

MANITOBA HYDRO BIPOLE III TRANSMISSION PROJECT

Construction Access Opportunities



November 2016



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Transmission Business Unit
Manitoba Hydro

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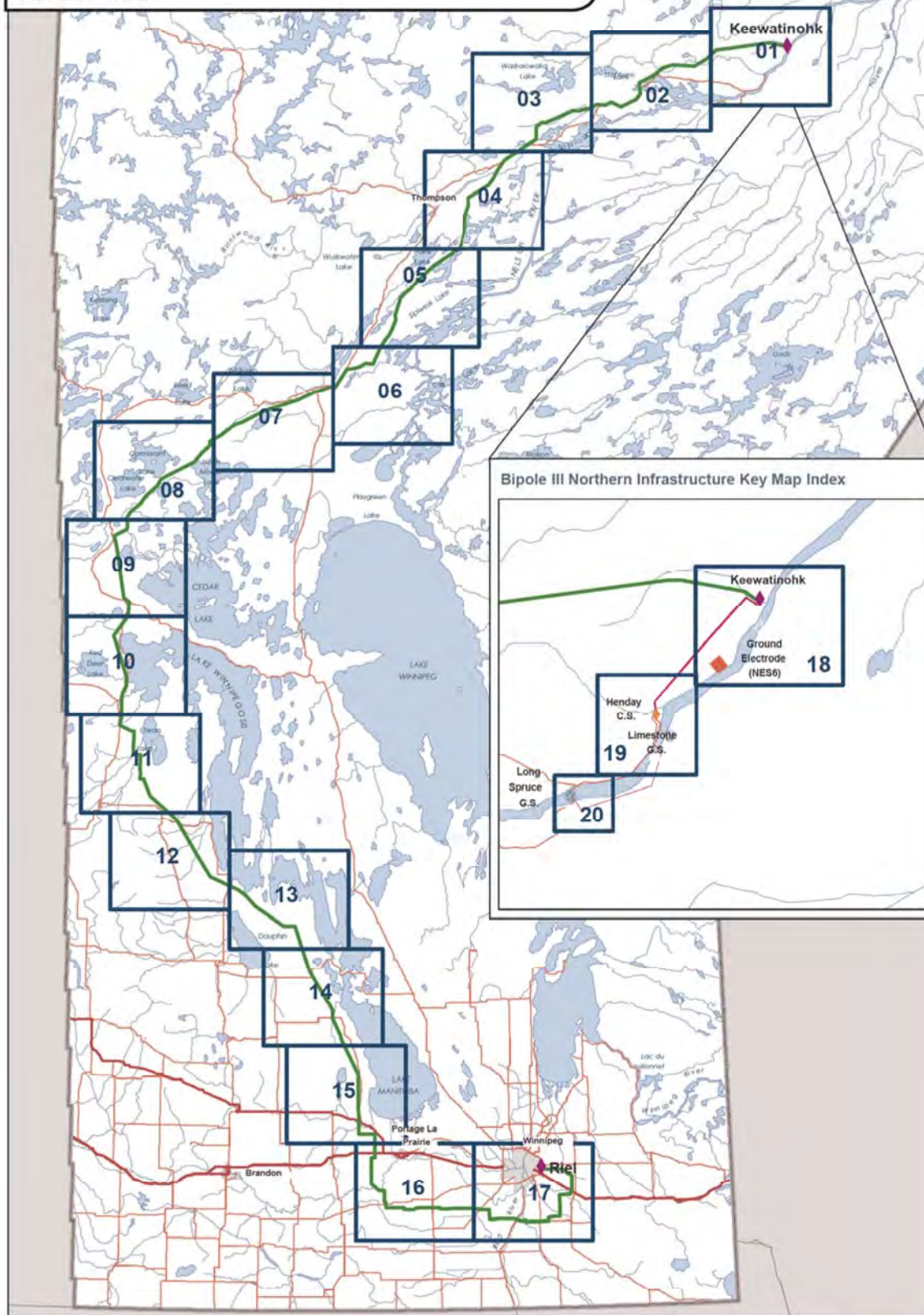
List of Revisions- BP/III Access Management Plan

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MANITOBA HYDRO BIPOLE III TRANSMISSION PROJECT Construction Access Opportunity

KEY MAP INDEX



MAP BOOK USER INFORMATION

This map book and associated access information tables include a summary of the following information:
Map book - developed from 20 map sheets presented at a map scale of 1:250,000 covering the entire FPR from the Keewatinohk converter station to the Riel converter station and three maps at 1:60,000, 1:30,000, and 1:28,000 to show the infrastructure around Keewatinohk Converter Station. These maps include the following information:

- Project Infrastructure - infrastructure associated with the Bipole III project
- Infrastructure - other Manitoba Hydro infrastructure
- Landbase - pertinent landbase information including: communities, Rural Municipalities, First Nations, National and Provincial Parks and Wildlife Management Areas.
- Access - preliminary access routes and points, stream crossings, rail crossings and transmission line crossings. Access information consists of the following:
 - Access Routes - proposed access routes from existing Provincial or Municipal road to the FPR.
 - Access Points - access points consisting of the intersection of the access route and the existing provincial or municipal road and the FPR or where the FPR intersects a Provincial or Municipal road.
 - Access Route- access routes are labeled in ascending numerical order from the Keewatinohk converter station to the Riel converter station. Where the FPR intersects the existing Provincial or Municipal road network, access points have been identified without a corresponding access route, and are denoted with an "RT" as the point represents the access intersection of the road and the FPR.

