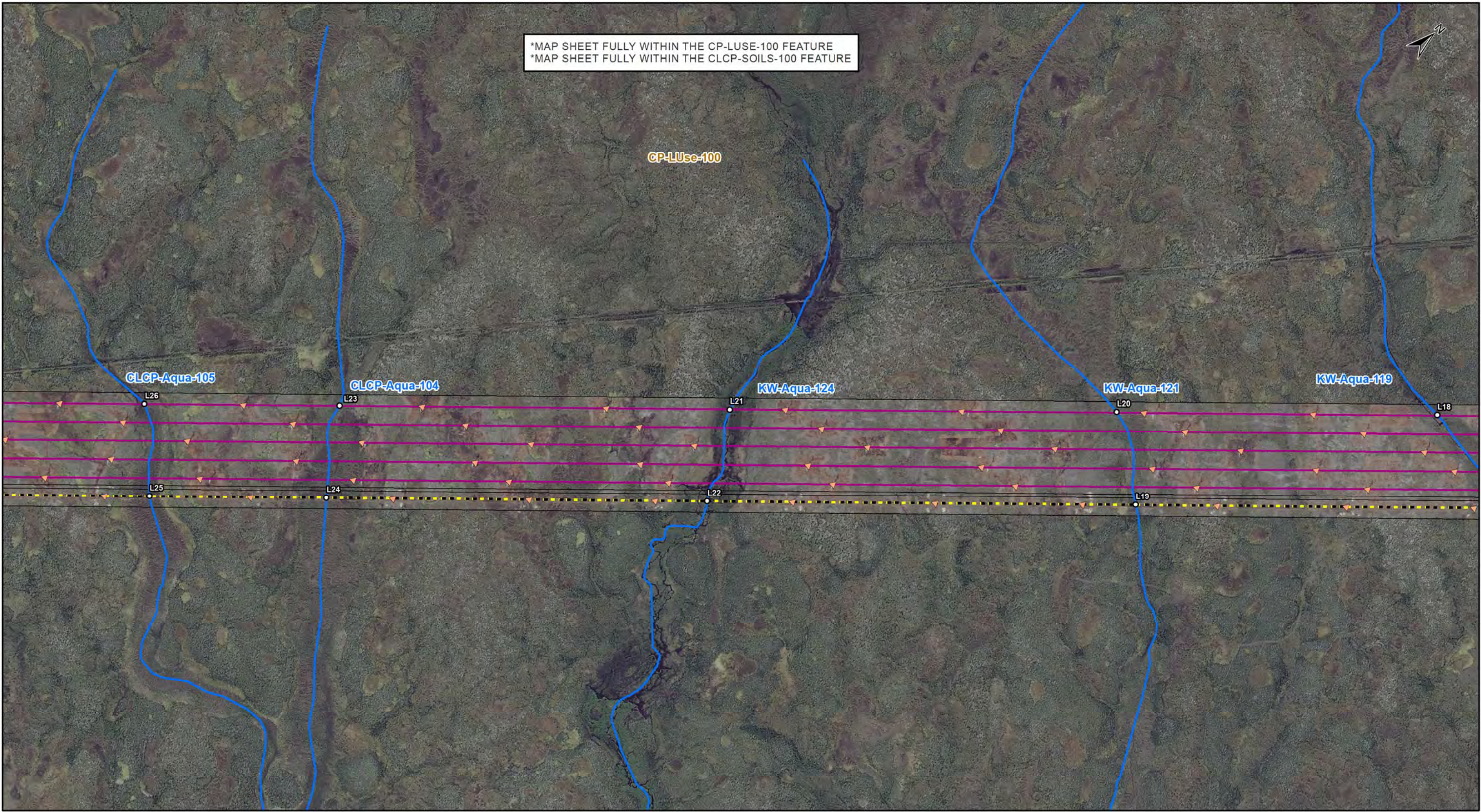




Coordinate System: UTM Zone 14N NAD83
 Data Source: MB Hydro, ProvMB, NRCAN
 Date Created: November 15, 2016
 Version: Final 4.0

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|---|---|--|
| Land Base
<ul style="list-style-type: none"> • Transmission Line — Highway — Major Road — Local Road --- Winter Road — Railway (Operational) — Railway (Discontinued) ⊠ Mining ▭ Provincial Forest | Project Infrastructure
<ul style="list-style-type: none"> — BP/III Final Preferred Route — Ground Electrode Line — Construction Power Line ▭ Borrow Deposits ▭ Excavated Material Placement Area ▭ Keewatinohk ▭ Converter Station ▭ Ground Electrode | <ul style="list-style-type: none"> ▭ Manitoba Hydro & Contractor Work Area ▭ Access Road ▭ Security Gatehouse ▭ Preliminary Tower Location |
|---|---|--|

