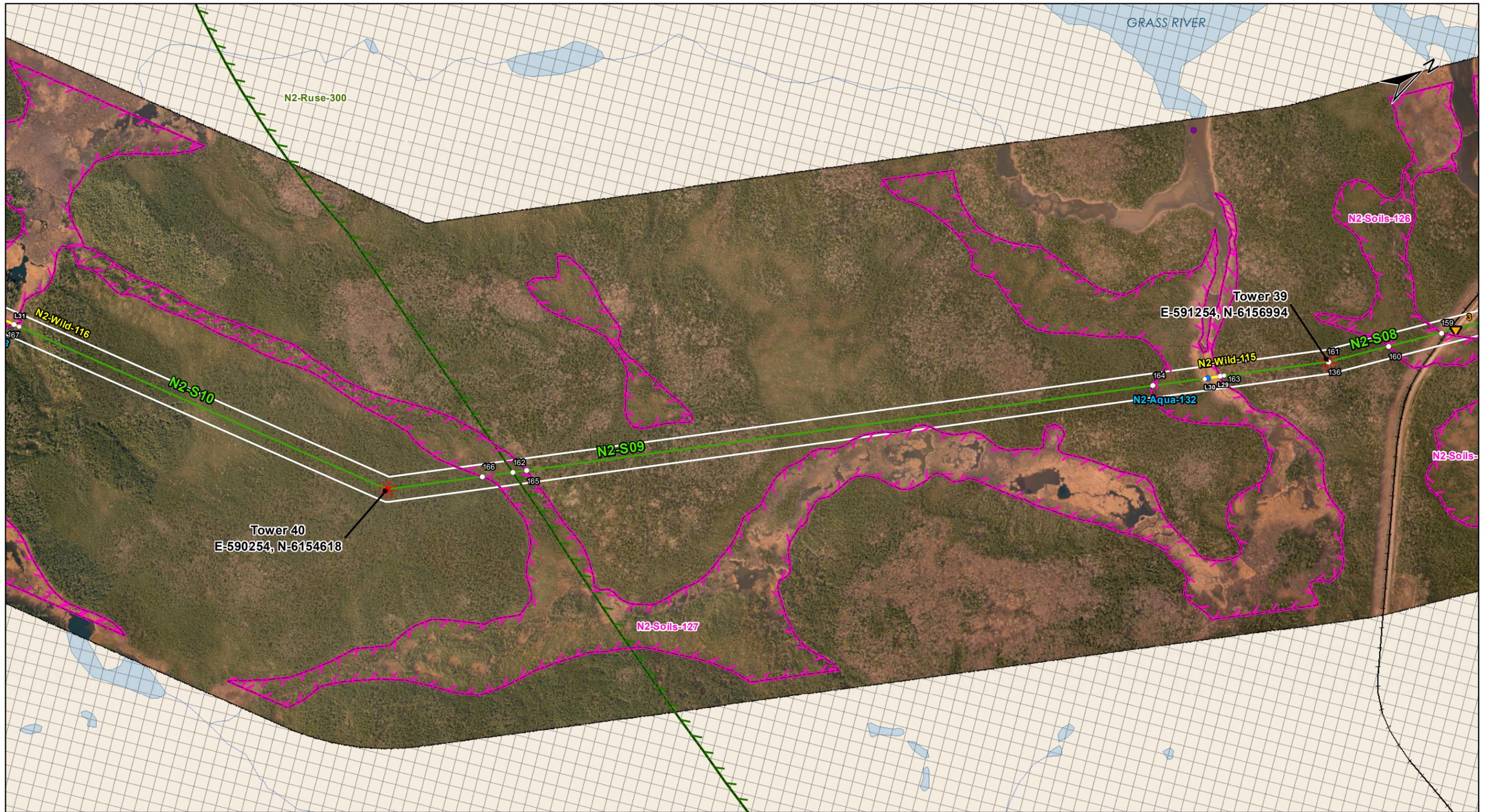


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	<p>Coordinate System: UTM Zone 14N NAD83 Data Source: MB Hydro, ProvMB, NRCAN Date Created: December 02, 2013</p>	<p>Land Base</p> <ul style="list-style-type: none"> Transmission Line Highway Major Road Local Road Winter Road Railway (Operational) Railway (Discontinued) Mining Provincial Park 	<p>Project Infrastructure</p> <ul style="list-style-type: none"> Angle Tower Locations BPIII Final Preferred Route 66 m Right of Way 	<p>Points of Access*</p> <ul style="list-style-type: none"> Proposed Access Point Major Stream Crossing Abandoned Rail Crossing Rail Crossing Transmission Line Crossing Proposed Access Route <p><small>*Labels correspond to BPIII Access Management Database</small></p>	<p>ESS Features</p> <p>Heritage</p> <ul style="list-style-type: none"> Archaeological <p>Water</p> <ul style="list-style-type: none"> Water Crossing <p>Wildlife</p> <ul style="list-style-type: none"> Birds and Habitat <p>Resource Use</p> <ul style="list-style-type: none"> Forestry <p>Soils and Terrain</p> <ul style="list-style-type: none"> Permafrost 	<p>Bipole III Transmission Project Construction Environmental Protection Plan Construction Section N2 Environmentally Sensitive Site Locations</p> <p>Map 76</p>
	<p>0 120 240 480</p> <p style="text-align: center;">Metres</p> <p style="text-align: center;">1:10,000</p>					

MAP NUMBER : 76

ESS Group : Forestry

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S08	N2-RUse-300	Fuel wood collection area	Site: 135 to 136	E- 593025 N-6163061	E- 591254 N-6156994	14N	6320 m
N2-S09	N2-RUse-300	Fuel wood collection area	Site: 161 to 162	E- 591254 N-6156994	E- 590388 N-6154935	14N	2234 m

Potential Effects:

Potential to disrupt access to fuel wood area

Specific Mitigation:

- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Avoid surface damage to and obstruction of access route
