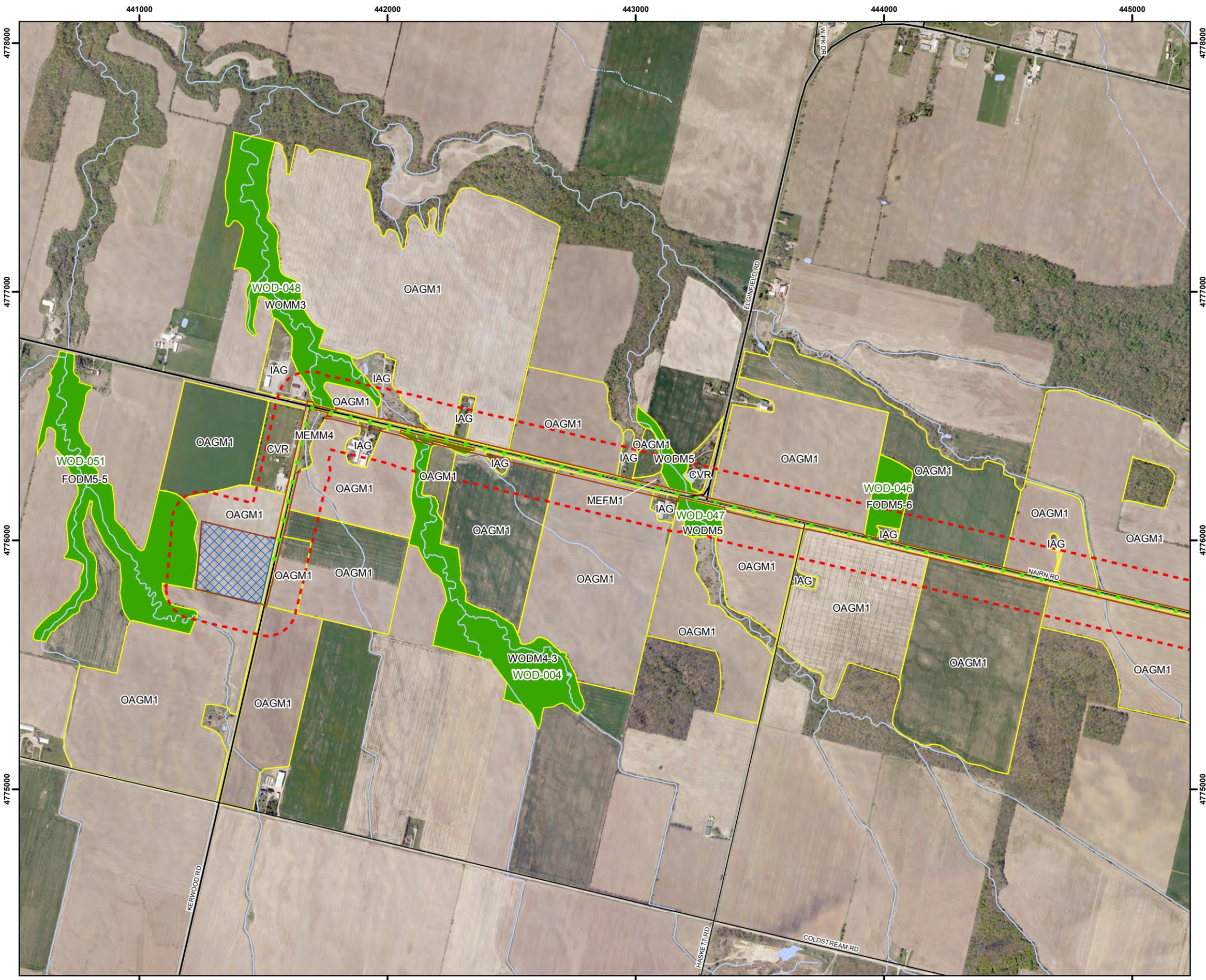


Figure 4a

# Parkhill Interconnect Significant Natural Features & Vegetation Communities - West

- Legend**
- Project Area (120m)
  - Project Location
  - Transmission Line
  - Switchyard
  - Existing Transmission Line
  - Railroad
  - Primary Road
  - Secondary Road
  - Intermittent Watercourse
  - Permanent Watercourse
  - Open Aquatic
  - Significant Woodland (WOD)
  - Ecological Land Classification (ELC)
- (CVR) Residential  
 (FODM5-5) Dry - Fresh Sugar Maple - Hickory Deciduous Forest Type  
 (FODM5-6) Dry - Fresh Sugar Maple - Basswood Deciduous Forest Type  