- ESS Legend**
- BP/III ESS - Lines**
- Water**
- Water Crossing
- BP/III ESS - Poly**
- Land Use**
- ▭ Conservation

Bipole III Transmission Project
Construction Environmental Protection Plan
 AC Collector Lines,
 Construction Power Line and Station
 Environmentally Sensitive Site Locations

ESS Group: Conservation

Sec ID	ESS ID	ESS Name	Location	Start	Stop
CP	CP-LUse-100	Churchill Wildlife Management Area	Entire Extent of Map 4	-	-

Potential Effects:

Within the Churchill Wildlife Management Area.

Specific Mitigation:

- Must not place food for the purpose of attracting, feeding or holding polar bears
- All project staff must record all polar bears encountered/observed on a daily basis, any observations of polar bears or polar bear tracks must be reported to the MH Site Environmental Officer or MH Environmental Inspector
- All garbage (non-hazardous domestic waste) must be stored in wildlife proof containers or within electric fencing and removed from Wildlife Management Area
- Clearing within the ROW will be kept to a minimum and with non -non-hazard trees removed. Any trees that are cleared must be cut, piled and burned under safe conditions
- Carry out construction activities on well frozen ground in wetlands

ESS Group: Water Crossing

Sec ID	ESS ID	ESS Name	Location	Start	Stop	Channel Width (m) (m)	Wet Width (m)	Fish Habitat Class	Habitat Sensitivity
CLCP	KW-Aqua-119	Unnamed Tributary of Swift Creek	Site: L17 to L18	E-810064 N-6288036	E-809752 N-6288062	N/A	N/A	Marginal	Moderate
KW	KW-Aqua-121	Unnamed Tributary of Swift Creek	Site: L19 to L20	E-809399 N-6287285	E-809176 N-6287412	N/A	N/A	Marginal	Moderate
KW	KW-Aqua-124	Unnamed Tributary of Swift Creek	Site: L21 to L22	E-808482 N-6286625	E-808629 N-6286416	N/A	N/A	Marginal	Moderate
CLCP	CLCP-Aqua-104	Unnamed Tributary of Swift Creek	Site: L23 to L24	E-807780 N-6285833	E-807945 N-6285643	N/A	N/A	Marginal	Moderate
CLCP	CLCP-Aqua-105	Unnamed Tributary of Swift Creek	Site: L25 to L26	E-807628 N-6285284	E-807431 N-6285438	N/A	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; fish habitat disturbance & 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 vegetation will be maintained along with trees that do not violate Manitoba Hydro Vegetation 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

