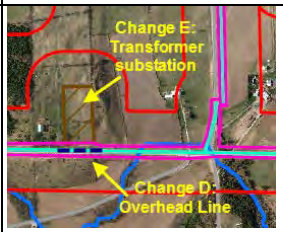
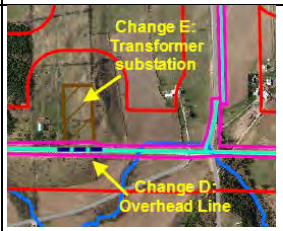
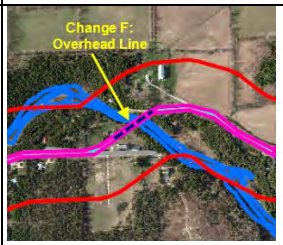
Proposed Change	Project Component	Description of Original Project Component as described in the East Durham Wind Energy Centre NHA (LGL, 2012)		Description of Proposed Change to Project Component	
C	Construction laydown		A transformer substation was located to the south of the construction laydown area and to the north of County Rd. 4.		Expansion of the construction laydown area to include the location of the original transformer substation as documented in the original NHA (LGL, 2012)
D	Overhead line		Underground electrical collection line was proposed within the road right-of-way along County Rd. 4.		Overhead line from Substation installed across County Rd. 4 to connect to the Hydro One grid.
E	Transformer substation		No project components were previously proposed for this property other than underground electrical collection line in road right-of-way along County Rd. 4 (blue line).		New location for transformer substation
F	Overhead line		Crossing of Saugeen River with electrical collection line within existing road right-of-way was proposed for installation through attachment to the existing bridge structure or as underground installation through use of directional drilling.		Crossing of Saugeen River with electrical collection line is proposed to run overhead within the existing road right-of-way.

2.0 RECORDS REVIEW

A complete Records Review, including a search and analysis of records as they relate to natural heritage features, was completed in the East Durham Wind Energy Centre NHA (LGL, 2012). Given that the study area remains unchanged, the Records Review was not repeated or expanded upon for the purpose of this addendum.

Table 2 summarizes the natural features ruled out within the Project study area through the original Records Review conducted and therefore not carried forward into Site Investigation. This table is an excerpt from Table 4 that appears in the East Durham Wind Energy Centre NHA (LGL, 2012).

Table 2: Summary of Natural Features not Carried Forward into Site Investigation Based on Results of Records Review.

Type of Feature	Results of Records Review	Carried Forward to Site Investigation (yes/no)
Provincial Parks and Conservation Reserves	None found within the project study area.	No
Area of Natural and Scientific Interest – Life Science	None found within the project study area.	No
Area of Natural and Scientific Interest – Earth Science	None found within the project study area.	No
Coastal Wetland	None found within the project study area.	No

3.0 SITE INVESTIGATION

3.1 METHODS

From 2009 to 2012 site investigations were completed for natural features identified within 120m of the project location and reported on in the East Durham Wind Energy Centre Natural Heritage Assessment (LGL, 2012). The details of those field investigations were used to characterize natural features as they pertain to the proposed layout changes described herein, given that most of the additional infrastructure proposed lies within the boundary of construction of previously identified project components. Additional site investigation was performed in October 2012 to address changes in the layout that pertained to areas not previously studied. In particular, the properties proposed to host the transformer substation and the access road and underground electrical line to service the new meteorological tower were field surveyed on October 24, 2012.

Site investigations included study of the air, land and water components of all identified natural areas. Project Location refers to the construction disturbance limits around all proposed project components; all setbacks and measurements from natural features were determined from the limits of construction disturbance.

All lands proposed to host infrastructure associated with the wind power project were accessible to field crews during site investigation; however, many non-participatory landowners denied access to their property. A land agent was retained by the proponent to secure land access from landowners where possible. Figure 1 defines the Project Location and indicates which properties were accessible to the field crew conducting the surveys. Where access to a feature was permitted by the landowner, investigations were conducted directly through field surveys; however, when access to properties was denied, an alternative site investigation was completed from the closest accessible property boundary, and further supported with analysis of orthographic images. The natural features identified through records review and site investigation were studied to determine the composition, form and function of each. Table 3 summarizes the names of the qualified individuals that conducted the surveys, as well as the dates, times and methodologies employed in order to characterize and inventory existing conditions in or within 120m of the Project Location. Field notes from each site survey, and qualifications of the personnel conducting the surveys are included in Appendix A and C, respectively. Any corrections made to information obtained through records review are summarized in Section 3.2.1.

3.1.1 Vegetation Communities and Vascular Plants

The classification of vegetation communities according to the Ecological Land Classification (ELC) for Southern Ontario (Lee *et.al.*, 1998) was completed for all natural features. Initially ELC was identified to a course community level through interpretation of aerial photographs. Through field investigations the initial classification was refined to ecosite; or, where possible, vegetation type. A unique numerical identity was assigned to each vegetation type and other important features to allow for ELC communities to be easily tracked through Site Investigation and into subsequent phases of the NHA. In some cases non-natural features were included in the unit numbering to cover all areas in or within 120m of the Project Location. For example, residential properties or those occupied by other structures (e.g. a church) were tracked. Although these properties were not included in the boundaries of natural features later identified, they were delineated as part of the effort to determine boundaries of adjacent natural features. Later in the Site Investigation process, the ELC communities found to comprise natural features in the form of woodlands and valleylands were identified using unique codes to specify the particular type of feature (e.g. WO-06 to indicate woodland feature 6). ELC data was used in the early stages to identify potential wetland features which were then further addressed using the Ontario Ministry of Natural Resources' Ontario Wetland Evaluation System (OWES) protocol (OMNR, 2002). The use of ELC was also an important tool for the identification of candidate significant wildlife habitat according to the Significant Wildlife Habitat Draft Ecoregion 6E Criterion Schedule (OMNR, 2012a).

Vascular plant inventories were also completed in tandem with ELC surveys to document all species identifiable at the time of survey. Vascular plant nomenclature follows Newmaster *et al.* 2012. For the purpose of documenting rare species, those designated as SH (possibly extirpated - historical), S1 (extremely rare), S2 (very rare), or S3 (rare to uncommon) using the provincial ranking as obtained through Oldham 2009, were considered.

3.1.2 Wildlife Habitat

ELC communities defined according to Section 4.1.1 were screened against the Significant Wildlife Habitat Draft Ecoregion 6E Criterion Schedule (OMNR, 2012) to identify Candidate Significant Wildlife Habitat. Where any part of the Project Location was determined to be within the boundary of such a feature, the feature was identified and carried forward into the Evaluation of Significance phase of the NHA. Where any potential habitat was determined to be within 120 m of the Project Location (but not within the Project Location) , Table 16 in Appendix D of the Natural Heritage Assessment Guide for Renewable Energy Project (OMNR, 2011) was applied. Table 16 scopes the types of Candidate Significant Wildlife Habitat that must be identified based on the type of project component proposed within 120m. Habitats identified in Table 16 as Generalized Candidate Significant Wildlife Habitat with potential to be present within 120 m of the Project Location (based on landscape and geography) were assumed to exist; and, carried forward into the Evaluation of Significance phase. A summary of Candidate and Generalized Candidate Significant Wildlife Habitat identified in or within 120m of the Project Location is included in Section 4.2 Results of Site Investigation.

Table 3: Summary of Site Investigation Methods for Changes to Project Layout

Location (as shown on Figure 2)	Purpose	Summary of Methods	Date(s), Time(s) & Duration	Weather Condition	Sources & Dates of Information Used	Names, affiliation & qualifications of investigators
Change A	Investigation of wildlife habitat, vegetation communities and screening for any type of natural features in or within 120m of the project location (valleylands, wetlands, woodlands and water bodies). Property accessed for survey: Lot 46, Concession 1 N of Durham Rd. Glenelg	Documentation of vegetation communities was completed according to the Ecological Land Classification for Southern Ontario (Lee et al. 1998). OWES trained biologist screened area for any additional wetland features. Area searches for wildlife or signs of wildlife habitat (presence of scat, nests, tracks, etc.) were conducted. Significant Wildlife Habitat Technical Guide and Ecoregion Criteria Schedule 6E were used to screen for candidate SWH.	October 24, 2012 10:00 – 11:30 1.5 hours	Temperature = 8°C No precipitation, overcast, fog Wind Speed (km): 15-22	Aerial photography Ecological Land Classification for Southern Ontario: First Approximation and Its Application. 1998 Lee at al. Significant Wildlife Habitat Technical Guide, OMNR 2000 Ontario Wetland Evaluation System 3rd Edition. Southern Manual. 1993. Ecological Land Classification for Southern Ontario (Lee et al. 1998).	Jennifer Noel, Botanist (LGL Limited) OWES trained Complete qualifications included in Appendix B
Change B	No additional Site Investigation required – new project component (MET tower) is located within area previously surveyed as construction laydown area.					
Change C	No additional Site Investigation required – additional area for construction laydown is located within area previously surveyed for transformer substation.					

