Environment



NextEra Energy Canada, ULC

# Project Modifications Report – Goshen Wind Energy Centre

Prepared by: AECOM 300 – 300 Town Centre Boulevard Markham, ON, Canada L3R 5Z6 905 477 1456 fax www.aecom.com

Project Number: 60155032

Date: January, 2013

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# Appendices

Appendix A. Original Project Location and Modified Project Location

## **Glossary of Terms**

EIS .....Environmental Impact Study MNR .....Ontario Ministry of Natural Resources MTCS .....Ministry of Tourism, Culture and Sport NextEra .....NextEra Energy Canada, ULC O.Reg. 359/09 .....Ontario Regulation 359/09 The Project .....Goshen Wind Energy Centre REA.....Renewable Energy Approval

# 1. Introduction

Goshen Wind, Inc., a wholly owned subsidiary of NextEra Energy Canada, ULC (NextEra), is proposing to construct a wind energy project in the Municipalities of Bluewater and South Huron, Huron County, Ontario. The following sections of this report describe the proposed modifications to this Project and to corresponding potential environmental effects and mitigation measures. The report also summarizes the edits to be made to the draft Renewable Energy Approval (REA) reports that were circulated for this Project as part of the public and municipal consultation review.

Please note that this report has been prepared for the purpose of the final public meeting and is not a formal REA report. Therefore it will not be included in the final REA submission.

### 1.1 The Proponent

The Project will be owned and operated by Goshen Wind, Inc., a subsidiary of NextEra. NextEra's indirect parent company is NextEra Energy Resources, LLC. The proponent has not changed since the release of Draft REA Reports for review; however, the proponent's address has changed and is provided in the table below.

The primary contacts for the Project are as follows:

Project Proponent	Project Consultant
Nicole Geneau Project Director NextEra Energy Canada, ULC 390 Bay Street, Suite 1720 Toronto, ON M5H 2Y2	Marc Rose Senior Environmental Planner AECOM 300-300 Town Centre Blvd. Markham, Ontario L3R 5Z6
Phone:1-416-364-9714 Email:Goshen.Wind@NextEraEnergy.com Website:www.NextEraEnergyCanada.com	Phone:905-477-8400 x388 Email:marc.rose@aecom.com

# 1.2 Project Study Area

The proposed Project is located in Huron County, within the Municipalities of Bluewater and South Huron (refer to Figure 2-1). The Project Study Area has not changed since the release of Draft REA Reports.

The following co-ordinates define the external boundaries of the Project Study Area:

Longitude	Latitude
-81.6753290	43.4155312
-81.3011931	43.3810955
-81.3303330	43.3036317
-81.7743607	43.2379854

# 2. Proposed Project Modifications

NextEra is proposing modifications to the Project design in response to landowner requests. These proposed project modifications are illustrated in Figure 2-1 and include the following:

- Realignment or relocation of the access roads to Turbines 5, 7, 23, 49, 66, 68, 75, and 77;
- Realignment or relocation of the access roads to three meteorological towers;
- Realignment or relocation of the collection lines to Turbines 7, 49, 68 and 75, and between Turbines 36, 37 and 64;
- Relocation of the laydown area for Turbine 4; and
- Relocation of the substation within the same parcel.

Tables 2-1 to 2-3 document the edits to the Draft REA reports made available for municipal and public review, specifically the Construction Plan Report, Design and Operations Report and Water Assessment and Water Body Report. Edits to the Project Description Report, which are not included in this report, reflect the edits to the other reports.

These modifications do not result in any new effects to those previously identified through the various studies conducted and documented in the Draft REA reports. Please note that the Natural Heritage Assessment and Environmental Impact Assessment Report Addendum, Stage 2 Archaeological Assessment Addendum, and the Heritage Assessment Addendum have been submitted to the Ministry of Natural Resources (MNR) and the Ministry of Tourism, Culture and Sport (MTCS), respectively, for review and sign-off.



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## 2.1 Edits to the Construction Plan Report

The edits made to the Construction Plan Report due to these project modifications and to comments received from review agencies including the MNR are summarized as follows:

#### Archaeology

- An increase in archaeological sites identified in the Stage 2 Archaeological Assessment and recommended for Stage 3 Archaeological Assessment.
- A greater number of displaced archaeological resources.

#### **Cultural Heritage**

 An increase in the number of structures identified as greater than 40 years old and with cultural heritage value or interest.

#### **Natural Heritage**

- Removal of significant valleylands as natural features requiring an Environmental Impact Study (EIS) due to a recent amendment to *O.Reg. 359/09*.
- Addition of the mitigation strategy to install sediment and erosion control fencing along edge of construction area if within 30 m of a woodland to address the potential effect of increased erosion and sedimentation resulting from clearing and grubbing, excavation, backfilling and stockpiling.
- Removal of the mitigation strategy to limit construction and decommissioning activities within 30 m of wetlands and woodlands during certain periods of the year for the potential effect of disturbance to or loss of Generalized Candidate Significant Wildlife Habitat as it was deemed unnecessary by the MNR.
- Addition of the mitigation strategy to identify locations of cavity trees and ensure clusters of cavity trees will remain present after tree removal is complete to address the potential effects on Bat Maternity Colonies and Red-headed Woodpecker habitat where vegetation removal is proposed.

#### **Other Resources**

- An increase in the distance between the Stephen landfill and proposed infrastructure; and
- An increase in the number of petroleum resources within 75 m of Project infrastructure based on a field review.

Table 2-1 documents the edits to the Construction Plan Report (September, 2012).

#### Table 2-1Edits to the Construction Plan Report

Section / Page	Original Text	
Section 3.1 / page 18	In 2011 and 2012, pedestrian surveys were conducted within the Project Study Area in support of the Stage 2 Archaeological Assessment, according to the 2011 <i>Standards and Guidelines for Consultant Archaeologists</i> issued by the Ontario Ministry of Tourism, Culture and Sport (MTCS) (Government of Ontario, 2011). A total of 61 archaeological sites were identified and 28 sites have been recommended for further Stage 3 archaeological assessment.	In 2011 and 2012, pedestrian surveys were conducted within the according to the 2011 <i>Standards and Guidelines for Consultant</i> . (MTCS) (Government of Ontario, 2011). A total of 61 <u>62</u> archaeo further Stage 3 archaeological assessment.
Section 3.1 / page 18	A Cultural Heritage Assessment (Golder, 2012) was also completed to identify built heritage and cultural heritage landscape resources related to the Euro-Canadian land use in the area dating prior to 1970. All work was carried out in accordance with the Ontario <i>Heritage Act</i> , the <i>Provincial Policy Statement</i> , and the <i>Environmental Assessment Act</i> . The report identified 98 structures (55 houses and 43 barns or barn complexes) as greater than 40 years old within the Project Study Area and as having general historical interest contributing to the character of the vernacular rural landscape. When applying the criteria set out in <i>Ontario Regulation 9/06</i> , 71 of these structures (35 houses and 36 barns) were determined to have cultural heritage value or interest. Following the evaluation of anticipated impacts, both direct and indirect, according to <i>InfoSheet #5</i> (Government of Ontario, 2006), no anticipated impacts were identified. As there are no anticipated impacts to the cultural heritage features, no further work is recommended.	A Cultural Heritage Assessment (Golder, 2012) was also completed to the Euro-Canadian land use in the area dating prior to 1970. <i>Provincial Policy Statement</i> , and the <i>Environmental Assessment</i> barn complexes) as greater than 40 years old within the Project character of the vernacular rural landscape. When applying the observed to have cultural heritad direct and indirect, according to <i>InfoSheet #5</i> (Government of Orimpacts to the cultural heritage features, no further work is recording to <i>InfoSheet</i> #5 (Bovernment of Context).
Section 3.1.1 / page 19	Disturbance or displacement of 28 archaeological resources identified through the Stage 2 Archaeological Assessment due to construction of project infrastructure.	Disturbance or displacement of 28 <u>33</u> archaeological resources of project infrastructure.
Table 3-1 / page 19	Potential Effect Disturbance or displacement of 28 archaeological resources identified through Stage 2 Assessment due to construction of project infrastructure.	Potential Effect Disturbance or displacement of 28 33 archaeological resources infrastructure.
Table 3-1 / page 20	Valleylands	Valleylands
Table 3-1 / page 20	Significant Wildlife Habitat The following significant wildlife habitats were confirmed or treated as significant within the 120 m Area of Investigation and within 120 m of qualifying project infrastructure, and were therefore included in the EIS. • Bat maternity colonies; • Amphibian woodland breeding habitat; • Habitat for plant species of conservation concern (multiple); • Habitat for bird species of conservation concern (Red-headed Woodpecker); • Waterfowl (Tundra Swan) stopover and staging areas; • Reptile hibernacula; • Turtle over-wintering habitat; and • Habitat for Insect Species of Conservation Concern (Azure Bluet).	<ul> <li>Significant Wildlife Habitat</li> <li>The following significant wildlife habitats were evaluated and det 120 m of qualifying project infrastructure, and were therefore car</li> <li>5 bat maternity colonies;</li> <li>One colonially-nesting bird breeding habitat (tree/shrub);</li> <li>4 amphibian woodland breeding habitats;</li> <li>6 habitats for plant species of conservation concern (multiple);</li> <li>One habitat for bird species of conservation concern (multiple);</li> <li>Bat maternity colonies;</li> <li>Amphibian woodland breeding habitats;</li> <li>Bat maternity colonies;</li> <li>Amphibian woodland breeding habitats;</li> <li>Habitat for bird species of conservation concern (multiple);</li> <li>Bat maternity colonies;</li> <li>Amphibian woodland breeding habitat;</li> <li>Habitat for plant species of conservation concern (multiple);</li> <li>Habitat for bird species of conservation concern (multiple);</li> <li>Habitat for bird species of conservation concern (Red-hea);</li> <li>Waterfowl (Tundra Swan) stopover and staging areas;</li> <li>Reptile hibernacula;</li> <li>Turtle over-wintering habitat; and</li> <li>Habitat for Insect Species of Conservation Concern (Azure);</li> </ul>
Table 3-1 / page 20	Significant Wildlife Habitat N/A	Significant Wildlife Habitat The following features were treated as significant for the purpose to whether the mitigation measures described herein will be app • 2 waterfowl stopover and staging areas (terrestrial); • 11 bat maternity colonies; • 2 turtle wintering areas; • 8 reptile hibernacula; • One deer wintering congregation area; • One deer movement corridor; and, • 4 amphibian woodland breeding habitats.
Table 3-1 / page 21	Significant Wildlife Habitat         The following candidate significant wildlife habitats were identified within the 120 m Area of Investigation however not within 120 m of qualifying project infrastructure, and were therefore included in the EIS as Generalized Candidate Significant Wildlife Habitat:         • Waterfowl nesting areas;         • Reptile hibernacula;         • Bat maternity colonies;         • Amphibian woodland breeding habitat;         • Mature forest stands (numerous);         • Rare vegetation communities;         • Turtle nesting habitat;         • Woodland raptor nesting habitat;         • Woodland raptor nesting habitat;	Significant Wildlife Habitat         The following candidate significant wildlife habitats were identified         project infrastructure, and were therefore included in the EIS as         • Waterfowl nesting areas;         • Reptile hibernacula;         • Bat maternity colonies;         • Amphibian woodland breeding habitat;         • Habitat of plant species of conservation concern (numerous)         • Mature forest stands;         • Rare vegetation communities;         • Turtle nesting areas;

#### **Revised Text**

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eted to identify built heritage and cultural heritage landscape resources related All work was carried out in accordance with the Ontario *Heritage Act*, the *at Act*. The report identified 98 <u>135</u> structures (<del>55</del> <u>67</u> houses and 43 <u>68</u> barns or Study Area and as having general historical interest contributing to the criteria set out in *Ontario Regulation 9/06*, 74 <u>99</u> of these structures (<del>35</del> <u>49</u> age value or interest. Following the evaluation of anticipated impacts, both intario, 2006), no anticipated impacts were identified. As there are no anticipated mmended.

identified through the Stage 2 Archaeological Assessment due to construction

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e of this submission and included in the EIS (in some cases, a determination as lied will be made based on the outcome of pre-construction surveys):

ed within the 120 m Area of Investigation however not within 120 m of qualifying Generalized Candidate Significant Wildlife Habitat:

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Section / Page	Original Text	Re
	<ul> <li>Habitat for area sensitive species: interior forest breeding birds;</li> <li>Seeps and springs; and</li> <li>Habitats of species of conservation concern (numerous).</li> </ul>	<ul> <li><u>Woodland raptor nesting habitat;</u></li> <li><u>Woodland area-sensitive bird breeding habitat;</u></li> <li><u>Terrestrial crayfish habitat; and</u></li> <li><u>Seeps and springs.</u></li> </ul>
		<ul> <li>The following candidate significant wildlife habitats were identified w project infrastructure, and were therefore included in the EIS as Ger</li> <li>Waterfowl nesting areas;</li> <li>Reptile hibernacula;</li> <li>Bat maternity colonies;</li> <li>Amphibian woodland breeding habitat;</li> <li>Amphibian wetland breeding habitat;</li> <li>Mature forest stands (numerous);</li> <li>Rare vegetation communities;</li> <li>Turtle nesting habitat;</li> <li>Woodland raptor nesting habitat;</li> <li>Colonial nesting Bird Breeding Habitat (Tree/Shrub);</li> <li>Habitat for area sensitive species: interior forest breeding bird</li> <li>Seeps and springs; and</li> <li>Habitats of species of conservation concern (numerous).</li> </ul>
Table 3-2 / page 25	Potential Effect	Potential Effect
	<ul> <li>Increased erosion and sedimentation resulting from clearing and grubbing, excavation, backfilling and stockpiling.</li> <li>Mitigation Strategy <ul> <li>Develop and implement an erosion and sediment control plan before commencement of construction as per Ontario Provincial Standard Specifications (OPSD 219.130).</li> <li>Utilize erosion blankets, erosion control fencing, straw bales, siltation bags, etc. For construction activities within 30 m of a wetland, woodland or water body, to mitigate potential excessive erosion and sedimentation. Extra erosion and sediment control materials should be kept on hand, (i.e., heavy duty silt fencing, straw bales).</li> <li>Keep sediment and erosion control measures in place until disturbed areas have been stabilized (i.e., re-vegetated).</li> <li>Schedule grading within 30 m of a watercourse or wetland to avoid times of high runoff volumes (spring and fall), wherever possible. Temporarily suspend work if high runoff volume is noted or excessive flows of sediment discharges occur until mitigation measures are in place.</li> <li>Re-vegetate temporary roads to pre-construction conditions as soon as possible after construction activities are complete using species native to Ontario in naturally vegetated areas.</li> </ul> </li> <li>Monitor on-site conditions (i.e., erosion and sediment control, spills, flooding, etc.) where construction occurs within 30 m of a feature on the following basis:     <ul> <li>Weekly during active construction periods;</li> <li>Prior to, during and post forecasted large rainfall events (&gt;20 millimetres in 24 hours) or significant snowmelt events (i.e., spring freshet);</li> <li>Daily during extended rain or snowmelt periods;</li> <li>Monthy during inactive construction periods</li></ul></li></ul>	<ul> <li>Increased erosion and sedimentation resulting from clearing and</li> <li>Mitigation Strategy</li> <li>Develop and implement an erosion and sediment control plan bet Specifications (OPSD 219.130).</li> <li>Utilize erosion blankets, erosion control fencing, straw bales, silta woodland or water body, to mitigate potential excessive erosion a kept on hand, (i.e., heavy duty silt fencing, straw bales).</li> <li>Check that erosion control tools are in good repair and properly fr prior to commencing daily construction activities.</li> <li>Keep sediment and erosion control measures in place until distur</li> <li>To avoid sedimentation in wetlands and watercourses, schedule runoff volumes, wherever possible. Temporarily suspend work if I occur until contingency measures are in place.</li> <li>Re-vegetate temporary roads to pre-construction conditions as sen native to Ontario in naturally vegetated areas.</li> <li>Monitor on-site conditions (i.e., erosion and sediment control, spi following basis:</li> <li>Weekly during active construction periods;</li> <li>Prior to, during and post forecasted large rainfall events (&gt;20 r Daily during extended rain or snowmelt periods;</li> <li>Monthly during inactive construction periods, where the site is</li> <li>Contingency Measures:</li> </ul>
	Suspend work if excessive flows of sediment discharges occur until additional mitigation measures are in place.	<ul> <li>Suspend work if excessive flows of sediment discharges occu erosion and sediment control materials kept on site, such as h</li> <li>Potential Effect</li> <li>Increased erosion and sedimentation resulting from clearing and</li> <li>Mitigation Strategy</li> <li>Develop and implement an erosion and sediment control plan be Specifications (OPSD 219.130).</li> <li>Utilize erosion blankets, erosion control fencing, straw bales, silta woodland or water body, to mitigate potential excessive erosion a kept on hand, (i.e., heavy duty silt fencing, straw bales).</li> <li>Keep sediment and erosion control measures in place until distur</li> <li>Schedule grading within 30 m of a watercourse or wetland to avo Temporarily suspend work if high runoff volume is noted or excess place.</li> <li>Re-vegetate temporary roads to pre-construction conditions as so native to Ontario in naturally vegetated areas.</li> </ul>

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- unctioning prior to conducting daily work and re-install or repair as required
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		<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Monitor on-site conditions (i.e., erosion and sediment controfollowing basis:         <ul> <li>Weekly during active construction periods;</li> <li>Prior to, during and post forecasted large rainfall even freshet);</li> <li>Daily during extended rain or snowmelt periods;</li> <li>Monthly during inactive construction periods, where t Contingency Measures:             <ul> <li>Suspend work if excessive flows of sediment dischart</li> </ul> </li> </ul></li></ul>
Table 3-2 / page 25	<ul> <li>Potential Effect <ul> <li>Removal/disturbance of topsoil and increased soil compaction from manoeuvring of heavy machinery, excavation and backfilling.</li> </ul> </li> <li>Mitigation Strategy <ul> <li>Minimize vehicle traffic on exposed soils, avoid compacting or other hardening of natural ground surface, and avoid the movement of heavy machinery on areas with sensitive slopes.</li> <li>Where feasible, lighter vehicles and lighter machinery should be used in and around natural areas.</li> <li>Any vehicles used within natural areas should use wide-based tires. Tracked vehicles should be avoided.</li> </ul> </li> </ul>	<ul> <li>Potential Effect</li> <li>Removal/disturbance of topsoil and increased soil compaction</li> <li>Mitigation Strategy</li> <li>Minimize vehicle traffic on exposed soils, avoid compacting of machinery on areas with sensitive slopes.</li> <li>Where feasible, lighter vehicles and lighter machinery should</li> <li>Any vehicles used within natural areas should use wide-base</li> </ul>
Table 3-2 / page 26	Potential Effect         • Damage to vegetation while operating equipment.         Mitigation Strategy         • Keep vegetation removal to a minimum and limited to non-significant habitats (e.g., hedgerows).         • For roadside collection line routes, vegetation removal (if any) will be kept to a minimum and will be limited to the road right-of-way.         • Where construction is to occur within 30 m of natural features, install and maintain protective fencing to clearly define the construction area and prevent accidental damage to vegetation.         • Trees at risk of being damaged during construction should be pruned through implementation of proper arboricultural techniques.         • Where excavation for construction of access roads or collection lines is conducted within the rooting zone of trees (e.g., within 5 m of the dripline), proper root pruning measures should be implemented to protect tree roots.         Monitoring Plan and Contingency Measures         • Undertake monthly site inspections to ensure that only specified trees are removed, protective fencing is intact and that there is no damage caused to the remaining trees during construction, damaged trees should be pruned through implementation of proper arboricultural techniques, under supervision of an Arborist or Forester.         • In the event that trees are damaged during construction, damaged trees should be pruned through implementation of proper arboricultural techniques, under supervision of an Arborist or Forester.         • Consultation with MNR to determine additional contingency measures if necessary.	<ul> <li>Potential Effect Damage to vegetation while operating equipment.</li> <li>Mitigation Strategy         <ul> <li>Keep vegetation removal to a minimum and limited to non-si</li> <li>For roadside collection line routes, vegetation removal (if any</li> <li>Where construction is to occur within 30 m of natural feature and prevent accidental damage to vegetation <u>or intrusion int</u></li> <li>Where excavation for construction of access roads or collect dripline for collection line installation within road right-of-way</li> <li>Keep vegetation removal to a minimum and limited to non-si</li> <li>For roadside collection line routes, vegetation removal (if any</li> <li>Where construction is to occur within 30 m of natural feature and prevent accidental damage to vegetation.</li> <li>Trees at risk of being damaged during construction should b</li> <li>Where excavation for construction of access roads or collect dripline), proper root pruning measures should be implemen</li> </ul> </li> <li>Monitoring Plan and Contingency Measures         <ul> <li>Undertake monthly site inspections to ensure that only specic caused to the remaining trees during construction.</li> <li>Contingency Measures:                 <ul> <li>Repair protective fencing if damaged.</li> <li>In the event that trees are damaged during construction, dar techniques, under supervision of an Arborist or Forester.</li> <li>If accidental damage to habitat occurs, habitat restoration with Consultation with MIDE to dotomino additional contingency</li></ul></li></ul></li></ul>
Table 3-2 / page 27	<ul> <li>Potential Effect <ul> <li>Disturbance to or loss of wildlife habitat, including active bird nests.</li> </ul> </li> <li>Mitigation Strategy <ul> <li>Schedule vegetation removal outside of breeding season (May 1 to July 30) where possible.</li> <li>Undertake active nest surveys if clearing of vegetation must take place during this period.</li> <li>Construction and decommissioning activities within 30 m of woodlands or wetlands should occur during daylight hours (7:00 am to 7:00 pm), wherever possible.</li> </ul> </li> <li>Monitoring Plan and Contingency Measures <ul> <li>Undertake monthly site inspections to ensure that only specified trees are removed, protective fencing is intact and that there is no damage caused to the remaining trees during construction.</li> <li>Contingency Measures: <ul> <li>In the event that trees are damaged during construction, damaged trees should be pruned through implementation of proper arboricultural techniques, under supervision of an Arborist or Forester.</li> <li>Consultation with MNR to determine additional contingency measures if necessary.</li> </ul> </li> </ul></li></ul>	<ul> <li>Potential Effect Disturbance to or loss of wildlife habitat, including active bird ne Mitigation Strategy <ul> <li>Schedule vegetation removal outside of breeding season (M</li> <li>Undertake active nest surveys prior to construction if clearing</li> <li>Only apply herbicides (if required) when wind speeds are low practices).</li> <li>Only use herbicides (if required) approved for use adjacent the agricultural practices).</li> <li>Schedule vegetation removal outside of breeding season (M</li> <li>Undertake active nest surveys if clearing of vegetation must.</li> <li>Construction and decommissioning activities within 30 m of wherever possible.</li> </ul> </li> <li>Monitoring Plan and Contingency Measures <ul> <li>Undertake monthly site inspections to ensure that only special caused to the remaining trees during construction.</li> </ul> </li> </ul>

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Id be used in and around natural areas. sed tires. Tracked vehicles should be avoided.

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y) will be kept to a minimum and will be limited to the road right-of-way. es, install and maintain protective fencing to clearly define the construction area to the natural feature.

tion lines is conducted <u>adjacent to the dripline of woodlands (or within the</u> /s), implement proper root pruning measures to protect tree roots. ignificant habitats (e.g., hedgerows).

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be pruned through implementation of proper arboricultural techniques. tion lines is conducted within the rooting zone of trees (e.g., within 5 m of the sted to protect tree roots.

ified trees are removed, protective fencing is intact and that there is no damage

maged trees should be pruned through implementation of proper arboricultural

ill occur using suitable native species. measures if necessary.

ests.

