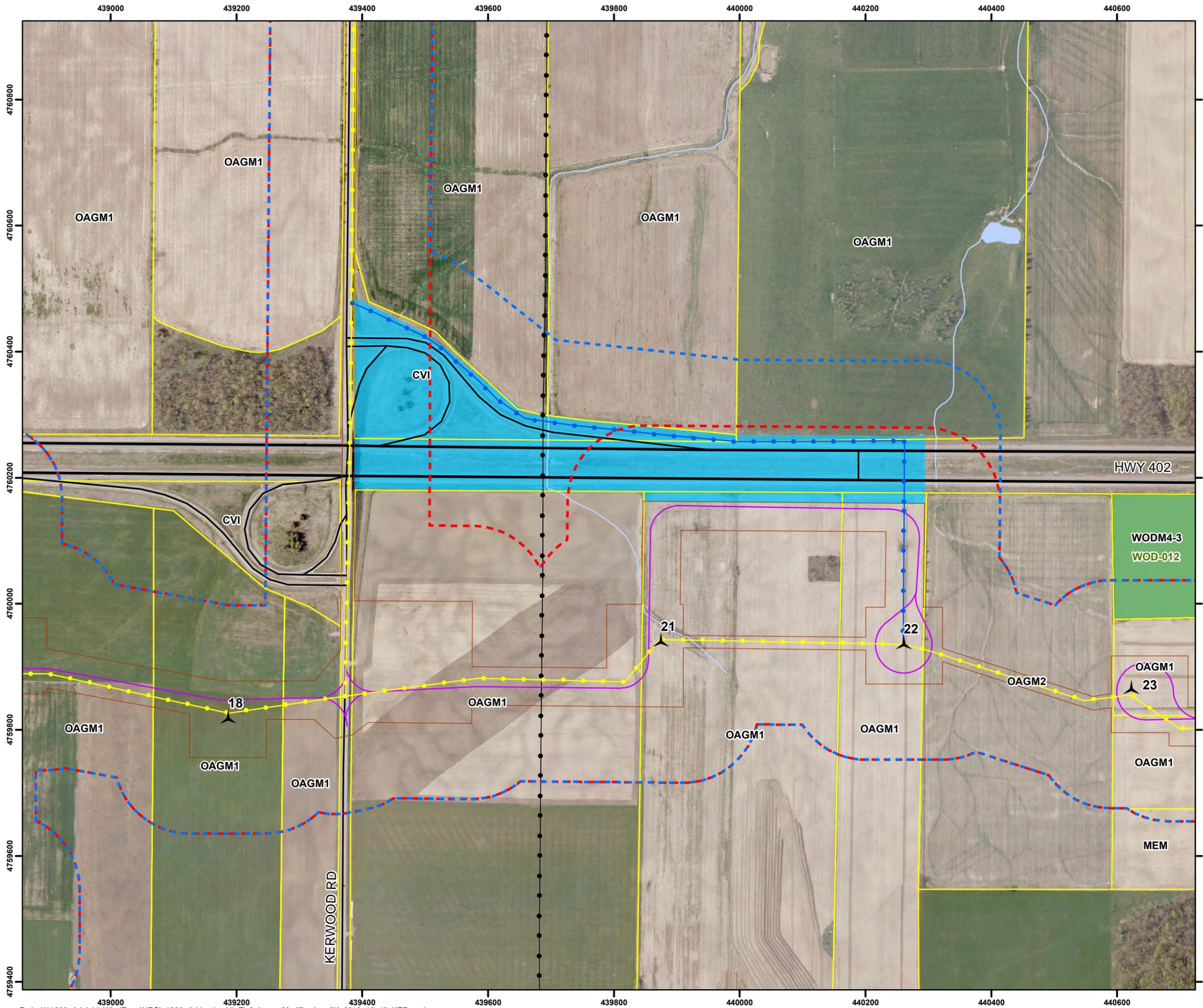


Figure 2

# Adelaide Wind Energy Centre Layout Modification



- Legend**
- - - New Project Area (120m Buffer)
  - - - Previous Project Area (120m Buffer)
  - Additional Footprint
  - Additional Collector System
  - Turbine
  - Project Location
  - Access Road
  - Collector System
  - Existing Transmission Line
  - Highway
  - Primary Road
  - Secondary Road
  - ~ Watercourse
  - Open Aquatic
  - Provincially Significant Wetland (PSW)
  - Other Wetland
  - Significant Woodland (WOD)
  - Generalized Wildlife Habitat
  - Significant Wildlife Habitat
  - Ecological Land Classification (ELC)
- (CVI) Transportation and Utilities  
(MEM) Mixed Meadow  
(OAGM1) Annual Row Crops  
(OAGM2) Perennial Cover Crops  
(WODM4-3) Sugar Maple Deciduous Woodland Type

**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. Source: Data provided by MNR. Copyright: Queen's Printer Ontario

Project: 1230 Date: December 16, 2013	NAD83 - UTM Zone 17 Scale: 1:6,000 (11x17")
--	--

0
100
200
300
400 Metres

## 2.0 Staff Roles

The requirements of the REA process indicate that the name and qualifications of staff participating in the NHA should be provided. This staffing information is provided in the Adelaide Wind Energy Centre NHA (NRSI 2012a) and the qualifications and roles of key staff participating in this addendum to the Adelaide Wind Energy Centre NHA have been outlined below.

