Plant SCC Surveys (Slightly Hirsute Sedge, Squarrose Sedge, Shellbark Hickory, Black Gum)/ Wetland Assessments	May 9	1320	4.25	13	2	75

Table 2. Evaluation of Significance Survey Details

			Start Time	Duration		Weather Conditions			
Staff Name(s)	Purpose	Date (2016)	(hrs)	(hrs)	Temp. (ºC)	Beaufort Wind	Cloud Cover (%)		
Andrew Dean Carlene Perkin	Plant SCC Surveys (Slightly Hirsute Sedge, Squarrose Sedge, Shellbark Hickory, Black Gum)/ Wetland Assessments	May 10	0815	5.0	9	4	100		
Andrew Dean Carlene Perkin	Plant SCC Surveys (Slightly Hirsute Sedge, Squarrose Sedge, Shellbark Hickory, Black Gum)/ Wetland Assessments	May 11	0820	7.25	11	4	100		
Kathryn Hoo	Bald Eagle Behaviour Survey	May 11	1020	4.0	12	4	100		
Nathan Miller	Bald Eagle Behaviour Survey	May 16	1036	4.0	14	4-5	10		
Ken Burrell	Bald Eagle Behaviour Survey	May 19	1008	4.0	15	1	0		
Charlotte Teat	Bald Eagle Behaviour Survey	May 24	1052	4.0	22	3	10		
Christina Carter	Bald Eagle Behaviour Survey	May 27	1144	4.0	26	1	20		
Pat Deacon	Bald Eagle Behaviour Survey	May 30	0802	4.0	22	2	10		
	Wetland Assessments		1219	3.25	25	2	10		
Ken Burrell	Bald Eagle Behaviour Survey	June 2	0850	4.0	23	2	60		
Nathan Miller	Bald Eagle Behaviour Survey	June 6	0840	4.0	22	3-4	0		
Pat Deacon	Bald Eagle Behaviour Survey	June 9	0821	4.0	18-22	2	5		
Ken Burrell	Bald Eagle Behaviour Survey	June 13	0946	4.0	18	2	60		
Charlotte Teat	Bald Eagle Behaviour Survey	June 16	1255	4.0	23	2-4	95		
Ken Burrell	Bald Eagle Behaviour Survey	June 20	0833	4.0	28	4	80		
Pat Deacon	Bald Eagle Behaviour Survey	June 23	1153	4.0	24	1-4	100		

Table 2. Evaluation of Significance Survey Details

			Start Time	Duration	Weather Conditions			
Staff Name(s)	Purpose	Date (2016)	(hrs)	(hrs)	Temp. (ºC)	Beaufort Wind	Cloud Cover (%)	
Pat Deacon	Bald Eagle Behaviour Survey	June 27	1026	4.25	30	1	5	
Nathan Miller	Bald Eagle Behaviour Survey	June 30	0943	4.0	26	2	20	
Ken Burrell	Bald Eagle Behaviour Survey	July 4	0832	4.0	18	3	60	
Christina Carter	Bald Eagle Behaviour Survey	July 7	1107	4.0	27	2	60	
Todd Hagedorn	Bald Eagle Behaviour Survey	July 11	1042	4.0	22	3	10	
Nathan Miller	Bald Eagle Behaviour Survey	July 14	1005	4.0	24	4	90	
Christina Carter	Bald Eagle Behaviour Survey	July 18	1132	4.0	28	2	80	
Todd Hagedorn	Bald Eagle Behaviour Survey	July 21	0954	4.0	23	5	0	
Todd Hagedorn	Bald Eagle Behaviour Survey	July 25	1117	4.0	26	4	60	
Ken Burrell	Bald Eagle Behaviour Survey	July 28	0927	4.25	24	2	100	
Charlotte Teat	Bald Eagle Behaviour Survey	August 2	1056	4.0	29	2-3	20	
Christina Carter	Bald Eagle Behaviour Survey	August 4	1134	4.0	27	1	20	
Ken Burrell	Bald Eagle Behaviour Survey	August 8	0937	4.25	22	2	0	
Nathan Miller	Bald Eagle Behaviour Survey	August 11	0838	4.0	30	3	20	
Christina Carter	Bald Eagle Behaviour Survey	August 15	1155	4.0	26	1	95	
Charlotte Teat	Bald Eagle Behaviour Survey	August 18	1055	4.0	29	1-2	60	
Pat Deacon	Bald Eagle Behaviour Survey	August 22	0808	4.0	14-22	0-1	5-25	
Pat Deacon Nathan Miller	Wetland Assessments	September 21	1320	2.5	28	1	50	
Jennifer Pedersen	Desktop evaluation of woodland significance	October 4	1010	4.0	Desktop evalu	N/A ation of significance	of woodland and	

Table 2. Evaluation of Significance Survey Details

			ate (2016) Start Time Duration (hrs) (hrs)	Start Time	Start Time	Duration		Weather Conditions	S
Staff Name(s)	Purpose	Date (2016)		Temp. (⁰C)	Beaufort Wind	Cloud Cover (%)			
Charlotte Teat	Desktop evaluation of woodland significance	October 6	1300	0.5		wetland habitats			
Jennifer Pedersen	Desktop evaluation of woodland significance	October 6	1030	1.0					
Erin Thompson	Desktop evaluation of woodland significance	October 6	1600	0.5					
Christy Humphrey	Desktop evaluation of wetland significance	October 11	1200	3.25					

5.2 Woodlands

NRSI biologists used modified ELC for southern Ontario, as outlined in the *Romney Wind Energy Centre Natural Heritage Site Investigation Report* (NRSI 2017), to identify woodlands in and within 120m of the Project Location (Lee *et al.* 1998). There are no candidate significant woodlands within the Project Location; however, there are 13 candidate significant woodlands within 120m of the Project Location (WOD 001, 002, 003, 004, 005, 006, 007, 008, 009, 011, 012, 013, and 014). All infrastructure will be placed outside of these features (as measured from dripline), in order to avoid impacts to the features themselves.

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 2012). 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 2012). Information collected from available background resources indicates that the Municipality of Chatham-Kent contained approximately less than 5% woodland cover in 2010 (Municipality of Chatham-Kent 2013). 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 13 woodlands within 120m of the Project Location.

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.

Table 3. Woodland Evaluation of Significance Criteria

Evaluation Criteria	Standards of Significance
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. Woodland diversity is identified where an area is dominated singly or in combination, by native naturally occurring sugar maple, black maple, silver maple, red maple, yellow birch, hickory, beech, black ash, walnut, tamarack, spruce, pine, oak, basswood or hemlock.
Uncommon Characteristics C	riteria
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 2012) must also have an average minimum width of 40m measured between crown edges, where the criterion size threshold is 0.5 to 4.0 hectares, to be considered significant (OMNR 2012).

5.3 Wetlands

Wetlands in and within 120m of the Project Location 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.

There are no candidate provincially significant wetlands within the Project Location. There are 8 candidate wetlands (WET 001, 002, 003, 004, 005, 006, 008, 009) that have been treated as Provincially Significant following Appendix C of the NHA Guide (OMNR 2012), and are within 120m of the Project Location. Wetlands 006 and 008 both consist of two wetland units and have been complexed because of their proximity to one

another. All infrastructure (construction disturbance area, access roads and cabling) will be placed outside of these features (as measured from the delineated wetland boundary using the OWES 50/50 rule) to avoid impacts to the features themselves.

Appendix C: Wetland Characteristics and Ecological Function Assessment for Renewable Energy Projects of the NHA Guide (OMNR 2012) 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 the approach presented is 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 quideline.

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 has been separated into the 4 broad groups of SWH, using the same general categories as the SWH Criteria Schedules for Ecoregion 7E (MNRF 2015): 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 candidate 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.

5.4.1 Seasonal Concentration Areas

Several candidate significant seasonal concentration areas have been identified in and within 120m of the Project Location. The vegetation mapping has been compared with the criteria outlined in the documents mentioned above to evaluate the significance of seasonal concentration areas in and within 120m of the Project Location. The general evaluation criteria for the wildlife habitats that have been carried forward from the *Romney Wind Energy Centre Natural Heritage Site Investigation Report* (NRSI 2017), 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	Evaluation Methods	Evaluation Criteria ¹		
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 in and within 120m of the Project Location. Following the Birds and Bird Habitat Guidelines for Wind Power Projects (OMNR 2011a), routes consisting of more than 60km in length were conducted in and within 120m of the Project Location. Driving surveys were conducted along these routes on 3 separate visits, spaced approximately 7 days apart in March 2016 when waterfowl were expected to be present within the general vicinity of the Project Location. Surveys were carried out during daylight hours, for at least 4 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, and 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.	Flooded areas with an annual mixed species aggregation concentration of 100 or more individuals of any of the following listed species:		

Table 4. Seasonal Concentration Areas Evaluation of Significance Criteria

Seasonal Concentration Area	Evaluation Methods	Evaluation Criteria ¹
	significant habitats can be seen on Maps 5-1 to 5-5 of the Romney Wind Energy Centre Natural Heritage Site Investigation Report (NRSI 2017).	
	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 Romney Wind Energy Centre Natural Heritage Site Investigation Report (NRSI 2017).	
Bat Maternity Colony	The presence of suitable cavity trees within these candidate bat maternity colonies (BMA-001, BMA-002, and BMA-003) 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, BMA-002, and BMA-003, and the habitats will be treated as significant.	N/A
Colonially – Nesting Bird Breeding Habitat (Tree/Shrubs)	The presence of nest bowls within the 3 candidate colonially-nesting bird breeding habitats (tree/shrubs) could not be identified during the site investigation phase of the project as site access was denied within each of these habitats (CBT-001, CBT-002 and CBT-003). As such, no further surveys will be conducted, and the habitats will be treated as significant.	N/A
Landbird Migratory Stopover Areas	The presence of landbird migratory stopover habitats within the 2 candidate habitats (LMS-001 and LMS-002) could not be verified as site access was denied. As such, no further surveys will be conducted, and the habitats will be treated as significant.	N/A

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

5.4.2 Rare Vegetation Communities and Specialized Wildlife Habitat

A single rare vegetation community has been identified within 120m of the Project Location. This community, a Bur Oak Mineral Deciduous Swamp (SWDM1-2), is a provincially rare (S3) vegetation community. Modified ELC for southern Ontario (Lee *et al.* 1998) was used to delineate this feature, and site-specific characteristics were 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 habitats 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 ¹		
Other Rare Vegetation Communities	The presence of a rare vegetation community, ORV-001, was identified during the site investigation phase of the Project. This community, a Bur Oak Mineral Deciduous Swamp (SWDM1-2), is a provincially rare (S3) vegetation community. As such, no further surveys are required and the habitat has already been determined to be significant. The location of the significant habitat can be seen on Maps 5-1 to 5-5.	Any provincially rare S1, S2, and/or S3 vegetation communities listed in Appendix M of the SWHTG.		
Amphibian Breeding Habitat (Woodland)	The presence of suitable amphibian woodland breeding habitat within the single candidate habitat (AWO-001) could not be verified as site access was denied. As such, no further surveys will be conducted, and the habitat will be treated as significant.	N/A		

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; MNRF 2016b) list or has 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 2016), but which have not been designated as Threatened or Endangered in Ontario (MNRF 2016b). 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.

NRSI biologists have considered the specific habitat requirements of several species of conservation concern that are known to occur within the vicinity of the Romney WEC. Habitat searches for these species were conducted as part of the site investigation. A total of 61 habitats for 11 unique species of conservation concern have been identified within 120m of the Project Location that have the potential to be impacted by the operation of this project. General evaluation criteria used in the evaluation of significance of the species of conservation concern 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 6 below.

Table 6. Special Concern and Rare Wildlife Species Evaluation of Significance Criteria								
Species of Conservation Concern	Evaluation Methods	Evaluation Criteria						
Bald Eagle (Haliaeetus leucocephalus)	evidence will be recorded for each species. The monitoring locations within these candidate significant habitats have been determined based on conditions of the site. The locations of each of the candidate significant habitats and proposed monitoring stations can be seen on Maps 6-1 to 6-5. Conducted NRSI conducted bald eagle behaviour surveys at a candidate bald eagle habitat, BAL-001, in 2016. An eagle nest was first documented on March 10, 2016, at which time 2 bald eagles were observed in the general proximity of the nest. A total of 3 surveys were conducted in March to assess whether the nest was active. Following the completion of 3 separate visits in the month of March 2016 to confirm the current use and activity of the nest, NRSI conducted additional surveys in accordance with the Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E (MNRF 2015), the Bald Eagle Habitat Management Guidelines (OMNR 1987) and the Birds and Bird Habitats: Guidelines for Wind Power Projects (OMNR 2011a). The monitoring program consisted of twice-weekly surveys near the active bald eagle nest, from April 5, 2016 until August 22, 2016. Twice-weekly surveys from April 5 to August 22 allowed for the collection of all appropriate information regarding the behaviour and habitat use of the bald eagles, including any successful juveniles, to support the delineation of habitat zones surrounding the nest in accordance with the Bald Eagle Habitat Management Guidelines (OMNR 1987). The behavioural study focused on the flight patterns, sight lines, perching habitat, and foraging habitat of the nesting eagles and any juveniles in order to refine the habitat zones around the nest. On each survey date, a biologist, using binoculars or a spotting scope, documented and mapped all activity of the eagle(s) for at least 4 hours of combined monitoring from 3 separate suitable vantage points on each visit. All bald eagle behaviour was recorded during the survey, with the approximate location, age, and behaviour (e.g. courtship, ne	Presence of an active bald eagle nest will confirm significance.						
	Appendix I.							

Species of	ern and Rare Wildlife Species Evaluation of Significand	e Criteria		
Conservation Concern	Evaluation Methods	Evaluation Criteria		
	If the possible bald eagle nest record, BAL-002, is determined to be present and active during the preconstruction site investigation survey, the following methods will be conducted at this location before construction of the Project begins.			
	Following the completion of a site investigation survey in the month of March to confirm the current use and activity of the nest, NRSI will conduct additional surveys in accordance with the Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E (MNRF 2015), the Bald Eagle Habitat Management Guidelines (OMNR 1987) and the Birds and Bird Habitats: Guidelines for Wind Power Projects (OMNR 2011a). The monitoring program will consist of twice-weekly surveys near the active bald eagle nest, from March until mid-August, or whenever the chick(s) leaves the nest. Twice-weekly surveys during this time period will allow for the collection of all appropriate information regarding the behaviour and habitat use of the bald eagles, including any successful juveniles, to support the delineation of habitat zones surrounding the nest in accordance with the Bald Eagle Habitat Management Guidelines (OMNR 1987).			
	The behavioural study will focus on the flight patterns, sight lines, perching habitat, and foraging habitat of the nesting eagles and any juveniles in order to refine the habitat zones around the nest.			
	On each survey date, a biologist, using binoculars or a spotting scope, will document and map all activity of the eagle(s) for at least 4 hours of combined monitoring from at least one suitable vantage point on each visit. All bald eagle behaviour will be recorded during the survey, with the approximate location, age, and behaviour (e.g. courtship, nest building, incubation), including mapping all flight corridors and habitats used. All bald eagle movements within an 800m radius from the nest will be recorded. Surveys will be completed during calm, clear weather conditions, when possible.			
	The location of the potentially significant nest can be seen on Maps 5-1 to 5-5.			
Wood Thrush (Hylocichla mustelina)	The presence of breeding wood thrush within the single candidate habitat (WTH-001) cannot be verified as site access was denied. As such, no further surveys will be conducted, and the habitat will be treated as significant.	N/A		
Vegetation				
Slightly Hirsute Sedge (Carex hirsutella)	Four habitats, SHS-002, SHS-004, SHS-005, and SHS-006, could not be verified as candidate significant wildlife habitat due to denied site access. With no reasonable alternative investigation options for these habitats, they have been treated as significant and no further monitoring is proposed.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.		

Species of	cern and Rare Wildlife Species Evaluation of Significand	
Conservation	Evaluation Methods	Evaluation Criteria
Concern	L Complessed	
	Conducted Area searches to identify the presence of this species were completed within SHS-001, SHS-003, and SHS-007, in conjunction with ELC surveys, during a time period when this species exhibits characteristics that allow for confident identification, which is during the fruiting period of April to June 2016.	
	The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-5.	
	Four habitats, SQS-002, SQS-004, SQS-005, and SQS-006, could not be verified as candidate significant wildlife habitat due to denied site access. With no reasonable alternate investigation options for these habitats, they have been treated as significant and no further monitoring is proposed.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
Squarrose Sedge (<i>Carex squarrosa</i>)	Conducted Area searches to identify the presence of this species were completed within SQS-001, SQS-003, and SQS-007, in conjunction with ELC surveys, during a time period when this species exhibits characteristics that allow for confident identification, which is during the fruiting period of April to September 2016.	
	The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-5.	
	Four habitats, CSE-002, CSE-004, CSE-005, and CSE-006, could not be verified as candidate significant wildlife habitat due to denied site access. With no reasonable alternative investigation options for these habitats, they have been treated as significant and no further monitoring is proposed.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.
	The following evaluation methods (outlined below) will be implemented for CSE-001, CSE-003 and CSE-007.	
Cattail Sedge (Carex typhina)	Proposed One standardized area search will be conducted within each candidate SWH for cattail sedge. 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, which is during the fruiting period of June to August.	
	The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-5.	
Shellbark Hickory (<i>Carya laciniosa</i>)	One habitat, SHH-004, has been confirmed significant based on the observation of this species during ELC surveys conducted from an adjacent property. As there was restricted site access, a full stem count could not be conducted and this habitat has been confirmed significant. Due to restricted access, no post-construction monitoring will be completed within this	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.

Species of	6. Special Concern and Rare Wildlife Species Evaluation of Significance Criteria						
Conservation Concern	Evaluation Methods	Evaluation Criteria					
	habitat. Three habitats, SHH-002, SHH-005 and SHH-006, could not be verified as candidate significant wildlife habitat due to denied site access. With no reasonable alternative investigation options for these habitats, they have been treated as significant and no further monitoring is proposed.						
	Conducted Area searches to identify the presence of this species were completed within SHH-001, SHH-003, and SHH-007, in conjunction with ELC surveys, during a time period when this species exhibits characteristics that allow for confident identification, which is during the leaf-on period of May to September 2016.						
	The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-5.						
	Four habitats, PAS-002, PAS-004, PAS-005, and PAS-006, could not be verified as candidate significant wildlife habitats due to denied site access. With no reasonable alternative investigation options for these habitats, they have been treated as significant and no further monitoring is required. The following evaluation methods (outlined below) will	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.					
Pumpkin Ash (Fraxinus profunda)	be implemented for PAS-001, PAS-003 and PAS-007. Proposed One standardized area search will be conducted within each candidate SWH for pumpkin ash. 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, which is when fruit and leaves are present between August and mid-October. The locations of each of the candidate significant						
Black Gum (<i>Nyssa sylvatica</i>)	habitats can be seen on Maps 6-1 to 6-5. Four habitats, BGU-002, BGU-004, BGU-005, and BGU-006, could not be verified as candidate significant wildlife habitat due to denied site access. With no reasonable alternate investigation options for these habitats, they have been treated as significant and no further monitoring is proposed. Conducted Area searches to identify the presence of this species were completed within BGU-001, BGU-003, and BGU-007, in conjunction with ELC surveys, during a time period when this species exhibits characteristics that allow for confident identification, which is during the leaf-on period of May to September 2016.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.					
	The locations of each of the candidate significant						

Species of	special Concern and Rare Wildlife Species Evaluation of Significance Criteria						
Conservation Concern	Evaluation Methods	Evaluation Criteria					
	habitats can be seen on Maps 6-1 to 6-5.						
Halberd-leaved	Four habitats, HLS-002, HLS-004, HLS-005, and HLS-006, could not be verified as candidate significant wildlife habitats due to denied site access. With no reasonable alternative investigation options for these habitats, they have been treated as significant and no further monitoring is required. The following evaluation methods (outlined below) will be implemented for HLS-001 and HLS-003.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.					
Halberd-leaved Smartweed (<i>Persicaria arifolia</i>)	Proposed One standardized area search will be conducted within each candidate SWH for halberd-leaved smartweed. 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, which is when flowers are present between June and July.						
	The locations of each of the candidate significant habitats can be seen on Maps 6-1 to 6-5.						
Shumard Oak (Quercus shumardii)	Four habitats, SHO-002, SHO-004, SHO-005, and SHO-006, could not be verified as candidate significant wildlife habitat due to denied site access. With no reasonable alternative investigation options for these habitats, they have been treated as significant and no further monitoring is proposed. Conducted An area search to identify the presence of this species was completed within 1 of the 7 candidate habitats (SHO-007), in conjunction with ELC surveys. Although this survey was not completed during the period of October to December when leaves and fully-developed acorns are available, no Shumard oak or similar oak species were observed within this habitat. The following evaluation methods (outlined below) will be implemented for SHO-001 and SHO-003.	Presence of this species within the habitat identified will trigger discussions with MNRF to determine if this represents a significant species population.					
	One standardized area search will be conducted within each SWH for Shumard oak. 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						

Species of Conservation Concern	Conservation Evaluation Methods				
Climbing Prairie Rose (Rosa setigera)	One habitat, CPR-001, could not be verified as candidate significant wildlife habitat due to denied site access. With no reasonable alternative investigation options for this habitat, it has been treated as significant and no further monitoring is proposed.	N/A			

6.0 Evaluation of Significance Results

6.1 Woodlands

Site-specific field investigations and basemapping have identified 13 candidate significant woodlands within 120m of the Romney WEC Project Location. After comparing site specific conditions to provincially established significance criteria, NRSI has identified 11 significant woodlands within 120m of the Project Location. There are no significant woodlands within the Project Location. The 11 significant woodlands within 120m of the Project Location will be carried forward to the EIS. Most of these woodlands are dominated by deciduous trees in forest and swamp communities, and range in size from 1.02ha to 22.40ha. The detailed evaluation of significance for each of these woodlands is provided in Table 7, which also details the specific location of these natural features in relation to project components. Maps 3-1 to 3-5 show the location of each of these significant woodlands in relation to the Project Location.

Table 7. Woodland Evaluation of Significance for the Romney Wind Energy Centre

					Ecological Functions (Y/N)									
Feature ID	Size (ha)	Composition	Distance to Project Location (m)	Woodland Size (>2ha, Y/N)	Interior	Proximity to Other Significant Woodlands or Habitats	Linkages	Water Protection	Woodland Diversity	Woodland Width (>40m, Y/N)	Uncommon Characteristics (Y/N)	Significant (Y/N)	Map(s)	EIS Required (Y/N)
WOD-001₁ Woodland	4.23	SWDM3-3	WT – 8 (T17) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Yes	No	No	No	No	Yes	Yes	Yes, white trout lily (<i>Erythronium</i> <i>albidum</i>)	Yes	3-2 3-3	Yes
WOD-002 ₃ Woodland	3.27	FODM9-3 SWDM1-2**	WT ->120 AR ->120 CL ->0.1* CA ->0.1* SI ->120	Yes	No	No	No	Yes	Yes	Yes	No	Yes	3-2 3-3	Yes
WOD-003 ₃ Woodland	5.99	SWDM1-2	WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	Yes	No	No	No	Yes	Yes	Yes	No	Yes	3-2 3-3	Yes
WOD-004 ₁ Woodland	2.61	SWDM3-3	WT ->120 AR - 1 CL - 1 CA - 1 SI ->120	Yes	No	No	No	No	Yes	Yes	No	Yes	3-3 3-4	Yes
WOD-005 ₃ Woodland	4.54	SWDM3-3 TAGM1	WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Yes	No	No	No	Yes	Yes	Yes	No	Yes	3-4	Yes
WOD-006 ₃ Woodland	2.84	SWDM3-3	WT – 34 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Yes	No	No	No	No	Yes	Yes	Yes, white trout lily	Yes	3-5	Yes

Table 7. Woodland Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Composition	Distance to Project Location (m)	Woodland Size (>2ha, Y/N)	Ecological Functions (Y/N)									
					Interior	Proximity to Other Significant Woodlands or Habitats	Linkages	Water Protection	Woodland Diversity	Woodland Width (>40m, Y/N)	Uncommon Characteristics (Y/N)	Significant (Y/N)	Map(s)	EIS Required (Y/N)
WOD-007 ₂ Woodland	10.01	SWDM3-3 TAGM1 TAGM3** FODM7	WT – 25 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Yes	No	No	No	Yes	Yes	Yes	Yes, wild garlic (<i>Allium</i> canadense var. canadense) and white trout lily	Yes	3-5	Yes
WOD-008₁ Woodland	0.74	TAGM2	WT ->120 AR ->120 CL ->0.1* CA ->0.1* SI ->120	No	No	No	No	No	No	Yes	No	No	N/A	No
WOD-009 ₂ Woodland	1.02	FODM7-1 TAGM1** TAGM3**	WT ->120 AR - 109 CL - 109 CA - 109 SI ->120	No	No	No	No	No	Yes	Yes	Yes, wild garlic and white trout lily	Yes	3-4 3-5	Yes
WOD-011₁ Woodland	22.40	SWDM3-3	WT ->120 AR ->120 CL ->0.1* CA ->0.1* SI ->120	Yes	Yes	No	No	Yes	Yes	Yes	Yes, spring cress (<i>Cardamine</i> <i>bulbosa</i>) and wild garlic	Yes	3-4	Yes
WOD-012 ₃ Woodland	1.22	SWDM3-2	WT ->120 AR ->120 CL - 65 CA - 65 SI ->120	No	No	No	No	No	Yes	No	No	No	N/A	No
WOD-013 ₂ Woodland	9.52	SWDM4-2 FODM6-5** WODM5** FODM	WT ->120 AR ->120 CL ->0.1* CA ->0.1* SI ->120	Yes	No	No	No	Yes	Yes	Yes	No	Yes	3-5	Yes

Table 7. Woodland Evaluation of Significance for the Romney Wind Energy Centre

					Ec	ological F	uncti	ons (Y	/N)					
Feature ID	Size (ha)	Composition	Distance to Project Location (m)	Woodland Size (>2ha, Y/N)	Interior	Proximity to Other Significant Woodlands or Habitats	Linkages	Water Protection	Woodland Diversity	Woodland Width (>40m, Y/N)	Uncommon Characteristics (Y/N)	Significant (Y/N)	мар (5)	EIS Required (Y/N)
WOD-014 ₃ Woodland	1.48	SWDM3-3	WT - >120 AR - 101 CL - 68 CA - 68 SI - >120	No	No	No	No	No	Yes	Yes	No	Yes	3-5	Yes

^{*} Mapping depicts this woodland being overlapped by the Project Location; however, all project components, including the construction disturbance area, will be located adjacent to the woodland (>0.1m).

Subscripts:

- 1: Entire woodland delineated on site.
- 2: Woodland delineated via a combination of methods: on site and property line/aerial photograph.
- 3: Entire woodland delineated from property line/ aerial photograph.

Legend

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

CA: Construction Activity/Temporary Infrastructure/Laydown Area

SI: Supporting Infrastructure - Building/Substation/Meteorological Tower/Point of Interconnect

^{**} ELC codes have not been mapped as they have been identified as inclusions (<0.5ha in size).

6.2 Wetlands

NRSI biologists identified a total of 8 candidate significant wetlands within 120m of the Romney WEC Project Location during site investigations. As these wetlands are not within the Project Location, NRSI has implemented the Appendix C evaluation process from the NHA Guide (OMNR 2012) to treat all wetlands as significant and apply appropriate mitigation measures as part of the EIS.

The wetlands identified within 120m of the Project Location include individual wetland communities, as well as two small wetland complexes (WET 006 and 008), ranging in size from 1.48ha to 23.62ha. These wetlands typically represent remnant treed swamps with constructed drainage. The Project Location and area within 120m is generally represented by very flat land with silty clay or clay loam soils. The wetlands in the area are largely dominated by trees such as Freeman's maple (*Acer x freemanii*), bur oak (*Quercus macrocarpa*), white elm (*Ulmus americana*), and hickory species (*Carya* spp.).

The wetlands identified within 120m of the Romney WEC Project Location are described in Table 8. Maps 3-1 to 3-5 show the location of each of the significant wetlands in relation to the Project Location.

Table 8. Wetland Evaluation of Significance for the Romney Wind Energy Centre

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 ₂ Wetland Big Creek Watershed	4.23	Individual Wetland SWDM3-3 100% Swamp 1 Vegetation Community 100% silty clay soils 100%Palustrine	WT – 8 (T17) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Wetland Type: Swamp Site Type: Palustrine Vegetation Communities: S1 h, ts, gc Proximity to other Wetlands: 3.7km to WET-002 (swamp), not hydrologically connected Interspersion: estimated to be very low; rectangular shape with one community Open Water: absent	Flood Attenuation: High, no wetlands upstream, wetland ~20% of its catchment basin Water Quality Improvement: Moderately High — palustrine with no 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 Recharge: Moderate — Palustrine with clay soils	Habitat for locally significant plant species (Field Observation – Geum vernum²)	Treat as Provincially Significant	3-2 3-3	Yes
WET-002 ₃ Wetland East Two Creeks Watershed	5.99	Individual Wetland SWDM1-2 100% Swamp 1 Vegetation Community 100% clay ¹ 100% Palustrine	WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	Wetland Type: Swamp Site Type: Palustrine Vegetation Communities: S1 h Proximity to other Wetlands: 1.03km to WET-003 (swamp), not hydrologically connected Interspersion: estimated to be very low; rectangular	Flood Attenuation: High, no wetlands upstream, wetland ~20% of its catchment basin Water Quality Improvement: Moderately High — palustrine with no inflows, >50% agricultural landscape; dominated by deciduous trees; swamp with <50% coverage of organic soils¹; no indication of	None known	Treat as Provincially Significant	3-2 3-3	Yes

Table 8. Wetland Evaluation of Significance for the Romney Wind Energy Centre

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)
				shapes with one community Open Water: absent	groundwater discharge Shoreline Erosion Control: None Groundwater Recharge: Moderate – Palustrine with clay soils				
WET-003 ₁ Wetland East Two Creeks Watershed	2.61	Individual Wetland SWDM3-3 100% Swamp 1 Vegetation Community 100% silty clay loam 100% Palustrine	WT - >120 AR - 1 CL - 1 CA - 1 SI - >120	Wetland Type: Swamp Site Type: Palustrine Vegetation Communities: S1 h, ts, gc Proximity to other Wetlands: 1.03km to WET-002 (swamp), not hydrologically connected Interspersion: estimated to be very low; rectangular shape with one community Open Water: absent	Flood Attenuation: High, no wetlands upstream, wetland ~20% of its catchment basin Water Quality Improvement: Moderately High — palustrine with no 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 Recharge: Moderate to High — Palustrine with clay/loam soils	Habitat for locally significant plant species (Field Observation – Geum vernum²)	Treat as Provincially Significant	3-3 3-4	Yes
WET-004 ₃ Wetland East Two Creeks Watershed	4.11	Individual Wetland SWDM3-3 100% Swamp 1 Vegetation	WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Wetland Type: Swamp Site Type: Palustrine Vegetation Communities: S1 h, ts, gc Proximity to other	 Flood Attenuation: High, no wetlands upstream, wetland ~35% of its catchment basin Water Quality Improvement: High – palustrine with 	Habitat for provincially significant plant species (Field Observation – Carya laciniosa)	Treat as Provincially Significant	3-4	Yes

Table 8. Wetland Evaluation of Significance for the Romney Wind Energy Centre

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)
		Community 100% clay ¹ 100% Palustrine		Wetlands: 1.49km to WET-003 (swamp), not hydrologically connected Interspersion: estimated to be very low; rectangular shape with one community Open Water: absent	weak inflows, >50% agricultural landscape; dominated by deciduous trees; swamp with <50% coverage of organic soils ¹ ; no indication of groundwater discharge • Shoreline Erosion Control: None • Groundwater Recharge: Moderate – Palustrine with clay soils				
WET-005 ₃ Wetland East Two Creeks Watershed	2.84	Individual Wetland SWDM3-3 100% Swamp 1 Vegetation Community 100% clay ¹ 100% Palustrine	WT – 34 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Wetland Type: Swamp Site Type: Palustrine Vegetation Communities: S1 h, ts, gc Proximity to other Wetlands: 1.86km to WET-006 (swamp), not hydrologically connected Interspersion: estimated to be very low; rectangular shape with one community Open Water: absent	Flood Attenuation: High, no wetlands upstream, wetland ~15% of its catchment basin Water Quality Improvement: High – palustrine with weak inflows, >50% agricultural landscape; dominated by deciduous trees; swamp with <50% coverage of organic soils¹; no indication of groundwater discharge Shoreline Erosion Control: None Groundwater Recharge: Moderate – Palustrine with clay soils	Habitat for provincially significant plant species (Field Observation – Carya laciniosa)	Treat as Provincially Significant	3-5	Yes

Table 8. Wetland Evaluation of Significance for the Romney Wind Energy Centre

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-006₂ Yellow Creek Watershed	4.77	Wetland Complex SWDM4-2 SWDM3-3 100% Swamp 2 Vegetation Communities 100% silty clay, silty clay loam 100% Riverine	WT – 111 (T13) AR – 28 CL – 13 CA – 13 SI – >120	Wetland Type: Swamp Site Type: Riverine Vegetation Communities: S1 h, ne S2 h, ts, gc Proximity to other Wetlands: 1.45km to WET-009 (swamp), not hydrologically connected Interspersion: estimated to be low to moderate; convoluted community edges with 2 community polygons Open Water: Type 1 (<5%)	 Flood Attenuation: Low - WET-007 and WET-008 upstream, wetland very small in relation to its 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/shrubs on banks, some emergent vegetation in watercourse Groundwater Recharge: Low - Riverine with clay and loam soils 	Habitat for locally significant plant species (Field Observation – Geum vernum² in hS1 and hS2) Fish Habitat - Low, ~4ha of seasonally flooded "swamp", plus ~0.5ha permanent watercourse ("low marsh"), unvegetated / weakly vegetated with tallgrass fish habitat	Treat as Provincially Significant	3-5	Yes
WET-008 ₂ Yellow Creek Watershed	23.62	Wetland Complex SWDM3-3 SWDM3-2 100% Swamp 2 Vegetation Communities 100% silty clay,	WT - >120 AR - >120 CL - >0.1* CA - >0.1* SI - >120	Wetland Type: Swamp Site Type: Palustrine Vegetation Communities: S1 h S2 h, ts, gc Proximity to other Wetlands: 1.84km to unidentified wetland	Flood Attenuation: High, no wetlands upstream, wetland ~40% of its catchment basin Water Quality Improvement: High – largely palustrine with weak inflows, >50% agricultural landscape; dominated by	 Habitat for provincially significant plant species (Field Observation – Carya laciniosa) Habitat for locally significant plant 	Treat as Provincially Significant	3-4	Yes

Table 8. Wetland Evaluation of Significance for the Romney Wind Energy Centre

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)
		clay ¹ 94% Palustrine 6% Isolated		(investigated but >120m from Project Location) (swamp), hydrologically connected Interspersion: estimated to be low; 2 wetland units both of linear/rectangular shapes Open Water: absent	deciduous trees; swamp with <50% coverage of organic soils¹; no indication of groundwater discharge • Shoreline Erosion Control: None • Groundwater Recharge: Moderate – Palustrine with clay soils	species (Field Observation – Carex bromoides, Galium asprellum, Geum vernum² in hS2)			
WET-009 ₃ Wharram Drain Watershed	1.48	Individual Wetland SWDM3-3 100% Swamp 1 Vegetation Community 100% clay ¹ 100% Isolated	WT - >120 AR - 74 CL - 68 CA - 68 SI - >120	Wetland Type: Swamp Site Type: Isolated Vegetation Communities: S1 h Proximity to other Wetlands: 725m to unidentified wetland (investigated but >120m from Project Location) (swamp), not hydrologically connected Interspersion: estimated to be low; 1 wetland unit of linear/rectangular shapes Open Water: absent	Flood Attenuation: Medium, no wetlands upstream, wetland ~5% of its catchment basin Groundwater recharge: Medium – Isolated with clay soils	None	Treated as Provincially Significant	N/A	Yes

^{*} Mapping depicts this wetland as being overlapped by the Project Location; however, all project components, including the construction disturbance area, will be located adjacent to the wetland (>0.1m).

Subscripts:

- 1: Entire wetland delineated on site.
- 2: Wetland delineated via a combination of methods: on site and property line/aerial photograph.
- 3: Entire wetland delineated from property line/ aerial photograph.

Superscripts:

- 1: Ontario Agricultural College 1930
- 2: Oldham 1993
- 3: Ministry of Natural Resources and Forestry 2014

Legend

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

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

6.3 Wildlife Habitat

During the detailed site investigation of the Romney WEC, NRSI biologists examined natural features in and within 120m of the Project Location for the presence of candidate significant wildlife habitats. Several candidate SWH types have been identified in and within 120m of the Project Location. 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 2012) 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 candidate significant wildlife habitat identified in the site investigation has been summarized, with more detailed information on survey methods and results provided in Table 9.

6.3.1 Seasonal Concentration Areas

Based on the results of the site investigation, NRSI biologists have identified 37 candidate 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.

After comparing waterfowl stopover and staging habitat (terrestrial) survey results to provincially established significance criteria, NRSI has determined that the 29 candidate waterfowl stopover and staging habitats (terrestrial) are not significant. A total of 3 candidate bat maternity colonies, 3 colonially-nesting bird breeding habitats (tree/shrubs), and 2 landbird migratory stopover areas have been treated as significant, as access to these habitats was denied. The general habitat characteristics and distance relative to the Project Location for each of these seasonal concentration areas can be found in Table 9 and are shown on Maps 4-1 to 4-5.

In addition, the site investigation identified a number of seasonal concentration areas as generalized candidate SWH, including 1 raptor wintering area, 4 bat maternity colonies, 4 turtle wintering areas, 2 colonially-nesting bird breeding habitat (tree/shrubs), 2

colonially-nesting bird breeding habitats (ground), 1 butterfly migratory stopover area, 3 landbird migratory stopover areas, and 1 deer winter congregation area. As these habitats are located within 120m of project components that do not contain an "X" or "Y" in Table 19 of the NHA Guide (OMNR 2012), they have been considered as generalized candidate SWH and are not specifically discussed further in this report but are shown on Maps 7-1 to 7-5.

6.3.2 Rare Vegetation Communities and Specialized Wildlife Habitats

The results of the site investigation have identified 1 rare vegetation community and 1 candidate specialized wildlife habitat within 120m of the Project Location.

One rare vegetation community (ORV-001) has been confirmed as significant based on the presence of a provincially significant vegetation community. Property access to the feature where the single specialized wildlife habitat (AWO-001) is located was denied and therefore this habitat has been treated as significant. The general habitat characteristics and distance relative to the Project Location for this specialized wildlife habitat can be found in Table 9 and is shown on Maps 5-1 to 5-5.

In addition, the site investigation identified a number of rare vegetation communities and specialized wildlife habitats as generalized candidate SWH, including 1 rare vegetation community, 1 waterfowl nesting area and 1 amphibian breeding habitat (woodland). As these habitats are located within 120m of project components that do not contain an "X" or "Y" in Table 19 of the NHA Guide (OMNR 2012), they have been considered as generalized candidate SWH and are not specifically discussed further in this report but are shown on Maps 7-1 to 7-5.

6.3.3 Habitats for Species of Conservation Concern

The results of the site investigation have identified 64 candidate habitats for species of conservation concern within 120m of the Project Location, although many of these habitats are a single feature that provide candidate habitat for multiple species of conservation concern. After comparing site specific conditions to provincially established significance criteria, NRSI has identified that 2 habitats for Special Concern and rare wildlife species have been confirmed significant based on the presence of the species (BAL-001 and SHH-004), and 15 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 pre-construction surveys to be undertaken to confirm the significance of the habitat. An additional 34 habitats for Special Concern and rare wildlife species will continue to be treated as significant without the commitment for additional pre-construction surveys, as site access has been denied and alternate survey locations (i.e. roadside, accessible adjacent property) are not available and/or not suitable to meet the habitat survey requirements. A total of 13 habitats for Special Concern and rare wildlife species have been confirmed not significant, where ELC and wildlife surveys were completed during the appropriate time of year. 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 9 and are shown on Maps 6-1 to 6-5.

In addition, the site investigation identified a number of habitats for Species of Conservation Concern and Special Concern and rare wildlife species as generalized candidate SWH, including:

- 1 habitat for open country breeding bird habitat,
- 7 habitats for terrestrial crayfish,
- 7 habitats for eastern wood-pewee,
- 2 habitats for wood thrush,
- 12 habitats for red-headed woodpecker,
- 5 habitats for slightly hirsute sedge,
- 5 habitats for squarrose sedge,
- 5 habitats for cattail sedge,
- 5 habitats for shellbark hickory,
- 5 habitats for pumpkin ash,
- 5 habitats for black gum,
- 3 habitats for halberd-leaved smartweed,
- 5 habitats for Shumard oak,
- 1 habitat for climbing prairie rose,
- 1 habitat for hackberry emperor,
- 3 habitats for monarch, and
- 2 habitats for common sootywing.

As these habitats are located within 120m of project components that do not contain an "X" or "Y" in Table 19 of the NHA Guide (OMNR 2012), they have been considered as generalized candidate SWH and are not specifically discussed further in this report but are shown on Maps 7-1 to 7-5.