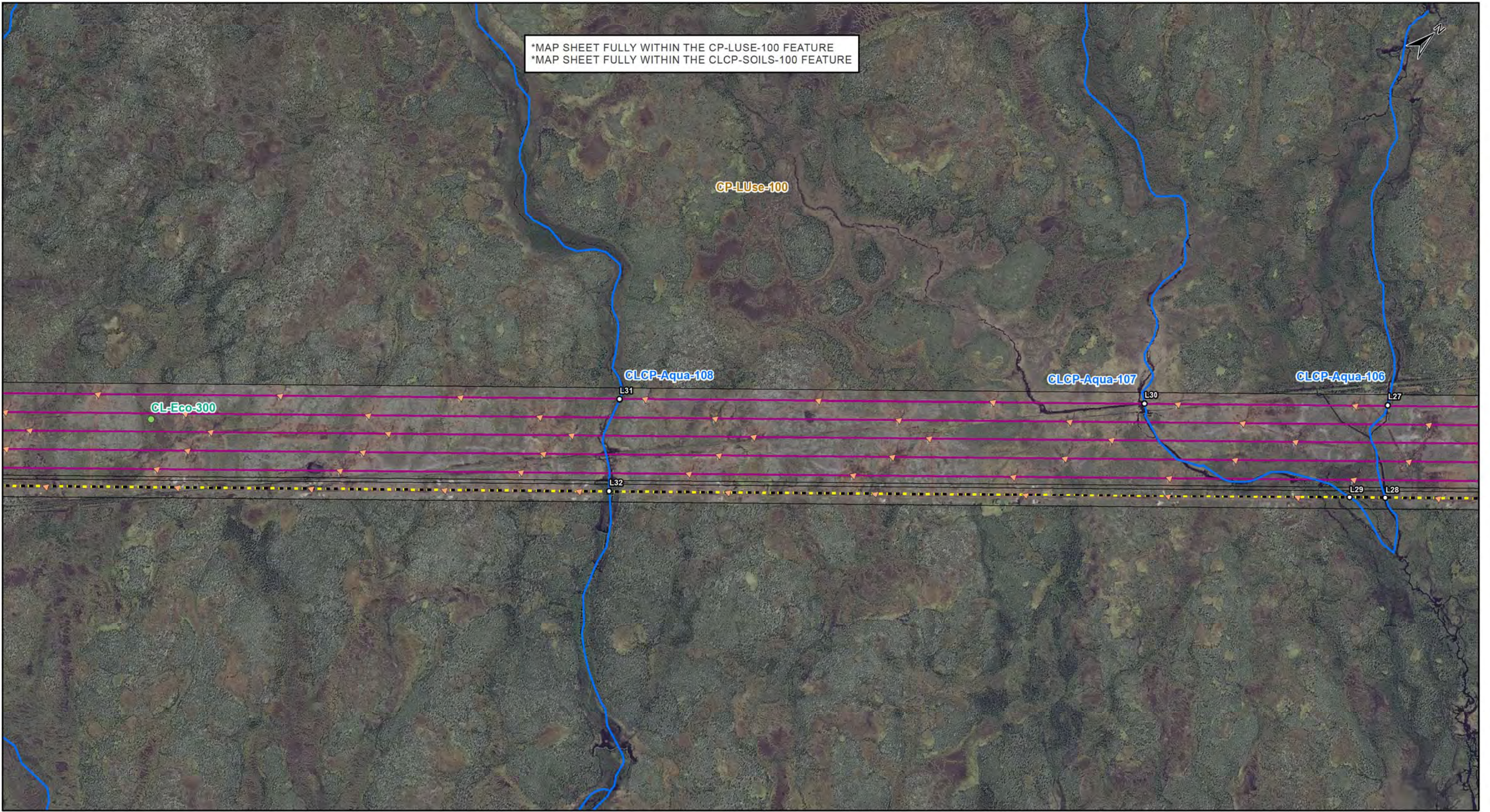
Sec-Seg ID	ESS ID	ESS Name
CLCP	CLCP-Soils-100	Permafrost

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 >3m 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



Coordinate System: UTM Zone 14N NAD83
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|---|---|--|
| Land Base
<ul style="list-style-type: none"> • Transmission Line — Highway — Major Road — Local Road - - - Winter Road — Railway (Operational) - - - Railway (Discontinued) ⊠ Mining ▭ Provincial Forest | Project Infrastructure
<ul style="list-style-type: none"> — BP/III Final Preferred Route — Ground Electrode Line — Construction Power Line ▭ Borrow Deposits ▭ Excavated Material Placement Area ▭ Keewatinohk ▭ Converter Station ▭ Ground Electrode | <ul style="list-style-type: none"> ▭ Manitoba Hydro & Contractor Work Area ▭ Access Road ▭ Security Gatehouse ▭ Preliminary Tower Location |
|---|---|--|

- ESS Legend**
- BP/III ESS - Points**
- Ecosystem**
- Species of Concern
- BP/III ESS - Lines**
- Water**
- Water Crossing
- BP/III ESS - Poly**
- Land Use**
- ▭ Conservation

Bipole III Transmission Project
Construction Environmental Protection Plan
AC Collector Lines,
Construction Power Line and Station
Environmentally Sensitive Site Locations

ESS Group: Conservation

Sec ID	ESS ID	ESS Name	Location	Start	Stop
CP	CP-LUse-100	Churchill Wildlife Management Area	Entire Extent of Map 5	-	-

Potential Effects:

Within the Churchill Wildlife Management Area.

Specific Mitigation:

- Must not place food for the purpose of attracting, feeding or holding polar bears
- All project staff must record all polar bears encountered/observed on a daily basis, any observations of polar bears or polar bear tracks must be reported to the MH Site Environmental Officer or MH Environmental Inspector
- All garbage (non-hazardous domestic waste) must be stored in wildlife proof containers or within electric fencing and removed from Wildlife Management Area
- Clearing within the ROW will be kept to a minimum and with non -non-hazard trees removed. Any trees that are cleared must be cut, piled and burned under safe conditions
- Carry out construction activities on well frozen ground in wetlands