### Andrew Ryckman, B.Sc.

Andrew is a Terrestrial and Wetland Biologist with 8 years of environmental experience. He routinely manages the natural heritage aspects of renewable energy projects, with specific expertise relating to bats and herpetofauna. Andrew is certified in the Ecological Land Classification (ELC) system for southern Ontario (2010), and has successfully completed a Bat Conservation International (BCI) Acoustic Monitoring Workshop (2008).

Andrew's role was to act as the project manager, overseeing all aspects of the NHA, including all associated field work and reporting. He was the main contact point for agency staff and assisted with the preparation of all corresponding reports including this addendum.

### Charlotte Moore, M.E.S. (Candidate 2014).

Charlotte is a Terrestrial and Wetland Biologist with 3 years of experience in butterfly ecology and various other environmental projects. Charlotte has completed her Bachelor of Environmental Studies and is a candidate for a Master of Environmental Studies (2014) at the University of Waterloo. Other environmental projects Charlotte has worked on include the use of ELC, bat habitat assessments, breeding bird surveys and reptile studies. Charlotte is certified in the Ontario Wetland Evaluation System (2012) and ELC system for southern Ontario (2013).

Charlotte reviewed the changes to the Adelaide Wind Energy Centre's layout and assisted in identifying necessary NHA addendums. She also assisted with the preparation of this report.

### Christina Carter, M.E.S.

Christina is a Terrestrial and Wetland Biologist with 5 years of environmental experience. She has managed a variety of environmental projects, including renewable energy projects of both wind and solar facilities. Christina is certified in ELC for southern Ontario (2013) and specializes in bird ecology. She also has experience conducting natural area inventories with respect to vegetation, bats, reptiles, amphibians, and other mammals.

Christina assisted with the preparation of this report.

### Kaitlin Boddaert, GIS-UP

Kaitlin specializes in delivering mapping services using GIS applications and assists with NRSI's spatial technologies. Her project experience includes, but is

not limited to, the collection and creation of various datasets, the geocoding of addresses, the use of AutoCAD with integration into GIS, and the use of hard and soft data through scanning and georeferencing into digital format.

Kaitlin's role in the project was as a GIS technician. She reviewed and collected all available background mapping sources, digitized information gathered from site investigations, and integrated this information to generate this project's mapping.

### **3.0 Overview of Project Changes**

Since the approval of the NHA and subsequent NHA Addendums, minor changes have been made to the project layout, resulting in a review of the considerations made as part of the Adelaide Wind Energy Facility NHA.

The modification is related to the location of the underground cabling route at the corner of Kerwood Road and Highway 402. The proposed new route will run north from T22 across the 402 and west to Kerwood Road, where it will join up with previously permitted cabling (see Figure 2). The project area will extend slightly further north and east of the previous location. The change of the location of underground cabling overlaps agricultural row crops and has no direct impact on any natural features or wildlife habitats.

A visual overlay of the differences between the footprint of the latest approved layout submission and the currently proposed footprint of the Addendum V Report is provided on Figure 2. Also shown on this figure are significant woodlands, wetlands and significant wildlife habitats (if any), as well as the locations of any habitats treated as generalized significant wildlife habitat within the area of interest.

#### **4.0 Amendments to the Records Review**

The project area initially examined for the Adelaide Wind Energy Centre Records Review Report extended beyond the previously proposed project area to help address any later changes in the project's layout. Upon review of the changes to the project's layout, all project areas of this proposed layout were previously studied and included with the Records Review submission to the MNR. Thus, there are no new records of significant wildlife habitat or significant natural features that require consideration as part of the Records Review of this minor layout change.

## **5.0 Amendments to the Site Investigation**

By reviewing the minor changes made to the Adelaide Wind Energy Centre layout since its latest NHA confirmation, it has been verified that the proposed alteration to the project layout has led to no changes in distance between project components and natural features.

In addition, NRSI biologists have also reviewed the potential for additional generalized candidate wildlife habitat that may be present within 120m of the amended project location. As there were no changes in the distance between project components and natural features, no modifications to the consideration of generalized habitats were required.