Location (as shown on Figure 2)	Purpose	Summary of Methods	Date(s), Time(s) & Duration	Weather Condition	Sources & Dates of Information Used	Names, affiliation & qualifications of investigators
Change D	No additional Site Investigation required – new project component (overhead transmission) within area previously surveyed for underground collection line in existing road right-of-way.					
Change E	Investigation of wildlife habitat, vegetation Communities and screening for any type of natural features in or within 120m of the project location (valleylands, wetlands, woodlands and water bodies). Property accessed for survey: Lot 28, Concession 1 N of Durham Rd. Glenelg	Documentation of vegetation communities was completed according to the Ecological Land Classification for Southern Ontario (Lee et al. 1998). OWES trained biologist screened area for any additional wetland features. Area searches for wildlife or signs of wildlife habitat (presence of scat, nests, tracks, etc.) were conducted. Significant Wildlife Habitat Technical Guide and Ecoregion Criteria Schedule 6E were used to screen for candidate SWH.	October 24, 2012 11:30 – 13:30 2 hours	Temperature = 8°C No precipitation, overcast, fog Wind Speed (km): 15-22	Aerial photography Ecological Land Classification for Southern Ontario: First Approximation and Its Application. 1998 Lee at al. Significant Wildlife Habitat Technical Guide, OMNR 2000 Ontario Wetland Evaluation System 3rd Edition. Southern Manual. 1993. Ecological Land Classification for Southern Ontario (Lee et al. 1998).	Jennifer Noel, Botanist (LGL Limited) OWES trained Complete qualifications included in Appendix B
Change F	No additional Site Investigation required – new project component (overhead transmission) within area previously surveyed for underground collection line in existing road right-of-way.					

3.2 RESULTS

Natural features identified within 120m of the revised project layout are summarized below. Any SWH or any significant natural features as reported in the East Durham Wind Energy Centre NHA (LGL, 2012) and in or within 120m of newly identified project components were first documented. Following that, the results of the additional site investigation completed in October 2012 were used to screen for wetland, woodland, valleylands or Candidate SWH (Table 4). Each of the proposed changes to the layout is summarized in Section 3.2.5 below according to their proximity to natural features and wildlife habitat. Table 5 summarizes the natural features carried forward to Evaluation of Significance as they pertain to the revised layout.

3.2.1 Corrections to Records Review

No information was collected that would require a correction to the information obtained through Records Review and reported in the East Durham Wind Energy Centre NHA (LGL, 2012).

3.2.2 Ecological Land Classification (ELC) of Vegetation Communities

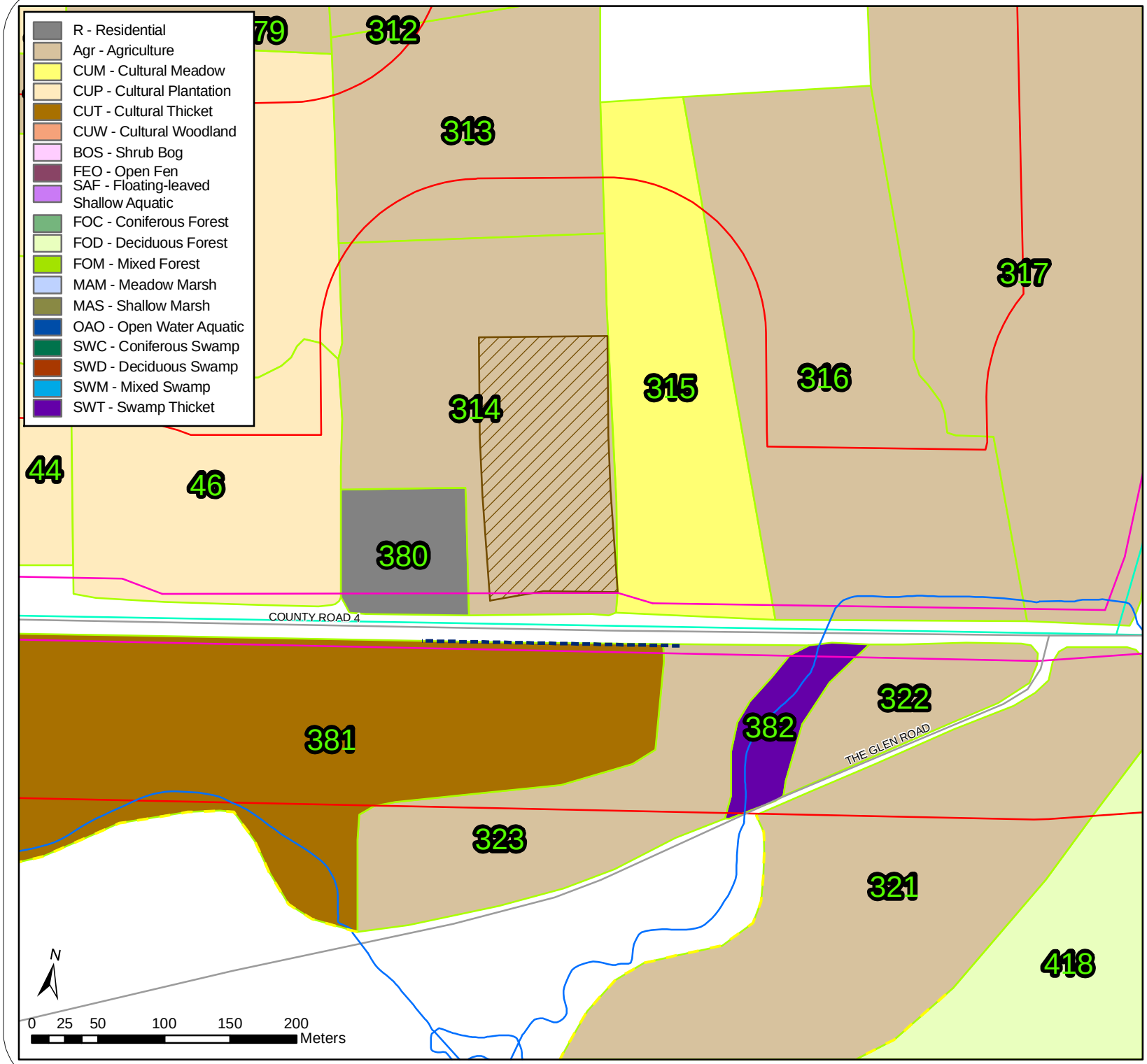
Figure 4 displays the ELC results obtained for the area hosting the transformer substation. The ELC communities documented in the East Durham Wind Energy Centre NHA (LGL, 2012) remain current for areas outside of what is shown in Figure 4. As a result of the October 2012 site investigation ELC unit 315 was the only polygon revised (from AGR to CUM1) from what was presented in the original NHA document.

3.2.3 Description of Natural Features

No new natural features in the form of wetlands, woodlands or valleylands were identified within 120m of the revised project layout as presented in Figures 2 and 3.

3.2.4 Wildlife Habitat

As a first step the areas where new project components are proposed were screened for any SWH previously identified in the original NHA report for the project (LGL, 2012). Following that Candidate Significant Wildlife Habitat (SWH) located within 120m of the revised project layout was scoped according to Table 16 of Appendix D in the Natural Heritage Assessment Guide for Renewable Energy Projects (NHAG) (OMNR, 2011). Table 4 summarizes the results of this process and Figure 5 displays Candidate SWH identified within 120m of the revised project location that was not previously identified in the original NHA for the project.



LEGEND

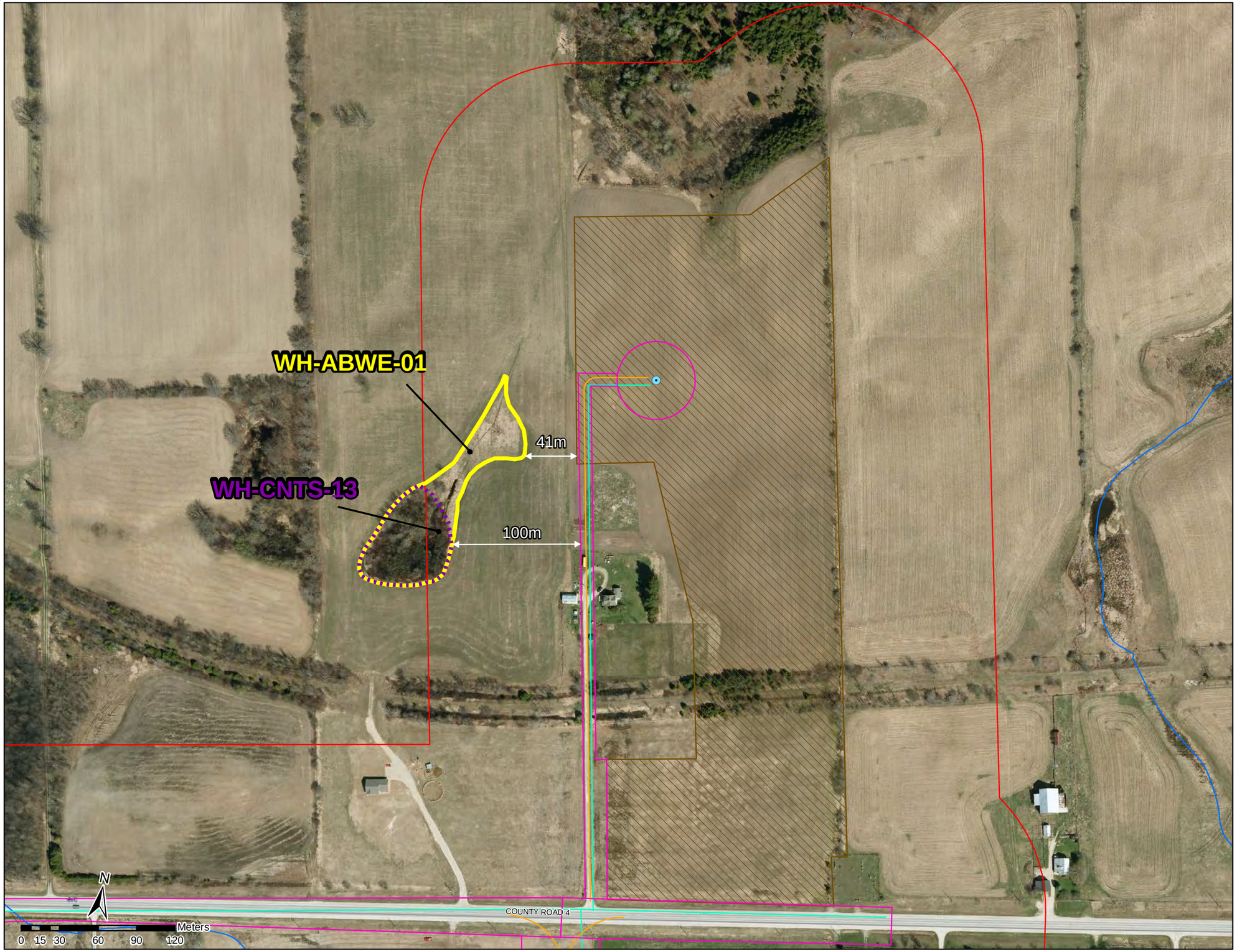
Site Plan (2012-10-26)