May 1 to July 30) where possible. ng of vegetation must take place during this period. w and no significant precipitation is expected (does not apply to agricultural

to water bodies, riparian buffers, or woodland edges (does not apply to

May 1 to July 30) where possible. t take place during this period. woodlands or wetlands should occur during daylight hours (7:00 am to 7:00 pm),

ified trees are removed, protective fencing is intact and that there is no damage

Section / Page	Original Text	я
		<ul> <li>Contingency Measures:</li> <li>In the event that trees are damaged during construction, damage techniques, under supervision of an Arborist or Forester.</li> <li><u>If accidental damage to habitat occurs, habitat restoration will</u></li> <li>Consultation with MNR to determine additional contingency measurements</li> </ul>
Table 3-2 / page 28	<ul> <li>Potential Effect <ul> <li>Soil / water contamination by oils, gasoline, grease and other materials from spills during directional drilling.</li> </ul> </li> <li>Mitigation Strategy <ul> <li>Conduct all drilling by licensed drillers in accordance with Regulation 903 under Ontario Water Resources Act, R.S.O. 1990.</li> <li>Develop and implement emergency spills plan outlining steps to contain any chemicals or to avoid contamination of adjacent features.</li> <li>Collect drill cuttings as they are generated and place in a soil bin or bag for off-site disposal.</li> <li>Ensure drill depth is at an appropriate depth below feature to reduce the risk of a "frac-out".</li> <li>Install protective fencing around vegetation to prevent accidental damage.</li> </ul> </li> </ul>	<ul> <li>Potential Effect</li> <li>Soil / water contamination by oils, gasoline, grease and other m</li> <li>Mitigation Strategy</li> <li>Conduct all drilling by licensed drillers in accordance with Regu</li> <li>Develop Frac-Out" Contingency Plan and implement emergence contamination of adjacent features.</li> <li>Collect drill cuttings as they are generated and place in a soil bit</li> <li>Ensure drill depth is at an appropriate depth below feature to respecific geotechnical conditions and will take into account soil t information.</li> <li>Install protective fencing around vegetation to prevent accidental</li> </ul>
Table 3-2 / page 28	<ul> <li>Potential Effect <ul> <li>Changes in surface water drainage patterns.</li> <li>Obstruction of lateral flows in surface water to wetlands.</li> </ul> </li> <li>Mitigation Strategy <ul> <li>Minimize changes in land contours and natural drainage; maintain timing and quantity of flows.</li> <li>Any grading of lands adjacent to natural features should match existing grades at the identified set-back, or buffer from the features.</li> </ul> </li> </ul>	<ul> <li>Potential Effect</li> <li>Changes in surface water drainage patterns.</li> <li>Obstruction of lateral flows in surface water to wetlands.</li> <li>Mitigation Strategy</li> <li>Minimize changes in land contours and natural drainage; maint</li> <li>Any grading of lands adjacent to natural features should match</li> <li>Control quantity and quality of stormwater discharge using best complete a Stormwater Pollution Prevention Study to address a Maintenance Building prior to construction).</li> </ul>
Table 3-3 / page 30	Potential Effect         • Accidental intrusion resulting in damage to vegetation or wildlife habitat form or function within significant wetlands, woodlands and / or wildlife habitat.         Performance Objectives         • Minimize potential for accidental intrusion into significant features.         Mitigation Strategy         • Maintain 30 m setback from significant wetlands and woodlands, where possible or a minimum 5 m setback (measured from the dripline of trees or wetland edge if trees are absent).         • Install and maintain protective fencing to clearly define the construction area and prevent accidental damage to vegetation.         • Clearly delineate habitat boundaries using protective fencing to ensure that construction activities occur outside the habitat boundaries.         Residual Effects         • Damage to vegetation or wildlife habitat minimized through application of mitigation measures.         • Low likelihood and limited magnitude of effect as a result.         Monitoring Plan and Contingency Measures         • Undertake monthly site inspections to ensure that protective fencing is intact and that there is no damage caused during construction.         Contingency Measures:         • In the event that trees are damaged during construction, damaged trees should be pruned through implementation of proper arboricultural techniques, under supervision of an Arborist or Forester.	<ul> <li>Potential Effect         <ul> <li>Accidental intrusion into natural features resulting in damage to</li> <li>Accidental intrusion resulting in damage to vegetation or wildlife wildlife habitat.</li> </ul> </li> <li>Performance Objectives         <ul> <li>Avoid accidental intrusion into significant features.</li> <li>Minimize potential for accidental intrusion into significant features.</li> </ul> </li> <li>Minimize potential for accidental intrusion into significant features.</li> <li>Mitigation Strategy         <ul> <li>Maintain 30 m setback from significant features, where possible edge if trees are absent).</li> <li>Limit vegetation removal for the transmission line to the existing.</li> <li>Establish 30 m setback to significant wetlands from new transm</li> <li>Where construction occurs within 30 m, install and maintain prodamage to vegetation.</li> <li>Maintain 30 m setback from significant wetlands and woodlands trees or wetland edge if trees are absent).</li> <li>Install and maintain protective fencing to clearly define the construction occurs within 30 m, install and mould trees or wetland edge if trees are absent).</li> </ul> </li> <li>Install and maintain protective fencing to clearly define the construction will be avoided through clear delineation of Negligible residual effects.</li> <li>Accidental intrusion will be avoided through clear delineation of Negligible residual effects.</li> <ul> <li>Damage to vegetation or wildlife habitat minimized through app</li> <li>Low likelihood and limited magnitude of effect as a result.</li> </ul> <li>Monitoring Plan and Contingency Measures         <ul> <li>Undertake weekly site inspection by an Environmental Monitor during construction.</li> <li>Repair protective fencing if damaged.</li></ul></li></ul>

ged trees should be pruned through implementation of proper arboricultural

occur using suitable native species. easures if necessary.

naterials from spills during directional drilling.

lation 903 under Ontario Water Resources Act, R.S.O. 1990. y spills plan outlining steps to contain any chemicals or to avoid

in or bag for off-site disposal. educe the risk of a "frac-out". Drilling depth will be determined based on siteype, soil variances and porosity, as derived from exploratory borehole

al damage.

tain timing and quantity of flows.

existing grades at the identified set-back, or buffer from the features. t management practices (e.g., use of a permeable surface for access roads, any potential effects associated with stormwater runoff for the Operations and

the form or function of significant wetlands and / or woodlands. e habitat form or function within significant wetlands, woodlands and / or

e, or a minimum 5 m setback (measured from the dripline of trees or feature

g road right-of-way at WET-053. nission line pole locations, where possible. ptective fencing to clearly define the construction area and prevent accidental

s, where possible or a minimum 5 m setback (measured from the dripline of

struction area and prevent accidental damage to vegetation. ensure that construction activities occur outside the habitat boundaries.

boundaries and protective fencing.

lication of mitigation measures.

to ensure that protective fencing is intact and that there is no damage caused

of proper arboricultural techniques, under supervision of an Arborist or

ation will occur utilizing suitable native species. ncing is intact and that there is no damage caused during construction.

Section / Page	Original Text	
		Contingency Measures:     In the event that trees are damaged during construction, dam techniques, under supervision of an Arborist or Forester.
Table 3-3 / page 30	N/A	Potential Effect     Accidental intrusion into bat maternity colonies causing habita     Performance Objectives
		<u>Avoid accidental intrusion into natural features.</u> <u>Mitigation Strategy</u> <u>Clearly delineate construction boundaries where construction</u> <u>activities accur outside the beliet the underice</u>
		<u>Residual Effects</u> <u>Habitat damage will be avoided through clear delineation of b</u> <u>Negligible residual effects.</u>
		<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Undertake weekly site inspections by an Environmental Monit caused during construction.</li> </ul>
		<ul> <li>Contingency Measures:</li> <li>Repair protective fencing if damaged.</li> <li>Any damaged trees will be pruned through implementation of</li> <li>If accidental damage to habitat occurs, habitat restoration will</li> </ul>
Table 3-3 / page 30	N/A	Potential Effect     Accidental intrusion into turtle wintering areas causing habitat
		<ul> <li><u>Avoid accidental intrusion into habitat.</u></li> <li><u>Mitigation Strategy</u></li> <li><u>Clearly delineate habitat boundaries within 10 m of the habitat outside the habitat boundaries.</u></li> </ul>
		<ul> <li><u>Residual Effects</u></li> <li><u>Disruption to turtle wintering habitats avoided through habitat</u></li> <li><u>Negligible residual effects.</u></li> </ul>
		<ul> <li><u>Monitoring Plan and Contingency Measures</u></li> <li><u>Undertake weekly site inspections by an Environmental Monit</u> caused during construction.</li> </ul>
		Contingency Measures:     Repair protective fencing if damaged.     Consultation with MNR to determine additional contingency measurements
Table 3-3 / page 30	N/A	Potential Effect     Accidental intrusion into reptile hibernacula causing habitat da     Performance Objectives     Avoid accidental intrusion into natural feature.     Avoid damage to rock pile(s).
		<ul> <li>Mitigation Strategy</li> <li>Clearly delineate habitat boundaries where construction will o occur outside the natural feature and avoid direct disturbance</li> </ul>
		<ul> <li><u>Residual Effects</u></li> <li><u>Habitat damage will be avoided and mortality minimized throu</u></li> <li><u>Negligible residual effects.</u></li> </ul>
		<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Undertake weekly site inspections by an Environmental Monit caused during construction.</li> </ul>

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n will occur within 10 m using protective fencing to ensure that construction

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f proper arboricultural techniques, under supervision of an Arborist or Forester. Il occur using suitable native species.

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occur within 10 m using protective fencing to ensure that construction activities e to the feature (e.g., rock pile).

ugh clear habitat delineation.

itor to ensure that protective fencing is intact and that there is no damage

	Section / Page	Original Text	
			Contingency Measures:     Repair protective fencing if damaged.     Consultation with MNR to determine additional contingency r
-	Table 3-3 / page 31	N/A	Potential Effect     Risk of soil or water contamination resulting from accidental s     Performance Objectives     Minimize soil or water contamination.
			<ul> <li><u>Mitigation Strategy</u></li> <li><u>Develop and implement emergency spills plan outlining steps</u> <u>features.</u></li> </ul>
			<ul> <li><u>Soil and water contamination minimized through application of</u></li> <li><u>Low likelihood and limited magnitude of effect as a result.</u></li> </ul>
			Monitoring Plan and Contingency Measures     Contractor to conduct routine inspections of construction equ     Develop an emergency spills plan.
			<ul> <li>Contingency Measures:</li> <li>In the event of a spill, immediately stop all work until the spill</li> <li>Notify MOE's Spills Action Centre of any leaks or spills.</li> <li>Assess and remediate affected soils and water by using spill</li> <li>If a spill enters a wetland, collect and analyze water samples</li> <li>Monitor daily until cleanup is completed</li> </ul>
	Table 3-3 / page 31	N/A	Potential Effect     Increased dust accumulation on peripheral wetland vegetation
			<ul> <li><u>Performance Objectives</u></li> <li><u>Minimize dust accumulation on peripheral vegetation.</u></li> </ul>
			<ul> <li>Mitigation Strategy</li> <li>Use of water as a dust suppressant within the construction for wetland.</li> </ul>
			Accumulation of dust on peripheral vegetation will be minimiz           Some residual effects of limited magnitude likely.
			Monitoring Plan and Contingency Measures     Daily monitoring of areas where active construction is occurring Monitor.
			Contingency Measures:     If dust accumulation on wetland plants occurs, spray down pl
	Table 3-3 / page 32	Potential Effect           • Increased erosion and sedimentation resulting from clearing and grubbing, excavation, backfilling and stockpiling           Monitoring Plan and Contingency Measures	<ul> <li>Potential Effect</li> <li>Increased erosion and sedimentation resulting from clearing and/or woodlands.</li> </ul>
		<ul> <li>Monitor on-site conditions (i.e., erosion and sediment control, spills, flooding, etc.) where construction occurs within 30 m of a feature on the following basis: <ul> <li>Weekly during active construction periods;</li> <li>Prior to, during and post forecasted large rainfall events (&gt;20 millimetres in 24 hours) or significant snowmelt events (i.e., spring freshet);</li> <li>Daily during extended rain or snowmelt periods;</li> <li>Monthly during inactive construction periods, where the site is left alone for 30 days or longer.</li> </ul> </li> </ul>	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Monitor on-site conditions (i.e., erosion and sediment control Environmental Monitor on the following basis:         <ul> <li>Daily during active construction periods;</li> <li>Prior to, during and post forecasted large rainfall even freshet);</li> <li>Daily during extended rain or snowmelt periods;</li> </ul> </li> </ul>
		<ul> <li>Contingency Measures:</li> <li>Suspend work if excessive flows of sediment discharges occur until additional mitigation measures are in place.</li> <li>For construction of the transmission line at Azure Bluet Habitat Feature, Turtle Over-Wintering Habitat Feature and Amphibian Woodland Breeding Habitat Features:</li> <li>Monitor condition of the pond during on-site monitoring events at frequency described above.</li> </ul>	Monthly during inactive construction periods, where th     Monitor on-site conditions (i.e., erosion and sediment control     woodland feature on the following basis: <u>Weekly during active construction periods;</u> <u>Prior to, during and post forecasted large rainfall events</u>
		• Analyze water samples for general chemistry (e.g., temperature, pH, dissolved oxygen, and conductivity), suspended solids, turbidity,	Daily during extended rain or snowmelt periods;

measures if necessary.

spills of fuel, etc.

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of mitigation measures.

ipment for leaks / spills.

is cleaned up.

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potprint along areas where construction is located within 5 m of a significant

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ing within 5 m of a significant wetland by Environmental

lants with water.

and grubbing, excavation, backfilling and stockpiling near significant wetlands

, flooding, etc.) where construction occurs within 5 m of a wetland feature by an

nts (>20 millimetres in 24 hours) or significant snowmelt events (i.e., spring

ne site is left alone for 30 days or longer. , spills, flooding, etc.) where construction occurs within 30 m of a wetland or

s (>20 millimetres in 24 hours) or significant snowmelt events (i.e., spring freshet);

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	nutrients and total metals (e.g., copper, iron, zinc and aluminum) during and after construction.	Monthly during inactive construction periods, where the
	Contingency Measures: • If negative effects to the pond are detected, corrective measures will be taken, to be determined through consultation with MNR. These habitat compensation or restoration measures will be described in a Compensation Plan, to be submitted to MNR.	<ul> <li><u>Suspend work if excessive flows of sediment discharges occur</u> erosion and sediment control materials kept on site such as silt</li> <li>Monitor on site conditions (i.e., erosion and sediment control, si following basis:</li> <li>Weekly during active construction periods;</li> <li>Prior to, during and post forecasted large rainfall events (&gt;20 m</li> <li>Daily during extended rain or snowmelt periods;</li> <li>Monthly during inactive construction periods, where the site is le</li> <li>Contingency Measures:</li> <li>Suspend work if excessive flows of sediment discharges occur</li> <li>For construction of the transmission line at Azure Bluet Habitat Breeding Habitat Features:</li> <li>Monitor condition of the pond during on site monitoring events and analyze water samples for general chemistry (e.g., temperature nutrients and total metals (e.g., copper, iron, zinc and aluminum Contingency Measures:</li> <li>If negative effects to the pond are detected, corrective measure habitat expensed in a restaured and events and total metals (e.g., temperature basis of the pond are detected, corrective measure</li> </ul>
Table 3-3 / page 33	Potential Effect	Potential Effect
	<ul> <li>Soil/water contamination resulting from accidental spills.</li> <li>Performance Objectives</li> <li>Minimize soil/water contamination.</li> </ul>	<ul> <li>Soil/water contamination resulting from accidental spills.</li> <li>Performance Objectives</li> <li>Minimize soil/water contamination.</li> </ul>
	<ul> <li>Mitigation Strategy</li> <li>Develop and implement emergency spills plan outlining steps to contain any chemicals or to avoid contamination of adjacent wetland features.</li> </ul>	Mitigation Strategy      Develop and implement emergency spills plan outlining steps to a
	<ul> <li>Residual Effects</li> <li>Water contamination minimized through application of mitigation measures.</li> <li>Low likelihood and limited magnitude of effect as a result.</li> </ul>	<ul> <li>Residual Effects</li> <li>Water contamination minimized through application of mitigation</li> <li>Low likelihood and limited magnitude of effect as a result.</li> </ul>
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Conduct daily inspections of construction equipment for leaks / spills.</li> <li>Implement contingency measures in the event of a spill.</li> </ul>	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Conduct daily inspections of construction equipment for leaks /</li> <li>Implement contingency measures in the event of a spill.</li> </ul>
	<ul> <li>Contingency Measures:</li> <li>In the event of a spill, immediately stop all work until the spill is cleaned up.</li> <li>Install a spill collection pad for refuelling and maintenance.</li> <li>Notify MOE's Spills Action Centre of any leaks or spills.</li> <li>Assess and remediate affected soils and water by using spill kit kept on site.</li> <li>For spills near wetlands, analyze water samples for general chemistry (e.g., temperature, pH, dissolved oxygen, and conductivity), suspended solids, turbidity, nutrients and total metals (e.g., copper, iron, zinc and aluminum).</li> <li>Monitor daily to ensure proper cleanup is completed.</li> </ul>	<ul> <li>Contingency Measures:</li> <li>In the event of a spill, immediately stop all work until the spill is</li> <li>Install a spill collection pad for refuelling and maintenance.</li> <li>Notify MOE's Spills Action Centre of any leaks or spills.</li> <li>Assess and remediate affected soils and water by using spill kit</li> <li>For spills near wetlands, analyze water samples for general che suspended solids, turbidity, nutrients and total metals (e.g., cop</li> <li>Monitor daily to ensure proper cleapup is completed.</li> </ul>
Table 3-3 / page 33	Potential Effect	Potential Effect
	<ul> <li>Increased dust accumulation on peripheral wetland vegetation, causing damage to wetland plants resulting from construction of access roads where the minimum 5 m setback from dripline will be applied to Significant Wetland Features.</li> <li>Performance Objectives</li> <li>Minimize dust accumulation on peripheral vegetation.</li> </ul>	<ul> <li>Increased dust accumulation on peripheral wetland vegetation, roads where the minimum 5 m setback from dripline will be app</li> <li>Performance Objectives</li> <li>Minimize dust accumulation on peripheral vegetation.</li> </ul>
	<ul> <li>Mitigation Strategy</li> <li>Use of water as a dust suppressant along areas where construction is located within 5 m of a significant wetland.</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>Use of water as a dust suppressant along areas where construct</li> </ul>
	<ul> <li>Residual Effects</li> <li>Accumulation of dust on peripheral vegetation will be minimized through the application of mitigation measures.</li> <li>Residual effects likely however limited magnitude of effect as a result given the application of mitigation measures.</li> </ul>	<ul> <li>Residual Effects</li> <li>Accumulation of dust on peripheral vegetation will be minimized</li> <li>Residual effects likely however limited magnitude of effect as a</li> </ul>
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Daily monitoring of areas where active construction is occurring within 5 m of a significant wetland by Environmental Monitor.</li> <li>Contingency Measures:</li> <li>If dust accumulation on wetland plants occurs, spray down plants with water.</li> </ul>	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Daily monitoring of areas where active construction is occurring Contingency Measures:</li> <li>If dust accumulation on wetland plants occurs, spray down plan</li> </ul>

e site is left alone for 30 days or longer.

r until additional mitigation measures are in place (e.g., installation of extra ilt fencing, straw bales, etc.). spills, flooding, etc.) where construction occurs within 30 m of a feature on the

millimetres in 24 hours) or significant snowmelt events (i.e., spring freshet);

left alone for 30 days or longer.

r until additional mitigation measures are in place. It Feature, Turtle Over-Wintering Habitat Feature and Amphibian Woodland

s at frequency described above.re, pH, dissolved oxygen, and conductivity), suspended solids, turbidity, im) during and after construction.

res will be taken, to be determined through consultation with MNR. These ad in a Compensation Plan, to be submitted to MNR.

contain any chemicals or to avoid contamination of adjacent wetland features.

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Section / Page	Original Text	
Table 3-3 / page 34	<ul> <li>Potential Effect</li> <li>Changes in surface water drainage patterns resulting in effects to soil moisture and species composition of vegetation where the minimum 5 m setback from dripline will be applied to Significant Wetland Features.</li> </ul>	Potential Effect     Changes in surface water drainage patterns resulting in effects     m setback from dripline will be applied to Significant Wetland F
	<ul> <li>Performance Objectives</li> <li>No effects to soil moisture and species composition of vegetation.</li> </ul>	Performance Objectives     No effects to soil moisture and species composition of vegetat
	<ul> <li>Mitigation Strategy</li> <li>Ensure Best Management Practices are used to maintain current drainage patterns.</li> </ul>	Mitigation Strategy      Ensure Best Management Practices are used to maintain current
	<ul> <li>Residual Effects</li> <li>Changes in surface water drainage patterns will be minimized through the application of mitigation measures.</li> <li>Low likelihood and limited magnitude of effect as a result.</li> </ul>	<ul> <li>Residual Effects</li> <li>Changes in surface water drainage patterns will be minimized</li> <li>Low likelihood and limited magnitude of effect as a result.</li> </ul>
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Daily monitoring of areas where active construction is occurring within 5 m of a significant wetland by Environmental Monitor.</li> </ul>	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Daily monitoring of areas where active construction is occurrin</li> </ul>
7.11.00/ 0/	<ul> <li>Contingency Measures:</li> <li>If surface water drainage alterations are detected, undertake corrective measures to restore drainage patterns.</li> </ul>	Contingency Measures:     If surface water drainage alterations are detected, undertake c
Table 3-3 / page 34	<ul> <li>Optimize Lifect</li> <li>Unplanned intrusion into significant woodlands/wetlands in event of equipment malfunction due to directional drilling and risk of sedimentation or erosion into significant wetlands when directionally drilling.</li> </ul>	Potential Effect     Unplanned intrusion into significant wetlands and / or woodlan     Risk of soil or water contamination from spills during directions
	<ul> <li>Performance Objectives</li> <li>Minimize potential for accidental intrusion and sedimentation or erosion into significant features.</li> </ul>	Risk of sedimentation or erosion into significant wetlands and     Unplanned intrusion into significant woodlands/wetlands in eve     adjacentation or erosion into significant woodlands/wetlands in eve
	<ul> <li>Where feasible, wetland/woodland crossings will be within existing right-of-ways adjacent to wetland/woodland areas.</li> <li>Where feasible, wetland/woodland crossings will be completed via horizontal directional drilling as per O. Reg. 359/09.</li> <li>Locate entrance and exit pits at least 30 m from feature edge.</li> <li>Install protective fencing around vegetation to prevent accidental damage.</li> <li>Ensure drill depth is at an appropriate depth below wetland to reduce the risk of a "frac-out".</li> <li>Restore drilling sites to pre-construction conditions once construction is complete.</li> <li>Develop and implement an emergency spills plan outlining steps to contain any chemicals and avoid contamination of adjacent wetland features. As part of this plan, "frac-out" provisions will be provided.</li> <li>Install sediment and erosion control fencing along edge of wetland if within 30 m as per Ontario Provincial Standard Specifications (OPSD 219.130).</li> <li>Residual Effects <ul> <li>Risk of unplanned intrusion and sedimentation or erosion into feature due to directional drilling will be minimized through the use of mitigation measures.</li> <li>Moderate likelihood; if accidental damage occurs, negative effects may be measurable but would represent a small change relative to existing conditions.</li> </ul> </li> <li>Monitoring Plan and Contingency Measures <ul> <li>See directional drilling above.</li> </ul> </li> </ul>	<ul> <li>Performance Objectives</li> <li>Minimize potential for accidental intrusion into significant featu</li> <li>Minimize erosion, sedimentation and turbidity during directiona</li> <li>Minimize potential for accidental intrusion and sedimentation of</li> <li>Minimize potential for accidental intrusion and sedimentation of</li> <li>Mitigation Strategy</li> <li>Where feasible, wetland crossings will be within existing right- Crossings will be completed via horizontal directional drilling.</li> <li>Locate entrance and exit pits at least 30 m from feature edge.</li> <li>Install sediment fencing as per Ontario Provincial Standard Sp</li> <li>Ensure drill depth is at an appropriate depth below feature to r</li> <li>Restore drilling sites to pre-construction conditions once const</li> <li>Develop Frac-Out" Contingency Plan outlining steps to contair</li> <li>Where feasible, wetland/woodland crossings will be within exist</li> <li>Where features cannot be avoided, crossings will be complete</li> <li>Locate entrance and exit pits at least 30 m from feature edge.</li> <li>Install protective fencing around vegetation to prevent accident</li> <li>Ensure drill depth is at an appropriate depth below wetland to</li> <li>Restore drilling sites to pre-construction conditions once const</li> <li>Develop Frac-Out" Contingency Plan outlining steps to contair</li> <li>Where features cannot be avoided, crossings will be complete</li> <li>Locate entrance and exit pits at least 30 m from feature edge.</li> <li>Install protective fencing around vegetation to prevent accident</li> <li>Ensure drill depth is at an appropriate depth below wetland to</li> <li>Restore drilling sites to pre-construction conditions once const</li> <li>Develop and implement an emergency spills plan outlining step features. As part of this plan, "frac-out" provisions will be prov</li> <li>Install sediment and erosion control fencing along edge of wet 219.130)</li> </ul>
		<ul> <li>Residual Effects</li> <li><u>Risk of unplanned intrusion into wetland due to directional drill erosion, minimized through the application of mitigation measu</u></li> <li><u>Moderate likelihood; if unplanned intrusion occurred, negative to existing conditions.</u></li> <li>Risk of unplanned intrusion and sedimentation or erosion into mitigation measures.</li> <li><u>Moderate likelihood; if accidental damage occurs, negative effective conditions.</u></li> </ul>

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I/or woodlands wetlands when directionally drilling. ent of equipment malfunction due to directional drilling and risk of ionally drilling.

