

MAP SHEET FULLY WITHIN THE N4-WILD-200 FEATURE

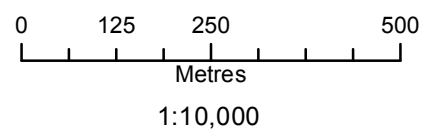
N4-Wild-200



ISKWANANIKA
KESPEETIK CREEK



Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, ProvMB, NRCAN
Date Created: April 10, 2014
Version: Draft



- Land Base**
- Transmission Line
 - Highway
 - Major Road
 - Local Road
 - Winter Road
 - Railway (Operational)
 - Railway (Discontinued)
 - First Nation
 - Mining
 - Provincial Forest

- Project Infrastructure**
- * Angle Tower Locations
 - BP III Final Preferred Route
 - 66 m Right of Way

- Points of Access***
- Proposed Access Point
 - Major Stream Crossing
 - ▲ Abandoned Rail Crossing
 - ▲ Rail Crossing
 - Transmission Line Crossing
 - Proposed Access Route
- *Labels correspond to BP III Access Management Database

- ESS Features**
- Water**
 - Water Crossing
 - Access**
 - Intersection
 - Wildlife**
 - Mammals and Habitat

**Bipole III Transmission Project
Construction Environmental Protection Plan
Construction Section N4
Environmentally Sensitive Site Locations**

Draft: For Discussion Purposes Only

ESS Group: Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
N4-S01	N4-Aqua-100	Iskwayanikakespeetik Creek	357307	5942911	14N	N/A	2m	Moderate	Marginal
N4-S01	N4-Aqua-101	Iskwayanikakespeetik Creek	357321	5942818	14N	N/A	2m	Moderate	Marginal
N4-S01	N4-Aqua-102	Iskwayanikakespeetik Creek	357342	5942672	14N	N/A	3m	Moderate	Marginal
N4-S01	N4-Aqua-103	Iskwayanikakespeetik Creek	357351	5942609	14N	N/A	3m	Moderate	Marginal
N4-S01	N4-Aqua-104	Iskwayanikakespeetik Creek	357434	5942024	14N	N/A	1m	Moderate	Marginal
N4-S01	N4-Aqua-105	Iskwayanikakespeetik Creek	357450	5941918	14N	N/A	1m	Moderate	Marginal

Potential Effects:

Habitat loss and contamination from structure foundations & installations; increased erosion & sedimentation of streams; Damage to stream banks; Loss of riparian vegetation; Fish habitat disturbances and impeded fish movement; Rutting of floodplain

Specific Mitigation:

- Carry out construction activities on frozen ground to minimize surface damage, rutting and erosion
- Use existing trails, roads or cut lines whenever possible as access routes
- Identify and flag buffer areas prior to start of work
- Riparian Buffers shall be a minimum of 30m and increase in size based on slope of land entering waterway. Within these buffers shrub and herbaceous understory veg will be maintained along with trees that do not violate MH Veg Clearance Requirements.
- 7m no machine zone will restrict equipment in close proximity to the waterbody except at the trail crossing.
- Adhere to Department of Fisheries and Oceans (DFO) Operational Statements for Temporary Stream Crossings, Ice Bridges and Snow Fills, and Overhead Line Construction
- No instream works or fording from April 15 - July 15

ESS Group: Mammals and Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N4-S01	N4-Wild-200	MCWS Caribou Sensitive Area	Site: 1 to 4	E-354917 N-5957921	E-361228 N-5915591	14N	42800m

Potential Effects:

The Bog Woodland Caribou Range Sensitive Area

Specific Mitigation:

- Manitoba Hydro will not support development of designated motorized recreational trail use within areas described above if requested.
- Extension of wildlife crossing and vegetation management measures to the 230 kV line running adjacent to the Bipole III transmission line in this range. Location of specific measures on the 230kV line to be determined in conjunction with Wildlife Branch.
- No shear blading to clear the right of way (ROW) in the sensitive range. Selective cutting methods will only be used leaving low shrub and herb plant communities on the ROW.
- Maintenance trails to be maintained to reduce line of sight for hunters and predators.
- Annual ground inspection of towers to occur late in winter season to avoid creating packed snow trails that facilitate predator use of the ROW.
- At PTH 10 and 60 crossings a vegetated buffer zone x m wide will be left at the edge of the ROW to reduce visibility and access on to the ROW from the highways. A maintenance trail will still be needed on to the ROW from the highway.
- Any access trails used to access the ROW for construction that will not be needed for future maintenance will be decommissioned on completion of construction.
- Any culverts or road improvements will be removed and the first 100 m from of the trail dug up to the extent possible. Available slash < 1 m in height will also be evenly distributed over the access trail to reduce the possibility of use be ATV traffic.