- Turbine
- Met Tower
- Access Road
- Construction Disturbance
- UndergroundCollection
- Overhead Transmission
- Substation
- Laydown Area
- 120m Buffer from All Project Components
- ELC Unit
- ELC
- ELC Boundary Est. from Ortho
- Roadway
- Watercourse (LIO, 2012-06-19)
- Waterbody (LIO, 2012-06-19)

Ecological Land Classification

LGL LIMITED
environmental research associates

Project	TA8119	**Figure**	4
Date	Nov, 2012	**Prepared By:**	VLK
Scale	1:4,000	**Verified By:**	LKR



LEGEND

- Candidate SWH: Amphibian Breeding Habitat (Wetland)
- Candidate SWH: Colonial Nesting Bird Breeding Habitat (tree/shrub)

Site Plan (2012-09-12)

- Turbine
- MET Tower
- Access Road
- Construction Disturbance
- Underground Collection
- Overhead Transmission
- MET Tower 200ft Disturbance Area
- Substation
- Laydown Area
- 120m Buffer from Project Components
- Study Area (Dec 2011)
- Watercourse (LIO, 2012-06-19)
- Waterbody (LIO, 2012-06-19)

Additional Candidate SWH Due to Changes A-C

LGL LIMITED
environmental research associates

Project	TA8119	**Figure**	5
Date	Nov, 2012	**Prepared By:**	VLK
Scale	1:2,900	**Verified By:**	LKR

Table 4: Screening of Candidate SWH within the revised project layout as determined through site investigation conducted on October 24, 2012

Type of Candidate Significant Wildlife Habitat	Required to be identified for the following components (as per Appendix D of the NHAG)*	Summary of Criteria (Significant Wildlife Habitat Draft Ecoregion 6E Criterion Schedule, OMNR, 2012).	SWH Identified in the East Durham Wind Energy Centre NHA (LGL, 2012) for Areas Within 120m of Proposed Changes to the Layout	Results of New Site Investigation Conducted October 24, 2012 Within 120m of Proposed Changes	Carried Forward to Evaluation of Significance as a result of Additional Site Investigation? (yes/no)	
					Candidate SWH	Generalized Candidate SWH
Waterfowl Stopover and Staging Areas (terrestrial)	Turbine	• ELC ecosites CUM1 and CUT1 • Evidence of annual spring flooding from melt water or run-off within these Ecosites. • Agricultural fields with waste grains are not considered to be SWH.	No SWH or Generalized SWH of this type was identified.	Additional area investigated is dominated by agricultural fields which are excluded from the criteria for this type of habitat. In addition CUM polygon identified (ELC unit 315) is comprised of a hilly terrain that does not allow for formation of sheetwater in spring. 	No	No
Waterfowl Stopover and Staging Areas (aquatic)	Turbine	• ELC ecosites MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, MAS1, MAS2, MAS3, SAS1, SAM1, SAF1, SWD1, SWD2, SWD3, SWD4, SWD5, SWD6, SWD7 • Ponds, marshes, lakes, bays, coastal inlets, and watercourses used during migration. • Significant sites are generally larger wetlands, especially those adjacent to large bodies of water, and relatively undisturbed shorelines with vegetation.	No SWH of this type was identified; generalized SWH was identified as within 120m of underground/ overhead lines in existing road right of ways.	ELC surveys did not indicate the presence of suitable habitat to support large numbers of migratory waterfowl. Wetlands are not located adjacent to large bodies of open water. This type of habitat was screened by searching for candidate ecosites within 120m of the proposed revisions to the project layout; the following were considered further to determine if they were candidates: 100 SWD4 ecosite type; too small to support large number of waterfowl, also not close to large body of open water, surrounded by agricultural fields;	No	No

Type of Candidate Significant Wildlife Habitat	Required to be identified for the following components (as per Appendix D of the NHAG)*	Summary of Criteria (Significant Wildlife Habitat Draft Ecoregion 6E Criterion Schedule, OMNR, 2012).	SWH Identified in the East Durham Wind Energy Centre NHA (LGL, 2012) for Areas Within 120m of Proposed Changes to the Layout	Results of New Site Investigation Conducted October 24, 2012 Within 120m of Proposed Changes	Carried Forward to Evaluation of Significance as a result of Additional Site Investigation? (yes/no)	
					Candidate SWH	Generalized Candidate SWH
Shorebird Migratory Stopover Areas	Turbine	• ELC ecosites MAM1, MAM2, MAM3, MAM4, MAM5, BBO1, BBO2, BBS1, BBS2, BBT1, BBT2, SDO1, SDS2, SDT1 • Shorelines of lakes, rivers and wetlands, including beach areas, bars and seasonally flooded, muddy and un-vegetated shoreline habitats.	No SWH or Generalized SWH of this type was identified.	No muddy un-vegetated shoreline habitats were identified in or within 120m of the revised project location.	No	No
Raptor Wintering Area	Turbine Overhead lines	• Combination of ELC Community Series; need to have present one Community Series from each land class: Forest: FOD, FOM, FOC. Upland: CUM; CUT; CUS; CUW. • Least disturbed sites, idle/fallow or lightly grazed field/meadow (>15ha) with adjacent woodlands.	No SWH or Generalized SWH of this type was identified.	CUM ecosite identified (ELC unit 315) as part of Oct 2012 site does not meet size criteria in Ecoregion Schedule 6E, nor is it adjacent to an FO community.	No	No
Bat Hibernacula	Turbine	Bat Hibernacula may be found in these ecosites: CCR1 CCR2 CCA1 CCA2 (Note: buildings are not considered to be SWH) Also found in caves, mine shafts, underground foundations, and Karsts.	No SWH or Generalized SWH of this type was identified. (as reported in NRSI, 2012)	No habitat that matches that described in Ecoregion Schedule 6E was found.	No	No

Type of Candidate Significant Wildlife Habitat	Required to be identified for the following components (as per Appendix D of the NHAG)*	Summary of Criteria (Significant Wildlife Habitat Draft Ecoregion 6E Criterion Schedule, OMNR, 2012).	SWH Identified in the East Durham Wind Energy Centre NHA (LGL, 2012) for Areas Within 120m of Proposed Changes to the Layout	Results of New Site Investigation Conducted October 24, 2012 Within 120m of Proposed Changes	Carried Forward to Evaluation of Significance as a result of Additional Site Investigation? (yes/no)	
					Candidate SWH	Generalized Candidate SWH
Bat Maternity Colonies	Turbine	All ELC Ecosites in ELC Community Series: FOD FOM	No SWH of this type was identified; generalized SWH was identified as within 120m of underground/ overhead lines in existing road right of ways. (as reported in NRSI, 2012)	No additional FO communities were documented within 120m of the revised project layout.	No	No
Turtle Wintering Area	Turbine Access road	• Snapping and Midland Painted turtles: ELC communities SW, MA, OA and SA; ELC Community Series FEO, BOO • For most turtles, wintering areas are in the same general area as their core habitat. • Water has to be deep enough not to freeze and have soft mud substrates.	None identified.	ELC unit 100 (SWD4) was the only criteria ecosite identified and it did not have an open water component that would have sufficient water depth to function as turtle wintering habitat.	No	No
Reptile Hibernacula	Turbine Access road	• For all snakes, habitat may be found in any ecosite in central Ontario other than very wet ones. • Areas including rock crevices, crumbling foundations, rock piles, stone fences and old wells may indicate this type of habitat. • For Five-lined Skink, ELC community series of FOD and FOM and ecosites FOC1 and FOC3	No SWH or Generalized SWH of this type was identified.	Rock piles were located along hedgerows as a result of rocks being removed from agricultural fields. Rock piles within 120m of project location did not provide access below the frost line. No additional FO communities documented. No candidate habitat of this type identified within 120m of the revised Project Location.	No	No