 (IAG) Agricultural Infrastructure  
 (MEFM1) Dry - Fresh Forb Meadow Ecosite  
 (MEMM4) Fresh-Moist Mixed Meadow Ecosite  
 (OAGM1) Annual Row Crops  
 (WODM4-3) Sugar Maple Deciduous Woodland Type  
 (WODM5) Fresh - Moist Deciduous Woodland Ecosite  
 (WOMM3) Dry - Fresh Mixed Woodland Ecosite



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Project: 1341 Date: October 18, 2013	NAD83 - UTM Zone 17 Scale: 1:45,000 (11x17")
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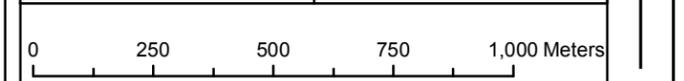
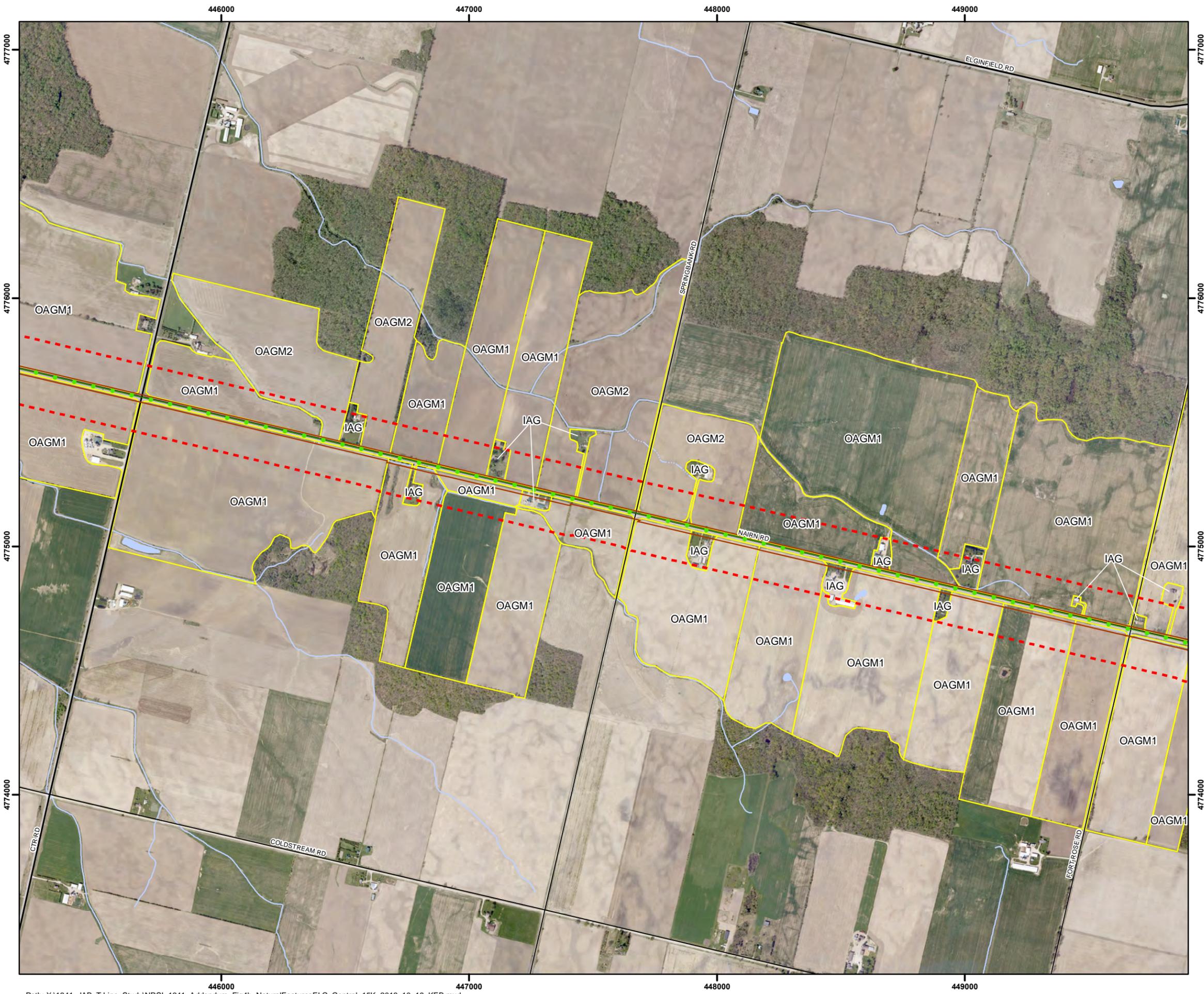