ESS Group: Water Crossing

Sec ID	ESS ID	ESS Name	Location	Start	Stop	Channel Width (m)	Wet Width (m)	Fish Habitat Class	Habitat Sensitivity
CLCP	CLCP-Aqua-106	Swift Creek	Site: L27 to L28	E-807011 N-6284967	E-807197 N-6284797	6	6	Marginal	Moderate
CLCP	CLCP-Aqua-107	Unnamed Tributary of Swift Creek	Site: L29 to L30	E-807133 N-6284725	E-806574 N-6284471	10	10	Marginal	Moderate
CLCP	CLCP-Aqua-108	Unnamed Tributary of Beaver Creek	Site: L31 to L32	E-805632 N-6283405	E-805801 N-6283221	6	6	Marginal	Moderate

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; 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 vegetation will be maintained along with trees that do not violate Manitoba Hydro Vegetation 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: Species of Concern

Sec ID	ESS ID	ESS Name	Easting	Northing
CL	CL-Eco-300	Species of Concern (plant)	804840	6282412

Potential Effects:

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

Specific Mitigation:

- Identify and flag prior to start of work
- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Provide 5m vegetated (shrub and herbaceous) buffer around site
- Remove trees by hand or other low-disturbance methods
- Confine vehicle traffic to established trails to the extent possible

ESS Group: Permafrost

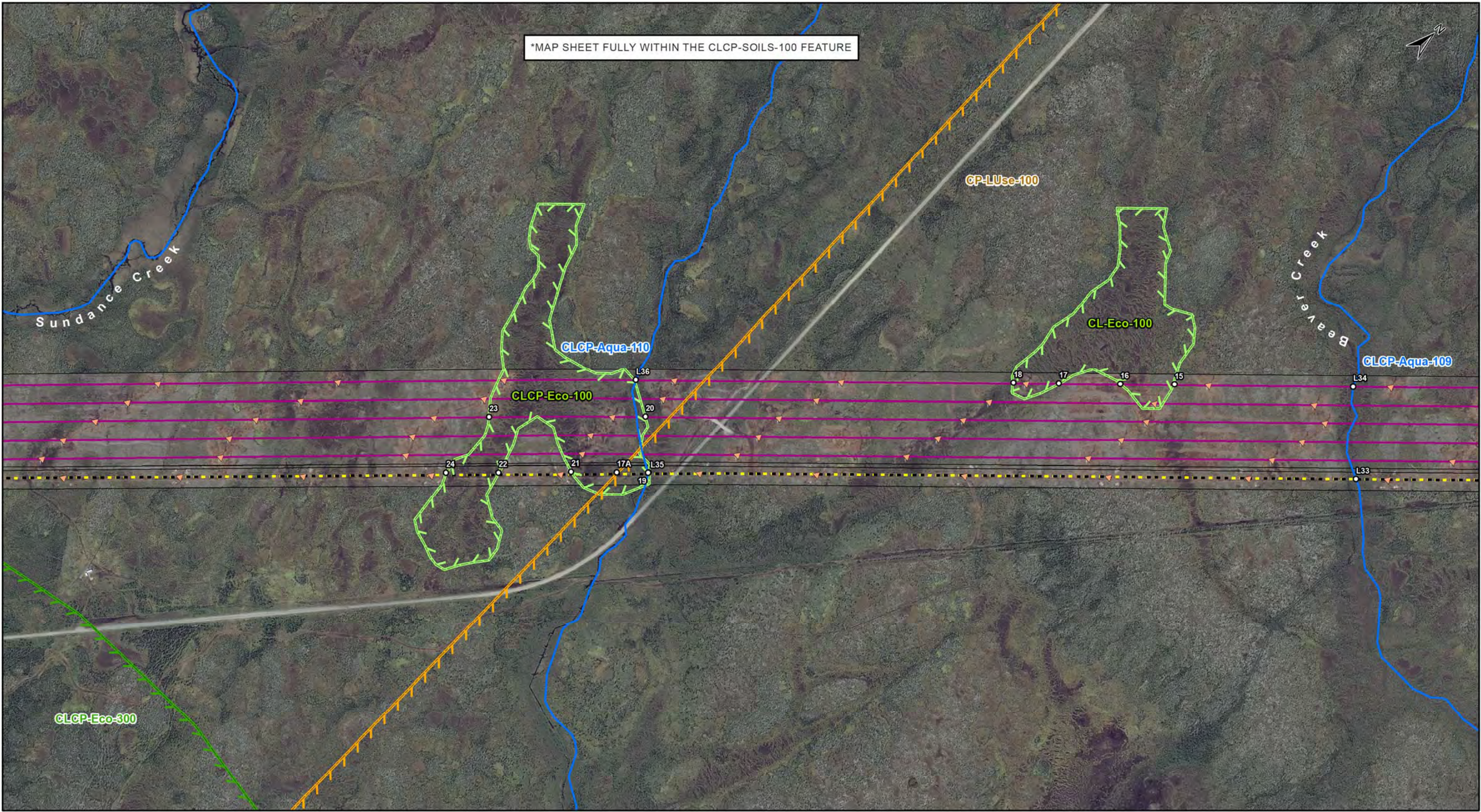
Sec-Seg ID	ESS ID	ESS Name
CLCP	CLCP-Soils-100	Permafrost