Type of Candidate Significant Wildlife Habitat	Required to be identified for the following components (as per Appendix D of the NHAG)*	Summary of Criteria (Significant Wildlife Habitat Draft Ecoregion 6E Criterion Schedule, OMNR, 2012).	SWH Identified in the East Durham Wind Energy Centre NHA (LGL, 2012) for Areas Within 120m of Proposed Changes to the Layout	Results of New Site Investigation Conducted October 24, 2012 Within 120m of Proposed Changes	Carried Forward to Evaluation of Significance as a result of Additional Site Investigation? (yes/no)	
					Candidate SWH	Generalized Candidate SWH
Colonial-Nesting Bird Breeding Habitat (bank and cliff swallows)	Turbine	• Ecosites CUM1, CUT1, CUS1, BLO1, BLS1, BLT1, CLO1 CLS1, CLT1. • Eroding banks, sandy hills, borrow pits, steep slopes, and sand piles (Bank Swallow and N. Rough-winged Swallow). Cliff faces, bridge abutments, silos, barns (Cliff Swallows). • Does not include man-made structures (bridges or buildings) or recently (2 years) disturbed soil areas	No SWH or Generalized SWH of this type was identified.	ELC unit 315 (CUM) was identified as part of Oct 2012 site visit. The hilly topography is devoid of exposed soils or eroding banks. This CUM unit does not provide suitable habitat of this type.	No	No
Colonial-Nesting Bird Breeding Habitat (tree/shrub)	Turbine Access road	• Ecosites: SWM2, SWM3, SWM5, SWM6, SWD1, SWD2, SWD3, SWD4, SWD5, SWD6, SWD7, FET1 • Nests in live or dead standing trees in wetlands, lakes, islands, and peninsulas. Shrubs and occasionally emergent vegetation may also be used. • Most nests in trees are 11 to 15 m from ground, near the top of the tree.	No SWH of this type was identified in areas within 120m of proposed changes to the layout; however, generalized SWH was identified as within 120m of underground/ overhead lines in existing road right of ways.	ELC unit 100 (SWD4) was the only criteria ecosite identified within 120m of the revised project layout. This feature (WH-CNTS-13) was carried forward to evaluation of significance. (Figure 5)	Yes	No

Type of Candidate Significant Wildlife Habitat	Required to be identified for the following components (as per Appendix D of the NHAG)*	Summary of Criteria (Significant Wildlife Habitat Draft Ecoregion 6E Criterion Schedule, OMNR, 2012).	SWH Identified in the East Durham Wind Energy Centre NHA (LGL, 2012) for Areas Within 120m of Proposed Changes to the Layout	Results of New Site Investigation Conducted October 24, 2012 Within 120m of Proposed Changes	Carried Forward to Evaluation of Significance as a result of Additional Site Investigation? (yes/no)	
					Candidate SWH	Generalized Candidate SWH
Colonial-Nesting Bird Breeding Habitat (ground)	Turbine Access road	MAM1 – 6, MAS 1 – 3; CUM, CUT, CUS; Rock island or peninsula within a lake or large river; Brewer's Blackbird- In close proximity to watercourses in open fields or pastures with scattered trees or shrubs (CUM, CUT and CUS).	No SWH of this type was identified in areas within the Project Layout; however, generalized SWH was identified as within 120m of underground/ overhead lines in existing road right of ways.	No rock island or peninsula type habitat was found during site investigation. ELC unit 315 (CUM) identified as part of Oct 2012 site visit is comprised of hilly topography with a mix of field and shrub vegetation. This unit has potential to provide suitable habitat for Colonial Nesting Birds. This unit was not within 120m of turbine components or an access road and was therefore treated as Generalized Candidate SWH as per Appendix D, Table 16 for the area of Unit 315 within 120m of the substation location.	No	Yes
Deer Yarding Areas	All	Deer yarding areas identified by MNR.	SWH of this type (SWH-DYA-01) was identified within 120m of proposed Change E. No generalized SWH was identified in the project area.	No additional deer yarding areas identified.	No WH-DYA-01 already confirmed as SWH within 120mof Change F.	No
Cliffs and Talus Slopes	Access road	ELC types TAO, TAS, TAT, CLO, CLS, CLT; Near vertical cliff, and talus slope is rubble at base of cliff.	No SWH or Generalized SWH of this type was identified.	None of the criteria ecosite codes were found in or within 120m of the revised project layout.	No	No
Sand Barren	Access road	ELC types SBO1, SBS1, SBT1	No SWH or Generalized SWH of this type was identified.	None of the criteria ecosite codes were found in or within 120m of the revised project layout.	No	No
Alvar	Access road	ELC types ALO1, ALS1, ALT1, FOC1, FOC2, CUM2, CUS2, CUT2-1, CUW2	No SWH or Generalized SWH of this type was identified.	None of the criteria ecosite codes were found in or within 120m of the revised project layout.	No	No

Type of Candidate Significant Wildlife Habitat	Required to be identified for the following components (as per Appendix D of the NHAG)*	Summary of Criteria (Significant Wildlife Habitat Draft Ecoregion 6E Criterion Schedule, OMNR, 2012).	SWH Identified in the East Durham Wind Energy Centre NHA (LGL, 2012) for Areas Within 120m of Proposed Changes to the Layout	Results of New Site Investigation Conducted October 24, 2012 Within 120m of Proposed Changes	Carried Forward to Evaluation of Significance as a result of Additional Site Investigation? (yes/no)	
					Candidate SWH	Generalized Candidate SWH
Old Growth Forest	Access road	FOD, FOC, FOM Stands 30ha or larger, abundance of snags and downed woody debris; No recognizable forest activities; Dominant tree species >140 years old.	No SWH or Generalized SWH of this type was identified.	None of the criteria ecosite codes were found in or within 120m of the revised project layout.	No	No
Savannah	Access road	TPS1, TPS2, TPW1, TPW2, CUS2; Tallgrass prairie habitat with tree cover between 25 and 60%; no minimum size, with savannah indicator species.	No SWH or Generalized SWH of this type was identified.	None of the criteria ecosite codes were found in or within 120m of the revised project layout.	No	No
Tallgrass Prairie	Access road	TPO1, TPO2; Tallgrass prairie with no minimum size, one or more prairie indicator species.	No SWH or Generalized SWH of this type was identified.	None of the criteria ecosite codes were found in or within 120m of the revised project layout.	No	No
Other Rare Vegetation Communities	Access road	Rare vegetation communities may include beaches, fens, forest, marsh, barrens, dunes and swamps; Provincially rare community type S1, S2 or S3 and SH.	No SWH or Generalized SWH of this type was identified.	None of the criteria ecosite codes were found in or within 120m of the revised project layout.	No	No

Type of Candidate Significant Wildlife Habitat	Required to be identified for the following components (as per Appendix D of the NHAG)*	Summary of Criteria (Significant Wildlife Habitat Draft Ecoregion 6E Criterion Schedule, OMNR, 2012).	SWH Identified in the East Durham Wind Energy Centre NHA (LGL, 2012) for Areas Within 120m of Proposed Changes to the Layout	Results of New Site Investigation Conducted October 24, 2012 Within 120m of Proposed Changes	Carried Forward to Evaluation of Significance as a result of Additional Site Investigation? (yes/no)	
					Candidate SWH	Generalized Candidate SWH
Waterfowl Nesting Areas	Turbine	All upland habitat located adjacent to ELC ecosites: MAS1, MAS2, MAS3, SAS1, SAM1, SAF1, MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, SWT1, SWT2, SWD1, SWD2, SWD3, SWD4; Upland area needs to be at least 120m wide.	No SWH of this type was identified in areas within 120m of proposed changes to the layout; however, generalized SWH was identified as within 120m of underground/ overhead lines in existing road right of ways.	ELC unit 100 (SWD4) identified as part of Oct 2012 site visit combined with ELC unit 100 (MAM2) meets size criteria (>0.5ha) is comprised of hilly topography with potential to provide suitable habitat for waterfowl nesting. This type of habitat requires confirmation only when turbine components are located within 120m. Given that no turbines are proposed within 120m of this feature, the area of units 100 and 101 within 120m of the revised project layout was carried forward as Generalized Candidate SWH of this type.	No	Yes
Bald Eagle and Osprey Nesting, Foraging and Perching Habitat	Turbine	ELC Ecosite codes of FOD, FOM, FOC, SWD, SWM and SWC directly adjacent to riparian areas – rivers, lakes, ponds and wetlands.	No SWH of this type was identified in areas within the Project Layout; however, generalized SWH was identified as within 120m of underground/ overhead lines in existing road right of ways.	None of the criteria ecosites were identified as adjacent to riparian areas within the revised project layout.	No	No
Woodland Raptor Nesting Habitat	None	May be found in all forested ELC ecosites, may also be found in SWC, SWM, SWD and CUP3. Natural and conifer woodland/forest stands greater than 30ha, with greater than 10ha of interior habitat (defined as 200m from edge).	No SWH or Generalized SWH of this type was identified.	No deep interior habitat identified within 120m of the revised project layout.	No	No