- Make fuel wood from ROW clearing available to local community where demand exists

ESS Group : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S08	N2-Soils-126	Permafrost	Site: 159 to 160	E-591343 N-6157298	E-591302 N-6157156	14N	148 m
N2-S09	N2-Soils-127	Permafrost	Site: 163 to 164	E-591139 N-6156721	E-591068 N-6156551	14N	185 m
N2-S09	N2-Soils-127	Permafrost	Site: 165 to 166	E-590402 N-6154969	E-590355 N-6154858	14N	121 m
N2-S10	N2-Soils-127	Permafrost	Site: 167 to 168	E-589353 N-6153971	E-589353 N-6153971	14N	248 m

Potential Effects:

Melting or loss of permafrost due to disturbance of the active layer

Specific Mitigation:

- Carry out construction activities on frozen ground to minimize surface damage and rutting
- Use existing trails, roads or cut lines whenever possible as access routes
- Avoid organic soils containing permafrost to the extent possible
- Maintain shrub and herbaceous vegetation to the extent possible
- Remove trees by low-disturbance methods
- Confine vehicle traffic to established trails to the extent possible
- Implement erosion protection before commencing construction 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-S09	N2-Wild-115	Waterfowl sensitivity area	Site: L29 to L30	E- 591144 N-6156731	E-591124 N-6156683	14N	52 m
N2-S10	N2-Wild-116	Waterfowl sensitivity area	Site: L31 to L32	E- 589366 N-6153981	E-589147 N-6153824	14N	270 m

Potential Effects:

Higher risk of wire collision, disturbance during breeding and nesting, risk of wire collision is localized to the right-of-way while construction disturbance can effect colonies up to 400 meters away

Specific Mitigation:

- Adhere to reduced risk timing windows for protection of birds (August 1- April 30)
- Maintain setback during 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 : Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
N2-S09	N2-Aqua-132	Unnamed Tributary into Partridge Crop Lake	591127	6156691	14N	10m	10m	Marginal	Moderate

