

# Appendix I

## Wildlife Species List

**Appendix I: Incidental Wildlife - Breeding Birds**

Common Name	Scientific Name	Status						Identified in Partners in Flight Ontario BCR 13 Landbird Conservation Plan	Area-sensitive (OMNR <sup>c</sup> )	Significant in Region 6 (south-central)	Significant in Region 7 (south)	Huron	
		Species at Risk (national) <sup>a</sup>	SARA (Species at Risk Act) status	SARA Schedule	Species at Risk (SARO) <sup>a</sup>	Provincially Rare (NHIC breeding season SRANK) <sup>b</sup>	Level					Habitat	
American Crow	<i>Corvus brachyrhynchos</i>												
American Goldfinch	<i>Carduelis tristis</i>											Level 3	Open Country
American Pipit	<i>Anthus rubescens</i>												
American Robin	<i>Turdus migratorius</i>												
American Tree Sparrow	<i>Spizella arborea</i>												
American Woodcock	<i>Scolopax minor</i>											Level 4	Forest
Baltimore Oriole	<i>Icterus galbula</i>						√						
Belted Kingfisher	<i>Ceryle alcyon</i>						√						
Black-and-white Warbler	<i>Mniotilta varia</i>							A				Level 3	Forest
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>						√					Level 2	Forest
Black-capped Chickadee	<i>Poecile atricapillus</i>											Level 4	Forest
Blackpoll Warbler	<i>Dendroica striata</i>												
Blue Jay	<i>Cyanocitta cristata</i>												
Blue-winged Warbler	<i>Vermivora pinus</i>						√					Level 1	Forest
Brown Thrasher	<i>Toxostoma rufum</i>						√					Level 1	Open Country
Brown-headed Cowbird	<i>Molothrus ater</i>												
Canada Goose	<i>Branta canadensis</i>												
Cedar Waxwing	<i>Bombycilla cedrorum</i>												
Chipping Sparrow	<i>Spizella passerina</i>												
Common Grackle	<i>Quiscalus quiscula</i>												
Common Yellowthroat	<i>Geothlypis trichas</i>												
Cooper's Hawk	<i>Accipiter cooperi</i>	NAR						A				Level 3	Forest
Dark-eyed Junco	<i>Junco hyemalis</i>								Y	Y			
Downy Woodpecker	<i>Picoides pubescens</i>												
Eastern Kingbird	<i>Tyrannus tyrannus</i>						√					Level 3	Open Country
Eastern Phoebe	<i>Sayornis phoebe</i>											Level 3	Forest
Eastern Wood-Pewee	<i>Contopus virens</i>						√						
Field Sparrow	<i>Spizella pusilla</i>						√					Level 3	Open Country
Gray Catbird	<i>Dumetella carolinensis</i>											Level 4	Forest
Great Blue Heron	<i>Ardea herodias</i>												
Great Crested Flycatcher	<i>Myiarchus crinitus</i>												
Hairy Woodpecker	<i>Picoides villosus</i>							A					
Horned Lark	<i>Eremophila alpestris</i>											Level 3	Open Country
House Wren	<i>Troglodytes aedon</i>												
Indigo Bunting	<i>Passerina cyanea</i>												
Killdeer	<i>Charadrius vociferus</i>												
Magnolia Warbler	<i>Dendroica magnolia</i>							A		Y		Level 1	Forest
Mallard	<i>Anas platyrhynchos</i>												
Mourning Dove	<i>Zenaidura macroura</i>												
Northern Cardinal	<i>Cardinalis cardinalis</i>												
Northern Flicker	<i>Colaptes auratus</i>						√						
Northern Harrier	<i>Circus cyaneus</i>	NAR					√	A				Level 4	Marsh
Ovenbird	<i>Seiurus aurocapillus</i>							A				Level 4	Forest
Pileated Woodpecker	<i>Dryocopus pileatus</i>							A				Level 2	Forest
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>											Level 2	Forest
Red-eyed Vireo	<i>Vireo olivaceus</i>												
Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	THR	THR	Schedule 1	SC	S3	√					Level 1	Forest
Red-tailed Hawk	<i>Buteo jamaicensis</i>	NAR											
Red-winged Blackbird	<i>Agelaius phoeniceus</i>												
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>						√						
Ruby-crowned Kinglet	<i>Regulus calendula</i>								Y	Y		Level 4	Forest
Ruby-throated Hummingbird	<i>Archilochus colubris</i>											Level 3	Forest
Ruffed Grouse	<i>Bonasa umbellus</i>											Level 3	Forest
Rusty Blackbird	<i>Euphagus carolinus</i>	SC	SC	Schedule 1					Y				
Savannah Sparrow	<i>Passerculus sandwichensis</i>						√	A				Level 1	Open Country
Snow Bunting	<i>Plectrophenax nivalis</i>												
Song Sparrow	<i>Melospiza melodia</i>												
Swamp Sparrow	<i>Melospiza georgiana</i>											Level 2	Marsh
Tree Swallow	<i>Tachycineta bicolor</i>												
Trumpeter Swan	<i>Cygnus buccinator</i>	NAR				S2S3							
Turkey Vulture	<i>Cathartes aura</i>											Level 3	Forest
Vesper Sparrow	<i>Poocetes gramineus</i>						√					Level 2	Open Country
Warbling Vireo	<i>Vireo gilvus</i>												
White-breasted Nuthatch	<i>Sitta carolinensis</i>							A					
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>												
White-throated Sparrow	<i>Zonotrichia albicollis</i>											Level 2	Forest
Wild Turkey	<i>Meleagris gallopavo</i>												
Willow Flycatcher	<i>Empidonax traillii</i>						√						
Wood Duck	<i>Aix sponsa</i>											Level 4	Forest
Wood Thrush	<i>Hylocichla mustelina</i>						√					Level 4	Forest
Yellow Warbler	<i>Dendroica petechia</i>												
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>							A				Level 1	Forest
Yellow-rumped Warbler	<i>Dendroica coronata</i>									Y		Level 4	Forest
Yellow-throated Vireo	<i>Vireo flavifrons</i>							A					

**KEY**

<sup>a</sup> National Species at Risk are those listed by COSEWIC = Committee on the Status of Endangered Wildlife in Canada

Provincial Species at Risk are those listed by COSSARO = Committee on the Status of Species at Risk in Ontario  
 END = Endangered, THR = Threatened, SC = Special Concern

<sup>b</sup> SRANK (from Natural Heritage Information Centre) shown for breeding status if: S1 (Critically Imperiled, often < 5 occurrences), S2 (Imperiled, often <20 occurrences), S3 (Vulnerable, often 80 or fewer), S3S4 (uncertain between S3 and S4), or T (tracked species) that are S4 or S5; SRANK not shown if: S4 (apparently secure, uncommon), S5 (secure, common).

Area-sensitive sources:

<sup>c</sup> Ontario Ministry of Natural Resources (OMNR). 2000. Significant Wildlife Habitat Technical Guide (Appendix G). 151 p plus appendices.

<sup>d</sup> Ontario Ministry of Natural Resources (OMNR). 1993 (Revised 1994, 2002 draft). Ontario Wetland Evaluation System, Southern Manual. 3rd Edition. NEST Technical Manual TM-002. 173 pp.

Appendix I: Incidental Wildlife

Taxon	Common Name	Scientific Name	Status					Tracked by NHIC	
			G Rank <sup>1</sup>	S Rank <sup>2</sup>	COSEWIC	SARA	SARA		MNR/SARO
Crustaceans	Chimney Crayfish	<i>Cambarus diogenes</i>	G5	S3					
Hemiptera	Annual Cicada								
Herpetofauna	Eastern Newt/Red-spotted Newt	<i>Notophthalmus viridescens</i>	G5T5	S5					
	Eastern Red-backed Salamander	<i>Plethodon cinereus</i>	G5	S5					
	American Toad	<i>Bufo (Anaxyrus) americanus</i>	G5	S5					
	Spring Peeper	<i>Pseudacris crucifer</i>	G5	S5					
	Green Frog	<i>Rana (Lithobates) clamitans</i>	G5	S5					
	Northern Leopard Frog	<i>Rana (Lithobates) pipiens</i>	G5	S5	NAR				
	Wood Frog	<i>Rana (Lithobates) sylvatica</i>	G5	S5					
Lepidoptera	Eastern Comma	<i>Polygonia comma</i>	G5	S5					
	Grey Comma	<i>Polygonia progne</i>	G4G5	S5					
	Milbert's Tortoiseshell	<i>Aglais milberti</i>	G5	S5					
	Red Admiral	<i>Vanessa atalanta</i>	G5	S5					
	Red-spotted Purple	<i>Limenitis arthemis astyanax</i>	G5T5	S5					
	Monarch	<i>Danaus plexippus</i>	G5	S2N,S4B	SC	SC	Schedule 1	SC	√
	Giant Swallowtail	<i>Papilio cresphontes</i>	G5	S3					√
	Eastern Tiger Swallowtail	<i>Papilio glaucus</i>	G5	S5					
	Cabbage White	<i>Pieris rapae</i>	G5	SNA					
	Clouded Sulphur	<i>Colias philodice</i>	G5	S5					
	Orange Sulphur	<i>Colias eurytheme</i>	G5	S5					
Mammals	White-tailed Deer	<i>Odocoileus virginianus</i>	G5	S5					
	Coyote	<i>Canis latrans</i>	G5	S5					
	Red Fox	<i>Vulpes vulpes</i>	G5	S5					
	Raccoon	<i>Procyon lotor</i>	G5	S5					
	Eastern Cottontail	<i>Sylvilagus floridanus</i>	G5	S5					
	Eastern Chipmunk	<i>Tamias striatus</i>	G5	S5					
	Groundhog/Woodchuck	<i>Marmota monax</i>	G5	S5					
	Gray Squirrel	<i>Sciurus carolinensis</i>	G5	S5					
	Meadow Vole	<i>Microtus pennsylvanicus</i>	G5	S5					
Odonata	Common Green Darner	<i>Anax junius</i>	G5	S5					
	Yellow-legged Meadowhawk	<i>Sympetrum vicinum</i>	G5	S5					
	Ebony Jewelwing	<i>Calopteryx maculata</i>	G5	S5					
Reptiles	Eastern Gartersnake	<i>Thamnophis sirtalis sirtalis</i>	G5T5	S5					

<sup>1</sup> **G-rank:** G rank Global ranks are assigned by a consensus of the network of CDCs, scientific experts, and The Nature Conservancy to designate a rarity rank based on the range-wide status of a species, subspecies or variety.  
G1 Extremely rare; usually 5 or fewer occurrences in the overall range or very few remaining individuals; or because of some factor(s) making it especially vulnerable to extinction.  
G2 Very rare; usually between 5 and 20 occurrences in the overall range or with many individuals in fewer occurrences; or because of some factor(s) making it vulnerable to extinction.  
G3 Rare to uncommon; usually between 20 and 100 occurrences; may have fewer occurrences, but with a large number of individuals in some populations; may be susceptible to large-scale disturbances.  
G4 Common; usually more than 100 occurrences; usually not susceptible to immediate threats.  
G5 Very common; demonstrably secure under present conditions  
G? Not Yet Ranked; or if following a ranking, Rank Uncertain (e.g. G3?). S? Species have not had a rank assigned.  
T Denotes that the rank applies to a subspecies or variety.