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ed via horizontal directional drilling as per O. Reg. 359/09.

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ling, resulting in soil or water contamination and / or sedimentation and ures. effects may be measurable but would likely represent a small change relative

feature due to directional drilling will be minimized through the use of

fects may be measurable but would represent a small change relative to

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		<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Monitor directional drilling for the duration of such activities by not occur, and if it does, to ensure that there are no effects on a contingency Measures:</li> <li>In the event of a "frac-out", immediately stop all work, including</li> <li>Monitor "frac-out" for 4 hours to determine if the drilling mud consuspend sediments in the water column. If drilling mud does n curtain).</li> <li>If the fracture becomes excessively large, engage a spill respoint the spill affects an area that is vegetated, the area will be see allowed to re-grow from existing vegetation. Revegetated area confirm revegetation is successful.</li> <li>Document post-cleanup conditions with photographs and prepared.</li> </ul>
Table 3-3 / page 34	Potential Effect	"frac-out" and measures implemented to prevent recurrence. F     See directional drilling above.     Potential Effect
	<ul> <li>Unintended damage to adjacent vegetation due to proximity of transmission line to significant wetlands/woodlands, small size of the right-of- way and constrained work area.</li> </ul>	<ul> <li>Unintended damage to adjacent vegetation due to proximity of way and constrained work area.</li> </ul>
	<ul> <li>Performance Objectives</li> <li>Minimize potential for unintended damage to significant wetlands/woodlands.</li> </ul>	<ul> <li>Performance Objectives</li> <li>Minimize potential for unintended damage to significant wetlan</li> </ul>
	<ul> <li>Mitigation Strategy</li> <li>Limit vegetation removal within significant wetlands to the existing right-of-way.</li> <li>Maintain 30 m setback from significant wetlands and woodlands, where possible or a minimum 5 m setback (measured from the dripline of trees or wetland edge if trees are absent).</li> <li>Install protective fencing around vegetation to prevent accidental damage.</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>Limit vegetation removal within significant wetlands to the exist</li> <li>Maintain 30 m setback from significant wetlands and woodland trees or wetland edge if trees are absent).</li> <li>Install protective fencing around vegetation to prevent accident</li> </ul>
	<ul> <li>Residual Effects</li> <li>Damage to vegetation will be minimized through the application of mitigation measures.</li> <li>Construction effects unlikely; if accidental damage occurred, negative effects may be measurable but would represent a small change relative to existing conditions.</li> </ul>	<ul> <li>Residual Effects</li> <li>Damage to vegetation will be minimized through the application</li> <li>Construction effects unlikely; if accidental damage occurred, no relative to existing conditions.</li> </ul>
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Undertake monthly site inspections to ensure that protective fencing is intact and that there is no damage caused during construction.</li> </ul>	Monitoring Plan and Contingency Measures  Undertake monthly site inspections to ensure that protective fe
	<ul> <li>Contingency Measures:</li> <li>In the event that trees are damaged during construction, damaged trees should be pruned through implementation of proper arboricultural techniques, under supervision of an Arborist or Forester.</li> </ul>	<ul> <li>Contingency Measures:</li> <li>In the event that trees are damaged during construction, dama techniques, under supervision of an Arborist or Forester.</li> </ul>
Table 3-3 / page 36	<ul> <li>Potential Effect</li> <li>Loss of up to 2.86 ha of forest cover within Significant Woodland Features from clearing for transmission line.</li> </ul>	<ul> <li>Potential Effect</li> <li><u>Clearing of vegetation resulting in loss of up to 2.6 ha of forest</u></li> <li><u>Loss of up to 2.86 ha of forest cover within Significant Woodlar</u></li> </ul>
	<ul> <li>Clearing of vegetation will occur for the transmission line.</li> <li>Moderate residual effects.</li> </ul>	<ul> <li>Residual Effects</li> <li>Clearing of vegetation will occur for the transmission line.</li> <li>Loss of forest cover minimized through afforestation; however</li> </ul>
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Daily monitoring of areas where active vegetation removal is occurring by Environmental Monitor.</li> <li>Contingency Measures:</li> <li>In the quest that trace are demaged during construction, demaged trace about the pruped through implementation of preper orberioultural.</li> </ul>	the cleared forest.     Moderate residual effects.
	techniques, under supervision of an Arborist or Forester.	<ul> <li>Daily monitoring of areas where active vegetation removal is on</li> <li>Monitor establishment of planted area and replant/fill plant if re</li> </ul>
		<ul> <li>Contingency Measures:</li> <li>Any damaged trees will be pruned through implementation of p</li> <li>In the event that trees are damaged during construction, dama techniques, under supervision of an Arborist or Forester.</li> </ul>

an Environmental Monitor to ensure that "frac-out" or accidental intrusion does surface or groundwater.

g the recycling of drilling mud / lubricant. ongeals. If drilling mud congeals, take no other action that would potentially not congeal, erect isolation/containment environment (underwater boom and

onse team to contain and clean up excess drilling mud in the water. eeded and/or replanted using species similar to those in the adjacent area, or as will be monitored twice per year for two years subsequent to "frac-out" to

pare "frac-out" incident report describing time, place, actions taken to remediate Provide incident report to MNR and MOE forthwith.

f transmission line to significant wetlands/woodlands, small size of the right-of-

nds/woodlands.

sting right-of-way. ds, where possible or a minimum 5 m setback (measured from the dripline of

ntal damage.

on of mitigation measures. negative effects may be measurable but would represent a small change

encing is intact and that there is no damage caused during construction.

aged trees should be pruned through implementation of proper arboricultural

t cover for transmission line construction within significant woodlands. Ind Features from clearing for transmission line.

there will be a time delay for the planted area to reach the same function as

occurring by Environmental Monitor. equired (may be undertaken by partner organization).

proper arboricultural techniques, under supervision of an Arborist or Forester. aged trees should be pruned through implementation of proper arboricultural

Section / Page	Original Text	
Table 3-3 / page 36	<ul> <li>Potential Effect</li> <li>Changes to surface water hydrology resulting from turbine construction near Significant Valleyland Feature.</li> </ul>	Potential Effect     Changes to surface water hydrology resulting from turbine con
	<ul> <li>Performance Objectives</li> <li>Minimize changes to surface water hydrology.</li> </ul>	Performance Objectives • Minimize changes to surface water hydrology.
	<ul> <li>Mitigation Strategy</li> <li>Limit changes in land contours.</li> <li>Maintain streams and timing and quantity of flow.</li> </ul>	Mitigation Strategy   Limit changes in land contours.  Maintain streams and timing and quantity of flow.
	<ul> <li>Residual Effects</li> <li>Changes in surface water drainage patterns and obstruction of lateral flows minimized through mitigation measures.</li> <li>Low likelihood and limited magnitude of effects as a result.</li> </ul>	<ul> <li>Residual Effects</li> <li>Changes in surface water drainage patterns and obstruction of</li> <li>Low likelihood and limited magnitude of effects as a result.</li> </ul>
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Inspect locations following completion of construction to ensure no grade changes.</li> </ul>	Monitoring Plan and Contingency Measures <ul> <li>Inspect locations following completion of construction to ensure</li> </ul>
	<ul> <li>Contingency Measures:</li> <li>If surface water drainage alterations are detected, undertake corrective measures to restore drainage pattern.</li> </ul>	Contingency Measures:     If surface water drainage alterations are detected, undertake c
Table 3-3 / page 36	N/A	<ul> <li>Potential Effect</li> <li>Disruption of Tundra Swans in stopover and staging habitat du staging areas.</li> </ul>
		Performance Objectives     Avoid disruption of Tundra Swan during migration.
		<ul> <li><u>Mitigation Strategy</u></li> <li><u>Schedule construction activities within 300 m of the stopover a Swan (March 1 to April 15). If this is not possible, MNR will be</u></li> </ul>
		<ul> <li><u>Clearly delineate work area using erosion fencing or similar ba</u></li> <li><u>Restore temporary construction areas to pre-construction concareas with native plants).</u></li> </ul>
		<ul> <li><u>Residual Effects</u></li> <li><u>Disruption of Tundra Swans will be minimized through the app</u></li> <li><u>Negligible residual effects.</u></li> </ul>
		<ul> <li>Monitoring Plan and Contingency Measures</li> <li>No monitoring or contingency measures required as long as control of the second se</li></ul>
Table 3-3 / page 36	<ul> <li>Potential Effect</li> <li>Changes to surface water drainage patterns resulting from turbine and access road construction causing indirect effects on Waterfowl (Tundra Swan) Stopover and Staging Area Features.</li> </ul>	Potential Effect     Changes to surface water drainage patterns resulting in indired     Changes to surface water drainage patterns resulting from turk     (Tundra Swan) Stopover and Staging Area Features
	<ul><li>Mitigation Strategy</li><li>Minimize land contour changes.</li></ul>	Mitigation Strategy     Ensure Best Management Practices are used to maintain currently and the strategy and the strateg
	<ul> <li>Residual Effects</li> <li>Habitat damage will be minimized through the application of mitigation measures.</li> <li>Construction effects temporary and minor.</li> </ul>	Implement infiltration techniques to the maximum extent possil     Minimize paved surfaces and design roads to promote infiltrati     Limit changes in land contours.     Minimize land contour changes.
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Inspect locations following completion of construction to ensure no grade changes.</li> </ul>	Residual Effects
	<ul> <li>Contingency Measures:</li> <li>If surface water drainage alterations are detected, undertake corrective measures to restore drainage pattern.</li> </ul>	<ul> <li><u>Low likelihood and limited magnitude of effect as a result.</u></li> <li><u>Habitat damage will be minimized through the application of m</u></li> <li><u>Construction effects temporary and minor.</u></li> </ul>
		<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Site inspection by Environmental Monitor following grading activ</li> <li>Inspect locations following completion of construction to ensure</li> </ul>
		<ul> <li>Contingency Measures:</li> <li>If surface water drainage alterations are detected, undertake c</li> </ul>

nstruction near Significant Valleyland Feature.

of lateral flows minimized through mitigation measures.

re no grade changes.

corrective measures to restore drainage pattern.

ue to construction/ decommissioning activities in waterfowl stopover and

and staging habitat to occur outside the important period of staging Tundra e consulted regarding mitigation measures that may be required. arrier to avoid accidental damage to staging habitat. ditions as soon as possible (e.g., re-vegetate formerly naturally vegetated

blication of mitigation measures.

onstruction occurs outside migration period.

ect effects on waterfowl stopover and staging areas. bine and access road construction causing indirect effects on Waterfowl

rent drainage patterns, including: ible. ion.

rainage patterns.

nitigation measures.

ivities within 30 m of stopover and staging area. re no grade changes.

corrective measures to restore drainage pattern.

Section / Page	Original Text	I
Table 3-3 / page 37	<ul> <li>Potential Effect</li> <li>Disruption of Tundra Swan use of Waterfowl (Tundra Swan) Stopover and Staging Area Features resulting from turbine, access road and collection line construction.</li> </ul>	<ul> <li>Potential Effect</li> <li>Disruption of Tundra Swan use of Waterfowl (Tundra Swan) St collection line construction.</li> </ul>
	<ul><li>Performance Objectives</li><li>Avoid disruption of Tundra Swan during migration.</li></ul>	<ul> <li>Performance Objectives</li> <li>Avoid disruption of Tundra Swan during migration.</li> </ul>
	<ul> <li>Mitigation Strategy</li> <li>Construction activities within 300 m of the stopover and staging habitat should be timed to avoid migration timing windows (typically early to late March).</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>Construction activities within 300 m of the stopover and staging late March).</li> </ul>
	<ul> <li>Residual Effects</li> <li>Disruption of Tundra Swans will be minimized through the application of mitigation measures.</li> <li>Negligible residual effects.</li> </ul>	<ul> <li>Residual Effects</li> <li>Disruption of Tundra Swans will be minimized through the appl</li> <li>Negligible residual effects.</li> </ul>
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>No monitoring or contingency measures required as long as construction occurs outside migration period.</li> </ul>	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>No monitoring or contingency measures required as long as co</li></ul>
Table 3-3 / page 37	N/A	Potential Effect     Displacement and/or mortality of pursing female and juvenile b
		<u>Removal of confirmed significant cavity trees or other suitable,</u> transmission line.
		<ul> <li><u>Performance Objectives</u></li> <li><u>No displacement and/or mortality of nursing female and juvenil</u></li> <li><u>Maintain sufficient clusters of cavity trees within the woodland</u></li> </ul>
		<ul> <li>Mitigation Strategy</li> <li>Identify locations of cavity trees within the bat maternity colony habitat after tree removal is complete. A "cluster" is defined bat</li> </ul>
		surveyed to contain a relatively high cavity tree density (≥10 ca circular area (12.6 m in radius). If this mitigation measure is no required.
		<ul> <li>Schedule tree removal to occur outside of the bat maternal per consulted regarding mitigation measures that may be required</li> </ul>
		<u>Residual Effects</u> <u>Significance of residual effects will be determined based on the</u>
		<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Supervision of tree removal by a qualified Environmental Monitorial</li> </ul>
		Contingency Measures     Any damaged trees will be pruned through implementation of p
Table 3-3 / page 37	N/A	Potential Effect
		<u>Performance Objectives</u> Minimize noise disturbance and/or avoidance behaviour during
		Mitigation Strategy           • Schedule tree removal to occur outside of the bat maternal per consulted regarding mitigation measures that may be required.           • Schedule tree removal to occur during daylight hours.
		<ul> <li><u>Residual Effects</u></li> <li><u>Disturbance avoided through timing of construction activities.</u></li> <li><u>No residual effects anticipated.</u></li> </ul>
		Monitoring Plan and Contingency Measures     No monitoring or contingency measures required

topover and Staging Area Features resulting from turbine, access road and

g habitat should be timed to avoid migration timing windows (typically early to

lication of mitigation measures.

onstruction occurs outside migration period.

bats resulting from vegetation clearing for the transmission line.

, but not studied, cavity trees resulting from vegetation clearing for the

ile bats.

for ongoing bat maternity colony habitat use.

y habitat and ensure clusters of cavity trees will remain present within the ased on relative cavity tree density within a habitat. If these habitats are avity trees/ha), a cluster is defined as 4 suitable cavity trees within any 0.05 ha ot possible, MNR will be consulted regarding mitigation measures that may be

s to be removed and whether each tree contains a cavity suitable for potential

riod of May 1 to July 31, wherever possible. If this is not possible, MNR will be on using suitable native tree species, if possible.

ne results of post-construction monitoring.

itor.

proper arboricultural techniques, under supervision of an Arborist or Forester.

construction of the transmission line.

construction.

riod of May 1 to July 31, wherever possible. If this is not possible, MNR will be

Section / Page	Original Text	
Table 3-3 / page 38	N/A	Potential Effect
		Distribution of possible montainty of turties moving between wint
		Performance Objectives     Minimize disruption of turtle movement.
		Mitigation Strategy
		Fence area as far from pond and as close to proposed road as
		<ul> <li>Post speed limits (30 km/hr) and turtle crossing signage along</li> <li>To avoid collisions with turtles, schedule construction activities</li> </ul>
		emergence (March 15 to May 31). If construction must occur
		construction activities.
		Residual Effects
		<u>Disruption and/or mortality minimized through construction tim</u> <u>Low likelihood of occurring and limited magnitude.</u>
		Monitoring Plan and Contingency Measures
		If construction occurs within 30 m of a turtle wintering area (if of a second sec
		searches for turtles by a qualified Biologist prior to soil strippin within the construction footprint.
		<u>Contingency Measures:</u> <u>Turtles encountered within the construction area will be moved</u>
	N/A	Monitor or a qualified Biologist.
Table 5-57 page 50		Increased erosion and sedimentation resulting from clearing a
		near turtle wintering areas.
		Performance Objectives
		<u>Minimize erosion and sedimentation in wintering pond.</u>
		Mitigation Strategy
		Standards Specifications (OPSD 219.130).
		Residual Effects
		Erosion and sedimentation mitigated through sediment and en
		relative to existing conditions.
		Monitoring Plan and Contingency Measures
		Monitor on-site conditions (i.e., erosion and sediment control, s     within 20 m of a facture on the fallowing basis
		Weekly during active construction periods;
		<ul> <li>Prior to, during and post forecasted large rainfall events (&gt;20 r</li> <li>Daily during extended rain or snowmelt periods;</li> </ul>
		Monthly during inactive construction periods, if the site is left a
		Contingency Measures:
		<ul> <li>Suspend work if excessive flows of sediment discharges occur and sediment control materials kept on site, such as heavy du</li> </ul>
Table 3-3 / page 38	N/A	Potential Effect
		Changes to surface water drainage patterns causing indirect e
		Performance Objectives
		minimize manou croce on writering habitat through changes
		<ul> <li><u>Ensure no grade changes within 30 m</u> of pond.</li> </ul>
		Pasidual Effecto
		Indirect effects to habitat minimized by maintaining grade.
		Low likelihood of occurring and limited magnitude.

tering ponds and other areas.

<u>s possible.</u>

relevant construction access roads. s within 30 m to occur during daylight hours and not during the period of during this timing window, conduct area searches for turtles daily prior to

ning and speed limits.

determined to be significant) between March 15 and May 31, conduct area or grubbing, as well as daily prior to construction activities by the Contractor

d to a safe location (nearby pond) under the direction of the Environmental

and grubbing, backfilling and stockpiling resulting from access road construction

nstruction area if within 30 m of habitat feature as per Ontario Provincial

osion control fencing. tive effects may be measurable but would likely represent a small change

spills, flooding, etc.) by an Environmental Monitor where construction occurs

millimetres in 24 hours) or significant snowmelt events (i.e., spring freshet);

alone for 30 days or longer.

r until additional mitigation measures are in place (e.g., install the extra erosion ity silt fencing, straw bales, etc.).

effects on turtle wintering areas.

s to surface water drainage patterns.

Section / Page	Original Text	
		Monitoring Plan and Contingency Measures     Inspect locations following completion of access roads by an l     Monitor condition of the need during on site menitoring overtex
		Contingency Measures:
Table 3-3 / page 39	N/A	If surface water drainage alterations are detected, undertake of Potential Effect     Risk of snake mortality from construction equipment.
		Performance Objectives     Avoid mortality from equipment.
		<ul> <li><u>Mitigation Strategy</u></li> <li><u>Schedule construction activities within 30 m of the hibernaculu return (September 1 – October 15) to hibernacula.</u></li> <li><u>If construction must take place within 30 m of hibernacula duri</u></li> <li><u>Erect temporary drift fence where within 30 m; and</u></li> </ul>
		<ul> <li><u>Conduct area searches for snake species within the construct</u></li> <li><u>Residual Effects</u></li> <li><u>Mortality minimized through construction timing or drift fencing</u></li> <li>Low likelihood of occurring and limited magnitude (i.e., no or limited magnited magnitude (i.e., no or limited magnited magnited magnited ma</li></ul>
		<ul> <li>Monitoring Plan and Contingency Measures</li> <li>If construction occurs within 30 m of a reptile hibernaculum (if September 1 and October 15, conduct area searches for snak prior to construction activities by the Contractor within the con</li> </ul>
		Weekly inspection of drift fence while construction is occurring
		<u>Snakes encountered within the construction area will be move</u> <u>qualified Biologist.</u>
Table 3-3 / page 39	N/A	Potential Effect     Noise disturbance and/or avoidance behaviour of colonially-network
		Performance Objectives     Minimize disturbance to colonially-nesting birds (Great Blue H
		<ul> <li><u>Mitigation Strategy</u></li> <li><u>Schedule construction activities within 120 m (of 300 m buffer</u> is not possible, MNR will be consulted regarding mitigation metabolic</li> </ul>
		Residual Effects           • Disturbance to colonially-nesting birds will be avoided through           • Negligible residual effects.
		<ul> <li>Monitoring Plan and Contingency Measures</li> <li>No monitoring or contingency measures required.</li> </ul>
Table 3-3 / page 39	N/A	Potential Effect     Noise disturbance and/or avoidance behaviour of deer during
		Performance Objectives     Minimize disturbance to wintering deer.
		<ul> <li>Mitigation Strategy</li> <li>Schedule construction activities within 120 m of deer winter construction activities within 120 m of deer winter constructions are not favourable for a lowers where environmental conditions are not favourable for</li> </ul>
		between December 1 and March 31.
		<ul> <li><u>Residual Effects</u></li> <li><u>Disturbance to wintering deer will be minimized through const</u></li> <li><u>Negligible residual effects.</u></li> </ul>

Environmental Monitor to ensure no grade changes. is at frequency described for sediment and erosion control.

corrective measures to restore drainage pattern.

um to avoid timing windows during which snakes emerge (April 1 - May 15) and

ing these timing windows:

tion area daily prior to construction activities.

<u>g.</u> imited mortality expected).

f determined to be significant) between April 15 and May 31 or between kes by a qualified Biologist prior to soil stripping or grubbing, as well as daily instruction footprint. g during specified timing windows.

ed to a safe location under the direction of the Environmental Monitor or a

esting birds during construction.

<u>lerons).</u>

er) to occur outside the sensitive breeding period of March 15 to August 1. If this neasures that may be required.

n construction timing.

construction.

congregation areas to occur before December 1 or after March 31 when the ling. or yarding, contact MNR to determine if construction activities may proceed

ruction timing.

Section / Page	Original Text	F
		Monitoring Plan and Contingency Measures
		No monitoring or contingency measures required if construction
		<ul> <li>If construction is scheduled to occur between December 1 and varding (e.g., concentrations of tracks) by a gualified Biologist</li> </ul>
Table 3-3 / page 39	Potential Effect	Potential Effect
	• Disruption of amphibians moving to breeding pools and home range resulting from access road construction near Amphibian Woodland	Risk of mortality from construction equipment to amphibians m
	Breeding Habitat Features.	Disruption of amphibians moving to breeding pools and home i      Breeding Habitat Eastures
	Monitoring Plan and Contingency Measures	
	No monitoring required if timing windows are applied.	Monitoring Plan and Contingency Measures
	Contingency Measures:	No monitoring required if timing windows are applied.
	• If construction occurs after dark within the specified liming windows, amphibian mortality surveys will be conducted the following day.	<ul> <li>In construction occurs within 30 m or amphibian breeding habita windows, amphibian mortality surveys will be conducted the following habitation of the surveys will be conducted the following habitation of the surveys will be conducted the following habitation of the surveys will be conducted the following habitation of the surveys will be conducted the following habitation of the surveys will be conducted the following habitation of the surveys will be conducted the following habitation of the surveys will be conducted the following habitation of the surveys will be conducted the following habitation of the surveys will be conducted the following habitation of the surveys will be conducted the following habitation of the surveys will be conducted the following habitation of the surveys will be conducted the following habitation of the surveys will be conducted the following habitation of the surveys will be conducted the following habitation of the surveys will be conducted the surveys will be conducted the following habitation of the surveys will be conducted the following habitation of the surveys will be conducted the surveys will be conducted the survey will be conducte</li></ul>
		Contingency Measures:
		<ul> <li><u>Restrict work to daylight hours it significant amphibian mortality</u></li> <li><u>No monitoring required if timing windows are applied.</u></li> </ul>
		· · · · · · · · · · · · · · · · · · ·
		Contingency Measures:
Table 3-3 / page 40	Ν/Δ	In construction occurs after dark within the specified timing wind     Potential Effect
		Increased erosion and sedimentation resulting from clearing ar
		near amphibian woodland breeding habitat.
		Performance Objectives
		<u>Minimize erosion and sedimentation to breeding habitat.</u>
		Install sediment and erosion control fencing along edge of constant of the sediment and erosion control fencing along edge of constant of the sediment and erosion control fencing along edge of constant of the sediment and erosion control fencing along edge of the sediment and erosion control fencing along edge of the sediment along edge o
		Standards Specifications (OPSD 219.130).
		Desidual Effects
		Frosion and sedimentation mitigated through sediment and erce
		Moderate likelihood; if erosion and sedimentation occur negative
		relative to existing conditions.
		Monitoring Plan and Contingency Measures
		Monitor on-site conditions (i.e., erosion and sediment control, s
		within 30 m of a feature on the following basis:
		<ul> <li>weekly during active construction periods;</li> <li>Prior to, during and post forecasted large rainfall events</li> </ul>
		freshet);
		<ul> <li><u>Daily during extended rain or snowmelt periods;</u></li> </ul>
		Contingency Measures:
		Suspend work if excessive flows of sediment discharges occur
		and sediment control materials kept on site, such as heavy dut
		<ul> <li>If construction is scheduled to occur between December 1 and</li> </ul>
		yarding (e.g., concentrations of tracks) by a qualified Biologist.
Table 3-3 / page 40	Potential Effect	Potential Effect
	• Risk of mortality to amphibians moving between breeding pool and nome range.	<ul> <li>Risk of montality to amphibians moving between breeding pool</li> </ul>
	Performance Objectives	Performance Objectives
	Minimize amphibian mortality along access road.	Minimize amphibian mortality along access road.
	Mitigation Strategy	Mitigation Strategy
	• Avoid construction in proximity to this feature at night between April 1st and June 30th and any rainy nights from spring to early autumn,	Avoid construction in proximity to this feature at night between
	wherever possible.	wherever possible.
	Enforce slow vehicle speeds. Post and maintain speed limit signs.	Enforce slow vehicle speeds. Post and maintain speed limit sig
	Residual Effects	Residual Effects
	Risk of amphibian mortality reduced through mitigation measures.	Risk of amphibian mortality reduced through mitigation measur
	• Operation effects minor (i.e., no or limited mortality expected).	• Uperation effects minor (i.e., no or limited mortality expected).

on does not occur between December 1 and March 31. d March 31, undertake survey to determine snow depth and evidence of . Contact MNR to determine if construction activities may proceed.

noving to breeding pools and home range. range resulting from access road construction near Amphibian Woodland

tat (if determined to be significant) after dark within the specified timing blowing day by a qualified Biologist.

ty is detected through mortality surveys.

dows, amphibian mortality surveys will be conducted the following day.

nd grubbing, backfilling and stockpiling resulting from access road construction

struction area if within 30 m of habitat feature as per Ontario Provincial

osion control fencing. ive effects may be measurable but would likely represent a small change

spills, flooding, etc.) by an Environmental Monitor where construction occurs

s (>20 millimetres in 24 hours) or significant snowmelt events (i.e., spring

e site is left alone for 30 days or longer.

r until additional mitigation measures are in place (e.g., install the extra erosion ity silt fencing, straw bales, etc.). on does not occur between December 1 and March 31. d March 31, undertake survey to determine snow depth and evidence of

March 31, undertake survey to determine snow depth and evidence of
 Contact MNR to determine if construction activities may proceed.

l and home range.