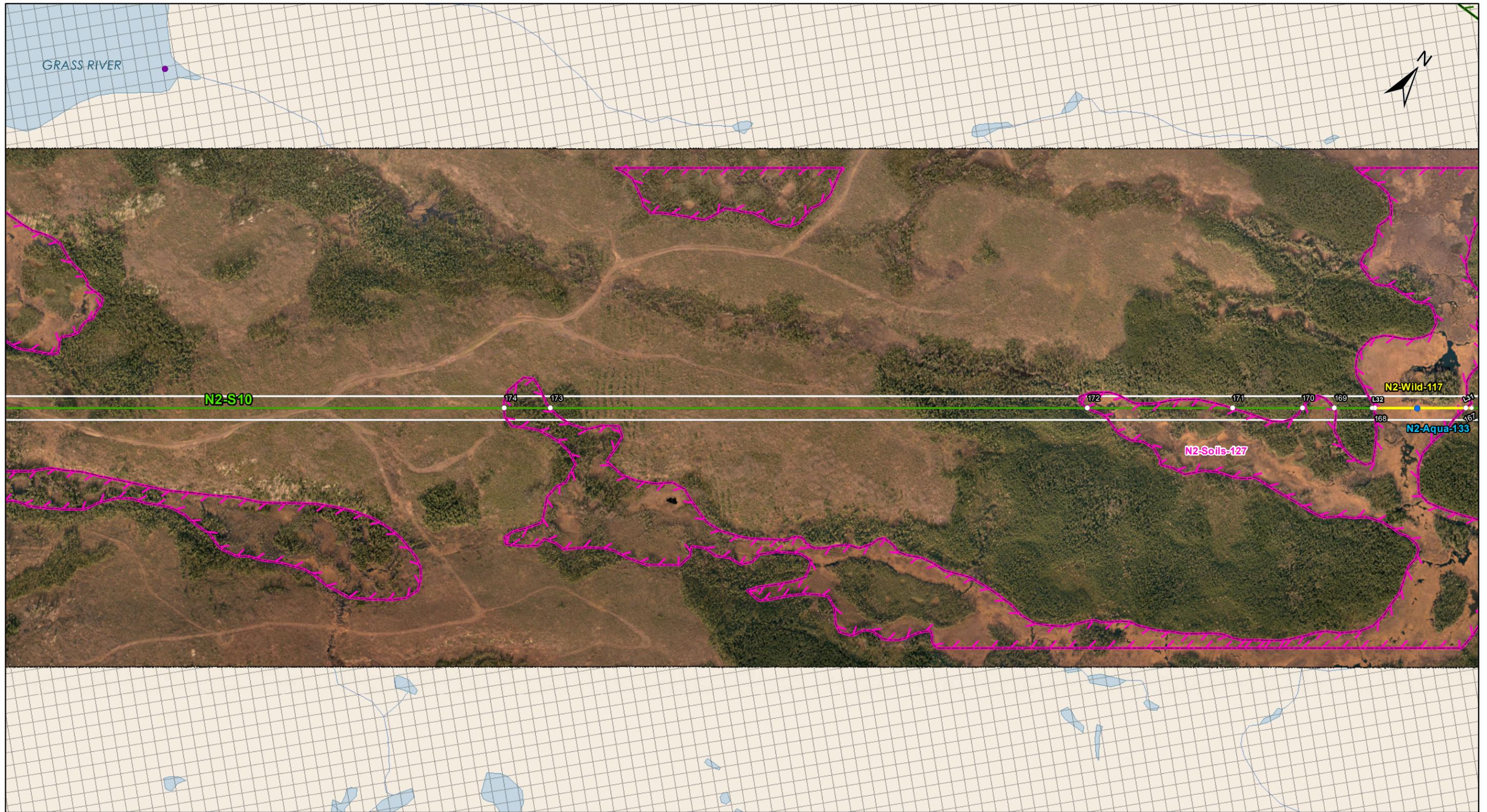
Potential Effects:

Habitat loss & contamination from structure foundations & installations; increased erosion & sedimentation of streams; damage to stream banks; loss of riparian vegetation

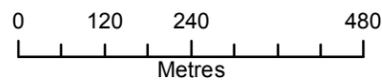
Specific Mitigation:

- 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

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Coordinate System: UTM Zone 14N NAD83
 Data Source: MB Hydro, ProvMB, NRCAN
 Date Created: December 02, 2013



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Land Base

- Transmission Line
- Highway
- Major Road
- Local Road
- Winter Road
- Railway (Operational)
- Railway (Discontinued)
- Mining
- Provincial Park

Project Infrastructure

- Angle Tower Locations
- BPIII 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 BPIII Access Management Database

ESS Features

- Heritage**
- Archaeological
- Water**
- Water Crossing
- Wildlife**
- Birds and Habitat
- Resource Use**
- Forestry
- Soils and Terrain**
- Permafrost

**Bipole III Transmission Project
 Construction Environmental Protection Plan
 Construction Section N2
 Environmentally Sensitive Site Locations**