<sup>2</sup> **S-rank:** The Natural Heritage provincial ranking system (provincial S-rank) is used by the MNR Natural Heritage Information Centre (NHIC) to set protection priorities for rare species and natural communities. Definitions are as follows:  
S1 Extremely rare in Ontario; usually 5 or fewer occurrences in the province or very few remaining individuals; often especially vulnerable to extirpation.  
S2 Very rare in Ontario; usually between 5 and 20 occurrences in the province or with many individuals in fewer occurrences; often susceptible to extirpation.  
S3 Rare to uncommon in Ontario; usually between 20 and 100 occurrences in the province; may have fewer occurrences, but with a large number of individuals in some populations; may be susceptible to large-scale disturbances.  
S4 Most species with an S3 rank are assigned to the watch list, unless they have a relatively high global rank.  
S5 Common and apparently secure in Ontario; usually with more than 100 occurrences in the province.  
S6 Very common and demonstrably secure in Ontario.  
SNA Not Applicable —A conservation status rank is not applicable because the species is not a suitable target for conservation activities

# Appendix J

## Addendum Report

NextEra Energy Canada, ULC  
Goshen Wind Energy Centre

## **Natural Heritage Assessment and Environmental Impact Study Report Addendum**

**Prepared by:**

AECOM

300 – 300 Town Centre Boulevard      905 477 8400    tel  
Markham, ON, Canada L3R 5Z6          905 477 1456    fax  
[www.aecom.com](http://www.aecom.com)

**Project Number:**

60155032

**Date:**

January, 2013

## AECOM Signatures

Report Prepared By:



---

Olga Hropach, (Hon) B.Sc.  
Terrestrial Ecologist

Report Reviewed By:



---

Jessica M. Ward, (Hon) B.Sc., Ph.D.  
Ecologist

# Table of Contents

	page
<b>1. Introduction</b> .....	<b>1</b>
1.1 Overview of Project Location Modifications.....	1
1.2 Summary of NHA and EIS Addendum .....	3
<b>2. Addendum to the Records Review</b> .....	<b>4</b>
<b>3. Addendum to the Site Investigation</b> .....	<b>4</b>
3.1 Methods .....	4
3.1.1 Wildlife Habitat.....	4
3.2 Results .....	4
3.2.1 Wildlife Habitat.....	4
3.2.2 Minimum Distances from Natural Features to Project Location .....	5
<b>4. Addendum to the Evaluation of Significance</b> .....	<b>5</b>
4.1 Methods .....	5
4.2 Results .....	5
<b>5. Addendum to the Environmental Impact Study</b> .....	<b>6</b>
5.1 Significant Wetlands .....	6
5.2 Significant Woodlands .....	7
5.3 Significant Valleylands.....	7
5.4 Significant Wildlife Habitat .....	8
<b>6. Summary</b> .....	<b>8</b>
<b>7. References</b> .....	<b>8</b>

## List of Figures

Figure 1. Project Location Modifications .....	9
Figure 2. Significant Wildlife Habitat.....	16

## List of Tables

Table 1. Summary of Proposed Modifications .....	1
Table 2. Summary of Changes to Goshen NHA and EIS Report .....	3
Table 3. Updated Minimum Distances Between the Project Location and Natural Features .....	5

# 1. Introduction

Goshen Wind, Inc., a wholly owned subsidiary of NextEra Energy Canada, ULC (NextEra), is proposing to construct a wind energy project in Bluewater and South Huron, Huron County, Ontario. AECOM Canada Ltd. (AECOM) was retained by NextEra to prepare a Natural Heritage Assessment (NHA) and Environmental Impact Study (EIS) for the proposed Goshen Wind Energy Centre (the Project), in accordance with the requirements of the Renewable Energy Approval (REA) process and O.Reg. 359/09. The Goshen Wind Energy Centre Natural Heritage Assessment and Environmental Impact Study Report (AECOM, 2013; hereafter referred to as the submitted NHA and EIS) was submitted to the Ontario Ministry of Natural Resources (MNR) in January 2013.

This addendum has been prepared as a supplement to the submitted NHA and EIS, and is intended to fulfill the requirements of a Natural Heritage Assessment and Environmental Impact Study in accordance with the requirements of the Renewable Energy Approval process and O.Reg. 359/09, with respect to modifications to the Project Location proposed after submission of the NHA and EIS to MNR.

## 1.1 Overview of Project Location Modifications

The proposed Project Study Area remains unchanged from the submitted NHA and EIS; however, there are modifications proposed to the Project Location (i.e., location of specific components of the Project). All of the proposed modifications are summarized in Table 1. For each proposed modification, a map showing the revised Project Location and associated 120 m Area of Investigation, referenced against the Project Location and associated 120 m Area of Investigation in the submitted NHA and EIS, is included in this addendum (refer to Table 1 for corresponding Figures). Changes in the minimum distance from natural features within 120 m of each modification to the specific project component(s) proposed to be modified are also provided in the table below.

**Table 1. Summary of Proposed Modifications**

Modification ID	Feature(s) Potentially Affected by Proposed Modification (Change in Minimum Distance to Modified Project Component)	Map
<b>A1:</b> Relocation of access road and collection line to Turbine 7 to northern property line. Collection line extended north within the road right-of-way.	Natural Area 370 is no longer within 120 m of the Project Location. Features within 120 m of this modification include: <ul style="list-style-type: none"> <li>• Woodland Feature WOD-307 (increased from 102 m to &gt;120 m).</li> </ul>	Figure 1A
<b>A2:</b> Relocation of access road to meteorological tower to the north.	None	Figure 1A
<b>A3:</b> Disturbance area for construction of Turbine 4 extended to northern property line.	Disturbance area remains within 120 m of Natural Area 375. Features within 120 m of this modification include: <ul style="list-style-type: none"> <li>• Wetland Feature WET-025 (no change);</li> <li>• Woodland Feature WOD-312 (no change);</li> <li>• Confirmed Significant Wildlife Habitat: <ul style="list-style-type: none"> <li>◦ Plant Species of Conservation Concern Habitat Feature SCP-17 (no change);</li> </ul> </li> <li>• Generalized Candidate Significant Wildlife Habitat (Amphibian Breeding Habitat (Woodland), Plant Species of Conservation Concern Habitat, Bird Species of Conservation Concern Habitat) (no change).</li> </ul>	Figure 1A
<b>A4:</b> Relocation of access road to Turbine 5 to northern property line.	Access road remains within 120 m of Natural Area 379. Features within 120 m of this modification include: <ul style="list-style-type: none"> <li>• Woodland Feature WOD-331 (no change);</li> <li>• Valleyland Feature VAL-02 (reduced from 89 m to 82 m);</li> <li>• Candidate Significant Wildlife Habitat: <ul style="list-style-type: none"> <li>◦ Amphibian Wetland Breeding Habitat Feature AWE-29 (increased from 23 m to 73 m);</li> <li>◦ Deer Winter Congregation Area Feature DWC-01 (no change);</li> <li>◦ Deer Movement Corridor Feature WOD-331 (no change);</li> </ul> </li> <li>• Generalized Candidate Significant Wildlife Habitat (Woodland Area-Sensitive Bird Breeding Habitat, Woodland Raptor Nesting Habitat, Bird Species of Conservation Concern Habitat) (no change).</li> </ul>	Figure 1A