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
Seasonal Concen	tration A						
WST-001 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	41.73	OAGM1 Annual Row Crop Communities May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT - >120 AR - 21 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-002 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	80.29	OAGM1 Annual Row Crop Communities (soybeans) 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-003 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	39.67	OAGM1 Annual Row Crop Communities (corn) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT - >120 AR - 21 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-004 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	49.68	OAGM1 Annual Row Crop Communities (corn) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT - >120 AR - >120 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) ₃	54.00	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating	WT - >120 AR - >120 CL - Overlapping CA - Overlapping SI - >120	Number of Indicator Species Observations: Visit 1: American Wigeon (5) Visit 2: None Visit 3: None	Not Significant	N/A	No

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		waterfowl (Tundra Swan).					
WST-006 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	41.25	OAGM1 Annual Row Crop Communities (corn) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT - >120 AR - >120 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-007 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	25.78	OAGM1 Annual Row Crop Communities May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT - >120 AR - >120 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-008 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	60.41	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT - >120 AR - >120 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-009 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	19.70	OAGM1 Annual Row Crop Communities (corn) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT ->120 AR - >120 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-010 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	37.03	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating	WT – Overlapping (T17) 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

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		waterfowl (Tundra Swan).					
WST-011 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	33.30	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating	WT - >120 AR - >120 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
		waterfowl (Tundra Swan).					
WST-012 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	35.87	OAGM1 Annual Row Crop Communities (corn) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT – Overlapping (T2) 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-013 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	62.22	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT – Overlapping (T2) 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-014 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	40.48	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT – 60 (T7) 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-015 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	20.68	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and	WT - >120 AR - >120 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

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		resting habitat for migrating waterfowl (Tundra Swan).					
WST-016 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	19.68	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT - >120 AR - >120 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-017 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	9.69	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT - >120 AR - >120 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-018 Waterfowl Stopover and Staging Habitat (Terrestrial) ₃	20.56	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT - >120 AR - >120 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-019 Waterfowl Stopover and Staging Area (Terrestrial) ₃	20.86	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT - >120 AR - >120 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-020 Waterfowl Stopover and Staging Area (Terrestrial) ₃	26.69	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating	WT - >120 AR - 19 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

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
	1	waterfowl (Tundra Swan).					
WST-021 Waterfowl Stopover and Staging Area (Terrestrial) ₃	20.59	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT - >120 AR - >120 CL - Overlapping CA - Overlapping SI - >120	Number of Indicator Species Observations: Visit 1: None Visit 2: American Wigeon (5) Visit 3: None	Not Significant	N/A	No
WST-022 Waterfowl Stopover and Staging Area (Terrestrial) ₃	20.35	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT – 45 (T15) AR – Overlapping CL – Overlapping CA – Overlapping SI – >120	Number of Indicator Species Observations: Visit 1: None Visit 2: American Wigeon (1) Visit 3: None	Not Significant	N/A	No
WST-023 Waterfowl Stopover and Staging Area (Terrestrial) ₃	40.98	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT – Overlapping (T15) 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-024 Waterfowl Stopover and Staging Area (Terrestrial) ₃	40.55	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT - >120 AR - >120 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-025 Waterfowl Stopover and Staging Area (Terrestrial) ₃	75.54	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT - >120 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-026 Waterfowl Stopover and	18.58	OAGM1 Annual Row Crop Communities (soybeans)	WT - >120 AR - 24 CL - Overlapping	Number of Indicator Species Observations: Visit 1: None	Not Significant	N/A	No

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
Staging Area (Terrestrial) ₃		May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	CA – Overlapping SI – >120	Visit 2: None Visit 3: None			
WST-027 Waterfowl Stopover and Staging Area (Terrestrial) ₃	27.65	OAGM1 Annual Row Crop Communities (soybeans) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT - >120 AR - >120 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-028 Waterfowl Stopover and Staging Area (Terrestrial) ₃	52.94	OAGM1 Annual Row Crop Communities (corn) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT - >120 AR - >120 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-029 Waterfowl Stopover and Staging Area (Terrestrial) ₃	33.21	OAGM1 Annual Row Crop Communities (corn) May provide foraging and resting habitat for migrating waterfowl (Tundra Swan).	WT - >120 AR - >120 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
BMA-001 Bat Maternity Colony ₃	5.99	SWDM1-2 Bur Oak Mineral Deciduous Swamp May provide roosting habitat and shelter for raising young.	WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	4-2 4-3	Yes
BMA-002 Bat Maternity Colony ₃	4.54	SWDM3-3 Swamp Maple Mineral Deciduous Swamp May provide roosting habitat and shelter for raising young.	WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	4-4	Yes

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
BMA-003 Bat Maternity Colony ₃	2.84	SWDM3-3 Swamp Maple Mineral Deciduous Swamp May provide roosting habitat and shelter for raising young.	WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	4-5	Yes
CBT-001 Colonially- Nesting Breeding Bird Habitat (Trees/Shrubs) ₃	5.99	SWDM1-2 Bur Oak Mineral Deciduous Swamp May provide nesting and breeding habitat for colonial birds using trees or shrubs.	WT - 79 (T1) AR - 70 CL - 70 CA - 70 SI - >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	4-2 4-3 4-4	Yes
CBT-002 Colonially- Nesting Breeding Bird Habitat (Trees/Shrubs) ₃	4.54	SWDM3-3 Swamp Maple Mineral Deciduous Swamp May provide nesting and breeding habitat for colonial birds using trees or shrubs.	WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	4-4	Yes
CBT-003 Colonially- Nesting Breeding Bird Habitat (Trees/Shrubs) ₃	2.84	SWDM3-3 Swamp Maple Mineral Deciduous Swamp May provide nesting and breeding habitat for colonial birds using trees or shrubs.	WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	4-5	Yes
LMS-001 Landbird Migratory Stopover Area ₃	4.54	SWDM3-3 Swamp Maple Mineral Deciduous Swamp May provide suitable stopover habitat for a significant abundance and diversity of migratory	WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	4-4	Yes

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		landbirds.					, ,
LMS-002 Landbird Migratory Stopover Area ₃	2.84	SWDM3-3 Swamp Maple Mineral Deciduous Swamp May provide suitable stopover habitat for a significant abundance and diversity of migratory landbirds.	WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	4-5	Yes
Rare Vegetation C	ommuni	ties and Specialized Wildlife	Habitats			T	
ORV-001 Other Rare Vegetation Communities Habitat ₃	5.99	SWDM1-2 Bur Oak Mineral Deciduous Swamp May provide habitat for species of conservation concern and increase vegetation diversity.	WT - 79 (T1) AR - 70 CL - 70 CA - 70 SI - >120	Confirmed to contain provincially rare vegetation community, Bur Oak Mineral Deciduous Swamp (SWMD1-2).	Significant	5-2 5-3	Yes
AWO-001 Amphibian Breeding Habitat (Woodland) ₃	5.99	SWDM1-2 Bur Oak Mineral Deciduous Swamp May be used for egg laying, breeding and feeding habitat.	WT - 79 (T1) AR - 70 CL - 70 CA - 70 SI - >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	5-2 5-3	Yes
Special Concern a	nd Rare					T	
EWP-001 Eastern Wood- Pewee Habitat ₁	4.23	SWDM3-3 Swamp Maple Mineral Deciduous Swamp May be used for breeding, nesting or foraging habitat.	WT - 8 (T17) AR - >0.1* CL - >0.1* CA - >0.1* SI - >120	To be confirmed through pre- construction surveys. See Table 6 for full survey methodology.	Treated as Significant	SCC-A (1) 6-2 6-3	Yes**
EWP-002 Eastern Wood- Pewee Habitat ₃	5.99	SWDM1-2 Bur Oak Mineral Deciduous Swamp May be used for breeding, nesting or foraging habitat.	WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-B (1) 6-2 6-3	Yes

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
EWP-003 Eastern Wood- Pewee Habitat ₃	4.54	SWDM3-3 Swamp Maple Mineral Deciduous Swamp May be used for breeding, nesting or foraging habitat.	WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Although access was denied to EWP- 003 during 2016, pre-construction surveys will be conducted at the property line adjacent to this habitat. See Table 6 for full survey methodology.	Treated as Significant	SCC-D (1) 6-4	Yes**
EWP-004 Eastern Wood- Pewee Habitat ₃	2.84	SWDM3-3 Swamp Maple Mineral Deciduous Swamp May be used for breeding, nesting or foraging habitat.	WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Although access was denied to EWP- 004 during 2016, pre-construction surveys will be conducted at the property line adjacent to this habitat. See Table 6 for full survey methodology.	Treated as Significant	SCC-G (1) 6-5	Yes**
EWP-005 Eastern Wood- Pewee Habitat ₂	10.01	TAGM1 Coniferous Plantation TAGM3 Deciduous Plantation SWDM3-3 Swamp Maple Mineral Deciduous Swamp FODM7 Fresh – Moist Lowland Deciduous Forest May be used for breeding, nesting or foraging habitat.	WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	To be confirmed through pre- construction surveys in the accessible portions of the candidate feature. See Table 6 for full survey methodology.	Treated as Significant	SCC-H (1) 6-5	Yes**
BAL-001 Bald Eagle Habitat ₃	201.0	OAGM1 Annual Row Crop Communities CVR Residential May be used by bald eagles for nesting, foraging	WT – Overlapping ¹ (T10)*** AR – Overlapping*** CL – Overlapping*** CA – Overlapping*** SI – >120***	As a result of the bald eagle behaviour surveys conducted in 2016, active use of this nest by bald eagle was confirmed. According to the SWH Criteria Schedules for Ecoregion 7E (MNRF 2015), the bald eagle nest, plus a 400m to 800m zone around the nest is considered to be the Significant Wildlife Habitat. As	Significant	SCC-F (12) 6-4 6-5	Yes

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		and perching habitat.		well, the Bald Eagle Habitat Management Guidelines (OMNR 1987) outline the 3 habitat zones for nest trees, which include the primary zone (0-100m), secondary zone (100- 200m) and tertiary zone (200-400m, and up to 800m). The results of the comprehensive behavioural study were used to define the habitat zones based on site- specific landscape and habitat features, as well as observed behaviour of nesting bald eagles. The data collected was analyzed to identify important life cycle (i.e. perching, foraging, etc.) habitats for the eagles, and was used to refine the habitat zones around the nest accordingly (see Map 8). Bald eagle behaviour monitoring field			
BAL-002 ₃	be investion the pr Funct	attributes and composition to determined when the site gation is completed as part of e-construction commitments for this feature. ion may include use by bald es for nesting, foraging and perching habitat.	$WT -> 120^{2}$ $AR -> 120^{2}$ $CL -> 120^{2}$ $CA -> 120^{2}$ $SI -> 120^{2}$	notes are provided in Appendix I. A pre-construction site investigation survey will be conducted at this feature to determine if the bald eagle nest is present and active. If active, additional behaviour surveys will be conducted to define the habitat zones of the nesting bald eagles. According to the SWH Criteria Schedules for Ecoregion 7E (MNRF 2015), the bald eagle nest, plus a 400m to 800m zone around the nest is considered to be the Significant Wildlife Habitat. As well, the Bald Eagle Habitat Management Guidelines (OMNR 1987) outline the 3 habitat zones for nest trees, which	Treated as Significant	6-4	Yes

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
				include the primary zone (0-100m), secondary zone (100-200m) and tertiary zone (200-400m, and up to 800m).			
				The results of the comprehensive behavioural study will be used to define the habitat zones based on site-specific landscape and habitat features, as well as observed behaviour of nesting bald eagles. The data collected will be analyzed to identify important life cycle (i.e. perching, foraging, etc.) habitats for the eagles, and will be used to refine the habitat zones around the nest accordingly.			
WTH-001 Wood Thrush Habitat ₃	5.99	SWDM1-2 Bur Oak Mineral Deciduous Swamp May be used for breeding, nesting or foraging habitat.	WT - 79 (T1) AR - 70 CL - 70 CA - 70 SI - >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-B (3) 6-2 6-3	Yes
SHS-001 Slightly Hirsute Sedge Habitat ₁	4.23	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 - 8 (T17) AR - >0.1* CL - >0.1* CA - >0.1* SI - >120	This species was not observed during area searches conducted in conjunction with ELC mapping on May 11, 2016.	Not Significant	N/A	No
SHS-002 Slightly Hirsute Sedge Habitat ₃	5.99	SWDM1-2 Bur Oak Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote	WT - 79 (T1) AR - 70 CL - 70 CA - 70 SI - >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-B (5) 6-2 6-3	Yes

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		optimal growth and fecundity of this species.					Ì
SHS-003 Slightly Hirsute Sedge Habitat₁	2.61	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 - 1 CL - 1 CA - 1 SI - >120	This species was not observed during area searches conducted in conjunction with ELC mapping on May 10, 2016.	Not Significant	N/A	No
SHS-004 Slightly Hirsute Sedge Habitat ₃	4.54	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 – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-D (5) 6-4	Yes
SHS-005 Slightly Hirsute Sedge Habitat ₃	2.84	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 – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-G (5) 6-5	Yes
SHS-006 Slightly Hirsute Sedge Habitat ₂	5.73	SWDM3-3 Swamp Maple Mineral Deciduous Swamp FODM7 Fresh – Moist Lowland Deciduous Forest Provides suitable moisture regime, light levels, and	WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-J (5) 6-5	Yes

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		soil properties that promote optimal growth and fecundity of this species.					
SHS-007 Slightly Hirsute Sedge Habitat₁	1.02	FODM7-1 Fresh – Moist White Elm Lowland Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT - >120 AR - 109 CL - 109 CA - 109 SI - >120	This species was not observed during area searches conducted in conjunction with ELC mapping on May 10, 2016.	Not Significant	N/A	No
SQS-001 Squarrose Sedge Habitat ₁	4.23	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 - 8 (T17) AR - >0.1* CL - >0.1* CA - >0.1* SI - >120	This species was not observed during area searches conducted in conjunction with ELC mapping on May 11, 2016.	Not Significant	N/A	No
SQS-002 Squarrose Sedge Habitat ₃	5.99	SWDM1-2 Bur Oak Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT - 79 (T1) AR - 70 CL - 70 CA - 70 SI - >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-B (6) 6-2 6-3	Yes
SQS-003 Squarrose Sedge Habitat ₁	2.61	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 - 1 CL - 1 CA - 1 SI - >120	This species was not observed during area searches conducted in conjunction with ELC mapping on May 10, 2016.	Not Significant	N/A	No

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
SQS-004 Squarrose Sedge Habitat₃	4.54	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 – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-D (6) 6-4	Yes
SQS-005 Squarrose Sedge Habitat ₃	2.84	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 – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-G (6) 6-5	Yes
SQS-006 Squarrose Sedge Habitat ₂	5.73	SWDM3-3 Swamp Maple Mineral Deciduous Swamp FODM7 Fresh – Moist Lowland Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-J (6) 6-5	Yes
SQS-007 Squarrose Sedge Habitat ₁	1.02	FODM7-1 Fresh – Moist White Elm Lowland Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT - >120 AR - 109 CL - 109 CA - 109 SI - >120	This species was not observed during area searches conducted in conjunction with ELC mapping on May 10, 2016.	Not Significant	N/A	No

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
CSE-001 Cattail Sedge Habitat₁	4.23	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 - 8 (T17) AR - >0.1* CL - >0.1* CA - >0.1* SI - >120	To be confirmed through pre- construction surveys. See Table 6 for full survey methodology.	Treated as Significant	SCC-A (7) 6-2 6-3	Yes**
CSE-002 Cattail Sedge Habitat₃	5.99	SWDM1-2 Bur Oak Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-B (7) 6-2 6-3	Yes
CSE-003 Cattail Sedge Habitat₁	2.61	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 - 1 CL - 1 CA - 1 SI - >120	To be confirmed through pre- construction surveys. See Table 6 for full survey methodology.	Treated as Significant	SCC-C (7) 6-3 6-4	Yes**
CSE-004 Cattail Sedge Habitat₃	4.54	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 – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-D (7) 6-4	Yes
CSE-005 Cattail Sedge Habitat₃	2.84	SWDM3-3 Swamp Maple Mineral Deciduous Swamp	WT – 15 (T9) AR – >0.1* CL – >0.1*	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-G (7) 6-5	Yes

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

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 - >0.1* SI - >120				
CSE-006 Cattail Sedge Habitat₂	5.73	SWDM3-3 Swamp Maple Mineral Deciduous Swamp FODM7 Fresh – Moist Lowland Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-J (7) 6-5	Yes
CSE-007 Cattail Sedge Habitat₁	1.02	FODM7-1 Fresh – Moist White Elm Lowland Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT - >120 AR - 109 CL - 109 CA - 109 SI - >120	To be confirmed through pre- construction surveys. See Table 6 for full survey methodology.	Treated as Significant	SCC-E (7) 6-4 6-5	Yes**
SHH-001 Shellbark Hickory Habitat ₁	4.23	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 - 8 (T17) AR - >0.1* CL - >0.1* CA - >0.1* SI - >120	This species was not observed during area searches conducted in conjunction with ELC mapping on May 11, 2016.	Not Significant	N/A	No
SHH-002 Shellbark Hickory	5.99	SWDM1-2 Bur Oak Mineral	WT – 79 (T1) AR – 70	Site access was denied, and therefore no site-specific results could	Treated as Significant	SCC-B (8)	Yes

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
Habitat₃		Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	CL - 70 CA - 70 SI - >120	be collected.		6-2 6-3	
SHH-003 Shellbark Hickory Habitat ₁	2.61	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 - 1 CL - 1 CA - 1 SI - >120	This species was not observed during area searches conducted in conjunction with ELC mapping on May 10, 2016.	Not Significant	N/A	No
SHH-004 Shellbark Hickory Habitat ₃	4.54	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 – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	This species was confirmed to be present in the candidate habitat when observed during ELC surveys and mapping conducted on May 10, 2016.	Significant	SCC-D (8) 6-4	Yes
SHH-005 Shellbark Hickory Habitat ₃	2.84	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 – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-G (8) 6-5	Yes
SHH-006 Shellbark Hickory Habitat ₂	5.73	SWDM3-3 Swamp Maple Mineral Deciduous Swamp FODM7	WT - 56 (T13) AR - >0.1* CL - >0.1*CA - >0.1* SI - >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-J (8) 6-5	Yes

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		Fresh – Moist Lowland Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.					
SHH-007 Shellbark Hickory Habitat ₁	1.02	FODM7-1 Fresh – Moist White Elm Lowland Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT - >120 AR - 109 CL - 109 CA - 109 SI - >120	This species was not observed during area searches conducted in conjunction with ELC mapping on May 10, 2016.	Not Significant	N/A	No
PAS-001 Pumpkin Ash Habitat₁	4.23	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 – 8 (T17) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	To be confirmed through pre- construction surveys. See Table 6 for full survey methodology.	Treated as Significant	SCC-A (9) 6-2 6-3	Yes**
PAS-002 Pumpkin Ash Habitat₃	5.99	SWDM1-2 Bur Oak Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT - 79 (T1) AR - 70 CL - 70 CA - 70 SI - >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-B (9) 6-2 6-3	Yes
PAS-003 Pumpkin Ash Habitat₁	2.61	SWDM3-3 Swamp Maple Mineral Deciduous Swamp	WT - >120 AR - 1 CL - 1 CA - 1	To be confirmed through pre- construction surveys. See Table 6 for full survey	Treated as Significant	SCC-C (9) 6-3 6-4	Yes**

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

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.	SI - >120	methodology.			
PAS-004 Pumpkin Ash Habitat ₃	4.54	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 - 15 (T8) AR - >0.1* CL - >0.1* CA - >0.1* SI - >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-D (9) 6-4	Yes
PAS-005 Pumpkin Ash Habitat₃	2.84	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 – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-G (9) 6-5	Yes
PAS-006 Pumpkin Ash Habitat₂	5.73	SWDM3-3 Swamp Maple Mineral Deciduous Swamp FODM7 Fresh – Moist Lowland Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT - 56 (T13) AR - >0.1* CL - >0.1* CA - >0.1* SI - >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-J (9) 6-5	Yes
PAS-007 Pumpkin Ash Habitat₁	1.02	FODM7-1 Fresh – Moist White Elm Lowland Deciduous Forest	WT - >120 AR - 109 CL - 109	To be confirmed through pre- construction surveys.	Treated as Significant	SCC-E (9) 6-4	Yes**

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

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 – 109 SI – >120	See Table 6 for full survey methodology		6-5	
BGU-001 Black Gum Habitat₁	4.23	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 – 8 (T17) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	This species was not observed during area searches conducted in conjunction with ELC mapping on May 11, 2016.	Not Significant	N/A	No
BGU-002 Black Gum Habitat₃	5.99	SWDM1-2 Bur Oak Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT - 79 (T1) AR - 70 CL - 70 CA - 70 SI - >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-B (13) 6-2 6-3	Yes
BGU-003 Black Gum Habitat₁	2.61	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 - 1 CL - 1 CA - 1 SI - >120	This species was not observed during area searches conducted in conjunction with ELC mapping on May 10, 2016.	Not Significant	N/A	No
BGU-004 Black Gum Habitat₃	4.54	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and	WT – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-D (13) 6-4	Yes

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		soil properties that promote optimal growth and fecundity of this species.					
BGU-005 Black Gum Habitat ₃	2.84	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 – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-G (13) 6-5	Yes
BGU-006 Black Gum Habitat ₂	5.73	SWDM3-3 Swamp Maple Mineral Deciduous Swamp FODM7 Fresh – Moist Lowland Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-J (13) 6-5	Yes
BGU-007 Black Gum Habitat₁	1.02	FODM7-1 Fresh – Moist White Elm Lowland Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT - >120 AR - 109 CL - 109 CA - 109 SI - >120	This species was not observed during area searches conducted in conjunction with ELC mapping on May 10, 2016.	Not Significant	N/A	No
HLS-001 Halberd-leaved Smartweed Habitat ₁	4.23	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture	WT - 8 (T17) AR - >0.1* CL - >0.1* CA - >0.1* SI - >120	To be confirmed through pre- construction surveys. See Table 6 for full survey methodology.	Treated as Significant	SCC-A (14) 6-2 6-3	Yes**

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		regime, light levels, and soil properties that promote optimal growth and fecundity of this species.					
HLS-002 Halberd-leaved Smartweed Habitat ₃	5.99	SWDM1-2 Bur Oak Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT - 79 (T1) AR - 70 CL - 70 CA - 70 SI - >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-B (14) 6-2 6-3	Yes
HLS-003 Halberd-leaved Smartweed Habitat ₁	2.61	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 - 1 CL - 1 CA - 1 SI - >120	To be confirmed through pre- construction surveys. See Table 6 for full survey methodology.	Treated as Significant	SCC-C (14) 6-3 6-4	Yes**
HLS-004 Halberd-leaved Smartweed Habitat ₃	4.54	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 - 15 (T8) AR - >0.1* CL - >0.1* CA - >0.1* SI - >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-D (14) 6-4	Yes
HLS-005 Halberd-leaved Smartweed Habitat ₃	2.84	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and	WT – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-G (14) 6-5	Yes

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

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.					
HLS-006 Halberd-leaved Smartweed Habitat ₂	5.73	SWDM3-3 Swamp Maple Mineral Deciduous Swamp FODM7 Fresh – Moist Lowland Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-J (14) 6-5	Yes
SHO-001 Shumard Oak Habitat₁	4.23	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 -8 (T17) AR - >0.1* CL - >0.1* CA - >0.1* SI - >120	To be confirmed through pre- construction surveys. See Table 6 for full survey methodology.	Treated as Significant	SCC-A (10) 6-2 6-3	Yes**
SHO-002 Shumard Oak Habitat ₃	5.99	SWDM1-2 Bur Oak Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 79 (T1) AR – 70 CL – 70 CA – 70 SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-B (10) 6-2 6-3	Yes
SHO-003 Shumard Oak Habitat ₁	2.61	SWDM3-3 Swamp Maple Mineral Deciduous Swamp Provides suitable moisture regime, light levels, and soil properties that promote	WT - >120 AR - 1 CL - 1 CA - 1 SI - >120	To be confirmed through pre- construction surveys. See Table 6 for full survey methodology.	Treated as Significant	SCC-C (10) 6-3 6-4	Yes**

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		optimal growth and fecundity of this species.					
SHO-004 Shumard Oak Habitat ₃	4.54	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 – 15 (T8) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-D (10) 6-4	Yes
SHO-005 Shumard Oak Habitat ₃	2.84	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 – 15 (T9) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-G (10) 6-5	Yes
SHO-006 Shumard Oak Habitat ₂	5.73	SWDM3-3 Swamp Maple Mineral Deciduous Swamp FODM7 Fresh – Moist Lowland Deciduous Forest Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT – 56 (T13) AR – >0.1* CL – >0.1* CA – >0.1* SI – >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-J (10) 6-5	Yes
SHO-007 Shumard Oak Habitat ₁	1.02	FODM7-1 Fresh – Moist White Elm Lowland Deciduous Forest Provides suitable moisture regime, light levels, and	WT - >120 AR - 109 CL - 109 CA - 109 SI - >120	No Shumard oak or similar oak species were observed during area searches conducted in conjunction with ELC mapping on May 10, 2016.	Not Significant	N/A	No

Table 9. Individually Delineated Wildlife Habitat Evaluation of Significance for the Romney Wind Energy Centre

Feature ID	Size (ha)	Attributes, Composition, Functions	Distance to Project Location (m)	Evaluation Results	Significance	Map(s)	EIS Required (Y/N)
		soil properties that promote optimal growth and fecundity of this species.					
CPR-001 Climbing Prairie Rose Habitat ₃	31.45	MEMM3 Dry - Fresh Mixed Meadow Provides suitable moisture regime, light levels, and soil properties that promote optimal growth and fecundity of this species.	WT - >120 AR - 25 CL - >0.1* CA - >0.1* SI - >120	Site access was denied, and therefore no site-specific results could be collected.	Treated as Significant	SCC-L (11) 6-5	Yes

^{*} Mapping depicts this SWH being overlapped by the Project Location; however, all project components, including the construction disturbance area, will be located adjacent to the SHW (>0.1m).

Subscripts:

- 1: Entire feature delineated on site.
- 2: Feature delineated via a combination of methods: on site and property line/aerial photograph, where portions were not accessible.
- 3: Entire feature delineated from property line/ aerial photograph.

Legend

WT: Wind Turbine AR: Access Road CL: Collector lines

CA: Construction Activity/Temporary Infrastructure/ Laydown Area

SI: Supporting Infrastructure - Building/Substation/Meteorological Tower/Point of Interconnect

^{**} Pre-construction survey commitment has been made to determine if the candidate significant wildlife habitat is significant or non-significant.

^{***} This distance is measured from the edge of the 800m buffer surrounding the location of the bald eagle nest to the infrastructure. The nest itself is located an additional 800m from infrastructure.

¹ The 800m buffer surrounding the nest overlaps with the air space occupied by the turbine blades of T10 and does not overlap the proposed construction disturbance area of the turbine.

² The possible bald eagle nest record is located greater than 120m from the Project Location, but has the potential to overlap with Project Infrastructure if an up to 800m buffer is applied to the habitat, which will be determined by the site investigation and/or evaluation of significance surveys completed as part of pre-construction commitments for this feature.

7.0 Evaluation of Significance Summary

In accordance with the REA Regulation, NRSI biologists have completed a comprehensive evaluation of significance of the Romney WEC. The results of the evaluation have been discussed in the preceding sections, and have been summarized in Table 10 below. This summary includes woodlands, wetlands, and SWH, some of which will be carried forward to the EIS, as noted in the table. Habitat composition, functions and distances from each feature to project infrastructure can be found in Table 7 (woodlands), Table 8 (wetlands) and Table 9 (significant wildlife habitat).

Based on a comprehensive evaluation of significance, following provincial guidelines and standards, NRSI biologists have determined that several significant features, including 11 woodlands, 8 wetlands, and 61 SWH, are present within 120m of the Project Location. No significant or provincially significant natural features are located within the Project Location. Several additional wildlife habitats have been considered generalized SWH as per Appendix D of the NHA Guide (2012). Each of these significant or generalized SWH are listed in Table 10 below, and will be discussed in detail in the EIS which will be prepared under a separate cover.

Table 10. Summary of Candidate Significant Natural Features and Wildlife Habitats within the Romney Wind Energy Centre

Feature ID	Feature Within Project Location (Y/N)	Feature Within 120m of Project Location (Y/N)	Feature Individually Delineated* (Y/N)	Significant/EIS Required (Y/N)
Woodlands				
WOD-001	No	Yes	Yes	Yes
WOD-002	No	Yes	Yes	Yes
WOD-003	No	Yes	Yes	Yes
WOD-004	No	Yes	Yes	Yes
WOD-005	No	Yes	Yes	Yes
WOD-006	No	Yes	Yes	Yes
WOD-007	No	Yes	Yes	Yes
WOD-008	No	Yes	Yes	No
WOD-009	No	Yes	Yes	Yes
WOD-011	No	Yes	Yes	Yes
WOD-012	No	Yes	Yes	No
WOD-013	No	Yes	Yes	Yes
WOD-014	No	Yes	Yes	Yes
Wetlands				

Table 10. Summary of Candidate Significant Natural Features and Wildlife Habitats within the Romney Wind Energy Centre

Energy Centre				
Feature ID	Feature Within Project Location (Y/N)	Feature Within 120m of Project Location (Y/N)	Feature Individually Delineated* (Y/N)	Significant/EIS Required (Y/N)
WET-001	No	Yes	Yes	Yes (Treated as Significant)
WET-002	No	Yes	Yes	Yes (Treated as Significant)
WET-003	No	Yes	Yes	Yes (Treated as Significant)
WET-004	No	Yes	Yes	Yes (Treated as Significant)
WET-005	No	Yes	Yes	Yes (Treated as Significant)
WET-006	No	Yes	Yes	Yes (Treated as Significant)
WET-008	No	Yes	Yes	Yes (Treated as Significant)
WET-009	No	Yes	Yes	Yes (Treated as Significant)
Individually Delineated Candidat	e Significant Wild	dlife Habitats		
WST-001	Yes	Yes	Yes	No
WST-002	Yes	Yes	Yes	No
WST-003	Yes	Yes	Yes	No
WST-004	Yes	Yes	Yes	No
WST-005	Yes	Yes	Yes	No
WST-006	Yes	Yes	Yes	No
WST-007	Yes	Yes	Yes	No
WST-008	Yes	Yes	Yes	No
WST-009	Yes	Yes	Yes	No
WST-010	Yes	Yes	Yes	No
WST-011	Yes	Yes	Yes	No
WST-012	Yes	Yes	Yes	No
WST-013	Yes	Yes	Yes	No
WST-014	Yes	Yes	Yes	No
WST-015	Yes	Yes	Yes	No
WST-016	Yes	Yes	Yes	No
WST-017	Yes	Yes	Yes	No
WST-018	Yes	Yes	Yes	No
WST-019	Yes	Yes	Yes	No
WST-020	Yes	Yes	Yes	No
WST-021	Yes	Yes	Yes	No
WST-022	Yes	Yes	Yes	No
WST-023	Yes	Yes	Yes	No
WST-024	Yes	Yes	Yes	No
WST-025	Yes	Yes	Yes	No No
WST-026	Yes	Yes	Yes	No No
WST-027 WST-028	Yes Yes	Yes Yes	Yes Yes	No No
WST-028 WST-029	Yes	Yes	Yes	No No
BMA-001	No	Yes	Yes	Yes (Treated as Significant)
BMA-002	No	Yes	Yes	Yes (Treated as Significant)

Table 10. Summary of Candidate Significant Natural Features and Wildlife Habitats within the Romney Wind Energy Centre

Energy Centre		1		
Feature ID	Feature Within Project Location (Y/N)	Feature Within 120m of Project Location (Y/N)	Feature Individually Delineated* (Y/N)	Significant/EIS Required (Y/N)
BMA-003	No	Yes	Yes	Yes (Treated as Significant)
CBT-001	No	Yes	Yes	Yes (Treated as Significant)
CBT-002	No	Yes	Yes	Yes (Treated as Significant)
CBT-003	No	Yes	Yes	Yes (Treated as Significant)
LMS-001	No	Yes	Yes	Yes (Treated as Significant)
LMS-002	No	Yes	Yes	Yes (Treated as Significant)
ORV-001	No	Yes	Yes	Yes
AWO-001	No	Yes	Yes	Yes (Treated as Significant)
EWP-001	No	Yes	Yes	Yes** (Treated as Significant)
EWP-002	No	Yes	Yes	Yes (Treated as Significant)
EWP-003	No	Yes	Yes	Yes** (Treated as Significant)
EWP-004	No	Yes	Yes	Yes** (Treated as Significant)
EWP-005	No	Yes	Yes	Yes** (Treated as Significant)
BAL-001	Yes	Yes	Yes	Yes
BAL-002	Possible ¹	Possible ¹	Yes	Yes** (Treated as Significant)
WTH-001	No	Yes	Yes	Yes (Treated as Significant)
SHS-001	No	Yes	Yes	No
SHS-002	No	Yes	Yes	Yes (Treated as Significant)
SHS-003	No	Yes	Yes	No
SHS-004	No	Yes	Yes	Yes (Treated as Significant)
SHS-005	No	Yes	Yes	Yes (Treated as Significant)
SHS-006	No	Yes	Yes	Yes (Treated as Significant)
SHS-007	No	Yes	Yes	No
SQS-001	No	Yes	Yes	No
SQS-002	No	Yes	Yes	Yes (Treated as Significant)
SQS-003	No	Yes	Yes	No
SQS-004	No	Yes	Yes	Yes (Treated as Significant)
SQS-005	No	Yes	Yes	Yes (Treated as Significant)
SQS-006	No	Yes	Yes	Yes (Treated as Significant)

Table 10. Summary of Candidate Significant Natural Features and Wildlife Habitats within the Romney Wind Energy Centre

Energy Centre	Energy Centre						
Feature ID	Feature Within Project Location (Y/N)	Feature Within 120m of Project Location (Y/N)	Feature Individually Delineated* (Y/N)	Significant/EIS Required (Y/N)			
SQS-007	No	Yes	Yes	No			
CSE-001	No	Yes	Yes	Yes** (Treated as Significant)			
CSE-002	No	Yes	Yes	Yes (Treated as Significant) Yes**			
CSE-003	No	Yes	Yes	(Treated as Significant)			
CSE-004	No	Yes	Yes	Yes (Treated as Significant)			
CSE-005	No	Yes	Yes	Yes (Treated as Significant)			
CSE-006	No	Yes	Yes	Yes (Treated as Significant)			
CSE-007	No	Yes	Yes	Yes** (Treated as Significant)			
SHH-001	No	Yes	Yes	No			
SHH-002	No	Yes	Yes	Yes (Treated as Significant)			
SHH-003	No	Yes	Yes	No			
SHH-004	No	Yes	Yes	Yes			
SHH-005	No	Yes	Yes	Yes (Treated as Significant)			
SHH-006	No	Yes	Yes	Yes (Treated as Significant)			
SHH-007	No	Yes	Yes	No Yes**			
PAS-001	No	Yes	Yes	(Treated as Significant) Yes			
PAS-002	No	Yes	Yes	(Treated as Significant) Yes**			
PAS-003	No	Yes	Yes	(Treated as Significant) Yes			
PAS-004	No	Yes	Yes	(Treated as Significant)			
PAS-005	No	Yes	Yes	Yes (Treated as Significant) Yes			
PAS-006	No	Yes	Yes	(Treated as Significant) Yes**			
PAS-007	No	Yes	Yes	(Treated as Significant)			
BGU-001	No	Yes	Yes	No			
BGU-002	No	Yes	Yes	Yes (Treated as Significant)			
BGU-003	No	Yes	Yes	No Voc			
BGU-004	No	Yes	Yes	Yes (Treated as Significant)			
BGU-005	No	Yes	Yes	Yes (Treated as Significant) Yes			
BGU-006	No	Yes	Yes	(Treated as Significant)			
BGU-007	No	Yes	Yes	No			

Table 10. Summary of Candidate Significant Natural Features and Wildlife Habitats within the Romney Wind Energy Centre

Energy Centre						
Feature ID	Feature Within Project Location (Y/N)	Feature Within 120m of Project Location (Y/N)	Feature Individually Delineated* (Y/N)	Significant/EIS Required (Y/N)		
HLS-001	No	Yes	Yes	Yes** (Treated as Significant)		
HLS-002	No	Yes	Yes	Yes (Treated as Significant)		
HLS-003	No	Yes	Yes	Yes** (Treated as Significant)		
HLS-004	No	Yes	Yes	Yes (Treated as Significant)		
HLS-005	No	Yes	Yes	Yes (Treated as Significant)		
HLS-006	No	Yes	Yes	Yes (Treated as Significant)		
SHO-001	No	Yes	Yes	Yes** (Treated as Significant)		
SHO-002	No	Yes	Yes	Yes (Treated as Significant)		
SHO-003	No	Yes	Yes	Yes** (Treated as Significant)		
SHO-004	No	Yes	Yes	Yes (Treated as Significant)		
SHO-005	No	Yes	Yes	Yes (Treated as Significant)		
SHO-006	No	Yes	Yes	Yes (Treated as Significant)		
SHO-007	No	Yes	Yes	No		
CPR-001	No	Yes	Yes	Yes (Treated as Significant)		
Generalized Candidate Significant	Wildlife Habitat					
Raptor Wintering Areas	No	Yes	No	Yes		
Bat Maternity Colonies	No	Yes	No	Yes		
Turtle Wintering Areas	No	Yes	No	Yes		
Colonially – Nesting Bird Breeding Habitat (Tree/Shrub)	No	Yes	No	Yes		
Colonially – Nesting Bird Breeding Habitat (Ground)	No	Yes	No	Yes		
Migratory Butterfly Stopover Area	No	Yes	No	Yes		
Landbird Migratory Stopover Areas	No	Yes	No	Yes		
Deer Winter Congregation Area	No	Yes	No	Yes		
Other Rare Vegetation Communities	No	Yes	No	Yes		
Waterfowl Nesting Area	No	Yes	No	Yes		
Amphibian Breeding Habitat (Woodland)	No	Yes	No	Yes		
Open Country Bird Breeding Habitat	No	Yes	No	Yes		
Terrestrial Crayfish	No	Yes	No	Yes		
Eastern Wood-Pewee	No	Yes	No	Yes		
Wood Thrush	No	Yes	No	Yes		
Red-headed Woodpecker	No	Yes	No	Yes		
Slightly Hirsute Sedge	No	Yes	No	Yes		

Table 10. Summary of Candidate Significant Natural Features and Wildlife Habitats within the Romney Wind **Energy Centre**

Feature ID	Feature Within Project Location (Y/N)	Feature Within 120m of Project Location (Y/N)	Feature Individually Delineated* (Y/N)	Significant/EIS Required (Y/N)
Squarrose Sedge	No	Yes	No	Yes
Cattail Sedge	No	Yes	No	Yes
Shellbark Hickory	No	Yes	No	Yes
Pumpkin Ash	No	Yes	No	Yes
Black Gum	No	Yes	No	Yes
Halberd-leaved Smartweed	No	Yes	No	Yes
Shumard Oak	No	Yes	No	Yes
Climbing Prairie Rose	No	Yes	No	Yes
Hackberry Emperor	No	Yes	No	Yes
Monarch	No	Yes	No	Yes
Common Sootywing	No	Yes	No	Yes

^{*}All woodlands and wetlands were individually delineated. Candidate SWH was individually delineated as per Table 19 of the NHA Guide (OMNR 2012).

^{**}Pre-construction survey commitment has been made to determine if the candidate significant wildlife habitat is

significant or non-significant.

¹The possible bald eagle nest record is located greater than 120m from the Project Location, but has the potential to overlap with Project Infrastructure if an up to 800m buffer is applied to the habitat, which will be determined by the site investigation and/or evaluation of significance surveys completed as part of pre-construction commitments for this feature.

8.0 References

Publications

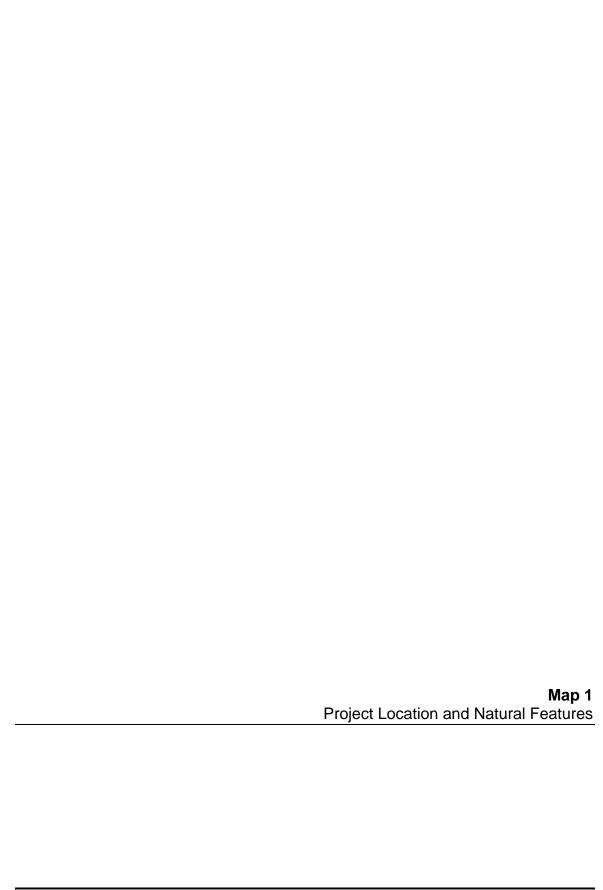
- Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification (ELC) for Southern Ontario: First Approximation and its Application. Ontario Ministry of Natural Resources, Southcentral Science Section, Science Development and Transfer Branch. SCSS Field Guide FG-02.
- Ministry of Natural Resources and Forestry (MNRF). 2015. Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E. January 2015.
- Ministry of Natural Resources and Forestry (MNRF). 2014. Ontario Wetland Evaluation System: Southern Manual. 3rd Edition, Version 3.3. August 2014.
- Natural Resource Solutions Inc. (NRSI). 2017. Romney Wind Energy Centre: Natural Heritage Site Investigation Report. June 2017.
- Oldham, M.J. 1993. Distribution and Status of the Vascular Plants of Southwestern Ontario. Ontario Ministry of Natural Resources, Aylmer. 150 pp.
- Ontario Agricultural College. 1930. County of Kent Soil Map: Soil Survey Report No. 3. Department of Chemistry, Ontario Agricultural College. The Experimental Farms Branch, Ottawa. [map].
- Ontario Ministry of Natural Resources (OMNR). 2012. Natural Heritage Assessment (NHA) Guide for Renewable Energy Projects. November 2012.
- Ontario Ministry of Natural Resources (OMNR). 2011a. Birds and Bird Habitats: Guidelines for Wind Power Projects. December 2011.
- Ontario Ministry of Natural Resources (OMNR). 2011b. Bat and Bat Habitats: Guidelines for Wind Power Projects. July 2011.
- Ontario Ministry of Natural Resources (OMNR). 1987. Bald Eagle Habitat Management Guidelines. June 1987.

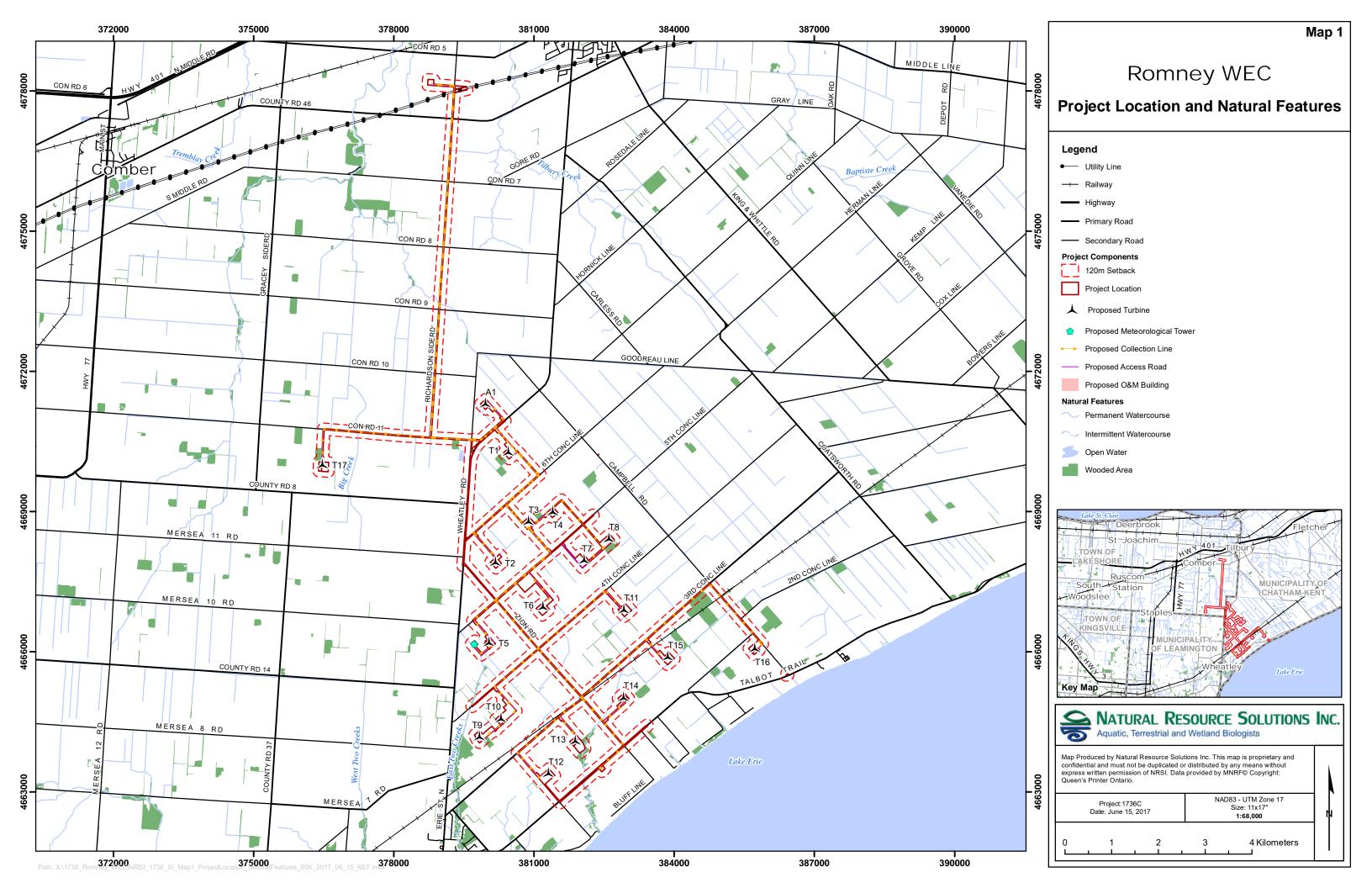
Internet Sources

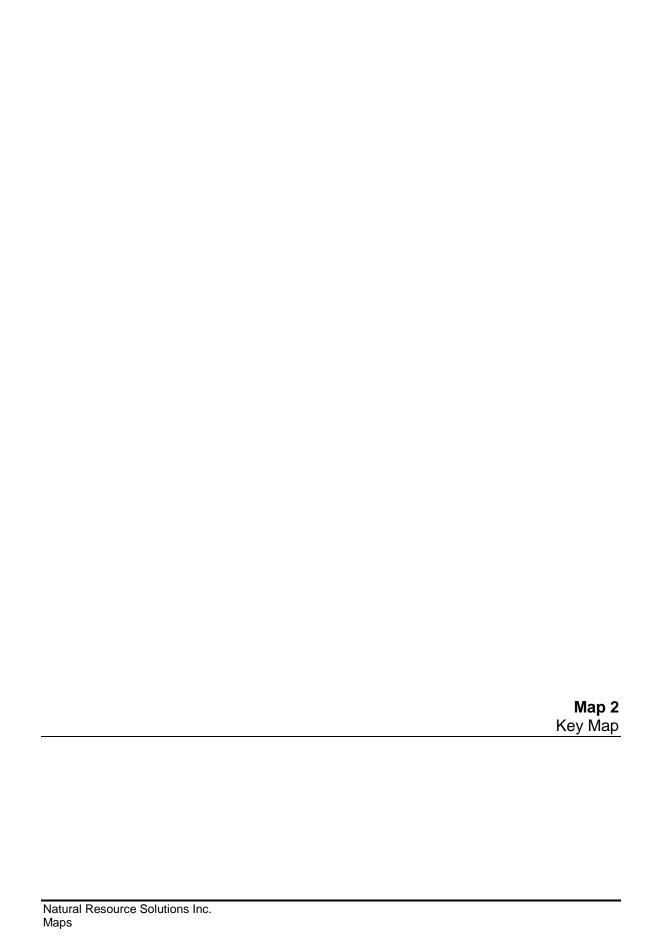
- Committee on the Status of Endangered Wildlife In Canada (COSEWIC). 2016. Species information. Available at: http://www.cosewic.gc.ca/eng/sct5/index_e.cfm (Accessed October 17, 2016).
- Ministry of Natural Resources and Forestry (MNRF). 2016a. Land Information Ontario (LIO). Available at: https://www.ontario.ca/page/land-information-ontario (Accessed September 15, 2016).