Potential Effects:

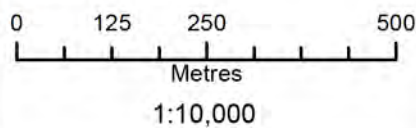
Melting or loss of permafrost due to disturbance of the active layer

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 >3m 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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Land Base

- Transmission Line
- Highway
- Major Road
- Local Road
- Winter Road
- Railway (Operational)
- Railway (Discontinued)
- ⊠ Mining
- ▭ Provincial Forest

Project Infrastructure

- BP/III Final Preferred Route
- Ground Electrode Line
- Construction Power Line
- ▭ Borrow Deposits
- ▭ Excavated Material Placement Area
- ▭ Keewatinohk
- ▭ Converter Station
- ▭ Ground Electrode

- ▭ Manitoba Hydro & Contractor Work Area
- ▭ Access Road
- ▭ Security Gatehouse
- ▭ Preliminary Tower Location

ESS Legend

- BP/III ESS - Lines
- Water
- Water Crossing
- BP/III ESS - Poly
- Ecosystem
- ▭ Habitat
- ▭ Species of Concern

Land Use

- ▭ Conservation

Bipole III Transmission Project
Construction Environmental Protection Plan
AC Collector Lines,
Construction Power Line and Station
Environmentally Sensitive Site Locations

ESS Group: Conservation

Sec ID	ESS ID	ESS Name	Location	Start	Stop
CP	CP-LUse-100	Churchill Wildlife Management Area	Construction Power Site (Map 1) to Site 17A	803162	6280240

Potential Effects:

Within the Churchill Wildlife Management Area.

Specific Mitigation:

- Must not place food for the purpose of attracting, feeding or holding polar bears
- All project staff must record all polar bears encountered/observed on a daily basis, any observations of polar bears or polar bear tracks must be reported to the MH Site Environmental Officer or MH Environmental Inspector
- All garbage (non-hazardous domestic waste) must be stored in wildlife proof containers or within electric fencing and removed from Wildlife Management Area
- Clearing within the ROW will be kept to a minimum and with non -non-hazard trees removed. Any trees that are cleared must be cut, piled and burned under safe conditions
- Carry out construction activities on well frozen ground in wetlands

ESS Group: Water Crossing

Sec ID	ESS ID	ESS Name	Location	Start	Stop	Channel Width (m)	Wet Width (m)	Fish Habitat Class	Habitat Sensitivity
CLCP	CLCP-Aqua-109	Beaver Creek	Site: L33 to L34	E-804491 N-6281741	E-804297 N-6281899	16	7	Marginal	Marginal
CLCP	CLCP-Aqua-110	Unnamed Tributary of Sundance Creek	Site: L35 to L36	E-803219 N-6280303	E-803008 N-6280443	N/A	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; fish habitat disturbance & 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 vegetation will be maintained along with trees that do not violate Manitoba Hydro Vegetation 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: Habitat

Sec ID	ESS ID	ESS Name	Location	Start	Stop	Distance (m)
CL	CL-Eco-100	Patterned Fen	Site: 15 to 16	E-803976 N-6281537	E-803878 N-6281426	150
CL	CL-Eco-100	Patterned Fen	Site: 17 to 18	E-803768 N-6281302	E-803686 N-6281210	130
CL	CLCP-Eco-100	Patterned Fen	Site: 20 to 23	E-803100 N-6280398	E-802823 N-6280078	408
CP	CLCP-Eco-100	Patterned Fen	Site: 19 to 21	E-803219 N-6280305	E-803080 N-6280148	211
CP	CLCP-Eco-100	Patterned Fen	Site: 22 to 24	E-802953 N-6279998	E-802860 N-6279891	138

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 ground to minimize surface damage, rutting and erosion
- Provide 30 m vegetated (shrub and herbaceous) buffer around site
- Remove trees by low-disturbance methods within buffer
- The application of herbicides is prohibited within buffer