April 1st and June 30th and any rainy nights from spring to early autumn,

<del>gns.</del>

<del>ires.</del>

Section / Page	Original Text	1
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>No monitoring required if timing windows are applied.</li> </ul>	Monitoring Plan and Contingency Measures <ul> <li>No monitoring required if timing windows are applied.</li> </ul>
	<ul> <li>Contingency Measures:</li> <li>If construction occurs after dark in or near identified movement corridors between April 1st and June 30th and rainy nights from spring to early autumn, amphibian mortality surveys will be conducted the following day.</li> </ul>	<ul> <li>Contingency Measures:</li> <li>If construction occurs after dark in or near identified movement early autumn, amphibian mortality surveys will be conducted th</li> </ul>
Table 3-3 / page 40	<ul> <li>Potential Effect</li> <li>Mortality to reptiles from construction equipment for construction of access roads near Reptile Hibernaculum Feature.</li> </ul>	Potential Effect     Mortality to reptiles from construction equipment for construction
	Performance Objectives     Minimize mortality from equipment.	Performance Objectives <ul> <li>Minimize mortality from equipment.</li> </ul>
	<ul> <li>Mitigation Strategy</li> <li>Construction activities within 60 m of the hibernaculum should be timed to avoid timing windows during which snakes emerge (April 15 - May 31) and return (September 1 – October 15) to hibernaculum.</li> <li>If construction must take place during these timing windows, erect temporary drift fence between edge of habitat and road if hibernaculum is within 60 m of road.</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>Construction activities within 60 m of the hibernaculum should 31) and return (September 1 – October 15) to hibernaculum.</li> <li>If construction must take place during these timing windows, en within 60 m of road.</li> </ul>
	<ul> <li>Residual Effects</li> <li>Habitat damage will be avoided and mortality minimized through the application of mitigation measures.</li> <li>Construction effects temporary and minor (i.e., no or limited mortality expected).</li> </ul>	<ul> <li>Residual Effects</li> <li>Habitat damage will be avoided and mortality minimized throug</li> <li>Construction effects temporary and minor (i.e., no or limited more)</li> </ul>
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>No monitoring required if timing windows are applied.</li> </ul>	Monitoring Plan and Contingency Measures • No monitoring required if timing windows are applied.
	<ul> <li>Contingency Measures:</li> <li>Weekly inspection of drift fence if construction occurs during specified timing windows.</li> </ul>	Contingency Measures: • Weekly inspection of drift fence if construction occurs during sp
Table 3-3 / page 41	<ul> <li>Potential Effect</li> <li>Disruption of turtles moving between over-wintering ponds and other areas or turtle mortality resulting from access road and transmission line construction near or within Turtle Over-wintering Habitat Features.</li> </ul>	<ul> <li>Potential Effect</li> <li>Disruption of turtles moving between over-wintering ponds and line construction near or within Turtle Over-wintering Habitat Full</li> </ul>
	<ul> <li>Performance Objectives</li> <li>Minimize disruption of turtle movement.</li> <li>Minimize turtle mortality.</li> </ul>	Performance Objectives     Minimize disruption of turtle movement.     Minimize turtle mortality.
	<ul> <li>Mitigation Strategy</li> <li>Fence area as far from pond and as close to proposed road or transmission line clearing as possible. Post speed limits and turtle crossing signage along relevant construction access roads.</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>Fence area as far from pond and as close to proposed road or signage along relevant construction access roads.</li> </ul>
	<ul> <li>Residual Effects</li> <li>Disruption to turtle movement and risk of turtle mortality minimized with the application of mitigation measures.</li> <li>Construction effects temporary and minor (i.e., no or limited mortality expected).</li> </ul>	Residual Effects           • Disruption to turtle movement and risk of turtle mortality           • Construction effects temporary and minor (i.e., no or line)
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Undertake monthly site inspections to ensure that protective fencing is intact and that there is no damage caused during construction.</li> <li>No contingency measures required.</li> </ul>	Monitoring Plan and Contingency Measures     Undertake monthly site inspections to ensure that prote     No contingency measures required.
Table 3-3 / page 41	Potential Effect Changes to surface water drainage patterns resulting from access road construction causing indirect effects on Turtle Over-wintering Habitat Features.	Potential Effect Changes to surface water drainage patterns resulting from access roa
	<ul> <li>Performance Objectives</li> <li>Minimize indirect effects on over-wintering habitat through changes to surface water drainage patterns.</li> </ul>	Performance Objectives <ul> <li>Minimize indirect effects on over-wintering habitat throut</li> </ul>
	<ul><li>Mitigation Strategy</li><li>Ensure no grade changes within 30 m of pond.</li></ul>	<ul> <li>Mitigation Strategy</li> <li>Ensure no grade changes within 30 m of pond.</li> </ul>
	<ul> <li>Residual Effects</li> <li>Indirect effects to habitat minimized with the application of mitigation measures.</li> <li>Construction effects temporary and minor.</li> </ul>	Residual Effects           • Indirect effects to habitat minimized with the application           • Construction effects temporary and minor.
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Monitor condition of the pond during on-site monitoring events at frequency described for sediment and erosion control.</li> </ul>	Monitoring Plan and Contingency Measures     Monitor condition of the pond during on-site monitoring
	<ul> <li>Contingency Measures:</li> <li>If surface water drainage alterations are detected, undertake corrective measures to restore drainage pattern.</li> </ul>	Contingency Measures: If surface water drainage alterations are detected, undertake corre

nt corridors between April 1st and June 30th and rainy nights from spring to he following day.

on of access roads near Reptile Hibernaculum Feature.

be timed to avoid timing windows during which snakes emerge (April 15 - May

erect temporary drift fence between edge of habitat and road if hibernaculum is

gh the application of mitigation measures. ortality expected).

pecified timing windows.

d other areas or turtle mortality resulting from access road and transmission Features.

r transmission line clearing as possible. Post speed limits and turtle crossing

y minimized with the application of mitigation measures. mited mortality expected).

ective fencing is intact and that there is no damage caused during construction.

ad construction causing indirect effects on Turtle Over-wintering Habitat Features.

ugh changes to surface water drainage patterns.

n of mitigation measures.

events at frequency described for sediment and erosion control.

ective measures to restore drainage pattern.

	Section / Page	Original Text	I
	Table 3-3 / page 41	<ul> <li>Potential Effect</li> <li>Removal of vegetation within significant features resulting in habitat damage from clearing for transmission line within Azure Bluet Habitat Feature and Turtle Over-wintering Habitat Feature.</li> </ul>	Potential Effect Removal of vegetation within significant features resulting in habit Feature and Turtle Over-wintering Habitat Feature.
		<ul> <li>Performance Objectives</li> <li>Minimize disturbance to significant wildlife habitat.</li> <li>No destruction of pond.</li> </ul>	Performance Objectives     Minimize disturbance to significant wildlife habitat.     No destruction of pond.
		<ul> <li>Mitigation Strategy</li> <li>Maintain a 10 m buffer around the breeding pond within which no vegetation removal will occur.</li> <li>Fence area as far from pond and as close to transmission line disturbance area as possible.</li> <li>Minimize the area of tree removal within the natural area to the extent possible.</li> <li>Re-vegetate disturbed areas as soon as possible after construction activities are complete using species native to Ontario in naturally vegetated areas.</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>Maintain a 10 m buffer around the breeding pond within</li> <li>Fence area as far from pond and as close to transmissi</li> <li>Minimize the area of tree removal within the natural are</li> <li>Re-vegetate disturbed areas as soon as possible after or vegetated areas.</li> </ul>
		<ul> <li>Residual Effects</li> <li>Clearing of vegetation will occur for the transmission line.</li> <li>Disruption to significant wildlife habitat minimized through setback and protective fencing.</li> <li>Moderate residual effects.</li> </ul>	Residual Effects         • Clearing of vegetation will occur for the transmission lin         • Disruption to significant wildlife habitat minimized throug         • Moderate residual effects.
		<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Monitor condition of the pond during on-site monitoring events at frequency described for sediment and erosion control.</li> </ul>	Monitoring Plan and Contingency Measures     Monitor condition of the pond during on-site monitoring
		<ul> <li>Contingency Measures:</li> <li>If negative effects to the pond are detected, corrective measures will be taken, to be determined through consultation with MNR. These babitat compensation or restoration measures will be described in a Compensation Plan, to be submitted to MNR.</li> </ul>	Contingency Measures: If negative effects to the pond are detected, corrective measures of compensation or restoration measures will be described in a Com
ł	Table 3-3 / page 41	Potential Effect	Potential Effect
		<ul> <li>Changes to surface water drainage patterns resulting from transmission line construction causing indirect effects on Azure Bluet Habitat Feature, Turtle Over-wintering Habitat Feature and Amphibian Woodland Breeding Habitat Features.</li> </ul>	Changes to surface water drainage patterns resulting from transm Feature, Turtle Over-wintering Habitat Feature and Amphibian Wo
		<ul> <li>Performance Objectives</li> <li>Minimize indirect effects on pond through changes to surface water drainage patterns.</li> </ul>	Performance Objectives     Minimize indirect effects on pond through changes to su
		<ul> <li>Mitigation Strategy</li> <li>Ensure no grade changes within 30 m of pond.</li> </ul>	Mitigation Strategy Ensure no grade changes within 30 m of pond.
		<ul> <li>Residual Effects</li> <li>Indirect effects to significant wildlife habitat minimized with the application of mitigation measures.</li> <li>Construction effects temporary and minor.</li> </ul>	Residual Effects           • Indirect effects to significant wildlife habitat minimized w           • Construction effects temporary and minor.
		<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Monitor condition of the pond during on-site monitoring events at frequency described for sediment and erosion control.</li> </ul>	Monitoring Plan and Contingency Measures <ul> <li>Monitor condition of the pond during on-site monitoring</li> </ul>
		<ul> <li>Contingency Measures:</li> <li>If negative effects to the pond are detected, corrective measures will be taken, to be determined through consultation with MNR. These habitat compensation or restoration measures will be described in a Compensation Plan, to be submitted to MNR</li> </ul>	Contingency Measures: If negative effects to the pond are detected, corrective measures of compensation or restoration measures will be described in a Com
	Table 3-3 / page 41	<ul> <li>Potential Effect</li> <li>Removal of vegetation within significant features resulting in habitat damage from clearing for transmission line within Amphibian Woodland Breeding Habitat Features.</li> </ul>	Potential Effect Removal of vegetation within significant features resulting in habit Breeding Habitat Features.
		<ul> <li>Mitigation Strategy</li> <li>Focus construction activities within the woodland to outside April 1<sup>st</sup> and June 30<sup>th</sup> (for significant frog breeding habitats) or March 15<sup>th</sup> and April 30<sup>th</sup> (for significant salamander breeding habitat), to avoid disturbance to breeding amphibians and vehicle caused mortality.</li> <li>Maintain a 10 m buffer around the breeding pond within which no vegetation removal will occur.</li> <li>Minimize the area of tree removal within the natural area to the extent possible.</li> <li>Re-vegetate disturbed areas as soon as possible after construction activities are complete using species native to Ontario in naturally vegetated areas.</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>Clearing of vegetation will not take place between April 1 and 2 measures that may be required.</li> <li>Schedule construction activities within the woodland to outside and April 30th (for significant salamander breeding habitat), to within 30 m of amphibian breeding habitats will not occur after be consulted regarding mitigation measures that may be require Maintain a 10 m buffer around the breeding pond within which (sediment fencing) prior to any earth movement, stockpiling or breeding pool or pond.</li> <li>Minimize the area of tree removal within the natural area to the Re-vegetate temporarily disturbed areas as soon as possible a naturally vegetated areas.</li> <li>Focus construction activities within the woodland to outside Application and the set of the set</li></ul>
			April 30 <sup>th</sup> (for significant salamander breeding habitat), to avoid

itat damage from clearing for transmission line within Azure Bluet Habitat

n which no vegetation removal will occur.

- ion line disturbance area as possible.
- ea to the extent possible.
- construction activities are complete using species native to Ontario in naturally

ne. Jgh setback and protective fencing.

events at frequency described for sediment and erosion control.

will be taken, to be determined through consultation with MNR. These habitat npensation Plan, to be submitted to MNR.

nission line construction causing indirect effects on Azure Bluet Habitat /oodland Breeding Habitat Features.

surface water drainage patterns.

with the application of mitigation measures.

events at frequency described for sediment and erosion control.

will be taken, to be determined through consultation with MNR. These habitat npensation Plan, to be submitted to MNR

itat damage from clearing for transmission line within Amphibian Woodland

June 30. If this is not possible, MNR will be consulted regarding mitigation

e April 1st and June 30th (for significant frog breeding habitats) or March 15th avoid disturbance to breeding amphibians and vehicle caused mortality. Work dusk during the breeding season (as above). If this is not possible, MNR will ired.

no vegetation removal will occur, where possible. Install wildlife fencing r other activities on the site, to prevent any impact or disturbance to the

e extent possible. after construction activities are complete using species native to Ontario in

pril 1<sup>st</sup> and June 30<sup>th</sup> (for significant frog breeding habitats) or March 15<sup>th</sup> and disturbance to breeding amphibians and vehicle caused mortality.

Section / Page	Original Text	
		<ul> <li>Maintain a 10 m buffer around the breeding pond within which</li> <li>Minimize the area of tree removal within the natural area to th</li> <li>Re-vegetate disturbed areas as soon as possible after construegetated areas.</li> </ul>
Table 3-3 / page 42	N/A	Potential Effect         Disruption or possible mortality of amphibians moving between be within amphibian woodland breeding habitat.         Performance Objectives         • Minimize disruption to amphibians.         Mitigation Strategy         • Schedule construction activities within the woodland to and April 30 (for significant salamander breeding habitats will r possible, MNR will be consulted regarding mitigation n         • Post speed limits along construction access roads (30         Residual Effects         • Disruption mitigated through construction timing and si
Table 3-3 / page 42	N/A	Low likelihood of occurring and limited magnitude ( <i>i.e.</i> Monitoring Plan and Contingency Measures     No monitoring or contingency measures required if tim     If construction occurs within 30 m of an amphibian bre     conduct area searches for amphibians by a qualified E Potential Effect Instruction and codimentation resulting from cloaring and
		Increased erosion and sedimentation resulting from clearing and construction within amphibian woodland breeding habitats.         Performance Objectives         • No disturbance to breeding amphibians.         • No destruction (including erosion and sedimentation) of Mitigation Strategy         • Install sediment and erosion control fencing along edg Standards Specifications (OPSD 219.130).         • Remove trees by hand-held equipment and drag them         • Lighter vehicles and lighter machinery should be used should have wide-based tires. Tracked vehicles should.         • Re-vegetate disturbed areas as soon as possible after vegetated areas.
		Residual Effects         • Erosion and sedimentation mitigated through sediment         • Low likelihood and limited magnitude of effect as a rest         Monitoring Plan and Contingency Measures         • Fencing must be keyed in correctly and monitored for         • Monitor on-site conditions ( <i>i.e.</i> , erosion and sediment of occurs within 30 m of a feature on the following basis:         • Weekly during active construction periods;         • Prior to, during and post forecasted large rainfall event freshet);         • Daily during extended rain or snowmelt periods;         • Monthly during inactive construction periods, where th         Contingency Measures:         Suspend work if excessive flows of sediment discharges oc erosion and sediment control materials kept on site. such a

h no vegetation removal will occur.

he extent possible.

ruction activities are complete using species native to Ontario in naturally

reeding pools and home range resulting from transmission line construction

o outside April 1 and June 30 (for significant frog breeding habitats) or March 15 tat), to avoid disturbance to breeding amphibians and vehicle caused mortality. not occur after dusk during the breeding season (as above). If this is not measures that may be required. 0 km/hr).

peed limits. , no or limited mortality expected).

ning windows are applied. Reding habitat (if determined to be significant) between April 1 and June 30, Biologist prior to soil stripping or grubbing.

grubbing, backfilling and stockpiling resulting from transmission line

of breeding sites.

ge of construction area if within 30 m of habitat feature as per Ontario Provincial

n out of the natural area to minimize soil disturbance. d in and around the natural area. Any vehicles used within the natural area ld be avoided. r construction activities are complete using species native to Ontario in naturally.

nt and erosion control fencing. sult.

proper installation and maintenance by an Environmental Monitor. control, spills, flooding, etc.) by an Environmental Monitor where construction

ts (>20 millimetres in 24 hours) or significant snowmelt events (i.e., spring

ne site is left alone for 30 days or longer.

ccur until additional mitigation measures are in place (e.g., install the extra as heavy duty silt fencing, straw bales, etc.).

Section / Page	Original Text	F
Table 3-3 / page 43	N/A	Potential Effect Possible indirect effects on amphibian breeding pool condition three line construction within amphibian woodland breeding habitats.
		Performance Objectives     No disturbance to breeding amphibians.     No destruction (including erosion and sedimentation) of
		Mitigation Strategy         • Install sediment and erosion control fencing along edge Standards Specifications (OPSD 219.130).         • Remove trees by hand-held equipment and drag them of Lighter vehicles and lighter machinery should be used i should have wide-based tires. Tracked vehicles should         • Re-vegetate disturbed areas as soon as possible after or vegetated areas.
		Erosion and sedimentation mitigated through sediment     Low likelihood and limited magnitude of effect as a resu
		<ul> <li>Monitoring Plan and Contingency Measures         <ul> <li>Fencing must be keyed in correctly and monitored for p</li> <li>Monitor on-site conditions (<i>i.e.</i>, erosion and sediment co occurs within 30 m of a feature on the following basis:</li> <li>Weekly during active construction periods;</li> <li>Prior to, during and post forecasted large rainfall events freshet);</li> <li>Daily during extended rain or snowmelt periods;</li> <li>Monthly during inactive construction periods, where the Contingency Measures:</li> </ul> </li> </ul>
Table 3-3 / page 43	<ul> <li>Potential Effect</li> <li>Disruption of amphibians moving between breeding pools and home range resulting from transmission line construction within Amphibian Woodland Breeding Habitat Features.</li> </ul>	and Potential Effect Disruption of amphibians moving between breeding pools and how Woodland Breeding Habitat Features.
	<ul><li>Performance Objectives</li><li>Minimize disruption to amphibian movement.</li></ul>	Performance Objectives Minimize disruption to amphibian movement.
	<ul> <li>Mitigation Strategy</li> <li>Focus construction activities within the woodland to outside April 1<sup>st</sup> and June 30<sup>th</sup> (for significant frog breeding habitats) or March 15<sup>th</sup> and April 30<sup>th</sup> (for significant salamander breeding habitat), to avoid disturbance to breeding amphibians and vehicle caused mortality.</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>Focus construction activities within the woodland to out and April 30<sup>th</sup> (for significant salamander breeding habit</li> </ul>
	<ul> <li>Residual Effects</li> <li>Disruption to amphibians minimized with the application of mitigation measures.</li> <li>Construction effects temporary and minor.</li> </ul>	<ul> <li>Residual Effects</li> <li>Disruption to amphibians minimized with the application</li> <li>Construction effects temporary and minor.</li> </ul>
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>No monitoring or contingency measures required if timing windows are applied.</li> </ul>	Monitoring Plan and Contingency Measures No monitoring or contingency measures required if timing window
Table 3-3 / page 43	<ul> <li>Potential Effect</li> <li>Removal of vegetation within significant feature resulting in habitat damage from clearing for transmission line within Red-headed Woodpecker Habitat Feature.</li> </ul>	Potential Effect Removal of vegetation within significant feature resulting in habita Woodpecker Habitat.
	<ul> <li>Performance Objectives</li> <li>Minimize disturbance to breeding habitat.</li> <li>No destruction of nest site.</li> </ul>	Red-headed Woodpecker breeding habitat may be disturbed by n Removal of vegetation within significant feature resulting in habitat Habitat Feature.
	<ul> <li>Mitigation Strategy</li> <li>Focus construction activities within habitat to outside the breeding season of May 1<sup>st</sup> to July 31<sup>st</sup>.</li> <li>Maintain a 10 m buffer around the nest within which no vegetation removal will occur.</li> <li>Clearly delineate habitat boundaries (i.e., 10 m buffer) using protective fencing to ensure that construction activities occur outside the habitat boundaries.</li> </ul>	<ul> <li>Performance Objectives</li> <li>Minimize disturbance to breeding habitat.</li> <li><u>Avoid disturbance to breeding birds.</u></li> <li><u>No destruction of nest site.</u></li> </ul>
	Minimize the area of tree removal within the natural area to the extent possible.	Mitigation Strategy

rough changes to surface water drainage patterns resulting from transmission

of breeding sites.

e of construction area if within 30 m of habitat feature as per Ontario Provincial

out of the natural area to minimize soil disturbance. in and around the natural area. Any vehicles used within the natural area <u>I be avoided.</u> construction activities are complete using species native to Ontario in naturally

t and erosion control fencing. ult.

proper installation and maintenance by an Environmental Monitor. control, spills, flooding, etc.) by an Environmental Monitor where construction

s (>20 millimetres in 24 hours) or significant snowmelt events (i.e., spring

e site is left alone for 30 days or longer.

ntil additional mitigation measures are in place (e.g., install the extra erosion

me range resulting from transmission line construction within Amphibian

tside April 1<sup>st</sup> and June 30<sup>th</sup> (for significant frog breeding habitats) or March 15<sup>th</sup> itat), to avoid disturbance to breeding amphibians and vehicle caused mortality.

n of mitigation measures.

vs are applied.

at damage resulting from transmission line construction within Red-headed

noise from construction. at damage from clearing for transmission line within Red-headed Woodpecker