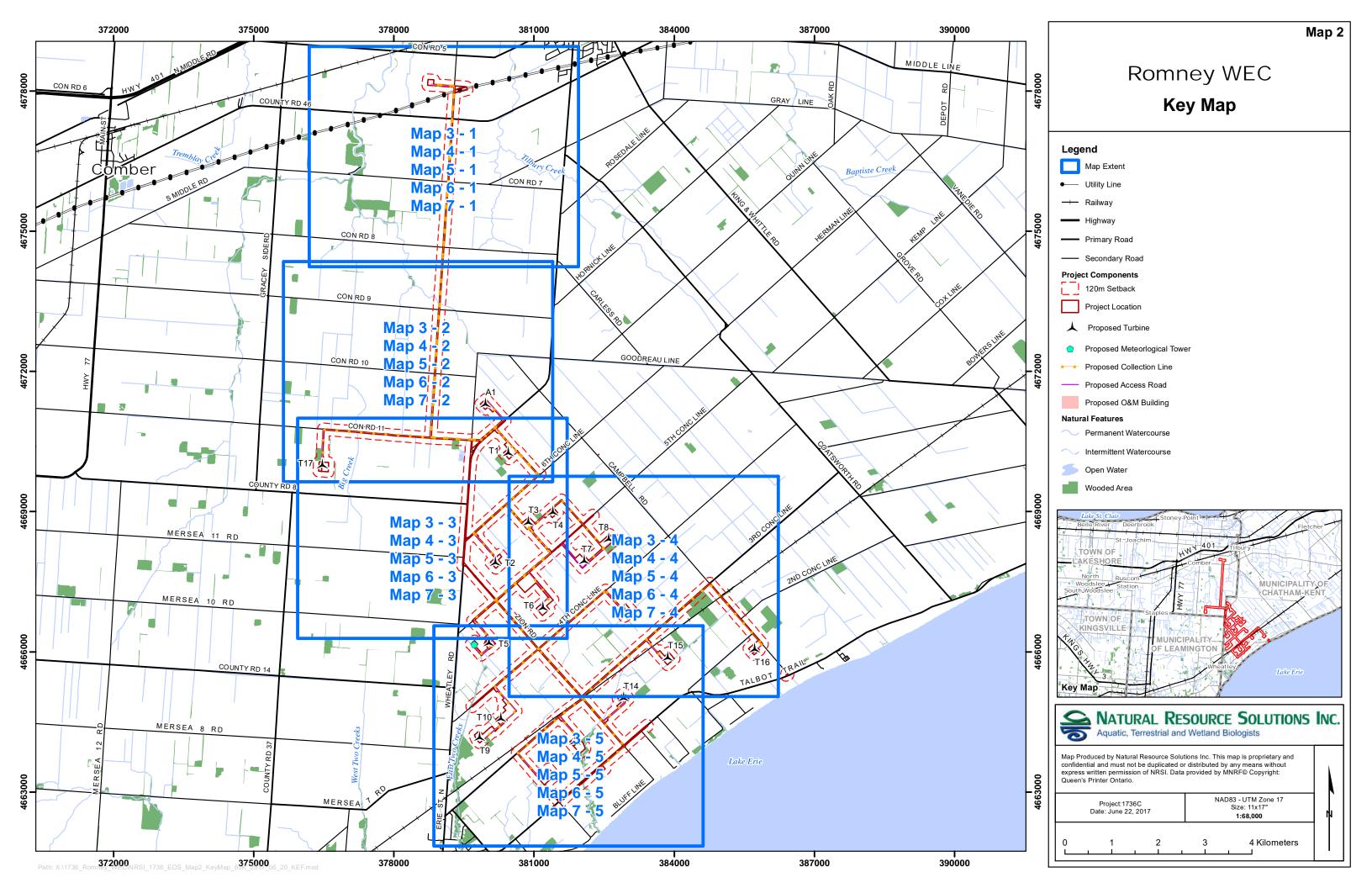
Ministry of Natural Resources and Forestry (MNRF). 2016b. Species at Risk in Ontario (SARO) List. Available at: https://www.ontario.ca/environment-and-energy/species-risk-ontario-list (Accessed October 17, 2016).

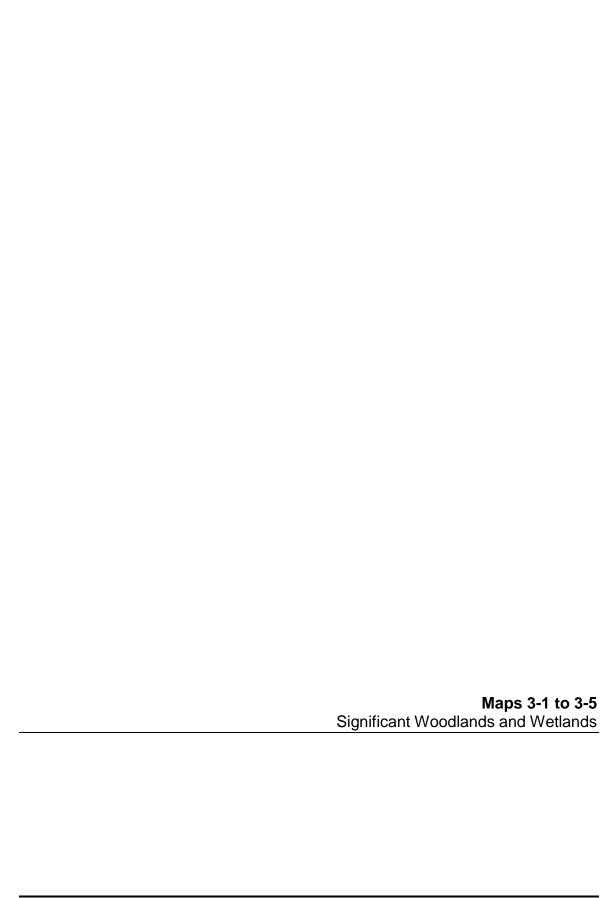
Municipality of Chatham-Kent. 2013. Chatham-Kent Trees, Forest and Woodlots – Review of the Literature: Appendix A – 2010 Woodlands. Available at: http://www.chatham-kent.ca/CommunityParks/Pages/ForestCoverinChatham-Kent.aspx (Accessed September 14, 2016).