Type of Candidate Significant Wildlife Habitat	Required to be identified for the following components (as per Appendix D of the NHAG)*	Summary of Criteria (Significant Wildlife Habitat Draft Ecoregion 6E Criterion Schedule, OMNR, 2012).	SWH Identified in the East Durham Wind Energy Centre NHA (LGL, 2012) for Areas Within 120m of Proposed Changes to the Layout	Results of New Site Investigation Conducted October 24, 2012 Within 120m of Proposed Changes	Carried Forward to Evaluation of Significance as a result of Additional Site Investigation? (yes/no)	
					Candidate SWH	Generalized Candidate SWH
Turtle Nesting Areas	Access Road	Exposed mineral soil (sand or gravel) less than 100m from the follow ECL Ecosite types: MAM2, MAM3, MAM4, MAM5, MAM6, MAM1, MAM2, SAS1, SAM1, SAF1, BOO1, FEO1,	No SWH of this type was identified in areas within 120m of proposed changes to the layout; however, generalized SWH was identified as within 120m of underground/ overhead lines in existing road right of ways.	No areas of exposed sand/gravel were noted in proximity to wetland ecosites.	No	No
Seeps and Springs	None	Areas where groundwater comes to the surface. Any forested ecosite within the headwater areas of a stream could have seeps/springs	No SWH of this type was identified in areas within the Project Layout; however, generalized SWH was identified as within 120m of all project components.	No seeps or springs were identified in or within 120m of the additional areas investigated relating to the revised project layout.	No	No
Amphibian Breeding Habitat (woodland)	Access Road	Ecosites include FOC, FOM, FOD, SWC, SWM, and SWD. Breeding pools within woodland or shortest distance from forest habitat are more significant as they are more likely to be used.	No SWH of this type was identified in areas within 120m of proposed changes to the layout; however, generalized SWH was identified as within 120m of underground/ overhead lines in existing road right of ways.	No woodland pools were identified in or within 120m of the additional areas investigated relating to the revised project layout.	No	No
Amphibian Breeding Habitat (wetlands)	Access Road	ELC Ecosites SW, MA, FE, BO, OA, and SA.	No SWH of this type was identified in areas within the Project Layout; however, generalized SWH was identified as within 120m of underground/ overhead lines in existing road right of ways.	ELC unit 100 (SWD4) was the only criteria ecosite identified within 120m of the revised project layout. This feature (WH-ABWE-01) was carried forward to evaluation of significance. (Figure 5)	Yes	No

Type of Candidate Significant Wildlife Habitat	Required to be identified for the following components (as per Appendix D of the NHAG)*	Summary of Criteria (Significant Wildlife Habitat Draft Ecoregion 6E Criterion Schedule, OMNR, 2012).	SWH Identified in the East Durham Wind Energy Centre NHA (LGL, 2012) for Areas Within 120m of Proposed Changes to the Layout	Results of New Site Investigation Conducted October 24, 2012 Within 120m of Proposed Changes	Carried Forward to Evaluation of Significance as a result of Additional Site Investigation? (yes/no)	
					Candidate SWH	Generalized Candidate SWH
Marsh Bird Breeding Habitat	Turbine	ELC Ecosites including: MAM1, MAM2, MAM3, MAM4, MAM5, MAM6, SAS1, SAM1, SAF1, FEO1, BOO1 For Green Heron: All SW, MA and CUM1 sites.	No SWH of this type was identified in areas within 120m of proposed changes to the layout; however, generalized SWH was identified as within 120m of underground/ overhead lines in existing road right of ways.	Criteria ecosites documented within 120m of the revised project layout in Oct 2012 site investigation include ELC unit 315 (CUM1) and ELC unit 101 (MAM2). These units were not within 120m of turbine components and were therefore treated as Generalized Candidate SWH as per Appendix D, Table 16 for the area of Unit 315within 120m of the substation location (Change E) and the area of unit 101 within 120m of the access road to the new Met tower (Change A).	No	Yes
Woodland Area Sensitive Bird Breeding Habitat	None	Community ecosite types: FOC, FOM, FOD, SWC, SWM, SWD Woodlots>30h; typically 60 years old or older, deep interior habitat >200m from edge.	No SWH or Generalized SWH of this type was identified.	Based on a review of deep interior habitat (>200m interior from forest edge), there is no deep interior habitat in or within 120m of the revised project location. Deep interior habitat assessment site investigation analysis Figure is shown in Appendix D of this report.	No	No
Open Country Bird Breeding Habitat	Turbine	CUM1 and CUM2 Ecosites, of size >30ha, not under active agricultural use in the last 5 years.	No SWH or Generalized SWH of this type was identified.	No CUM communities of 30ha or larger are identified in or within 120m of the revised project location.	No	No
Shrub/Early Successional Bird Breeding Habitat/ Declining Guild Shrubland Birds	Turbine	Ecosites: CUT1 CUT2 CUS1 CUS2 CUW1 CUW2 Patches of shrub ecosites can be complexed into a larger habitat for some bird species Areas >10ha in size.	No SWH of this type was identified in areas within 120m of proposed changes to the layout; however, generalized SWH was identified as within 120m of underground/ overhead lines in existing road right of ways.	None of the criteria ecosites were identified within 120m of the revised project layout.	No	No

Type of Candidate Significant Wildlife Habitat	Required to be identified for the following components (as per Appendix D of the NHAG)*	Summary of Criteria (Significant Wildlife Habitat Draft Ecoregion 6E Criterion Schedule, OMNR, 2012).	SWH Identified in the East Durham Wind Energy Centre NHA (LGL, 2012) for Areas Within 120m of Proposed Changes to the Layout	Results of New Site Investigation Conducted October 24, 2012 Within 120m of Proposed Changes	Carried Forward to Evaluation of Significance as a result of Additional Site Investigation? (yes/no)	
					Candidate SWH	Generalized Candidate SWH
Terrestrial Crayfish	None	MAM1 MAM2 MAM3 MAM4 MAM5 MAM6 MAS1 MAS2 MAS3	No SWH of this type was identified in areas within the Project Layout; however, generalized SWH was identified as within 120m of all project components.	Potential habitat is present in ELC unit 101 (MAM2); however, habitat of this type can be accepted as Generalized Candidate SWH according to Appendix D, Table 16 of the NHAG (OMNR, 2011) for all project components. The area of ELC unit 101 within 120m of the revised project layout was carried forward as Generalized Candidate SWH of this type.	No	Yes
Special Concern and Rare Wildlife Species	According to MNR	Based on information obtain in records review, S1- S3, SH and SC or rare wildlife species for the project area include: Canada Warbler Common Nighthawk Golden-winged Warbler Red-headed Woodpecker Short-eared Owl Clamp-tipped Emerald Harlequin Darner Monarch Northern Long-eared Bat Small-footed (Least) Bat Hart's Tongue Fern Moss (Pottia intermedia) Scarlett Beebalm Milksnake Eastern Ribbonsnake Snapping Turtle	No SWH of this type was identified in areas within 120m of the proposed changes to the layout; however, generalized SWH was identified as within 120m of underground/ overhead lines in existing road right of ways.	Results of October 2012 site investigation did not document any additional wetlands, woodlands or valleylands within 120m of the new project location. Other than agricultural lands the only other ELC ecosite type documented was a cultural meadow. Based on these results no candidate SWH was identified for the Special Concern or Rare Wildlife Species listed here. However, given that Milksnake is a habitat generalist and the associated difficulty of defining specific habitat, Generalized Candidate SWH was carried forward within 120m of the revised layout (Changes A, B, C, and E). Common Nighthawk is another species generally considered to use a wide variety of habitat; however, night surveys conducted during the site investigation for the original NHA were determined as sufficient to cover off the area in the revised project layout and rule out habitat use by this species.	No	Yes (Milksnake)

Type of Candidate Significant Wildlife Habitat	Required to be identified for the following components (as per Appendix D of the NHAG)*	Summary of Criteria (Significant Wildlife Habitat Draft Ecoregion 6E Criterion Schedule, OMNR, 2012).	SWH Identified in the East Durham Wind Energy Centre NHA (LGL, 2012) for Areas Within 120m of Proposed Changes to the Layout	Results of New Site Investigation Conducted October 24, 2012 Within 120m of Proposed Changes	Carried Forward to Evaluation of Significance as a result of Additional Site Investigation? (yes/no)	
					Candidate SWH	Generalized Candidate SWH
Amphibian Movement Corridors	Turbine Access Road and where SWH for Amphibian Breeding (wetland) has been identified	Movement corridors must be determined when Amphibian wetland breeding habitat is confirmed as SWH. Corridors should consist of native vegetation, roadless area, no gaps such as fields, waterways or bodies, and undeveloped areas are most significant. Corridors should be at least 200m wide with gaps <20m and if following riparian area with at least 15m of vegetation on both sides of waterway.	No SWH or Generalized SWH of this type was identified.	Area surrounding the candidate SWH identified of this type (WH-ABWE-01) identified within 120m of the revised project layout is surrounded by extensive agricultural field that comprises a >20m gap between wetland and woodland features.	No, given that no suitable habitat exists adjacent to WH-ABWE-01 that would function as a corridor.	No
Deer Movement Corridors	Turbine Access Road and where SWH for Deer Yarding Area has been identified	Indicator Species: White-tailed Deer corridors may be found in all forested ecosites. A Project Proposal in Stratum II Deer Wintering Area has potential to contain corridors.	The Deer Movement corridors identified were within 120m of proposed underground collection; therefore this type of habitat was accepted as Generalized SWH. No SWH of this type was identified.	The project component proposed as Change F and within 120m of the Deer Movement corridors previously identified is overhead line. According to Appendix D of the NHAG (OMNR, 2011) this habitat remains as Generalized SWH.	No	No, already identified as Generalized SWH in area of Change F.