Figure 4b

# Parkhill Interconnect Significant Natural Features & Vegetation Communities - Central



### Legend

- Project Area (120m)
  - Project Location
  - Transmission Line
  - Existing Transmission Line
  - Railroad
  - Primary Road
  - Secondary Road
  - Intermittent Watercourse
  - Permanent Watercourse
  - Open Aquatic
  - Significant Woodland (WOD)
  - Ecological Land Classification (ELC)
- (IAG) Agricultural Infrastructure  
(OAGM1) Annual Row Crops  
(OAGM2) Perennial Cover Crops



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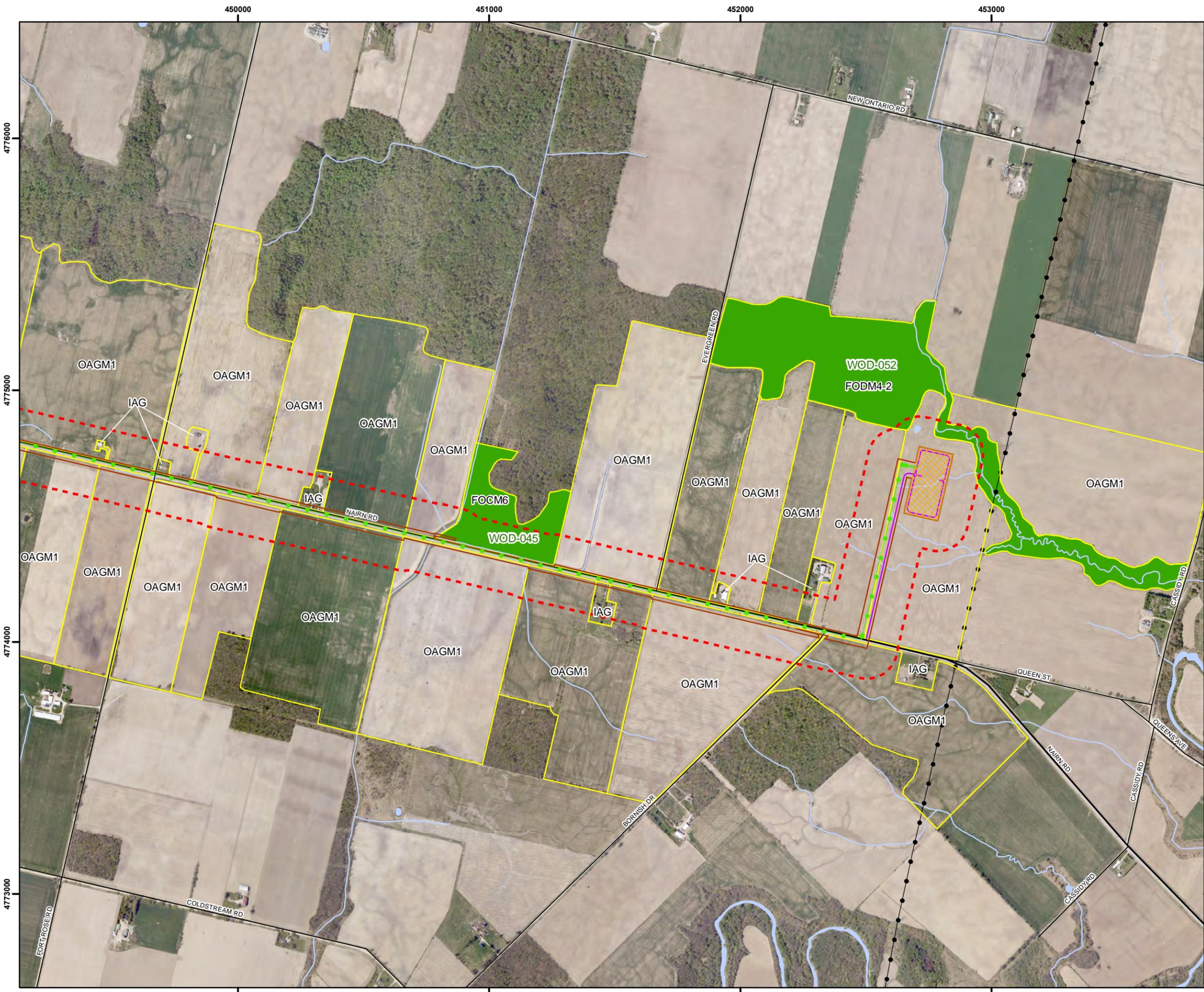
Project: 1341 Date: October 18, 2013	NAD83 - UTM Zone 17 Scale: 1:45,000 (11x17")
0      250      500      750      1,000 Meters	