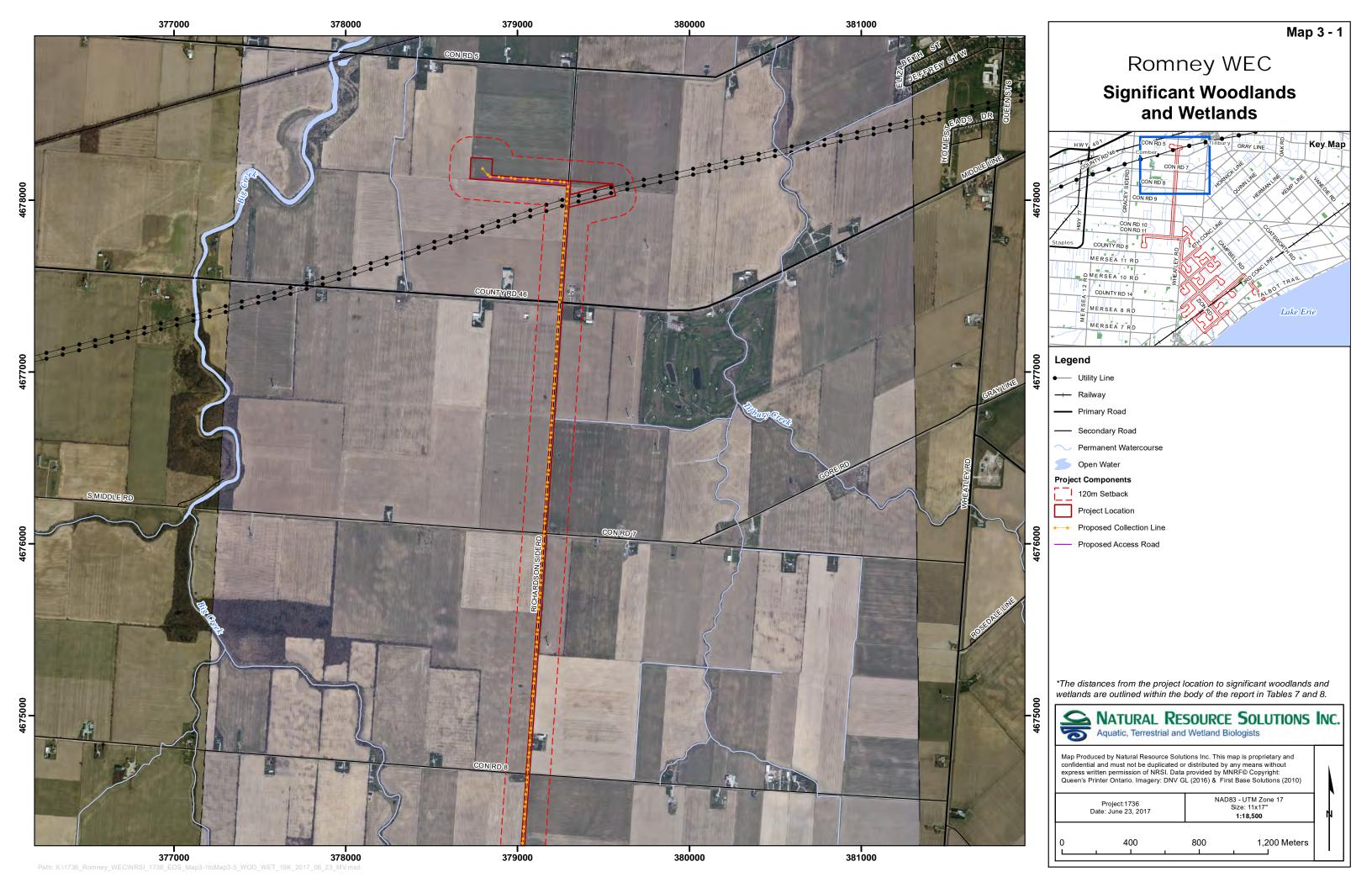


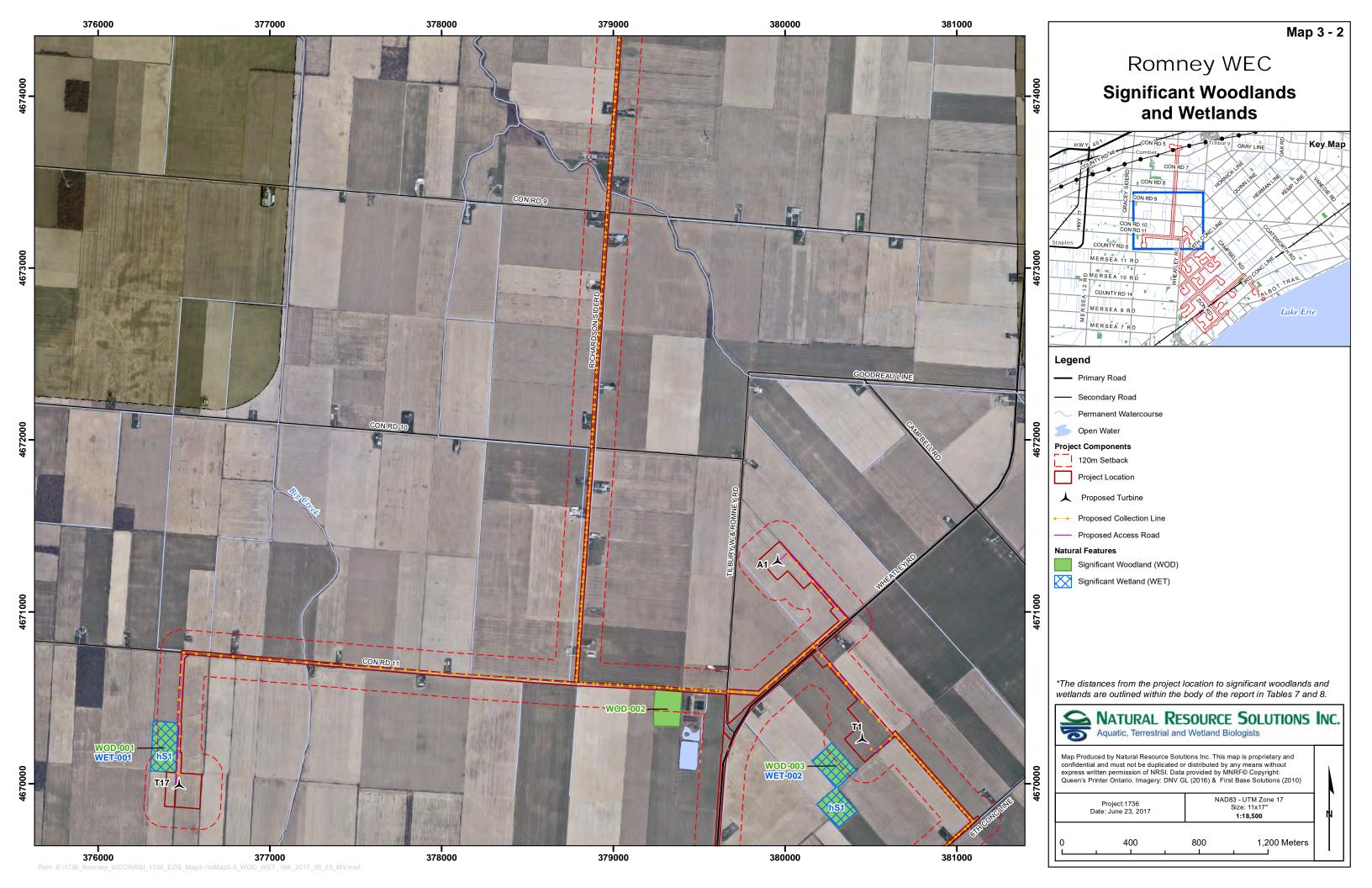


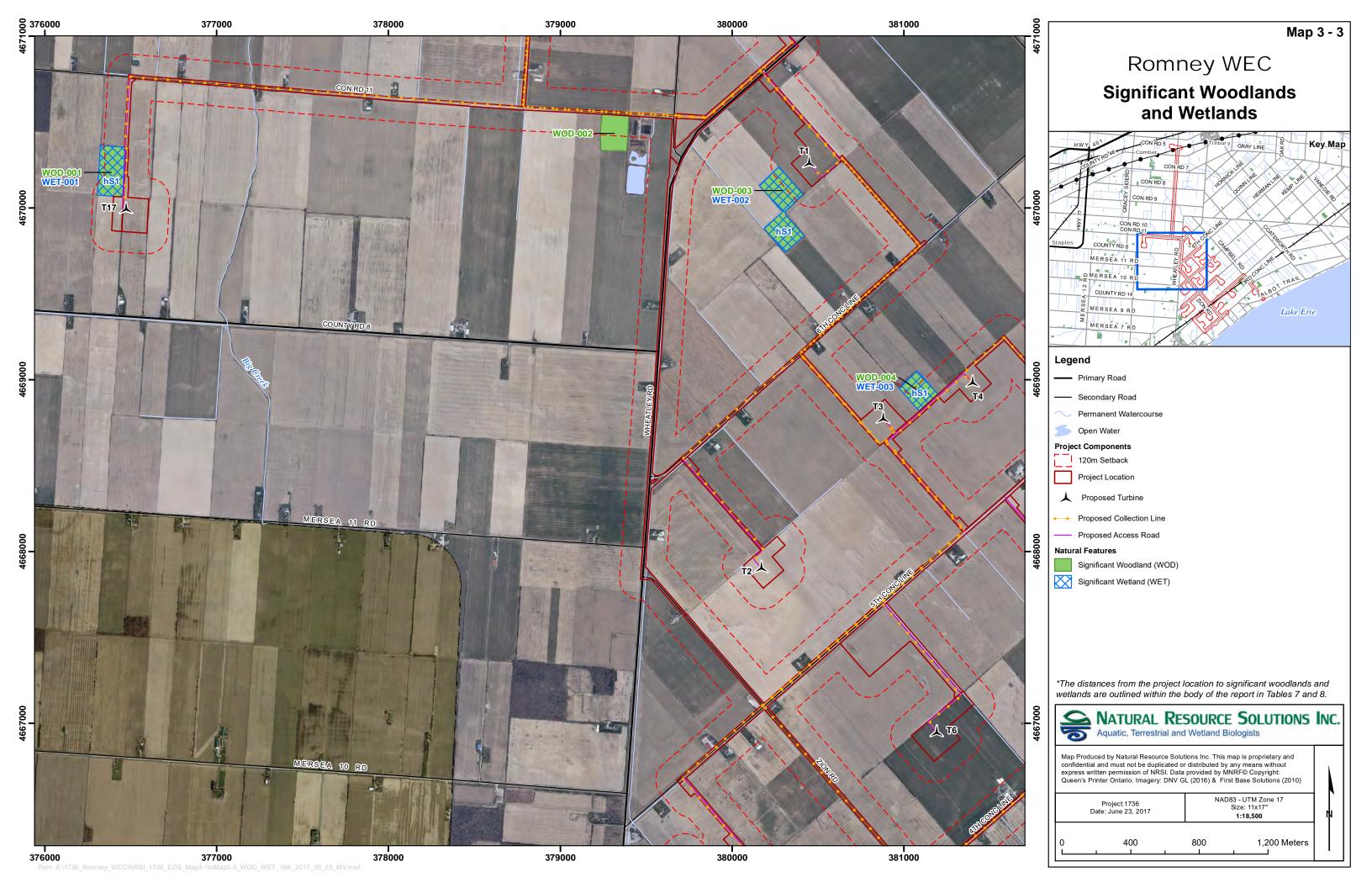


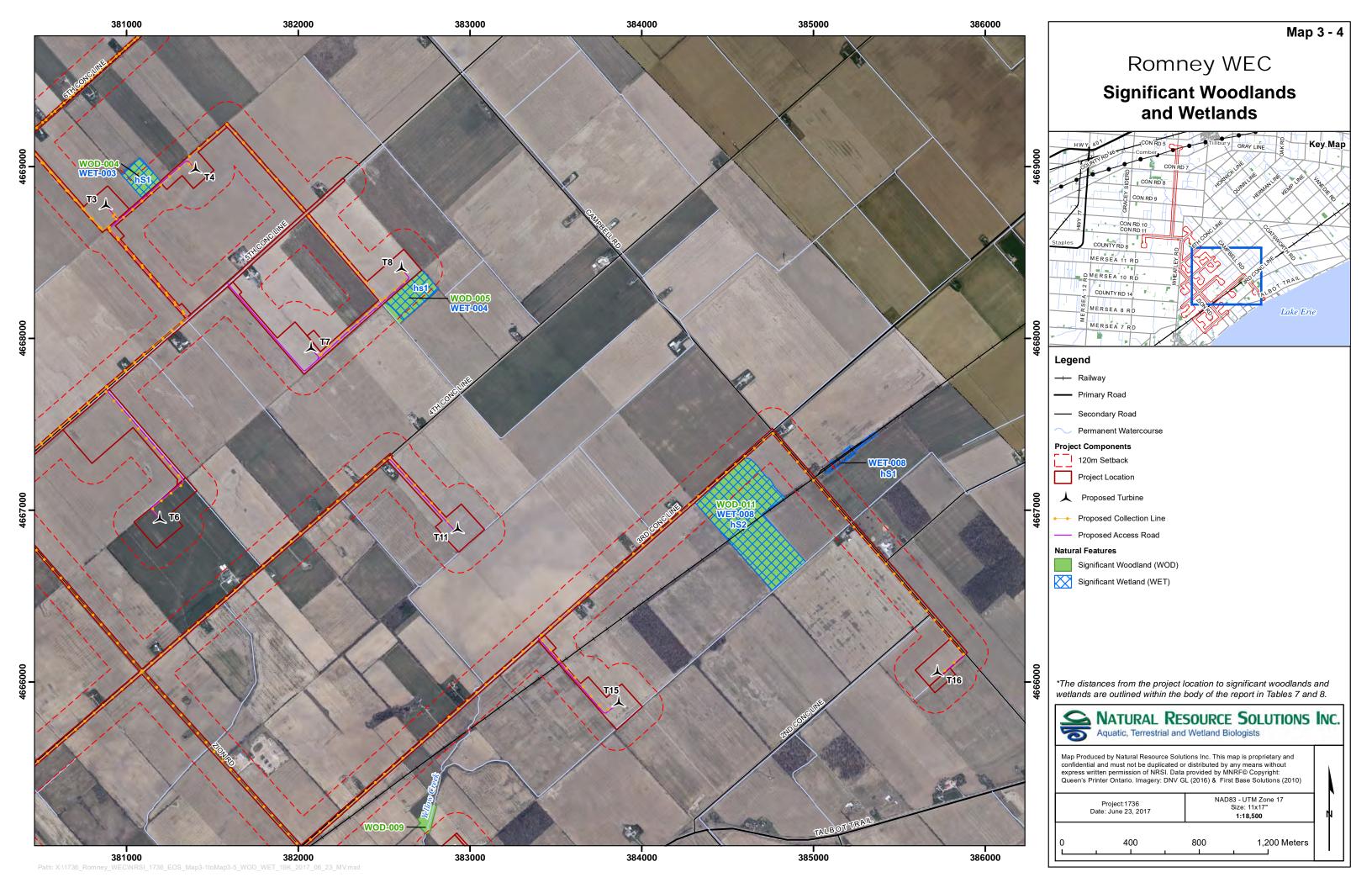


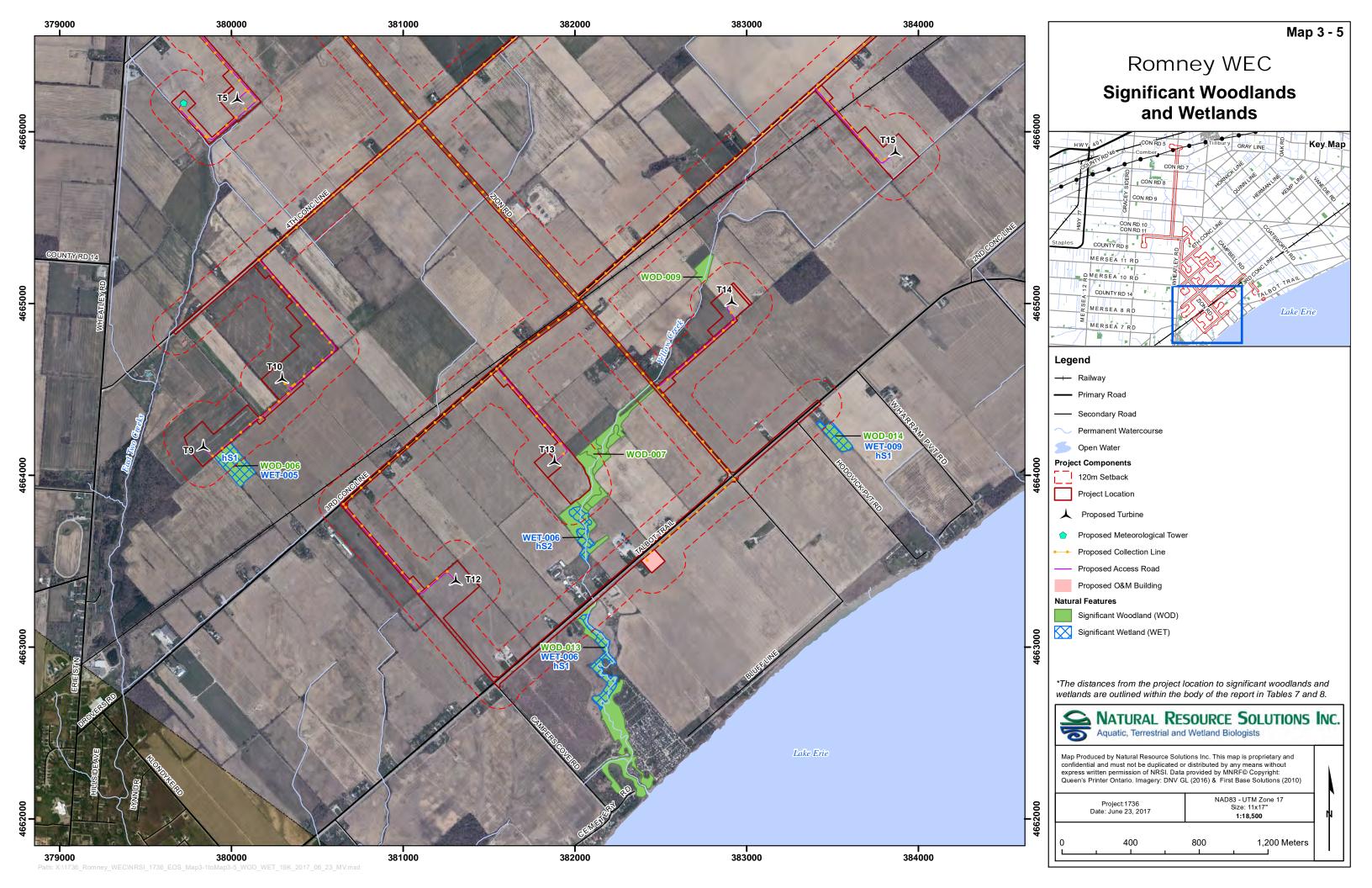




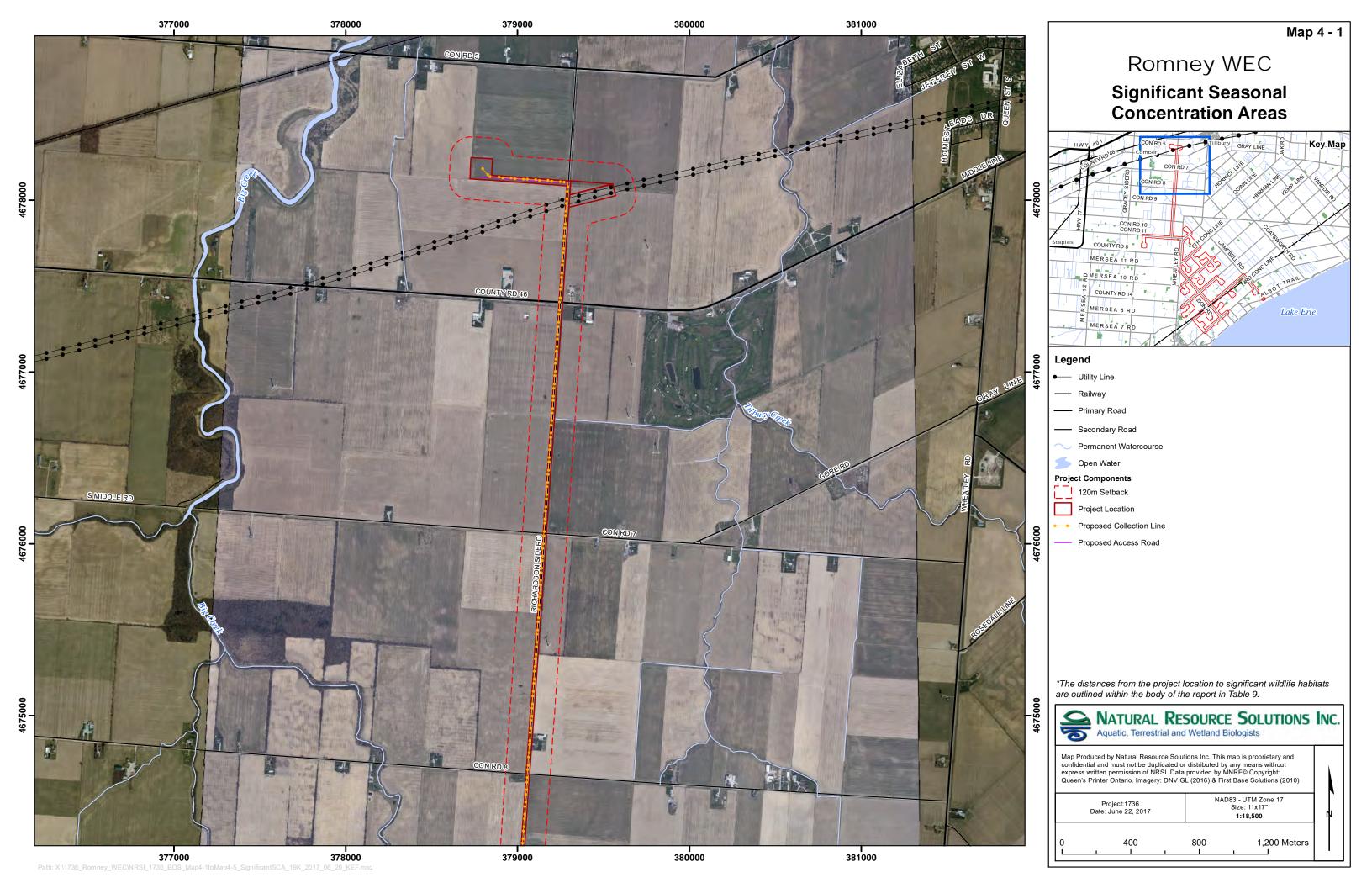


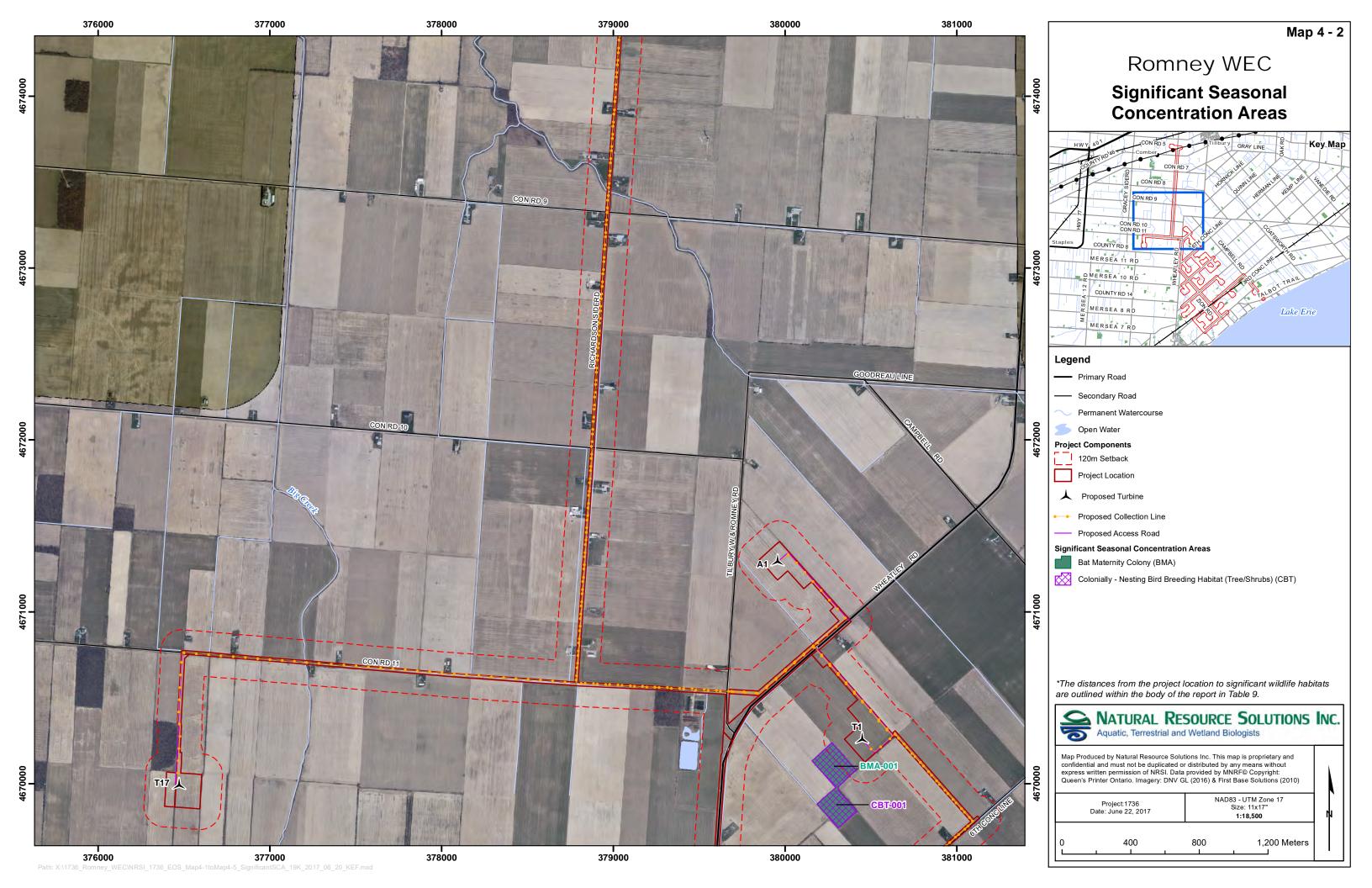


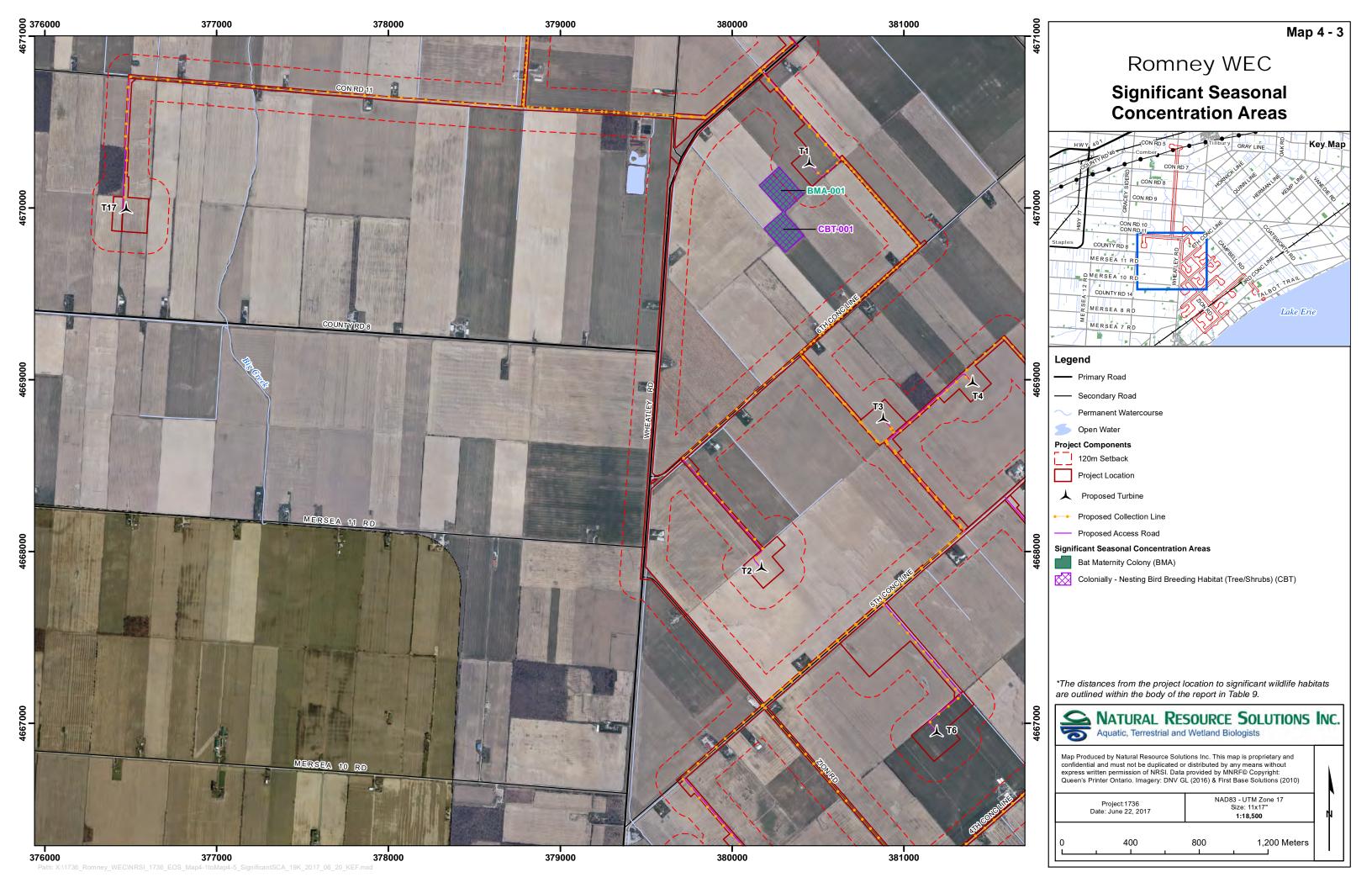


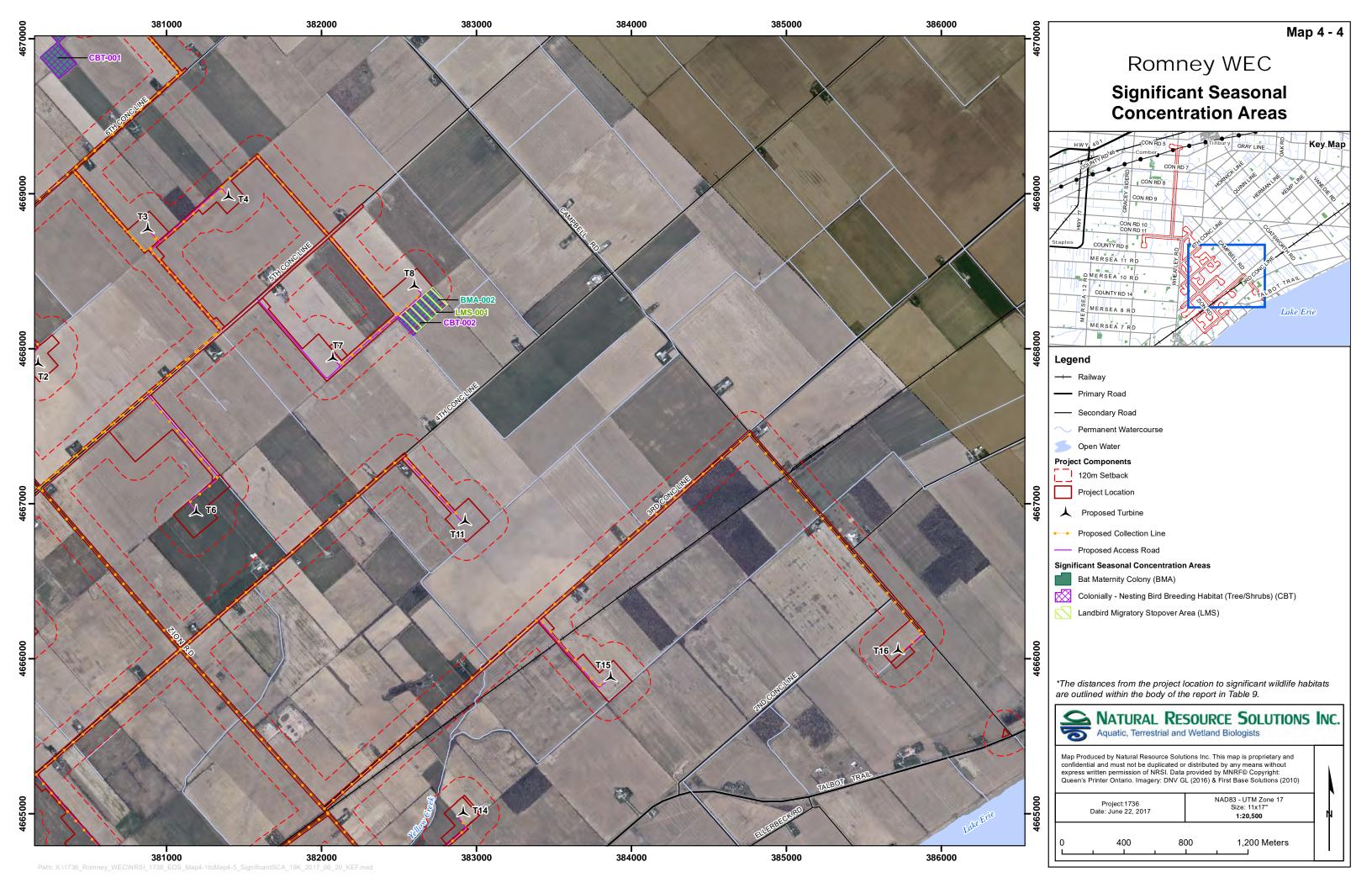


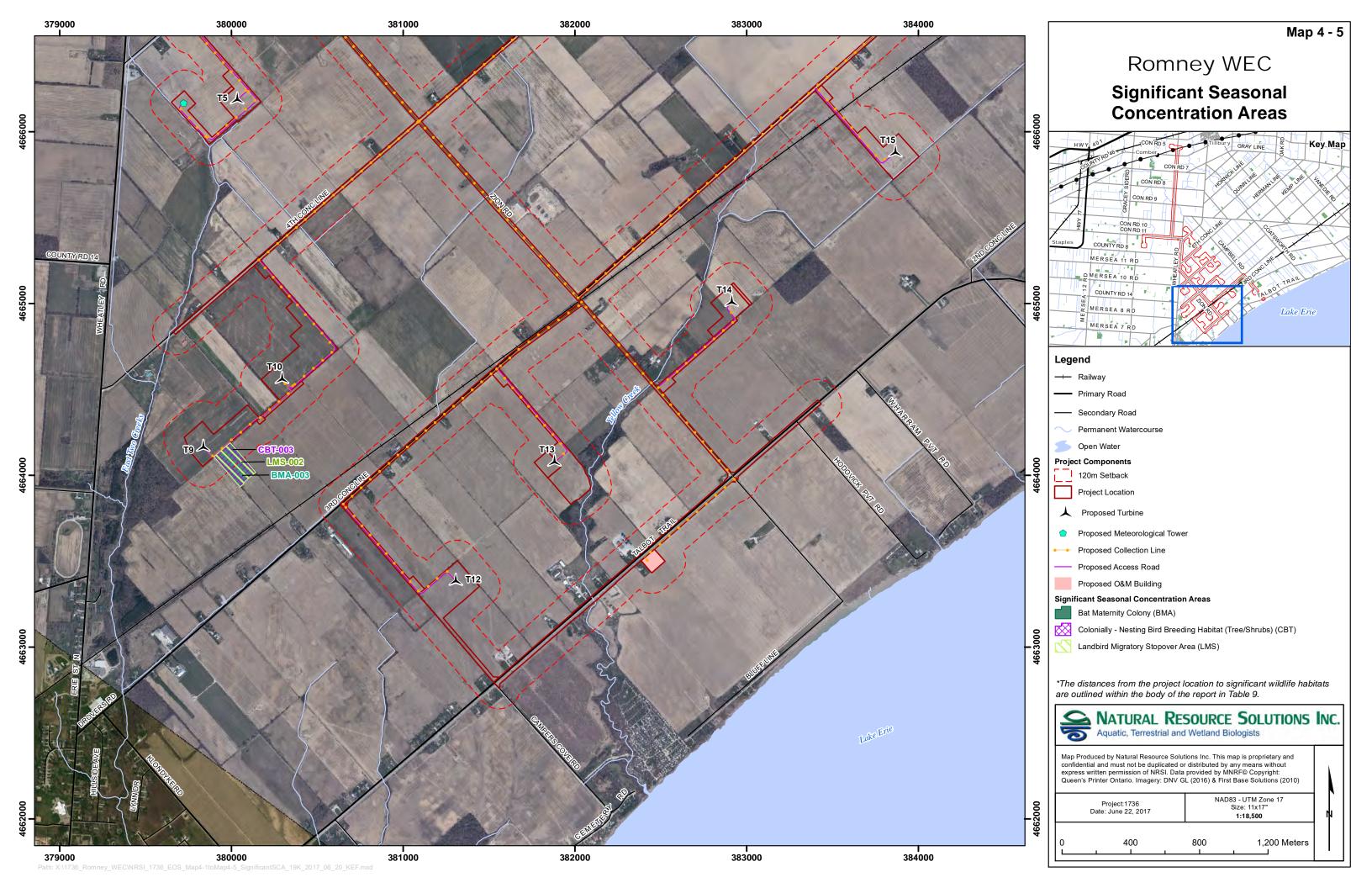




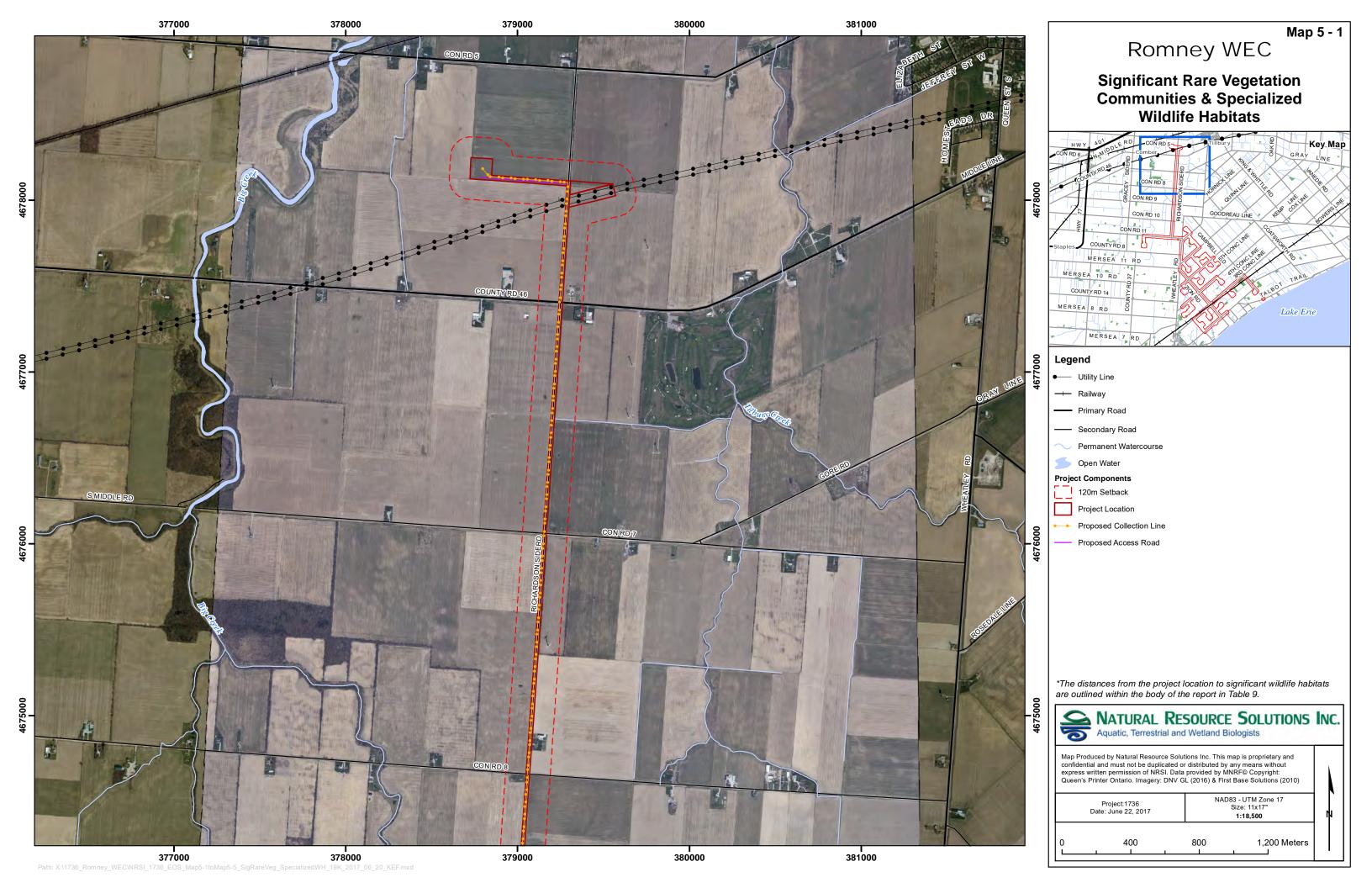


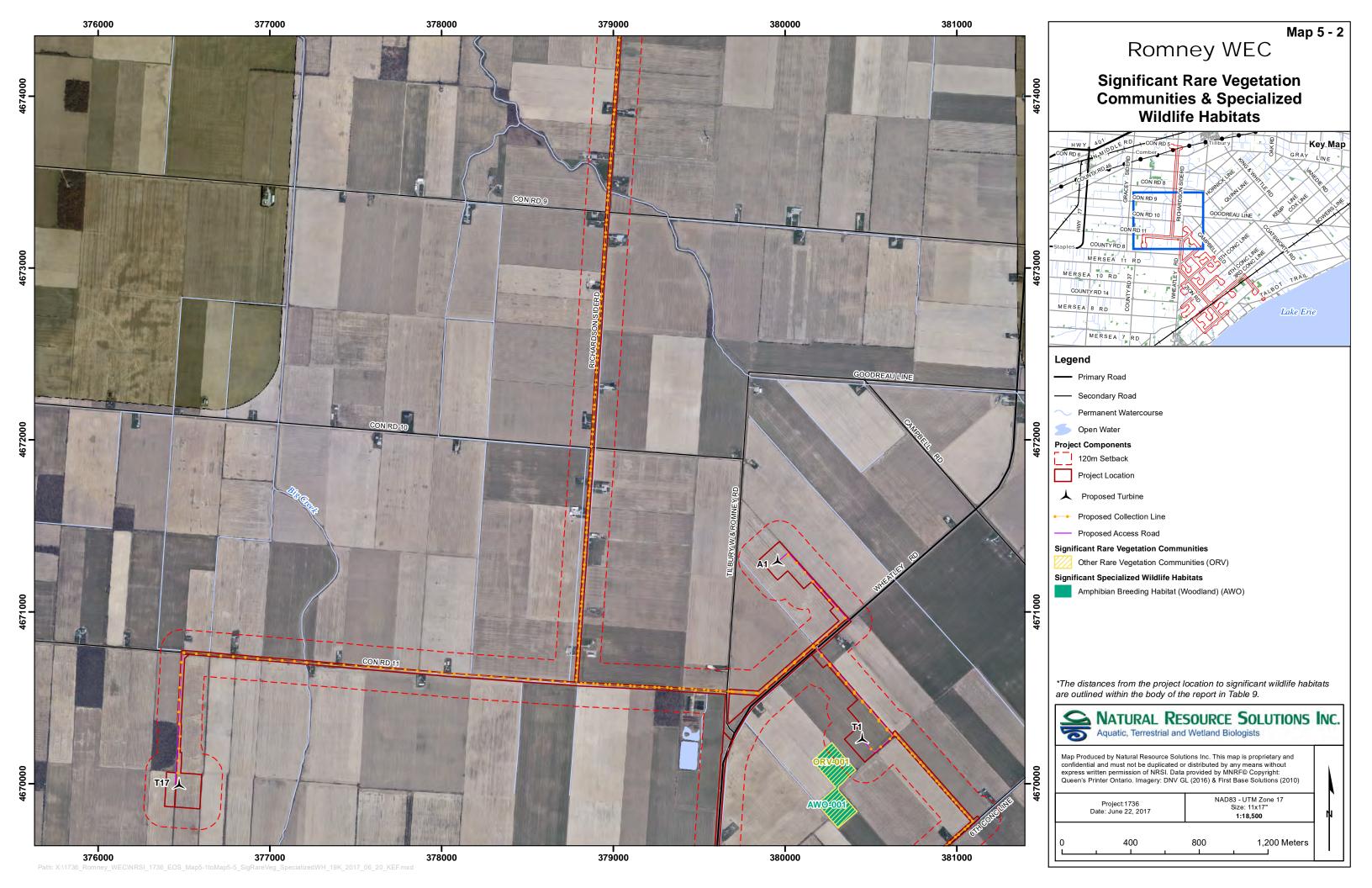


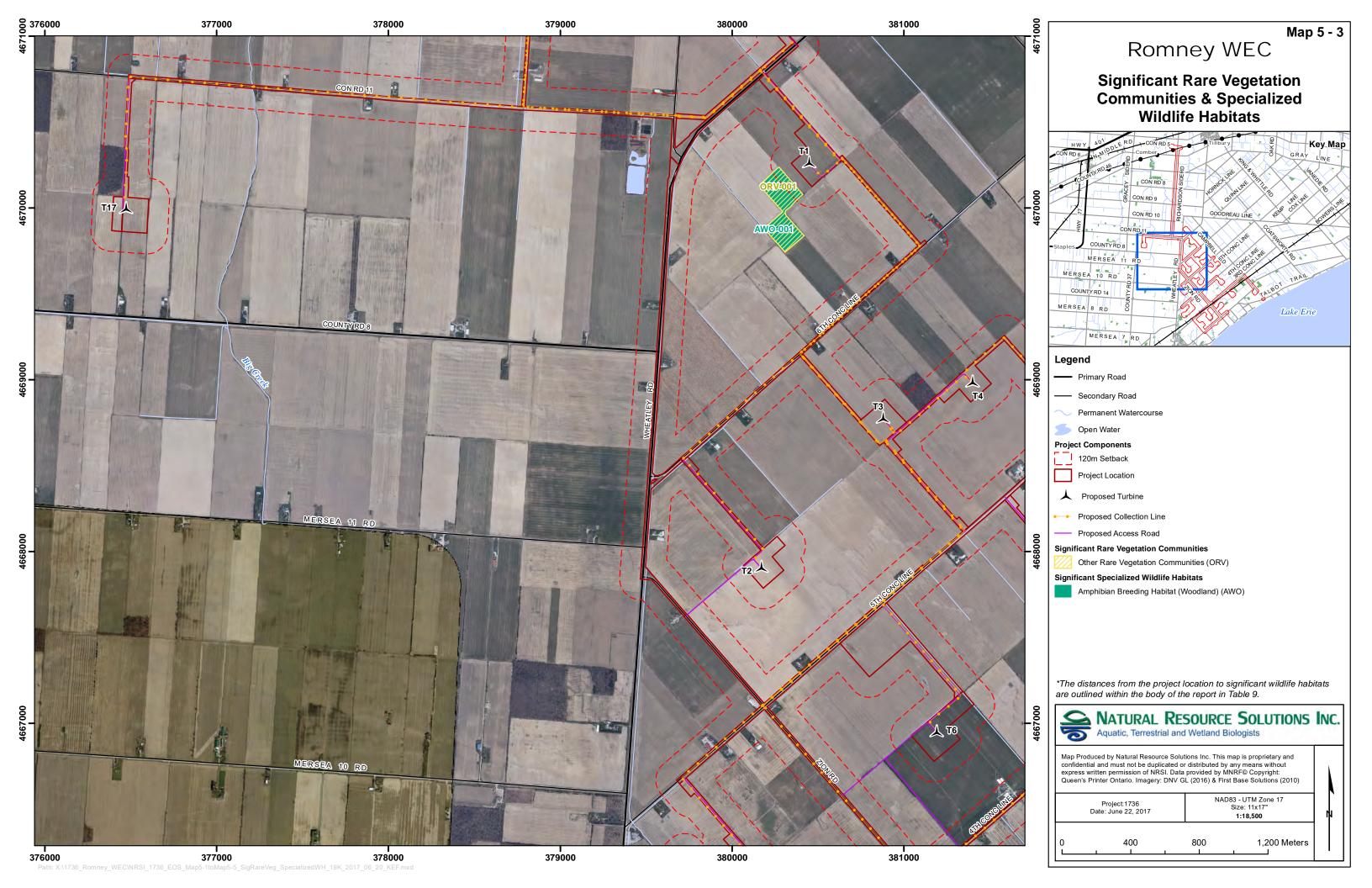


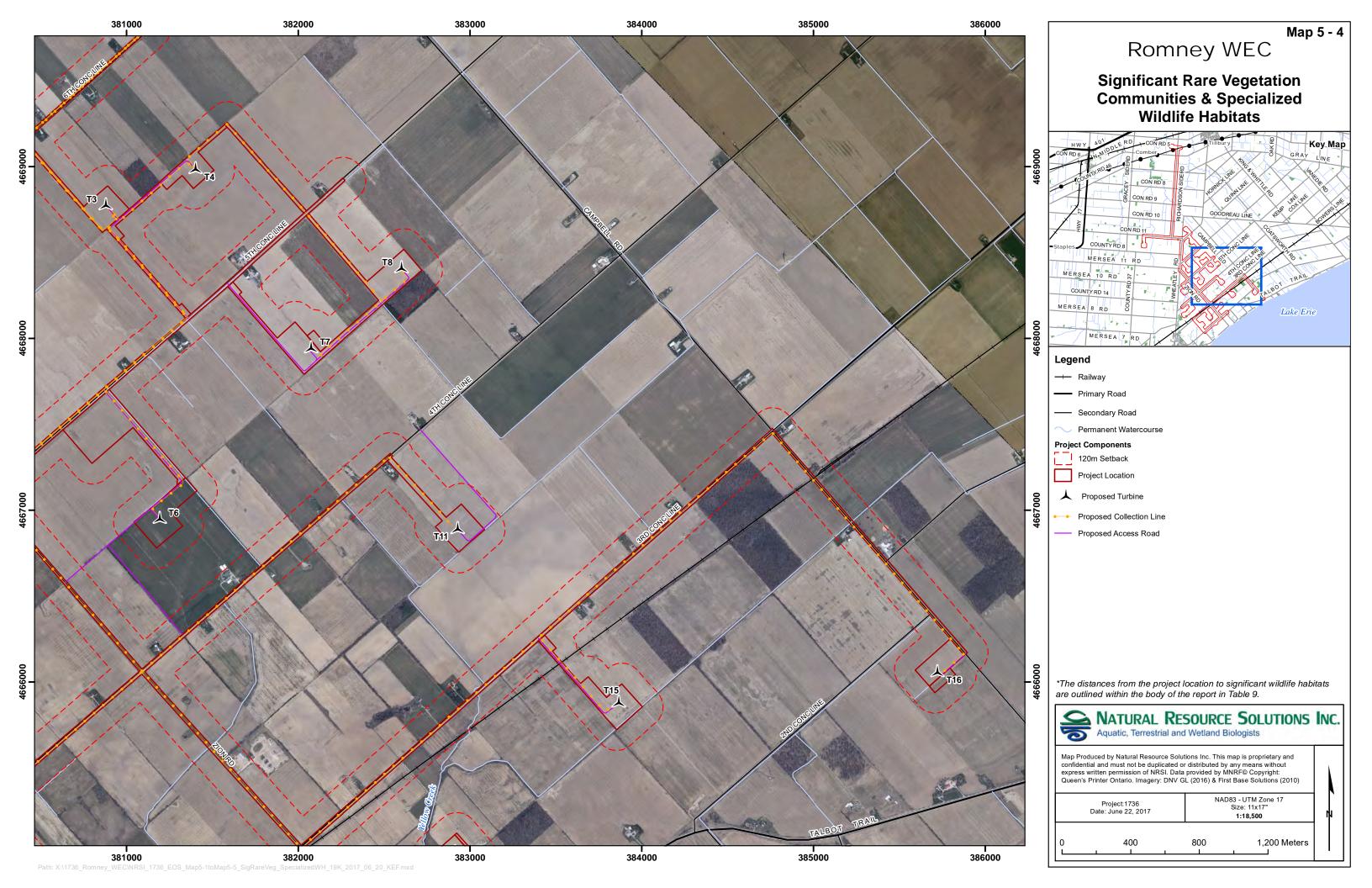


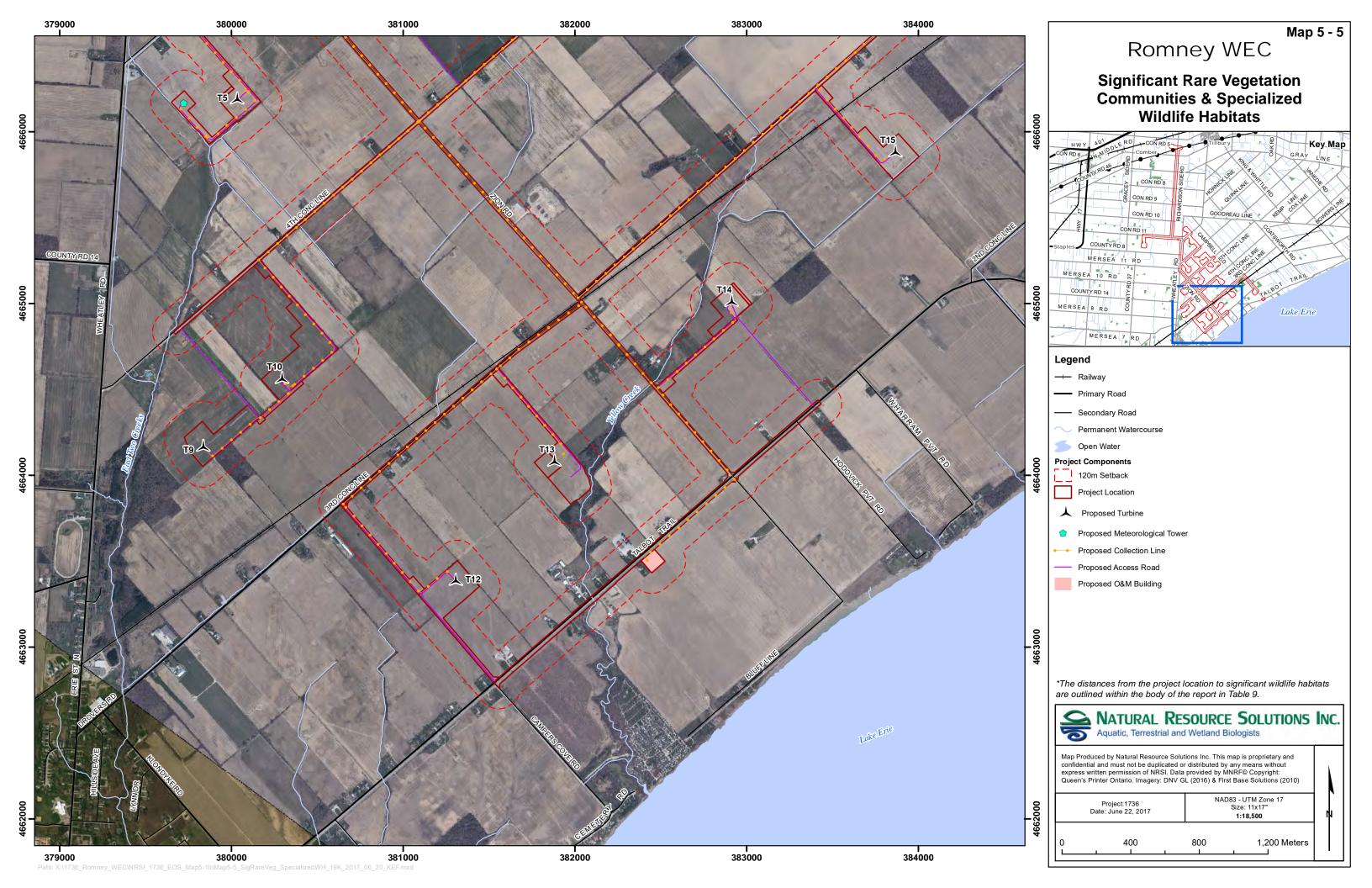


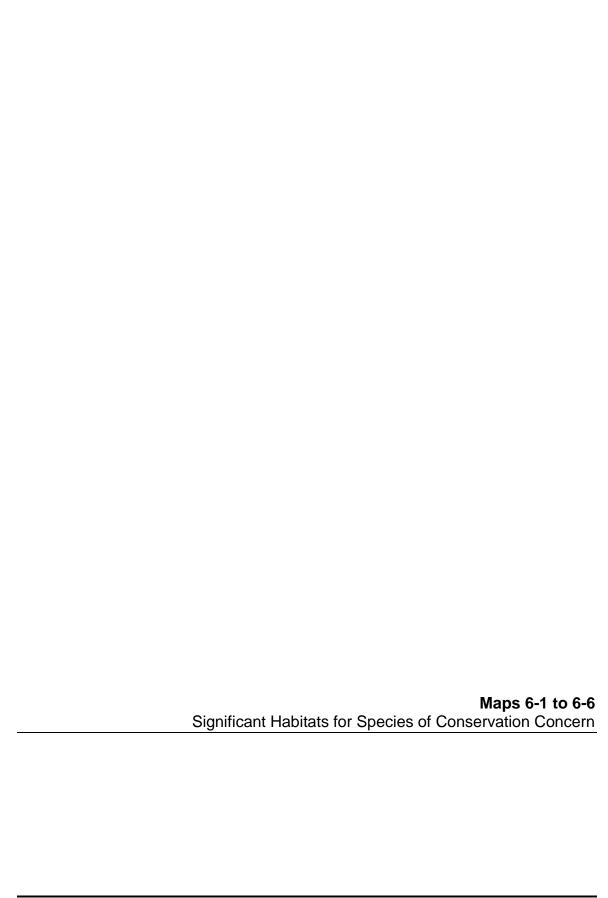


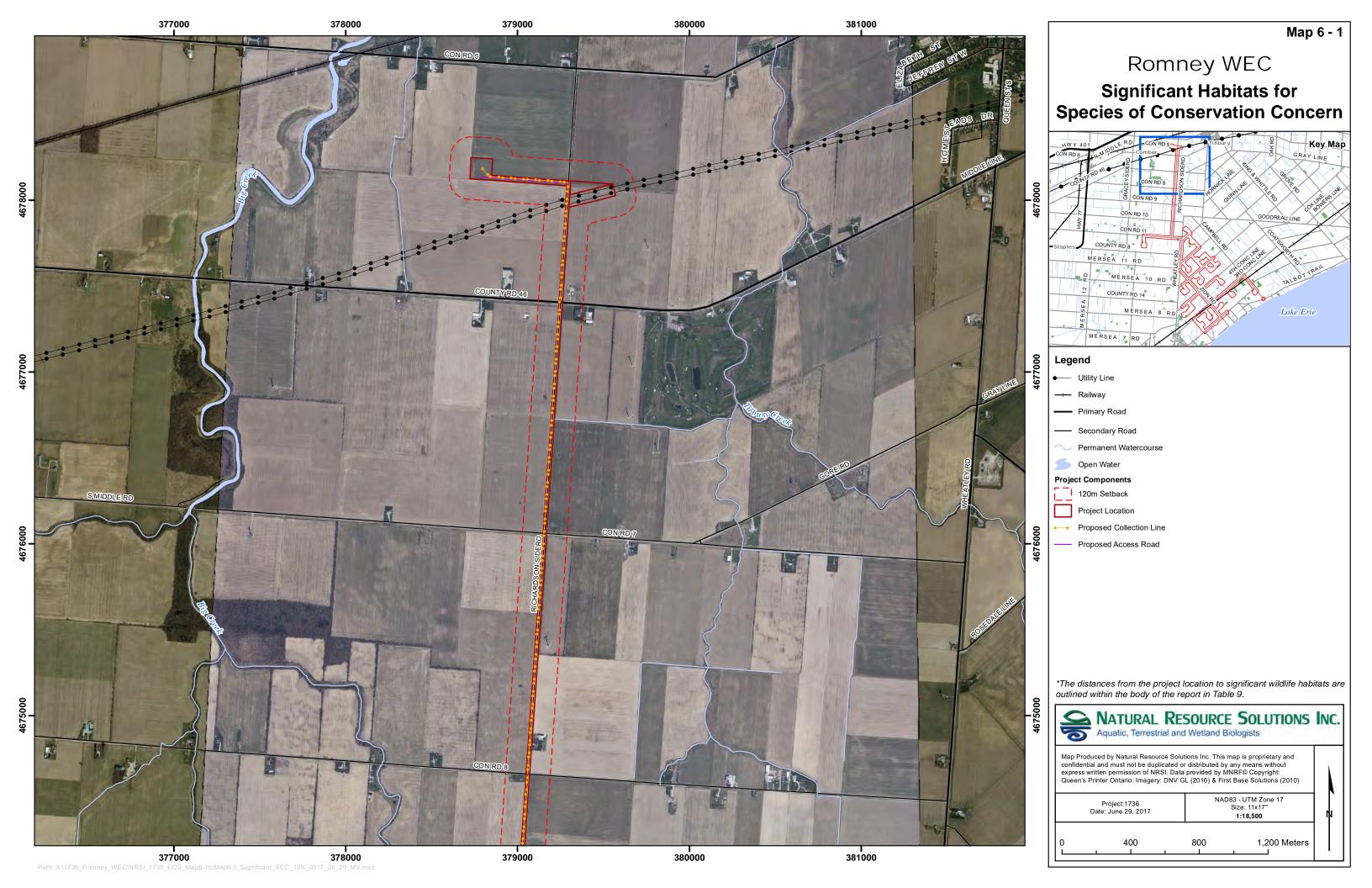


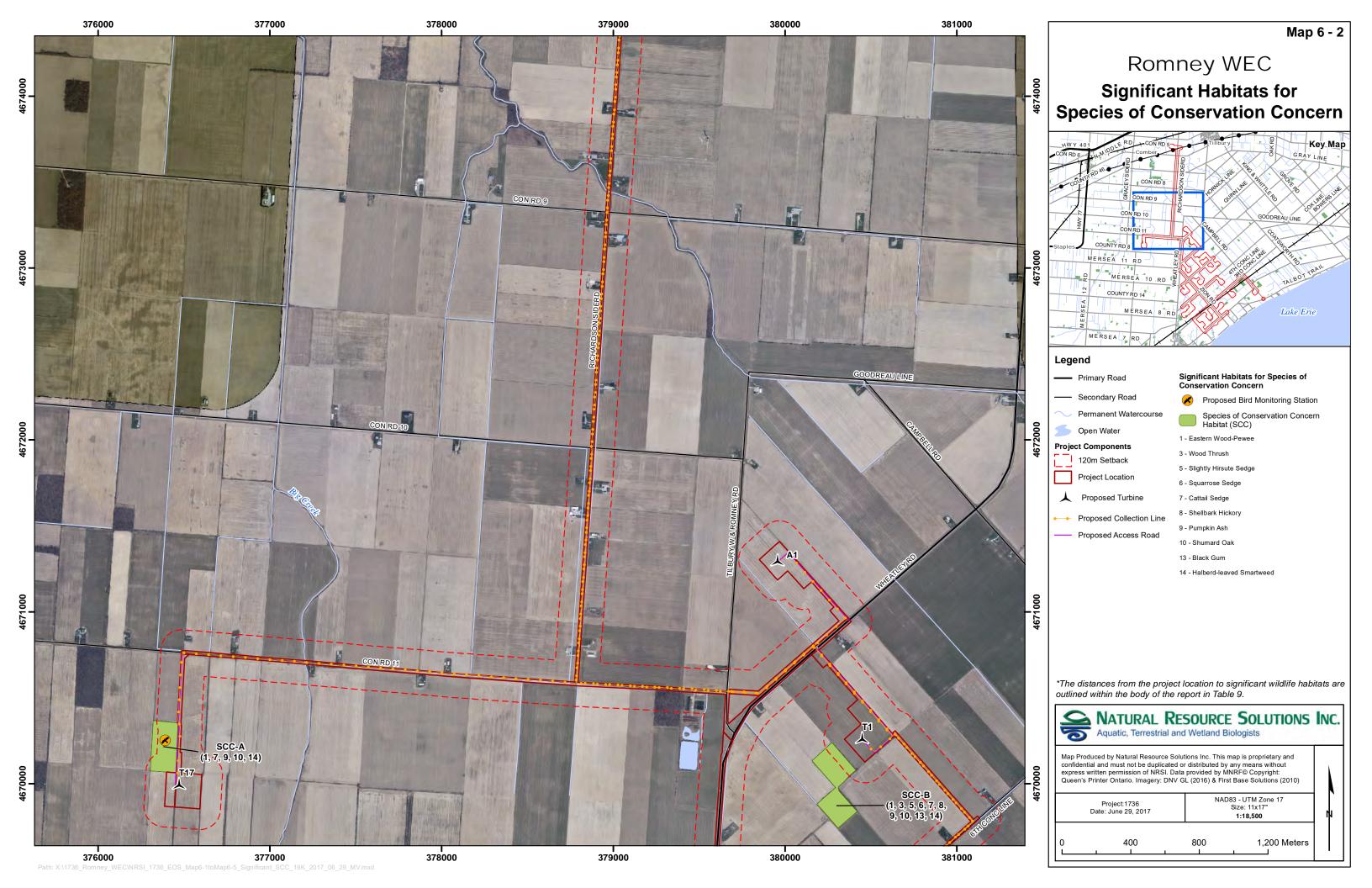


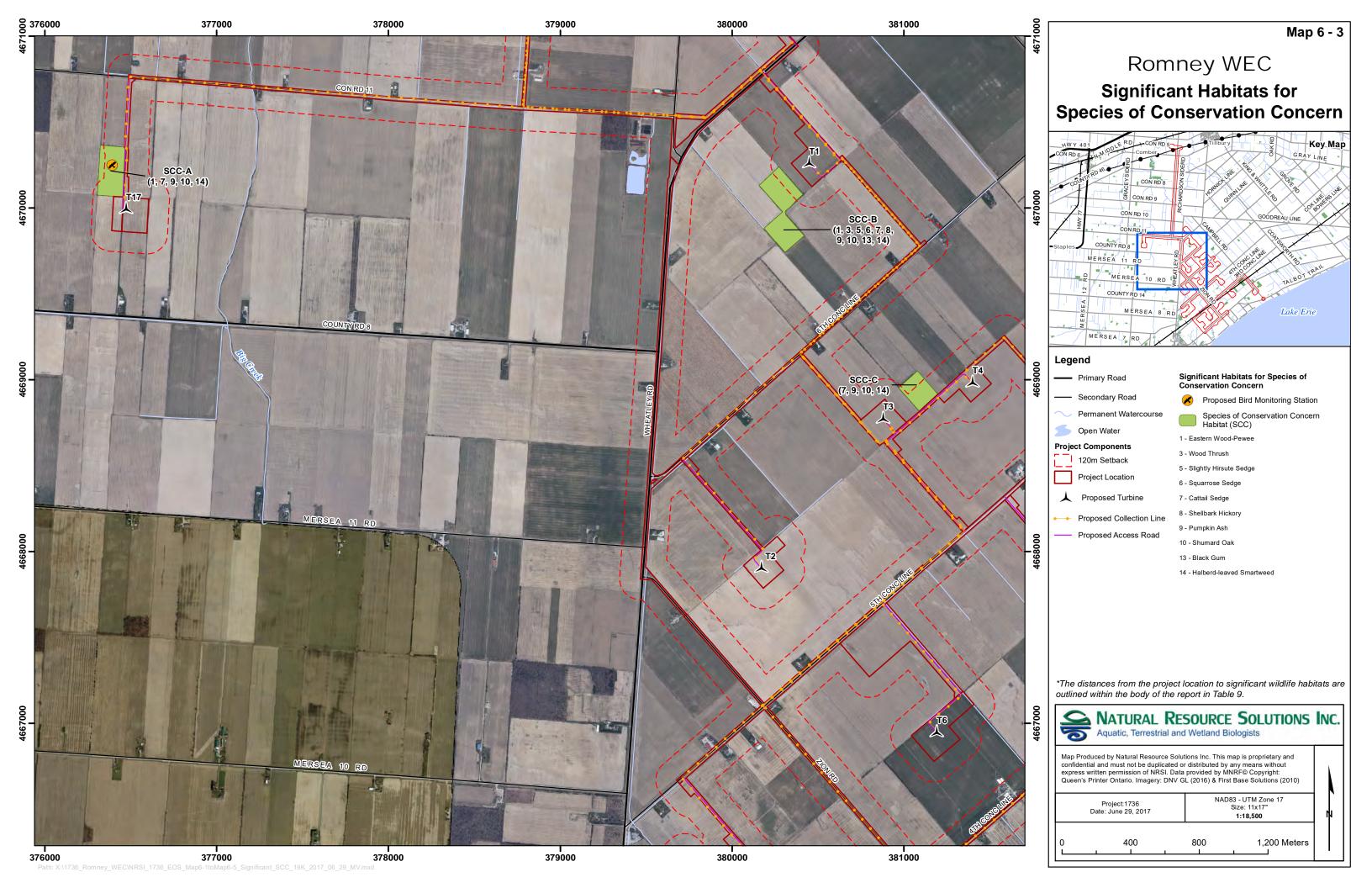


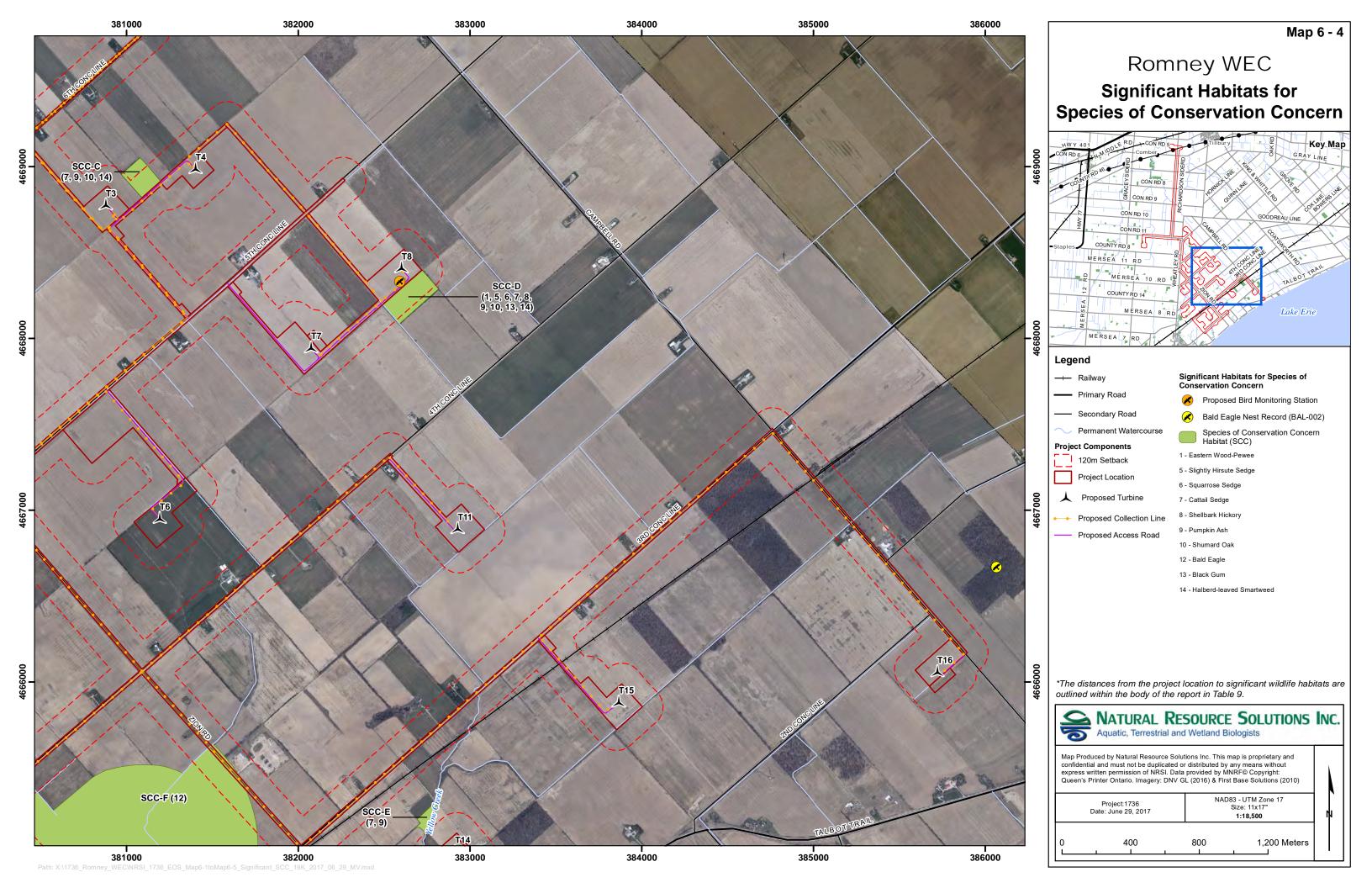


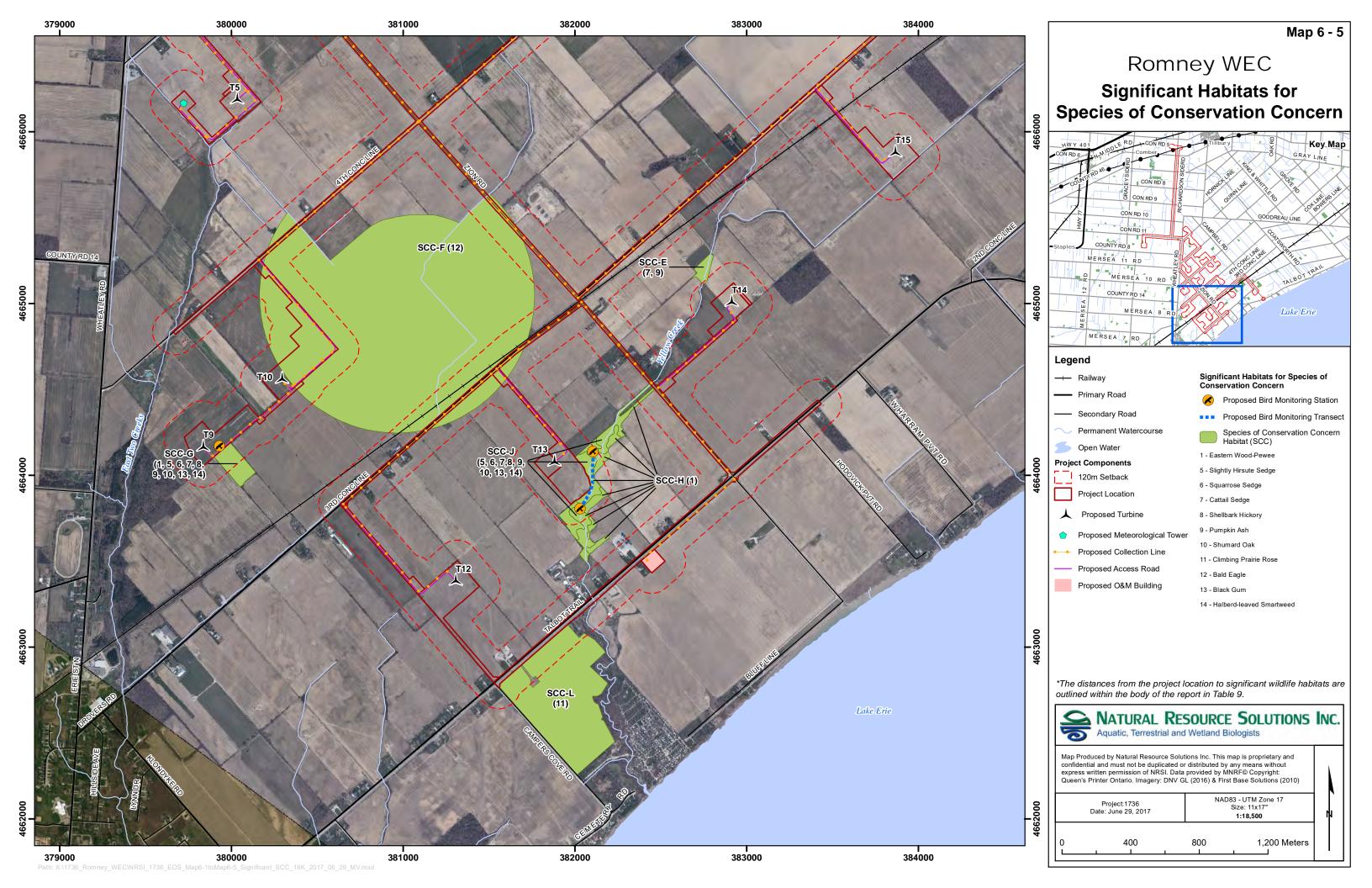












Romney WEC

Species of Conservation Concern Habitat

Project: 1736

Date: June 23, 2017



SCC-A

Eastern Wood Pewee: EWP-001

Cattail Sedge: CSE-001 Pumpkin Ash: PAS-001 Shumard Oak: SHO-001

Halberd-leaved Smartweed: HLS-001

SCC-B

Eastern Wood Pewee: EWP-002

Wood Thursh: WTH-001

Slightly Hirsute Sedge: SHS-002 Squarrose Sedge: SQS-002

Cattail Sedge: CSE-002 Shellbark Hickory: SHH-002 Pumpkin Ash: PAS-002 Shumard Oak: SHO-002 Black Gum: BGU-002

Halberd-leaved Smartweed: HLS-002

SCC-C

Cattail Sedge: CSE-003 Pumpkin Ash: PAS-003 Shumard Oak: SHO-003

Halberd-leaved Smartweed: HLS-003

SCC-D

Eastern Wood Pewee: EWP-003 Slightly Hirsute Sedge: SHS-004 Squarrose Sedge: SQS-004

Cattail Sedge: CSE-004 Shellbark Hickory: SHH-004 Pumpkin Ash: PAS-004 Shumard Oak: SHO-004 Black Gum: BGU-004

Halberd-leaved Smartweed: HLS-004

SCC-E

Cattail Sedge: CSE-007 Pumpkin Ash: PAS-007

SCC-F

Bald Eagle: BAL-001

SCC-G

Eastern Wood Pewee: EWP-004

Slightly Hirsute Sedge: SHS-005 Squarrose Sedge: SQS-005 Cattail Sedge: CSE-005 Shellbark Hickory: SHH-005 Pumpkin Ash: PAS-005 Shumard Oak: SHO-005 Black Gum: BGU-005

Halberd-leaved Smartweed: HLS-005

SCC-H

Eastern Wood Pewee: EWP-005

SCC-J

Slightly Hirsute Sedge: SHS-006

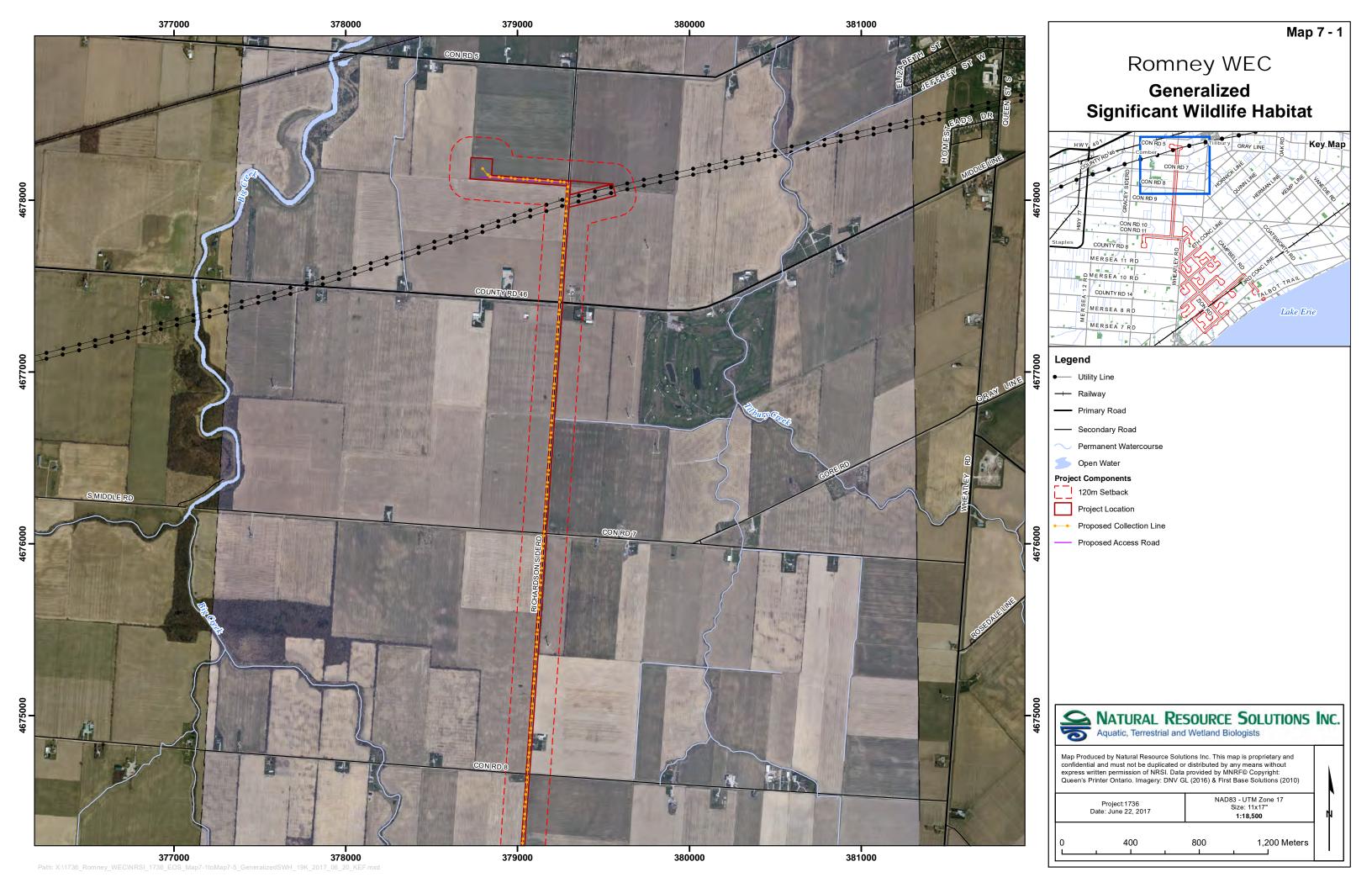
Squarrose Sedge: SQS-006
Cattail Sedge: CSE-006
Shellbark Hickory: SHH-006
Pumpkin Ash: PAS-006
Shumard Oak: SHO-006
Black Gum: BGU-006