NOTE: * process of scoping candidate significant wildlife habitat according to project component type as described in Appendix D of NHAG (OMNR, 2011)

3.2.5 Summary of Natural Features within 120m of Proposed Changes

Change A (Access Road/Underground Electrical to MET Tower)

The access road follows the alignment of an existing driveway and farm laneway that is bordered by agricultural fields. The footprint of the central portion of the road was not previously identified as part of the project layout. Natural features previously identified within 120m of the original project layout remain as the only features identified within 120m of the revised layout, namely significant wetland WE-03 and significant woodland WO-02. Other project components identified in the original project layout remain as the closest components to these significant features. No valleylands are located within 120m of this layout change. Screening of ELC was conducted for all types of candidate SWH described for Ecoregion 6E in the MNR Ecoregion Schedule (OMNR, 2012) as shown in Table 4. The results of which determined the access road to be 41m from candidate significant wildlife habitat for Amphibian Breeding – wetland (WH-ABWE-01) and 100m from Colonial Nesting Bird Breeding - tree/shrub (WH-CNTS-13) as shown in Figure 5.

The proposed access road is also located within 120m of Generalized Candidate SWH of the following types:

- Waterfowl Nesting Areas
- Marsh Bird Breeding Habitat
- Terrestrial Crayfish
- Special Concern and Rare Wildlife Species

The Candidate SWH described above was carried forward to the Evaluation of Significance. No new natural features were carried forward for evaluation.

Change B (Additional MET Tower)

The Met tower is located within the construction laydown area in an agricultural field. No new features were identified within 120m of this project component. All significant natural features and significant wildlife habitat located within 120m of this project component was previously documented in the NHA for the Project (LGL, 2012). SWH to be documented for this type of project component is similar to that pertaining to construction laydown area already addressed in the East Durham Wind Energy Centre NHA (LGL, 2012). No new Candidate SWH or natural features pertaining to this project component were carried forward to Evaluation of Significance.

Change C (Expansion of Construction Laydown Area)

The expansion of the construction laydown area includes the area identified in the original NHA for the Project for installation of a transformer substation. This additional area to be used for construction laydown is comprised of agricultural field and was fully studied and reported on in the East Durham Wind Energy Centre NHA given that it is the same footprint identified as the original transformer substation. All significant natural features and significant wildlife habitat located within 120m of this project component was previously documented in the original NHA for the Project (LGL, 2012). No new Candidate SWH or natural features pertaining to this project component were carried forward to Evaluation of Significance.

Change D (Overhead Transmission to connect Substation to Grid)

The overhead line is proposed to connect the transformer substation to the Hydro One grid. Given that underground electrical collection line was proposed previously within the road right-of-way in this location, this area was studied and reported on in the original East Durham Wind Energy Centre NHA. All significant natural features and significant wildlife habitat located within 120m of this project component was previously documented in the NHA for the Project (LGL, 2012). No new Candidate SWH or natural features pertaining to this project component were carried forward to Evaluation of Significance.

Change E (New Location of Transformer Substation)

The transformer substation is located on a property not surveyed as part of the original NHA. ELC survey of the substation property documents the area as agricultural field with adjacent cultural meadow (CUM1) and other active agricultural lands. Figure 4 displays the ELC vegetation communities documented during the October 24th field visit.

The location of the transformer substation is not within 120m of any wetlands or woodlands. This project component is located within 120m of a significant valleyland (VA-06) as shown below.

Proposed location of transformer substation is 95m from a significant valleyland (VA-06)

The location of the transformer substation is also located within 120m of Generalized Candidate SWH of the following types:

- Colonial-Nesting Bird Breeding Habitat (ground)
- Marsh Bird Breeding Habitat
- Special Concern and Rare Wildlife Species

Change F (Overhead Transmission to cross the Saugeen River)

This overhead line is proposed as a means of crossing the Saugeen River with electrical collection. Given that underground electrical collection line was proposed previously within the road right-of-way in this location, this area was studied and reported on in the original East Durham Wind Energy Centre NHA. All significant natural features and significant wildlife habitat located within 120m of this project component was previously documented in the NHA for the Project (LGL, 2012). No new Candidate SWH or natural features pertaining to this project component were carried forward to Evaluation of Significance.

Table 5: Summary of natural features identified through site investigation and carried forward to Evaluation of Significance

Feature Type/ID as shown in Figure 4	Methods used to identify the feature	Minimum distance between feature and project location
Wildlife Habitat Amphibian Breeding Habitat (wetland) WH-ABWE-01	ELC field assessment identified an isolated wetland feature >120m from nearest woodland. The feature is a combination of a reed-canary grass meadow marsh (MAM2) and a balsam poplar and red maple deciduous swamp (SWD4).	41m from access road to Met tower (shown in Figure 5)
Wildlife Habitat Colonial Nesting Bird Breeding Habitat (tree/shrub) WH-CNTS-13	ELC field assessment identified a balsam poplar and red maple deciduous swamp (SWD4).	100m from access road to Met tower (shown in Figure 5)
Generalized Candidate SWH	Screening of ELC communities for potential habitat as described in Ecoregion Schedule 6E (OMNR, 2012)	Within 120m of new project components (transformer substation and revised layout of construction laydown to include Met tower and access road).

4.0 EVALUATION OF SIGNIFICANCE

The REA process requires the applicant to determine if any natural features identified in or within 120 metres of the project location are significant, or provincially significant, to further determine whether development prohibitions and setbacks apply (O. Reg. 359/09, Section 38). Under Part IV, Section 27 of O. Reg. 359/09, an evaluation of significance, using procedures established or accepted by MNR, is required when the project location is proposed within 120 metres of a natural feature (or, 50 metres of an earth science ANSI).

Only 2 features were carried into the Evaluation of Significance: Candidate SWH for amphibian wetland breeding (WH-ABWE-01) and colonial nesting bird breeding habitat (tree/shrub) (WH-CNTS-13).

4.1 METHODS

In the case of the two candidate SWHs identified through Site Investigation, targeted studies to determine the significance of the habitat could not be conducted given that the changes to the project layout were identified in October 2012 and the appropriate season for study had passed (spring). For that reason, both WH-ABWE-01 and WH-CNTS-01 were treated as significant with a commitment to undertake a habitat use study prior to construction within 120m of the habitat (as outlined in the NHAG, OMNR, 2012). These habitats are therefore treated as significant and further addressed within the Environmental Impact Study where the applicable habitat use study commitments are also described.