Figure 4c

# Parkhill Interconnect Significant Natural Features & Vegetation Communities - East

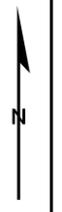
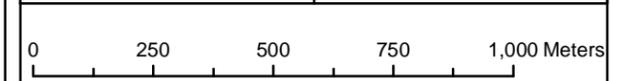
**Legend**

- Project Area (120m)
  - Project Location
  - Access Road
  - Transmission Line
  - Point of Interconnect
  - Existing Transmission Line
  - Railroad
  - Primary Road
  - Secondary Road
  - Intermittent Watercourse
  - Permanent Watercourse
  - Open Aquatic
  - Significant Woodland (WOD)
  - Ecological Land Classification (ELC)
- (FOCM6) Naturalized Coniferous Plantation  
 (FODM4-2) Dry - Fresh White Ash - Hardwood Deciduous Forest Type  
 (IAG) Agricultural Infrastructure  
 (OAGM1) Annual Row Crops



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Project: 1341 Date: October 18, 2013	NAD83 - UTM Zone 17 Scale: 1:45,000 (11x17")
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## **6.0 Amendments to the Evaluation of Significance**

As part of this addendum, NRSI biologists have reviewed the potential for changes to the Evaluation of Significance phase of this project. After examining the changes in distances between project components and natural features, reviewing changes to generalized significant wildlife habitats, and conducting additional site investigations to examine the potential for wildlife habitats in features that could no longer be considered Generalized, it has been determined that there are no new 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 evaluation of significance. Additionally, since there are minimal changes in these distances, there are no features that are no longer within 120m of a project location.

No additional Evaluation of Significance is required for the Parkhill Interconnect as a result of modifications to the project location.

## 7.0 Amendments to the Environmental Impact Study

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

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

- Changes to Mitigation Measures (i.e. project location now closer to or overlapping 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, including the distances of the project location to natural features and have determined that based on the proposed changes, several mitigation measures will be changed for WOD-004 and WOD-045.

These mitigation measures, monitoring commitments and contingency measures are outlined below in Table 4.

The mitigations measures, monitoring commitments and contingency measures for generalized significant wildlife habitat outlined in the *Parkhill Interconnect Natural Heritage Assessment Report* (NRSI 2013), no longer apply to WOD-004, WOD-045 and the area of WOD-048 that is no longer delineated as part of the woodland.