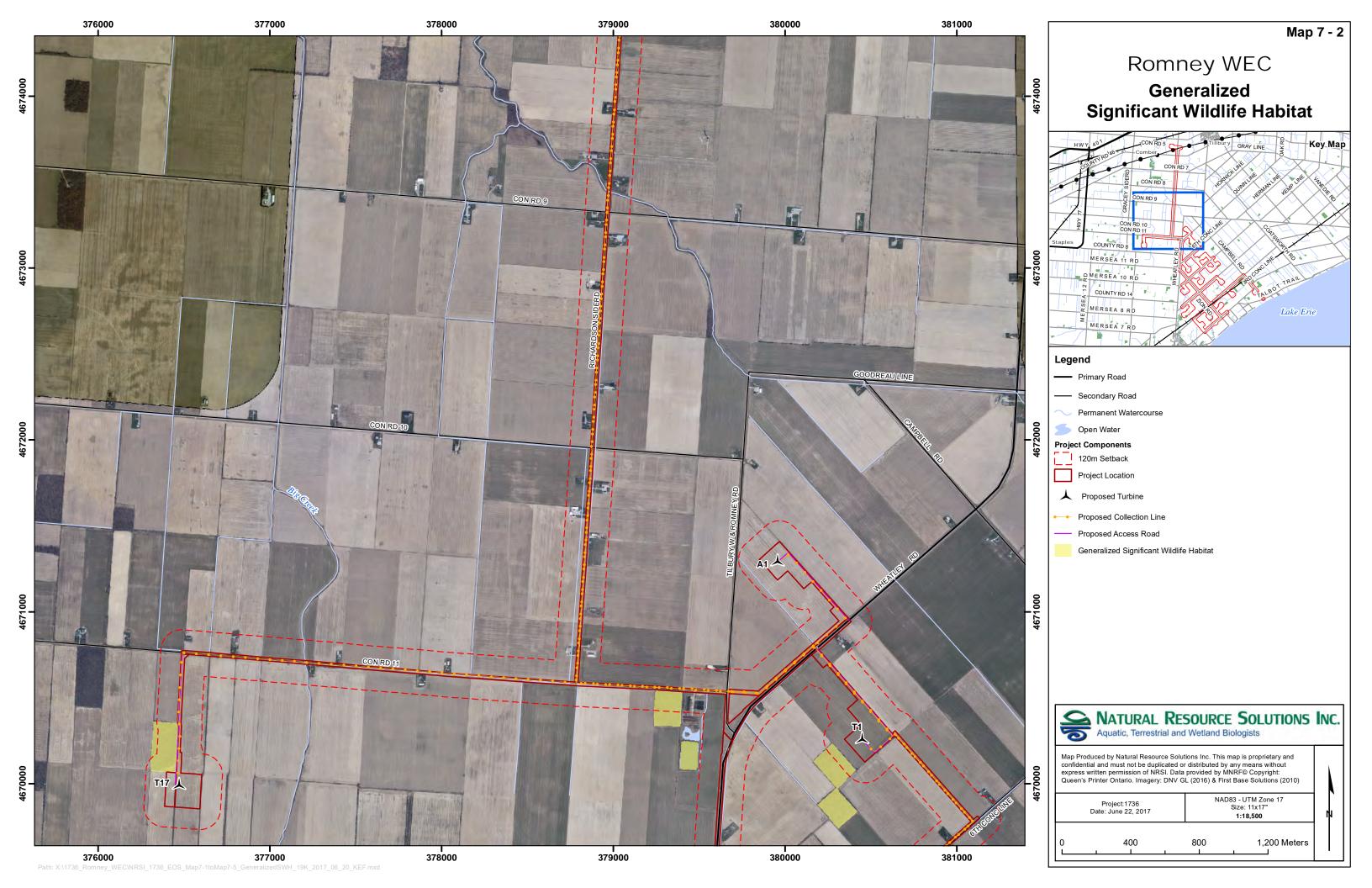
Halberd-leaved Smartweed: HLS-006

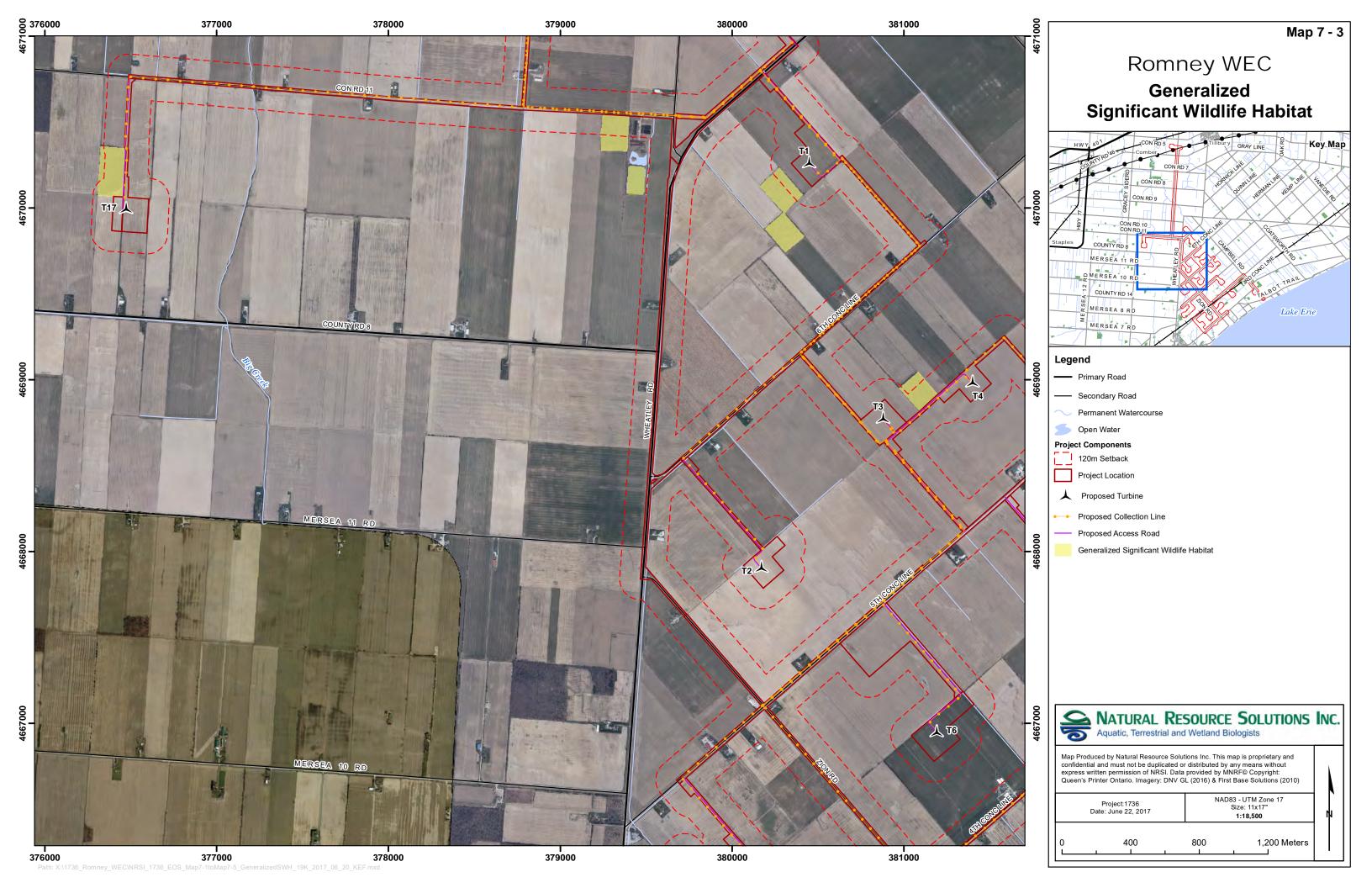
SCC-L

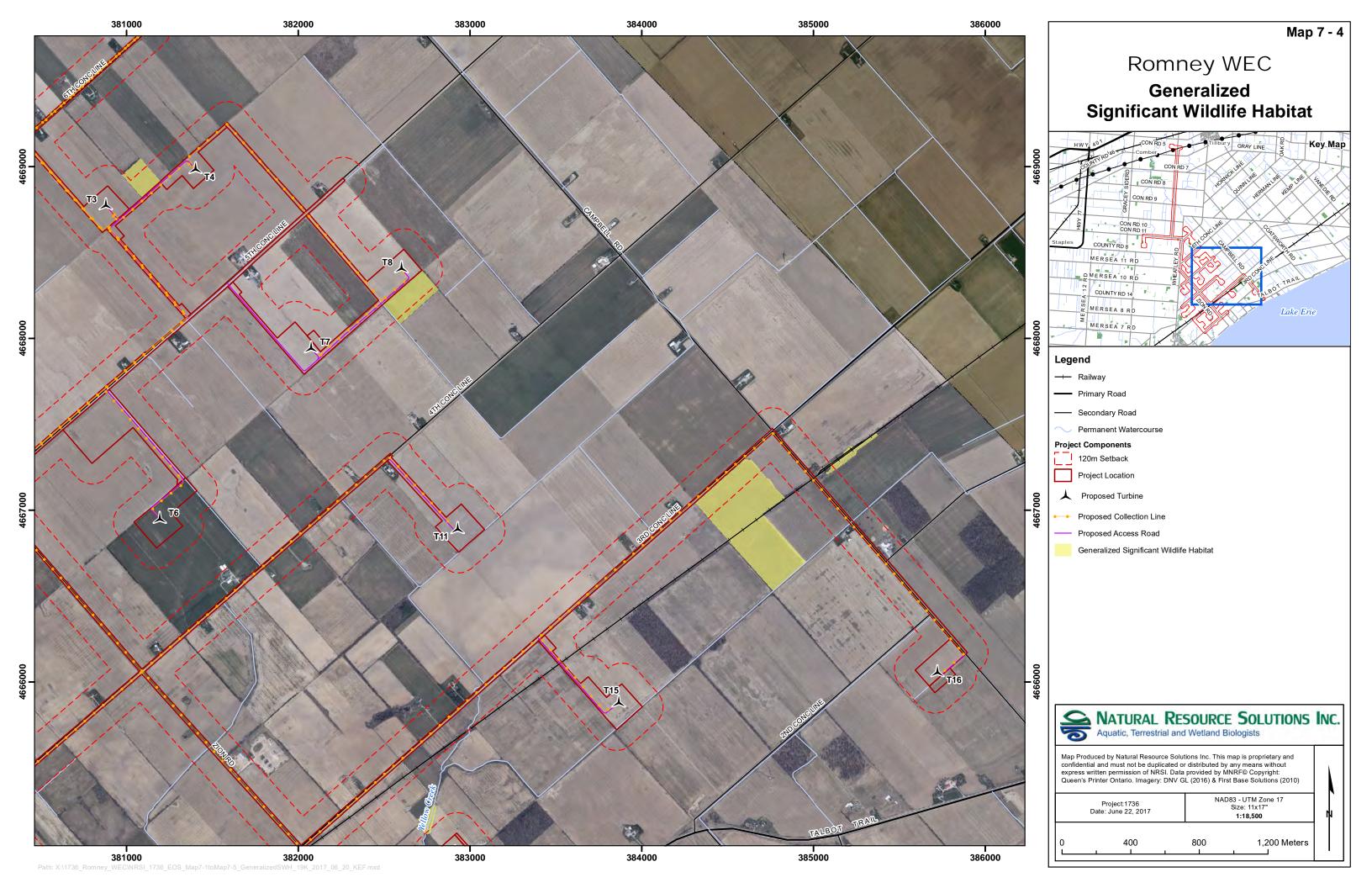
Climbing Prairie Rose: CPR-001

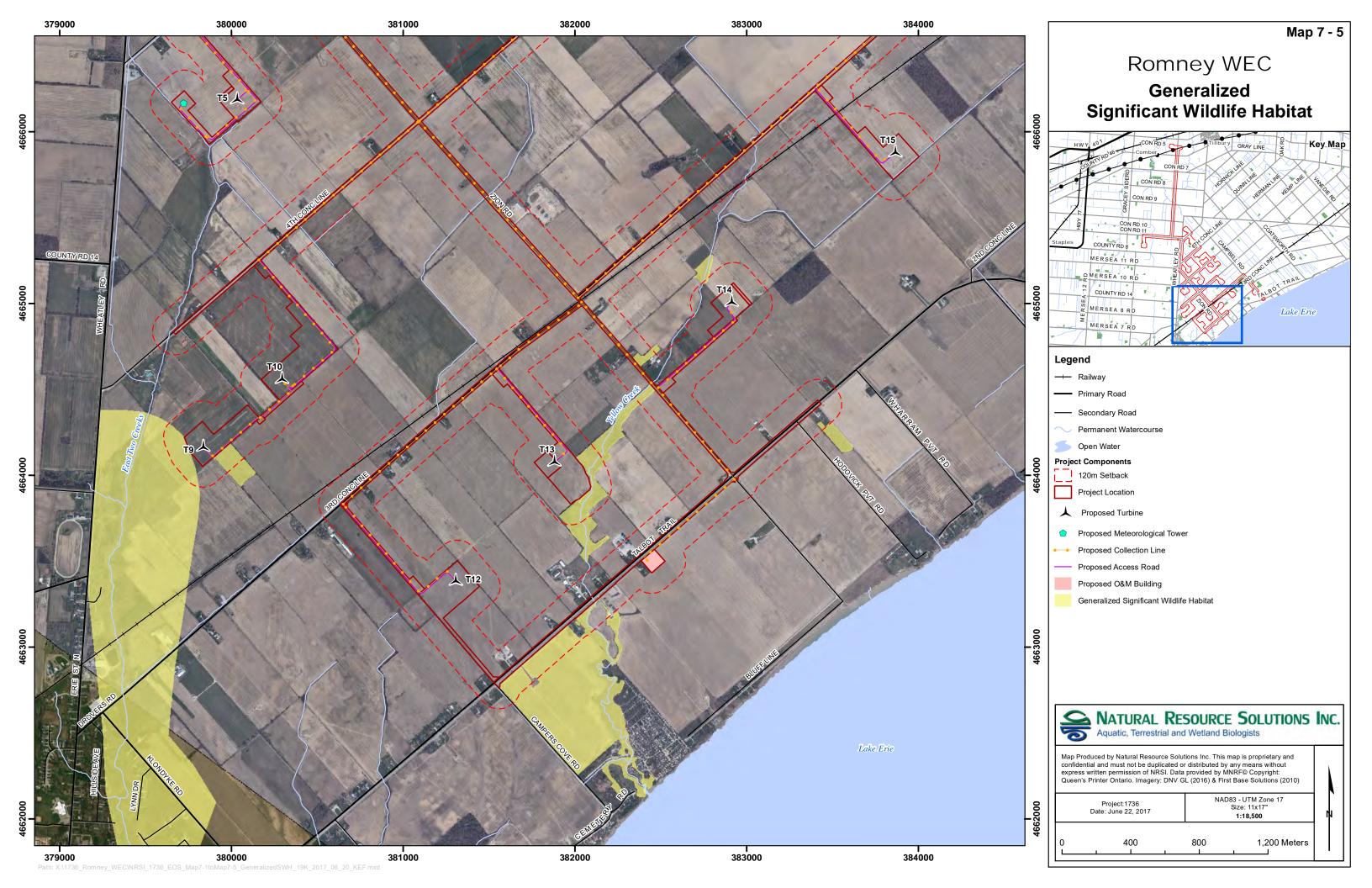
Maps 7-1 to 7-5 Generalized Significant Wildlife Habitat
Contrained digrimidant vinding Habitat



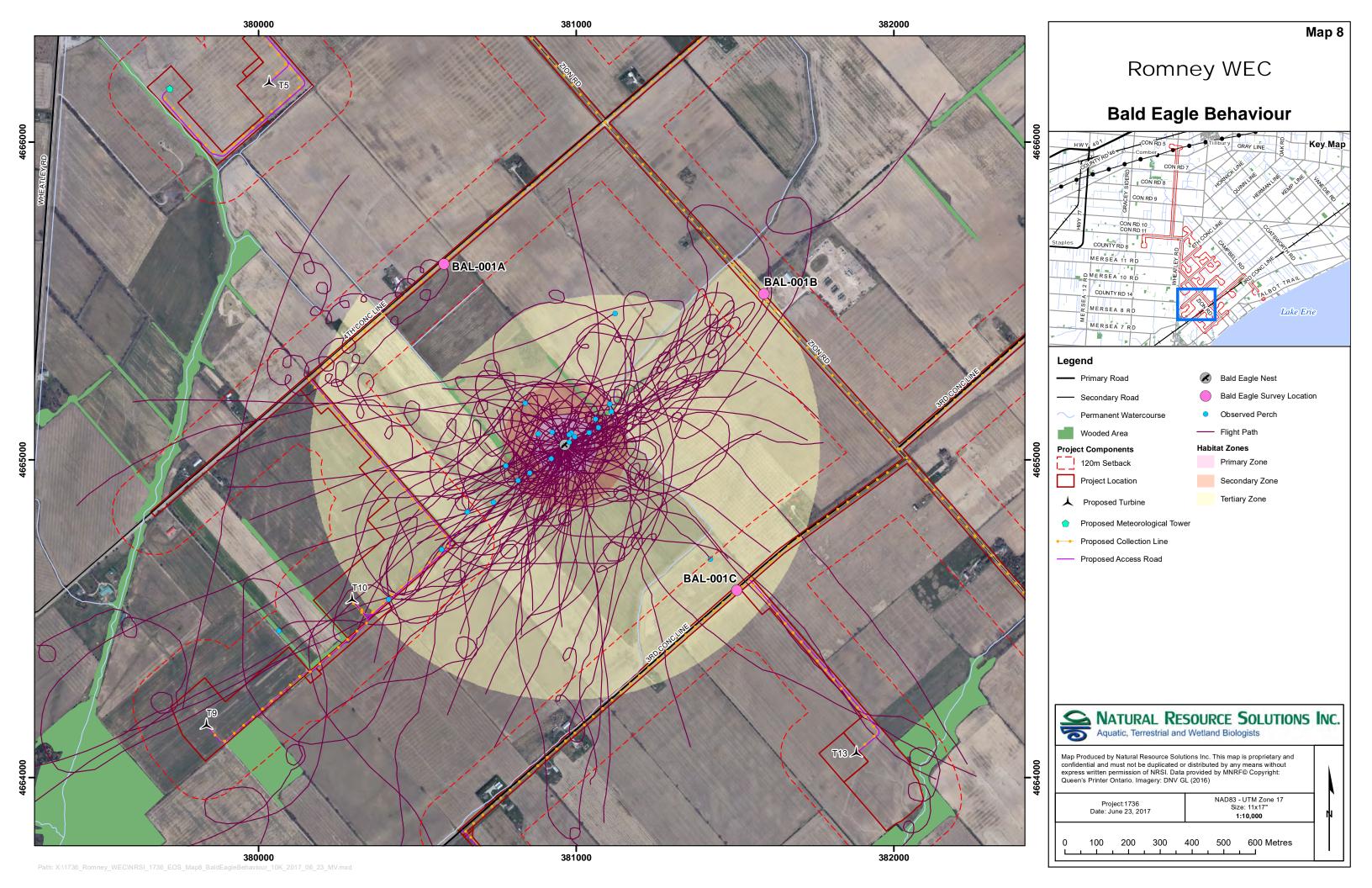


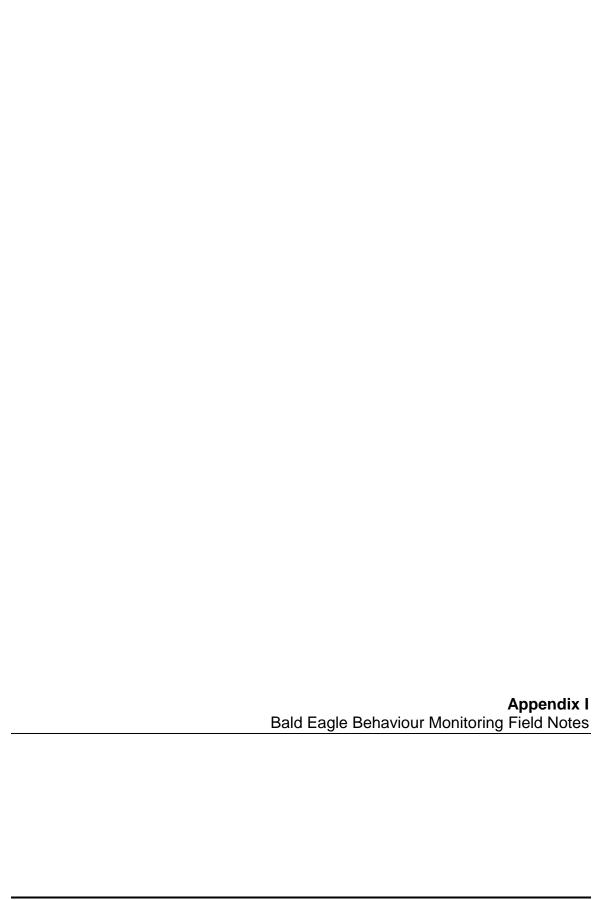












Bald Eagle Behavioural Survey	
Project Name: Romney WEC	Project #: 1736B
Air Temp (°C): Observers: K. Bwrrell	Date: April 5/16
Cloud Cover (%): 10 Cloud Height: low me	edium (high) Wind Speed: 2
Wind Direction: Precipitation:	Visibility: low medium high
Station 001A Start Time: 0739 End Time	: 0839
Station 001B Start Time: 0843 End Time	: 0943
Station 001C Start Time: 0947 End Time	: 1147

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
0739	1A	l adult	-adult sitting on nest	2	BAEA nest	
0826	Α/	1 adult	-flew in , with a precise to be a branch, set at nest for 6 min. Hen flew to nearby perch	1-3	١	
0843	18	1 colut	- adult on nest	2	BAEA nest	
0947	10	1 adult	-adult on nest	2	BAEA west	
1024	ıc	1 adult	-adult flew to nest t left 3 min offerwards	3-2	12+3	**
	ž					

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
		=				
1101	_					
		-				
			5			
			,			
identals: }	1. Robin, Killdeer	C. Grackle, H.	Lark, Song Sparrow, M. Dove,	Lapland Longs	pur (~130), Ring-bille	d 6v11,



Survey stop descriptions: 1A = 200 m Fast of

1293 Con. Line 4, by yellow sate

1B= directly south of drainage ditch, ~200mi north of entrance to gas plant (?)

10 = 100 m west of fire hydrant, directly south of nest

Bald Eagle Behavioural Survey	
Project Name: Rownly WEC	Project #:
Air Temp (°C): Observers:KMH	Date: Apr. 7/16
Cloud Cover (%): 100 Cloud Height: low r	medium high Wind Speed: 3
Wind Direction: W Precipitation: Recipitation:	Visibility: (low) medium high
Station 001A Start Time: 0945 End Time	me:
Station 001B Start Time: 10 50 End Time	me:
Station 001C Start Time: 1154 End Time	me: <u>1354</u>

< Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
0945	14	1 adult	Perched on nest	2	0	
1210	10	1 adult	Flew to nest from NW, landed for almin then flew to tree to the SW	2	2	
1217	10	1 adult	Flew away to the west	2	3	
			*			

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
	-					
			* *			
			American Robin, Ame Sparrow			



Bald Eagle Behavioural Sur	vey	
Project Name: Roman	WEC Project #: 1736 B)
Air Temp (°C):	Observers: KMH	Date: April 12, 2016
Cloud Cover (%):25	Cloud Height: low medium high	Wind Speed: 4
Wind Direction:	Precipitation: Nove	Visibility: low medium high
Station 001A Start Time: 085	End Time: <u>09.58</u>	
Station 001B Start Time:	53 End Time: <u>\\03</u>	
Station 001C Start Time: \\0	8 End Time: 1308	

Time	Observation Station	Number of Birds/Age	oreak off, hard to walk; 9=light struct Behaviour	Height Category	Activity Notes (Map Reference)	Other
0858	14	1 adult	Sitting on most	2	(D)	
¥ .						
			•			-

Incidentals: Horned Lark, American Robin, Red-winged Blackbird, Killdeer, European Starling, Northern Flicker, Bonaparte's Gull, Turkly Vulture, Black-capped chickadee, P. of ______ Ped-tailed Hawk,

1736B Ronney WEC Bold Eagle Monitoring Kathryn Hoo April 12, 2016

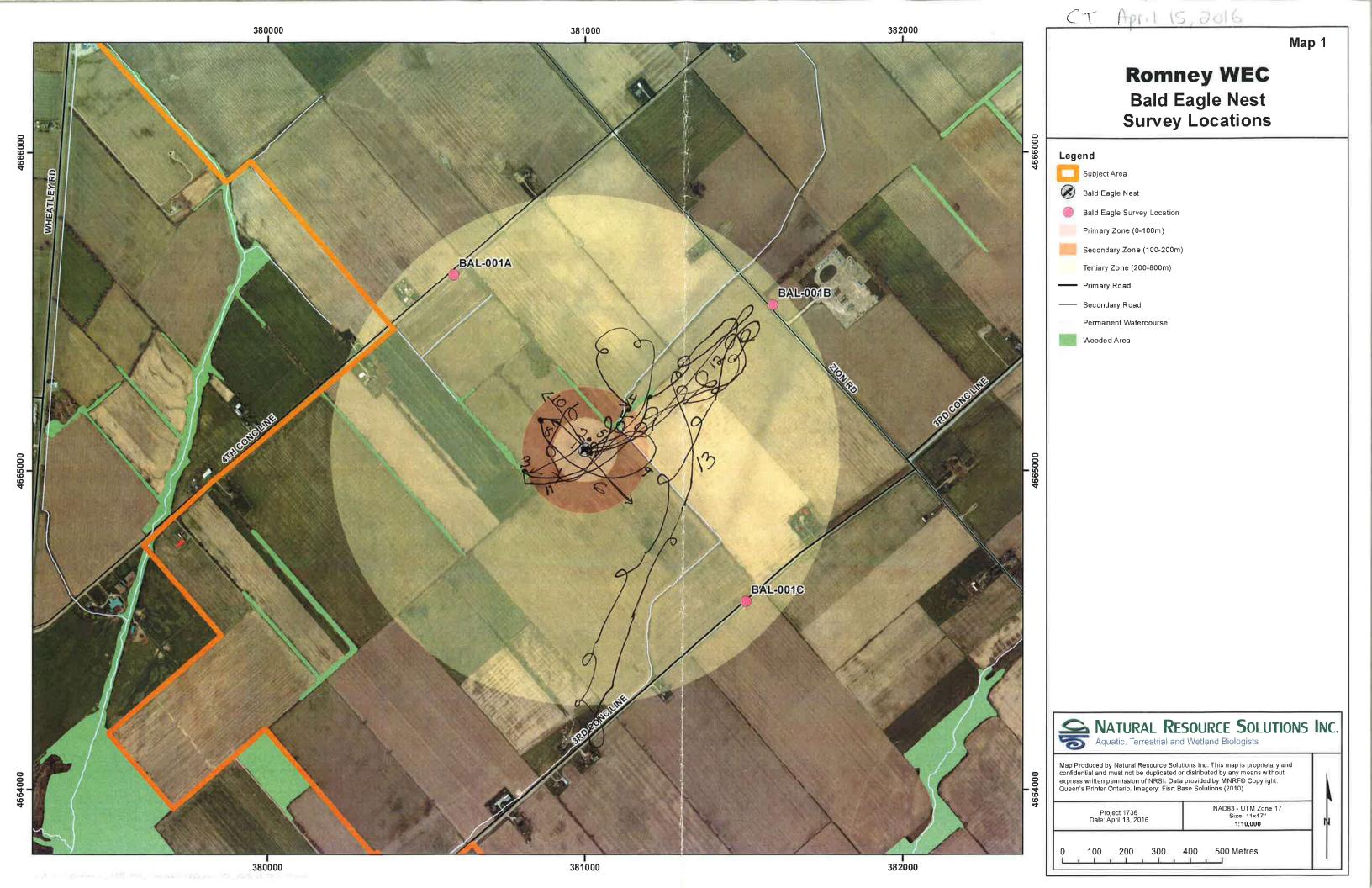


Bald Eagle Behavioural Sur	vey	
Project Name: Romney	WEC Project #: 1730	6-B
Air Temp (°C):	Observers: C T	_ Date:April SJol 6
Cloud Cover (%): 10	Cloud Height: low medium high	Wind Speed:
Wind Direction:	Precipitation: 100 ML	Visibility: low medium high
Station 001A Start Time:	End Time:	
Station 001B Start Time:	57 End Time: 13 57	
Station 001C Start Time:	59 End Time: 14 59	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
10.55	001A	02/2/45	nest, i perched	2 pst	To the same of the	
11:26	001A	adults	south and persied	2	1,3	
	001 A	odu Ft	flew north and perchasing tree	1-3	L-	
11:49	001 A	about	recogning stick;	2-3 erio1	5	*-
·	0018	a odults	I Maked at the March	9-3	1, 6	
12:19	0018	adults	I facted on rost.	3	. (,)	
12:40	0018	2 adults	other moved to feet on nest.	chad in 1820	1,8	
12:51	0018	audults	barkets nost, other	2-3	9,10	
12.59	0016	2 adults	1 perchad on nest	2	1,3	
13'55	0016	a adults	I Reiched on nost	+ 1-a	()	
14:36	0016	adults	1 BN next other stew NE and refurred to nest VI a Stick	2-3	12	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
14:45	0016	a adult	Ton rest, office flew neg nestion Ion rest, office flew inch to rest	(055)	()	
4:48	0010			1-2	5	
14:50	0010	adults	sooned around	1-10	13.	
			8			

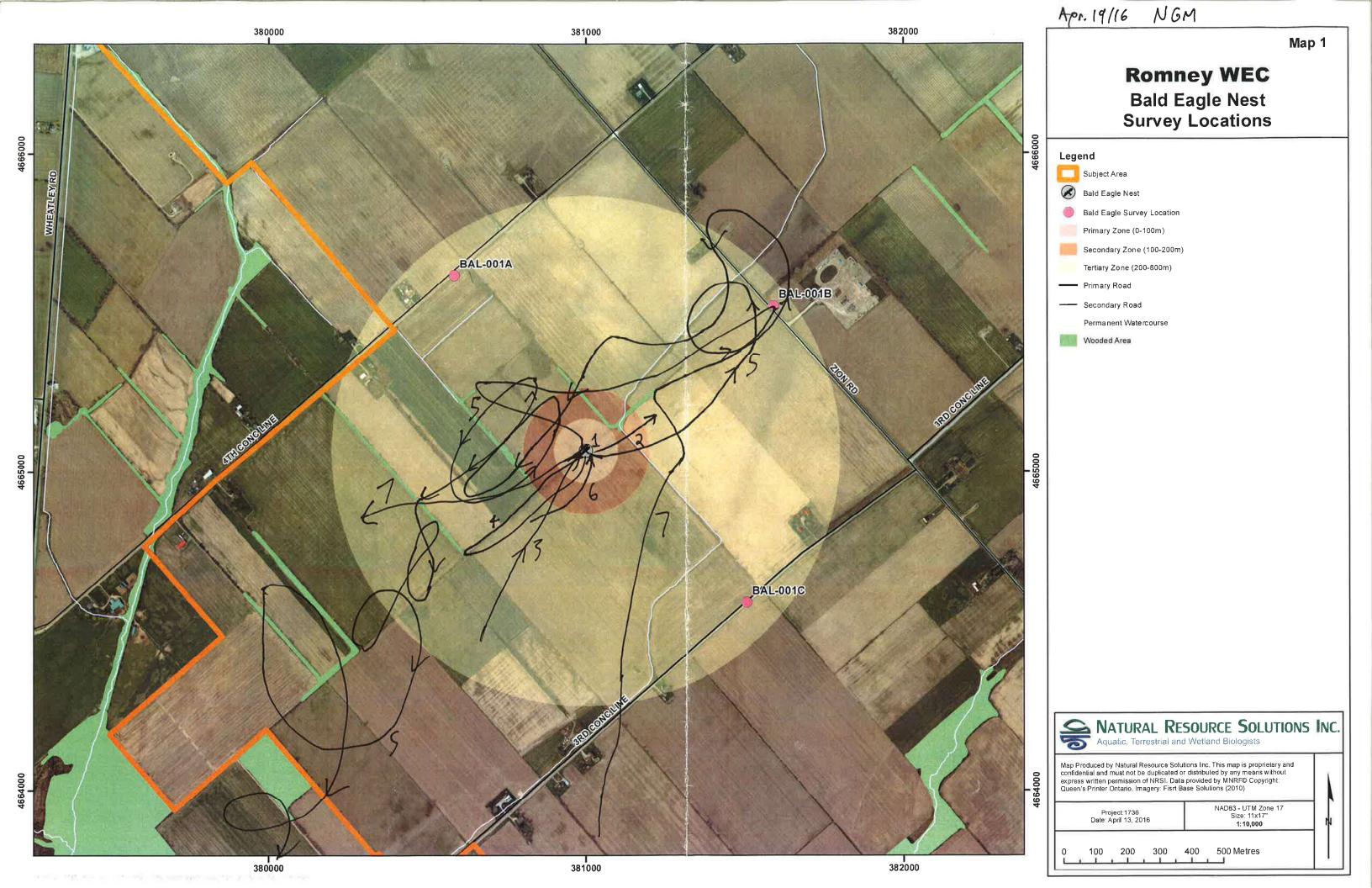
dentals: red-toiled hawk, American robin, European Starling redwinged blackbird, song sparrow thornod lank, brown-headed rowbird, turkey vulture, tree swallow, movining down, snow geese, Killdeer, osprey



Bald Eagle Behavioural Survey	
Project Name: Romney WF	Project #:
Air Temp (°C): 9-11°C Observers: N6M	Date:
Cloud Cover (%): 25 Cloud Height: low m	nedium high Wind Speed:
Wind Direction: None	Visibility: low medium high
Station 001A Start Time: 1003kg End Tim	e: 110dhs
Station 001B Start Time: 1105 hrs End Tim	e: 1205hrs
Station 001C Start Time: 12 08 hB End Tim	e: 1408 hrs

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
1002hs	001A	2 Adults	perhed as nest,	N	1	
lolaha	001A	1 Adult	Flew from hest art of site behand hees to cast.	2	2	14
1035hg	001A	1 Adult	Flow in from southwork of landed on the nest	1-2	3	
038hm	001A	1 Adult	same and flew from nest to nearly tree + returned to nest a stick	1	4	,= a
1055hs	001A	1 Adult	Adult left nest or sourced generally to the sw. very high	2-30	5	
1105hg	0018	1 Adult	perched as hest	2	1	-
ldooks	001B	1 Adult	Flew in from west + lauded on nest	2	6	
1908 ps	001 C	1 Adult	perched on west, no sign of other adult.	2	1	_
133543	001 C	1 Adult	Flew in from santh to wost with a stick or then left to be	, 2	7	
						. ,

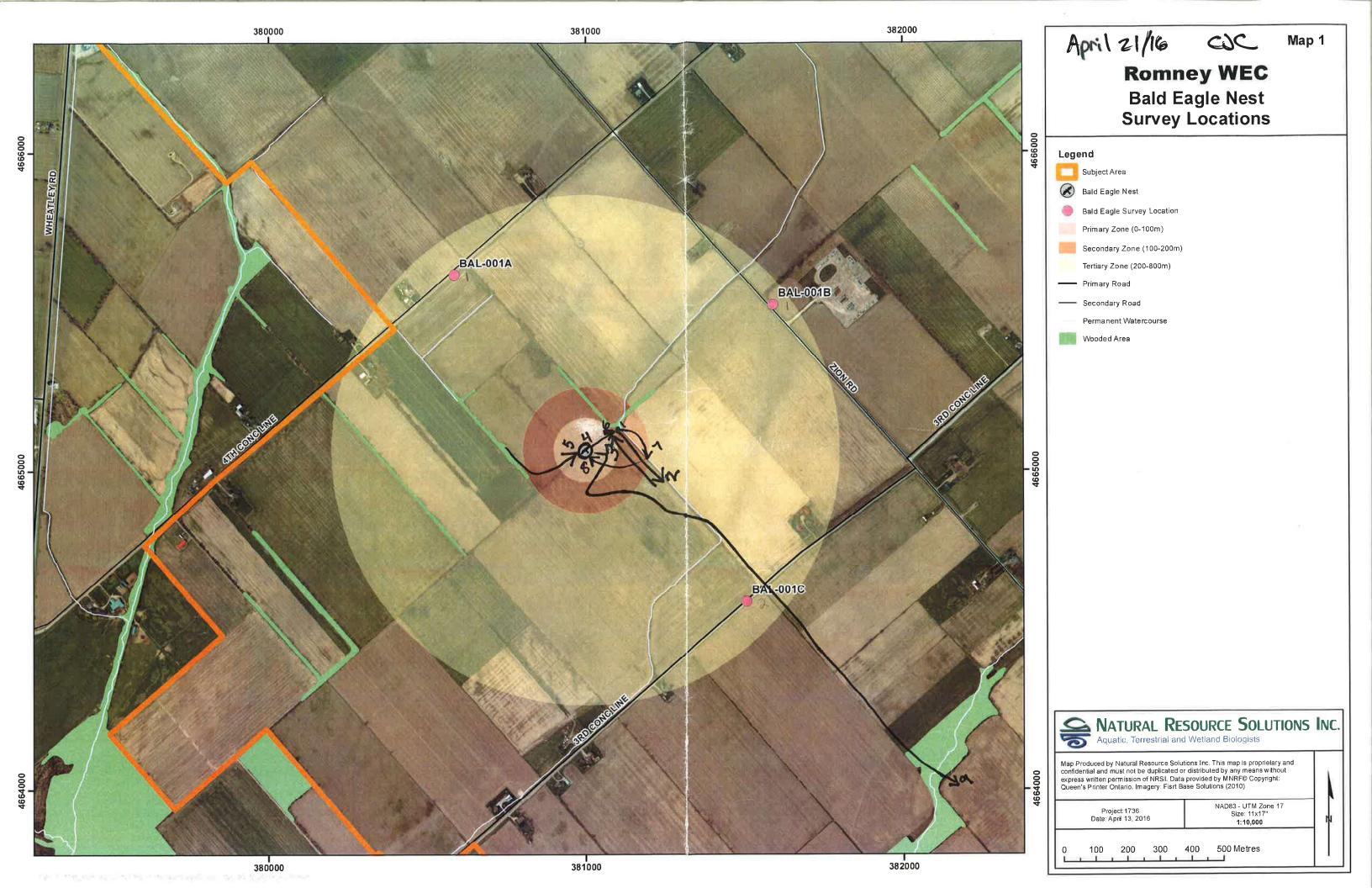
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
	**					
				-		
			•			
						·
dentale	IIPE DE TOUR	Mullad.	lateral Hours Turken	ultere A	Can fed radue	A Blackle
um bead	of chubird, C.G.	ackle, Tree	led-fusted Hunk, Turkey (smallery, Horned Cork, Ki	udeer, com	ida Gouse King-liv	rel Gall



Bald Eagle Behavioural Survey							
Project Name: Ronney	WEC	Project #:	<u>68</u>				
Air Temp (°C): 8°C	Observers: COC		Date: April 21/16				
Cloud Cover (%): 95%	Cloud Height: low	nedium high	Wind Speed:				
Wind Direction:	Precipitation: rau^		Visibility: low medium high				
Station 001A Start Time: 1	: 22 End Tim	ne: 12:22					
Station 001B Start Time: \ \ 2	2;24 End Tim	ne: 13',24					
Station 001C Start Time: \3	End Tim	ne: 15:26					

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
11:22	ωιA	No ob	2 nother 193			
12:25	0018	1 Adult	perched on woodlot near nest	2		
12:46	001B	1 AdoH	flew off perch to	0	2	
13:07	001B	1 Adult	flew off ground, back to perch on tree	2	3	
13:26	0010	1 Adult	perched on nest	2	4	likely on nest carlier.
14:18	0010	1 Adult	flew to nest	2	30	both adults on rest
14:19	001C	1 Adult	Alew from rest to perch in tree	2	6	
14:26	0010	IAdult	Alew to ground	0	7	
14:28	001C	1 Adult	flew back to nest	2	8	
14:29	001C	1 Adult	flew towards SE along hedgerow	2-3	9	

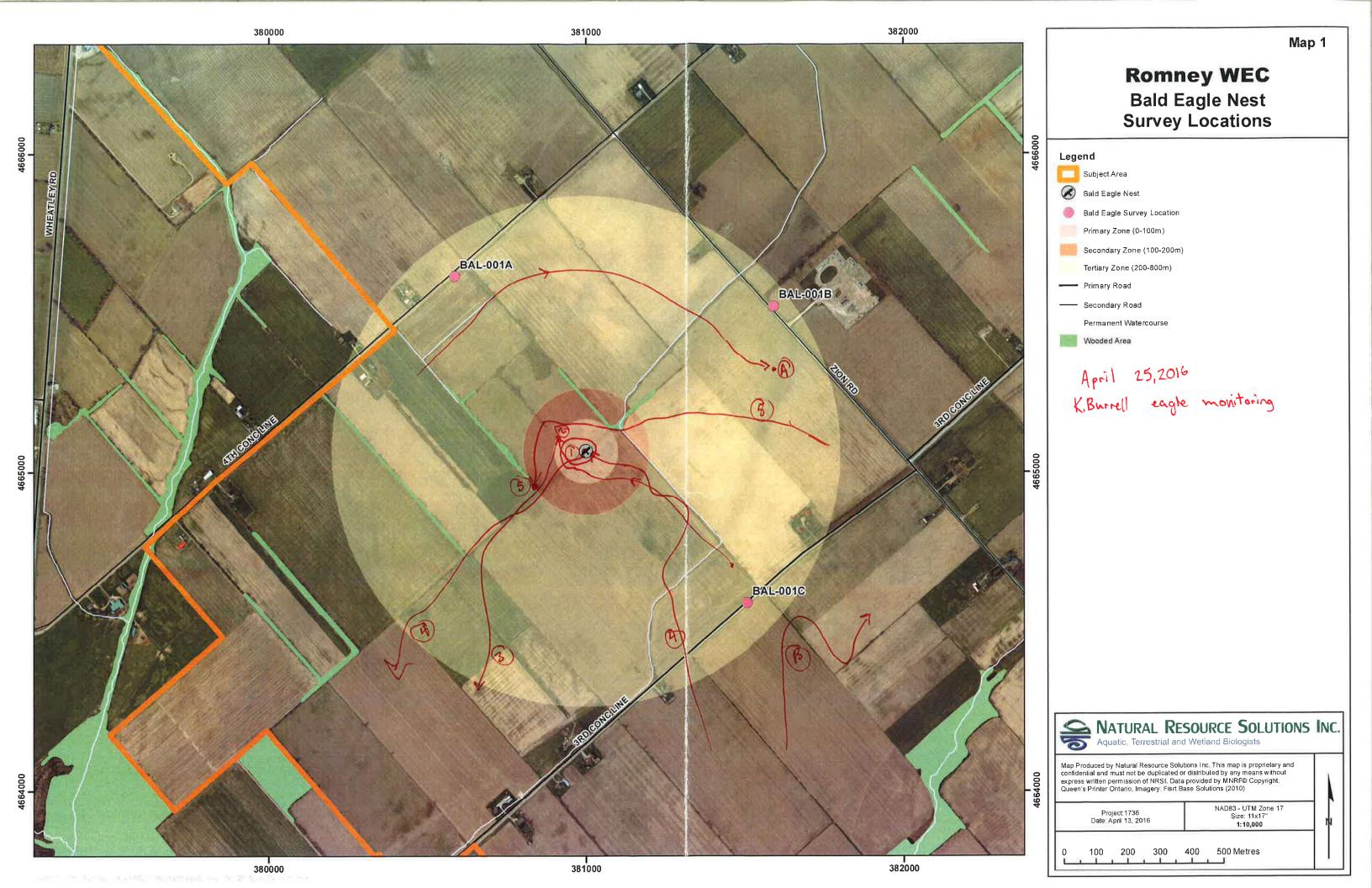
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
			*			
			*			
			_			
dentals:	Killdeer Red	-winged	Plactboard, Harned	Lark, Eur	open Sterling	<i>'</i>)



Bald Eagle Behavioural Surve	э у	
Project Name: Rowney	NEC Project	#: 1736B
Air Temp (°C):\l\ °	Observers: K. Burrell	Date: April 25/16
Cloud Cover (%): 60	Cloud Height: low medium	high Wind Speed: 4
Wind Direction: 5E	Precipitation:	Visibility: low medium high
Station 001A Start Time: 08	End Time: 0919	
Station 001B Start Time: 0923	End Time: 1023	
Station 001C Start Time: 1027	End Time: 1227	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
0819	I A	1 adult	-adult sitting on west	2	1	
0854	Al	1 adult	About sot-up off nest to appeared to rearrange west (eggs) before sitting that	2	١	
0929	18	1 admit	flew in klaunded	3-1	2	
1036	10	ladett	and bird flew from	1-3	3	
1104	10	ladult	Adult flew to nest, dropping something (small manual) off	4-2	4	
1150	IC	1 adult	Flew in & perched	4-1	5	
			8.			