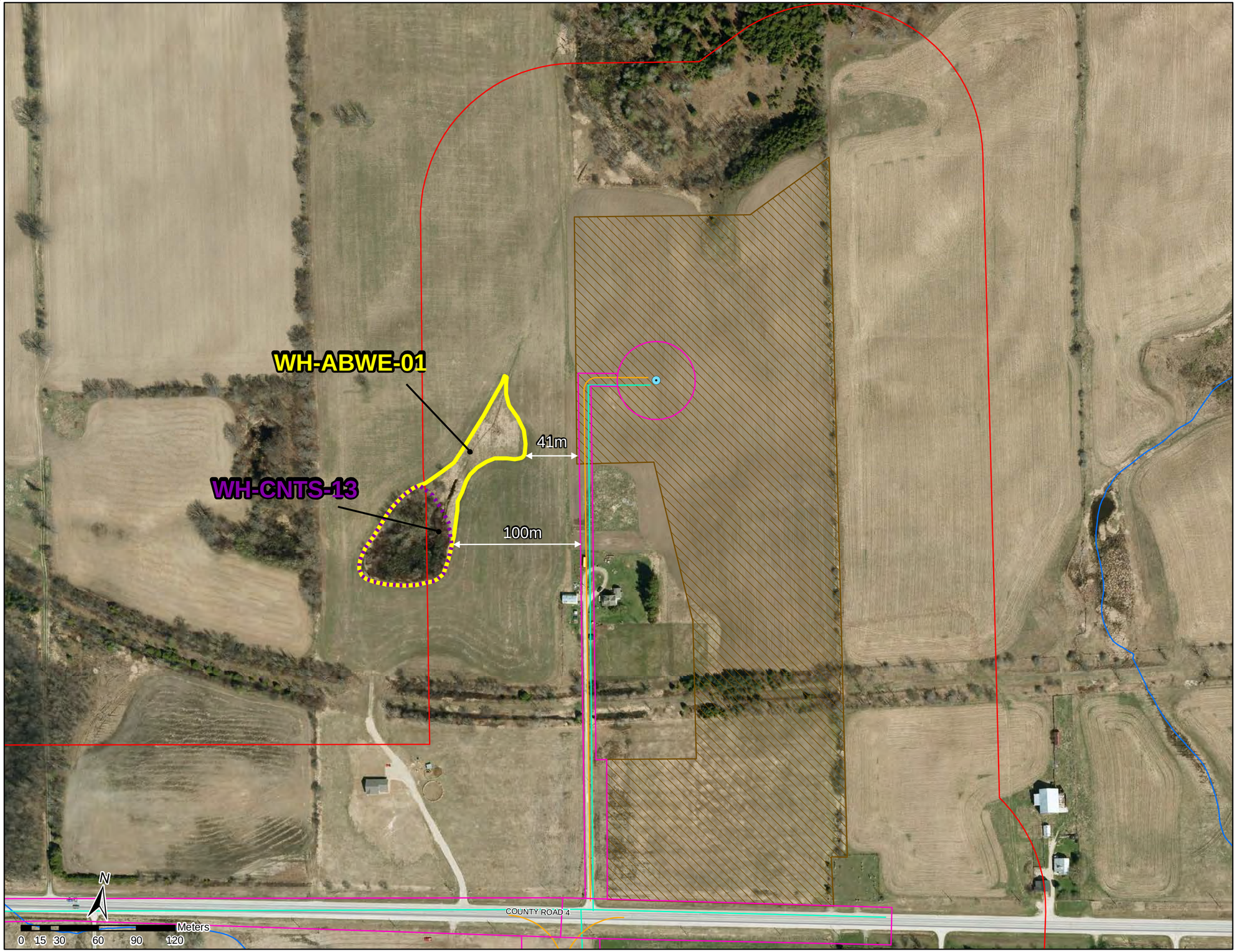
All identified types of Generalized Candidate SWH as listed in Section 3.2.5 were treated as significant and are displayed in Figure 7.

4.2 RESULTS

Figures 6 and 7 display the results of the evaluation of significance as they pertain to the revised project layout for the Project. Table 6 summarizes the types of significant features carried forward into the Environmental Impact Study (Section 6.0).

Table 6: Summary of Significant Features Evaluated or Treated as Significant

Feature Type	Feature Identifiers	Distance to Nearest Project Component	Environmental Impact Study (EIS) Required?
Significant Wildlife Habitat – Amphibian Breeding Habitat (wetland)	SWH-ABWE-01as shown in Figure 6	41m from access road to Met tower	Yes
Significant Wildlife Habitat – Colonial Nesting Bird Breeding Habitat (tree/shrub)	SWH-CNTS-13 as shown in Figure 6	100m from access road to Met tower	Yes
Generalized Candidate Significant Wildlife Habitat	None	Within 120m of project location as displayed in Figure 7	Yes



LEGEND

- SWH: Amphibian Breeding Habitat (Wetland)
- SWH: Colonial Nesting Bird Breeding Habitat (tree/shrub)

Site Plan (2012-09-12)

- Turbine
- MET Tower
- Access Road
- Construction Disturbance
- Underground Collection
- Overhead Transmission
- MET Tower 200ft Disturbance Area
- Substation
- Laydown Area
- 120m Buffer from Project Components
- Study Area (Dec 2011)
- Watercourse (LIO, 2012-06-19)
- Waterbody (LIO, 2012-06-19)

Additional SWH Due to Changes A-C

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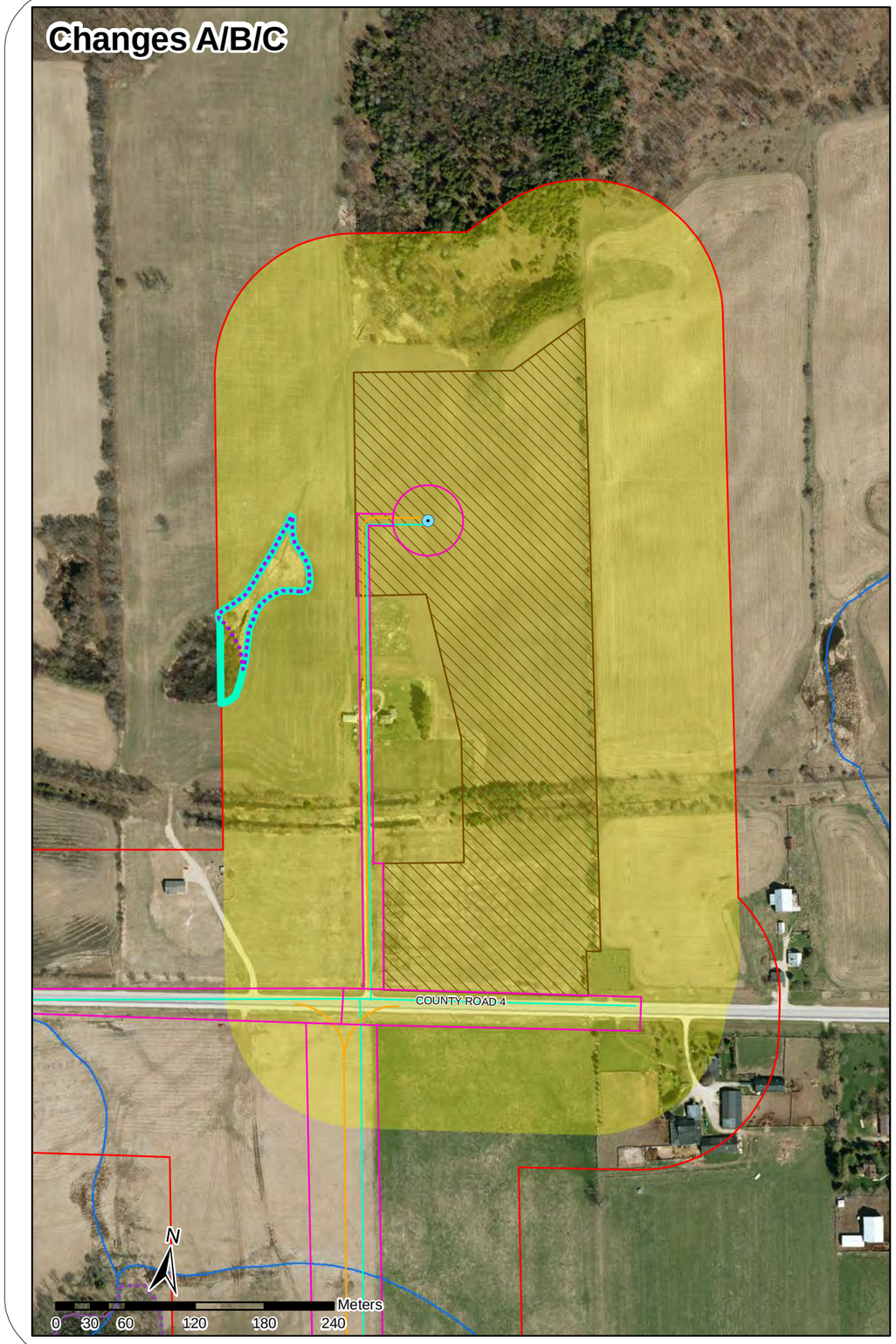
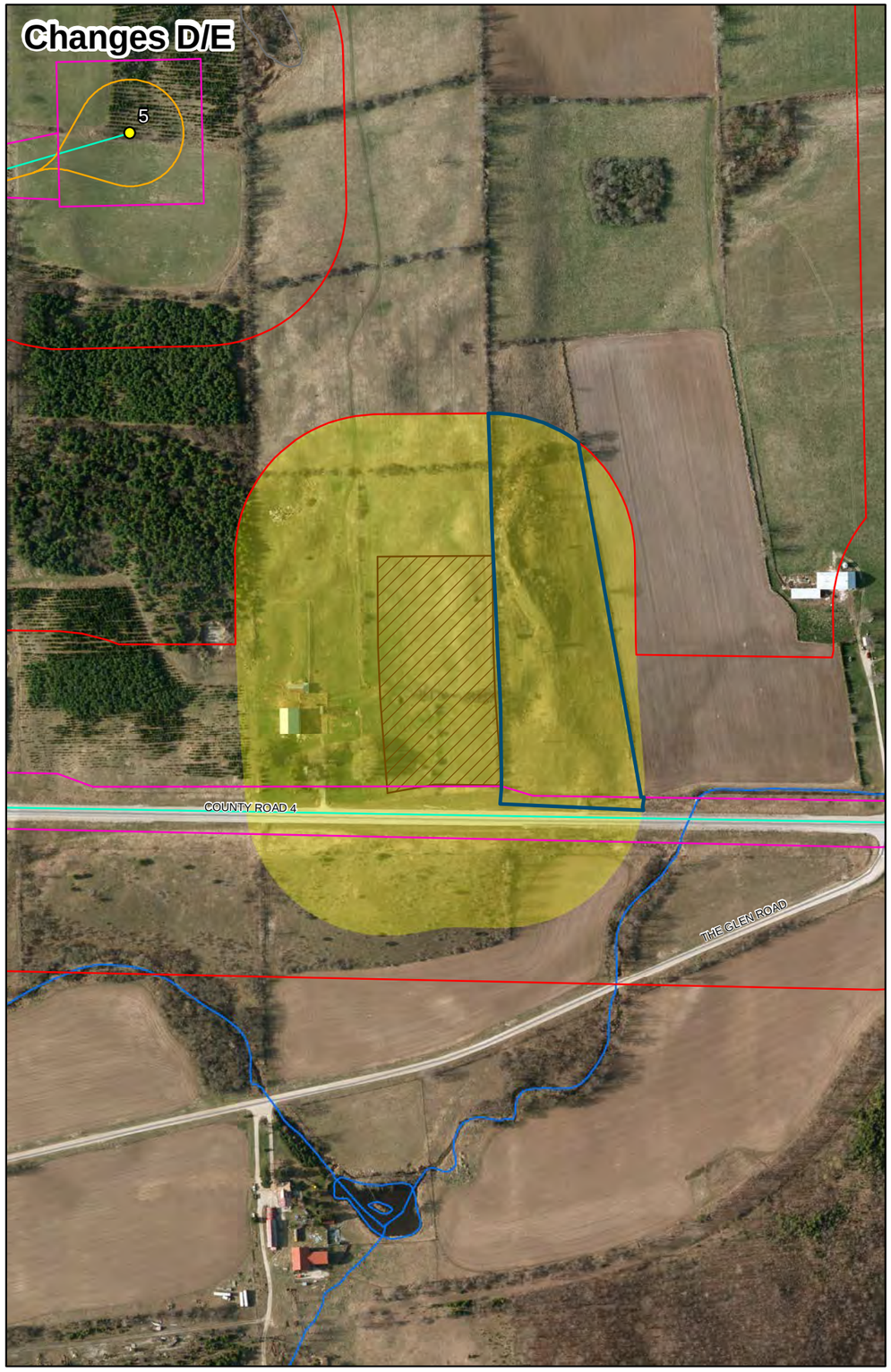
Project	TA8119	**Figure**	6
Date	Nov, 2012	**Prepared By:**	VLK
Scale	1:2,900	**Verified By:**	LKR