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	<ul> <li>Remove trees by hand-held equipment and drag them out of the natural area to minimize soil disturbance. If possible, leave some woody debris to decompose naturally.</li> <li>Lighter vehicles and lighter machinery should be used in and around the natural area. Any vehicles used within the natural area should have wide-based tires. Tracked vehicles should be avoided.</li> <li>Monitoring Plan and Contingency Measures</li> <li>Supervision of vegetation removal by a qualified Biologist to ensure no destruction of nesting habitat.</li> <li>No additional monitoring or contingency measures required if timing window is applied.</li> </ul>	<ul> <li>Identify locations of cavity trees within the Red-headed Woodperhabitat after vegetation removal is complete. If this is not possibl required.</li> <li>Schedule vegetation clearing within habitat to occur outside the Maintain a 10 m buffer around the nest within which no vegetatio Clearly delineate habitat boundaries (i.e., 10 m buffer) using proprescribed areas.</li> <li>Minimize the area of tree removal within the natural area to the end Nest searches will be conducted by a qualified Biologist prior to Remove trees by hand-held equipment and drag them out of the debris to decompose naturally.</li> <li>Lighter vehicles and lighter machinery should be used in and arc wide-based tires. Tracked vehicles should be avoided.</li> <li>Use single poles for the transmission line, if possible.</li> <li>Focus construction activities within the natural area area area.</li> <li>Minimize the area of tree removal within the nest within which no vehicles and lighter around the nest within which no vehicles the maintain a 10 m buffer around the nest within which no vehicles.</li> <li>Glearly delineate habitat boundaries (i.e., 10 m buffer) un habitat boundaries.</li> <li>Minimize the area of tree removal within the natural area woody debris to decompose naturally.</li> <li>Lighter vehicles and lighter machinery should be used ir and area woody debris to decompose naturally.</li> <li>Lighter vehicles and lighter machinery should be used ir should have wide-based tires. Tracked vehicles should be used ir should have wide-based tires. Tracked vehicles should be used ir should have wide-based tires. Tracked vehicles should be used ir should have wide-based tires. Tracked vehicles should be used ir should have wide-based tires. Tracked vehicles should be used ir should have wide-based tires. Tracked vehicles should be used ir should have wide-based tires. Tracked vehicles should be used ir should have wide-based tires. Tracked vehicles should be used ir should have wide-based tir</li></ul>
Table 3-3 / page 43	Potential Effect Noise disturbance to breeding Red-headed Woodpeckers during transmission line construction within Red-headed Woodpecker Habitat	Prune any damaged trees through implementation of pro     Supervision of vegetation removal by a qualified Biologis     No additional monitoring or contingency measures required if timin     Potential Effect     Noise disturbance to breeding Red-headed Woodpeckers during to
	<ul> <li>Feature.</li> <li>Performance Objectives <ul> <li>Minimize disturbance to breeding birds.</li> </ul> </li> </ul>	Feature. Performance Objectives Minimize disturbance to breeding birds.
	Mitigation Strategy Focus construction activities within habitat to outside the breeding season of May 1 <sup>st</sup> to July 31 <sup>st</sup> .	Mitigation Strategy Focus construction activities within habitat to outside the
	<ul> <li>Residual Effects</li> <li>Disturbance avoided through timing of construction activities.</li> <li>No residual effects anticipated.</li> </ul>	Residual Effects           • Disturbance avoided through timing of construction activ           • No residual effects anticipated.
	Monitoring Plan and Contingency Measures No monitoring or contingency measures required if timing window is applied.	Monitoring Plan and Contingency Measures
Table 3-3 / page 44	Potential Effect         Displacement and/or mortality of nursing female and juvenile bats resulting from vegetation clearing for transmission line construction within Bat         Maternity Colony Features.         Performance Objectives         • No displacement and/or mortality of nursing female and juvenile bats.	Potential Effect         Displacement and/or mortality of nursing female and juvenile bats         Maternity Colony Features.         Performance Objectives         • No displacement and/or mortality of nursing female and
	<ul> <li>Mitigation Strategy <ul> <li>Prepare a tree preservation plan which identifies specific trees to be removed and whether each tree contains a cavity suitable for potential use as a bat maternity colony.</li> <li>Tree removal will occur outside of the maternity and summer swarming period of May 15 to August 31, wherever possible. If this is not possible, MNR will be consulted regarding any additional mitigation measures that may be required.</li> </ul></li></ul>	<ul> <li>Mitigation Strategy</li> <li>Prepare a tree preservation plan which identifies specific potential use as a bat maternity colony.</li> <li>Tree removal will occur outside of the maternity and surr not possible, MNR will be consulted regarding any additional set of the maternity and set of the possible.</li> </ul>
	Residual Effects     Significance of residual effects will be determined based on the results of post-construction monitoring.	Residual Effects      Significance of residual effects will be determined based
	Monitoring Plan and Contingency Measures No monitoring or contingency measures required during construction.	Monitoring Plan and Contingency Measures

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#### **Revised Text**

- cker habitat and ensure suitable snag trees will remain present within the e, MNR will be consulted regarding mitigation measures that may be
- breeding season of May 1 to July 31. on removal will occur. tective fencing to ensure that construction activities occur only within
- extent possible.
- vegetation clearing.
- e natural area to minimize soil disturbance. If possible, leave some woody
- bund the natural area. Any vehicles used within the natural area should have
- e breeding season of May 1<sup>st</sup> to July 31<sup>st</sup>. vegetation removal will occur. using protective fencing to ensure that construction activities occur outside the
- a to the extent possible.
- out of the natural area to minimize soil disturbance. If possible, leave some
- and around the natural area. Any vehicles used within the natural area be avoided.
- nmental Monitor to limit removal of habitat to the extent possible.
- oper arboricultural techniques, under supervision of an Arborist or Forester. st to ensure no destruction of nesting habitat. ng window is applied.
- ransmission line construction within Red-headed Woodpecker Habitat

e breeding season of May 1<sup>st</sup> to July 31<sup>st</sup>.

vities.

is applied.

resulting from vegetation clearing for transmission line construction within Bat

juvenile bats.

- c trees to be removed and whether each tree contains a cavity suitable for
- nmer swarming period of May 15 to August 31, wherever possible. If this is tional mitigation measures that may be required.
- on the results of post-construction monitoring.

on.

Section / Page	Original Text	
Table 3-3 / page 45	Potential Effect Removal of confirmed significant cavity trees or other suitable, but not studied, cavity trees resulting from vegetation clearing for transmission line construction within Bat Maternity Colony Features.	Potential Effect Removal of confirmed significant cavity trees or other suitable, bu line construction within Bat Maternity Colony Features.
	<ul> <li>Performance Objectives</li> <li>Successful relocation of any significant maternity colonies that may be removed (if applicable).</li> </ul>	Performance Objectives     Successful relocation of any significant maternity colonies that
	<ul> <li>Mitigation Strategy</li> <li>For each suitable cavity tree to be removed, a bat house will be installed in the closest suitable woodland habitat (the remainder of the woodland for each of the affected habitats).</li> <li>Details of bat box construction and placement will be provided to MNR for approval prior to installation.</li> <li>If a significant maternity colony must be removed, timing, location, and bat house design will be of utmost importance for the colony to successfully re-establish, and will be discussed with the MNR.</li> </ul>	<ul> <li>Mitigation Strategy         <ul> <li>For each suitable cavity tree to be removed, a bat hous the woodland for each of the affected habitats).</li> <li>Details of bat box construction and placement will be pr</li> <li>If a significant maternity colony must be removed, timin to successfully re-establish, and will be discussed with the successfully re-establish.</li> </ul> </li> </ul>
	<ul> <li>Residual Effects</li> <li>Significance of residual effects will be determined based on the results of post-construction monitoring.</li> </ul>	Residual Effects     Significance of residual effects will be determined base
	Monitoring Plan and Contingency Measures	Monitoring Plan and Contingency Measures
Table 2.2 (page 45	No monitoriti effect	Potential Effect
Table 3-37 page 45	Noise disturbance and/or avoidance behaviour to bats during transmission line construction within Bat Maternity Colony Features.	Noise disturbance and/or avoidance behaviour to bats during tran
	<ul> <li>Performance Objectives</li> <li>Minimize noise disturbance and/or avoidance behaviour during construction.</li> </ul>	Performance Objectives  Minimize noise disturbance and/or avoidance behaviour during
	<ul> <li>Mitigation Strategy</li> <li>Tree removal should occur outside of the summer swarming and roosting period of local bat species (May 15<sup>th</sup>-August 31<sup>st</sup>).</li> </ul>	Mitigation Strategy  Tree removal should occur outside of the summer swar
	<ul> <li>Residual Effects</li> <li>Disturbance avoided through timing of construction activities.</li> <li>No residual effects anticipated.</li> </ul>	Residual Effects           • Disturbance avoided through timing of construction acti           • No residual effects anticipated.
	Monitoring Plan and Contingency Measures	Monitoring Plan and Contingency Measures
Table 3-4 / page 44	<ul> <li>Residual Effects</li> <li>Temporary disruption of substrates/habitat associated with in-water works minimized through application of mitigation measures.</li> <li>Moderate likelihood and magnitude of effect occurring due to number of watercourse crossings.</li> </ul>	Residual Effects <ul> <li>Temporary disruption of substrates/habitat associated v</li> <li>Moderate likelihood of effect occurring due to number o</li> <li>habitat and common species: as such fish passage will</li> </ul>
Table 3-4 / page 46	Potential Effect	Potential Effect
Section 3.9.1 / page 52	There are five closed landfills within the Project Study Area (as shown on Figure 2-3), all of which are municipally-owned. The Stephen landfill (South Huron) is located within the Wind Energy Centre Study Area approximately 550 m south of the collection line between Turbines 42 and 78. Due to the distance between the landfill and Project infrastructure, construction activities are not anticipated to have an effect upon the closed landfill. The Usborne landfill (South Huron) is located within the Transmission Line Study Area, directly south of the breaker switch station and across the other side of Dump Road. Construction activities are not anticipated to have an effect upon the closed landfill because there is sufficient separation between the landfill and the Project infrastructure due to the presence of the road.	There are five closed landfills within the Project Study Area (as sh (South Huron) is located within the Wind Energy Centre Study Are and 78. Due to the distance between the landfill and Project infra closed landfill. The Usborne landfill (South Huron) is located with station and across the other side of Dump Road. Construction ac there is sufficient separation between the landfill and the Project in
Section 3.9.4 / page 54	One petroleum resource was identified within 75 m of Project infrastructure based on the MNR's Oil, Gas and Salt Resources Library. Specifically, the access road and collection line between Turbines 54 and 84 is approximately 60 m from a petroleum resource. There are no oil and gas companies operating pipelines within the Project Study Area.	One petroleum resource was identified within 75 m of Project infra Specifically, the access road and collection line between Turbines producing well. Three other resources were identified based on ground-truthing of the collection line between Turbines 53 and 55, and a natural gas There are no oil and gas companies operating pipelines within the
Section 3.9.5 / page 54	No effects on open or closed landfills, aggregate resources, forest resources or petroleum wells are anticipated as a result of the construction phase of the Project due to the distance between the Project and these resources. An Engineer's Report will be submitted to the MNR prior to construction to confirm that there are no effects on the one petroleum resource located within 75 m of Project infrastructure.	No effects on open or closed landfills, aggregate resources, fores phase of the Project due to the distance between the Project and construction to confirm that there are no effects on the one four p

ut not studied, cavity trees resulting from vegetation clearing for transmission

t may be removed (if applicable).

se will be installed in the closest suitable woodland habitat (the remainder of

rovided to MNR for approval prior to installation. ng, location, and bat house design will be of utmost importance for the colony the MNR.

ed on the results of post-construction monitoring.

tion.

nsmission line construction within Bat Maternity Colony Features.

g construction.

rming and roosting period of local bat species (May 15<sup>th</sup>-August 31<sup>st</sup>).

ivities.

#### tion.

with in-water works minimized through application of mitigation measures. of watercourse crossings; <u>however, magnitude of effect limited due to marginal</u> I be maintained and will continue to provide habitat.

#### of hydro transmission line poles.

hown on Figure 2-3), all of which are municipally-owned. The Stephen landfill rea approximately 550 650 m south of the collection line between Turbines 42 astructure, construction activities are not anticipated to have an effect upon the hin the Transmission Line Study Area, directly south of the breaker switch ctivities are not anticipated to have an effect upon the closed landfill because infrastructure due to the presence of the road.

astructure based on the MNR's Oil, Gas and Salt Resources Library. s 54 and 84 is approximately 60 m from a petroleum resource an active oil

of the Project Location. There is a storage tank and natural gas line 9 m from s line 7 m from the collection line between Turbines 14 and 31.

#### e Project Study Area.

st resources or petroleum wells are anticipated as a result of the construction I these resources. An Engineer's Report will be submitted to the MNR prior to betroleum resource<u>s</u> located within 75 m of Project infrastructure.

## 2.2 Edits to the Design and Operations Report

The edits made to the Design and Operations Report due to these project modifications and to comments received from review agencies including the MNR are summarized as follows:

#### Archaeology

 An increase in archaeological sites identified in the Stage 2 Archaeological Assessment and recommended for Stage 3 Archaeological Assessment.

#### **Cultural Heritage**

 An increase in the number of structures identified as greater than 40 years old and with cultural heritage value or interest.

#### **Natural Heritage**

- An increase in the number of years of post-construction monitoring for specific Bat Maternity Colonies, snake populations.
- An increase in number of years of reporting reptile hibernacula findings to MNR.
- Replacement of the potential effect of the absence of confirmed significant cavity trees or other suitable, but not studied, cavity trees removed during construction with disturbance and/or avoidance behaviour during operation, as the goal during the construction phase will be to leave enough cavity trees in place to allow continued Bat Maternity Colony habitat use.
- Addition of the mitigation strategy to conduct post-construction monitoring of Bat Maternity Colonies in the vicinity of the transmission line to ensure continued use of the habitat.
- Removal of installation and monitoring of bat houses/boxes as a mitigation strategy and monitoring plan and contingency measure as cavity trees are intended to be left intact.
- Addition of the following regarding the potential effect on colonially-nesting birds due to noise from operation of turbines:
  - Performance objective: Minimize disturbance to colonially-nesting birds (Great Blue Herons).
  - Mitigation strategy: Post-construction monitoring to ensure continued use of the habitat.
  - Residual effects: Significance of residual effects will be determined based on the results of postconstruction monitoring.
  - Monitoring plan and contingency measures: Conduct 3 years of post-construction colonially-nesting bird monitoring; report the findings of the colonially-nesting bird monitoring program to MNR on an annual basis for the first 3 years of operation; if significant declines or disappearance of species is detected, determine whether this is likely to have been caused by the Project. If so, implement corrective measures that are developed through consultation with MNR.

#### Surface Water

 Removal of obstruction of lateral flows in watercourses and other waterbodies due to design of culverts and debris build-up at water crossings as a potential surface water effect as this effect and its mitigation are addressed elsewhere;

#### **Other Resources**

- An increase in the distance between the Stephen landfill and proposed infrastructure; and
- An increase in the number of petroleum resources within 75 m of Project infrastructure based on a field review.

Table 2-2 documents the edits to the Design and Operations Report (September, 2012).

#### Table 2-2Edits to the Design and Operations Report

Section / Page	Original Text	
Section 6.1 / page 18	In 2011 and 2012, pedestrian surveys were conducted within the Project Study Area in support of the Stage 2 Archaeological Assessment, according to the 2011 <i>Standards and Guidelines for Consultant Archaeologists</i> issued by the Ontario Ministry of Tourism, Culture and Sport (MTCS) (Government of Ontario, 2011). A total of 61 archaeological sites were identified and 28 sites have been recommended for further Stage 3 archaeological assessment.	In 2011 and 2012, pedestrian surveys were conducted within the according to the 2011 <i>Standards and Guidelines for Consultant A</i> (MTCS) (Government of Ontario, 2011). A total of 61 <u>62</u> archaeol Stage 3 archaeological assessment.
Section 6.1 / page 18	A Cultural Heritage Assessment (Golder, 2012) was also completed to identify built heritage and cultural heritage landscape resources related to the Euro-Canadian land use in the area dating prior to 1970. All work was carried out in accordance with the <i>Ontario Heritage Act</i> , the <i>Provincial Policy Statement</i> , and the <i>Environmental Assessment Act</i> . The report identified 98 structures (55 houses and 43 barns or barn complexes) as greater than 40 years old within the Project Study Area and as having general historical interest contributing to the character of the vernacular rural landscape. When applying the criteria set out in <i>Ontario Regulation 9/06</i> , 71 of these structures (35 houses and 36 barns) were determined to have cultural heritage value or interest. Following the evaluation of anticipated impacts, both direct and indirect, according to <i>InfoSheet #5</i> (Government of Ontario, 2006), no anticipated impacts were identified. As there are no anticipated impacts to the cultural heritage features, no further work is recommended.	A Cultural Heritage Assessment (Golder, 2012) was also complete the Euro-Canadian land use in the area dating prior to 1970. All w <i>Policy Statement</i> , and the <i>Environmental Assessment Act</i> . The r complexes) as greater than 40 years old within the Project Study the vernacular rural landscape. When applying the criteria set out barns) were determined to have cultural heritage value or interest according to <i>InfoSheet #5</i> (Government of Ontario, 2006), no anti- cultural heritage features, no further work is recommended.
Table 6-1 / page 20	Valleylands One valleyland feature was determined to be significant and therefore included in the EIS.	Valleylands One valleyland feature was determined to be significant and there
Table 6-1 / page 20	Significant Wildlife Habitat         The following significant wildlife habitats were confirmed or treated as significant within the 120 m Area of Investigation and within 120 m of qualifying project infrastructure, and were therefore included in the EIS.         Bat maternity colonies;         Amphibian woodland breeding habitat;         Habitat for plant species of conservation concern (multiple);         Habitat for bird species of conservation concern (Red-headed Woodpecker);         Waterfowl (Tundra Swan) stopover and staging areas;         Reptile hibernacula;         Turtle over-wintering habitat; and         Habitat for Insect Species of Conservation Concern (Azure Bluet).	Significant Wildlife Habitat         The following significant wildlife habitats were evaluated and determ         120 m of qualifying project infrastructure, and were therefore carr         5 bat maternity colonies;         One colonially-nesting bird breeding habitat (tree/shrub)         4 amphibian woodland breeding habitats;         6 habitats for plant species of conservation concern (m         One habitat for bird species of conservation concern (R         The following significant wildlife habitats were confirmed or treated qualifying project infrastructure, and were therefore included in the Bat maternity colonies;         Amphibian woodland breeding habitat;
Table 6-1 / page 20	Significant Wildlife Habitat	<ul> <li>Amprindian woodiand breeding nabitat,</li> <li>Habitat for plant species of conservation concern (multi</li> <li>Habitat for bird species of conservation concern (Red-r</li> <li>Waterfowl (Tundra Swan) stopover and staging areas;</li> <li>Reptile hibernacula;</li> <li>Turtle over-wintering habitat; and</li> <li>Habitat for Insect Species of Conservation Concern (Azure Bluet)</li> <li>Significant Wildlife Habitat</li> <li>The following features were treated as significant for the purpose</li> </ul>
		to whether the mitigation measures described herein will be appli- 2 waterfowl stopover and staging areas (terrestrial); 11 bat maternity colonies; 2 turtle wintering areas; 8 reptile hibernacula; One deer wintering congregation area; One deer movement corridor; and, 4 amphibian woodland breeding habitats.
Table 6-1 / page 21	Significant Wildlife Habitat         The following candidate significant wildlife habitats were identified within the 120 m Area of Investigation however not within 120 m of qualifying project infrastructure, and were therefore included in the EIS as Generalized Candidate Significant Wildlife Habitat:         • Waterfowl nesting areas;         • Reptile hibernacula;         • Bat maternity colonies;         • Amphibian woodland breeding habitat;         • Mature forest stands (numerous);         • Rare vegetation communities;         • Turtle overwintering habitat;         • Woodland raptor nesting habitat;         • Colonial-nesting Bird Breeding Habitat (Tree/Shrub);         • Habitat for area sensitive species: interior forest breeding birds;         • Seeps and springs; and	Significant Wildlife Habitat         The following candidate significant wildlife habitats were identified         project infrastructure, and were therefore included in the EIS as 0         Waterfowl nesting areas;         Reptile hibernacula;         Bat maternity colonies;         Amphibian woodland breeding habitat;         Amphibian wetland breeding habitat;         Habitats of plant species of conservation concern (numer         Habitat of bird species of conservation concern (numer         Mature forest stands;         Rare vegetation communities;         Turtle nesting area;         Woodland raptor nesting habitat;         Woodland area-sensitive bird breeding habitat;         Terrestrial crayfish habitat; and

#### **Revised Text**

Project Study Area in support of the Stage 2 Archaeological Assessment, Archaeologists issued by the Ontario Ministry of Tourism, Culture and Sport logical sites were identified and 28 33 sites have been recommended for further

ted to identify built heritage and cultural heritage landscape resources related to work was carried out in accordance with the *Ontario Heritage Act*, the *Provincial* report identified 98 <u>135</u> structures (55 <u>67</u> houses and 43 <u>68</u> barns or barn Area and as having general historical interest contributing to the character of at in *Ontario Regulation 9/06*, 74 <u>99</u> of these structures (35 <u>46</u> houses and 36 <u>53</u> st. Following the evaluation of anticipated impacts, both direct and indirect, ticipated impacts were identified. As there are no anticipated impacts to the

#### efore included in the EIS.

ermined to be significant in or within the 120 m Area of Investigation and within ried forward to the EIS.

<u>);</u>

nultiple); and, Red-headed Woodpecker).

ed as significant within the 120 m Area of Investigation and within 120 m of the EIS.

ti<mark>ple);</mark> headed Woodpecker);

-

e of this submission and included in the EIS (in some cases, a determination as ied will be made based on the outcome of pre-construction surveys):

d within the 120 m Area of Investigation however not within 120 m of qualifying Generalized Candidate Significant Wildlife Habitat:

<u>nerous);</u> rous);

Section / Page	Original Text	R
		<ul> <li>The following candidate significant wildlife habitats were identified project infrastructure, and were therefore included in the EIS as Ge</li> <li>Waterfowl nesting areas;</li> <li>Reptile hibernacula;</li> <li>Bat maternity colonies;</li> <li>Amphibian woodland breeding habitat;</li> <li>Amphibian wetland breeding habitat;</li> <li>Mature forest stands (numerous);</li> <li>Rare vegetation communities;</li> <li>Turtle nesting habitat;</li> <li>Turtle overwintering habitat;</li> <li>Colonial nesting Bird Breeding Habitat (Tree/Shrub);</li> <li>Habitat for area sensitive species: interior forest breeding.</li> <li>Habitats of species of conservation concern (numerous).</li> </ul>
Table 6-2 / page 21-30	Potential Effect Risk of bird collisions with turbines (Project-wide). Risk of bat collisions with turbines (Project-wide).	Potential Effect Risk of bird collisions with turbines (Project-wide). Risk of bat collisions with turbines (Project-wide).
	<ul> <li>Residual Effects</li> <li>Significance of residual effects will be determined based on the results of post-construction monitoring.</li> <li>Risk of bird collisions with turbine minimized through mitigation.</li> <li>Risk of bat collisions with turbine minimized through mitigation.</li> </ul>	Risk of bird mortality caused by turbines (Project-wide). Risk of bat mortality caused by turbines (Project-wide). Residual Effects • Significance of residual effects will be determined based on the r • Risk of bird collisions with turbine minimized through mitigation. • Risk of bat collisions with turbine minimized through mitigation. • Risk of bird and bat collisions with turbine minimized through mitigation. • Risk of bird and bat collisions with turbine minimized through mitigation.
Table 6-2 / page 21-30	Potential Effect         Soil / water contamination by oils, gasoline, grease and other materials (e.g., turbine lubricant, maintenance personnel) resulting from turbine operation and maintenance, substation operation and maintenance, or transmission line maintenance.         Mitigation Strategy         • Control soil / water contamination through Best Management Practices.         • Ensure machinery arrives on site in a clean, washed condition and is maintained free of fluid leaks.         • Develop a spill response plan outlining steps to contain any spills during maintenance activities to avoid contamination of valleyland and wetland features. Train staff on associated procedures and maintain emergency spill kits on site.         • Dispose of any waste material from maintenance activities by authorized and approved off-site vendors.         • Site maintenance, vehicle washing and refuelling stations where contaminants are handled at least 30 m away from natural features including water bodies and squificant woodlands, wetlands, and wildlife habitat.         • Implement vehicle and equipment cleaning procedures and practices to minimize or eliminate the discharge of pollutants from vehicle / equipment cleaning operations to watercourses or natural areas.         • Store any stockpiled materials away from natural features to prevent deleterious substances from inadvertently discharging to the environment.         • Only apply herbicides (if required) when wind speeds are low and no significant precipitation is expected (does not apply to agricultural practices).         • Soil / water contamination will be minimized through the application of mitigation measures.         •	<ul> <li>Potential Effect</li> <li>Soil / water contamination by oils, gasoline, grease and other material operation and maintenance, substation operation and maintenance</li> <li>Risk of soil or water contamination from oil, gas, etc. during maintenance</li> <li>Risk of soil or water contamination from oil, gas, etc. during maintenance</li> <li>Risk of soil or water contamination through Best Management Procession</li> <li>Control soil / water contamination through Best Management Procession</li> <li>Ensure machinery arrives on site in a clean, washed condition are</li> <li>Develop a spill response plan outlining steps to contain any spills dure features. Train staff on associated procedures and maintain emerge</li> <li>Dispose of any waste material from maintenance activities by au</li> <li>Site maintenance, vehicle washing and refuelling stations where water bodies and significant woodlands, wetlands, and wildlife hat</li> <li>Implement vehicle and equipment cleaning procedures and prace equipment cleaning operations to watercourses or natural areas.</li> <li>Store any stockpiled materials away from natural features to precenvironment.</li> <li>Only apply herbicides (if required) when wind speeds are low an practices).</li> <li>Only use herbicides (if required) approved for use adjacent to water practices).</li> <li>Develop and implement an emergency spills plan outlining steps significant wetlands.</li> <li>Residual Effects</li> <li>Soil / water contamination will be minimized through the applicat Low likelihood and limited magnitude of effects on surface water are in Residual effects considered negligible.</li> </ul>
		Monitoring Plan and Contingency Measures <ul> <li>Conduct regular site inspections and monitoring of turbines by a</li> </ul>

d within the 120 m Area of Investigation however not within 120 m of qualifying Generalized Candidate Significant Wildlife Habitat:

ing birds;

results of post-construction monitoring.

nitigation.

e results of post-construction monitoring.

naterials (e.g., turbine lubricant, maintenance personnel) resulting from turbine ance, or transmission line maintenance.