ESS Group: Permafrost

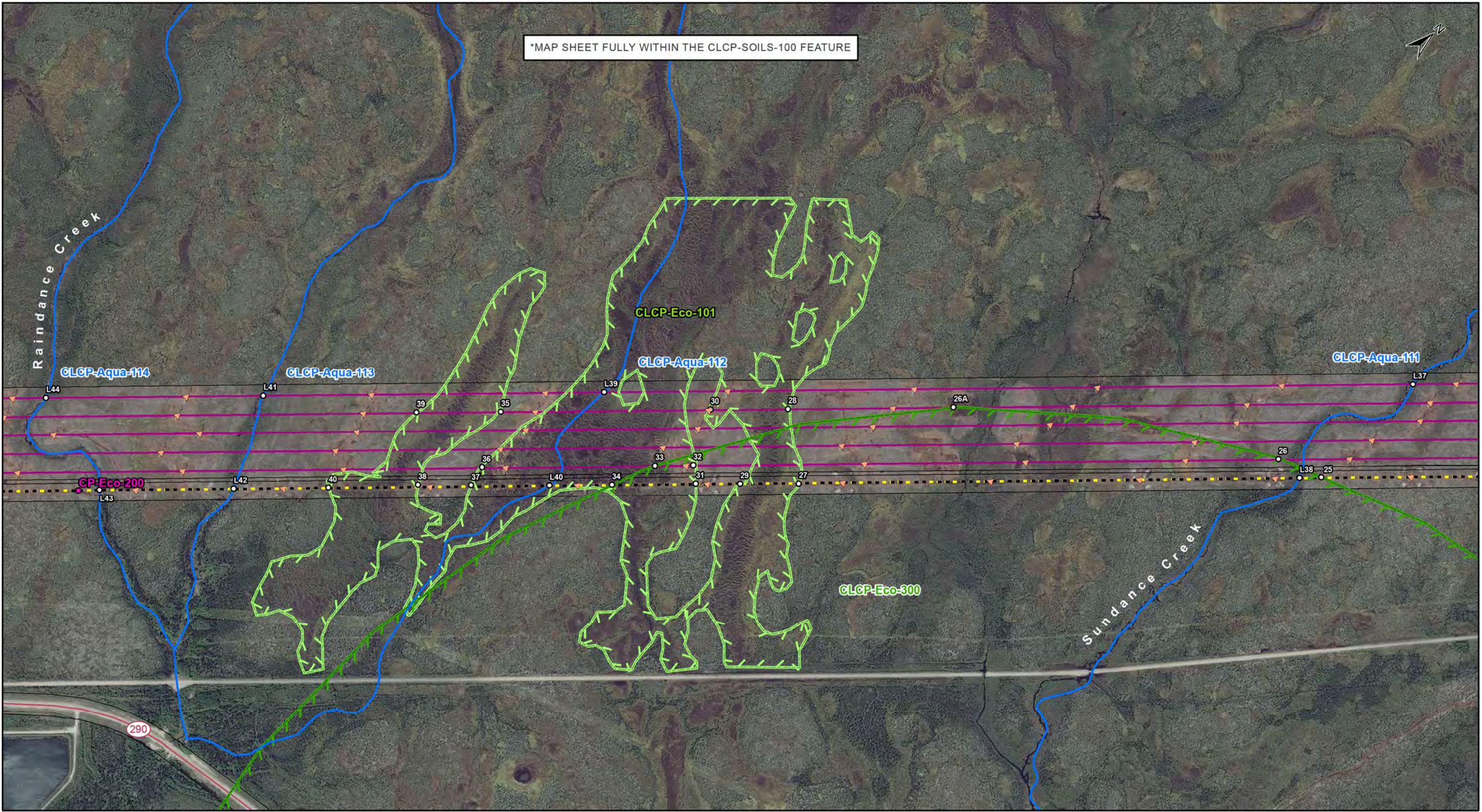
Sec-Seg ID	ESS ID	ESS Name
CLCP	CLCP-Soils-100	Permafrost

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 >3m 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



*MAP SHEET FULLY WITHIN THE CLCP-SOILS-100 FEATURE



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| Land Base
<ul style="list-style-type: none"> • Transmission Line — Highway — Major Road — Local Road --- Winter Road — Railway (Operational) — Railway (Discontinued) ⊠ Mining ▭ Provincial Forest | Project Infrastructure
<ul style="list-style-type: none"> — BP/III Final Preferred Route — Ground Electrode Line — Construction Power Line ▭ Borrow Deposits ▭ Excavated Material Placement Area ▭ Keewatinohk ▭ Converter Station ▭ Ground Electrode | <ul style="list-style-type: none"> ▭ Manitoba Hydro & Contractor Work Area ▭ Access Road ▭ Security Gatehouse ▭ Preliminary Tower Location |
|---|---|--|