**Table 1. Summary of Proposed Modifications**

<b>Modification ID</b>	<b>Feature(s) Potentially Affected by Proposed Modification (Change in Minimum Distance to Modified Project Component)</b>	<b>Map</b>
<b>B1:</b> Disturbance area modified for access road to meteorological tower (narrower and longer).	None	Figure 1B
<b>B2:</b> Relocation of access road to Turbine 23 to northern property line.	Access road proposed within 120 m of Natural Area 285. Features within 120 m of this modification include: <ul style="list-style-type: none"> <li>• Wetland Feature WET-019 (reduced from &gt;120 m to 75 m);</li> <li>• Woodland Feature WOD-137 (reduced from &gt;120 m to 70 m);</li> <li>• Candidate Significant Wildlife Habitat: <ul style="list-style-type: none"> <li>◦ Bat Maternity Colony Feature BMC-285 (reduced from &gt;120 m to 70 m);</li> </ul> </li> <li>• Generalized Candidate Significant Wildlife Habitat (Bird Species of Conservation Concern Habitat, Plant Species of Conservation Concern Habitat) (reduced from &gt;120 m to 70 m).</li> </ul> Access road remains within 120 m of Natural Area 280. Features within 120 m of this modification include: <ul style="list-style-type: none"> <li>• Wetland Feature WET-019 (no change);</li> <li>• Woodland Feature WOD-131 (no change);</li> <li>• Generalized Candidate Significant Wildlife Habitat (Seeps and Springs, Amphibian Breeding Habitat (Woodland), Woodland Raptor Nesting Habitat, Woodland Area-Sensitive Bird Breeding Habitat, Plant Species of Conservation Concern Habitat, Bird Species of Conservation Concern Habitat) (no change).</li> </ul>	Figure 1B
<b>B3:</b> Relocation of access road to Turbine 66, to extend north to Kirkton Road.	Access road is no longer within 120 m of Natural Area 266. Features within 120 m of this modification include: <ul style="list-style-type: none"> <li>• Wetland Feature WET-019 (increased from 111 m to &gt;120 m);</li> <li>• Woodland Feature WOD-131 (increased from 44 m to &gt;120 m);</li> <li>• Generalized Candidate Significant Wildlife Habitat (Woodland Area-Sensitive Bird Breeding Habitat, Bird Species of Conservation Concern Habitat, Turtle Wintering Area, Seeps and Springs, Amphibian Breeding Habitat (Woodland), Plant Species of Conservation Concern Habitat, Insect Species of Conservation Concern Habitat, Woodland Raptor Nesting Habitat, Bat Maternity Colony) (increased from 44 m to &gt;120 m).</li> </ul>	Figure 1B
<b>C1:</b> Modification of construction laydown yard to be a square instead of rectangular area.	None	Figure 1C
<b>C2:</b> Relocation of access road and collection line to Turbine 75 to southern property line.	None	Figure 1C
<b>D1:</b> Minor realignment of access road to meteorological tower.	None	Figure 1D
<b>E1:</b> Relocation of collection line between Turbines 36, 37 and 64, to run adjacent to boundary of natural area 236.	Collection line remains within 120 m of Natural Area 236. Features within 120 m of this modification include: <ul style="list-style-type: none"> <li>• Wetland Feature WET-010 (reduced from 3 m to &gt;0.1 m);</li> <li>• Woodland Features WOD-044 (increased from 30 m to 33 m) and WOD-054 (no change);</li> <li>• Candidate Significant Wildlife Habitat: <ul style="list-style-type: none"> <li>◦ Bat Maternity Colony Feature BMC-236 (no change);</li> </ul> </li> <li>• Generalized Candidate Significant Wildlife Habitat (Mature Forest Stand, Amphibian Breeding Habitat (Woodland), Amphibian Breeding Habitat (Wetland), Bird Species of Conservation Concern Habitat, Plant Species of Conservation Concern Habitat, Insect Species of Conservation Concern Habitat) (no change).</li> </ul>	Figure 1E
<b>E2:</b> Relocation of access road and collection line to Turbine 68 to northern property line. Collection line extended eastward toward Natural Area 215.	Access road and collection line remain within 120 m of Natural Area 215. Features within 120 m of this modification include: <ul style="list-style-type: none"> <li>• Wetland Feature WET-008 (distance to access road reduced from 104 m to 75 m);</li> <li>• Woodland Feature WOD-033 (distance to access road reduced from 88 m to 56 m);</li> <li>• Candidate Significant Wildlife Habitat: <ul style="list-style-type: none"> <li>◦ Bat Maternity Colony Feature BMC-215 (distance to access road reduced from 88 m to 56 m);</li> </ul> </li> <li>• Generalized Candidate Significant Wildlife Habitat (Mature Forest Stand, Plant Species of Conservation Concern Habitat, Bird Species of Conservation Concern Habitat) (distance to access road reduced from 88 m to 56 m).</li> </ul>	Figure 1E

**Table 1. Summary of Proposed Modifications**

Modification ID	Feature(s) Potentially Affected by Proposed Modification (Change in Minimum Distance to Modified Project Component)	Map
<p><b>F1:</b> Relocation of access road to Turbine 49, to extend westward to Babylon Line.</p>	<p>Access road remains within 120 m of natural area 235. Features within 120 m of this modification include:</p> <ul style="list-style-type: none"> <li>• Wetland Feature WET-011 (no change);</li> <li>• Woodland Feature WOD-053 (no change);</li> <li>• Candidate Significant Wildlife Habitat:                             <ul style="list-style-type: none"> <li>○ Bat Maternity Colony Feature BMC-235 (no change);</li> <li>○ Reptile Hibernacula Feature RH-02 (no change);</li> <li>○ Amphibian Woodland Breeding Habitat Feature AWO-06 (no change);</li> </ul> </li> <li>• Generalized Candidate Significant Wildlife Habitat (Habitat for Plant Species of Conservation Concern, Habitat for Bird Species of Conservation Concern) (no change).</li> </ul> <p>Access road is no longer within 120 m Natural Area 245. Features within 120 m of this modification include:</p> <ul style="list-style-type: none"> <li>• Wetland Feature WET-011 (increased from &gt;0.1 m to &gt;120 m);</li> <li>• Woodland Feature WOD-064 (increased from &gt;0.1 m to &gt;120 m);</li> <li>• Candidate Significant Wildlife Habitat:                             <ul style="list-style-type: none"> <li>○ Amphibian Breeding Habitat (Woodland) Feature AWO-02 (increased from &gt;0.1 m to &gt;120 m);</li> </ul> </li> <li>• Generalized Candidate Significant Wildlife Habitat (Mature Forest Stand, Plant Species of Conservation Concern Habitat, Bird Species of Conservation Concern Habitat, Insect Species of Conservation Concern Habitat, Bat Maternity Colony) (increased from &gt;0.1 m to &gt;120 m).</li> </ul>	<p>Figure 1F</p>
<p><b>F2:</b> Relocation of access road to Turbine to northern property line.</p>	<p>None</p>	<p>Figure 1F</p>

**1.2 Summary of NHA and EIS Addendum**

Changes required to the submitted NHA and EIS in order to address the proposed modifications to the Project Location are summarized in Table 2. The relevant sections of this NHA Addendum pertaining to these changes are also provided in the table below.

**Table 2. Summary of Changes to Goshen NHA and EIS Report**

Submitted NHA and EIS Section	Changes Required	Refer to Addendum Section(s)
<p><b>2. Records Review</b></p>	<p><b>Methods:</b> No changes. <b>Results:</b> No changes.</p>	<p>Section 2</p>
<p><b>3. Site Investigation</b></p>	<p><b>Methods:</b> No changes. <b>Results:</b> Natural Area 370 is no longer within the 120 m Area of Investigation; therefore, this natural area, which includes Woodland Feature WOD-307, is removed from the NHA and EIS.  Candidate Significant Amphibian Breeding Habitat (Woodland) Feature AWO-02 is changed to Generalized Candidate Significant Wildlife Habitat in natural area 245 as result of modification F1.  Minimum distances between natural features and the Project Location were updated as required.</p>	<p>Section 3.1 Section 3.2</p>
<p><b>4. Evaluation of Significance</b></p>	<p><b>Methods:</b> No changes. <b>Results:</b> Commitment to complete pre-construction evaluation of significance surveys for Amphibian Breeding Habitat (Woodland) Feature AWO-02 is no longer required.</p>	<p>Section 4.1 Section 4.2</p>
<p><b>5. Environmental Impact Study</b></p>	<p>Feature-specific environmental effects and mitigation measures described in the submitted NHA and EIS are no longer required for Amphibian Breeding Habitat (Woodland) Feature AWO-02. Instead, mitigation measures to address potential effects to Generalized Candidate Significant Wildlife Habitat will be applied to this feature.</p>	<p>Section 5</p>

## 2. Addendum to the Records Review

The Records Review in the submitted NHA and EIS was conducted for the entire Project Study Area, rather than encompassing only the Project Location and an additional 120 m surrounding the Project Location as required by O.Reg. 359/09. This was done in order to accommodate any potential changes to the Project Location that may occur later in the project planning process. There are no additional natural features (i.e., natural features not already described in the submitted NHA and EIS) within the modified 120 m Area of Investigation. Consequently, no changes to the Records Review are required as a result of the proposed Project Location modifications.

## 3. Addendum to the Site Investigation

### 3.1 Methods

Site investigations were completed and described in the submitted NHA and EIS for all natural features within 120 m of the proposed Project Location modifications; therefore, no additional site investigations were required for the purpose of this NHA Addendum (refer to Figures 1A to 1F). Consequently, no changes are required to the methods as described in the submitted NHA and EIS.

#### 3.1.1 Wildlife Habitat

Where distances from Project infrastructure to wildlife habitat features changed as a result of the proposed Project Location modifications (refer to Table 1), these features were re-examined to determine whether the modifications resulted in changes to the designation of candidate Significant Wildlife Habitat and Generalized Candidate Significant Wildlife Habitat as per Appendix D of the Natural Heritage Assessment Guide for Renewable Energy Projects (MNR, 2012).

### 3.2 Results

No change to the boundaries, attributes, composition and functions of features are required as a result of the proposed Project Location modifications. The results of site investigations are presented in the submitted NHA and EIS and are not repeated here.

Where distances from Project infrastructure to wetland, woodland or valleyland features changed as a result of the proposed Project Location modifications (refer to Table 1), these features were carried forward to the Evaluation of Significance of this NHA Addendum to ensure that any potential effects of the modified Project components are addressed through the application of appropriate mitigation measures, if required.

Due to modification A1, natural area 370 is no longer within 120 m of the Project Location (refer to Figure 1A); consequently, woodland WOD-307 is removed from consideration in this NHA Addendum.

#### 3.2.1 Wildlife Habitat

An amphibian breeding habitat (woodland) feature in natural area 245 was identified as candidate Significant Wildlife Habitat (AWO-02) in the submitted NHA and EIS. However, due to modification F1, this feature is now more than 120 m away from the nearest access road; therefore, the designation of this feature is changed to Generalized Candidate Significant Wildlife Habitat (Figure 2). This feature was carried forward to the Evaluation of Significance of this NHA Addendum. No other changes to the designation of candidate Significant Wildlife Habitat and Generalized Candidate Significant Wildlife Habitat are required.

Where distances from Project infrastructure to wildlife habitat features changed as a result of the proposed Project Location modifications (refer to Table 1), these features were carried forward to the Evaluation of Significance of this NHA Addendum to ensure that any potential effects of the modified Project components are addressed through the application of appropriate mitigation measures, if required.

### 3.2.2 Minimum Distances from Natural Features to Project Location

The proposed Project Location modifications have resulted in changes to the minimum distance to Project Location for the following natural features (Table 3). Minimum distances to natural features not listed in the table below are the same as reported in the submitted NHA and EIS.