#### maintenance activities where access roads, turbines or the transmission

Practices.

- and is maintained free of fluid leaks.
- during maintenance activities to avoid contamination of valleyland and wetland gency spill kits on site.
- authorized and approved off-site vendors.
- re contaminants are handled at least 30 m away from natural features including habitat.
- actices to minimize or eliminate the discharge of pollutants from vehicle /
- revent deleterious substances from inadvertently discharging to the
- and no significant precipitation is expected (does not apply to agricultural
- ter bodies, riparian buffers, or woodland edges (does not apply to agricultural
- os to contain any spills during maintenance activities to avoid contamination of

ation of mitigation measures. and groundwater as a result.

a designated on-site Environmental Monitor(s).

Section / Page	Original Text	
		Contingency Measures:     Notify MOE's Spills Action Centre of any spills.     Assess and remediate affected soils and water. In the event that a spill occurs, the details of the spill will be reported at the spill occurs.
		No monitoring required. <u>Contingency Measures:</u> <u>Report the details of the spill to MOE, including a description</u>
Table 6-2 / page 21-30	Potential Effect Changes in surface water drainage patterns resulting in effects to soil moisture and species composition of vegetation from access road operation and maintenance	Potential Effect Changes in surface water drainage patterns resulting in effect road operation and maintenance
	<ul> <li>Performance Objective</li> <li>No effects to soil moisture and species composition of vegetation.</li> <li>Minimize changes in surface water drainage patterns.</li> </ul>	<ul> <li>Performance Objective</li> <li>No effects to soil moisture and species composition of vegetation</li> <li>Minimize changes in surface water drainage patterns.</li> </ul>
	<ul> <li>Mitigation Strategy</li> <li>Implement infiltration techniques to the maximum extent possible.</li> <li>Minimize paved surfaces and design roads to promote infiltration.</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>Implement infiltration techniques to the maximum extent possible</li> <li>Minimize paved surfaces and design roads to promote infiltration</li> </ul>
	<ul> <li>Residual Effects</li> <li>Effects to soil moisture and species composition of vegetation minimized through application of mitigation measures.</li> <li>Low likelihood and limited magnitude of effects as a result.</li> </ul>	Residual Effect • Effects to soil moisture and species composition of vegetation r
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Inspect locations within 30 m of wetlands following completion of access roads to ensure no grade changes.</li> <li>Contingency Measures: <ul> <li>If surface water drainage alterations are detected, undertake corrective measures to restore drainage pattern.</li> </ul> </li> </ul>	<ul> <li>Low likelihood and limited magnitude of effects as a result.</li> <li>Monitoring Plan and Contingency Measures</li> <li>Inspect locations within 30 m of wetlands following completion</li> <li>Contingency Measures:</li> </ul>
Table 6-2 / page 21-30	Potential Effect Potential introduction of invasive species into Significant Wetlands communities resulting from access road operation and maintenance.	If surface water drainage alterations are detected, undertake Potential Effect Potential introduction of invasive species into Significant We maintenance. Detential introduction of invasive species into water detected
	<ul> <li>Mitigation Strategy</li> <li>A restoration plan should be implemented to re-vegetate the 5 m buffer between the turbine and wetland. This should include the 1 year application of an approved herbicide to eradicate invasive species followed by the cultivation and seeding of the area with a native seed mix as well as the planting of native shrubs along the edge consistent with existing wetland vegetation composition</li> <li>Monitoring Plan and Contingency Measures</li> <li>Monitor twice per year for two years to confirm survival of seed mix.</li> <li>Contingency Measures:</li> </ul>	Potential introduction of invasive species into wetland comm         Mitigation Strategy         A restoration plan should be implemented to re-vegetate the 5 m application of an approved herbicide to eradicate invasive specie well as the planting of native shrubs along the edge consistent wi         • Develop and implement a restoration plan to re-vegetate the 5 application of an approved herbicide (as per Ausable Bayfield C native seed mix and the planting of native shrubs along the edge
		Monitoring Plan and Contingency Measures         • Monitor twice per year for two years to confirm survival of seed         • Contingency Measures:         Should seed mix and/or plantings not survive, additional seeding         • Monitor re-vegetated areas once per growing season for two years
Table 6-2 / page 21-30	Potential Effect Loss of forest cover (up to 2.8 ha) through vegetation clearing in Significant Woodlands due to transmission line establishment	<u>Contingency Measures:</u> <u>Should seed mix and/or plantings not survive, additional seedin</u> Potential Effect     Loss of forest cover (up to 2.8 ha) through vegetation clearing
	<ul> <li>Mitigation Strategy</li> <li>Establish an area of forest equal in area to the cleared area (up to 2.8 ha; to be determine d through a post-construction site inspection) through tree planting and management (e.g., in partnership with a local Conservation Authority). Details of the afforestation plan will be provided to MNR in a Compensation Plan.</li> <li>Residual Effects</li> <li>Clearing of vegetation will occur for the transmission line.</li> </ul>	Loss of forest cover (up to 2.6 ha) through vegetation clearin Mitigation Strategy Establish an area of forest equal in area to the cleared area (up to tree planting and management (e.g., in partnership with a local C in a Compensation Plan.
	<ul> <li>Loss of forest cover minimized through afforestation over time.</li> <li>Moderate residual effects.</li> </ul>	Establish an area of forest equal in area to the cleared area (up local Conservation Authority). Details of the afforestation plan v MNR.

rted back to MOE, including a description of any assessment and remediation

#### of any assessment and remediation undertaken.

cts to soil moisture and species composition of vegetation from access

n.

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minimized through application of mitigation measures.

of access roads to ensure no grade changes.

corrective measures to restore drainage pattern.

#### etlands communities resulting from access road operation and

#### munities adjacent to access roads

buffer between the turbine and wetland. This should include the 1 year as followed by the cultivation and seeding of the area with a native seed mix as ith existing wetland vegetation composition m buffer between the access road and the wetland. This will include the 1 year Conservation Authority) to eradicate invasive species followed by seeding with a

Conservation Authority) to eradicate invasive species followed by seeding with a ge consistent with existing vegetation composition.

l mix.

and/or plantings will be undertaken.

ears to confirm survival of plantings and/or seed mix.

ng and/or plantings will be undertaken.

ng in Significant Woodlands due to transmission line establishment

ng in Significant Woodlands due to transmission line establishment.

o 2.8 ha; to be determine d through a post-construction site inspection) through conservation Authority). Details of the afforestation plan will be provided to MNR

to 2.6 ha) through tree planting and management (e.g., in partnership with a will be described in a Compensation Plan to be developed in consultation with

Section / Page	Original Text	R
		Residual Effects         • Clearing of vegetation will occur for the transmission line.         • Loss of forest cover minimized through afforestation over time.         Moderate residual effects.         • Clearing of vegetation will occur for the transmission line.         • Loss of forest cover minimized through afforestation.
		cleared forest.
Table 6-2 / page 21-30	Potential Effect Clearing of vegetation for maintenance of the transmission line, resulting in accidental damage to Significant Woodlands.	Potential Effect Clearing of vegetation for maintenance of the transmission lir
	Performance Objective     Minimize accidental damage to significant woodlands	Performance Objective Minimize accidental damage to significant woodlands
	<ul> <li>Mitigation Strategy</li> <li>Perform vegetation clearing outside of the breeding bird season (May 1<sup>st</sup> to July 31<sup>st</sup>). Undertake active nest surveys if vegetation removal must take place during this period.</li> <li>Clearly stake area to be cleared.</li> <li>Limit size of machines to minimize soil compaction</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>Perform vegetation clearing outside of the breeding bird season must take place during this period.</li> <li>Clearly stake area to be cleared.</li> <li>Limit size of machines to minimize soil compaction</li> </ul>
	<ul><li>Residual Effects</li><li>Minimal effects to significant woodlands during maintenance.</li></ul>	Residual Effects Minimal effects to significant woodlands during maintenance.
Table 6-2 / page 21-30	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Removal of tree limbs on adjacent trees being retained should be carried out under supervision of an Arborist or Forester</li> <li>Potential Effect</li> </ul>	Monitoring Plan and Contingency Measures Removal of tree limbs on adjacent trees being retained should be Potential Effect
	<ul> <li>Avoidance by Tundra Swans of stopover and staging habitats during migration due to proximity of turbines.</li> <li>Mitigation Strategy <ul> <li>Implement contingency mitigation measures if disturbance effects are detected through post-construction monitoring. Mitigation techniques for Tundra Swans may include:</li> <li>Temporary shut-down of select turbines during migration period (typically early to late March);</li> <li>If necessary, work with MNR to develop other appropriate mitigation measures.</li> </ul> </li> <li>Monitoring Plan and Contingency Measures <ul> <li>Conduct 3 years of post-construction Tundra Swan monitoring at Features, including:</li> <li>Conduct surveys on three occasions approximately one week apart during the peak migratory period, which typically occurs in March but can range from mid-February to mid-April.</li> <li>Conduct surveys on three occasions approximately one week apart during the peak migratory period, which typically occurs in March but can range from mid-February to mid-April.</li> <li>Conduct surveys between sunrise and noon, and under calm, clear weather conditions, to the extent possible.</li> <li>One survey station will be placed per 0.5 km of candidate Tundra Swan stopover and staging habitat and be monitored for approximately 15 minutes.</li> <li>All observed waterfowl will be recorded along with their approximate location, age and behaviour.</li> </ul> </li> <li>Conduct surveys on throng Swan monitoring programs will be reported back to MNR on an annual basis for the first 3 years of operation.</li> <li>Configuency Measures:</li> <li>Institute changes to turbine operation if disturbance effects are detected through post-construction monitoring (see mitigation strategy in this table).</li> </ul>	<ul> <li>Avoidance by Tundra Swans of stopover and staging habitats</li> <li>Mitigation Strategy <ul> <li>Implement contingency mitigation measures if disturbance effect Tundra Swans may include:</li> <li>Temporary shut-down of select turbines during migration perict</li> <li>If necessary, work with MNR to develop other appropriate mitif</li> </ul> </li> <li>Implement contingency mitigation measures if disturbance effect</li> <li>Monitoring Plan and Contingency Measures</li> <li>Conduct 3 years of post-construction Tundra Swan monitoring at Conduct surveys on three occasions approximately one week can range from mid-February to mid-April.</li> <li>Conduct surveys between sunrise and noon, and under calm,</li> <li>One survey station will be placed per 0.5 km of candidate Tun minutes.</li> <li>All observed waterfowl will be recorded along with their approxir</li> <li>The findings of the Tundra Swan monitoring regrams will be recorded along with their approxir</li> <li>Conduct 3 years of post-construction Tundra Swan monitoring a qualified Biologist, including:</li> <li>Conduct surveys on three occasions approximately one week can range from mid-February to mid-April.</li> <li>Conduct surveys on three occasions approximately one week can range from three occasions approximately one week can range from the operation if disturbance effects are dettable).</li> </ul>
		If significant declines or disappearance of species is detected, or implement corrective measures that are developed through con

here will be a time delay for the planted area to reach the same function as the

ne, resulting in accidental damage to Significant Woodlands.

(May 1<sup>st</sup> to July 31<sup>st</sup>). Undertake active nest surveys if vegetation removal

carried out under supervision of an Arborist or Forester

s during migration due to proximity of turbines.

ts are detected through post-construction monitoring. Mitigation techniques for

od (typically early to late March); igation measures.

ts are detected through post-construction monitoring (contingency measures).

at Features, including: apart during the peak migratory period, which typically occurs in March but

clear weather conditions, to the extent possible. Idra Swan stopover and staging habitat and be monitored for approximately 15

nate location, age and behaviour. ported back to MNR on an annual basis for the first 3 years of operation.

tected through post-construction monitoring (see mitigation strategy in this

at Features WSST-15 and WSST-36 (if determined to be significant) by a

apart during the peak migratory period, which typically occurs in March but

dra Swan stopover and staging habitat and be monitored for approximately 15

mate location, age and behaviour. eported back to MNR on an annual basis for the first 3 years of operation.

determine whether this is likely to have been caused by the Project. If so, isultation with MNR.

Section / Page	Original Text	R
Table 6-2 / page 21-30	Potential Effect Disturbance to Tundra Swan stopover and staging habitats due to vehicular traffic on access roads.	Potential Effect Disturbance to Tundra Swan stopover and staging habitats du
	<ul> <li>Mitigation Strategy</li> <li>Avoid using access roads adjacent to Tundra Swan stopover and staging habitats during migration period (typically early to late March), to the extent possible.</li> </ul>	Mitigation Strategy Avoid using access roads adjacent to Tundra Swan stopover and s extent possible.
		<ul> <li>Schedule regular (non-critical) maintenance activities to occur ou the extent possible.</li> <li>Maintain wildlife crossing signs and limit speed of vehicles (30 km</li> </ul>
Table 6-2 / page 21-30	Potential Effect Bats may be disturbed by noise from operation of turbines.	Potential Effect Bats may be disturbed by noise from operation of turbines.
	<ul> <li>Mitigation Strategy</li> <li>Implement mitigation when disturbance effects are detected through post-construction monitoring (refer to mitigation measures for bat collisions with turbines above).</li> </ul>	Mitigation Strategy Implement mitigation when disturbance effects are detected throug with turbines above).
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Conduct 3 years of post-construction acoustic monitoring for Feature BMC-757 according to protocol described for pre-construction survey (as described in March 2010 Draft vortice of Pote and Pot Habitate: Guidelines for Wind Power Project) including:</li> </ul>	Implement contingency mitigation measures (as per consultation monitoring.
	<ul> <li>Through the night acoustic monitoring stations to be positioned within 10 m of the potential roost.</li> <li>Survey same stations as pre-construction survey.</li> <li>Visual monitoring to be conducted at dusk in June.</li> </ul>	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Conduct 3 years of post-construction acoustic monitoring for Feature E March 2010 Draft version of Bats and Bat Habitats: Guidelines for Win</li> </ul>
	<ul> <li>Acoustic monitoring to begin at dusk and continue for 5 hours, for up to 10 nights, or until roost is confirmed.</li> <li>Monitoring to occur between June 1 and June 30.</li> <li>Conduct 1 year of post-construction acoustic monitoring for Features BMC-189, BMC-229, BMC-326, and BMC-342 according to protocol described for pre-construction survey, as described in the March 2010 Draft version of <i>Bats and Bat Habitats: Guidelines for Wind Power Projects</i></li> </ul>	<ul> <li>I brough the hight acoustic monitoring stations to be positioned</li> <li>Survey same stations as pre-construction survey.</li> <li>Visual monitoring to be conducted at dusk in June.</li> <li>Acoustic monitoring to begin at dusk and continue for 5 hours,</li> </ul>
	<ul> <li>(see above).</li> <li>If the first year of post-construction monitoring indicates that this Feature may no longer be significant, an additional 2 years of post-construction monitoring will occur following pre-construction methods.</li> </ul>	<ul> <li>Monitoring to occur between June 1 and June 30.</li> <li>Conduct 1 year of post-construction acoustic monitoring for Featur described for pre-construction survey, as described in the March 2</li> </ul>
	If a significant habitat is still significant after the first year of post-construction monitoring, no further monitoring will occur as the habitat will be considered to be unaffected.	(see above).  If the first year of post-construction monitoring indicates that this
	<ul> <li>Conduct 1 year of post-construction acoustic monitoring for Features BMC-235, BMC-242, BMC-249, BMC-267, BMC-282, BMC-352, BMC-358 and BMC-372 (if deemed to be significant) according to protocol described for pre-construction survey (as described in July 2011 version of <i>Bats and Bat Habitats: Guidelines for Wind Power Projects</i>) including:</li> </ul>	<ul> <li>If a significant habitat is still significant after the first year of post- considered to be unaffected.</li> </ul>
	<ul> <li>Conduct monitoring of roost trees through exit surveys through June.</li> <li>Conduct active visual and acoustic monitoring at the cavity opening or crevice from 30 minutes before dusk until 60 minutes after dusk in June.</li> </ul>	<ul> <li>Conduct 1 year of post-construction acoustic monitoring for Feat 358 and BMC-372 (if deemed to be significant) according to proto of Bats and Bat Habitats: Guidelines for Wind Power Projects) in</li> </ul>
	• If this first year of post-construction monitoring indicates that a Feature may no longer be significant, an additional 2 years of post-construction monitoring will occur following pre-construction methods to determine if a change may represent normal variation in population or if the project has had an effect.	<ul> <li>Conduct monitoring of roost trees through exit surveys through</li> <li>Conduct active visual and acoustic monitoring at the cavity ope June.</li> </ul>
	<ul> <li>If a significant habitat is still significant after the first year of post-construction monitoring, no further monitoring will occur as the habitat will be considered to be unaffected.</li> <li>The findings of all acoustic monitoring programs will be reported back to MNR on an annual basis for the first 3 years of operation.</li> </ul>	<ul> <li>If this first year of post-construction monitoring indicates that a Fermonitoring will occur following pre-construction methods to deter has had an effect.</li> </ul>
	<ul> <li>Contingency Measures:</li> <li>Institute changes to turbine operation if disturbance effects are detected through post-construction monitoring (see mitigation strategy in this table)</li> </ul>	<ul> <li>If a significant habitat is still significant after the first year of post- considered to be unaffected.</li> <li>The findings of all acquistic monitoring programs will be reported by</li> </ul>
	<ul> <li>Consultation with MNR to determine additional contingency measures if necessary</li> </ul>	Contingency Measures:     Institute changes to turbine operation if disturbance effects are table).
		Consultation with MNR to determine additional contingency measu
		<u>Conduct 3 years of post-construction monitoring for Features BMC-755</u> for pre-construction survey (as described in March 2010 Draft version of <u>Through the night acoustic monitoring stations to be positioned</u>
		<ul> <li>Survey same stations as pre-construction survey.</li> <li>Visual monitoring to be conducted at dusk in June.</li> <li>Acoustic monitoring to begin at dusk and continue for 5 hours,</li> </ul>
		<ul> <li>Monitoring to occur between June 1 and June 30.</li> <li>Conduct 3 years of post-construction monitoring for Features BM (if deemed to be significant) according to protocol described for public describe</li></ul>
		<u>Habitats: Guidelines for Wind Power Projects) including:</u> <u>Conduct monitoring of roost trees during exit surveys througho</u> <u>Conduct active visual and acoustic monitoring at the cavity openance</u>
		June.

#### ue to vehicular traffic on access roads.

staging habitats during migration period (typically early to late March), to the

utside of the important period of staging Tundra Swan (March 1 to April 15), to

m/hr) near stopover and staging areas

gh post-construction monitoring (refer to mitigation measures for bat collisions

n with MNR) if disturbance effects are detected through post-construction

BMC-757 according to protocol described for pre-construction survey (as described in nd Power Projects) including: d within 10 m of the potential roost.

, for up to 10 nights, or until roost is confirmed.

res BMC-189, BMC-229, BMC-326, and BMC-342 according to protocol 2010 Draft version of *Bats and Bat Habitats: Guidelines for Wind Power Projects* 

Feature may no longer be significant, an additional 2 years of post-

-construction monitoring, no further monitoring will occur as the habitat will be

tures BMC-235, BMC-242, BMC-249, BMC-267, BMC-282, BMC-352, BMCtocol described for pre-construction survey (as described in July 2011 version including:

h June.

ening or crevice from 30 minutes before dusk until 60 minutes after dusk in

eature may no longer be significant, an additional 2 years of post-construction rmine if a change may represent normal variation in population or if the project

-construction monitoring, no further monitoring will occur as the habitat will be

ack to MNR on an annual basis for the first 3 years of operation.

e detected through post-construction monitoring (see mitigation strategy in this

ures if necessary

57, BMC-189, BMC-229, BMC-326, and BMC-342 according to protocol described of Bats and Bat Habitats: Guidelines for Wind Power Projects) including: d within 10 m of the potential roost.

for up to 10 nights, or until roost is confirmed.

MC-235, BMC-242, BMC-249, BMC-267, BMC-282, BMC-352, and BMC-358 pre-construction survey (as described in July 2011 version of *Bats and Bat* 

out June.

ening or crevice from 30 minutes before dusk until 60 minutes after dusk in

Section / Page	Original Text	R
		The findings of all monitoring programs will be reported to MNR     Contingency Measures:     Institute changes to turbine operation if disturbance effects are     Consultation with MNR to determine additional contingency measurements
Table 6-2 / page 21-30	Potential Effect Bats may display avoidance behaviour caused by turbine lighting. Monitoring Plan and Contingency Measures Conduct 3 years of post-construction acoustic monitoring for Feature BMC-757 according to protocol described for pre-construction survey (as described in March 2010 Draft version of <i>Bats and Bat Habitats: Guidelines for Wind Power Projects</i> ) including: Through the night acoustic monitoring stations to be positioned within 10 m of the potential roost. Survey same stations as pre-construction survey, Visual monitoring to be conducted at dusk in June. Acoustic monitoring to begin at dusk and continue for 5 hours, for up to 10 nights, or until roost is confirmed. Monitoring to occur between June 1 and June 30. Conduct 1 year of post-construction survey, as described in the March 2010 Draft version of <i>Bats and Bat Habitats: Guidelines for Wind Power Projects</i> (see above). If the first year of post-construction monitoring indicates that this Feature may no longer be significant, an additional 2 years of post- construction monitoring will occur following pre-construction monitoring for Features BMC-235, BMC-242, BMC-247, BMC-287, BMC-282, BMC-352, BMC-352, BMC-358 and BMC-372 (if deemed to be significant after the first year of post-construction monitoring will occur as the habitat will be considered to be unaffected. Conduct 1 year of post-construction acoustic monitoring for Features BMC-243, BMC-242, BMC-247, BMC-287, BMC-382, BMC-352, BMC- 358 and BMC-372 (if deemed to be significant acoustic monitoring for protocol described for pre-construction survey for <i>Mind Power Projects</i> ) including: Conduct active visual and acoustic monitoring at the cavity opening or crevice from 30 minutes before dusk until 60 minutes after dusk in June. If this first year of post-construction monitoring at the cavity opening or crevice from 30 minutes before dusk until 60 minutes after dusk in June. If this first year of post-construction monitoring at the cavity opening or crevice from 30 minutes before dusk u	<ul> <li>The findings of all monitoring programs will be reported to MNR</li> <li>Contingency Measures: <ul> <li>Institute changes to turbine operation if disturbance effects are</li> <li>Consultation with MNR to determine additional contingency me</li> </ul> </li> <li>Potential Effect <ul> <li>Bats may display avoidance behaviour caused by turbine light</li> </ul> </li> <li>Monitoring Plan and Contingency Measures</li> <li>Conduct 3 years of post-construction acoustic monitoring for Feat described in March 2010 Draft version of <i>Bats and Bat Habitats</i>: <ul> <li>Through the night acoustic monitoring stations to be positioned</li> <li>Survey same stations as pre-construction survey.</li> <li>Visual monitoring to be conducted at dusk in June.</li> <li>Acoustic monitoring to begin at dusk and continue for 5 hours,</li> <li>Monitoring to occur between June 1 and June 30.</li> </ul> </li> <li>Conduct 1 year of post-construction monitoring indicates that this construction monitoring will occur following pre-construction met if the project (see above).</li> <li>If the first year of post-construction acoustic monitoring for Feat 388 and BMC-372 (if deemed to be significant after the first year of post-construction acoustic monitoring for Feat 388 and BMC-372 (if deemed to be significant) according to prodom a statistic still significant after the first surveys in or post-construction acoustic monitoring for Feat 388 and BMC-372 (if deemed to be significant) according to prodom a statistic still significant after the first year of post-construction acoustic monitoring to prodom a statistic still significant after the first year of post-construction acoustic monitoring at the cavity op June.</li> <li>If this first year of post-construction monitoring at the cavity op June.</li> <li>If this first year of post-construction monitoring indicates that a F monitoring will occur following pre-construction methods to deter has had an effect.</li> <li>If a significant habitat is still significant after the first year of post-cons</li></ul>
	<ul> <li>Contingency Measures:</li> <li>Institute changes to turbine operation if disturbance effects are detected through post-construction monitoring (see mitigation strategy in this table).</li> <li>Consultation with MNR to determine additional contingency measures if necessary.</li> </ul>	<ul> <li>Contingency Measures:         <ul> <li>Institute changes to turbine operation if disturbance effects are table).</li> </ul> </li> <li>Consultation with MNR to determine additional contingency measures.</li> <li>Conduct 3 years of post-construction monitoring for Features BMC-75 for pre-construction survey (as described in March 2010 Draft version             <ul> <li>Through the night acoustic monitoring stations to be positioned.</li> <li>Survey same stations as pre-construction survey.</li> <li>Visual monitoring to be conducted at dusk in June.</li> <li>Acoustic monitoring to begin at dusk and continue for 5 hours,</li> <li>Monitoring to occur between June 1 and June 30.</li> </ul> </li> <li>Conduct 3 years of post-construction monitoring for Features BM (if deemed to be significant) according to protocol described for <i>Habitats: Guidelines for Wind Power Projects</i>) including:             <ul> <li>Conduct active visual and acoustic monitoring at the cavity op June.</li> <li>The findings of all monitoring programs will be reported to MNR</li> <li>Consultation with MNR to determine additional contingency monitoring contingency measures:             <ul> <li>Institute changes to turbine operation if disturbance effects are consultation with MNR to determine additional contingency monitoring contingency contingency contingency context contingency context context</li></ul></li></ul></li></ul>

on an annual basis for the first 3 years of operation.

e detected through post-construction monitoring. easures if necessary.

