

Manitoba Hydro

Metres 1:10,000

-- Winter Road - Railway (Operational) -+ Railway (Discontinued)

Mining
Provincial Park

A Rail Crossing

Transmission Line Crossing Proposed Access Route
\*Labels correspond to BPIII
Access Management Database

Groundwater

**Construction Section N3 Environmentally Sensitive Site Locations**  **MAP NUMBER:** 157

**ESS Group :** Permafrost

Sec-Seg ID	ESS ID	<b>ESS Name</b>	Location	Start	Stop	<b>UTM Zone</b>	Distance
N3-S19	N3-Soils-131	Permafrost	Site: 247 to 248	E-359478 N-5960311	E-359305 N-5960220	14N	196m
N3-S19	N3-Soils-131	Permafrost	Site: 249 to 250	E-359239 N-5960186	E-359034 N-5960079	14N	231m
N3-S19	N3-Soils-131	Permafrost	Site: 253 to 254	E-357058 N-5959043	E-355802 N-5958385	14N	1418m

#### **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: Groundwater

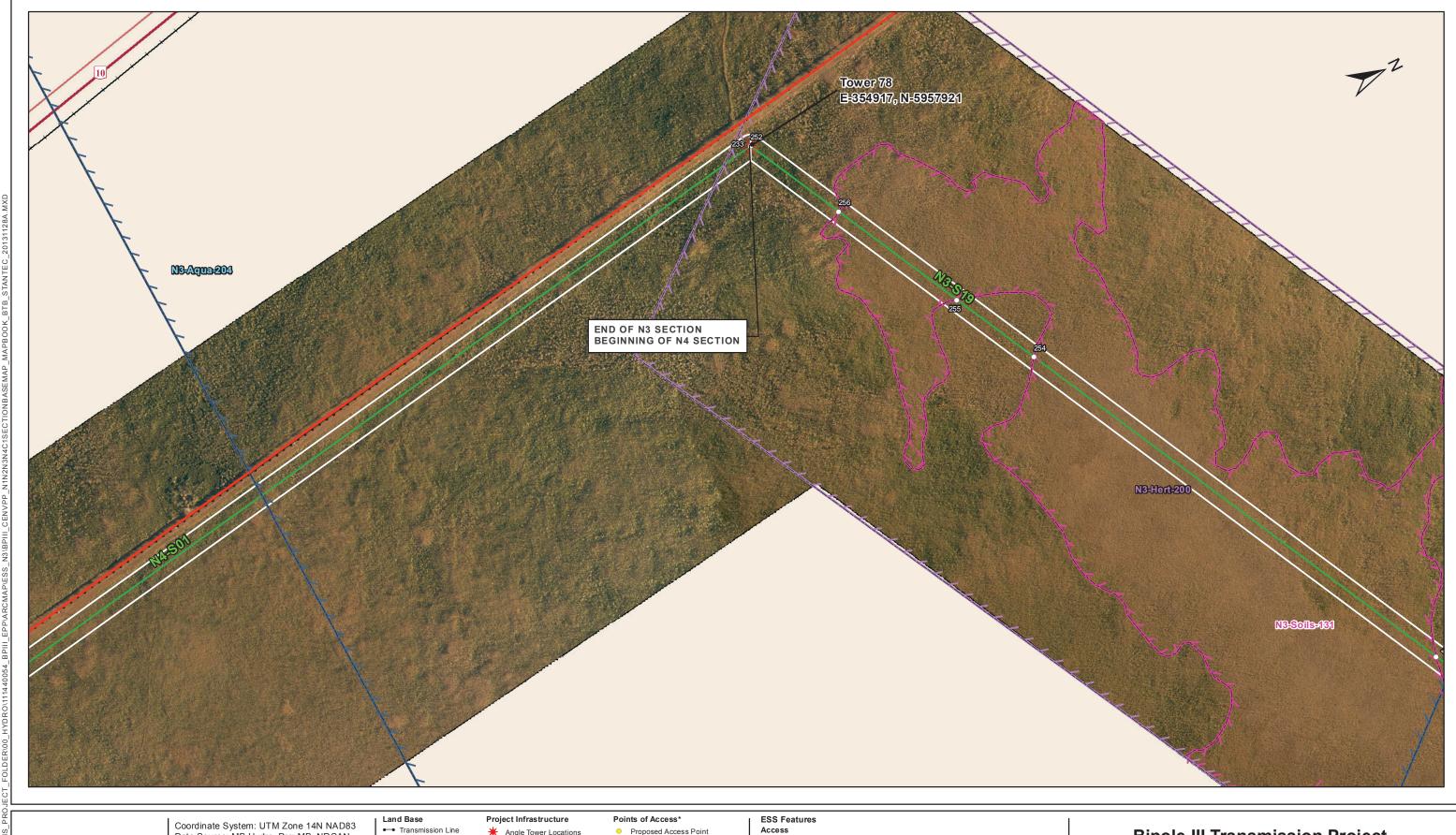
Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N3-S19	N3-Aqua- 204	Aquifers vulnerable to contamination	Site: 251 to 252	E-357107 N-5959069	E-354917 N-5957921	14N	2472m

### **Potential Effects:**

Potential groundwater contamination from a contingency event (e.g., spill)

### **Specific Mitigation:**

- Marshaling yards will be located on upland sites where possible
- An Emergency Preparedness and Spill Response Plan will be developed and an emergency response spill kit will be kept on-site at all times in case of fluid leaks or spills from machinery





Coordinate System: UTM Zone 14N NAD83 Data Source: MB Hydro, ProvMB, NRCAN Date Created: November 29, 2013

125 250 Metres 1:10,000

Highway 500

Major Road Local Road • Winter Road - Railway (Operational) -+ Railway (Discontinued)

Mining
Provincial Park

\* Angle Tower Locations BPIII Final Preferred Route == 66 m Right of Way

 Proposed Access Point Major Stream Crossing

Abandoned Rail Crossing A Rail Crossing

Transmission Line Crossing Proposed Access Route
\*Labels correspond to BPIII
Access Management Database

Access

Intersection Heritage, Cultural Soils and Terrain Permafrost Water

Groundwater

**Bipole III Transmission Project Construction Environmental Protection Plan Construction Section N3 Environmentally Sensitive Site Locations** 

Map 158

MAP NUMBER: 158

**ESS Group :** Permafrost

Sec-Seg ID	ESS ID	<b>ESS Name</b>	Location	Start	Stop	UTM Zone	Distance
N3-S19	N3-Soils-131	Permafrost	Site: 253 to 254	E-357058 N-5959043	E-355802 N-5958385	14N	1418m
N3-S19	N3-Soils-131	Permafrost	Site: 255 to 256	E-355561 N-5958259	E-355192 N-5958065	14N	417m

## **Potential Effects:**

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ESS Group: Groundwater

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