- ESS Legend**
- BP/III ESS - Lines**
- Water**
- Water Crossing
- BP/III ESS - Poly**
- Ecosystem**
- ▭ Habitat
- ▭ Species of Concern

Bipole III Transmission Project
Construction Environmental Protection Plan
AC Collector Lines,
Construction Power Line and Station
Environmentally Sensitive Site Locations

ESS Group: Water Crossing

Sec ID	ESS ID	ESS Name	Location	Start	Stop	Channel Width (m)	Wet Width (m)	Fish Habitat Class	Habitat Sensitivity
CLCP	CLCP-Aqua-111	Sundance Creek	Site: L37 to L38	E-801775 N-6279000	E-801764 N-6278602	3	3	Marginal	Moderate
CLCP	CLCP-Aqua-112	Unnamed Tributary of Raindance Creek	Site: L39 to L40	E-800352 N-6277330	E-800445 N-6277053	N/A	N/A	Marginal	Moderate
CLCP	CLCP-Aqua-113	Unnamed Tributary of Raindance Creek	Site: L41 to L42	E-799753 N-6276627	E-799890 N-6276402	N/A	2	Marginal	Moderate
CLCP	CLCP-Aqua-114	Raindance Creek	Site: L43 to L44	E-799655 N-6276126	E-799372 N-6276179	1	14	Marginal	Moderate

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; 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 vegetation will be maintained along with trees that do not violate Manitoba Hydro Vegetation 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: Species of Concern

Sec ID	ESS ID	ESS Name	Location	Start	Stop
CP	CLCP-Eco-300	Species of Concern (plant)	Site: 25 to 34	E-801802 N-6278648	E-800555 N-6277182
CL	CLCP-Eco-300	Species of Concern (plant)	Site: 26 to 26A to 33	(23) E-801689 N-6278592 (23A) E-801004 N-6278019	E-800593 N-6277304

Potential Effects:

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

Specific Mitigation:

- Identify and flag prior to start of work
- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Provide 5m vegetated (shrub and herbaceous) buffer around site
- Remove trees by low-disturbance methods
- Confine vehicle traffic to established trails to the extent possible

ESS Group: Habitat

Sec ID	ESS ID	ESS Name	Location	Start	Stop	Distance (m)
CP	CLCP-Eco-101	Patterned Fen	Site: 27 to 29	E-800885 N-6277567	E-800781 N-6277446	159
CP	CLCP-Eco-101	Patterned Fen	Site: 31 to 37	E-800701 N-6277356	E-800306 N-6276894	611
CP	CLCP-Eco-101	Patterned Fen	Site: 38 to 40	E-800210 N-6276786	E-800056 N-6276597	238
CL	CLCP-Eco-101	Patterned Fen	Site: 28 to 30	E-800714 N-6277678	E-800576 N-6277517	217
CL	CLCP-Eco-101	Patterned Fen	Site: 32 to 36	E-800660 N-6277383	E-800289 N-6276948	576
CL	CLCP-Eco-101	Patterned Fen	Site: 35 to 39	E-800209 N-6277085	E-800060 N-6276911	225

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 ground to minimize surface damage, rutting and erosion
- Provide 30 m vegetated (shrub and herbaceous) buffer around site
- Remove trees by low-disturbance methods within buffer
- The application of herbicides is prohibited within buffer

ESS Group: Permafrost

Sec-Seg ID	ESS ID	ESS Name
CLCP	CLCP-Soils-100	Permafrost

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
- An exception exists for the tower spans involving L61K (Str121-122), K61H-K64H (Str 60and 61), K61H & K62H (Str 62), K63H & K64H (Str. 64), K63H & K64H (Str 63.)
- 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 >3m 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: Research

Sec-Seg ID	ESS ID	ESS Name	Easting	Northing	UTM Zone
CP	CP-Eco-200	Permafrost Monitoring Site	799618	6276082	14N

Potential Effects:

Permafrost monitoring site, buried thermistor is exposed 5-10cm at the surface and is susceptible to damage

Specific Mitigation:

- Identify and flag sensor's location to protect it damage
- Notify construction crews of sensor location

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Land Base

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

Project Infrastructure

- BP/III Final Preferred Route
- Ground Electrode Line
- Construction Power Line
- Borrow Deposits
- Excavated Material Placement Area
- Keewatinohk Converter Station
- Ground Electrode

Manitoba Hydro & Contractor Work Area
 Access Road
 Security Gatehouse
 Preliminary Tower Location