**Table 4. Changes to Mitigation Measures for the Parkhill Interconnect**

Feature ID	Distance to Project Location	Potential Negative Effects	Mitigation Measures	Performance Objectives, Monitoring and Contingency Measures
WOD-004 WOD-045	Overlapping	<ul style="list-style-type: none"> <li>• Vegetation removal</li> </ul>	<ul style="list-style-type: none"> <li>• Clearly delineate the construction area to avoid unnecessary and/or accidental vegetation removal,</li> <li>• Avoid or minimize vegetation removal, wherever possible,</li> <li>• Vegetation removal will directly impact less than 1.5% of the total area of each natural feature,</li> <li>• Protect rare plant species, communities, wildlife habitats and critical areas,</li> <li>• Restore any areas where vegetation removal has occurred for the purposes of temporary construction activities as soon as possible after construction,</li> <li>• No vegetation removal to occur during the breeding bird season (May 1<sup>st</sup> – July 31<sup>st</sup>), unless nest searches conducted prior to removal to confirm no nests are present.</li> </ul>	<p><b>Performance Objective:</b></p> <ul style="list-style-type: none"> <li>• Minimize the amount of vegetation removal.</li> </ul> <p><b>Monitoring:</b></p> <ul style="list-style-type: none"> <li>• Upon review of final, surveyed, construction plans, a biologist will monitor all areas proposed for vegetation removal for rare plant species or potential wildlife habitat in advance of the vegetation removal.</li> </ul> <p><b>Contingency Measure:</b></p> <ul style="list-style-type: none"> <li>• If final construction plans show a permanent disturbance of more than 1.5% of the natural feature area, the Ministry of Natural Resources will be contacted and further mitigation measures may be implemented.</li> <li>• Should any rare species be documented, the Ministry of Natural Resources will be contacted and further mitigation plans may be implemented.</li> </ul>
		<ul style="list-style-type: none"> <li>• Sedimentation and erosion</li> </ul>	<ul style="list-style-type: none"> <li>• Implement a sediment and erosion control plan,</li> <li>• Install, monitor, and maintain erosion and sediment control measures (i.e. silt fences) around the construction area,</li> <li>• Minimize vegetation removal on slopes.</li> <li>• Schedule grading to avoid times of high runoff volumes (spring and fall), wherever possible and suspend work if an excessive sediment discharge occurs until mitigation measures have been established.</li> </ul>	<p><b>Performance Objective</b></p> <ul style="list-style-type: none"> <li>• Minimize impacts to natural features.</li> </ul> <p><b>Monitoring:</b></p> <ul style="list-style-type: none"> <li>• Regular construction monitoring of sediment and erosion control measures should occur in conjunction with other regular inspections of required mitigation measures.</li> </ul> <p><b>Contingency Measure:</b></p> <ul style="list-style-type: none"> <li>• Maintain or restore vegetated buffers, including riparian zones.</li> </ul>
		<ul style="list-style-type: none"> <li>• Spills (i.e. oil, gasoline, grease, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• All maintenance activities, vehicle refueling or washing, and chemical storage will be located more than 30m from any significant natural feature,</li> </ul>	<p><b>Performance Objective:</b></p> <ul style="list-style-type: none"> <li>• Minimize impacts to natural features.</li> </ul> <p><b>Monitoring:</b></p>

			<ul style="list-style-type: none"> <li>• Develop a spill response plan and train staff on appropriate procedures,</li> <li>• Keep emergency spill kits on site,</li> <li>• Dispose of waste material by authorized and approved off-site vendors,</li> <li>• Store hazardous materials in designated areas.</li> </ul>	<ul style="list-style-type: none"> <li>• None required</li> </ul> <p><b>Contingency Measure:</b></p> <ul style="list-style-type: none"> <li>• None required</li> </ul>
		<ul style="list-style-type: none"> <li>• Changes in soil moisture and compaction</li> </ul>	<ul style="list-style-type: none"> <li>• Implement infiltration techniques to the maximum extent possible,</li> <li>• Minimize the use of impervious surfaces where possible, such as utilizing and contouring permeable surface material (i.e gravel) to increase infiltration and reduce surface water runoff.</li> </ul>	<p><b>Performance Objective:</b></p> <ul style="list-style-type: none"> <li>• Minimize impact to soil moisture regime and vegetation species composition.</li> </ul> <p><b>Monitoring:</b></p> <ul style="list-style-type: none"> <li>• None required</li> </ul> <p><b>Contingency Measure:</b></p> <p>None required</p>
		<ul style="list-style-type: none"> <li>• Accidental damage to vegetation, including limbs and root zones</li> </ul>	<p>Clearly delineate work area using erosion fencing, or similar barrier, to avoid accidental damage to species to be retained,</p> <ul style="list-style-type: none"> <li>• Herbicides, if required, will be applied using a targeted application to specific tree stumps or small vegetation clusters rather than a general treatment within the entire cleared area.</li> </ul>	<p><b>Performance Objective:</b></p> <ul style="list-style-type: none"> <li>• Minimize direct impacts on vegetation communities and protect rare/sensitive habitats.</li> </ul> <p><b>Monitoring:</b></p> <ul style="list-style-type: none"> <li>• None required</li> </ul> <p><b>Contingency Measure:</b></p> <ul style="list-style-type: none"> <li>• Any tree limbs or roots that are accidentally damaged by construction activities will be pruned using proper arboricultural techniques.</li> </ul>
		<ul style="list-style-type: none"> <li>• Fugitive Dust Emission</li> </ul>	<ul style="list-style-type: none"> <li>• Implement a speed limit for construction equipment and trucks,</li> <li>• Apply dust suppressants to unpaved areas,</li> <li>• Re-vegetate cleared areas as soon as possible,</li> <li>• Install wind fences, as required.</li> </ul>	<p><b>Performance Objective:</b></p> <ul style="list-style-type: none"> <li>• Minimize impacts to natural features.</li> </ul> <p><b>Monitoring:</b></p> <ul style="list-style-type: none"> <li>• None required</li> </ul> <p><b>Contingency Measure:</b></p> <p>None required</p>