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
	1					
0844	14	13 adult	Black-bulled flower flew over & circled field & landed	6-0	A	
1048	ıC	18 A. Go Wen	Planess - flew by calling	3	В	
Incidentals:	in the second se					

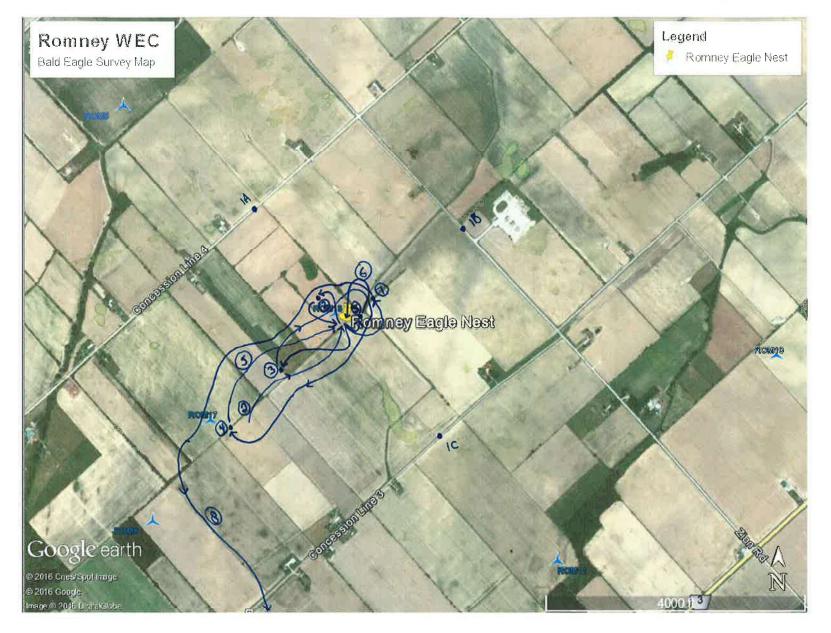


Bald Eagle Behavioural	Survey	
Project Name: Romas	Project #:_\	368
Air Temp (°C): 5	Observers: KMH	Date: Apr. 28/16
Cloud Cover (%):	Cloud Height: low medium high	Wind Speed:
Wind Direction: E	Precipitation: Light rain	Visibility: low medium high
Station 001A Start Time:	0902 End Time: 1002	
Station 001B Start Time:	100h End Time: 100	
Station 001C Start Time:	1110 End Time: 1310	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
0902	A	1 adult	sitting on nest	2		
0915	IA	1 adult	flew to nest from Swi, then to the ground just Mul of nest	2 -> 0	2	Eating on the ground.
1010	18	1 adult	Flew to nest then to tree to the SW	0 -> 2	3	3
1145	10	1 adult	Flew past nest then to the ground	2 -> 0	4	
1148	10	1 adult	Frew to nest for a 2 min then to ground	0-2-0	(5)	
1153	10	1 adult	Flew to nest with plant material	0 -> 2	(i)	
1211	10	1 adult	Flew NE and perched in free	2	1	
1245	10	1 adult	Flew SW and then S	2 ->4	(8)	
					*	

Incidentals: RWBL, TRES, TUVU, SOSP, VESP, HOLA, BHCO, AMRD.

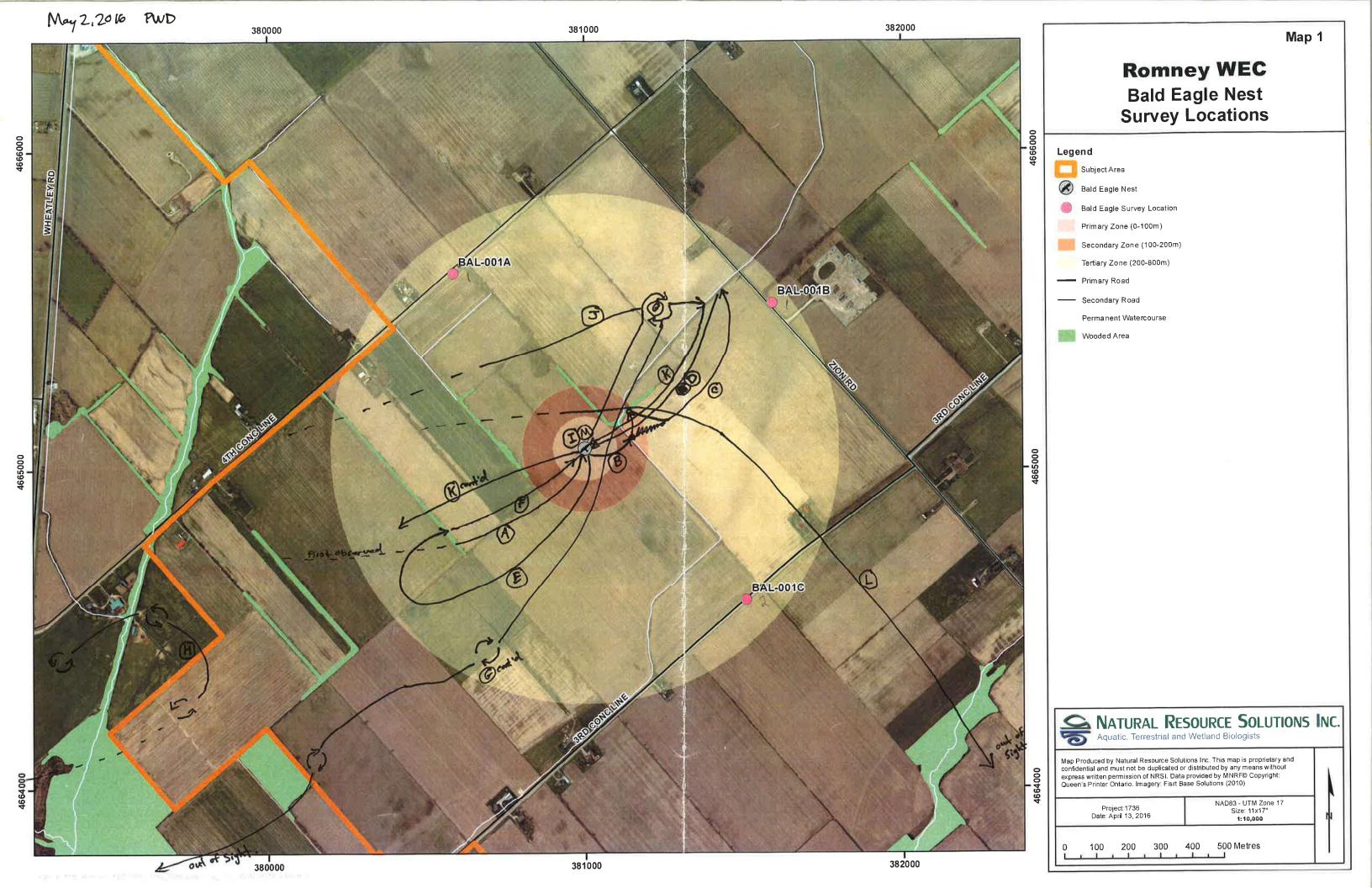
1736B Romany WEC KHO Bold Eagle monitoring April 28,20%



Bald Eagle Behavioural S	urvey	
Project Name: Romney	NEC Project #: 173	6B
Air Temp (°C):	Observers: PWD	Date: May 2, 2016
Cloud Cover (%): <u>IOO</u>	Cloud Height: low medium high	Wind Speed: 2
Wind Direction: NE	Precipitation: None	Visibility: low medium high
Station 001A Start Time;	15:4] End Time: 16:41	
Station 001B Start Time:	14: 37 End Time: 15:37	
Station 001C Start Time:	12:02 End Time: 4:02	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
12:15	001C	Adult	Flew to perch above nest	1	Α	
12:26	00 I C	Adult (same)	Flew from nest tree to nearby shape in hedge row (perched)		B	
12:28	001 C	Ŋ	Flew to ditch/undercourse, dove, got a large tish	1-0	C	
12:29	0010	(į	Returned to nest with fish	1	D	
12:32	0010	((Flew off nest to nearby Snay and perdued.	1	E	
12:34	001C	()	Flew back to nest.	\	F	
12:41	0010	1,	Lest Nest, circled high NF, then working to Sw of nest until out of sight (12:50)	4-6	0	Grebed high for 9 min.
13:05	001C	Ц	Returning (circling high) Remiss for away near wheathey	4-6	Н	W. Chorus frog ! alling in ditch.
13:08	0010	Adult (second)	Adult on nest presumally was on nest since arrival (did not see if fly In) nost,	. 16:41+	Ī	Shuffling around, standing up on edge of nost.
14:44	001B	Adult (appears to be first as recend Stayed on mest)	Flew in from Sw (distant). Approaches Zien Rd, then alwas for Fish in ditah	3-0	J	
14:45	0018	I.	Returns do nest with fish briefly then flies SW again. Adult (sound) stays on nest		K	

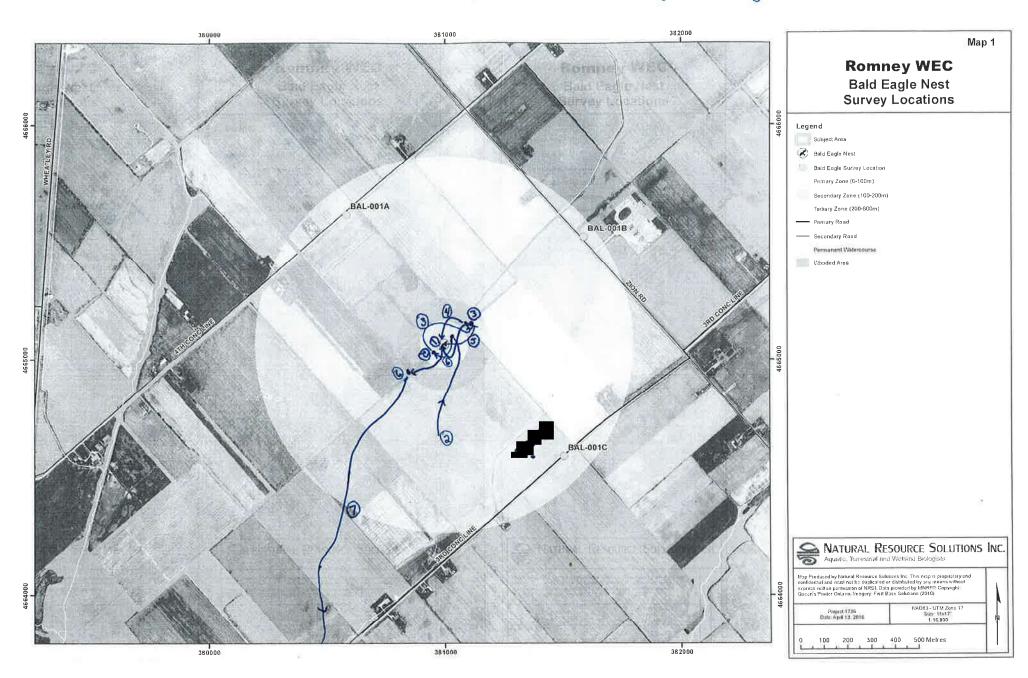
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
14:58	00 IB	Adult (Presumably first)	Fly-by, heading for SE and outled sight.	3	L	
16:21	001C	Adult (second)	About gets off rost shiftens around books wings, reduces to most fund survey concludes	1	М	Shodyun blocks on Sind Cone Line @ 16:21. Adult (second), gods up to change on Side of head
		3				
			•			
-	broned Look Red-winged Blockbis when Yulture Wildeler	Western Chrys of S Mourning Do	From Spoke inter	with 2 locals rested in the e	(separately) at 0010 agles. One claims pike is skinny, so polod ville Ash.	, both quite our in the drain pike).



Bald Eagle Behavioural Survey							
Project Name: Romnay WEC Project #:_	1736 B						
Air Temp (°C): Observers: KMH	Date: May 4, 2016						
Cloud Cover (%): 95 Cloud Height: low medium high	h Wind Speed: 3						
Wind Direction: 5 Precipitation: Light rain Starting at 114	Visibility: low medium high						
Station 001A Start Time: 0928 End Time: 1028							
Station 001B Start Time: 1032 End Time: 1132							
Station 001C Start Time: 1136 End Time: 1336							

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
0928	(4	1 adult	Sitting on nest	2		
0955	14	I adult	Flew in From S, landed near nest, then flew to tree to the SW	2	2	
1035	14	1 adult	Flew to tree to the	2	3	
1159	1c	1 adult	Flew to nest.	Q	4)	
1208	10	1 adult	Flew to the ground to the NE	2	3	
1245	10	1 adult	Flew to nest then to tree to the SW	3	(2)	Corrying food
1250	1 c	1 adult	Flew off to the S	2->4	1	
12,53	lc	1 adult 1 juvenile	Adult feeding juvenile in the nest	2	0	

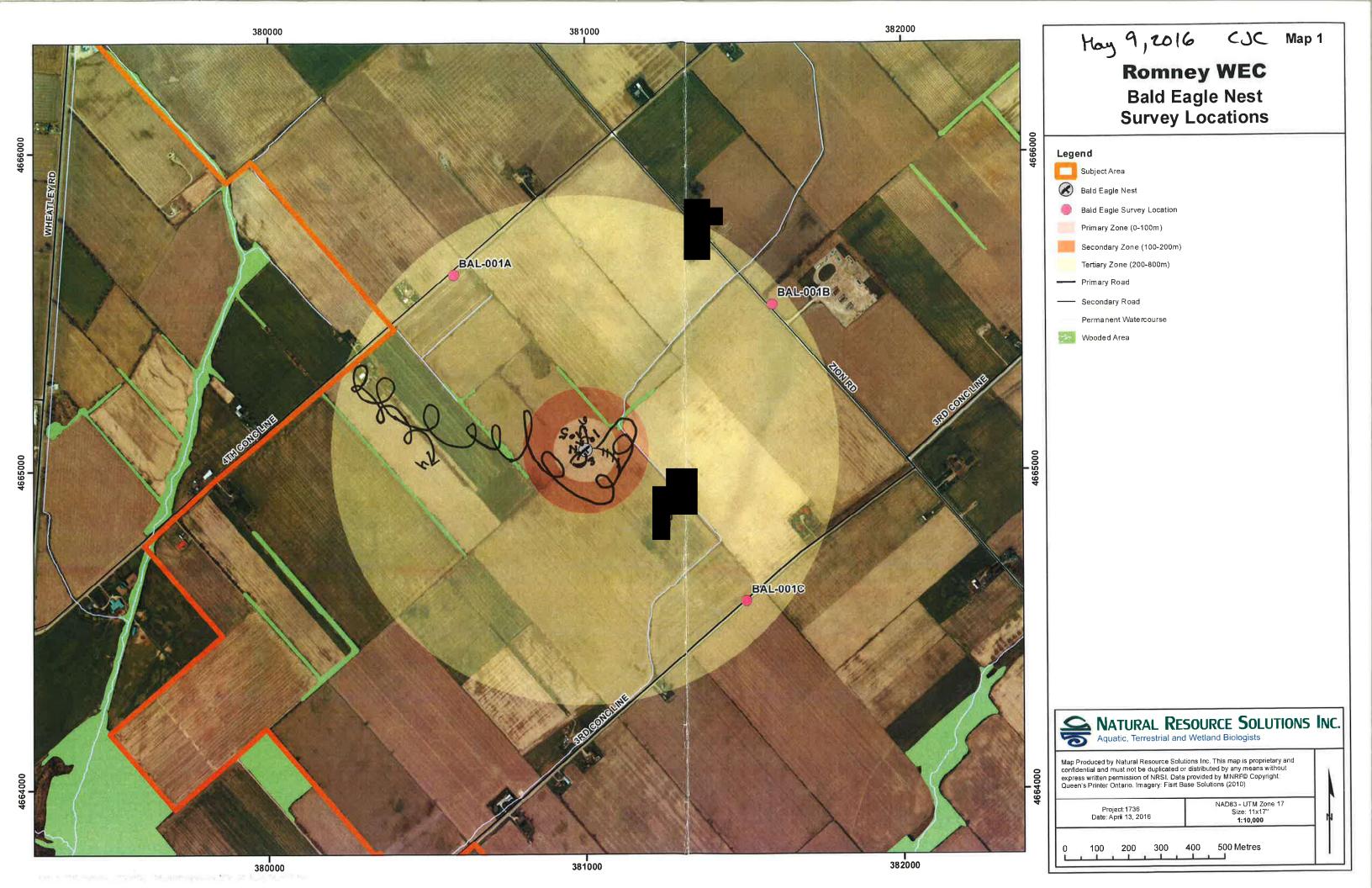
Incidentals: Horned Lark, Killdeer, Red-winged Blackbird,
Northern Harrier, Common Grackle, Vesper Sparrow, European Starling, P. __of__



Bald Eagle Behavioural Su	rvey		
Project Name: Romacu	, wec	Project #:173	6
Air Temp (°C):	Observers:	CSC	Date: May 9/16
Cloud Cover (%): <u>807</u>	Cloud Height:	low medium high	Wind Speed; 2
Wind Direction: SW_	Precipitation:_	none	Visibility: low medium high
Station 001A Start Time:	11:18	_ End Time: 12:18	_
Station 001B Start Time:	12:20	End Time:	
Station 001C Start Time:	13:22	_*End Time:	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
11:18	COLA	Adult	perched next to			
11:25	001A	1 Adult	moved anto		2	
11:36	001A	1 Adult	moved off next then back on again		3	
12:08	00 IA	(Adult	() () ()	5	4	
12:25	0018	1 Adult	peraled next to		7	
12:30	0018	1 Adult			2	
13:22	001C	1 Adult	perched on rest)	2	
14:37	0010	1 Adult	dropped to ground, the back to perch next to nest	0-1	6	
				¥		

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
				23		
			× ·			
	ı					
ncidentals:	Northern Care	lind, Hor ce Swallo	w, American Gold Hawk, Chipping	Blackbilling, C	Ird Eastern LIFF Swalla	Phoebe



Bald Eagle Behavioural Sur	vey	
Project Name: Rowney W	EC Project #:736	B_
Air Temp (°C): 12	Observers: KMH	_ Date: May 11, 2016.
Cloud Cover (%): 100	Cloud Height: low medium high	Wind Speed:
Wind Direction:	Precipitation: None	Visibility: low medium high
Station 001A Start Time: 102	D End Time: 1120	
Station 001B Start Time: 1\2	5 End Time: 12.35	
Station 001C Start Time: 12	30 End Time: 1430	

	7=lrg trees move; 8=twigs break off, hard to walk; 9=light structural damage; 10=trees uprooted							
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other		
1020	18	1 adult 1 juvenile	Sitting in hest	2				
1300	l c	1 adult	Flew NE and perched	2	٩			
1308	lc	1 adult	Flew back to nest; perched in tree directly above hest	2	3			
						II		

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
						1
						===
			*			
Incidentals:	hed-winged - Crow, Ti	Blackbird >TROY VULT	, Tree Swallow, Vesye we, American Coldfi	nch,	Horned Lark	-)



Bald Eagle Behavioural Survey	
Project Name: Romney WF	Project #: 1736 B
Air Temp (°C): 14 Observers: M	Date: May 16/16
Cloud Cover (%): 10 Cloud Height: lov	w medium high Wind Speed: 4-5
Wind Direction: Precipitation:/	Visibility: low medium high
Station 001A Start Time: 1036 hs	End Time: 136 WR
Station 001B Start Time: 1139hr3 E	End Time: 1239415
Station 001C Start Time: 1243hr3 E	and Time: 493hrs

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
1036hB	001A	1 Adult	Voung not visitle from vantage point	2 .	1	
1139 hg	001B	1 Adult 1 nestling	Young not visible from vantage point sitting on hest	2	1	
1236hm	001B	1 immature	Flying for away to west site in a NE direction	7	2	
1302hg	001c	1 Adult	Another adult fley in from north, crited the area + flow off to past.	5-10	3	
		×	•			
				10	p.j	
		*				11
						_

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
	8					
		-				

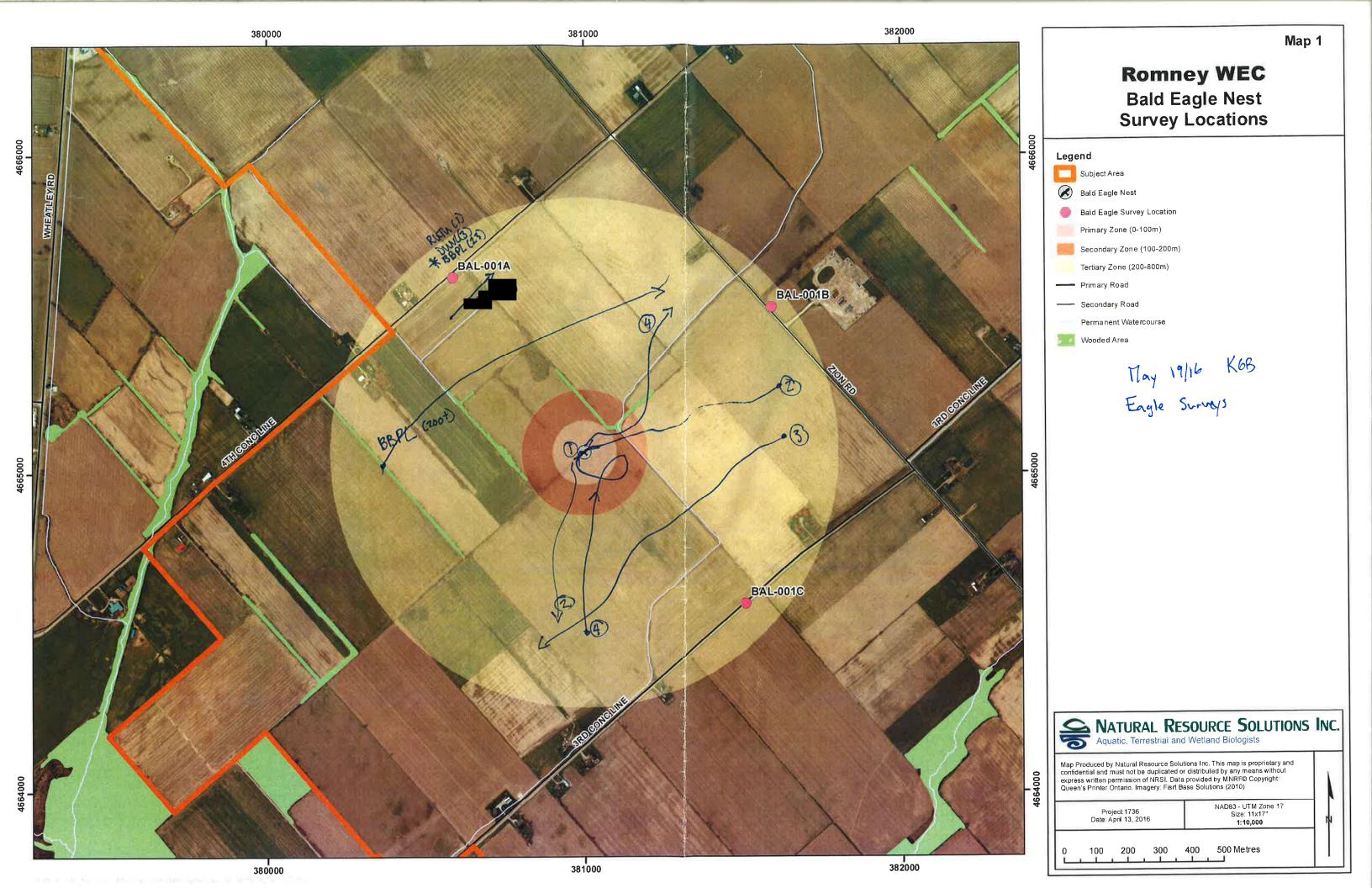
			-			
dentals:	Killner Rlad	C- hellited Plan	er, Dunlik Homed 1-12	Savaunal Came	Police and Michel	rol C. Ca
caw,	Turkey Witheres	Dave Hollow	er, Dunlin, Horned Lark, I, Red-tailed Howk was ender, Mallard,	nolling vives A	ated throwing board	Spotted



Bald Eagle Behavioural Sur	vey		
Project Name: Rommy W	EC .	Project #: 1736	B
Air Temp (°C):	Observers:	K68	Date: May 19/16
Cloud Cover (%): 1	Cloud Height:	low medium (high	Wind Speed:
Wind Direction: 515.	Precipitation:_		Visibility: low medium high
Station 001A Start Time: 100	18	End Time: 1208	
Station 001B Start Time: 1211		End Time: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
Station 001C Start Time: 13 5		End Time: <u>1415</u>	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
1003	IA	1021+	-sitting on nest	2		
1043	IA	1 and 1+	- flew to nest; left 4 ~ n. later	4-2	2	
113B	I A	(2nd year?)	. flew by, south of nest to continued	8	3	
(2)	18	1 afult	-ad. It sitting on	2		
125'†	18	ladutt	fedfore to nest in fish, fedfore to adults nest. Eguld see adults	4-2	4	
			nesting (1) jodult that flew in left @			
1315	10	1 20-14	- continuing adult,	Z.,	1	
			of .			

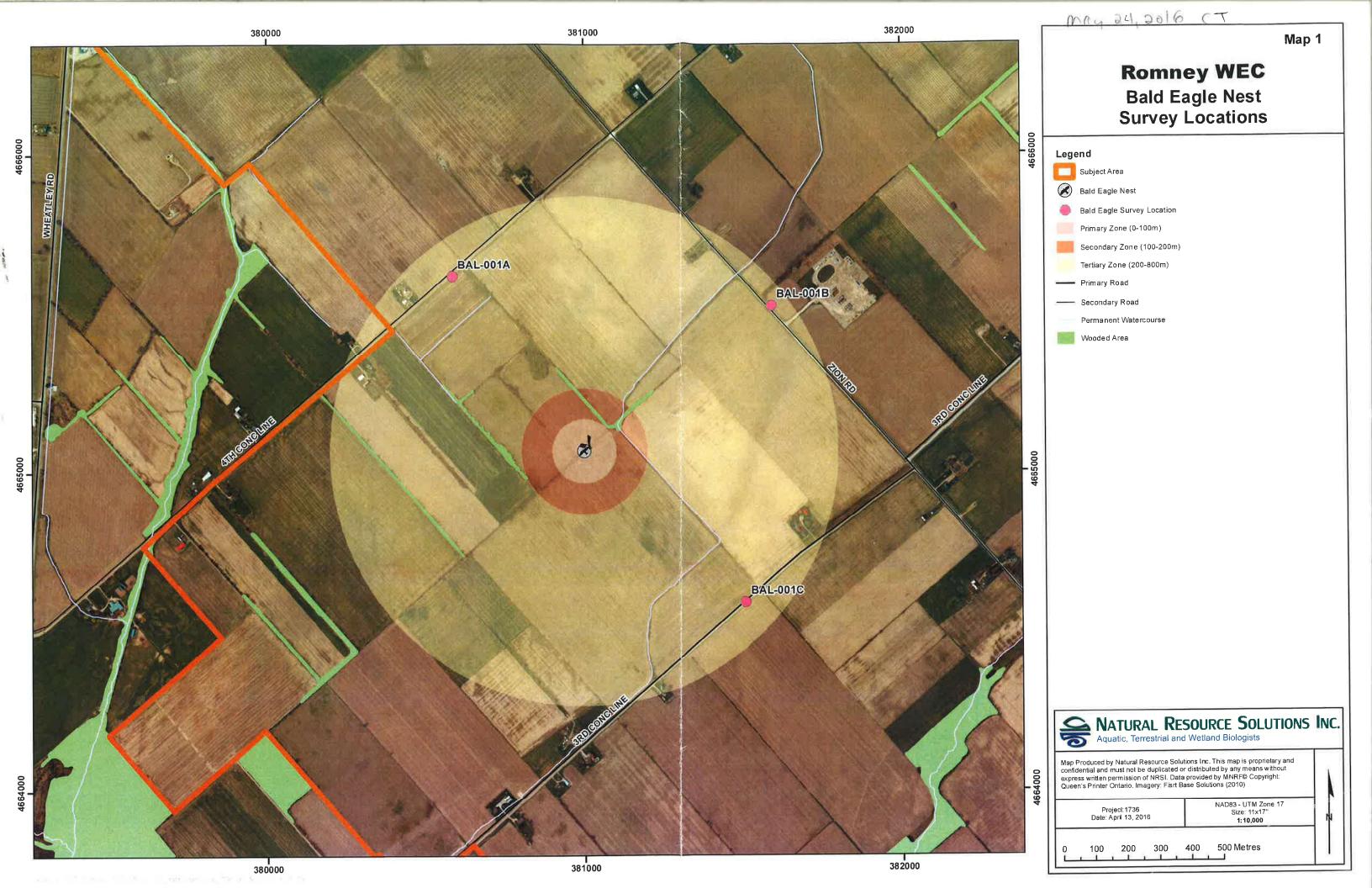
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
1201	IA		Flying over, calling	6	see map	
		-				
1631	41	200+BBPL	flew east	6	See map	
1045	18	23 BBFL 1 RUTU 3 DUNL	-foraging in field	0	see map	
Incidentals:						



Bald Eagle Behavioural Sur	vey	
Project Name: Romney	WEC Project #: 173	<u>68</u>
Air Temp (°C);	Observers:	Date: May 24, 2016
Cloud Cover (%):	Cloud Height: low medium (high	Wind Speed:
Wind Direction:	Precipitation: No Ne	Visibility: low medium high
Station 001A Start Time:	2.52 End Time: 1.52	
Station 001B Start Time:	54 End Time: 12.54	
Station 001C Start Time:	:57 End Time: 14.57	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
10:52	OSÍA	1 June 11	perchad on nest	es.		
1.50	001 P	1 adult	perched on rust, abult & juvenile eati		enterocin)	
1:54	0018	ladult limerile	00 -11 00 00 005	7	i kayan di	
12:57	00/0	laduit Ljuvenile	ferched on rost	2	1	
			4			

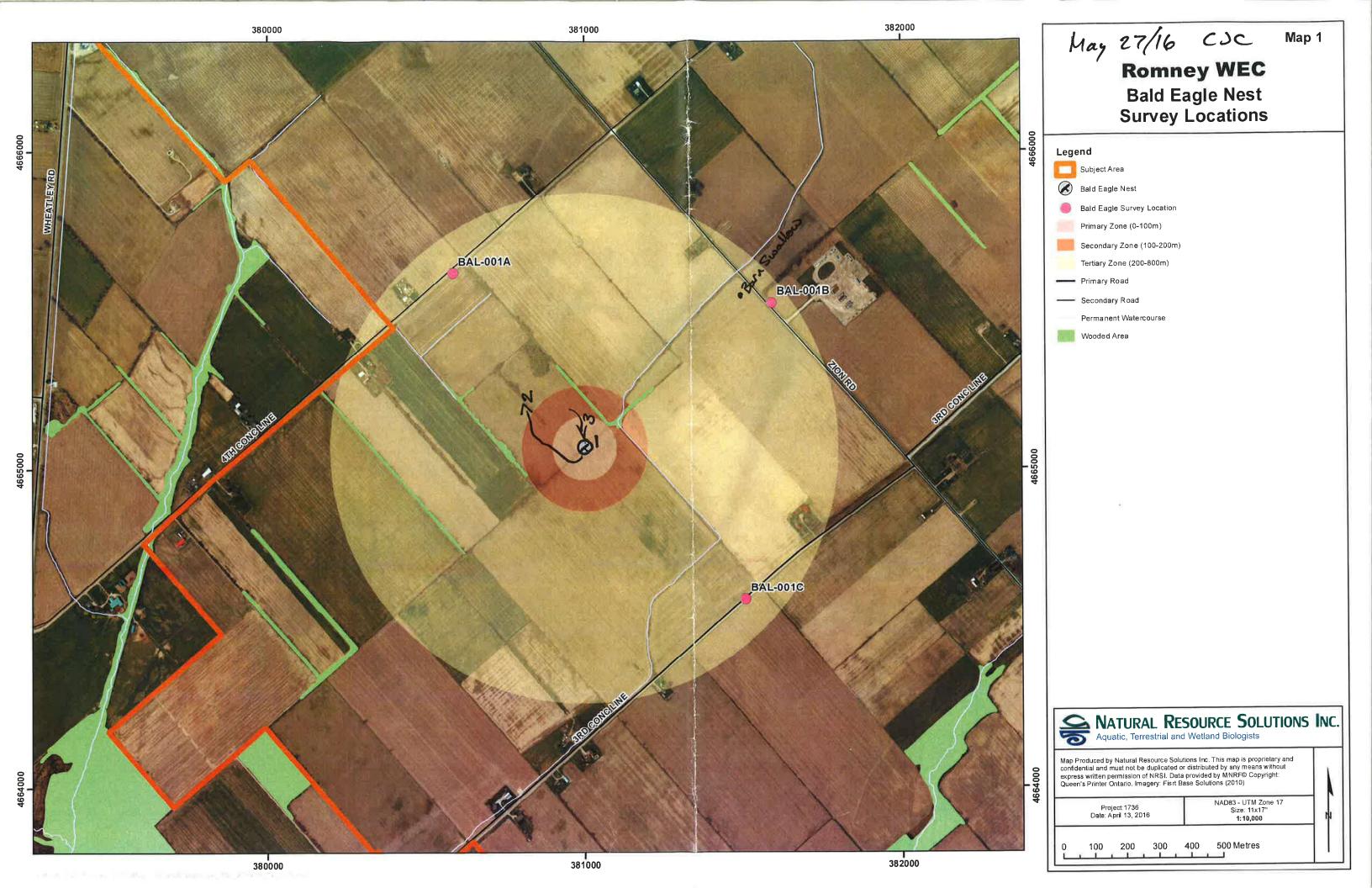
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
_						
			-			
identals:	Killdeer, Fed	winged laborations or entires or	exbird clife sue ide yellow warble about movering day	How, horner	fork cappose	while can unik



Bald Eagle Behavioural S	urvey		_
Project Name: Romney	WEC	Project #:	86B
Air Temp (°C): 26°C	Observers:	COC	Date: 10y 27/16
Cloud Cover (%): 200	Cloud Height:	low medium high	Wind Speed:
Wind Direction:	Precipitation:_	none	Visibility: low medium high
Station 001A Start Time:	11:44	End Time:	
Station 001B Start Time:	12:46	End Time:13:46	
Station 001C Start Time:	13148	End Time:15;48	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
11:44	601A	1 Adult	perched on nest	1		
12:46	0018	1 Adult	perched on	1		8
13:48	0010	1 Adult 1 Young	perched on nest	(Ĺ	
14:25	0010	1 Adult	Hew off rest	1-2	Z	
14:45	2010	1 Adolt	flew back to	(3	
				•		
						OK.
				7.		

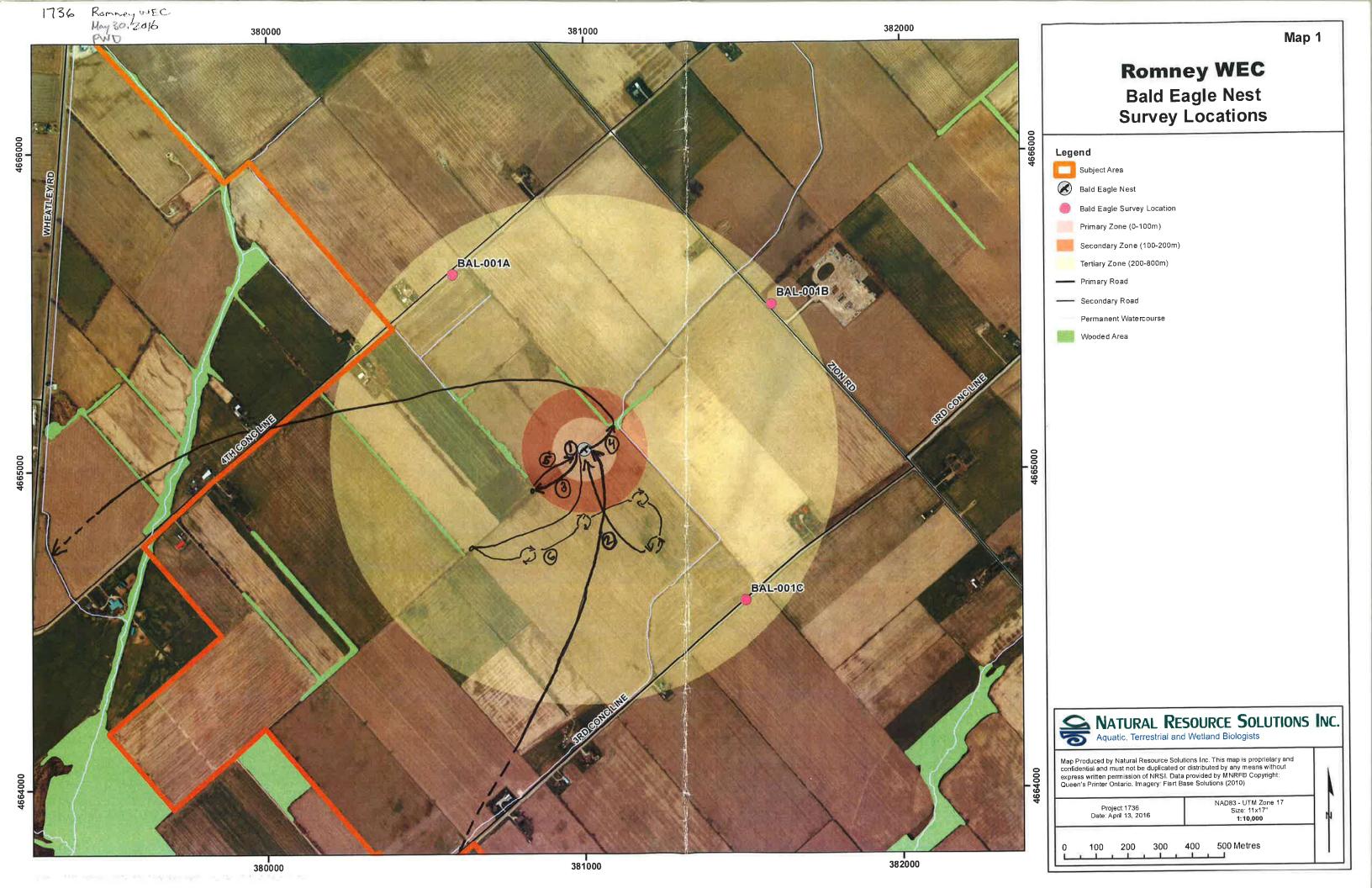
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
			=====			
						<u> </u>
						.4
-						
idont-la:	16	F 05		10 / 20		C - 11
cidentals:	Horned L , Killde	er, Reo	non Pellowthroat	oid, E. Pl	hoebe, Cliff (lots or	F .



Bald Eagle Behavioural S	Survey		
Project Name: Romney	WEC	Project #:\73	36
Air Temp (°C):	Observers:	2WD	Date: May 30, 2016
Cloud Cover (%): \o	Cloud Height:	low medium high	Wind Speed: 2
Wind Direction: SW	Precipitation:_	None	Visibility: low medium high
Station 001A Start Time:	0802	End Time:0902	
Station 001B Start Time:	0906	End Time:	
Station 001C Start Time:	1009	End Time:	

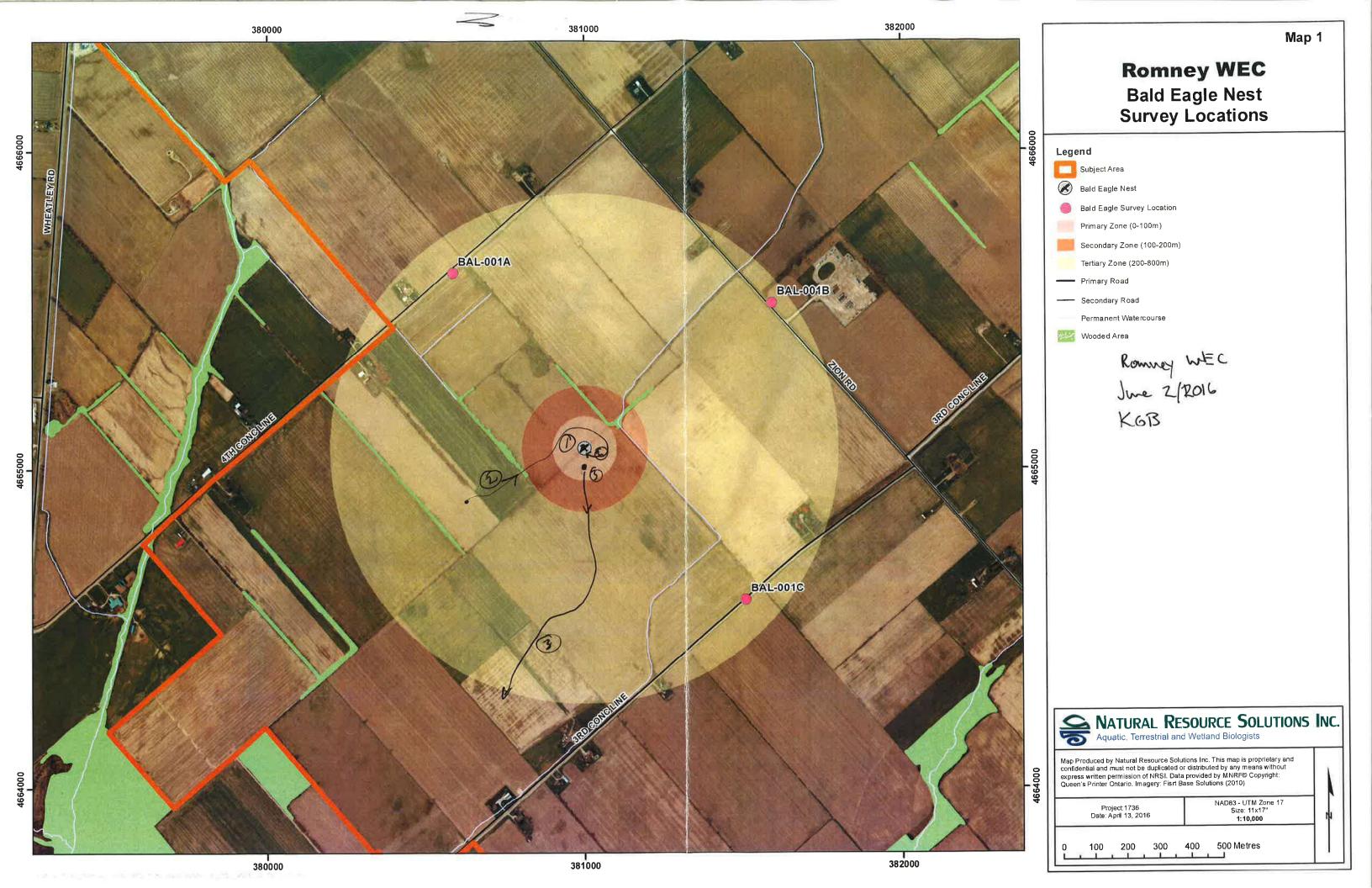
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
0802	001A	2	Adult perched on side of nost /sitting in.	-	(1)	
0913	0018		Second adult flew to next, perched in thee	2-1	2	First adult still on lin nest.
1001	00/B	.*	Adult Flow Flore nest	1	3	Earlet up on edge of nest.
1014	001 C	1	Rerched adult & flew to Mearby snags, perched briefly then flew of f.	-	4	
1019	001C	1	Adult @ returns to mest	*	Ŝ	
1039	001C	1	Adul & flies from rust as being pickup in raffling ficiler drives beneath and past north		(6)	
			Perchas briefly then beggers fireling nest high as truck divergrast nest a second line then beaves over beturns to per	11 =	-	
				i i		
→ 1269	Adult (A) and ear	bet remain	on nest until end of	survey.		