**Table 3. Updated Minimum Distances Between the Project Location and Natural Features**

Modification ID	Feature Type	Feature ID	Natural Area(s)	Minimum Distance from Project Location (m)	
				Distance in Submitted NHA and EIS (m)	Distance Corresponding to Modified Project Location (m)
A1	Woodland	WOD-307	370	102 m (access road)	No longer within the 120 m Area of Investigation
A4	Amphibian Breeding Habitat (Wetland)	AWE-29	379	23 m (access road)	73 m (access road)
E1	Woodland	WOD-044	236	30 m (collection line)	33 m (collection)
E2	Wetland	WET-008	215	38 m (collection line)	40 m (turbine construction footprint)
F1	Woodland	WOD-064	245	>0.1 m (access road, collection line)	>0.1 m (collection line)
	Wetland	WET-011	245	>0.1 m (access road, collection line)	>0.1 m (collection line)
	Amphibian Breeding Habitat (Woodland)	AWO-02	245	>0.1 m (access road, collection line)	>0.1 m (collection line)

## 4. Addendum to the Evaluation of Significance

### 4.1 Methods

The designation of amphibian breeding habitat (woodland) feature AWO-02 changed from candidate Significant Wildlife Habitat to Generalized Candidate Significant Wildlife Habitat as a result of modification F1 (Figure 2). Consequently, pre-construction Evaluation of Significance surveys are no longer required for this feature. No other changes are required to the methods as described in the submitted NHA and EIS.

### 4.2 Results

None of the proposed modifications require changes to or additional Evaluation of Significance studies. The results of these evaluations are presented in the submitted NHA and EIS and are not repeated here.

Where distances from Project infrastructure to significant features changed as a result of the proposed Project Location modifications (refer to Table 1), these features were carried forward to the EIS of this NHA Addendum to ensure that any potential effects of the modified Project components are addressed through the application of

appropriate mitigation measures, if required. As described in the submitted NHA and EIS, the following features were either evaluated and determined to be significant or treated as significant:

- Wetland Features WET-019, WET-010, WET-008 and WET-011;
- Woodland Features WOD-137, WOD-131, WOD-033 and WOD-064;
- Valleyland Feature VAL-02; and
- Bat Maternity Colony Feature BMC-285.

These significant features were carried forward to the EIS of this NHA Addendum. Note that features evaluated and determined not to be significant in the submitted NHA and EIS (e.g., Woodland Features WOD-307 and WOD-044, Bat Maternity Colony Feature BMC-215, and Amphibian Breeding Habitat (Wetland) Feature AWE-29) were not carried forward here.

The designation of candidate Amphibian Breeding Habitat (Woodland) Feature AWO-02 was changed to Generalized Candidate Significant Wildlife Habitat; therefore, pre-construction Evaluation of Significance surveys are no longer required for this feature. This feature was also carried forward to the EIS of this NHA Addendum.

## 5. Addendum to the Environmental Impact Study

### 5.1 Significant Wetlands

Distances from Project infrastructure to the following significant wetland features changed as a result of the proposed Project Location modifications. An assessment of any changes required to the mitigation measures that will be applied to these features is provided below.

**WET-019:** ..... The distance from this feature to the access road to Turbine 23 is reduced from >120 m to 75 m (modification B2), whereas the access road to Turbine 66 is no longer within 120 m of this feature (modification B3). No changes are required to the mitigation measures described in Section 5.5.1 of the submitted NHA and EIS to accommodate modification B2 (refer to mitigation measures for wetlands within 5 m of Project infrastructure in Table 5.2). Mitigation measures associated with the access road to Turbine 66 are no longer required for WET-019.

**WET-010:** ..... The distance from this feature to the collection line is reduced from 3 m to >0.1 m (modification E1). No changes are required to the mitigation measures described in Section 5.5.1 of the submitted NHA and EIS to accommodate this modification (refer to mitigation measures for wetlands within 5 m of Project infrastructure in Table 5.2).

**WET-008:** ..... The distance from this feature to the access road to Turbine 68 is reduced from 104 m to 75 m (modification E2). No changes are required to the mitigation measures described in Section 5.5.1 of the submitted NHA and EIS to accommodate this modification (refer to mitigation measures for wetlands 30 m to 120 m from Project infrastructure in Table 5.2).

**WET-011:** ..... The access road to Turbine 49 is no longer within 120 m of this feature (modification F1); therefore, mitigation measures associated with this access road are no longer required for WET-011. Refer to Section 5.5.1 of the submitted NHA and EIS for mitigation measures associated with the collection line (i.e., wetlands within 5 m of Project infrastructure in Table 5.2).

No other changes to the mitigation measures proposed for significant wetlands in the submitted NHA and EIS are required to accommodate the proposed Project Location modifications.

## 5.2 Significant Woodlands

Distances from Project infrastructure to the following significant woodland features changed as a result of the proposed Project Location modifications. An assessment of any changes required to the mitigation measures that will be applied to these features is provided below.

**WOD-137:** .....The distance from this feature to the access road to Turbine 23 is reduced from >120 m to 70 m (modification B2). No changes are required to the mitigation measures described in Section 5.6.1 of the submitted NHA and EIS to accommodate this modification (refer to mitigation measures for woodlands 30 m to 120 m from Project infrastructure in Table 5.3).

**WOD-131:** .....The access road to Turbine 66 is no longer within 120 m of this feature (modification B3); therefore, mitigation measures associated with this access road are no longer required for WOD-131.

**WOD-033:** .....The distance from this feature to the access road to Turbine 68 is reduced from 88 m to 56 m (modification E2). No changes are required to the mitigation measures described in Section 5.6.1 of the submitted NHA and EIS to accommodate this modification (refer to mitigation measures for woodlands within 5 m of Project infrastructure in Table 5.3).

**WOD-064:** .....The access road to Turbine 49 is no longer within 120 m of this feature (modification F1); therefore, mitigation measures associated with this access road are no longer required for WOD-064. Refer to Section 5.6.1 of the submitted NHA and EIS for mitigation measures associated with the collection line (i.e., woodlands within 5 m of Project infrastructure in Table 5.3).

No other changes to the mitigation measures proposed for significant woodlands in the submitted NHA and EIS are required to accommodate the proposed Project Location modifications.

## 5.3 Significant Valleylands

Distances from Project infrastructure to the following significant valleyland feature changed as a result of the proposed Project Location modifications.

**VAL-02:** .....The distance from this feature to the access road to Turbine 5 is reduced from 89 m to 82 m (modification A4).

According to a recent amendment to O.Reg. 359/09, significant valleylands are no longer included as a natural feature requiring an Environmental Impact Study; therefore, mitigation measures and monitoring commitments related to the valleyland feature are not presented in the submitted NHA and EIS nor in this NHA Addendum.

## 5.4 Significant Wildlife Habitat

Distances from Project infrastructure to the following significant wildlife habitat features changed as a result of the proposed Project Location modifications. An assessment of any changes required to the mitigation measures that will be applied to these features is provided below.

- Bat Maternity Colony Feature BMC-285: The distance from this feature to the access road to Turbine 23 is reduced from >120 m to 70 m (modification B2). No changes are required to the mitigation measures described in Section 5.8.3 of the submitted NHA and EIS to accommodate this modification (refer to mitigation measures for bat maternity colonies 30 m to 120 m from turbines in Table 5.7).
- Amphibian Woodland Habitat Feature AWO-02: The access road to Turbine 49 is no longer within 120 m of this feature (modification F1); therefore, the mitigation measures associated with Amphibian Woodland Breeding Habitat Feature AWO-02 no longer apply to this feature, as its designation was changed to Generalized Candidate Significant Wildlife Habitat. Instead, mitigation measures to address potential effects on Generalized Candidate Significant Wildlife Habitat, as described in Section 5.8.3 of the submitted NHA and EIS (refer to Table 5.6), will be applied to this feature.

No other changes to the mitigation measures proposed for significant wildlife habitat in the submitted NHA and EIS are required to accommodate the proposed Project Location modifications.

## 6. Summary

There are no additional potential effects on significant natural features resulting from the proposed Project Location modifications. Therefore, no additional mitigation measures and monitoring commitments are required to address potential effects to significant wetlands, significant woodlands, significant valleylands and significant wildlife habitat to accommodate the Project Location modifications described herein.

