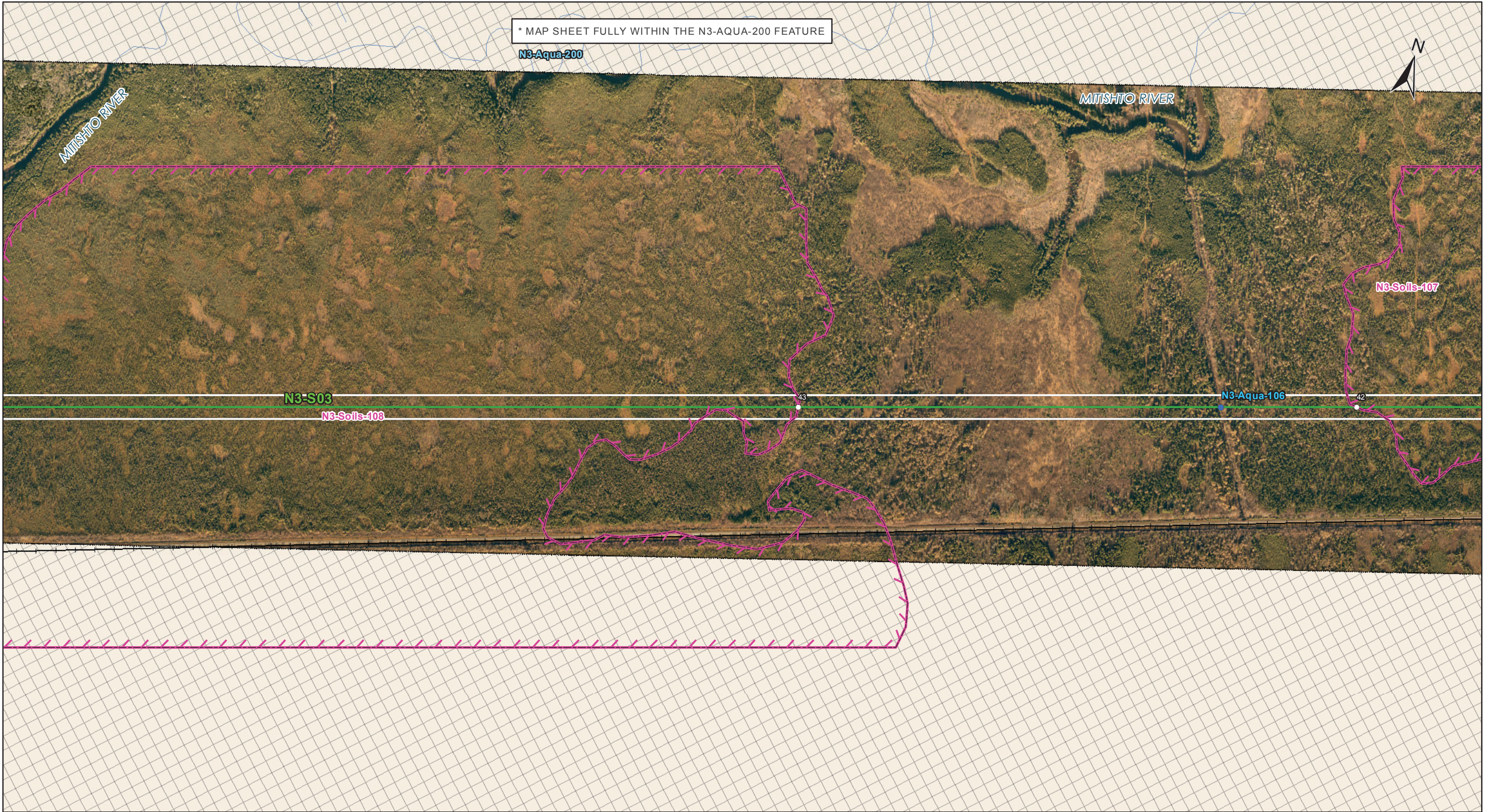


DOCUMENT PATH: G:\\_GIS\_PROJECT\_FOLDER00\_HYDRO\11440054\_BPIII\_EPPARCMAPIESS\_N3\BPIII\_CENVPP\_NIN2\N3\4C1\SECTIONBASEMAP\_MAPBOOK\_BTIB\_STANTEC\_20131128A.MXD



\* MAP SHEET FULLY WITHIN THE N3-AQUA-200 FEATURE



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

0 125 250 500  
 Metres  
 1:10,000

- 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 Crossing
  - Soils and Terrain
  - Water
  - Groundwater

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

MAP NUMBER : 119

ESS Group : Groundwater

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N3-S03	N3-Aqua-200	Aquifers Vulnerable to contamination	Site: 31 to 32	E-479552 N-6050468	E-460122 N-6044246	14N	20403m

**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

ESS Group : Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
N3-S03	N3-Aqua-106	Unnamed Tributary into Mitishto River	473866	6048581	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; fish habitat disturbance & impeded fish movement*

**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 : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N3-S03	N3-Soils-107	Permafrost	Site: 41 to 42	E-475320 N-6049040	E-474214 N-6048691	14N	1159m
N3-S03	N3-Soils-108	Permafrost	Site: 43 to 44	E-472774 N-6048237	E-460348 N-6044317	14N	13030m