Time	Observation Station	Number of Birds/Age	Beha	Height Activity Notes (Map Category Reference)			Other
				i			
					2		
						-	
Incidentals: Killdeer Horned Lark Song Sparrow N. Cardinal	Turkney Vulture Mourning Dove Red winged Blac Mallard Commen Brackle	American Brown-h kblid Red-tail America Wild Tu	Goldfinch paded Cowbied and Hawk Robin rkay	Tree Finallows Beltimore Oriola European Starling		Spoke with k East of Balo	adowner to



Bald Eagle Behavioura	Survey			
Project Name: Rowwy	WEC	_ Project #: 17368		
Air Temp (°C): 23	Observers: K. Burrell		Date:	2016
Cloud Cover (%):	Cloud Height: low m	nedium (high)	Wind Speed: 2	
Wind Direction:	Precipitation:		Visibility: low	medium high
Station 001A Start Time:	0850 End Tim	e: <u>1050</u>		
Station 001B Start Time:	1054 End Tim	e: <u>1154</u>		
Station 001C Start Time:	1157 End Tim	e: <u>1257</u>		

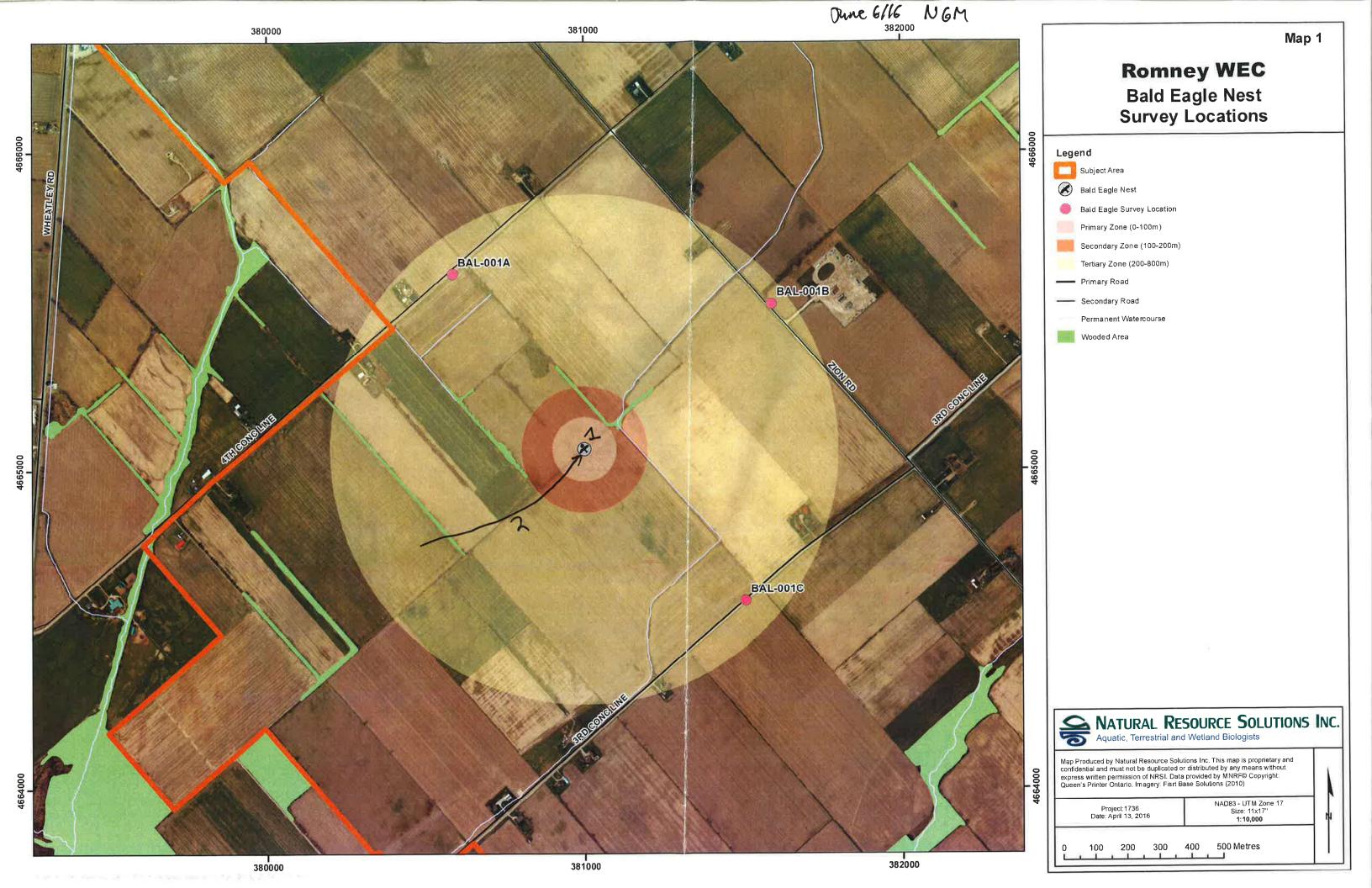
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
0350	IA	1 1000	restignite large	2	1	
1015	17	link.	rest down inside nest; cannot see individual arymore	2		
102.1	IA	todult	-flew in to perched Econde med (south side)	1-2	Z	
1059	113	1 adult	- Flew from near nest South & Hen SW	2-4	3	
1127	IB	ljuvi	- sat up on side of	2		



Bald Eagle Behavioural	Survey						
Project Name: Rombe	y WF		Project #: 1 > 3 @	6B			
Air Temp (°C):	Observers:	NGM		Date:	Tine	6/16	- a
Cloud Cover (%):	Cloud Height:	low me	edium high Mue	Wind Spe	ed:3	2 - 4	_
Wind Direction:	Precipitation:	Mone		Visibility:	low	medium	high
Station 001A Start Time:	0840 43	End Time	: 0940hrs				
Station 001B Start Time:	0944hR	End Time	104468				
Station 001C Start Time:	104743	End Time	124743				

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
0891hg	001A	1 Invenile	Sitting as nest. No sign of adult birds.	2		Duvenile is lage new, = 2/3 The size of dil
0949hs	001 B	1 Adult, 1 Tuvente	I Adult Flew M from west carryly food (unknown) to purposite	2-4	\mathcal{Z}	
1647hg	0010	1 Adult 1 Juneville	Penhed as nest	2		
			Ž.			K

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
-						
						_
			q			
identals:	c I of Swallow	, Filldeer,	Vesper Sparrows Suvanay 1, Listilled Gyll, E. str 1, Brown Leaded Carlord	h sparmy	Red-winged stackler,	Yeller Wa



Bald Eagle Behavioural Su	rvey	
Project Name: Romney	WEC Project #: 1730	6 <u>B</u>
Air Temp (°C): 18-22	Observers: Pun	Date: June 7,2016
Cloud Cover (%):	Cloud Height: low medium high	Wind Speed: 2
Wind Direction:	Precipitation: None	Visibility: low medium high
Station 001A Start Time:	End Time: 12:29	
Station 001B Start Time:	0:26 End Time: 11:26	
Station 001C Start Time:	8:21 End Time: 0:21	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
082\	001C	2	Percheck - Mult on brough above nest.		①	
0838		1	to perch near need,	3-1	2	
0902			hoult & them off into distance to Sw.	1-3	3	
0931			Adult A flew up, circled lended in tree new next.	1-2	9	
1032	001B	1	Adult & returns to		(5)	
1055			Adult B returns and purches in nest tree	3-1	6	
1122)	Adult B flies off to South.	1-3	7	1+
1129-1229	0014	BAL A	built A and earliet in next tree for ful	I how. Ac	luHB not sa	en.
					Ť	

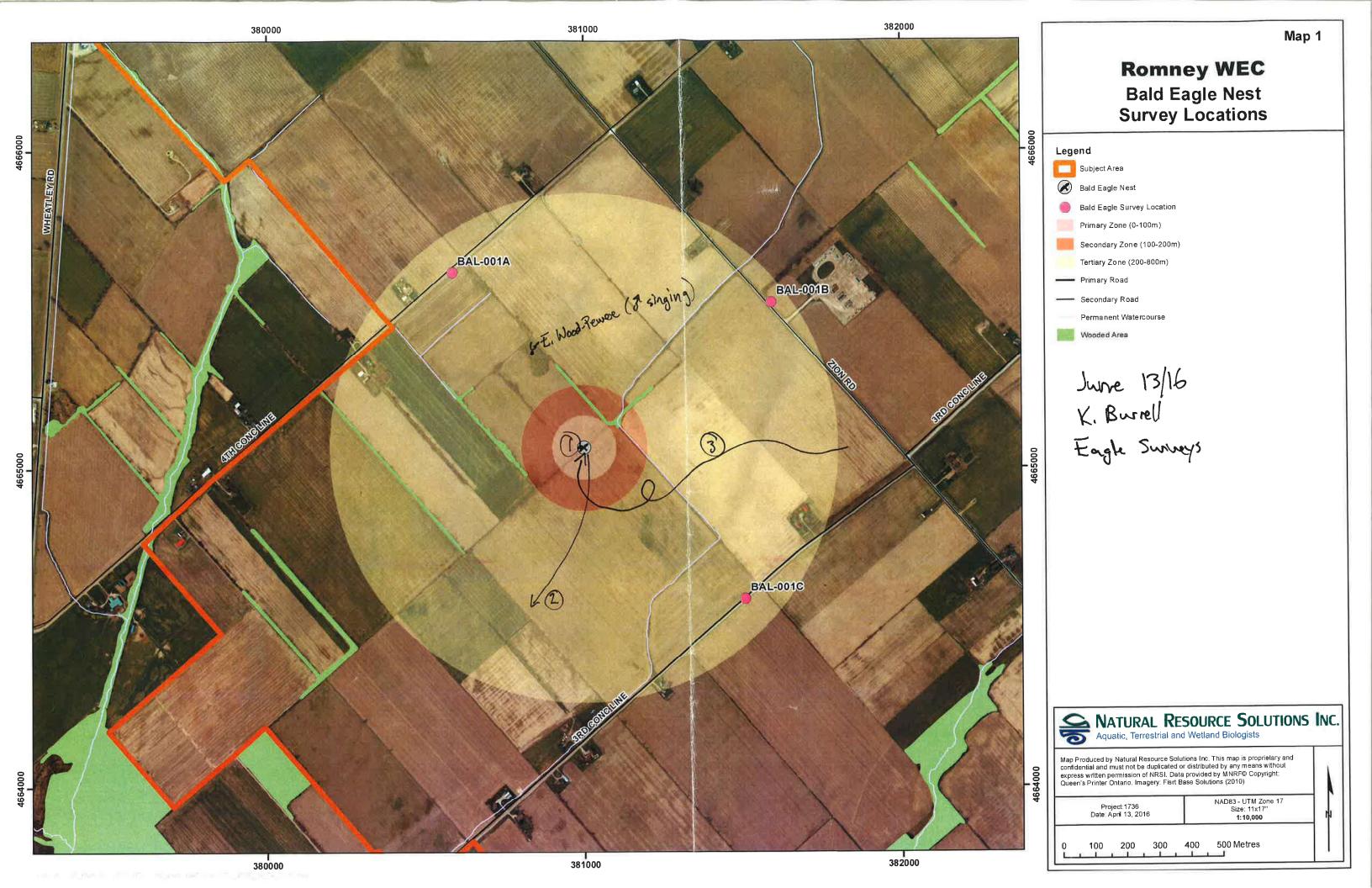
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
						1
					-	
			,			
=						
=					<u> </u>	
Incidentals: Horned Le Blue Sur Ann. Gobb	Ring bills ork Turkey V Am. Croc Finch Am. Roboi	d Enl P.E	. Vireo Black Swallow Coblege wh Morrante Ring	ha! he! gled.	Former Spreading to NW of BAL	-001C

June 9, 2016 PWD 382000 380000 Map 1 **Romney WEC Bald Eagle Nest Survey Locations** Legend Subject Area Bald Eagle Nest Bald Eagle Survey Location Primary Zone (0-100m) Secondary Zone (100-200m) BAL-001A Tertiary Zone (200-800m) Primary Road BAL-001B Secondary Road Permanent Watercourse Wooded Area BAL-0010 NATURAL RESOURCE SOLUTIONS INC.

Aquatic, Terrestrial and Wetland Biologists 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. Data provided by MNRF© Copyright: Queen's Printer Ontario. Imagery: Fisrt Base Solutions (2010) NAD83 - UTM Zone 17 Size: 11x17" 1:10,000 Project: 1736 Date: April 13, 2016 300 381000 380000 382000

Bald Eagle Behavioura	l Survey	
Project Name: Rower	NEC Project #: 1736	<u>B</u>
Air Temp (°C): 18	Observers: K. Burrell	Date: 6/13/16
Cloud Cover (%): 60	Cloud Height: low medium high	Wind Speed: 2
Wind Direction: 5	Precipitation:	Visibility: low medium high
Station 001A Start Time:_	0946 End Time: 1146	
Station 001B Start Time:_	1148 End Time: 1248	
Station 001C Start Time:_	1251 End Time: 1351	

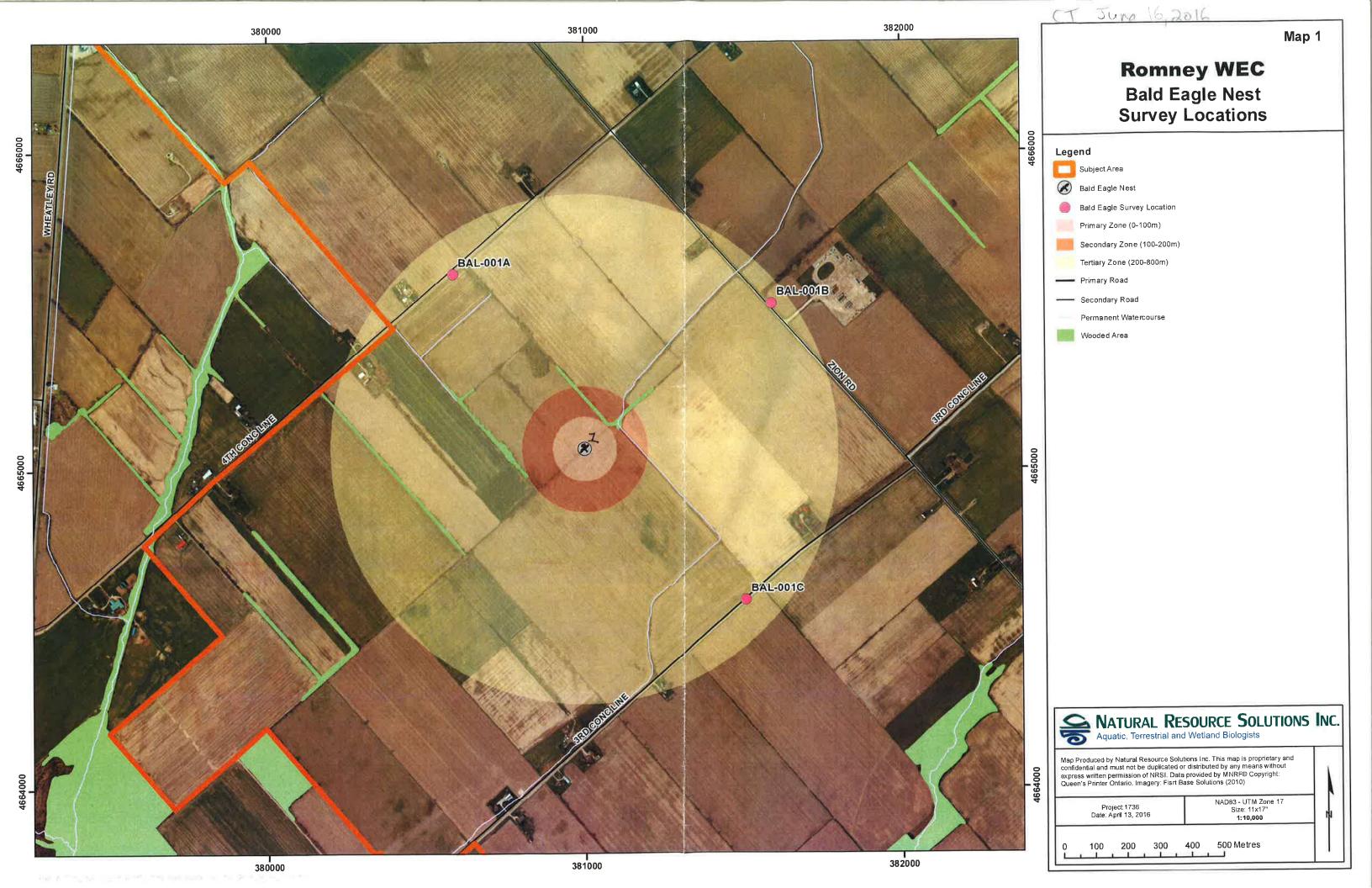
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
09/46	14	1 Juv.	Both perched on side from nest	2		
1142	1A	1 adult	flew from nest	2-3	2	
1148	1B	Busi	sitting on nest	2		
1251	10	ljuvi	Same bird, sitting on nest	2		
(311	\ C	1 adult	flew in I landed on mest (beside july)	3-2	3	
if.						



Bald Eagle Behavioural Sur	rvey	
Project Name: Romnley	Project #:	7368_
Air Temp (°C):	Observers:	
Cloud Cover (%): <u>75</u>	Cloud Height: low medium high	Wind Speed: 2 - 3º5 1 13 +0 14 15 15 15 15 15 15 15 15 15 15 15 15 15
Wind Direction:	Precipitation:	ISSOVisibility: low medium high
Station 001A Start Time:		11 181-1818
Station 001B Start Time:	.57 End Time:S7	thurself or
Station 001C Start Time:	56 End Time: 16.56	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
12,55	001A	1 savente	perchad in nest thinkened down in nest	2	ľ	
13:57	00/8	1 2 macu 16	thunkened down	2		
14'58	00/c	I shuenile	perched in	وبد		
			9			
			3			

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
	,					
			*			
Americ	ied-winged	blockbird Savorna	h sparrace, no h sparrace, no prown-heard grackle house sy	PANNER COMMINE	Torr, Killde Teken turro The suellou	9



Bald Eagle Behavioura	l Survey				
Project Name: Romes	MEC	Project #: 1736B			
Air Temp (°C):	Observers: K. Burrell		Date: _ λ _{νν}	re 20/16	
Cloud Cover (%): 80	Cloud Height: low me	edium high	Wind Spee	ed:	
Wind Direction: SW	Precipitation:		Visibility:	low medium	high
Station 001A Start Time:_	O833 End Time	1033			
Station 001B Start Time:_	1036 End Time	: 1136			
Station 001C Start Time:_	1139 End Time	: 1239			

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
0833	IA	Ljuvi	Perchad on nest	2	١	
0941	14	1 adult	Then in and perched on west to july.	2	Z	
1036	13	Ladult,	Both sitting on west	2	1	
1056	18	15001	Flapping wings several times	Z	1	
1102	1B		Missel the adult fly			
1139	10	1500	- sitting on nest	2		
1216	IC	ladutt	-fren , 1 plandel in tree by nest	3	3	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
	A. Robin Hoined Lork	Parair	d Blackbird			
	Kilder Song Sporrow Vesper Sporrow	House S	20010W			
	A. Crow					
			•			
,						
Incidentals:	lo					н



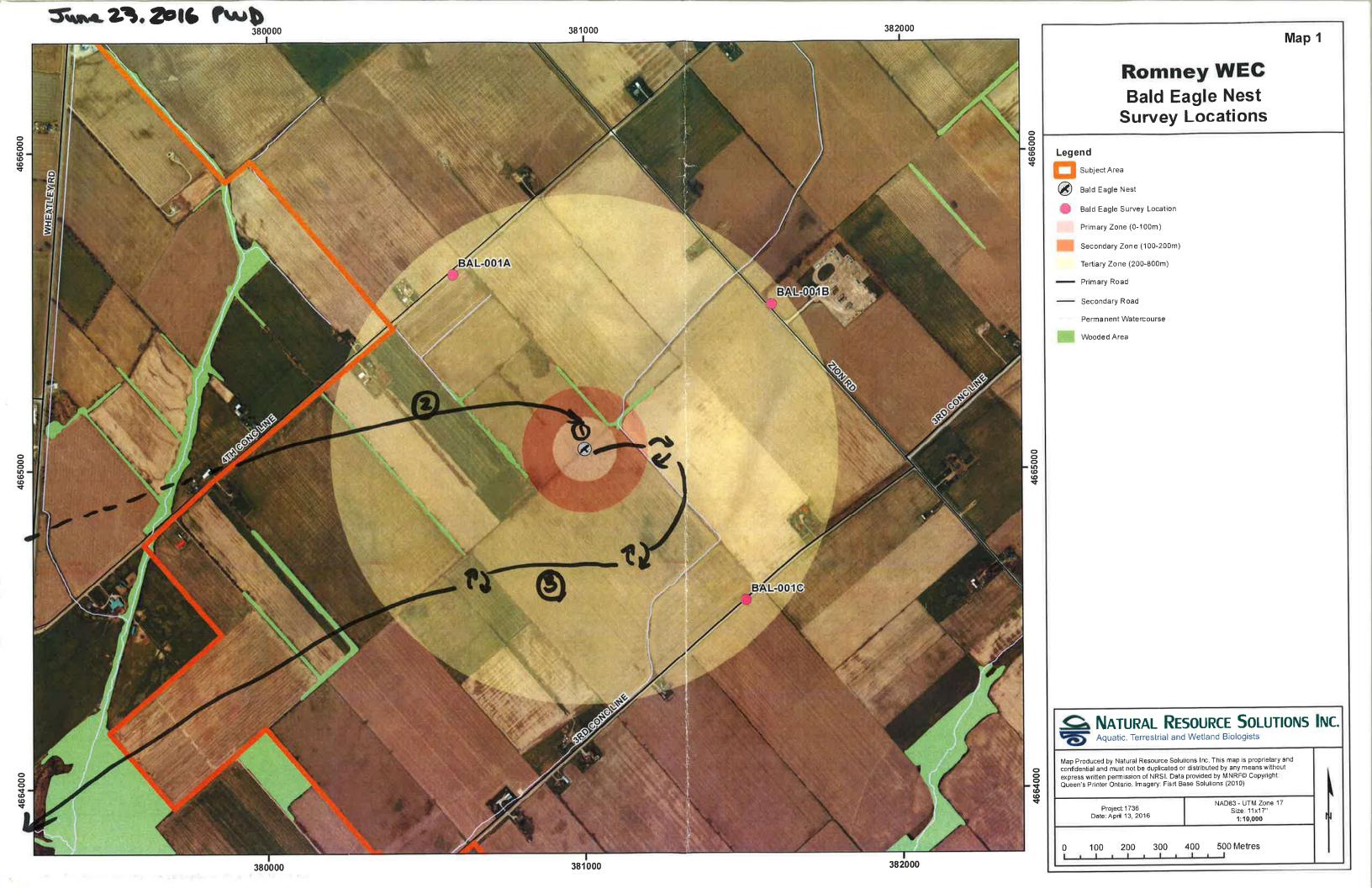
Bald Eagle Behavioural Survey						
Project Name: Rowney	WEC	_ Project #: <u>1736</u>	B_			
Air Temp (°C): 24-	Observers: PwD.		Date: Jue 23, 2016			
Cloud Cover (%): \oo	Cloud Height: low on	nedium high	Wind Speed:			
Wind Direction: <u>SW-W-N</u>	Precipitation: Periodic d	rizzle	Visibility: low medium high			
Station 001A Start Time:	1458 End Tim	ne:1558	Large storm system moving to			
Station 001B Start Time:	1356 End Tim	ie:1456	- from NW around 1300, passes			
Station 001C Start Time:	End Tim	ie: <u>1353</u>				

Height Category: 0=0-9m; 1=10-19m; 2=20-29m; 3 = 30-39m etc. Wind speed (Beaufort): 0=calm; 1=smoke drifts; 2=wind felt on face; 3=leaves move; 4=sm.branches move; 5=sm.trees move; 6=lrg branches move; 7=Irg trees move; 8=twigs break off, hard to walk; 9=light structural damage; 10=trees uprooted **Activity Notes** Observation Number of Height Time **Behaviour** (Map Other **Station** Birds/Age Category Reference) Standing in rest

(to adults visible)

During strong wind gusts
individual Reps' into brief
flight above nest before 1153 0010 1 Junile (Egglet) I Adult (A) Adult Flew to robed mad corrying fish/robed 1320 I Adult (A) Adult from from noot, headed SW. 1-4 1432 00/13 adult had not returned,
eagher remains on
rest, shuffling around
periodically

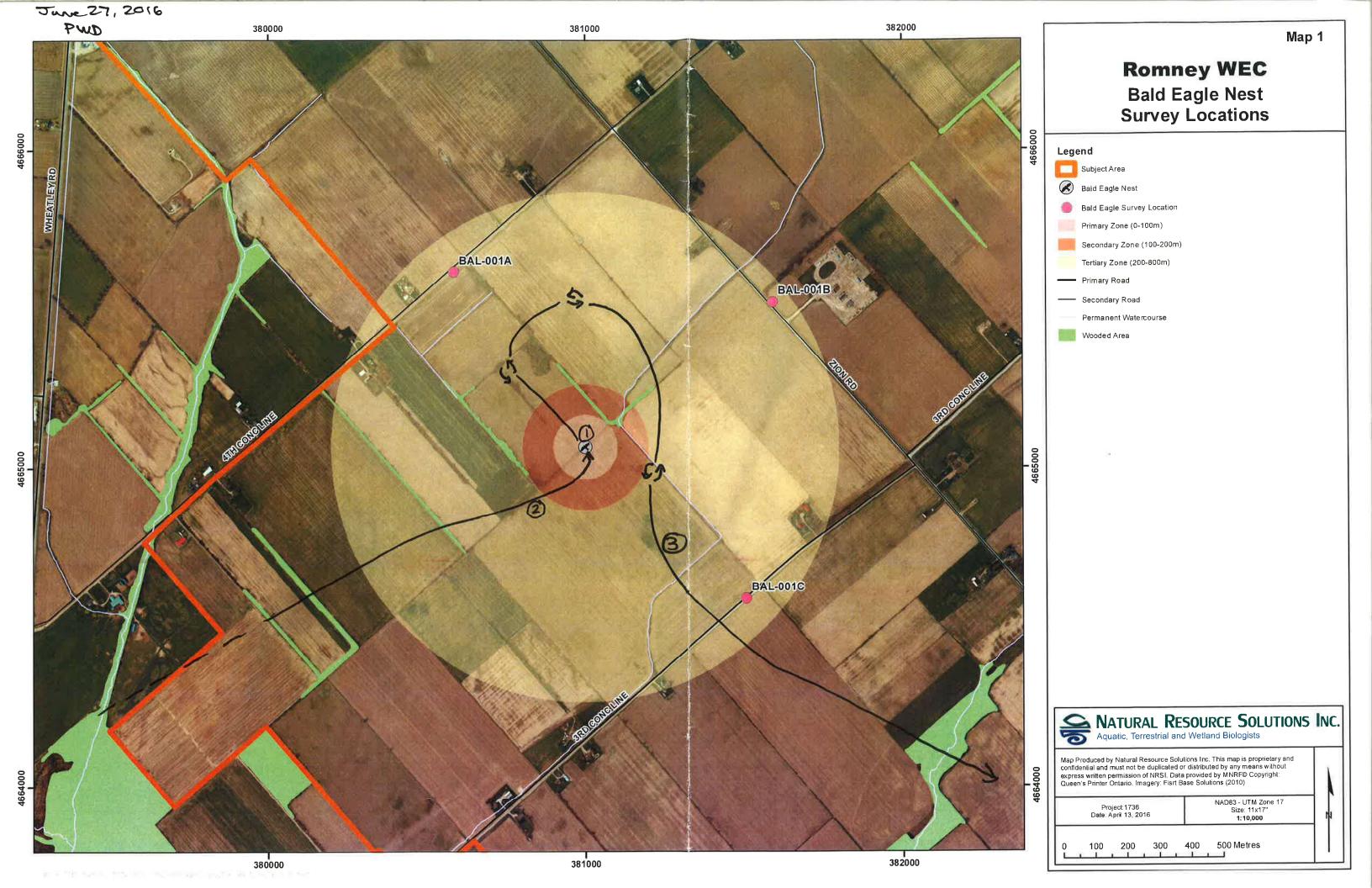
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
						_
			•			
Incidentals: k	Aldrer.	In Gldfinch		abboge white		
+ * A @	Sillcher Irned Look Sed-Winged Blackbird Mr. Crow Red Bluetleron	Mounting Dove Yellow Yelvell Song Spercons Ruck Agran	er			



Bald Eagle Behavioural S	urvey	
Project Name: Rowney	WEC Project #:_	1736B
Air Temp (°C):	Observers: PWD	Date: June 27, 2016
Cloud Cover (%): 5	Cloud Height: low medium hig	Wind Speed:
Wind Direction: W	Precipitation: None	Visibility: low medium high
Station 001A Start Time:	1343 End Time:	13
Station 001B Start Time:	1238 End Time: 133	8
Station 001C Start Time:	1026 End Time: 122	6

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
1026	0010	l eaglet	Rembred/Sitting in/on (at arrival) Flys to most and perches in tree is eagled Adult carrying food. Adult flew from next, circled, then flew off	1	0	
1220		1 Adulta)	Flys to most and perches in tree is eaglet		2	l h
1356	00 (A	1 Adult (A)	Adult Carrying tood. Adult flew from net, Circled, then thew eff	1-5	3	3
					×	
			*			
					_	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
			0			
						1
Incidentals: American Crow Horned Look Kildeer Song Sparrow Mourning Dove Ewopean Strelling Brown headed Condend						



Bald Eagle Behavioural S	urvey		3
Project Name: Rombey	WF	Project #:173	GB
Air Temp (°C): 26	Observers:	NGM	Date: Tune 30/16
Cloud Cover (%): 20	Cloud Height:	low medium (high)	Wind Speed:
Wind Direction:	Precipitation:_	None	Visibility: low medium high
Station 001A Start Time:	1250 hs	_ End Time:135043	Spraying posticities at
Station 001B Start Time:	1146 hrs	_ End Time:	Spraying possible at
Station 001C Start Time:	9943 hrs	End Time: 43 hrs	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
0943	0010	1 Junaile	perched on upst- periodically stretching of flapping wings. Little off	2	1	
1013	0010	1 Adult	Flow lack to nost from SE with prey of fed young bird. Persed as rest.	2	2	
1146	0013	1 Adult 1 Thronite	Penled an vest.	2	1	
1250 hg	OOIA	1 Twente	Adult must have flan from nest, unsure of where there were nest, exercisty wings	2	1	
			4			

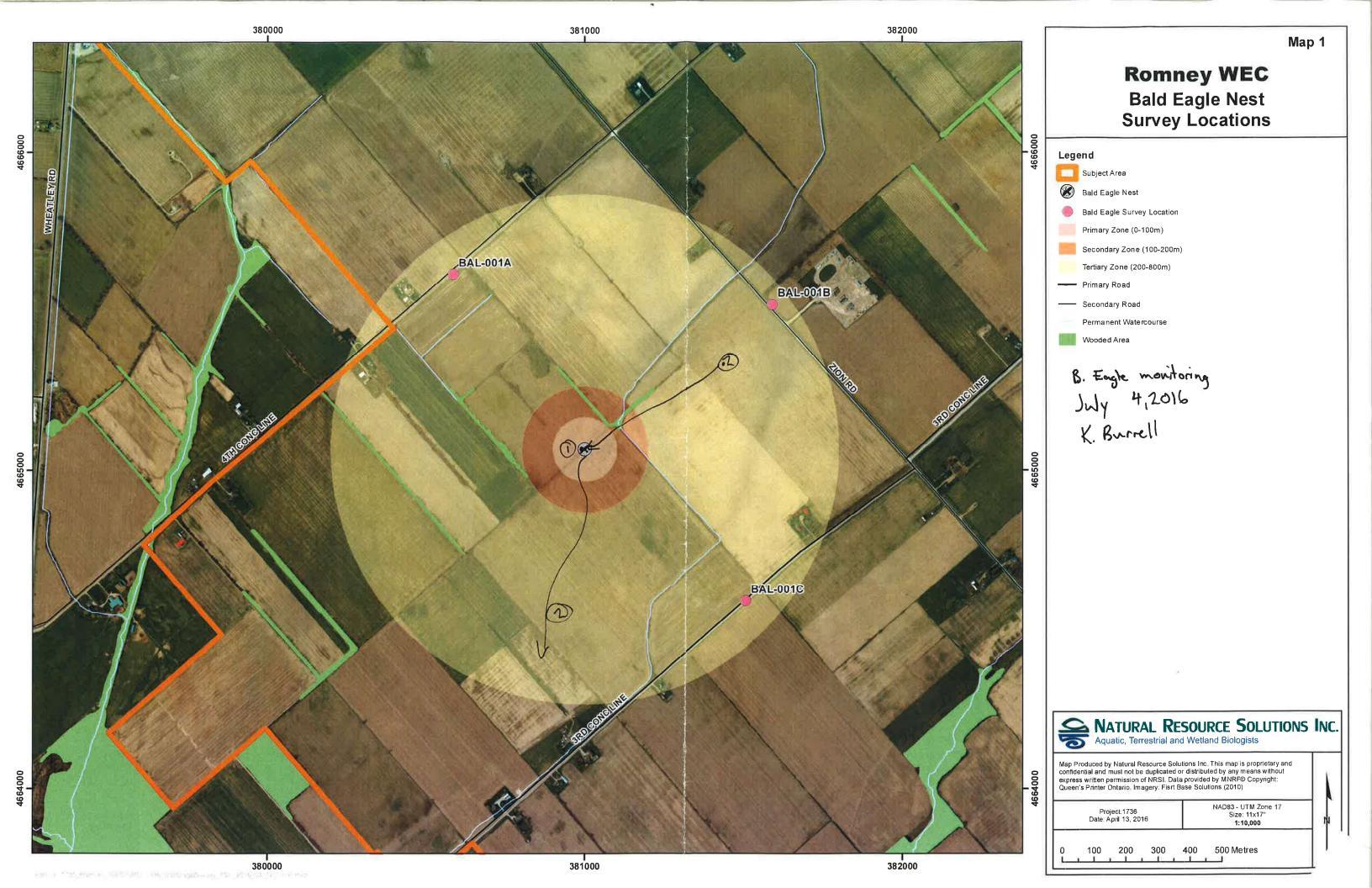
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
			-			
			4			
dentals:	Cliff smallow,		Vesner Sperran	Red-trivel H	oruk, Homed 1	orle A. Gol
on,	Killder, Rhy-	filled Gall	Tunkey unthere, 50	ng spamon,	House sparran	, c. Grackle

Ture 30/16 NGM 380000 381000 382000 Map 1 **Romney WEC Bald Eagle Nest Survey Locations** Legend Subject Area Bald Eagle Nest Bald Eagle Survey Location Primary Zone (0-100m) Secondary Zone (100-200m) BAL-001A Tertiary Zone (200-800m) ---- Primary Road --- Secondary Road Permanent Watercourse Wooded Area BAL-001C NATURAL RESOURCE SOLUTIONS INC.

Aquatic, Terrestrial and Wetland Biologists 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. Data provided by MNRF® Copyright: Queen's Printer Onlario. Imagery: Fisrt Base Solutions (2010) NAD83 - UTM Zone 17 Size: 11x17" 1:10,000 Project: 1736 Date: April 13, 2016 200 300 400 500 Metres 380000 382000 381000 Part A TOB Ston - AND ARM 135 3 HE 1965 FA, 15 - 25 G

Bald Eagle Behavioural Survey						
Project Name: Rowney WEC	Project #: \736B					
Air Temp (°C): 18 Observers: Ko Barrell	Date: Jwy 4, 2016					
Cloud Cover (%): 60 Cloud Height: low me	edium high Wind Speed: 3					
Wind Direction: Precipitation:	Visibility: low medium high					
Station 001A Start Time: 0832 End Time	e: <u>1032</u>					
Station 001B Start Time: 1035 End Time	e:					
Station 001C Start Time: 1/38 End Time	e: 1238					

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
0832	1A	1 500	-sitting beside nest in same area	1	1	
1035	1B	1 juni	in same area - Sitting besile nest in same area flapping wings vigorously a few tin - sitting beside nest in tree. Same commuts re: - flew in and landed for Z minutes, before flying away	25	1	
1138	1 C	1 juvi	-sitting baside nest in trace. Same commuts re:	stn, 1B (re	flapping)	
1154	10	1 adult	-flew in and landed for Z minutes, before flying a way	3-1	2	
			,			
			9			
			v. &			



Bald Eagle Behavioural Survey						
Project Name: Ronney	WEC	Project #:_ <u>173</u> 6	B			
Air Temp (°C): 27°C	Observers:	WC	Date: 00/2 7/16			
Cloud Cover (%): 60%	Cloud Height:	low medium (high)	Wind Speed:			
Wind Direction:	Precipitation:_	none	Visibility: low medium high			
Station 001A Start Time:	:07	_ End Time: 2:07				
Station 001B Start Time:	2:09	_ End Time:				
Station 001C Start Time:	3:11	_ End Time:15:11				

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
11:07	001A	2 Juvenile	perched on rest	1	(A)	
11:48	001A	1 Juvenile	flew to W		7	
11:52	∞IA	1 Juvile	soaring/kiroling up at into clouds	1-10	3	* \$
12:09	0018		beenutions			*
3:11	0010	1 Juvenile	perched on tree	1	4	
13:52	0010	1 Adult	flew from WtoE	2-8	5	
13:52	0010	1 Jovenile	Hew off perch to W, to grand in	1-0	6	
14:03	001 C	1 Juni le	ag. field (rye?) flew into woodlot	0-1	7	
14:53	0010	Adult	flew onto nest		8	

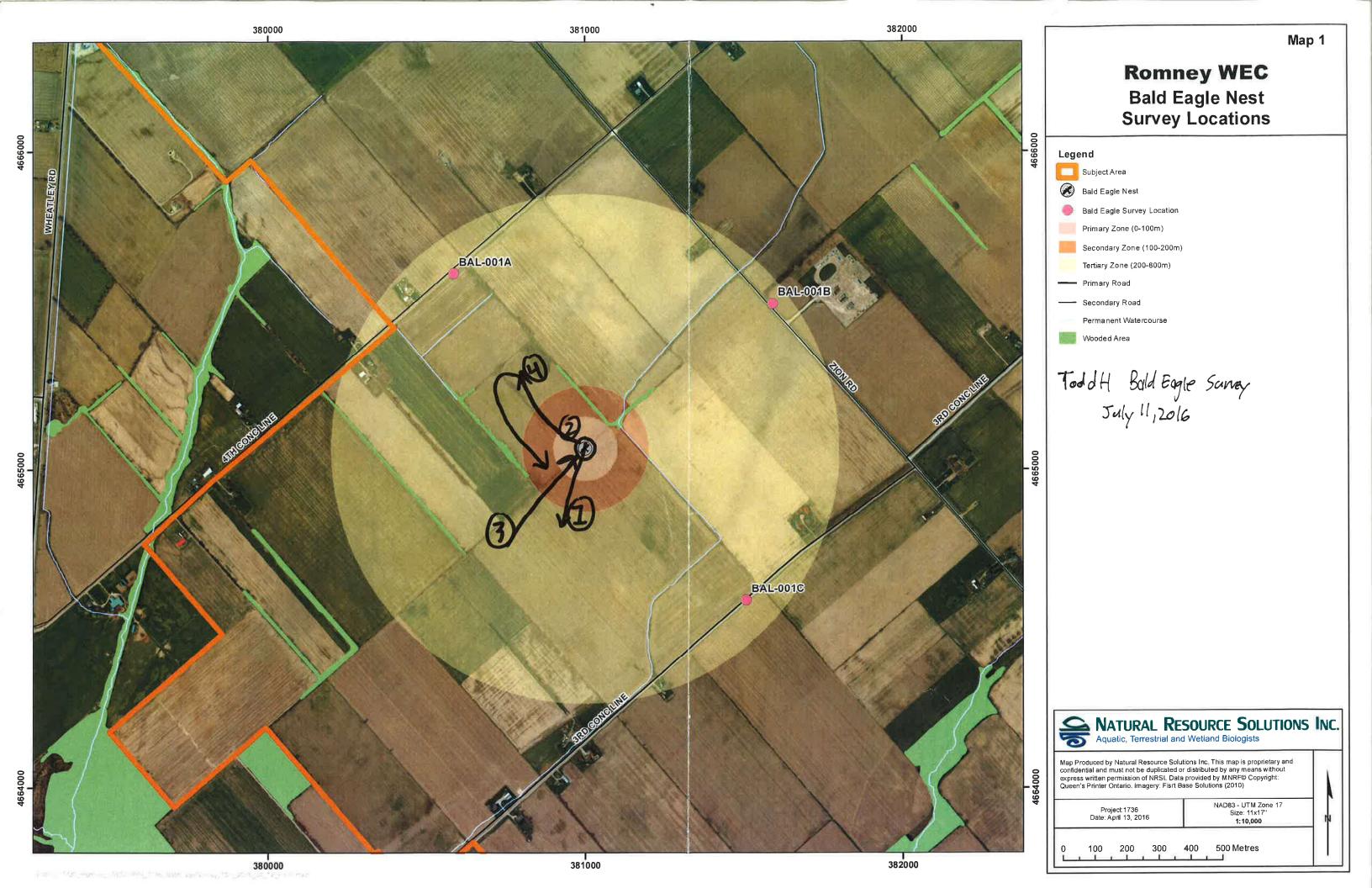
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other		
			14.					
						8		
-								
			9					
Incidentals:	noidentals: Killdean Horned Lank European Starling House Sparrans							
ncidentals: Killdeer, Horned lourk, European Starling, House Sparrow, Red-winged Blackbird, Song Sparrow								



Bald Eagle Behavioural Survey		
Project Name: Romney wind E	play (enter Project #: 1	736 <u>8</u>
Air Temp (°C): Obs	servers: Tada H	Date: July 11, 2016
Cloud Cover (%): 10 Cloud	ud Height: low medium high	Wind Speed: 3
Wind Direction: Pred	cipitation: None	Visibility: low medium (high)
Station 001A Start Time: 1047	End Time; 17.47	
Station 001B Start Time: 1245	End Time:	
Station 001C Start Time: 1350) End Time:	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
1052	BAL-007A	I/Jav.	tree but not in NEST. Flen West	1	7	
1056	BAL-007A	7/July	Perched in hest	0	2	
1217	BAL - 00]A		Flew in to hest with food . Cine food to nestlig,		3	
1406	BAL-VOIC	2/ adult Juv.	Jav. flew out of ne st Then perched in tree in hedge for 1915 of	PH I	L	
Ж						
			*			

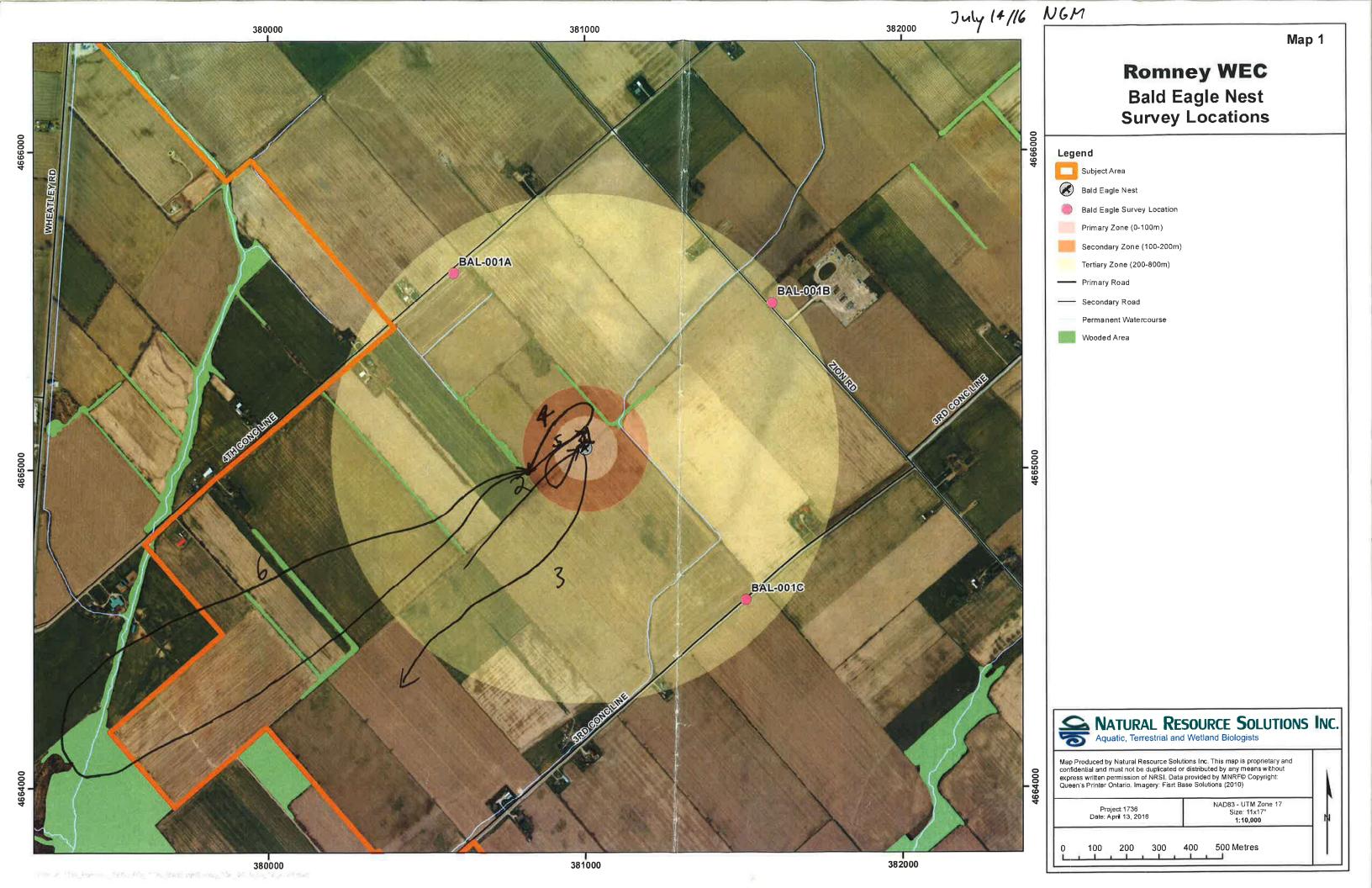
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
				· · ·		
			ė			
ocidentals:	Red toiled Low rtin Am Cron	k", kill	deer")	Vesper Spaw	ow, Am Robin	Horned lav