MAP NUMBER : 77

ESS Group : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S10	N2-Soils-127	Permafrost	Site: 167 to 168	E-589353 N-6153971	E-589353 N-6153971	14N	248 m
N2-S10	N2-Soils-127	Permafrost	Site: 169 to 170	E-589063 N-6153763	E-588992 N-6153713	14N	170 m
N2-S10	N2-Soils-127	Permafrost	Site: 171 to 172	E-588838 N-6153602	E-588518 N-6153372	14N	171 m
N2-S10	N2-Soils-127	Permafrost	Site: 173 to 174	E-587333 N-6152523	E-587231 N-6152449	14N	174 m

Potential Effects:

Melting or loss of permafrost due to disturbance of the active layer

Specific Mitigation:

- Carry out construction activities on frozen ground to minimize surface damage and rutting
- Use existing trails, roads or cut lines whenever possible as access routes
- Avoid organic soils containing permafrost to the extent possible
- Maintain shrub and herbaceous vegetation to the extent possible
- Remove trees by low-disturbance methods
- Confine vehicle traffic to established trails to the extent possible
- Implement erosion protection before commencing construction 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-S10	N2-Wild-116	Waterfowl sensitivity area	Site: L31 to L32	E- 589366 N-6153981	E-589147 N-6153824	14N	270 m

Potential Effects:

Higher risk of wire collision, disturbance during breeding and nesting, risk of wire collision is localized to the right-of-way while construction disturbance can effect colonies up to 400 meters away

Specific Mitigation:

- Adhere to reduced risk timing windows for protection of birds (August 1- April 30)
- Maintain setback during 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 : Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
N2-S10	N2-Aqua-133	Unnamed Tributary into Partridge Crop Lake	589246	6153895	14N	240m	N/A	Marginal	Moderate

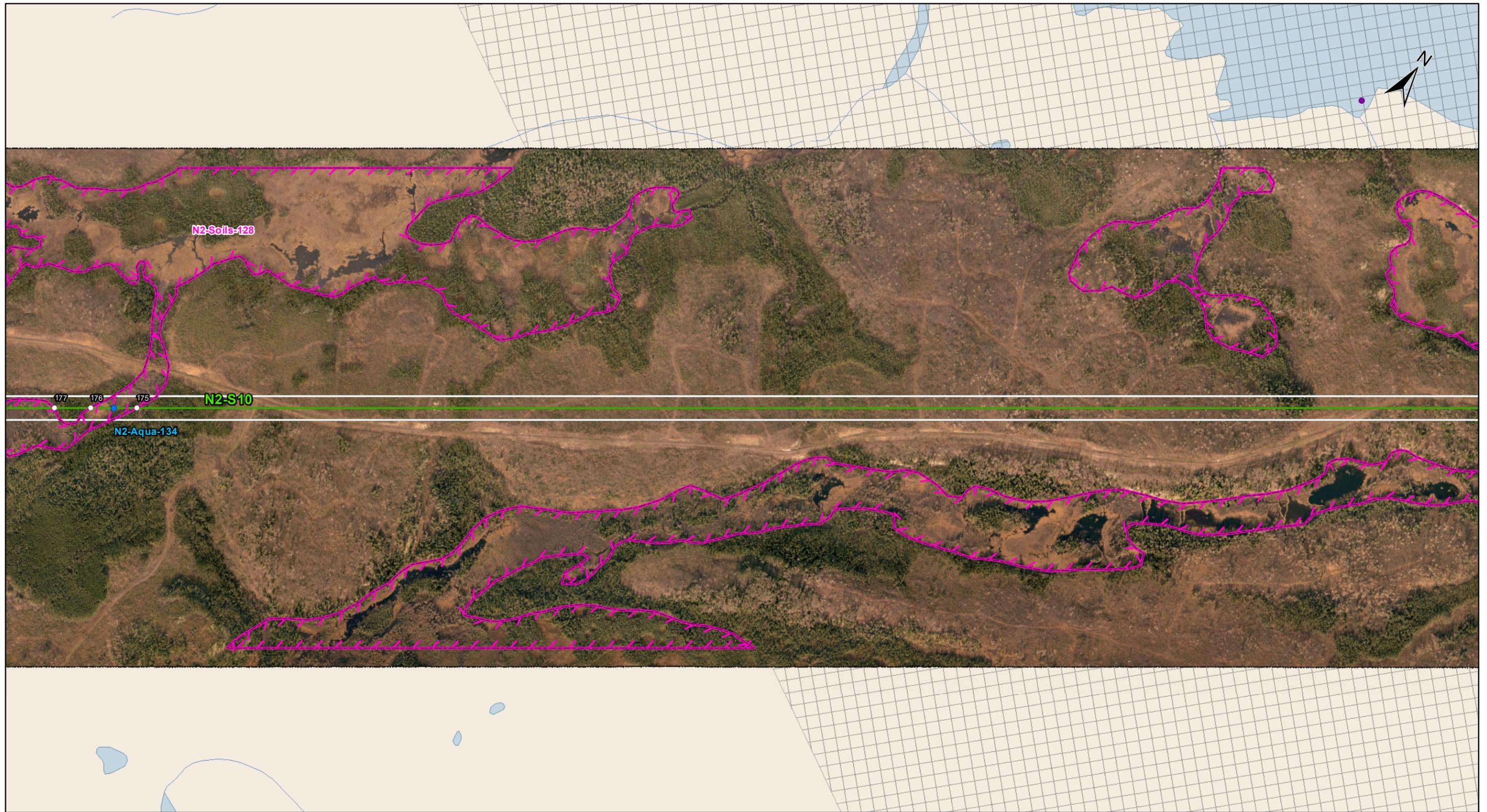
Potential Effects:

Habitat loss & contamination from structure foundations & installations; increased erosion & sedimentation of streams; damage to stream banks; loss of riparian vegetation

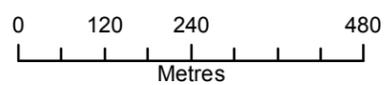
Specific Mitigation:

- 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

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Coordinate System: UTM Zone 14N NAD83
 Data Source: MB Hydro, ProvMB, NRCAN
 Date Created: December 02, 2013



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Land Base

- Transmission Line
- Highway
- Major Road
- Local Road
- Winter Road
- Railway (Operational)
- Railway (Discontinued)
- Mining
- Provincial Park

Project Infrastructure

- Angle Tower Locations
- BPIII 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 BPIII Access Management Database

ESS Features

- Heritage**
- Archaeological
- Water**
- Water Crossing
- Soils and Terrain**
- Permafrost

**Bipole III Transmission Project
 Construction Environmental Protection Plan
 Construction Section N2
 Environmentally Sensitive Site Locations**

MAP NUMBER : 78

ESS Group : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S10	N2-Soils-128	Permafrost	Site: 175 to 176	E-583202 N-6149559	E-583100 N-6149486	14N	125 m
N2-S10	N2-Soils-128	Permafrost	Site: 177 to 178	E-583021 N-6149429	E-582538 N-6149083	14N	594 m

- 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

Potential Effects:

Melting or loss of permafrost due to disturbance of the active layer

Specific Mitigation:

- Carry out construction activities on frozen ground to minimize surface damage and rutting
- Use existing trails, roads or cut lines whenever possible as access routes
- Avoid organic soils containing permafrost to the extent possible
- Maintain shrub and herbaceous vegetation to the extent possible
- Remove trees by low-disturbance methods
- Confine vehicle traffic to established trails to the extent possible
- Implement erosion protection before commencing construction in accordance with Erosion/Sediment Control Plan

ESS Group : Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
N2-S09	N2-Aqua-134	Unnamed Tributary into Partridge Crop Lake	583153	6149524	14N	N/A	N/A	Marginal	Low