#### nting.

ature BMC-757 according to protocol described for pre-construction survey (as : Guidelines for Wind Power Projects) including: d within 10 m of the potential roost.

, for up to 10 nights, or until roost is confirmed.

tures BMC-189, BMC-229, BMC-326, and BMC-342 according to protocol a 2010 Draft version of *Bats and Bat Habitats: Guidelines for Wind Power* 

: Feature may no longer be significant, an additional 2 years of postthods to determine if a change may represent normal variation in population or

-construction monitoring, no further monitoring will occur as the habitat will be

tures BMC-235, BMC-242, BMC-249, BMC-267, BMC-282, BMC-352, BMCtocol described for pre-construction survey (as described in July 2011 version ncluding: h June.

pening or crevice from 30 minutes before dusk until 60 minutes after dusk in

Feature may no longer be significant, an additional 2 years of post-construction rmine if a change may represent normal variation in population or if the project

construction monitoring, no further monitoring will occur as the habitat will be

back to MNR on an annual basis for the first 3 years of operation.

e detected through post-construction monitoring (see mitigation strategy in this

ures if necessary.

57, BMC-189, BMC-229, BMC-326, and BMC-342 according to protocol described of Bats and Bat Habitats: Guidelines for Wind Power Projects) including: d within 10 m of the potential roost.

, for up to 10 nights, or until roost is confirmed.

MC-235, BMC-242, BMC-249, BMC-267, BMC-282, BMC-352, and BMC-358 pre-construction survey (as described in July 2011 version of *Bats and Bat* 

out June. pening or crevice from 30 minutes before dusk until 60 minutes after dusk in

on an annual basis for the first 3 years of operation.

e detected through post-construction monitoring. leasures if necessary.

Section / Page	Original Text	
Table 6-2 / page 21-30	Potential Effect Removal of confirmed significant cavity trees or other suitable, but not studied, cavity trees in Bat Maternity Colony Features as a result of vegetation removal for the transmission line.	Potential Effect Removal of confirmed significant cavity trees or other suital result of vegetation removal for the transmission line.
	Performance Objective	Bats may be disturbed or avoid woodlands where tree remo
	Mitigation Strategy	Performance Objective <ul> <li>Protection of bat roosting habitat.</li> </ul>
	<ul> <li>For each suitable cavity tree to be removed, a bat house will be installed in the closest suitable woodland habitat (the remainder of the woodland for each of the affected habitats).</li> <li>Details of bat box construction and placement will be provided to MNR for approval prior to installation.</li> </ul>	Continued use of habitat.
	<ul> <li>If a significant maternity colony must be removed, timing, location, and bat house design will be of utmost importance for the colony to successfully re-establish, and will be discussed with the MNR.</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>For each suitable cavity tree to be removed, a bat house will be woodland for each of the affected habitats).</li> </ul>
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Conduct 3 years of post-construction acoustic monitoring of all remaining cavity trees for Features BMC-648 and BMC-720 (if deemed to be significant) according to protocol described for pre-construction survey (as described in July 2011 version of <i>Bats and Bat Habitats: Guidelines for Wind Power Projects</i>) including:</li> </ul>	Details of bat box construction and placement will be provided If a significant maternity colony must be removed, timing, location successfully re-establish, and will be discussed with the MNR.
	<ul> <li>Conduct monitoring of roost trees through exit surveys through June.</li> <li>Conduct active visual and acoustic monitoring at the cavity opening or crevice from 30 minutes before dusk until 60 minutes after dusk in</li> </ul>	Post-construction monitoring to ensure continued use of habita
	<ul> <li>Conduct post-construction visual monitoring of any bat boxes installed for 3 years after construction, to determine the success of the implemented mitigation measures.</li> </ul>	Conduct 3 years of post-construction acoustic monitoring of all significant) according to protocol described for pre-construction (a Minet Barrier Dational biodebies)
	<ul> <li>The findings of all acoustic monitoring programs will be reported back to MINR on an annual basis for the first 3 years of operation.</li> <li>Contingency Measures:         <ul> <li>If a permanent and significant disturbance has been noted within these Features, the MNR will be contacted to determine whether additional mitigation programs will be needed.</li> </ul> </li> </ul>	<ul> <li>For wind Power Projects) including:</li> <li>Conduct monitoring of roost trees through exit surveys through</li> <li>Conduct active visual and acoustic monitoring at the cavity of the cavity</li></ul>
	mitigation measures will be needed.	Gonduct post-construction visual monitoring of any bat boxes i     implemented mitigation measures.
		<ul> <li>The findings of all acoustic monitoring programs will be reporte</li> <li>Contingency Measures: If a permanent and significant disturbance has been noted within mitigation measures will be needed.</li> </ul>
		<ul> <li>Conduct 3 years of post-construction monitoring of all remaining according to protocol described for pre-construction survey (as <i>Power Projects</i>) including:</li> <li>Conduct monitoring of roost trees through exit surveys through Conduct active visual and acoustic monitoring at the cavity of</li> </ul>
		<u>June.</u> <u>The findings of all post-construction monitoring programs will b</u> <u>Contingency Measures:</u> <u>If a permanent and significant disturbance has been noted w</u>
Table 6-2 / page 21-30	N/A	mitigation measures will be needed. Potential Effect
. a.s. e e _ , page ee		Risk of road mortality to turtles moving between wintering p
		<ul> <li>Performance Objective</li> <li>Minimize turtle mortality along access roads.</li> </ul>
		<ul> <li>Mitigation Strategy</li> <li>Maintain wildlife crossing signs and limit speed of vehicles (30)</li> </ul>
		Residual Effects           • Risk of turtle road mortality reduced through mitigation measur           • Low likelihood of occurring and limited magnitude due to limite
		Monitoring Plan and Contingency Measures

ble, but not studied, cavity trees in Bat Maternity Colony Features as a

#### val will occur for the transmission line.

e installed in the closest suitable woodland habitat (the remainder of the

to MNR for approval prior to installation. n, and bat house design will be of utmost importance for the colony to

#### •

remaining cavity trees for Features BMC-648 and BMC-720 (if deemed to be a survey (as described in July 2011 version of *Bats and Bat Habitats: Guidelines* 

gh June. pening or crevice from 30 minutes before dusk until 60 minutes after dusk in

nstalled for 3 years after construction, to determine the success of the

d back to MNR on an annual basis for the first 3 years of operation.

these Features, the MNR will be contacted to determine whether additional

ig cavity trees for Features BMC-648 and BMC-720 (if deemed to be significant) described in July 2011 version of *Bats and Bat Habitats: Guidelines for Wind* 

gh June.

opening or crevice from 30 minutes before dusk until 60 minutes after dusk in

e reported back to MNR on an annual basis for the first 3 years of operation.

ithin these Features, the MNR will be contacted to determine whether additional

ponds and other areas.

km/hr) near turtle wintering areas.

<u>ures.</u> ed volume of maintenance vehicles.

Γ	Section / Page	Original Text	I
	Table 6-2 / page 21-30	Potential Effect Red-Headed Woodpecker Breeding Habitat may be disturbed by routine maintenance of the transmission line corridor.	Potential Effect Red-Headed Woodpecker Breeding Habitat may be disturbed
		Performance Objective     No displacement of breeding Red-Headed Woodpeckers from habitat.	Possible mortality to snakes from vehicles using access road
		No destruction of nesting habitat.	Performance Objective <ul> <li>No displacement of breeding Red-Headed Woodpeckers from I</li> </ul>
		<ul> <li>Mitigation Strategy</li> <li>Perform maintenance operations such as vegetation clearing outside the breeding season of May 1<sup>st</sup> to July 31<sup>st</sup>.</li> <li>Implement contingency mitigation measures (as per consultation with MNR) if disturbance effects are detected through post-construction</li> </ul>	Minimize snake mortality along access road.
		<ul> <li>monitoring</li> <li>Residual Effects</li> <li>If routine maintenance operations such as vegetation trimming and clearing are conducted outside the breeding season of May 1<sup>st</sup> to July 31<sup>st</sup> there should be minimal residual effects from maintenance of the transmission line.</li> <li>Nesting in utility poles has been recorded for Red-Headed Woodpecker, thus there is a possibility that the poles could provide future nesting habitat.</li> <li>Monitoring Plan and Contingency Measures</li> <li>Supervision of vegetation removal by a qualified Biologist to ensure no destruction of nesting habitat.</li> <li>No additional monitoring or contingency measures required if timing window is applied.</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>Perform maintenance operations such as vegetation clearing of Implement contingency mitigation measures (as per consultation monitoring</li> <li>Advise operations staff to take extra care while driving access r windows when snakes emerge (April 15 - May 31) and return (S</li> <li>Maintain wildlife crossing signs and limit speed of vehicles near Erect long term drift fence between edge of habitat (RH-02, RH snakes).</li> </ul>
			<ul> <li>Residual Effects</li> <li>If routine maintenance operations such as vegetation trimming there should be minimal residual effects from maintenance of the Nesting in utility poles has been recorded for Red-Headed Woodg habitat.</li> </ul>
			<ul> <li>Risk of snake mortality minimized through the application of mit</li> <li>Low likelihood of occurring and limited magnitude (i.e., no or limited m</li></ul>
			<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Supervision of vegetation removal by a qualified Biologist to end</li> <li>No additional monitoring or contingency measures required if tire</li> </ul>
			<ul> <li>Conduct reptile hibernacula surveys at reptile hibernacula within be significant) by a qualified Biologist annually for 3 years post- composition using protocol described for pre-construction surver Examination of rock piles and vicinity on three occasions betw Identify species and count individuals.</li> <li>Report the findings of the reptile hibernacula monitoring program</li> </ul>
			<u>Contingency Measures:</u> <u>If significant declines or disappearance of species is detected</u> measures will be taken, to be determined through consultatio
	Table 6-2 / page 21-30	Potential Effect Removal of vegetation within Red-Headed Woodpecker Breeding Habitat resulting from clearing for the transmission line.	Potential Effect Removal of vegetation within Red-Headed Woodpecker Bree
		<ul> <li>Performance Objective</li> <li>No displacement of breeding Red-headed Woodpeckers from habitat.</li> </ul>	Colonially-nesting birds may be disturbed by noise from ope
	No destruction of nesting habitat.	<ul> <li>Performance Objective</li> <li>No displacement of breeding Red-headed Woodpeckers from h No destruction of nesting habitat.</li> </ul>	
	<ul> <li>Implement contingency mitigation measures (as per consultation with MNR) if disturbance effects are detected through post-construction monitoring.</li> </ul>	<u>Minimize disturbance to colonially-nesting birds (Great Blue He</u>	
	<ul> <li>Residual Effects</li> <li>Some permanent vegetation removal within the woodland containing the Red-Headed Woodpecker nesting site will occur.</li> <li>Significance of residual effects will be determined based on the results of post-construction monitoring.</li> </ul>	Mitigation Strategy <ul> <li>Implement contingency mitigation measures (as per consultatio monitoring.</li> </ul>	
		<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Conduct 3 years of post-construction monitoring for Feature SCB-03, according to protocol described for pre-construction surveys following the <i>Forest Bird Monitoring Protocol</i> including:</li> </ul>	Post-construction monitoring to ensure continued use of the hal
		<ul> <li>Point counts within the woodlot on three separate visits during the period of May 15 – July 10.</li> <li>Conduct monitoring and evaluation of Red-Headed Woodpecker nest site to measure the use of the nesting location, and the success of breeding efforts.</li> </ul>	Residual Effects <ul> <li>Some permanent vegetation removal within the woodland conta</li> <li>Significance of residual effects will be determined based on the re</li> </ul>

by routine maintenance of the transmission line corridor.

ds.

habitat.

utside the breeding season of May 1<sup>st</sup> to July 31<sup>st</sup>. with MNR) if disturbance effects are detected through post-construction

roads near features RH-01, RH-02, RH-03 and RH-05, particularly during timing September 1 – October 15) to hibernacula. r crossings (30 km/hr).

I-03, RH-04 and RH-05) and road if hibernaculum determined to be large (>25

and clearing are conducted outside the breeding season of May 1<sup>st</sup> to July 31<sup>st</sup> he transmission line.

pecker, thus there is a possibility that the poles could provide future nesting

itigation measures. nited mortality expected) due to limited volume of maintenance vehicles.

sure no destruction of nesting habitat. ming window is applied.

n 120 m of access roads (RH-01, RH-02, RH-03 and RH-05; if determined to construction to assess any potential changes in snake populations or species ey, including: ween mid-April and mid-May.

m to MNR on an annual basis for the first 3 years of operation.

d, determine whether likely to have been caused by the Project. If so, corrective on with MNR.

eding Habitat resulting from clearing for the transmission line.

#### eration of turbines.

habitat.

erons).

on with MNR) if disturbance effects are detected through post-construction

abitat.

aining the Red-Headed Woodpecker nesting site will occur. esults of post-construction monitoring.

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	<ul> <li>Examine utility poles for signs of nesting by Red-Headed Woodpecker.</li> <li>The findings of post-construction monitoring will be reported back to MNR on an annual basis for the first 3 years of operation.</li> </ul>	Significance of residual effects will be determined based on the
	<ul> <li>Contingency Measures</li> <li>If significant declines or disappearance of species is detected, determine whether likely to have been caused by the project. If so, corrective measures will be taken, to be determined through consultation with MNR. Habitat compensation or restoration measures will be described in a Compensation Plan, to be submitted to MNR.</li> </ul>	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Conduct 3 years of post-construction monitoring for Feature SC the Forest Bird Monitoring Protocol including:         <ul> <li>Point counts within the woodlot on three separate visits during the Conduct monitoring and evaluation of Red-Headed Woodpect breeding efforts.</li> <li>Examine utility poles for signs of nesting by Red-Headed Wood</li> <li>The findings of post-construction monitoring will be reported bact Contingency Measures</li> <li>If significant declines or disappearance of species is detected, define measures will be taken, to be determined through consultation will Compensation Plan, to be submitted to MNR.</li> </ul> </li> </ul>
		<ul> <li>Include Turbines 55 and 56 in post-construction mortality monitor</li> <li>Conduct 3 years of post-construction colonially-nesting bird monitor</li> <li>Conduct surveys on two occasions per year, in April and June</li> <li>One vantage point will be placed along the fence line north of</li> <li>All observed colonially-nesting birds will be recorded along with</li> <li>Report the findings of the colonially-nesting bird monitoring progetime</li> <li>Contingency Measures:         <ul> <li>If significant declines or disappearance of species is detected implement corrective measures that are developed through content.</li> </ul> </li> </ul>
Table 6-2 / page 21-30	Potential Effect	Potential Effect
	Removal of vegetation within Azure Bluet Habitat and Turtle Over-wintering Habitat resulting from clearing for the transmission line.	Removal of vegetation within Azure Bluet Habitat and Turtle
	<ul> <li>Performance Objective</li> <li>Minimize disturbance to Azure Bluet habitat and turtle over-wintering habitat.</li> <li>No destruction of pond.</li> <li>Mitigation Strategy</li> </ul>	Risk of road mortality to amphibians moving between breedin Performance Objective • Minimize disturbance to Azure Bluet habitat and turtle over-wint No destruction of pond.
	<ul> <li>Implement contingency mitigation measures (as per consultation with MNR) if disturbance effects are detected through construction monitoring.</li> </ul>	<u>Minimize amphibian mortality along access roads.</u>
	<ul> <li>Residual Effects</li> <li>Clearing of vegetation will occur for the transmission line.</li> <li>Disruption to Azure Bluet habitat and turtle over-wintering habitat avoided or minimized through mitigation measures applied during construction.</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>Implement contingency mitigation measures (as per consultation monitoring.</li> </ul>
	<ul> <li>Moderate residual effects.</li> <li>Monitoring Plan and Contingency Measures</li> <li>If negative effects to the pond are detected through construction monitoring, corrective measures will be taken, to be determined through consultation with MNR. These habitat compensation or restoration measures will be described in a Compensation Plan, to be submitted to a consultation with MNR. These habitat compensation or restoration measures will be described in a Compensation Plan. to be submitted to a compensation of the plan and plan an</li></ul>	<ul> <li>Advise operations staff to avoid driving roads in proximity to the spring to early autumn, wherever possible.</li> <li>Most access road traffic will be confined to daytime hours. Avoi</li> <li>Maintain wildlife crossing signs and limit speed of vehicles near</li> </ul>
	MNR.	<ul> <li>Residual Effects</li> <li>Clearing of vegetation will occur for the transmission line.</li> <li>Disruption to Azure Bluet habitat and turtle over-wintering habitat construction.</li> <li>Moderate residual effects.</li> </ul>
		<ul> <li><u>Risk of amphibian mortality reduced through mitigation measure</u></li> <li><u>Low likelihood of mortality due to infrequent use of access roads</u></li> </ul>
		Monitoring Plan and Contingency Measures If negative effects to the pond are detected through construction r consultation with MNR. These habitat compensation or restoration
		<u>Conduct 3 years post-construction amphibian call surveys (frog- potential changes in amphibian breeding populations or species</u>
		<ul> <li><u>25, AWO-27 and AWO-30 by a qualified Biologist, including:</u></li> <li><u>Call surveys at each Feature three times between April 1st ar one half-hour after sunset and 2:00 am and, to the extent post</u></li> </ul>

eresults of post-construction monitoring.

B-03, according to protocol described for pre-construction surveys following

the period of May 15—July 10. ker nest site to measure the use of the nesting location, and the success of

odpecker. ck to MNR on an annual basis for the first 3 years of operation.

etermine whether likely to have been caused by the project. If so, corrective ith MNR. Habitat compensation or restoration measures will be described in a

oring program.

hitoring at feature CNB-01 by a qualified Biologist, including: e. f Turbine 56 and be monitored for approximately 15 minutes. ith their approximate location, age and behaviour. gram to MNR on an annual basis for the first 3 years of operation.

, determine whether this is likely to have been caused by the Project. If so, onsultation with MNR.

Over-wintering Habitat resulting from clearing for the transmission line.

#### ng pools and home range.

ering habitat.

n with MNR) if disturbance effects are detected through construction

se features at night between April 1 and June 30, and any rainy nights from

d access road use at night. crossings (30 km/hr).

at avoided or minimized through mitigation measures applied during

<u>es.</u> s by maintenance vehicles.

minute listening survey at each station.

nonitoring, corrective measures will be taken, to be determined through n measures will be described in a Compensation Plan, to be submitted to MNR.

s and toads) and egg mass or adult surveys (salamanders) to assess any distribution (if Features deemed to be significant) at features AWO-02, AWO-

Call surveys at each Feature three times between April 1st and June 30th, as per the *Marsh Monitoring Protocol*. Conduct surveys between one half-hour after sunset and 2:00 am and, to the extent possible, on nights that are clear, cloudy, damp, foggy, or have light rain and minimum night air temperatures of 5°C (41°F), 10°C (50°F) and 14°C (57°F) for each of the three respective survey periods. Complete a 3-

Section / Page	Original Text	
		Conduct surveys to target non-vocalizing amphibians (i.e., sa     Nocturnal survey for adult salamanders in late March to e     Surveys for salamander egg masses on two occasions ir     Surveys for larval salamanders in May or June.     The findings of post-construction monitoring will be reported ba     Contingency Measures     If significant declines or disappearance of species is detected     measures will be taken, to be determined through consultation
Table 6-2 / page 21-30	Potential Effect Removal of vegetation within Amphibian Woodland Breeding Habitats resulting from clearing for the transmission line.	Potential Effect Removal of vegetation within Amphibian Woodland Breeding
	<ul> <li>Performance Objective <ul> <li>Minimize disturbance to amphibian breeding habitat.</li> <li>No destruction of breeding pond.</li> </ul> </li> <li>Mitigation Strategy <ul> <li>Implement contingency mitigation measures (as per consultation with MNR) if disturbance effects are detected through post-construction monitoring.</li> </ul> </li> <li>Residual Effects <ul> <li>Some permanent vegetation removal within woodlands containing amphibian breeding habitat will occur. Breeding habitat should remain undisturbed.</li> <li>Significance of residual effects will be determined based on the results of post-construction monitoring.</li> </ul> </li> </ul>	Breeding amphibians may be disturbed by routine maintenant         Performance Objective         • Minimize disturbance to amphibian breeding habitat.         No destruction of breeding pond.         • Minimize disturbance due to maintenance activities.         Mitigation Strategy         • Implement contingency mitigation measures (as per consultation monitoring.         • Advise operations staff to avoid maintenance activities in proximabilities, or between March 15 and April 30 (for significant salate).         • Conduct area searches for amphibians prior to beginning maintenance
Table 6-2 / page 21-30	Potential Effect Possible mortality of turtles moving between over-wintering ponds and other areas due to access road operation and maintenance	Residual Effects         • Some permanent vegetation removal within woodlands contain undisturbed.         Significance of residual effects will be determined based on the reduced through mitigation measures include         • Risk of disturbance reduced through mitigation measures include         • Low likelihood of occurring and limited magnitude of residual effect         Potential Effect         Possible mortality of turtles moving between over-wintering
	<ul> <li>near Turtle Over-wintering Habitats.</li> <li>Performance Objective <ul> <li>Minimize turtle mortality along access roads</li> </ul> </li> <li>Mitigation Strategy <ul> <li>Maintain wildlife crossing signs and limit speed of vehicles near over-wintering ponds.</li> </ul> </li> <li>Residual Effect <ul> <li>Risk of turtle mortality reduced through mitigation measures.</li> <li>Low likelihood of occurring and limited magnitude due to limited volume of maintenance vehicles.</li> </ul> </li> <li>Monitoring Plan and Contingency Measures <ul> <li>No monitoring or contingency measures required.</li> </ul> </li> </ul>	near Turtle Over-wintering Habitats.         Performance Objective         Minimize turtle mortality along access roads         Mitigation Strategy         Maintain wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing signs and limit speed of vehicles near constraint wildlife crossing sis near constraint wildlife
Table 6-2 / page 21-30	Potential Effect         Possible mortality of turtles moving between over-wintering ponds and other areas due to transmission maintenance within Turtle Over-wintering Habitat.         Performance Objective         • Minimize turtle mortality along transmission line.         Mitigation Strategy         • Advise operations staff to avoid maintenance activities in proximity to this feature in May, June, September or October.         • Fence area as far from pond and as close to transmission line as possible during maintenance activities.         • Maintain wildlife crossing signs and limit speed of vehicles near over-wintering pond.	Potential Effect Possible mortality of turtles moving between over-wintering Over-wintering Habitat. <u>Risk of mortality to amphibians moving between breeding po- corridor.</u> Performance Objective Minimize turtle mortality along transmission line. • <u>No amphibian mortality due to maintenance activities.</u>

- alamanders) using one of the following three protocols:
- early April: n March and April;

ack to MNR on an annual basis for the first 3 years of operation.

d, determine whether likely to have been caused by the project. If so, corrective on with MNR.