ESS Group: Intersection

Sec-Seg ID	ESS ID	Location	ESS Name	Crossing Coordinates	UTM Zone
N4-S04	N4-Acss-100	C1	Snowmobile Trail	E-360362 N-5897633	14N

Potential Effects:

Potential interference with snowmobilers; safety issues

Specific Mitigation:

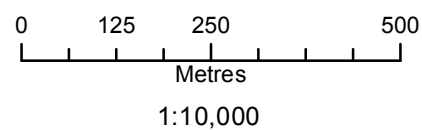
- Identify and flag prior to start of work
- Avoid surface damage to and obstruction of access route
- Post warning markers and signs at snowmobile trail location
- Notify snowmobile club/users and local authorities regarding construction activities and schedule, and address concerns prior to construction

MAP SHEET FULLY WITHIN THE N4-WILD-200 FEATURE

N4-Wild-200



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- Angle Tower Locations
 - BPIII Final Preferred Route
 - 66 m Right of Way

- Points of Access***
- Proposed Access Point
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**Bipole III Transmission Project
 Construction Environmental Protection Plan
 Construction Section N4
 Environmentally Sensitive Site Locations**

Draft: For Discussion Purposes Only

ESS Group: Mammals and Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N4-S01	N4-Wild-200	MCWS Caribou Sensitive Area	Site: 1 to 4	E-354917 N-5957921	E-361228 N-5915591	14N	42800m

Potential Effects:

The Bog Woodland Caribou Range Sensitive Area

Specific Mitigation:

- Manitoba Hydro will not support development of designated motorized recreational trail use within areas described above if requested.
- Extension of wildlife crossing and vegetation management measures to the 230 kV line running adjacent to the Bipole III transmission line in this range. Location of specific measures on the 230kV line to be determined in conjunction with Wildlife Branch.
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- Maintenance trails to be maintained to reduce line of sight for hunters and predators.
- Annual ground inspection of towers to occur late in winter season to avoid creating packed snow trails that facilitate predator use of the ROW.
- At PTH 10 and 60 crossings a vegetated buffer zone x m wide will be left at the edge of the ROW to reduce visibility and access on to the ROW from the highways. A maintenance trail will still be needed on to the ROW from the highway.
- Any access trails used to access the ROW for construction that will not be needed for future maintenance will be decommissioned on completion of construction.
- Any culverts or road improvements will be removed and the first 100 m from of the trail dug up to the extent possible. Available slash < 1 m in height will also be evenly distributed over the access trail to reduce the possibility of use be ATV traffic.

ESS Group: Intersection

Sec-Seg ID	ESS ID	Location	ESS Name	Crossing Coordinates	UTM Zone
N4-S04	N4-Acss-100	C1	Snowmobile Trail	E-360362 N-5897633	14N

Potential Effects:

Potential interference with snowmobilers; safety issues

Specific Mitigation:

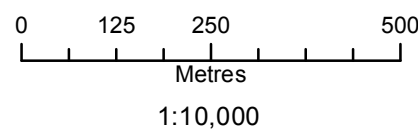
- Identify and flag prior to start of work
- Avoid surface damage to and obstruction of access route
- Post warning markers and signs at snowmobile trail location
- Notify snowmobile club/users and local authorities regarding construction activities and schedule, and address concerns prior to construction

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ESS Group: Mammals and Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N4-S01	N4-Wild-200	MCWS Caribou Sensitive Area	Site: 1 to 4	E-354917 N-5957921	E-361228 N-5915591	14N	42800m

Potential Effects:

The Bog Woodland Caribou Range Sensitive Area

Specific Mitigation:

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ESS Group: Intersection

Sec-Seg ID	ESS ID	Location	ESS Name	Crossing Coordinates	UTM Zone
N4-S04	N4-Acss-100	C1	Snowmobile Trail	E-360362 N-5897633	14N

Potential Effects:

Potential interference with snowmobilers; safety issues

Specific Mitigation:

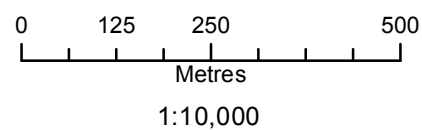
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- Post warning markers and signs at snowmobile trail location
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ESS Group: Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N4-S01	N4-Eco-101	Patterned Fen	Site: 15 to 16	E-359360 N-5928610	E-359447 N-5927998	14N	618m

Potential Effects:

Potential loss of plants of conservation concern and habitat disturbance from clearing, construction, maintenance and decommissioning activities.

Specific Mitigation:

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Use existing access roads and trails to the extent possible
- Provide 30 m vegetated (shrub and herbaceous) buffer around site
- Remove trees by low-disturbance methods
- Confine vehicle traffic to established trails to the extent possible
- Install erosion protection and sediment control measures in accordance with Erosion/Sediment Control Plan

ESS Group: Mammals and Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N4-S01	N4-Wild-200	MCWS Caribou Sensitive Area	Site: 1 to 4	E-354917 N-5957921	E-361228 N-5915591	14N	42800 m

Potential Effects:

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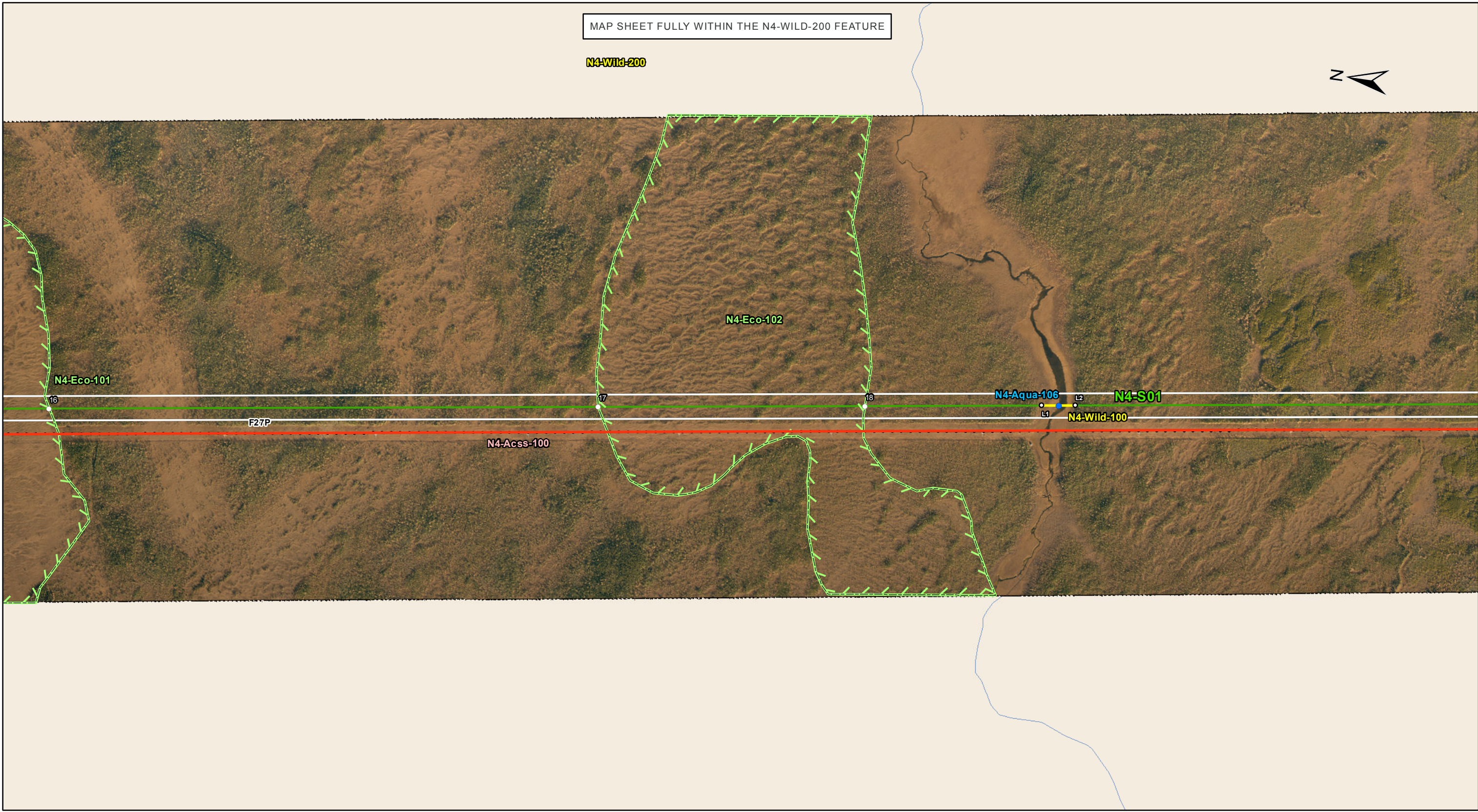
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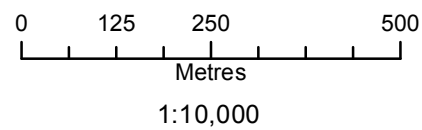
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ESS Group: Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
N4-S01	N4-Aqua-106	Unnamed tributary of Cedar Lake	359836	5925289	14N	N/A	31m	Moderate	Marginal