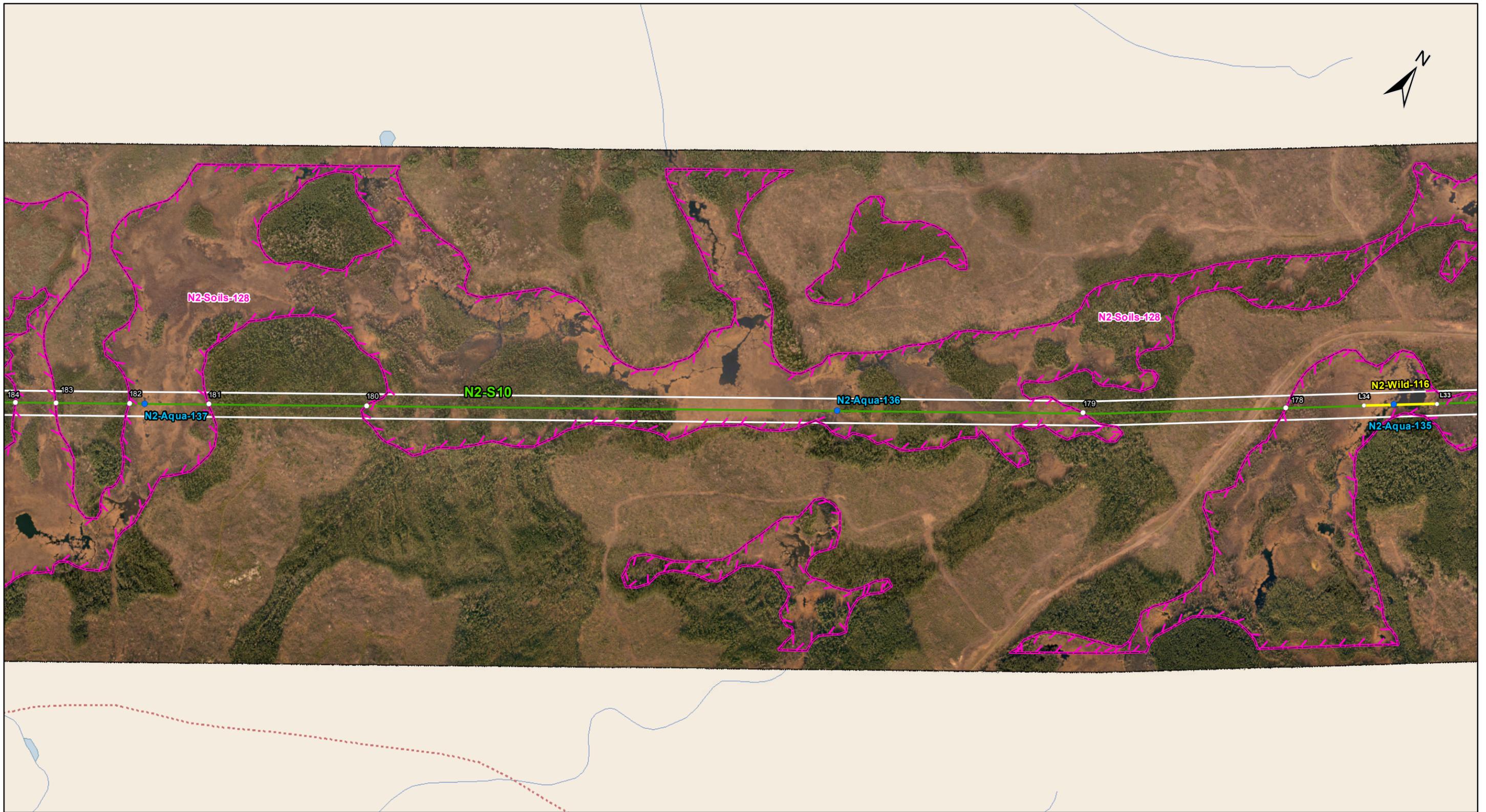
Potential Effects:

Habitat loss & contamination from structure foundations & installations; increased erosion & sedimentation of streams; damage to stream banks; loss of riparian vegetation

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

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Coordinate System: UTM Zone 14N NAD83
 Data Source: MB Hydro, ProvMB, NRCAN
 Date Created: December 02, 2013

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Land Base

- Transmission Line
- Highway
- Major Road
- Local Road
- Winter Road
- Railway (Operational)
- Railway (Discontinued)
- Mining
- Provincial Park

Project Infrastructure

- Angle Tower Locations
- BPIII 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 BPIII Access Management Database

ESS Features

- Water
- Water Crossing
- Wildlife
- Birds and Habitat
- Soils and Terrain
- Permafrost

**Bipole III Transmission Project
 Construction Environmental Protection Plan
 Construction Section N2
 Environmentally Sensitive Site Locations**

MAP NUMBER : 79

ESS Group : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S10	N2-Soils-128	Permafrost	Site: 177 to 178	E-583021 N-6149429	E-582538 N-6149083	14N	178 m
N2-S10	N2-Soils-128	Permafrost	Site: 179 to 180	E-582090 N-6148763	E-580465 N-6147694	14N	1945 m
N2-S10	N2-Soils-128	Permafrost	Site: 181 to 182	E-580107 N-6147458	E-579928 N-6147340	14N	215 m
N2-S10	N2-Soils-128	Permafrost	Site: 183 to 184	E-579760 N-6147230	E-579670 N-6147170	14N	109 m