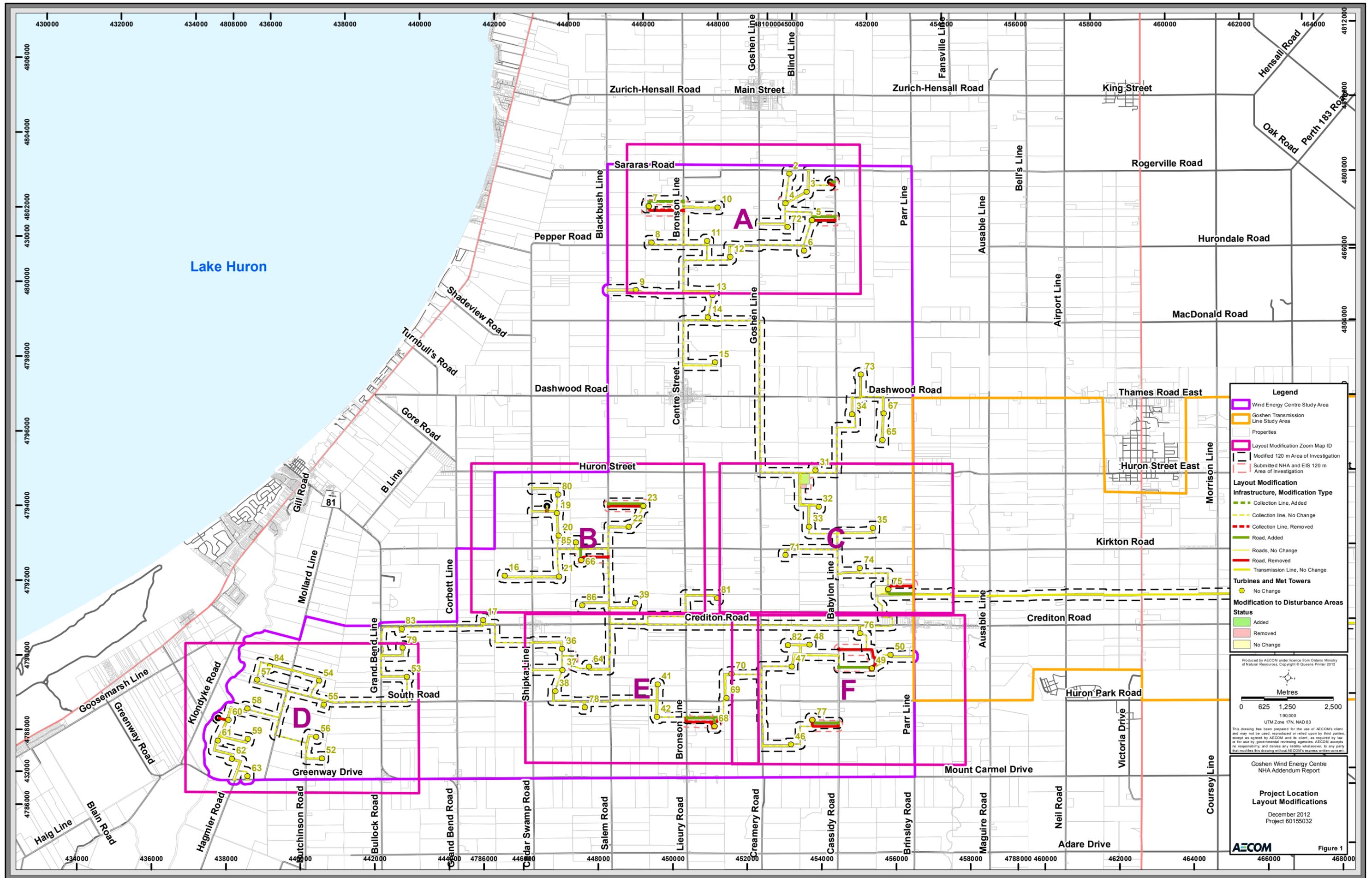
## 7. References

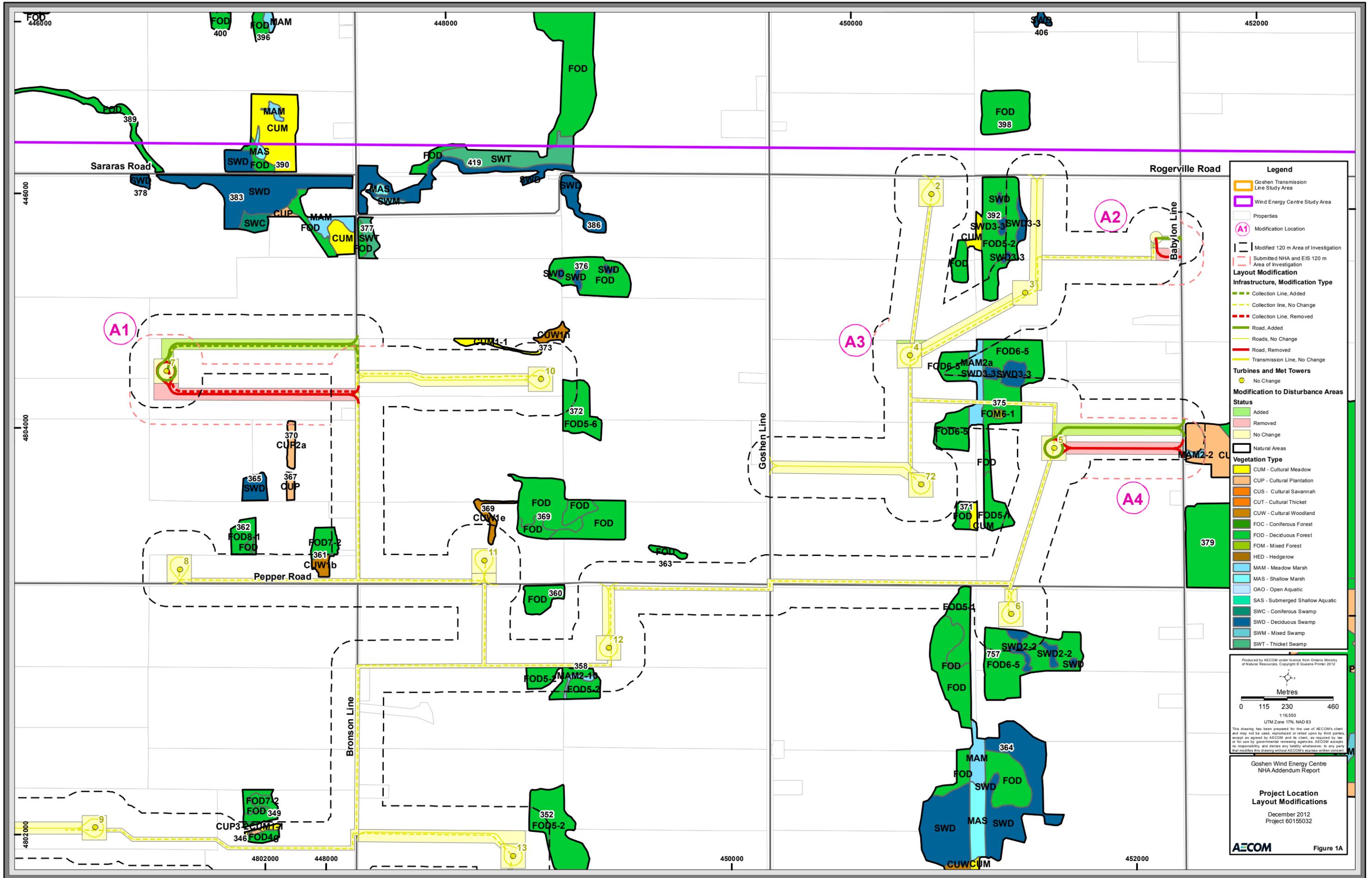
AECOM, 2013:

Goshen Wind Energy Centre Natural Heritage Assessment and Environmental Impact Study Report.  
Prepared for NextEra Energy Canada, ULC. January, 2013.

Ontario Ministry of Natural Resources (MNR), 2012:

Natural Heritage Assessment Guide for Renewable Energy Projects. 2<sup>nd</sup> Edition.





**Legend**

- Goshen Transmission Line Study Area
- Wind Energy Centre Study Area
- Properties
- Modification Location (A1, A2, A3, A4)
- Modified 120 m Area of Investigation
- Submitted NHA and EIS 120 m Area of Investigation

**Layout Modification**

**Infrastructure, Modification Type**

- Collection Line, Added
- Collection Line, No Change
- Collection Line, Removed
- Road, Added
- Roads, No Change
- Road, Removed
- Transmission Line, No Change

**Turbines and Met Towers**

- No Change

**Modification to Disturbance Areas Status**

- Added
- Removed
- No Change

**Natural Areas**

**Vegetation Type**

- CUM - Cultural Meadow
- CUP - Cultural Plantation
- CUS - Cultural Savannah
- CUT - Cultural Thicket
- CUW - Cultural Woodland
- FOC - Coniferous Forest
- FOD - Deciduous Forest
- FOM - Mixed Forest
- HED - Hedgerow
- MAM - Meadow Marsh
- MAS - Shallow Marsh
- OAO - Open Aquatic
- SAS - Submerged Shallow Aquatic
- SWC - Coniferous Swamp
- SWD - Deciduous Swamp
- SWM - Mixed Swamp
- SWT - Thicket Swamp

Produced by AECOM under license from Ontario Ministry of Natural Resources. Copyright © Queens Printer 2012.

Metres

0 115 230 460

1:16,550

UTM Zone 17N, NAD 83

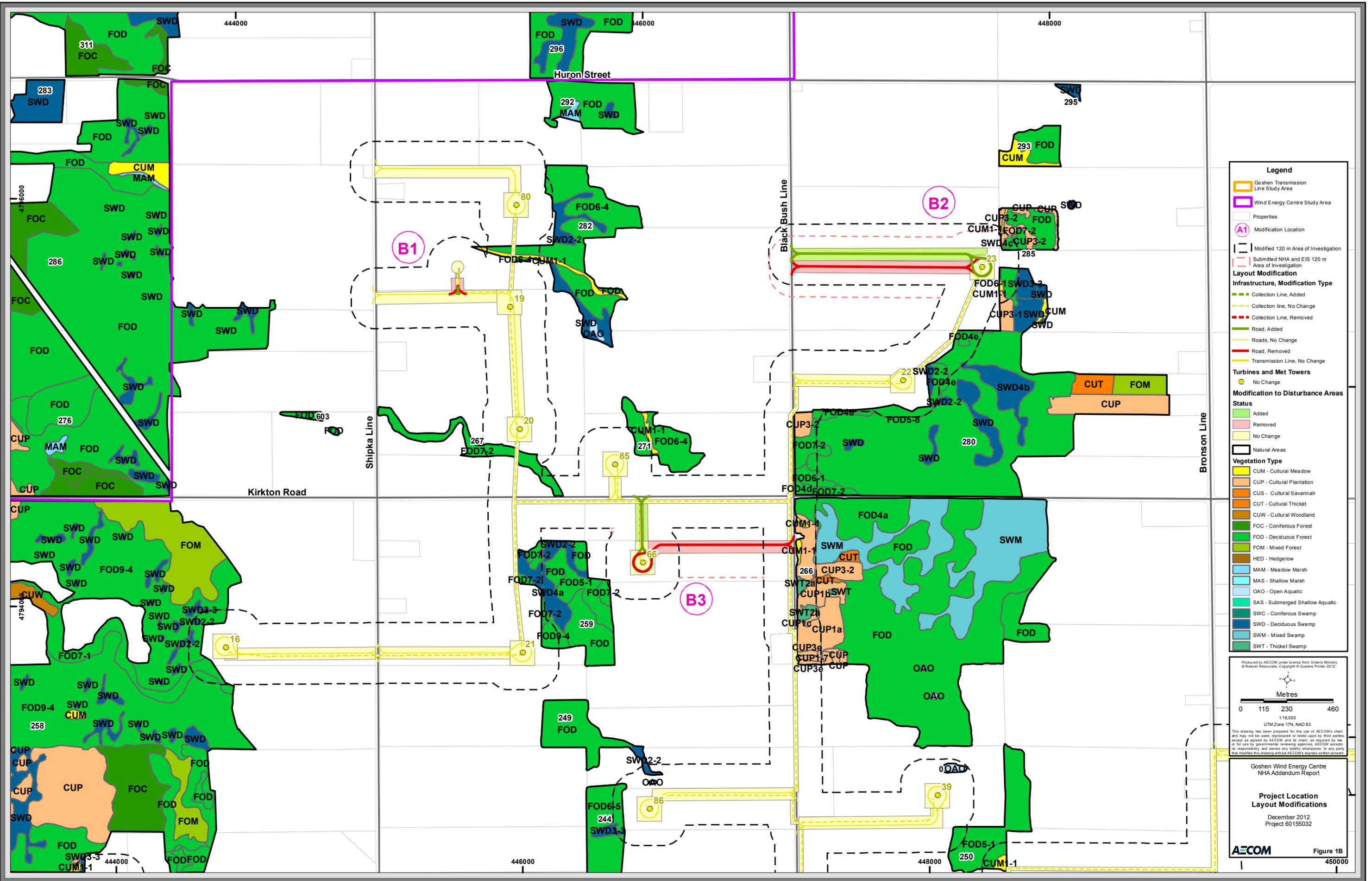
This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent.