Bald Eagle Behavioura	I Survey		
Project Name: Rome	ney	Project #:	36B
Air Temp (°C):	/ Observers;	NGM	Date: July 14/16
Cloud Cover (%): 90	Cloud Height:	low medium high	Wind Speed: 4
Wind Direction:	Precipitation:_	Nane	Visibility: low medium high
Station 001A Start Time:_	100540	End Time: 1105 kg	
Station 001B Start Time:_	110945	End Time:	
Station 001C Start Time:_	12/3hg	End Time:	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
1005hg	001A	1 Adult 1 Juveile	Both perched an	1	}	
1019hg	001A	1 Adult	in from SWO landed	1	2	
1026hs	001A	/ Adu H	Flew from nest to southwest	1-6	3	
110945	0018	1 Duraile	Penned an nost. Adult	1	*	-
1225hm	0010	1 Twente	Flew from uest a portedition a free	1	4	
1350hs	0010	1 Threale	Flew back formperh to nest	1	5	
1359hm	0010	1 Twente	Flew back to other perh to west	1	4	
14-0643	0010	1 Turbuill	lifted off perch + sourced high to the MEST of them back to perch	1-10	6	
			(
				×		
		(%)				

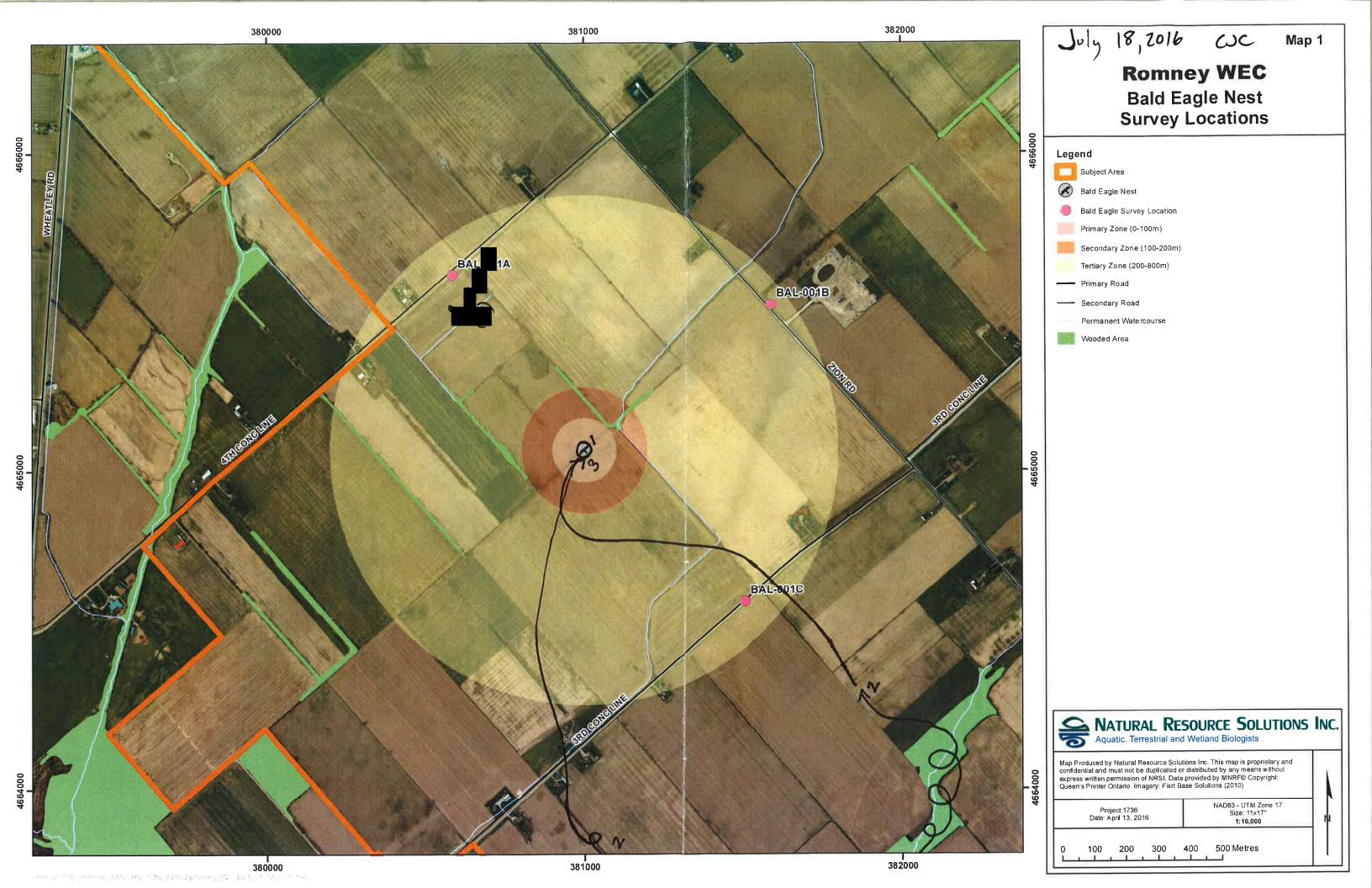
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
			-			
				*/	*	
			8			
		3				
	_					
dentals:		Manny D	we, A. Robin, C. Gackly	e redundal	Blacklon, E. Aarl	y, B. Ha
espec s	ochwan, chips h	Sparmen)	Me, A. Robin, C. Gackle A. Cow, Kill deer, Red-	twited thank, &	by filled Gull , (Att no la



Bald Eagle Behavioural Survey									
Project Name: Romney	WEC Project #:_	1736B							
Air Temp (°C): 28° C	Observers:C	Date: July 18/16							
Cloud Cover (%): <u>8076</u>	Cloud Height: low medium hig	Wind Speed:							
Wind Direction: NW	Precipitation: FLOAL	Visibility: low medium high							
Station 001A Start Time:	32 End Time:121	37							
Station 001B Start Time: 12	13/3 End Time:13/3	33							
Station 001C Start Time:	3:35 End Time:15:3	5							

Height Category: 0=0-9m; 1=10-19m; 2=20-29m; 3 = 30-39m etc. Wind speed (Beaufort): 0=calm; 1=smoke drifts; 2=wind felt on face; 3=leaves move; 4=sm.branches move; 5=sm.trees move; 6=lrg branches move; 7=Irg trees move; 8=twigs break off, hard to walk; 9=light structural damage; 10=trees uprooted **Activity Notes** Observation Number of Height Time **Behaviour** Other (Map **Station** Birds/Age Category Reference) 11:32 observations 001A No 12:33 0018 perched on nest 13:35 001C 1 Juverile I duverile flew off nest towards south, Inded in field (behingers) 001C 1-6 14:20 flew back to 1-2 15:05 0010 nes-. *

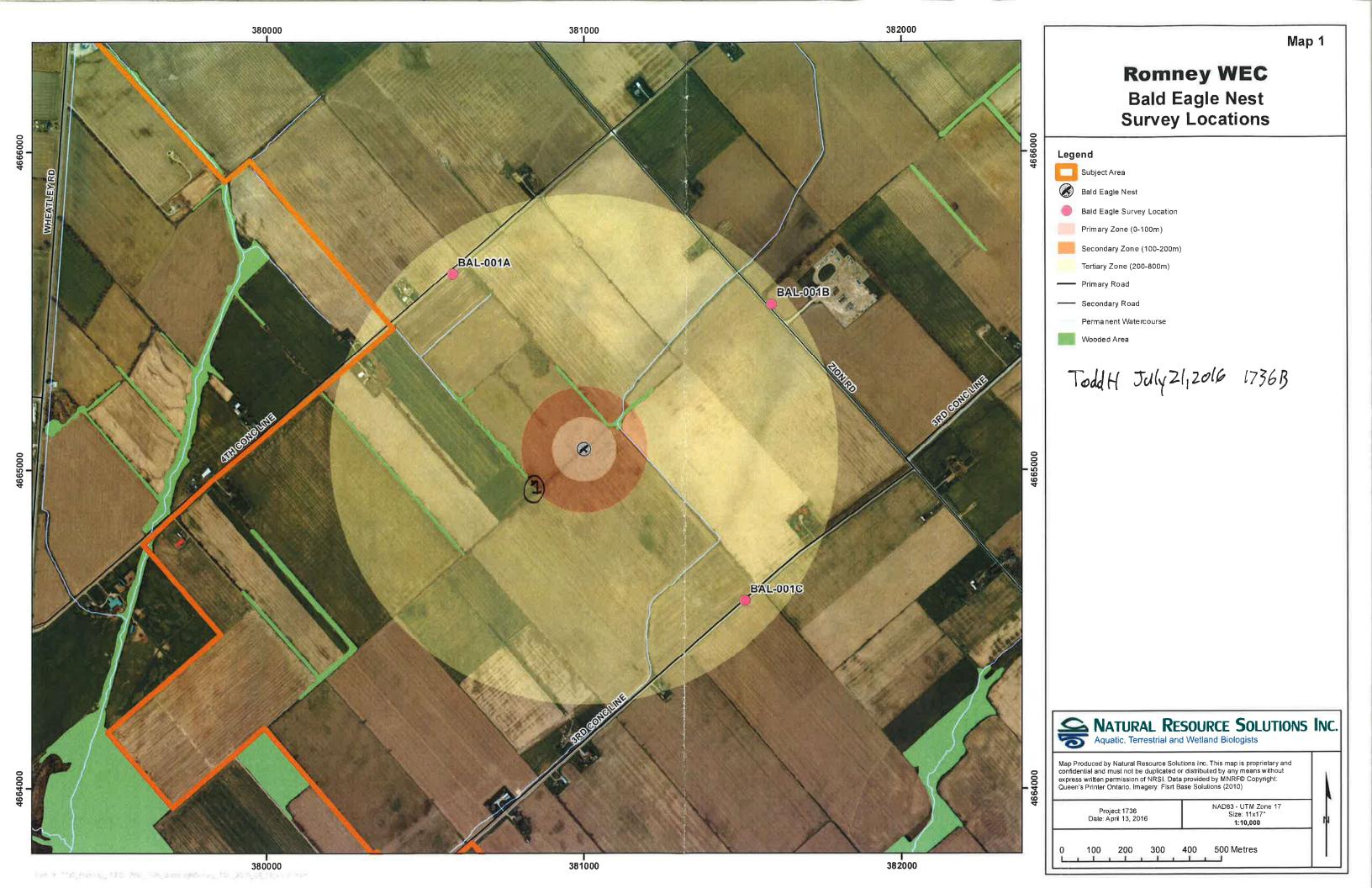
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
						(n - (s)
			*			
				-		
			N			
ncidentals:		, Killdeer,	Red-winsed Black	pird, Horne	el Lark, Turk	tes Volture
Am. Gol	dfinch			/	(



Bald Eagle Behavioural	Survey			
Project Name: Ramung	WP	Project #: <u>173</u>	6B_	
Air Temp (°C): 23	Observers: Todd H		Date: July 21, 2016	
Cloud Cover (%):	Cloud Height: low	medium high	Wind Speed:	
Wind Direction: 5	Precipitation: Non€		Visibility: low medium <	high
Station 001A Start Time:	154 End T	ime:		
Station 001B Start Time:	End T	ime:1255		
Station 001C Start Time:	12.57 End T	ime: <u>7357</u>		

Height Category: 0=0-9m; 1=10-19m; 2=20-29m; 3 = 30-39m etc.
Wind speed (Beaufort): 0=calm; 1=smoke drifts; 2=wind felt on face; 3=leaves move; 4=sm.branches move; 5=sm.trees move; 6=lrg branches move; 7=lrg trees move; 8=twigs break off, hard to walk; 9=light structural damage; 10=trees uprooted **Activity Notes** Height Observation Number of Other (Map Time **Behaviour** Category **Station** Birds/Age Reference) was@this Location for 2hrs Roofing 7/500, 601A 1004

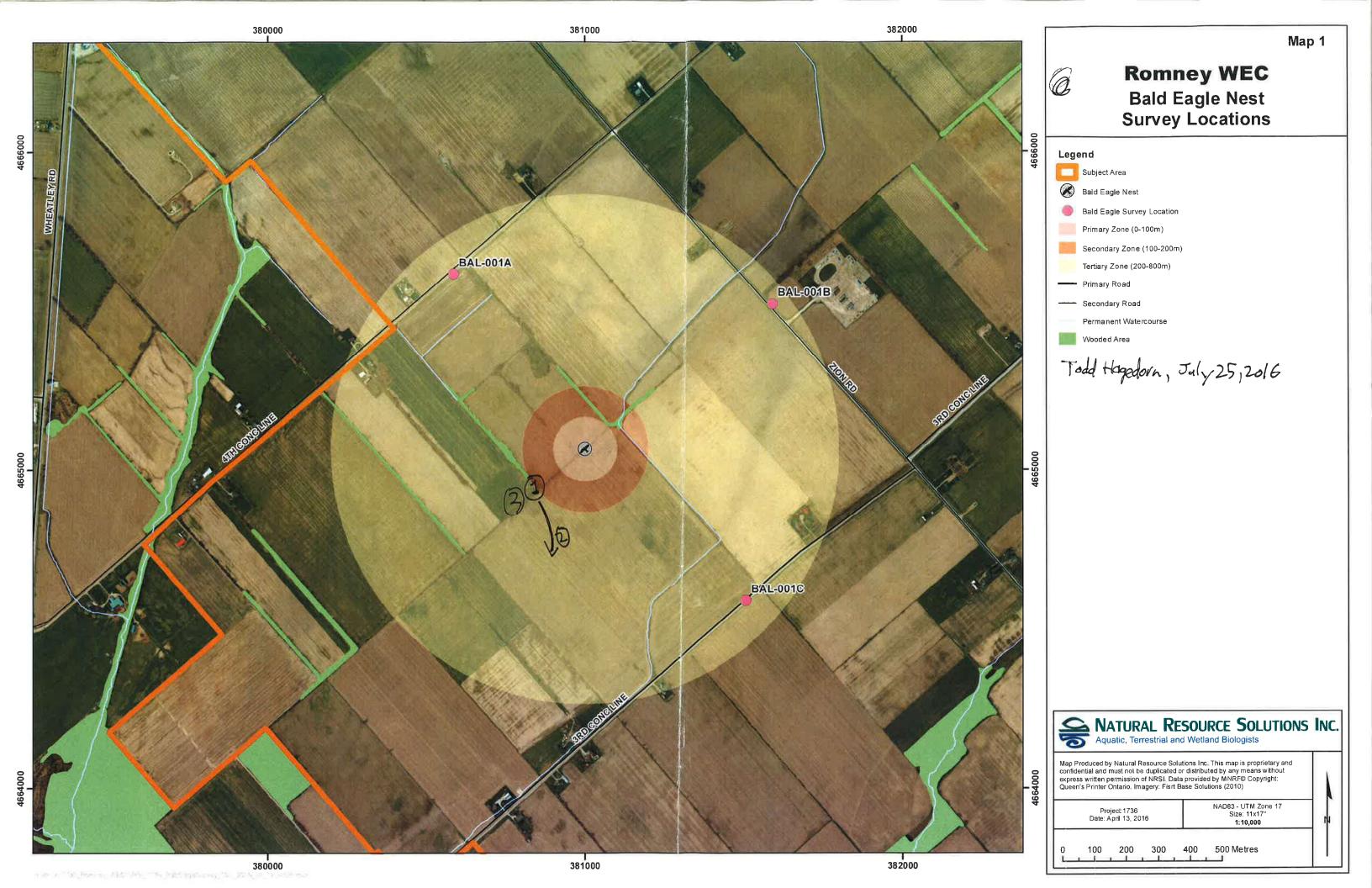
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
		_				
Incidentals:	cliff Guallow,		Purp	lemoutin		



Bald Eagle Behavioural	Survey				
Project Name: Rombey	BAEA Survey F	Project #:			
Air Temp (°C): 26	Observers: Todd H	Date:	July	5,2016	-
Cloud Cover (%):	Cloud Height: low media	um high Wind	Speed: 4		_
Wind Direction:	Precipitation: Nove	Visibi	lity: low	medium	high
Station 001A Start Time:	End Time:	13.17			
Station 001B Start Time:	3 8 End Time: _	1418			
Station 001C Start Time:	End Time:	1518			

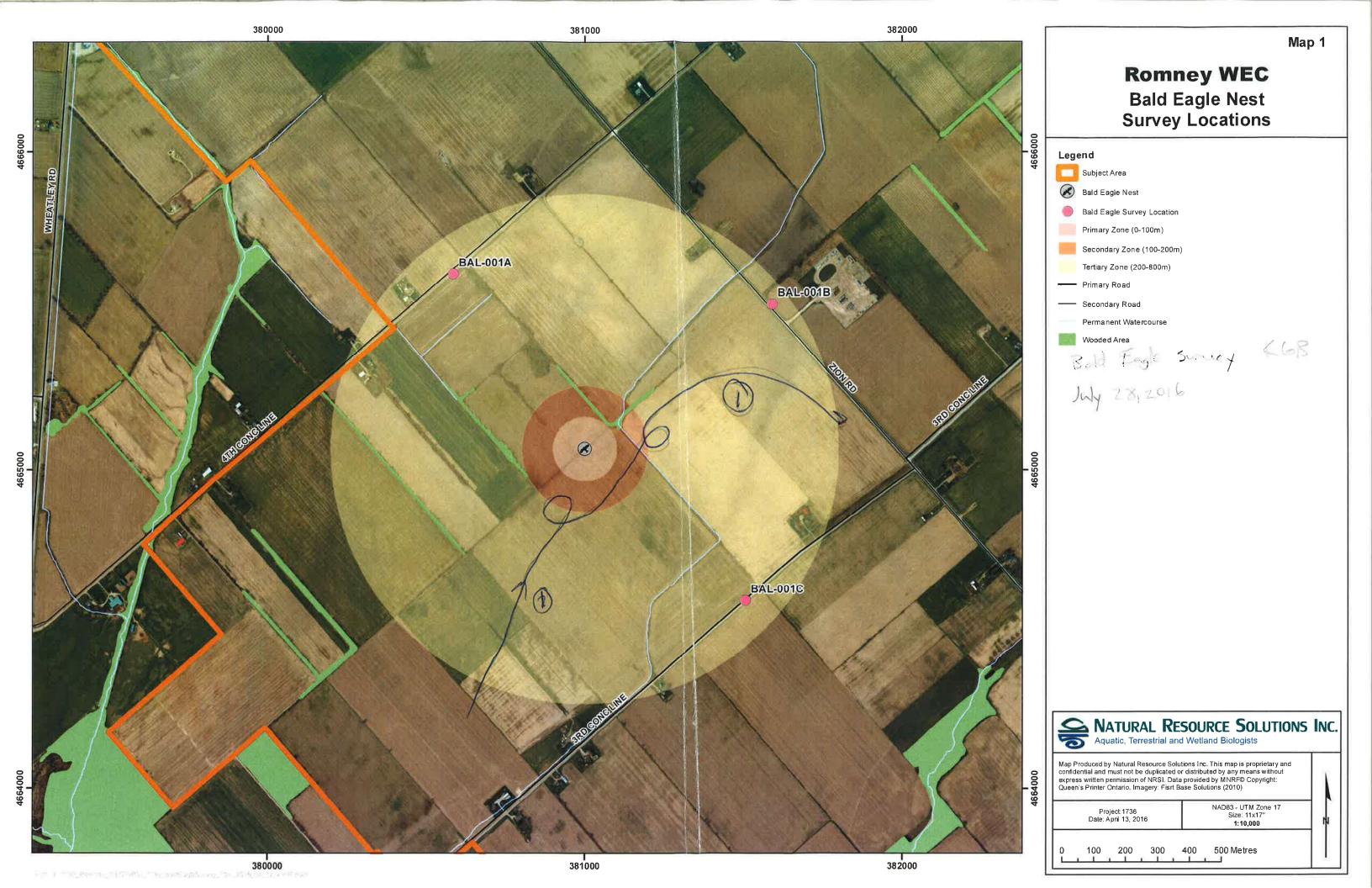
Height Category: 0=0-9m; 1=10-19m; 2=20-29m; 3 = 30-39m etc. Wind speed (Beaufort): 0=calm; 1=smoke drifts; 2=wind felt on face; 3=leaves move; 4=sm.branches move; 5=sm.trees move; 6=lrg branches move; 7=lrg trees move; 8=twigs break off, hard to walk; 9=light structural damage; 10=trees uprooted **Activity Notes** Observation Number of Height Time **Behaviour** Other (Map **Station** Birds/Age Category Reference) I / Jul. Both Koosting in dead tree, Both tring with 1123 DOIA 7/Adult Flew South I/adult 001 A 7=2 1207 1/JUV Roofing in dead the very like to the 1123 1423 0076

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
		i P				
			•			
			12			
ıcidentals:	1 Valor P	avole Martin	, Killdeer, Red-tiled	Haule		
	IM: FORITI)	ALL TO THE STATE OF THE STATE O) "weer, kia - kipa	1 I Gim K		



Bald Eagle Behavioural Survey		
Project Name: Ramed WEC	Project #:	68
Air Temp (°C): 24 Observers	: Ken Burrell	Date:
Cloud Cover (%): 100 Cloud Hei	ght: low medium high	Wind Speed:
Wind Direction: SW Precipitation	on:_ Nove	Visibility: low medium high
Station 001A Start Time: 0927	End Time: 1127	
Station 001B Start Time: 131	End Time: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
Station 001C Start Time: 1245	End Time: 1345	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
0927	IA	_	No eagles present			
1/31	18		No eagles present			
1302	at restrict	Todult	Flew over arded, calling several times	5-4	Ĭ	
			9			
				4		



Bald Eagle Behavioural Survey	
Project Name: Romney WEC Project #:	1736B
Air Temp (°C): 29 Observers:	Date: Aug 2 2016
Cloud Cover (%): Cloud Height: low medium hi	igh Wind Speed: 2-3
Wind Direction: SE Precipitation: Precipitation:	Visibility: low medium high
Station 001A Start Time: 10.56 End Time: 11:5	56
Station 001B Start Time: 1.55 End Time: End Time:	54
Station 001C Start Time: 15:00 End Time: 15:00	0

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
	00/A	Nov	e -		***	, , , , , , , , , , , , , , , , , , ,
	0013	101			-	
13758	001C	1 jovenik	quit light went	4-10 the N	1	
			•			
						,

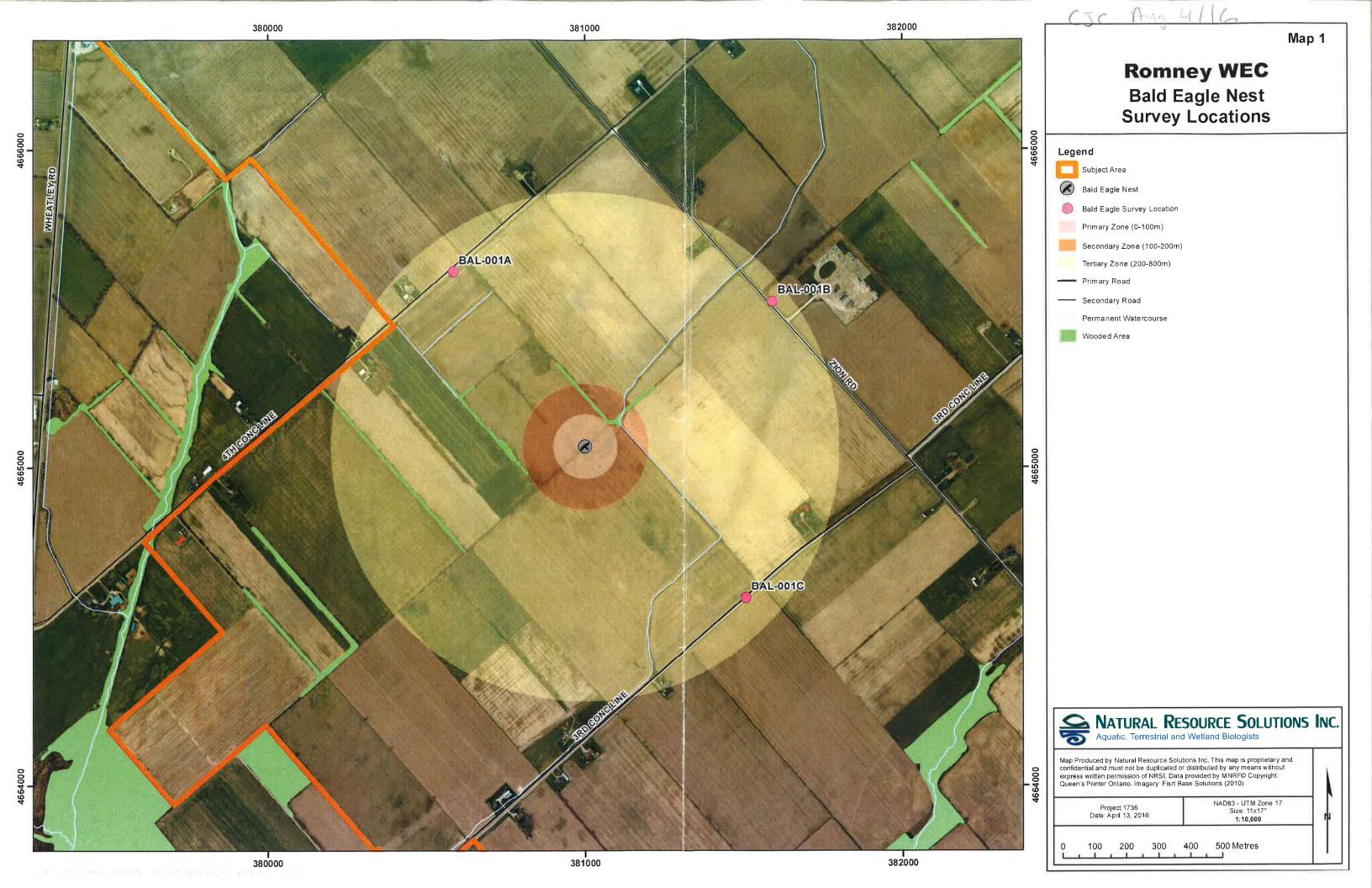
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
			*			
5.07.4						
identals: P	tmerican	(10 W,	furkcy vultu orch grey cathiro ons sparrow, red-taile	to tree 5	wallow, cabb	100



Bald Eagle Behavioural Sur	vey		
Project Name: Ronney	WEC	Project #:730	B
Air Temp (°C):	Observers;	CUC	Date: Aug 4/16
Cloud Cover (%): 207	Cloud Height:	low medium high	Wind Speed:
Wind Direction:	Precipitation:	none	Visibility: low medium high
Station 001A Start Time: //	:34	_ End Time:/7;34	
Station 001B Start Time: 12	:34	_ End Time:	
Station 001C Start Time:/ 3	2:38	_ End Time:/5	

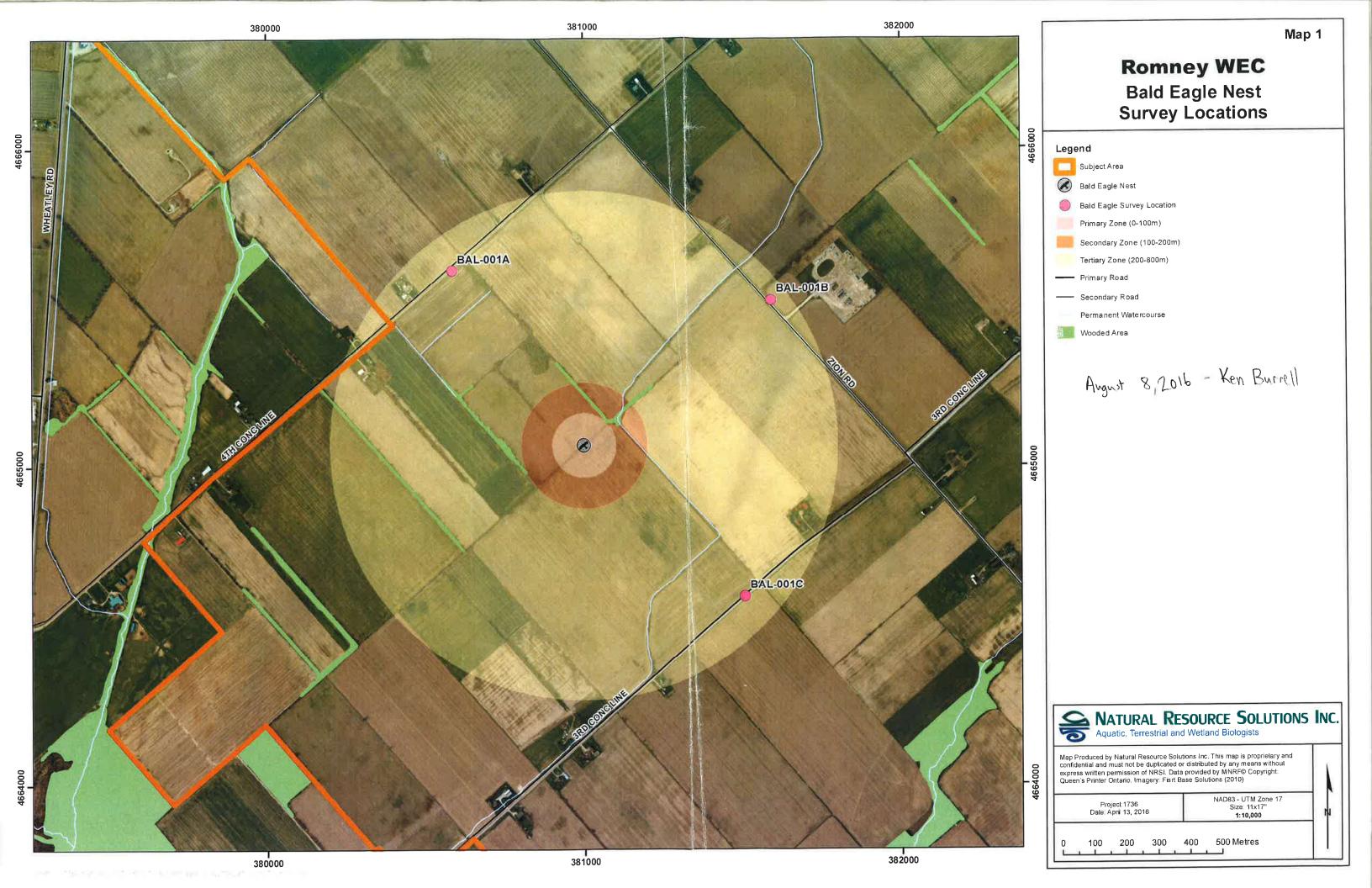
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
11:34	001A	No	observations			
12:36	0013	100	observations			
13:38	0010	No	observations			
			*			
		E				

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other	
_							
						7======================================	
			•				
Incidentals:	Incidentals: Am. Craw, Song Sparrow, Mourning Dave						



Bald Eagle Behavioural Sur	vey	
Project Name: Rowney WEG	Project #: 11368	
Air Temp (°C):	Observers: Ken Burnell	Date: August 8,2016
Cloud Cover (%):	Cloud Height: low medium high	Wind Speed: 2
Wind Direction:	Precipitation:	Visibility: low medium high
Station 001A Start Time: ()93	7 End Time: 1137	
Station 001B Start Time:	End Time: 1241	
Station 001C Start Time: 125	End Time: 1356	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
	1A		No observations	* Disputing and Property		
	IB		No observations		h	
	IC		No observation noted			
			4			
			Red-tailed Haust-	Ti Vulture HOLFT	P. Marting A. Go Down 5051	Afinch
			VESP 806U 886U	HOLA RWBL BCLO	MODO KILL	7
					Kon	

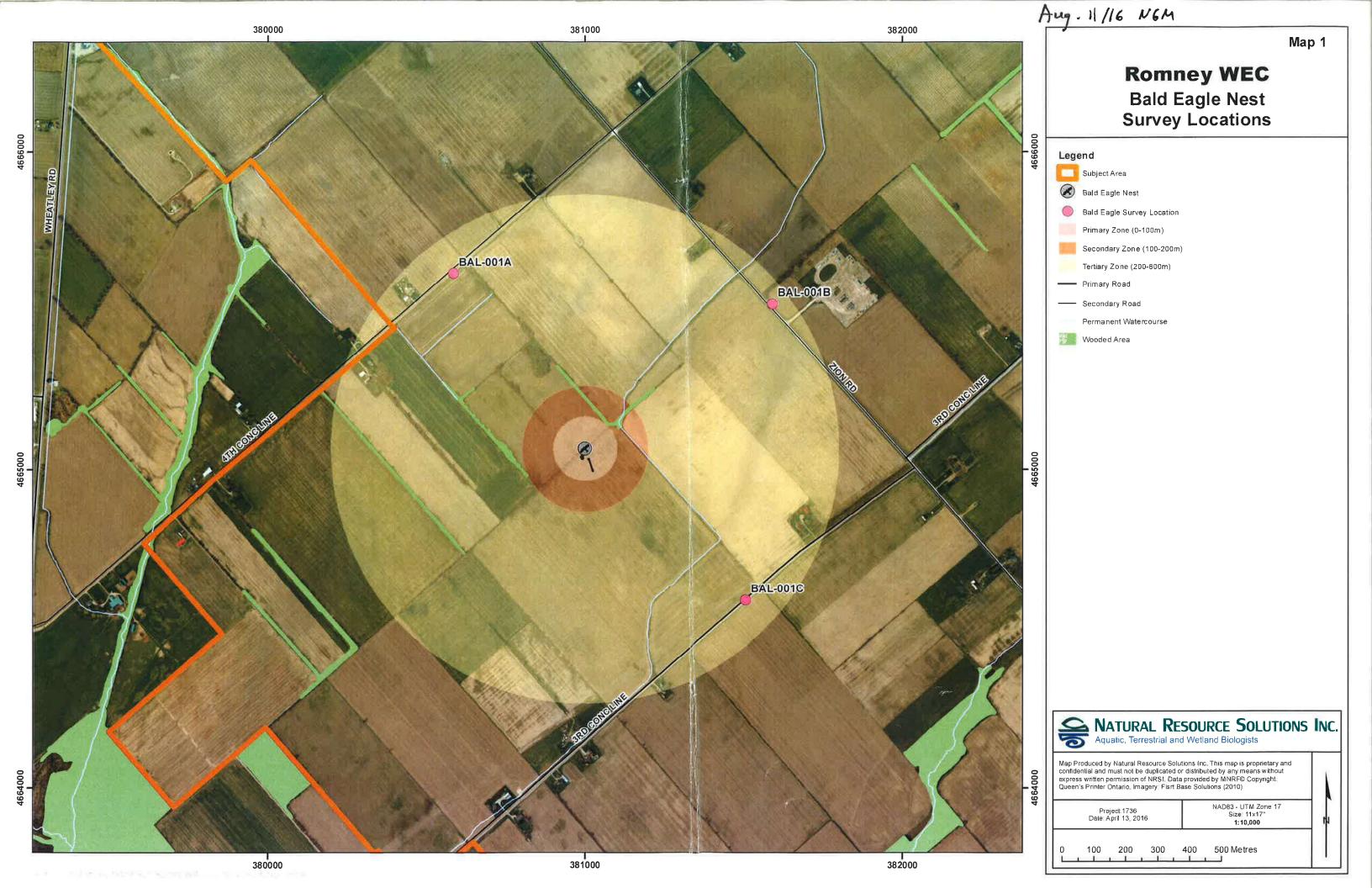


Bald Eagle Behavioural	Survey		
Project Name: Romne	WF	Project #:73	6 B
Air Temp (°C): 30	Observers:	NGM	Date:Aug-11/16
Cloud Cover (%): 20	Cloud Height:	low medium high	Wind Speed:
Wind Direction: 50	Precipitation:_	None	Visibility: low medium high
Station 001A Start Time;	0838h15	End Time:	
Station 001B Start Time:	0942 Lrs	End Time: 1042hrs	
Station 001C Start Time:	1045hrs	_ End Time: 12+5hrs	

Height Category: 0=0-9m; 1=10-19m; 2=20-29m; 3 = 30-39m etc.

Wind speed (Beaufort): 0=calm; 1=smoke drifts; 2=wind felt on face; 3=leaves move; 4=sm.branches move; 5=sm.trees move; 6=lrg branches move; 7=lrg trees move; 8=twigs break off, hard to walk; 9=light structural damage; 10=trees uprooted **Activity Notes** Observation Number of Height Other Time **Behaviour** (Map **Station** Birds/Age Category Reference) None observed 0 858hg 001A 0942hz 001B Nave observed Heard calling from samewhere near the next site, could not loroit 1 Juvenile 1119 hs 001C 2

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
			,			
			*			
			*			
					1	
dentals:	Right Martin, Turkey Cult	Marny Du	e, Sovannah James	Rock Pigean	Horned CarlC, -	Hense Spar
larerch,	Callage white 1	Pearl Crescen	t, Orange Sulphur, clan	ded sulphur		



Bald Eagle Behavioural Sur	vey		
Project Name: Ranney	WEC	Project #:	736B
Air Temp (°C):	Observers:	Coc	Date: Aug 15/16
Cloud Cover (%): <u>957</u> 0	Cloud Height:		
Wind Direction: \(\lambda \)	Precipitation:_	none (raining End Time: 12:5	Visibility: low medium high
Station 001A Start Time://	:55		
Station 001B Start Time:	:56	End Time:	6
Station 001C Start Time: 13	:58	End Time:15:59	8

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
11155	001A		obervations			
13:48	0016	1 Jovenile	flow to perch near nest	2		
15:03	0010	1 Juvenile	Aew from S past nest to N	2-3	2	
		9				
			q			
			.l			

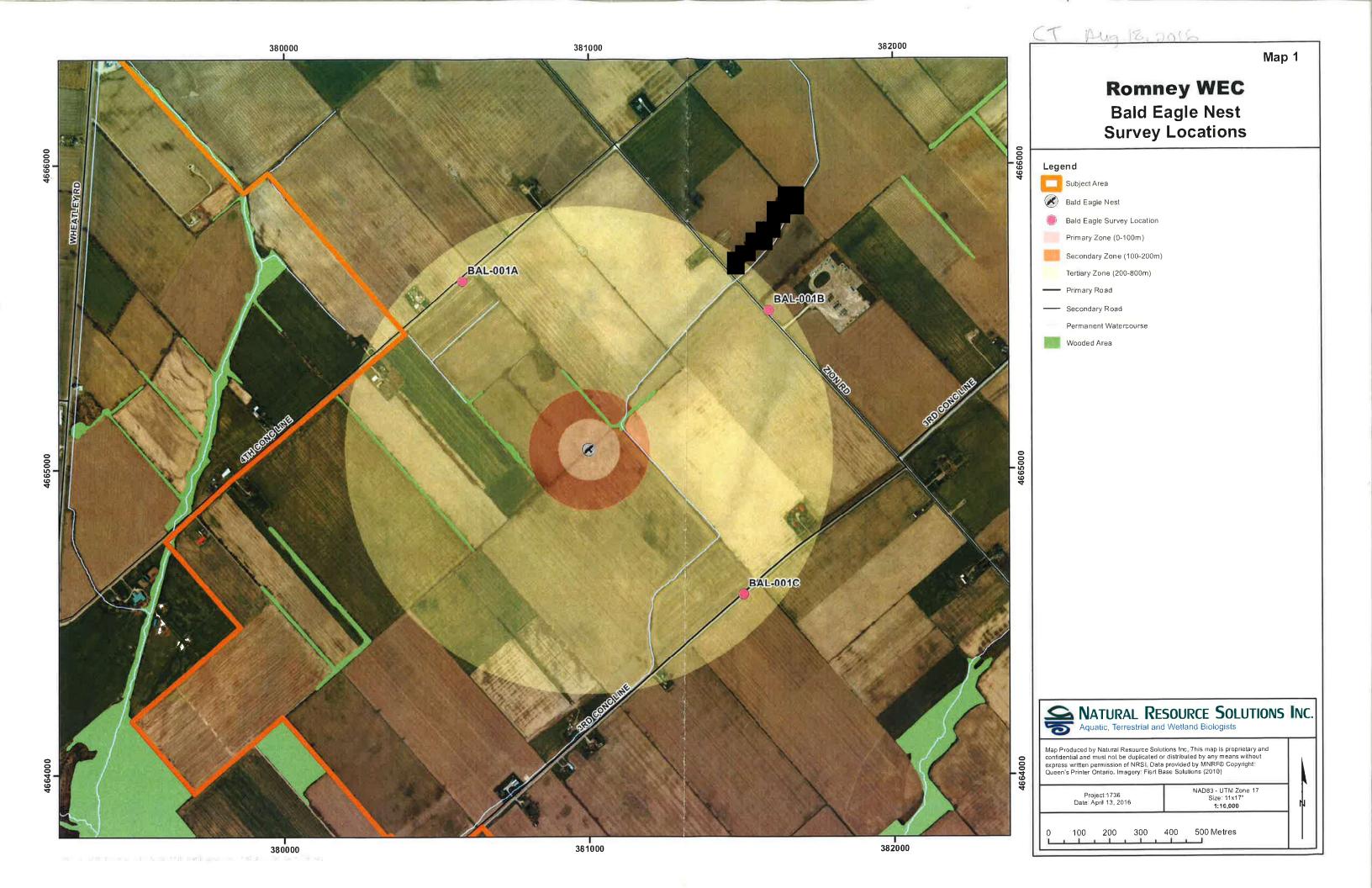
Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
===						-1.
dentals:	American (raw, Nor	thern Flicker, ailed Hawk, Tork	Song Sper	ow, American	1 Geoldt



Bald Eagle Behavioural Sur	vey	
Project Name: Romner	WEC Project #:_ 1730	6.B_
Air Temp (°C):	Observers:	Date: Aug. 18,2016
Cloud Cover (%): 60	Cloud Height: low medium high	Wind Speed:
Wind Direction: NE	Precipitation:	Visibility: low medium high
Station 001A Start Time:	<u> </u>	
Station 001B Start Time:	157 End Time: 12.57	
Station 001C Start Time:	2'59 End Time: 14'59	

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
	001A	- n	o observation	ns		
	001B		o observation	r \$		
	09/ (- (0 observation	× S		
			q			
				9		

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
			k:			
			\			<u> </u>
			*			
						11
identals:	cobbage whi	te block	swallowtail, American enjulture, silver-s	ican co	porthern h	apper
Chimon (heckered sky	per Luck	ey vulture, silver-s	olted Ship	per, pearl creso	tent



Bald Eagle Behavioural Su	rvey		
Project Name: Ramney W	EC.	Project #:1736	,c
Air Temp (°C): 14 - 22	Observers: PWD		Date: Aug. 22.2016
Cloud Cover (%): <u>5-25</u>	Cloud Height: low r	medium high	Wind Speed: O/I
Wind Direction: N/A - \$	Precipitation: None		Visibility: low medium high
Station 001A Start Time:	: 6	ne: 12:16	
Station 001B Start Time:	10:11 End Tim	ne:	
Station 001C Start Time:	08:08 End Tim	ne: <u>10:08</u>	 :

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other
0.0	BAL-OOIC	Not	ve observed			
10:11	BAL-001B	Non	e observed			
11:16-	BAL-OOIA	None	2 observed			
						K
			*			

Time	Observation Station	Number of Birds/Age	Behaviour	Height Category	Activity Notes (Map Reference)	Other

			6			
	Red tailed Hurk American Goldfind Ring-billed Gall American Com	Silver-5 Clouded ! Monstala Checkered Com. Sout	potted Skipper Great Blue Heron Sulphur Song Sparrow Doy-e Monarch Skipper ywing			