LEGEND

Site Plan (2012-09-12)

- Turbine
- MET Tower
- Access Road
- Construction Disturbance
- Underground Collection
- Overhead Transmission
- MET Tower 200ft Disturbance Area
- Substation
- Laydown Area
- 120m Buffer from Project Components
- Study Area (Dec 2011)
- Watercourse (LIO, 2012-06-19)
- Waterbody (LIO, 2012-06-19)

Generalized SWH for the following:

- Special Concern and Rare Wildlife Species (Milksnake)
- Marsh Bird Breeding Habitat & Terrestrial Crayfish
- Waterfowl Nesting Areas
- Colonial-Nesting Bird Breeding Habitat (ground) & Green Heron Breeding Habitat)

Generalized SWH

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Project	TA8119	**Figure**	7
Date	Nov, 2012	**Prepared By:**	VLK
Scale	1:4,500	**Verified By:**	LKR

Given that the changes proposed to the Project do not entail the installation or operation of components not previously addressed, the construction, operation and decommissioning activities as they are described in the Environmental Impact Study within the East Durham Wind Energy Centre NHA (LGL, 2012) for the Project remain accurate. No new significant wetlands, woodlands or valleylands have been identified in this report; and, new project components proposed are not any closer in proximity to the significant wetland, woodland and valleyland features than the closest components previously identified in the original NHA. For example, although the proposed access road to the Met tower is within 120m of WE-03, the construction laydown area remains as the closest project component to that feature (7m); and associated impacts, mitigation, monitoring and contingency plans have been previously determined for that feature in the original NHA. Likewise, no new types of Generalized SWH have been identified in this report compared to what has previously been documented; therefore, no new impacts, mitigation, contingency or monitoring plans are included herein. Figure 7 indicates areas to be included in the mitigation, monitoring and contingency measures prescribed for Generalized SWH in the original NHA document.

Proposed changes to the project layout can be grouped into 3 categories:

1. Installation of new project components (Changes A and E);
2. Change in property use (Changes B and C); and,
3. Change in method of installation of electrical lines (Changes D and F).

Where new project components are proposed within areas not previously included in the project layout two new types of wildlife habitat have been identified as within 120m and treated as significant: SWH-ABWE-01 and SWH-CNTS-13 (Figure 7). These habitats are treated as significant until pre-construction surveys can be completed to confirm (or rule out) the significance based on provincially accepted evaluation criteria as presented in the Ecoregion Schedule 6E (OMNR, 2012). Property access to the area containing these habitats has been denied for field study (Figure 1); however, these features are within 30 – 90m of the closest accessible property line, such that survey sufficient to evaluate the significance is considered possible. The habitat use studies proposed are described in Table 7 below. Potential impacts and associated mitigation, monitoring and contingency plans relating to the construction, operation and decommissioning phases for the additional infrastructure addressed here are outlined in Table 8, and are based on the treatment of these features as significant.

For those changes pertaining to a change in use of a property previously studied, no new significant features were identified and therefore no additional impacts were identified above and beyond what were identified in the Environmental Impact Study included as part of the East Durham Wind Energy Centre NHA (LGL, 2012). The addition of a Met tower to an area already identified for the purpose of construction laydown (Change B, Figure 3), and the change in use of an area originally identified for a transformer substation to be included as part of construction laydown (Change C, Figure 3) are two such examples of this. In these cases the change in use was determined to be similar in its impact to the natural environment; therefore, no additional mitigation, contingency and monitoring measures are prescribed beyond what has previously been identified in the original NHA to address significant natural features within 120m of these areas.

Where a change in the method of installation for electrical transmission from underground to overhead line has been proposed no new impacts have been identified given that the areas identified were included as areas within existing road right-of-ways and where electrical collection was already planned.

Table 7: Summary of Methods to be Used for Habitat Use Studies

Wildlife Type/ID	Distance from project	Habitat Use Study Criteria & Procedures (what, when, where and how)
Wildlife WH-ABWE-01 (Amphibian wetland breeding habitat) Treated as significant	41m (access road)	Pre-construction study of habitat will occur during spring amphibian breeding season (April/May). Marsh Monitoring Protocol will be used to document calling anurans on Spring nights under specific conditions of temperature and time by a qualified biologist. Calling levels of breeding frogs will be used to determine the diversity and abundance of species using the wetland habitat. Survey method to match Frog Monitoring method detailed in Table 5 of the NHA.
Wildlife WH-CNTS-13 (Colonial Nesting Bird Breeding Habitat) Treated as significant	100m (access road)	Pre-construction study of habitat will occur during leaf-off to identify nests by visual searches with binoculars. If nests are identified, auditory surveys and visual searches with binoculars will be conducted twice during the active nesting season (April-August) in order to document numbers of active nests If no nests are identified during leaf -off, no further surveys are required.

Table 8: Summary of potential negative effects and proposed mitigation measures for wildlife habitat that was treated as significant and require a habitat use study

Wildlife Habitat Type/ID	Project Phase & Activity within 120 m of the feature	Distance between Nearest Project Component & Wildlife Habitat	Potential Negative Effects to the Habitat	Mitigation Measures (if habitat is found to have species diversity or abundance at a level that would be considered significant)	Performance Objectives, Monitoring and Contingency Plans
Wildlife WH-ABWE-01 (Amphibian wetland breeding habitat)	Construction and Decommissioning of Access Road	41 m	• Mortality and/or disturbance to amphibians due to vegetation removal/soil grading • Potential for silt/sediment to enter into aquatic feature; • Potential to cause barrier to animal movement corridors; • Potential to change surface water drainage patterns or obstruct lateral flows to wetlands or aquatic features. • Changes to surface water drainage patterns resulting from access road construction causing indirect effects on habitat. • Potential for release of contaminants from construction vehicles.	• Schedule vegetation removal outside of breeding season for amphibians: • *Salamanders – March 15 to April 30th or as determined through consultation with MNR Midhurst District Offices;* *Frogs- April 1 to June 30th or as determined through consultation with MNR Midhurst District Offices ;* • Work within 30m of amphibian habitat will not occur after dusk during the breeding season (April-June) • Demarcate areas for construction to ensure activities remain outside of habitat • Develop and implement an erosion and sediment control plan before commencement of construction, ensure effective implementation of the plan with additional measures implemented as required for effect prevention of overland transport of silt and sediment. • Keep sediment and erosion control measures in place until disturbed areas have been stabilized (i.e., re-vegetated with native seed).	**Monitoring:** Conduct regular site inspections and monitoring of sediment and erosion controls where construction occurs within 30m of a feature, ensure construction best management practices are followed, by a designated on-site Environmental Monitor(s). Monitoring schedule should include weekly site visits during construction, prior to and post large rainfall events or significant snow event, daily during extended events and monthly during inactive construction periods and prior to stabilization of soils **Contingency Measures:** Notify MOE's Spills Action Centre for any spills; Assess and remediate affected soils and water. Ensure that additional sediment and erosion controls are available and on-site should additional controls be required, as identified by Environmental Monitor.