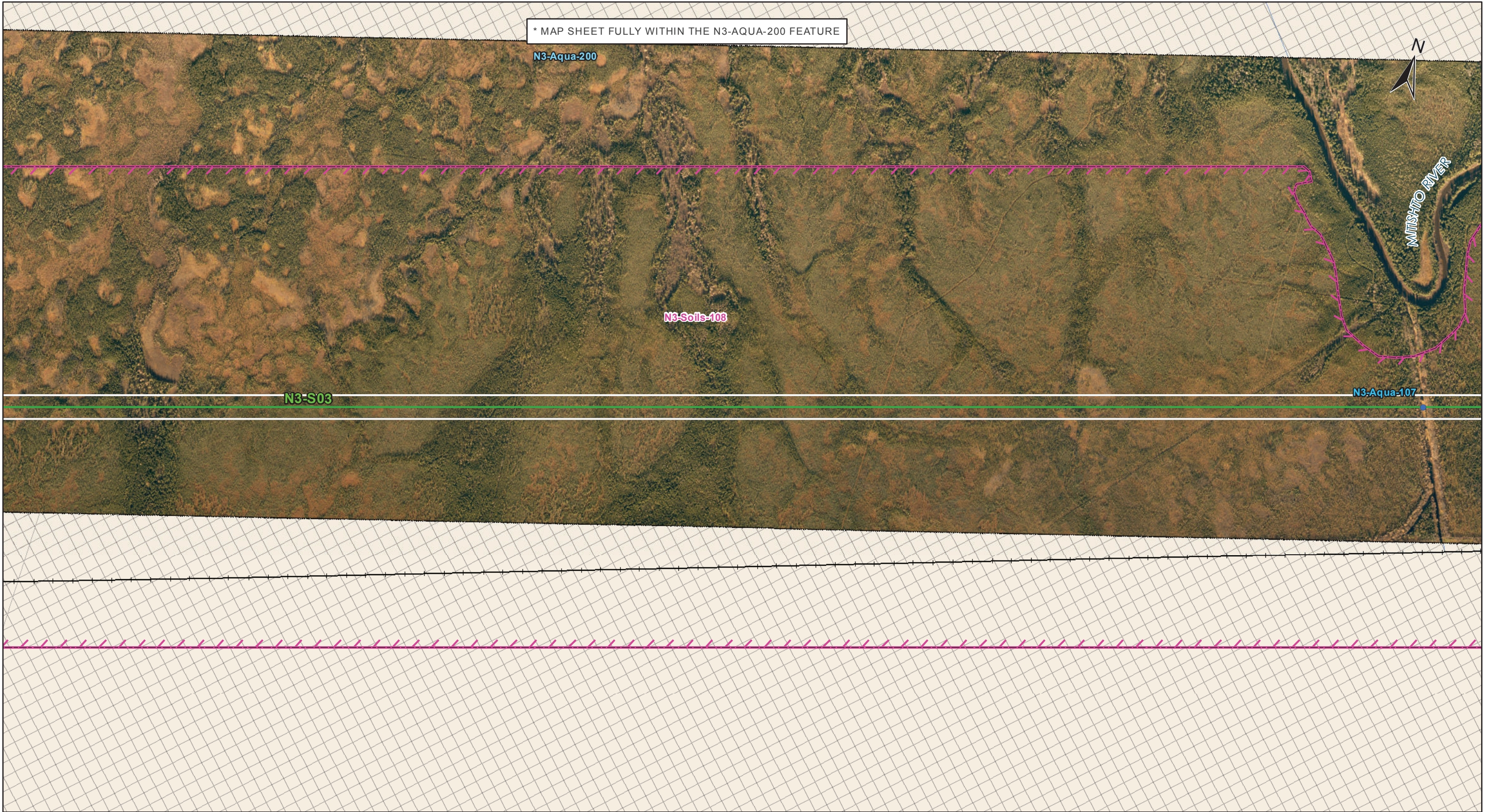
**Potential Effects:**

*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

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\* MAP SHEET FULLY WITHIN THE N3-AQUA-200 FEATURE

N3-Aqua-200

N3-Soils-108

N3-S03

N3-Aqua-107



NITISHTO RIVER



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

1:10,000

- 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
  - Soils and Terrain**
    - Permafrost
  - Water**
    - Groundwater

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

MAP NUMBER : 120

ESS Group : Groundwater

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N3-S03	N3-Aqua-200	Aquifers Vulnerable to contamination	Site: 31 to 32	E-479552 N-6050468	E-460122 N-6044246	14N	20403m

**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

ESS Group : Water Crossing

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone	Channel Width	Wet Width	Fish Habitat Class	Habitat Sensitivity
N3-S03	N3-Aqua-107	Unnamed Tributary into Mitishto River	470610	6047554	14N	2.5m	2.5m	Marginal	Low

**Potential Effects:**

*Habitat loss & contamination from structure foundations & installations; increased erosion & sedimentation of streams; damage to stream banks; loss of riparian vegetation; fish habitat disturbance & impeded fish movement*

**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 : Permafrost

Sec-Seg ID	ESS ID	ESS Name	Location	Start	Stop	UTM Zone	Distance
N3-S03	N3-Soils-108	Permafrost	Site: 43 to 44	E-472774 N-6048237	E-460348 N-6044317	14N	13030m

**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