## 7.2 New Mitigation Measures

There are no new significant natural features or wildlife habitats within the project area. As a result, no new mitigation measures need to be implemented for this project.

## 7.3 Changes to Monitoring Requirements

Based on the changes in project location, an additional monitoring requirement has been identified and outlined in Table 4 of this report. The additional monitoring requirement includes conducting vegetation inventories prior to any vegetation removal to ensure any rare species are documented and addressed appropriately in the unlikely event they are present within the area proposed for vegetation removal. NRSI has determined that the monitoring requirements identified in the Natural Heritage Assessment Report, along with those identified above, are suitable for the monitoring of potential impacts of the proposed Parkhill Interconnect.

## 8.0 Summary of Natural Heritage Amendments

In accordance with the REA Regulation, NRSI biologists have completed a comprehensive records review, site investigation, evaluation of significance, and EIS of the Parkhill Interconnect 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 5 below.

**Table 5. Summary of Natural Heritage Addendum for the Parkhill Interconnect**

Addendum Changes	Addendum Result
Significant Features	The boundaries of one natural feature, WOD-048, have been re-delineated and 3 natural features, including an area of WOD-048, and the entirety of WOD-004 and WOD-045 are no longer considered generalized significant wildlife habitat based on further site investigation of these features. NRSI has not identified any additional significant natural features or wildlife habitats within the project area. No other natural features or wildlife habitats have been removed from the project area due to the amendment to the project's layout.
Changes in Distances to Project Location	<p>The distances from the project location to significant natural features and wildlife habitats have changed due to minor adjustments to the project layout. These changes in distances to project location are associated with 6 significant natural features (woodlands) and the associated generalized significant wildlife habitats.</p> <p>Changes in distances from the project location to significant natural features (WOD-004, 045, 046, 047, 048, 052) are shown in Table 1 of this report.</p>
Mitigation Measures	<p>Based on the adjustments 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.</p> <p>Due to changes in distances between natural features and project components, additional mitigation measures have been proposed (Table 4) for two significant woodlands, WOD-004 and WOD-045.</p> <p>Generalized significant wildlife habitat mitigation measures no longer apply to WOD-004, WOD-045 and the area of WOD-048 located south of Elginfield Road that is no longer delineated as a woodland.</p> <p>All other mitigation measures, as detailed in the Natural Heritage Assessment Report (NRSI 2013) will provide the appropriate protection to ensure any permanent and adverse impacts from the Parkhill Interconnect are mitigated.</p>
Monitoring Commitments	<p>NRSI has identified that, based on the minor shifts in project location, the monitoring commitments outlined in the Natural Heritage Assessment Report (NRSI 2013) are still appropriate to monitor any potentially adverse impacts of this project.</p> <p>An additional monitoring requirement has been proposed based on possible vegetation removal. This new monitoring commitment is outlined in Table 4.</p>

With this addendum, it is maintained that with the implementation of the planned mitigation measures, monitoring programs, and contingency plans as presented in the Parkhill Interconnect Natural Heritage Assessment (NRSI 2013), that there is unlikely to be any significant impacts to natural heritage features, including woodlands or significant wildlife habitat.