ESS Legend

BP/III ESS - Points

Ecosystem

- Species of Concern
- Birds and Habitat

Wildlife

- Birds and Habitat

BP/III ESS - Lines

Water

- Water Crossing

Wildlife

- Birds and Habitat

BP/III ESS - Poly

RecUse

- Intersection
- Water Crossing

ESS Group: Wetland

Sec ID	ESS ID	ESS Name	Location	Start	Stop	Channel Width (m)	Wet Width (m)	Fish Habitat Class	Habitat Sensitivity
CL	CL-Aqua-300	Unnamed Wetland	Site: 43 to 44	E-798969 N-6275475	E-798942 N-6275444	N/A	N/A	No Fish Habitat	Low
CL	CLCP-Aqua-300	Unnamed Wetland	Site: 45 to 46	E-798591 N-6274961	E-798718 N-6274758	169	0	No Fish Habitat	Low
CP	CLCP-Aqua-300	Unnamed Wetland	Site: 47 to 48	E-798893 N-6274728	E-429885 N-6274679	169	0	No Fish Habitat	Low

Potential Effects:

Habitat loss and 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
- Provide 30 m vegetated (shrub and herbaceous) buffer around site
- Remove trees by low-disturbance methods within buffer
- The application of herbicides is prohibited within buffer

ESS Group: Water Crossing

Sec ID	ESS ID	ESS Name	Location	Start	Stop	Channel Width (m)	Wet Width (m)	Fish Habitat Class	Habitat Sensitivity
CP	CLCP-Aqua-115	Limestone River	-	E-799007 N-6274189	N/A	52	49	Important	Moderate
CL	CLCP-Aqua-115	Limestone River	Site: L46 to L47	E-798849 N-6273719	E-798645 N-6273731	52	49	Important	Moderate

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; 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 vegetation will be maintained along with trees that do not violate Manitoba Hydro Vegetation 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: Species of Concern

Sec ID	ESS ID	ESS Name	Easting	Northing
CP	CP-Eco-301	Species of Concern (plant)	798921	6274596
CL	CL-Eco-301a	Species of Concern (plant)	798761	6274354
CL	CL-Eco-302	Species of Concern (plant)	798751	6274313
CL	CL-Eco-303	Species of Concern (plant)	798752	6274305

Potential Effects:

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

Specific Mitigation:

- Identify and flag prior to start of work
- Carry out construction activities on frozen or dry ground to minimize surface damage, rutting and erosion
- Provide 5m vegetated (shrub and herbaceous) buffer around site
- Remove trees by low-disturbance methods
- Confine vehicle traffic to established trails to the extent possible

ESS Group: Birds and Habitat

Sec ID	ESS ID	ESS Name	Location	Start	Stop
CP	CP-Wild-100	Limestone River - movement route for waterfowl and raptors	-	E-799006 N-6274189	N/A
CL	CL-Wild-100	Limestone River - movement route for waterfowl and raptors	Site: L46 to L47	E-429753 N-6263725	E-429551 N-6263754

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: Permafrost

Sec-Seg ID	ESS ID	ESS Name
CLCP	CLCP-Soils-100	Permafrost

Potential Effects:

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

Specific Mitigation:

- Carry out construction activities on frozen or dry ground to minimize surface damage and rutting. Construction matting will be used to protect the area from rutting and exposure to mineral soil during wet conditions.
- Construction exceptions exist for the tower spans involving L61K (Str121-122), K61H-K64H (Str 60and 61), K61H & K62H (Str 62), K63H & K64H (Str. 64), K63H & K64H (Str 63.)
- 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 >3m 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: Access

Sec ID	ESS ID	ESS Name	Location	Start	Stop
CLCP	CLCP-Acss-100	Henday Rail Spur	Site: 49 to 50	E-799202 N-6273267	E-799214 N-6273209

Potential Effects:

Potential disruption or damage to surrounding habitat

Specific Mitigation:

- Existing trails, portages and other travel ways shall not be altered so as to interfere with other users.
- The permittee will ensure that any work done near a waterbody is done in accordance with the Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat, May 1996.
- No pushing debris into adjacent timber. Any debris shall be piled and burnt in windrows (max height .6 meters) no closer than 1 meter to the bush line. Burn piles must be 15 meters from standing timber.
- Locate fuel and equipment servicing areas a minimum distance of 100m from any waterbody.
- The Natural Resource Officer in Gillam 204-652-2273, shall be notified no less than one week prior to completion of operations to allow for final inspection of the operation.
- Follow all other conditions found in the work permit 2014-01-11-026.

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