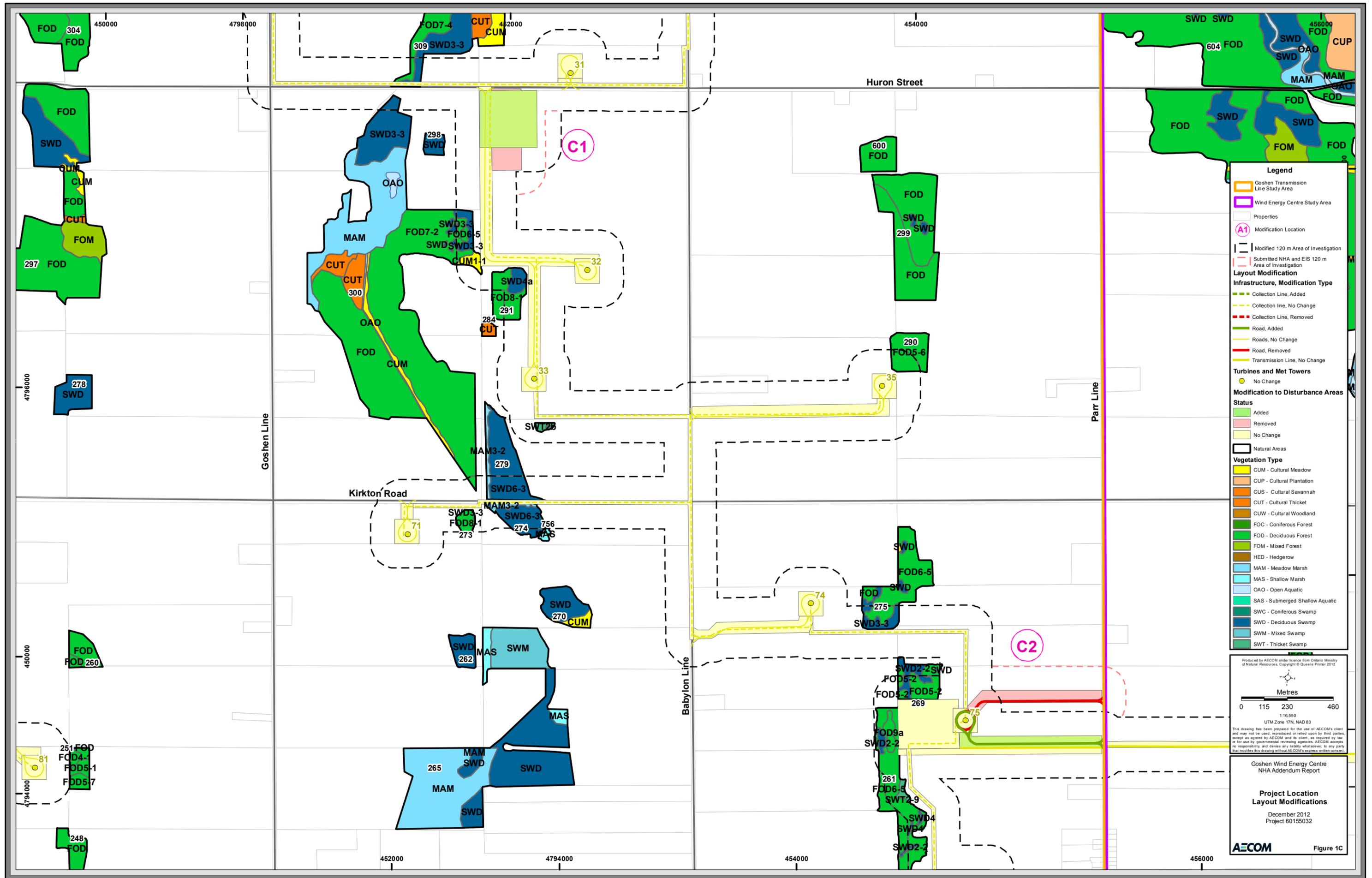
Goshen Wind Energy Centre  
NHA Addendum Report

**Project Location  
Layout Modifications**

December 2012  
Project 60155032

**AECOM** Figure 1A





**Legend**

- Goshen Transmission Line Study Area
- Wind Energy Centre Study Area
- Properties
- Modification Location
- Modified 120 m Area of Investigation
- Submitted NHA and EIS 120 m Area of Investigation

**Layout Modification**

**Infrastructure, Modification Type**

- Collection Line, Added
- Collection Line, No Change
- Collection Line, Removed
- Road, Added
- Roads, No Change
- Road, Removed
- Transmission Line, No Change

**Turbines and Met Towers**

- No Change

**Modification to Disturbance Areas**

**Status**

- Added
- Removed
- No Change

**Natural Areas**

**Vegetation Type**

- CUM - Cultural Meadow
- CUP - Cultural Plantation
- CUS - Cultural Savannah
- CUT - Cultural Thicket
- CUW - Cultural Woodland
- FOC - Coniferous Forest
- FOD - Deciduous Forest
- FOM - Mixed Forest
- HED - Hedgerow
- MAM - Meadow Marsh
- MAS - Shallow Marsh
- OAO - Open Aquatic
- SAS - Submerged Shallow Aquatic
- SWC - Coniferous Swamp
- SWD - Deciduous Swamp
- SWM - Mixed Swamp
- SWT - Thicket Swamp

Produced by AECOM under license from Ontario Ministry of Natural Resources. Copyright © Queens Printer 2012

Metres

0 115 230 460

1:16,550

UTM Zone 17N, NAD 83

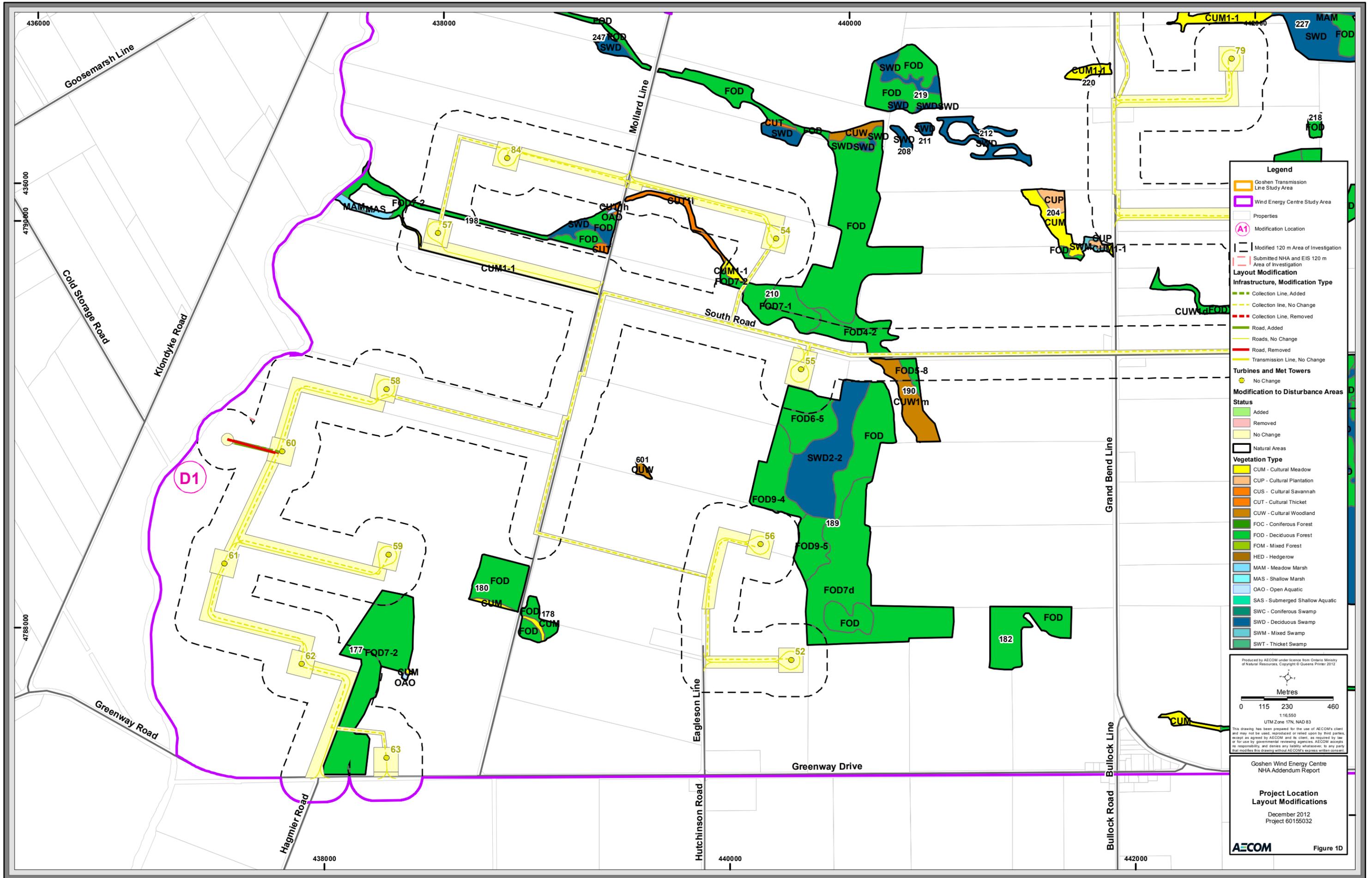
This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent.