g Habitats resulting from clearing for the transmission line.

nce of the transmission line corridor.

on with MNR) if disturbance effects are detected through post-construction

mity to these features between April 1 and June 30 (for significant frog breeding amander breeding habitats) and any rainy nights from spring to early autumn. tenance activities if required to take place within the above timing windows.

ning amphibian breeding habitat will occur. Breeding habitat should remain

esults of post-construction monitoring.

ding maintenance timing. ffects.

ponds and other areas due to access road operation and maintenance

over-wintering ponds.

volume of maintenance vehicles.

ponds and other areas due to transmission maintenance within Turtle

ools and home range resulting from maintenance of the transmission line

Section / Page	Original Text	F
	<ul> <li>Residual Effects</li> <li>Risk of turtle mortality reduced through mitigation measures.</li> <li>Low likelihood of occurring and limited magnitude due to limited volume of maintenance vehicles.</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>Advise operations staff to avoid maintenance activities in proxin</li> <li>Fence area as far from pond and as close to transmission line a Maintain wildlife crossing signs and limit speed of vehicles near or</li> </ul>
		<ul> <li><u>Advise operations staff to avoid, where possible, maintenance a significant frog breeding habitats) or between March 15<sup>th</sup> and A spring to early autumn.</u></li> <li><u>Maintain wildlife crossing signs and limit speed of vehicles near</u></li> </ul>
		<ul> <li>Residual Effects</li> <li>Risk of turtle mortality reduced through mitigation measures.</li> <li>Low likelihood of occurring and limited magnitude due to limited v</li> </ul>
		Risk of amphibian mortality reduced through maintenance timin     Low likelihood of occurring and limited magnitude of residual eff
Table 6-2 / page 21-30	Potential Effect	Potential Effect
	resulting from vegetation removal for maintenance of the transmission line.	resulting from vegetation removal for maintenance of the trai
	Performance Objective     Minimize disturbance to pond.	Performance Objective Minimize disturbance to pond.
	<ul> <li>Mitigation Strategy</li> <li>Fence area as far from pond and as close to transmission line as possible.</li> <li>Install sediment and erosion control fencing at fenced area location before commencing maintenance activities and maintain in place until disturbed areas are stabilized and re-vegetated.</li> </ul>	Mitigation Strategy • Fence area as far from pond and as close to transmission line a Install sediment and erosion control fencing at fenced area location disturbed areas are stabilized and re-vegetated.
	Residual Effects	Residual Effect
	<ul> <li>Erosion and sedimentation mitigated through sediment and erosion control fencing.</li> <li>Operational maintenance effects temporary and minor.</li> </ul>	• Erosion and sedimentation mitigated through sediment and eros Operational maintenance effects temporary and minor.
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Monitor on-site conditions (i.e., erosion and sediment control, spills, flooding, etc.) where construction occurs within 30 m of a feature on the following basis: <ul> <li>Weekly during active construction periods;</li> <li>Prior to, during and post forecasted large rainfall events (&gt;20 millimetres in 24 hours) or significant snowmelt events (i.e., spring freshet);</li> <li>Daily during extended rain or snowmelt periods;</li> <li>Monthly during inactive construction periods, where the site is left alone for 30 days or longer.</li> </ul> </li> <li>In the event that a spill / flooding occurs, the details of the event will be reported back to MOE, including a description of any assessment and remediation undertaken.</li> <li>Contingency Measures: <ul> <li>Suspend work if excessive flows of sediment discharges occur until additional mitigation measures are in place.</li> </ul> </li> </ul>	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>Monitor on-site conditions (i.e., erosion and sediment control, sp following basis:         <ul> <li>Weekly during active construction periods;</li> <li>Prior to, during and post forecasted large rainfall events (&gt;20</li> <li>Daily during extended rain or snowmelt periods;</li> <li>Monthly during inactive construction periods, where the site is</li> <li>In the event that a spill / flooding occurs, the details of the even remediation undertaken.</li> </ul> </li> <li>Contingency Measures: Suspend work if excessive flows of sediment discharges occur undertaken.</li> </ul>
Table 6-2 / page 21-30	Potential Effect Mortality to amphibians moving between breeding pools and home range resulting from access road operation and maintenance.	Potential Effect Mortality to amphibians moving between breeding pools and
	Performance Objective       • Minimize amphibian mortality along access roads	Removal of vegetation within Amphibian Woodland Breeding
	<ul> <li>Mitigation Strategy</li> <li>Advise operations staff to avoid driving roads in proximity to these features at night between April 1<sup>st</sup> and June 30<sup>th</sup>, and any rainy nights from spring to early autumn, wherever possible.</li> <li>Maintain wildlife crossing signs and limit speed of vehicles near crossings.</li> </ul>	Minimize amphibian mortality along access roads     Minimize disturbance to amphibian breeding habitat.     No destruction of breeding pond.
	<ul> <li>Residual Effects</li> <li>Risk of amphibian mortality reduced through mitigation measures.</li> <li>Low likelihood of mortality due to infrequent use of access roads by maintenance vehicles.</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>Advise operations staff to avoid driving roads in proximity to the spring to early autumn, wherever possible.</li> <li>Maintain wildlife crossing signs and limit speed of vehicles near crossing signs and limit speed spectra spectra</li></ul>
		<ul> <li><u>Schedule vegetation clearing within woodland to outside April 1</u></li> <li><u>Implement contingency mitigation measures (as per consultatio monitoring.</u></li> </ul>
		Residual Effects <ul> <li>Risk of amphibian mortality reduced through mitigation measured</li> </ul>

nity to this feature in May, June, September or October. as possible during maintenance activities. over-wintering pond.

activities in proximity to these features between April 1<sup>st</sup> and June 30<sup>th</sup> (for pril 10<sup>th</sup> (for significant salamander breeding habitat), and any rainy nights from

r crossings (30 km/hr).

olume of maintenance vehicles.

<u>ng.</u> ffects.

d Breeding Habitat, Azure Bluet Habitat and Turtle Over-wintering Habitat

is possible. In before commencing maintenance activities and maintain in place until

sion control fencing.

bills, flooding, etc.) where construction occurs within 30 m of a feature on the

millimetres in 24 hours) or significant snowmelt events (i.e., spring freshet);

Heft alone for 30 days or longer.

til additional mitigation measures are in place.

I home range resulting from access road operation and maintenance.

Habitats resulting from clearing for the transmission line.

ese features at night between April 1<sup>st</sup> and June 30<sup>th</sup>, and any rainy nights from

rossings.

and June 30. on with MNR) if disturbance effects are detected through post-construction

<del>s.</del>

Section / Page	Original Text	Re
		<ul> <li>Low likelihood of mortality due to infrequent use of access roads by</li> <li>Some permanent vegetation removal within woodlands containin undisturbed.</li> <li>Significance of residual effects will be determined based on the re</li> </ul>
Table 6-2 / page 21-30	Potential Effect	Potential Effect
	Breeding amphibians may be disturbed by routine maintenance of the transmission line corridor.	Breeding amphibians may be disturbed by routine maintenance
	Performance Objective     Minimize disturbance due to maintenance activities.	Performance Objective Minimize disturbance due to maintenance activities.
	<ul> <li>Mitigation Strategy</li> <li>Advise operations staff to avoid maintenance activities in proximity to these features between April 1st and June 30th (for significant frog breeding habitats), or between March 15th and April 30th (for significant salamander breeding habitats) and any rainy nights from spring to early autumn.</li> </ul>	Mitigation Strategy Advise operations staff to avoid maintenance activities in proximity habitats), or between March 15 <sup>th</sup> and April 30 <sup>th</sup> (for significant salar
	Pesidual Effects	Residual Effect
	<ul> <li>Risk of disturbance reduced through mitigation measures.</li> <li>Low likelihood of occurring and limited magnitude of residual effects.</li> </ul>	Low likelihood of occurring and limited magnitude of residual effects
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>No additional monitoring or contingency measures required.</li> </ul>	Monitoring Plan and Contingency Measures No additional monitoring or contingency measures required.
Table 6-2 / page 21-30	Potential Effect	Potential Effect
	Risk of disturbance to and/or mortality of amphibians from herbicide spraying along transmission line.	Risk of disturbance to and/or mortality of amphibians from her
	Mitigation Strategy	Mitigation Strategy
	Minimize aerial extent of herbicide spraying along transmission line.	Minimize aerial extent of herbicide spraying along transmission li
	Maintain 10 m buffer to pond where no berbicides area applied	<ul> <li>Maintain 10 m buffer to pond where no herbicides area applied</li> </ul>
		Apply only herbicides approved for use adjacent to water bodies
		• A dye solution will be used in herbicide mix to visually detect unifer
		<u>Conduct area searches for amphibians prior to herbicide applicat</u>
Table 6-2 / page 21-30	N/A	Potential Effect
		Red-Headed Woodpecker Breeding Habitat may be disturbed to
		Performance Objective     No displacement of breeding Red-Headed Woodpeckers from has     No destruction of nesting habitat.
		Mitigation Strategy
		<ul> <li>Perform maintenance operations such as vegetation clearing outs</li> <li>Implement contingency mitigation measures (as per consultation)</li> </ul>
		monitoring.
		Residual Effect
		If routine maintenance operations such as vegetation trimming and
		there should be minimal residual effects from maintenance of the
		<u>Nesting in utility poles has been recorded for Red-Headed Wood</u> <u>habitat.</u>
		Monitoring Plan and Contingency Measures
		Supervision of vegetation removal by a qualified Biologist to ensu
		No additional monitoring or contingency measures required if time
Table 6-2 / page 21-30	Potential Effect	Potential Effect
	Possible reptile mortality from vehicles using access road.	Possible reptile mortality from vehicles using access road.
	Performance Objective	Absence of vegetation within Red-Headed Woodpecker Breedi
	Minimize snake mortality along access road.	
	Mitigation Strategy	Barformanco Obioctivo
	<ul> <li>Frect long term drift fence between edge of habitat and road if hibernaculum determined to be large (&gt;25 snakes)</li> </ul>	Minimize snake mortality along access road
	<ul> <li>Advise operations staff to take extra care while driving near Feature RH-01</li> </ul>	initiative orlate mortainy along access road.
		• No displacement of breeding Red-headed Woodpeckers from ha
	Residual Effects	No destruction of nesting habitat.
	Risk of snake mortality minimized through the application of mitigation measures.	

<del>y maintenance vehicles.</del> ng amphibian breeding habitat will occur. Breeding pond should remain

results of post-construction monitoring.

#### ce of the transmission line corridor.

y to these features between April 1<sup>st</sup> and June 30<sup>th</sup> (for significant frog breeding mander breeding habitats) and any rainy nights from spring to early autumn.

<del>xts.</del>

#### erbicide spraying along transmission line.

line. ant precipitation is expected.

s within riparian buffer areas. iform coverage of spray area. ition.

#### by routine maintenance of the transmission line corridor.

<u>nabitat.</u>

tside the breeding season of May 1<sup>st</sup> to July 31<sup>st</sup>. n with MNR) if disturbance effects are detected through post-construction

and clearing are conducted outside the breeding season of May 1<sup>st</sup> to July 31<sup>st</sup> e transmission line. dpecker, thus there is a possibility that the poles could provide future nesting

sure no destruction of nesting habitat. ning window is applied.

#### ding Habitat resulting from clearing for the transmission line.

abitat.

Section / Page	Original Text	
	<ul> <li>Low likelihood of occurring and limited magnitude (i.e., no or limited mortality) due to limited volume of maintenance vehicles.</li> <li>Monitoring Plan and Contingency Measures</li> <li>Conduct reptile hibernaculum survey annually for 2 years post-construction to assess any potential changes in snake populations or species composition using protocol described for pre-construction survey (if Feature deemed to be significant), including:</li> <li>Examination of rock piles and vicinity on three occasions between mid-April and mid-May.</li> <li>Identify species and count individuals.</li> <li>The findings of the reptile hibernaculum monitoring programs will be reported back to MNR on an annual basis for the first 2 years of operation.</li> <li>Contingency Measures:</li> <li>If significant declines or disappearance of species is detected, determine whether likely to have been caused by the project. If so, corrective measures will be taken, to be determined through consultation with MNR.</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>Erect long term drift fence between edge of habitat and road if Advise operations staff to take extra care while driving near Feat</li> <li>Implement contingency mitigation measures (as per consultation monitoring.</li> <li>Consideration of Red-headed Woodpecker habitat requirement woodland.</li> <li>Residual Effects</li> <li>Risk of snake mortality minimized through the application of mit Low likelihood of occurring and limited magnitude (i.e., no or limit</li> <li>Some permanent vegetation removal within the woodland control</li> <li>Significance of residual effects will be determined based on the Monitoring Plan and Contingency Measures</li> <li>Conduct reptile hibernaculum survey annually for 2 years post- composition using protocol described for pre-construction survices and count individuals.</li> <li>The findings of the reptile hibernaculum monitoring programs we operation.</li> <li>Contingency Measures:</li> <li>If significant declines or disappearance of species is detected, define measures will be taken, to be determined through consultation will conduct 3 years of post-construction monitoring for Feature St the Forest Bird Monitoring Protocol including:</li> <li>Point counts within the woodlot on three separate visits during</li> <li>Conduct monitoring and evaluation of Red-Headed Woodpeet breeding efforts.</li> <li>Examine utility poles for signs of nesting by Red-Headed Woodpeet breeding efforts.</li> <li>Examine utility poles for signs of nesting by Red-Headed Woodpeet breeding efforts.</li> <li>If significant declines or disappearance of species is detected and measures will be taken, to be determined through consultation w</li> </ul>
Table 6-2 / page 21-30	N/A	Potential Effect         Risk of road mortality to deer moving through corridor.         Performance Objective         • Minimize road mortality to deer.         Mitigation Strategy         • Advise operations staff to avoid driving roads in proximity to th 1 and April 30 where possible.         • Encourage slow vehicle speeds. Post and maintain speed limit         Residual Effects         • Risk of deer mortality reduced through mitigation measures.         • Low likelihood of occurring and limited magnitude due to limite         Monitoring Plan and Contingency Measures         • No monitoring or contingency measures required.

f hibernaculum determined to be large (>25 snakes). ture RH-01

ion with MNR) if disturbance effects are detected through post-construction

nts in development of Compensation Plan for tree removal in significant

nitigation measures. ited mortality) due to limited volume of maintenance vehicles.

taining the Red-Headed Woodpecker nesting site will occur. ne results of post-construction monitoring.

t-construction to assess any potential changes in snake populations or species vey (if Feature deemed to be significant), including: tween mid-April and mid-May.

will be reported back to MNR on an annual basis for the first 2 years of

letermine whether likely to have been caused by the project. If so, corrective vith MNR.

CB-03, according to protocol described for pre-construction surveys following

g the period of May 15 – July 10. acker nest site to measure the use of the nesting location, and the success of

oodpecker. ack to MNR on an annual basis for the first 3 years of operation.

ed, determine whether likely to have been caused by the project. If so, corrective ion with MNR. Habitat compensation or restoration measures will be described in

is feature at night between November 15 and December 15, and between April

it signs (30 km/hr) and wildlife crossing signs on access roads.

d volume of maintenance vehicles.

Section / Page	Original Text	
Table 6-3 / page 36-37	Potential Effect Obstruction of lateral flows in watercourses and other waterbodies due to design of culverts and debris build-up at water crossings.	Potential Effect Obstruction of lateral flows in watercourses and other waterbodie
	Performance Objective     No obstructions of lateral flows.	Performance Objective     No obstructions of lateral flows.
	<ul> <li>Mitigation Strategy</li> <li>Design culverts to accommodate high flows of the watercourse.</li> <li>Inspect culverts during routine maintenance activities for buildup of debris.</li> </ul>	Mitigation Strategy           • Design culverts to accommodate high flows of the wate           • Inspect culverts during routine maintenance activities for the structure
	<ul> <li>Residual Effects</li> <li>Obstruction of lateral flows in watercourses and other waterbodies will be avoided through culvert design and maintenance activities.</li> <li>No likelihood of effect occurring.</li> </ul>	Obstruction of lateral flows in watercourses and other v           •         No likelihood of effect occurring.
	<ul> <li>Monitoring Plan and Contingency Measures</li> <li>No monitoring or contingency measures required.</li> </ul>	Monitoring Plan and Contingency Measures     No monitoring or contingency measures required.
Table 6-5 / page 39	<ul> <li>Mitigation Strategy</li> <li>Adhere to noise setbacks (greater than 1,000 m).</li> <li>Repair equipment in a timely manner.</li> <li>Install a 5 m high noise barrier around the transformer substation to comply with MOE noise limits.</li> </ul>	<ul> <li>Mitigation Strategy</li> <li>Adhere to noise setbacks (greater than 1,000 m).</li> <li>Repair equipment in a timely manner.</li> <li>Install a 5 6 m high noise barrier around the transformed</li> </ul>
Section 6.7.1 / page 42	There are five closed landfills within the Project Study Area (as shown on Figure 2-3), all of which are municipally-owned. The Stephen landfill (South Huron) is located within the Wind Energy Centre Study Area approximately 550 m south of the collection line between Turbines 42 and 78. Due to the distance between the landfill and Project infrastructure, construction activities are not anticipated to have an effect upon the closed landfill. The Usborne landfill (South Huron) is located within the Transmission Line Study Area, directly south of the breaker switch station and across the other side of Dump Road. Construction activities are not anticipated to have an effect upon the closed landfill because there is sufficient separation between the landfill and the Project infrastructure due to the presence of the road.	There are five closed landfills within the Project Study Area (as s (South Huron) is located within the Wind Energy Centre Study Ar and 78. Due to the distance between the landfill and Project infra closed landfill. The Usborne landfill (South Huron) is located with station and across the other side of Dump Road. Construction ar there is sufficient separation between the landfill and the Project
Section 6.7.4 / page 43	One petroleum resource was identified within 75 m of Project infrastructure based on the MNR's Oil, Gas and Salt Resources Library. Specifically, the access road and collection line between Turbines 54 and 84 is approximately 60 m from a petroleum resource. There are no oil and gas companies operating pipelines within the Project Study Area.	One petroleum resource was identified within 75 m of Project infr Specifically, the access road and collection line between Turbine producing well. Three other resources were identified based on ground-truthing of the collection line between Turbines 53 and 55, and a natural gas There are no oil and gas companies operating pipelines within th
Section 6.7.5 / page 43	No effects on open or closed landfills, aggregate resources, forest resources or petroleum wells are anticipated as a result of the construction phase of the Project due to the distance between the Project and these resources. An Engineer's Report will be submitted to the MNR prior to construction to confirm that there are no effects on the one petroleum resource located within 75 m of Project infrastructure.	No effects on open or closed landfills, aggregate resources, fores design and operations phase of the Project due to the distance b submitted to the MNR prior to construction to confirm that there a Project infrastructure.
Appendix A	(Transformer Substation UTM Co-ordinates) Easting 454558 Northing 4794974	(Transformer Substation UTM Co-ordinates) Easting 454558 454556 Northing 4794974 4794883

es due to design of culverts and debris build-up at water crossings.

ercourse. or buildup of debris.

waterbodies will be avoided through culvert design and maintenance activities.

er substation to comply with MOE noise limits.

shown on Figure 2-3), all of which are municipally-owned. The Stephen landfill rea approximately 550 650 m south of the collection line between Turbines 42 astructure, construction activities are not anticipated to have an effect upon the hin the Transmission Line Study Area, directly south of the breaker switch ctivities are not anticipated to have an effect upon the closed landfill because infrastructure due to the presence of the road.

rastructure based on the MNR's Oil, Gas and Salt Resources Library. Is 54 and 84 is approximately 60 m from <del>a petroleum resource <u>an active oil</u></del>

of the Project Location. There is a storage tank and natural gas line 9 m from s line 7 m from the collection line between Turbines 14 and 31.

e Project Study Area.

st resources or petroleum wells are anticipated as a result of the <del>construction</del> between the Project and these resources. An Engineer's Report will be are no effects on the one <u>four</u> petroleum resources located within 75 m of

## 2.3 Edits to the Water Assessment and Water Body Report

The edits made to the Water Assessment and Water Body Report due to these project modifications are summarized as follows:

- Increase in number of locations where the Project Location overlapped with a water body or potential water body;
- Decrease in the number of potential ponds identified;
- Addition of Feature ID D58 to Site Investigations;
- Addition of Feature ID D15 to Seepage Areas within 120 m of Project Location; and
- Addition of Feature ID D58 to the Summary of Corrections to Records Review.

Table 2-3 documents the edits to the Water Assessment and Water Body Report (September, 2012).

#### Table 2-3 Edits to the Water Assessment and Water Body Report

Section / Page	Original Text	R
Section 3.3 / page 21	Data collected during the Records Review stage, in particular the NRVIS layer mapping overlaid with natural features mapping and the locations of project components, as well as air photo interpretation, determined that there were a total of 98 locations where the Project Location overlapped with a water body or potential water body.	Data collected during the Records Review stage, in particular the N of project components, as well as air photo interpretation, determin overlapped with a water body or potential water body.
	Of these 98 sites, 80 locations were identified as permanent or intermittent streams within the Project Location. In addition, 18 potential ponds were identified and an additional 6 potential swales were identified through air photo interpretation. These were included in the mapping for site investigations as it is important to assess their current ecological function and to determine whether they meet the criteria for REA water body after field assessment. Therefore a total of 104 sites were carried forward to field investigations as shown in Table 3-9.	Of these 98 99 sites, 80 locations were identified as permanent or i ponds were identified and an additional 6 potential swales were ide site investigations as it is important to assess their current ecologic after field assessment. Therefore a total of 104 sites were carried for
Table 4-3 / page 148	P7	Feature ID           P7         D58
	Project Component Collection Line Buffer Road Buffer	Project Component Collection Line Buffer Road Buffer
	Investigation Date December 15, 2011	Investigation Date December 15, 2011 November 22, 2012
	Description of Site The pond could not be assessed as access was not granted and it could not be seen from the road.	Description of Site The pond could not be assessed as access was not granted and it No water body is present, it has been ploughed through.
	Feature Description From aerial photo interpretation it appears this pond is a low lying feature in a parking lot of an agricultural business.	Feature Description From aerial photo interpretation it appears this pond is a low lying f
	Not Sensitive	Feature Sensitivity Not Sensitive
Table 4-5 / page 154	N/A	Feature ID D15
		Project Component (associated Infrastructure) Collection Line and Road Buffer
		Indicators Found Water Speedwell
		Description of Site Where Found (water body or terrestrial feat Water body
Table 4-6 / page 155	N/A	<u>Feature #</u> <u>D58</u>
		Correction Not as mapped
		Reason for Correction Tile drain feature – no surface channel
Section 14.3 / page 156	Of the 117 features investigated, 33 were identified as non-REA water bodies (16 ponds, 6 swales and 11 watercourse features) because they did not fit the REA definition of a water body as outlined in Section 1.3 of this report. In addition, one feature could not be confirmed because of lack of access to the property to complete a site investigation. In total, 83 REA water bodies were carried forward to the Effects Assessment. This is summarized below in Table 4-7.	Of the 117 features investigated, 33 were identified as non-REA was because they did not fit the REA definition of a water body as outlin because of lack of access to the property to complete a site investig Assessment. This is summarized below in Table 4-7.
Table 5-8 / page 184	Residual Effects	Residual Effects
	<ul> <li>Moderate likelihood and magnitude of effect occurring due to number of watercourse crossings.</li> </ul>	<ul> <li>Moderate likelihood of effect occurring due to number of habitat and common species; as such fish passage will b</li> </ul>

#### Revised Text

IRVIS layer mapping overlaid with natural features mapping and the locations ed that there were a total of <u>9899</u> locations where the Project Location

intermittent streams within the Project Location. In addition, 48 <u>17</u> potential entified through air photo interpretation. These were included in the mapping for al function and to determine whether they meet the criteria for REA water body prward to field investigations as shown in Table 3-9.

could not be seen from the road. The feature is located in an agricultural field.

feature in a parking lot of an agricultural business. The water body may be tiled

ure – ELC code)

ater bodies (46 <u>15</u> ponds, 6 swales and 11 12 <u>buried watercourse</u> features) ned in Section 1.3 of this report. In addition, one feature could not be confirmed gation. In total, 83 REA water bodies were carried forward to the Effects

ith in-water works minimized through application of mitigation measures. watercourse crossings; <u>however, magnitude of effect limited due to marginal</u> be maintained and will continue to provide habitat.

# 3. Summary and Conclusions

The overall conclusion of this report is that the Project modifications listed above do not result in any new effects to those previously identified through the various studies conducted and documented in the Draft REA reports. The Project can be constructed, installed and operated without any significant adverse residual effects to the environment.



# **Appendix A**

Original Project Location and Modified Project Location