Potential Effects:

Habitat loss and contamination from structure foundations & installations; increased erosion & sedimentation of streams; Damage to stream banks; Loss of riparian vegetation; Fish habitat disturbances and impeded fish movement; Rutting of floodplain

Specific Mitigation:

- Carry out construction activities on frozen ground to minimize surface damage, rutting and erosion
- Use existing trails, roads or cut lines whenever possible as access routes
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- Riparian Buffers shall be a minimum of 30m and increase in size based on slope of land entering waterway. Within these buffers shrub and herbaceous understory veg will be maintained along with trees that do not violate MH Veg Clearance Requirements.
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ESS Group: Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
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N4-S01	N4-Eco-102	Patterned Fen	Site: 17 to 18	E-359659 N-5926525	E-359762 N-5925809	14N	723 m

Potential Effects:

Potential loss of plants of conservation concern and habitat disturbance from clearing, construction, maintenance and decommissioning activities.

Specific Mitigation:

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Use existing access roads and trails to the extent possible
- Provide 30 m vegetated (shrub and herbaceous) buffer around site
- Remove trees by low-disturbance methods
- Confine vehicle traffic to established trails to the extent possible
- Install erosion protection and sediment control measures in accordance with Erosion/Sediment Control Plan

ESS Group: Birds and Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S01	N4-Wild-100	Waterfowl sensitivity area	Site: L1 to L2	E-359830 N-5925335	E-359843 N-5925244	14N	92m

Potential Effects:

Higher risk of wire collision, Risk of wire collision is localized to the right-of-way

Specific Mitigation:

- Adhere to reduced risk timing windows for protection of birds (August 1- April 30)
- Maintain applicable setback during nesting and breeding timing window
- Conduct priority assessment for bird diverters and other measures prior to transmission line stringing
- Install bird diverters or other measures at high priority sites

ESS Group: Mammals and Habitat

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N4-S01	N4-Wild-200	MCWS Caribou Sensitive Area	Site: 1 to 4	E-354917 N-5957921	E-361228 N-5915591	14N	42800 m

Potential Effects:

The Bog Woodland Caribou Range Sensitive Area

Specific Mitigation:

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ESS Group: Intersection

Sec-Seg ID	ESS ID	Location	ESS Name	Crossing Coordinates	UTM Zone
N4-S04	N4-Acss-100	C1	Snowmobile Trail	E-360362 N-5897633	14N

Potential Effects:

Potential interference with snowmobilers; safety issues

Specific Mitigation:

- Identify and flag prior to start of work
- Avoid surface damage to and obstruction of access route
- Post warning markers and signs at snowmobile trail location
- Notify snowmobile club/users and local authorities regarding construction activities and schedule, and address concerns prior to construction

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