## **6.0 Amendments to the Evaluation of Significance**

As part of this addendum, NRSI biologists have reviewed the potential for changes to the EOS phase of this project. It has been determined that there are no natural features or wildlife habitats that potentially exist within 120m of the project location that were not already previously studied and discussed in the MNR approved NHA documents. Therefore, no additional features require an EOS. Additionally, since there are no changes in distances to natural features, there are no significant features that are no longer within 120m of a project location.

No additional EOS is required for the Adelaide Wind Energy Centre as a result of these minor modifications to the project location.

## **7.0 Amendments to the Environmental Impact Study**

As part of this NHA Addendum V Report, NRSI has considered all aspects of the previously approved EIS to determine if any changes or additions are required based on the modification to the project location.

For the purposes of this addendum, NRSI has reviewed 3 separate aspects relating to the potential for change to the EIS, as follows:

- Changes to Mitigation Measures (i.e. project location now closer to natural features)
- New Mitigation Measures (i.e. project location within 120m of a new feature)
- Changes to Monitoring Requirements

### **7.1 Changes to Mitigation Measures**

NRSI biologists have reviewed the changes in project location and have determined that the mitigation measures presented in the Natural Heritage EIS and subsequent NHA Addendums are still appropriate for the protection of significant natural features and wildlife habitats from potential permanent and/or adverse impacts that may result from the development of the Adelaide Wind Energy Centre.

### **7.2 New Mitigation Measures**

It was concluded that there are no additional significant natural features within the project area, nor are there any changes in distances from the project location to already identified natural features or wildlife habitats. As a result, no new mitigation measures need to be implemented for this project.

### **7.3 Changes to Monitoring Requirements**

Based on the minor changes in project location, NRSI has determined that the monitoring requirements identified in the Natural Heritage EIS remain appropriate for the monitoring of potential impacts from the proposed Adelaide Wind Energy Centre.

## 8.0 Summary of Natural Heritage Amendments

In accordance with the REA Regulation, NRSI biologists have completed a comprehensive records review, site investigation, EOS, and EIS of the Adelaide Wind Energy Centre project area. Following the review of proposed adjustments to the project location (as discussed above), NRSI has re-considered all aspects of the Natural Heritage Assessment within this report to determine if there are new natural features, changes in distance to project location, or new mitigation measures or monitoring commitments required to ensure that potential permanent or adverse environmental impacts are mitigated or studied appropriately. The summary of the result of this review of changes to the project location is summarized in Table 2 below.

**Table 2. Summary of Natural Heritage Addendum V for the Adelaide Wind Energy Centre**

Addendum Changes	Addendum Result
Significant Features	NRSI has not identified any additional significant natural features or wildlife habitats within the project area. Furthermore, no natural features or wildlife habitats have been removed from the project area resulting from the modifications to the project location.
Changes in Distances to Project Location	There are no changes in distances to project location as a result of the minor layout adjustment presented in this Addendum Report.
Mitigation Measures	Based on the minor adjustment of the project location, NRSI biologists have identified no additional significant features within 120m of the project location that require mitigation measures to be applied.  All other mitigation measures, as seen in the Natural Heritage EIS (NRSI 2012a) and NHA Addendum Reports (NRSI 2012b; NRSI 2013a; NRSI 2013b; NRSI 2013c) will provide the appropriate protection to ensure any potential impacts are mitigated.
Monitoring Commitments	NRSI has identified that, based on the minor shifts in project location, the monitoring commitments outlined in the Natural Heritage EIS (NRSI 2012a) and NHA Addendum Reports (NRSI 2012b; NRSI 2013a; NRSI 2013b; NRSI 2013c) are still appropriate to monitor any potentially impacts of this project.  No additional monitoring requirements are proposed as a result of the changes in project location.

With this addendum, it is maintained that with the implementation of the planned mitigation measures, monitoring programs, and contingency plans as presented in the Adelaide Wind Energy Centre: Natural Heritage EIS (NRSI 2012a) and subsequent addendums (NRSI 2012b, NRSI 2013a, NRSI 2013b, NRSI 2013c) that there is unlikely to be any significant impacts to natural features, including woodlands, wetlands, or significant wildlife habitats.

## 9.0 References

Natural Resource Solutions Inc. (NRSI). 2013a. Adelaide Wind Energy Centre Natural Heritage Assessment Addendum II Report. February 2013.

Natural Resource Solutions Inc. (NRSI). 2013b. Adelaide Wind Energy Centre Natural Heritage Assessment Addendum III Report. August 2013.

Natural Resource Solutions Inc. (NRSI). 2013c. Adelaide Wind Energy Centre Natural Heritage Assessment Addendum IV Report. November 2013.

Natural Resource Solutions Inc. (NRSI). 2012a. Adelaide Wind Energy Centre Natural Heritage Assessment. April 2012.

Natural Resource Solutions Inc. (NRSI). 2012b. Adelaide Wind Energy Centre Natural Heritage Assessment Addendum Report. July 2012.