Goshen Wind Energy Centre  
NHA Addendum Report

**Project Location  
Layout Modifications**

December 2012  
Project 60155032

**AECOM** Figure 1C



**Legend**

- Goshen Transmission Line Study Area
- Wind Energy Centre Study Area
- Properties
- Modification Location
- Modified 120 m Area of Investigation
- Submitted NHA and EIS 120 m Area of Investigation

**Layout Modification**

**Infrastructure, Modification Type**

- Collection Line, Added
- Collection Line, No Change
- Collection Line, Removed
- Road, Added
- Roads, No Change
- Road, Removed
- Transmission Line, No Change

**Turbines and Met Towers**

- No Change

**Modification to Disturbance Areas**

**Status**

- Added
- Removed
- No Change

**Natural Areas**

**Vegetation Type**

- CUM - Cultural Meadow
- CUP - Cultural Plantation
- CUS - Cultural Savannah
- CUT - Cultural Thicket
- CUW - Cultural Woodland
- FOC - Coniferous Forest
- FOD - Deciduous Forest
- FOM - Mixed Forest
- HED - Hedgerow
- MAM - Meadow Marsh
- MAS - Shallow Marsh
- OAO - Open Aquatic
- SAS - Submerged Shallow Aquatic
- SWC - Coniferous Swamp
- SWD - Deciduous Swamp
- SWM - Mixed Swamp
- SWT - Thicket Swamp

Produced by AECOM under license from Ontario Ministry of Natural Resources. Copyright © Queens Printer 2012

Metres

0 115 230 460

1:16,550

UTM Zone 17N, NAD 83

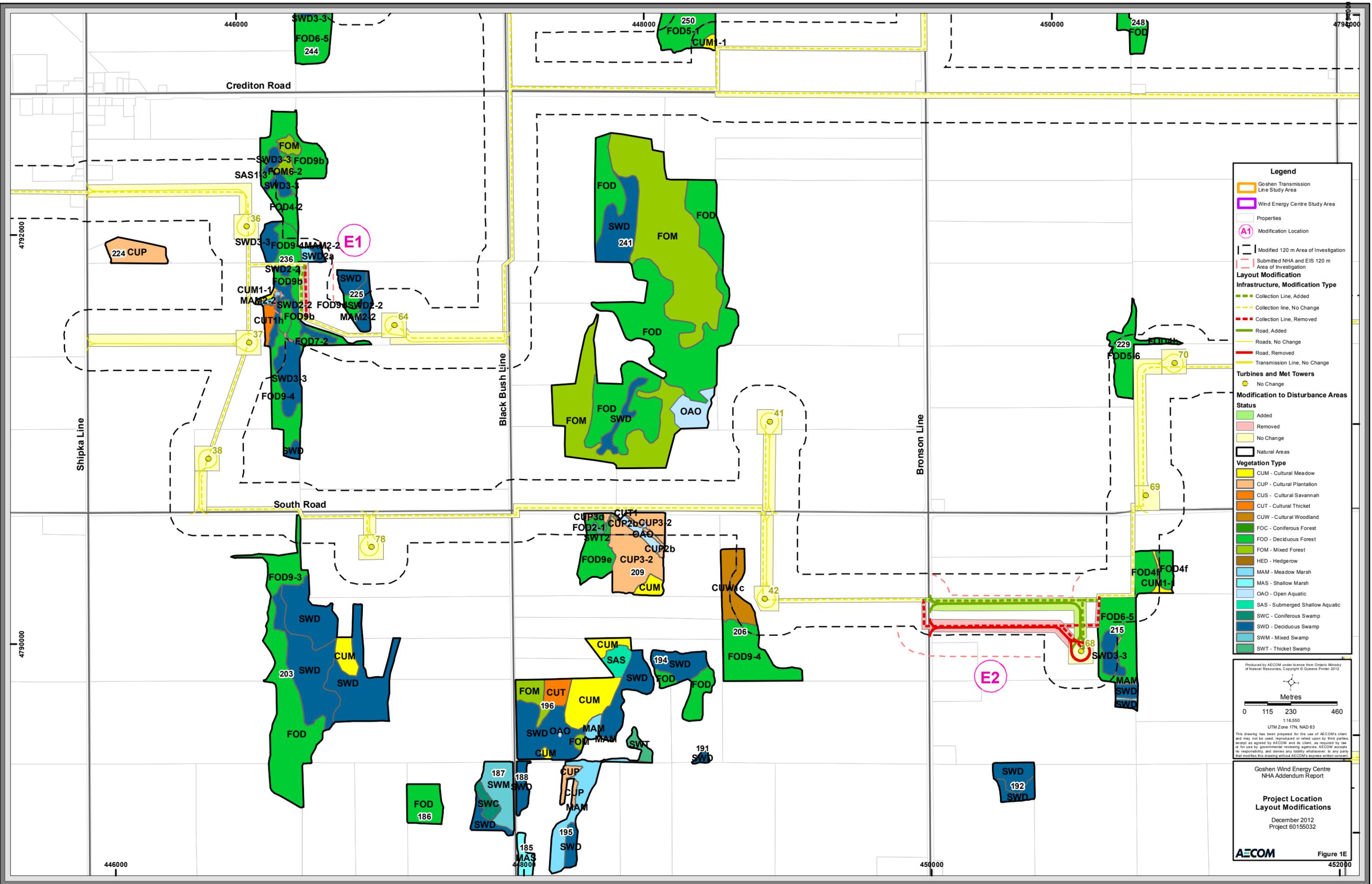
This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility and denies any liability whatsoever to any party that modifies this drawing without AECOM's express written consent.

Goshen Wind Energy Centre  
NHA Addendum Report

**Project Location  
Layout Modifications**

December 2012  
Project 60155032

**AECOM** Figure 1D



**Legend**

- Goshen Transmission Line Study Area
- Wind Energy Centre Study Area
- Properties
- Modification Location
- Modified 120 m Area of Investigation
- Submitted NHA and EIS 120 m Area of Investigation

**Layout Modification**

**Infrastructure, Modification Type**

- Collection Line, Added
- Collection Line, No Change
- Collection Line, Removed
- Road, Added
- Roads, No Change
- Road, Removed
- Transmission Line, No Change

**Turbines and Met Towers**

- No Change

**Modification to Disturbance Areas Status**

- Added
- Removed
- No Change

**Natural Areas**

**Vegetation Type**

- CUM - Cultural Meadow
- CUP - Cultural Plantation
- CUS - Cultural Savannah
- CUT - Cultural Thicket
- CUW - Cultural Woodland
- FOC - Coniferous Forest
- FOD - Deciduous Forest
- FOM - Mixed Forest
- HED - Hedgerow
- MAM - Meadow Marsh
- MAS - Shallow Marsh
- OAO - Open Aquatic
- SAS - Submerged Shallow Aquatic
- SWC - Coniferous Swamp
- SWD - Deciduous Swamp
- SWM - Mixed Swamp
- SWT - Thicket Swamp

Produced by AECOM under license from Ontario Ministry of Natural Resources. Copyright © Queens Printer 2012

Metres

0 115 230 460

1:16,550

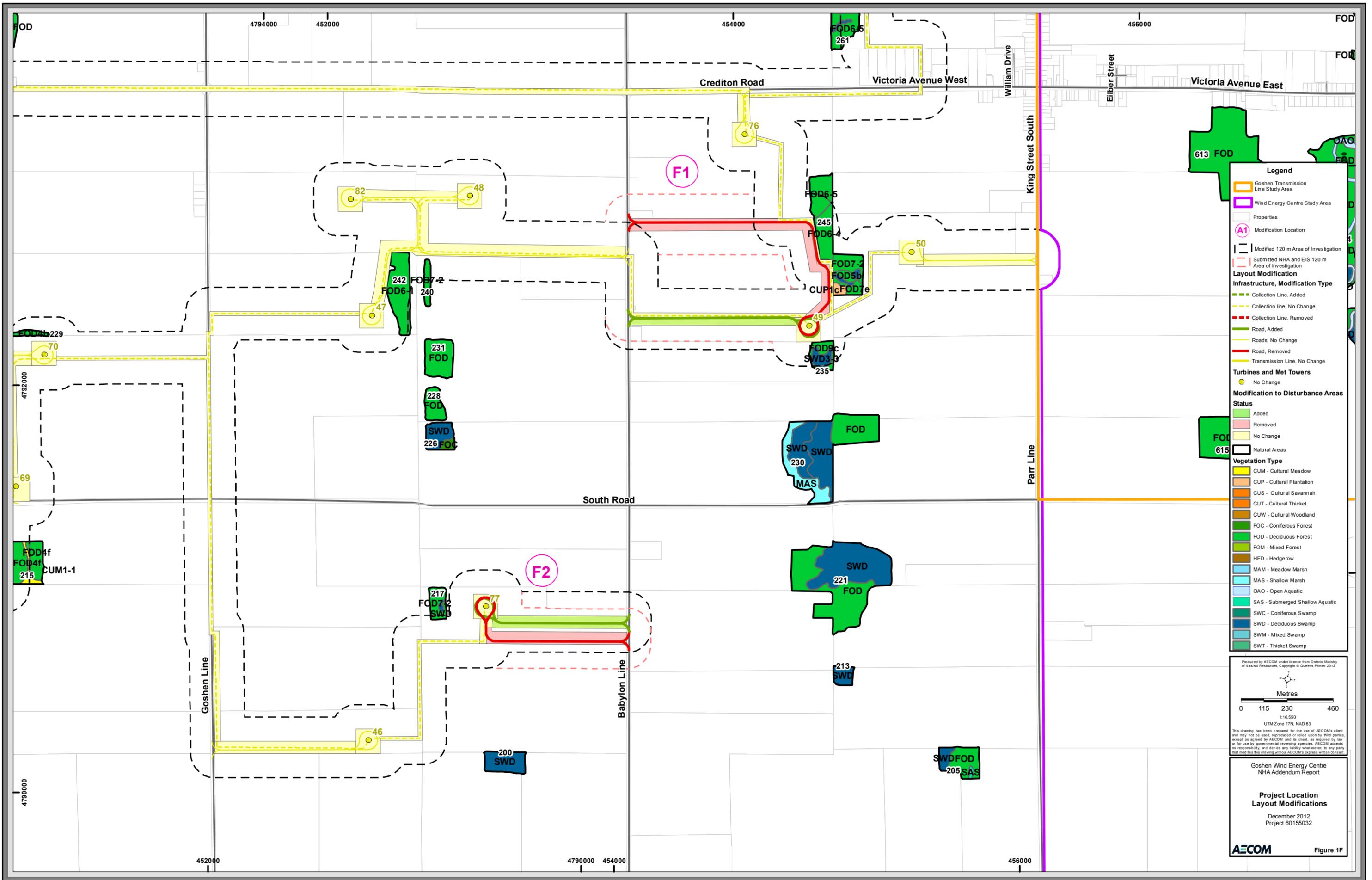
UTM Zone 17N, NAD 83

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent.