Potential Effects:

Melting or loss of permafrost due to disturbance of the active layer

Specific Mitigation:

- Carry out construction activities on frozen ground to minimize surface damage and rutting
- Use existing trails, roads or cut lines whenever possible as access routes
- Avoid organic soils containing permafrost to the extent possible
- Maintain shrub and herbaceous vegetation to the extent possible
- Remove trees by low-disturbance methods
- Confine vehicle traffic to established trails to the extent possible
- Implement erosion protection before commencing construction 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-S10	N2-Wild-117	Waterfowl sensitivity area	Site: L33 to L34	E- 582872 N-6149322	E-582711 N-6149207	14N	198 m

Potential Effects:

Higher risk of wire collision, disturbance during breeding and nesting, risk of wire collision is localized to the right-of-way while construction disturbance can effect colonies up to 400 meters away

Specific Mitigation:

- Adhere to reduced risk timing windows for protection of birds (August 1- April 30)
- Maintain setback during 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 : Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
N2-S10	N2-Aqua-135	Unnamed Tributary into Partridge Crop Lake	582777	6149254	14N	72m	72m	Marginal	Moderate
N2-S10	N2-Aqua-136	Unnamed Tributary into Partridge Crop Lake	581532	6148397	14N	33m	N/A	Marginal	Moderate
N2-S10	N2-Aqua-137	Unnamed Tributary into Partridge Crop Lake	579963	6147363	14N	5m	5m	Marginal	Moderate

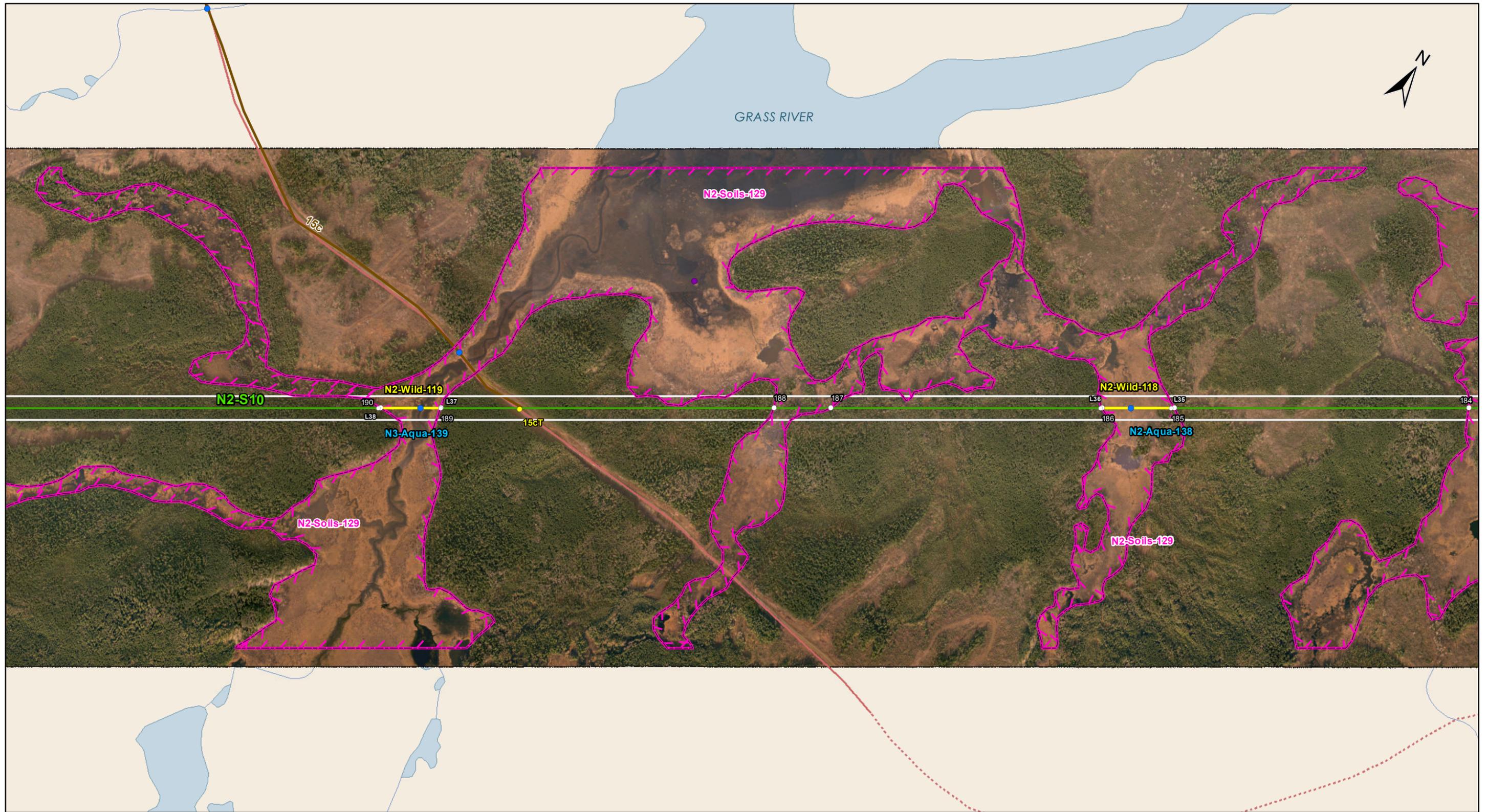
Potential Effects:

Habitat loss & contamination from structure foundations & installations; increased erosion & sedimentation of streams; damage to stream banks; loss of riparian vegetation

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

DOCUMENT PATH: G:_GIS_PROJECT_FOLDER00_HYDRO\11440054_BPIII_EPP\ARCMAPIESS_N2\BPIII_CENVPP_NIN2\N3\N4C1\SECTIONBASEMAP_MAPBOOK_BTIB_STANTEC_20131201.MXD



Coordinate System: UTM Zone 14N NAD83
 Data Source: MB Hydro, ProvMB, NRCAN
 Date Created: December 02, 2013

0 120 240 480
 Metres

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Land Base

- Transmission Line
- Highway
- Major Road
- Local Road
- Winter Road
- Railway (Operational)
- Railway (Discontinued)
- Mining
- Provincial Park

Project Infrastructure

- Angle Tower Locations
- BPIII 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 BPIII Access Management Database

ESS Features

- Heritage**
- Archaeological
- Water**
- Water Crossing
- Wildlife**
- Birds and Habitat
- Soils and Terrain**
- Permafrost

**Bipole III Transmission Project
 Construction Environmental Protection Plan
 Construction Section N2
 Environmentally Sensitive Site Locations**

MAP NUMBER : 80

ESS Group : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N2-S10	N2-Soils-129	Permafrost	Site: 185 to 186	E-579003 N-6146731	E-578838 N-6146622	14N	197 m
N2-S10	N2-Soils-129	Permafrost	Site: 187 to 188	E-578224 N-6146218	E-578094 N-6146132	14N	155 m
N2-S10	N2-Soils-129	Permafrost	Site: 189 to 190	E-577338 N-6145635	E-577202 N-6145545	14N	163 m

Potential Effects:

Melting or loss of permafrost due to disturbance of the active layer

Specific Mitigation:

- Carry out construction activities on frozen ground to minimize surface damage and rutting
- Use existing trails, roads or cut lines whenever possible as access routes
- Avoid organic soils containing permafrost to the extent possible
- Maintain shrub and herbaceous vegetation to the extent possible
- Remove trees by low-disturbance methods
- Confine vehicle traffic to established trails to the extent possible
- Implement erosion protection before commencing construction 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-S10	N2-Wild-118	Waterfowl sensitivity area	Site: L35 to L36	E- 578995 N-6146725	E-578836 N-6146621	14N	190 m
N2-S10	N2-Wild-119	Unnamed creek crossing	Site: L37 to L38	E- 577339 N-6145635	E-577198 N-6145542	14N	169 m

Potential Effects:

Higher risk of wire collision, disturbance during breeding and nesting, risk of wire collision is localized to the right-of-way while construction disturbance can effect colonies up to 400 meters away

Specific Mitigation:

- Adhere to reduced risk timing windows for protection of birds (August 1- April 30)
- Maintain setback during 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 : Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
N2-S10	N2-Aqua-138	Unnamed Tributary into Grass River	578905	6146667	14N	3m	3m	Marginal	Moderate
N2-S10	N2-Aqua-139	Unnamed Tributary into Grass River	577294	6145606	14N	48m	48m	Important	Moderate

Potential Effects:

Habitat loss & contamination from structure foundations & installations; increased erosion & sedimentation of streams; damage to stream banks; loss of riparian vegetation

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