Goshen Wind Energy Centre  
NHA Addendum Report

**Project Location  
Layout Modifications**

December 2012  
Project 60155032



**Legend**

- Goshen Transmission Line Study Area
- Wind Energy Centre Study Area
- Properties
- Modification Location (A1)
- Modified 120 m Area of Investigation
- Submitted NHA and EIS 120 m Area of Investigation

**Layout Modification**

**Infrastructure, Modification Type**

- Collection Line, Added
- Collection Line, No Change
- Collection Line, Removed
- Road, Added
- Roads, No Change
- Road, Removed
- Transmission Line, No Change

**Turbines and Met Towers**

- No Change

**Modification to Disturbance Areas**

**Status**

- Added
- Removed
- No Change

**Natural Areas**

**Vegetation Type**

- CUM - Cultural Meadow
- CUP - Cultural Plantation
- CUS - Cultural Savannah
- CUT - Cultural Thicket
- CUW - Cultural Woodland
- FOC - Coniferous Forest
- FOD - Deciduous Forest
- FOM - Mixed Forest
- HED - Hedgerow
- MAM - Meadow Marsh
- MAS - Shallow Marsh
- OAO - Open Aquatic
- SAS - Submerged Shallow Aquatic
- SWC - Coniferous Swamp
- SWD - Deciduous Swamp
- SWM - Mixed Swamp
- SWT - Thicket Swamp

Produced by AECOM under license from Ontario Ministry of Natural Resources. Copyright © Queens Printer 2012

Metres

0 115 230 460

1:16,550

UTM Zone 17N, NAD 83

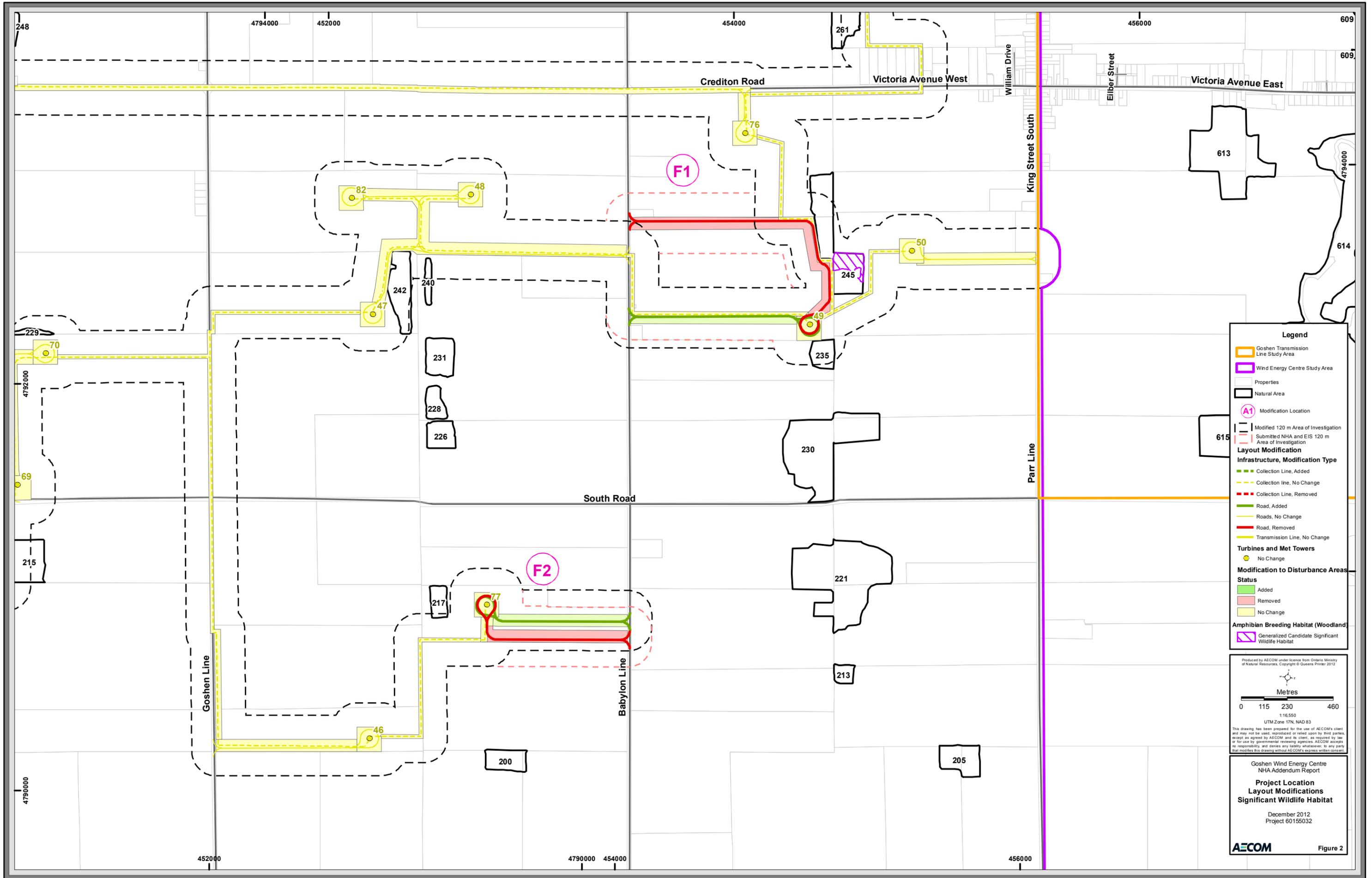
This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent.

Goshen Wind Energy Centre  
NHA Addendum Report

**Project Location  
Layout Modifications**

December 2012  
Project 60155032

**AECOM** Figure 1F



**Legend**

- Goshen Transmission Line Study Area
- Wind Energy Centre Study Area
- Properties
- Natural Area
- A1 Modification Location
- Modified 120 m Area of Investigation
- Submitted NHA and EIS 120 m Area of Investigation

**Layout Modification**

**Infrastructure, Modification Type**

- Collection Line, Added
- Collection line, No Change
- Collection Line, Removed
- Road, Added
- Roads, No Change
- Road, Removed
- Transmission Line, No Change

**Turbines and Met Towers**

- No Change

**Modification to Disturbance Areas Status**

- Added
- Removed
- No Change

**Amphibian Breeding Habitat (Woodland)**

- Generalized Candidate Significant Wildlife Habitat

Produced by AECOM under license from Ontario Ministry of Natural Resources. Copyright © Queens Printer 2012

Metres  
 0 115 230 460  
 1:16,550  
 UTM Zone 17N, NAD 83

This drawing has been prepared for the use of AECOM's client and may not be used, reproduced or relied upon by third parties, except as agreed by AECOM and its client, as required by law or for use by governmental reviewing agencies. AECOM accepts no responsibility and denies any liability whatsoever, to any party that modifies this drawing without AECOM's express written consent.

Goshen Wind Energy Centre  
 NHA Addendum Report  
**Project Location  
 Layout Modifications  
 Significant Wildlife Habitat**  
 December 2012  
 Project 60155032

**AECOM** Figure 2

# Appendix K

**Memo Dated January 14, 2013  
– Potential Changes to  
Infrastructure Related to  
Tundra Swan Habitat**

# Memorandum

To	Amy Cameron, MNR Jim Beal, MNR	Page 1
CC	Thomas Bird, NextEra Energy Canada ULC Marc Rose, AECOM	
Subject	Goshen Wind Energy Centre – Potential Changes to Infrastructure Related to Tundra Swan Habitat	
From	Jessica Ward, AECOM	
Date	January 14, 2013	60155032

Below is a summary of potential changes to the Goshen Wind Energy Centre Project Location in relation to candidate waterfowl (Tundra Swan) stopover and staging habitats WSST-36 and WSST-15, as discussed during our January 14, 2013 conference call. In the screenshots below, red hatching indicates removal, whereas green outlines indicate infrastructure to be retained.

### **WSST-36 (if habitat determined to be significant and the 300 m buffer determined to be appropriate through pre-construction surveys)**

1. *Turbine 46 (123 m from the area of seasonal flooding), if removed:*

- Removal of Turbine 46 and associated construction disturbance area;
- Removal of the access road to Turbine 46; and
- Collection line would be retained and located within the disturbance area as mapped in the Goshen NHA and EIS Report.



2. Turbine 47 (59 m from the area of seasonal flooding), if removed:

- Removal of Turbine 47 and associated construction disturbance area;
- Removal of the portion of access road extending from the junction with the access road to Turbine 48; and
- Collection line would be retained and located within the disturbance area as mapped in the Goshen NHA and EIS Report.



3. *Turbine 82 (5 m from the area of seasonal flooding), if removed:*

- Removal of Turbine 82 and associated construction disturbance area;
- Removal of the portion of access road extending from the junction with the access road to Turbine 48; and
- Removal of the portion of collection line extending from the junction with the collection line to Turbine 48.



**WSST-15 (if habitat determined to be significant and the 300 m buffer determined to be appropriate through pre-construction surveys)**

1. *Turbine 9 (250 m from the area of seasonal flooding), if removed:*

- Removal of Turbine 9 and associated construction disturbance area;
- Removal of the access road to Turbine 9; and
- Removal of the collection line extending west from Bronson Line and the access road to Turbine 13.