Supporting Access Information - data summary tables and stream crossing photos are presented and correspond with each map book map sheet. Information presented is as follows:

Waterbody Crossings -

Locations where the FPR intersects a stream or waterbody crossing are indicated by a blue point. Photos associated with stream crossings that have been included, were provided by North/South Consultants Inc.

Approved Access Routes -

Tabular summary of information on approved access routes, rationale for the inclusion of the access route, descriptions of the route, and the length of the route from the existing road to the FPR. Included in the tables are geographic coordinates of access points which represent the location at the start of an access trail and its destination on the ROW. Distance information includes distance from the previous access point along the FPR ROW and to the next access point along the FPR ROW for "T" points, and distance from the previous access point along the road and to the next access point along the road for "R" points

Rail Crossings -

Map symbology identifies the intersection of a railway and the FPR, and an indication of the status of the railway crossing (abandoned or active rail).

Transmission Line Crossings -

Map symbology identifies the intersection of the existing transmission line and the FPR

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Map 1

Access Routes												
Map Number	Route ID	Route Access Type	Description	Access Total Length	Road Access Point		Transmission ROW Access Point		Along ROW		Along Road	
					UTM Easting	UTM Northing	UTM Easting	UTM Northing	Distance to Previous Access Point	Distance to Next Access Point	Distance to Previous Access Point	Distance to Next Access Point
1	01	New Access	Access route within footprint of new proposed converter station	650m to Conawapa Road	815797.5061	6290863.6362	815168.4335	6291024.2349	NA	42km	2.7km	63km
1	02	Existing Access	Access route existing along T-line (Radisson to Churchill 138kV "RC60")	24km to PR 280	772639.929	6266980.29	773645.9815	6290603.3027	42km	54km	63km	50km

Photos of select water crossings for this map are located in the back of this book in a photo index

Bipole III Transmission Project

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- Henday Storage
- Limestone Stores Area
- Manitoba Hydro and Contractor Work Areas

Infrastructure

- Converter Station
- Generating Station
- Bipoles I and II
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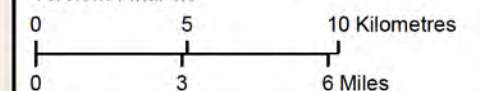
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- 12 Approved Access Route
- Approved Access Point*
- Abandoned Rail crossing
- Rail crossing
- Transmission Line Crossing
- Major Stream Crossing

Landbase

- Community
- City / Town
- First Nation
- National/Provincial Park
- Rural Municipality
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Construction Access Opportunities

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2	03	Existing Access	Existing Unmapped linear disturbance	1.5km to PR 280	724637.7415	6272094.8994	724530.5931	6273638.207	54km	3km	50km	1.2km
2	04	Existing Access	Existing unmapped linear disturbance	1.9km to PR 280	723868.9888	6271210.5516	722162.956	6271988.0923	3km	15.1km	1.2km	14.2km
2	04B	New/Existing Access	4B - Access route utilizes existing clearing off PR280 than a new trail to the FPR	424m to PR 280	714394.3166	6262327.5054	714052.4844	6262203.6842	15.1km	1.2km	14.2km	1.4km
2	04C	New/Existing Access	4C - Access route utilizes existing clearing off PR280 than a new trail to the FPR	279m to PR 280	714452.3078	6260897.3784	714183.6109	6261019.2529	1.2km	4.1km	1.4km	3.8km
2	05	Existing Access	Existing cutline	1km to PR 208	713285.4732	6257399.8461	712284.5525	6257542.2482	4.1km	6.4km	3.8km	7.1km
2	05A	New Access	5A - New Access Trail off PR 280	491m to PR 280	707379.9716	6253825.6169	707142.7782	6254239.983	6.4km	6.5km	7.1km	6.8km
2	06	Intersection	Intersection with PR 280 Crossing	NA	701259.3292	6251562.4781	701259.8292	6251562.9781	6.5km	500m	6.8km	400m
2	06A	Existing Access	6A - Existing trail through borrow pit of PR 280	224m to PR 280	700897.9062	6251714.9834	700776.1993	6251526.7533	500m	650m	400m	625m
2	07	Existing Access	Existing linear disturbance	220m to PR 280	700324.4661	6251969.2913	700175.0817	6251805.3564	650m	3.3km	625m	3.4km
2	07A	New Access	7A - New Access Trail off PR 280	311m to PR 280	697305.4109	6253475.9836	697146.8591	6253208.4868	3.3km	5.2km	3.4km	5.8km

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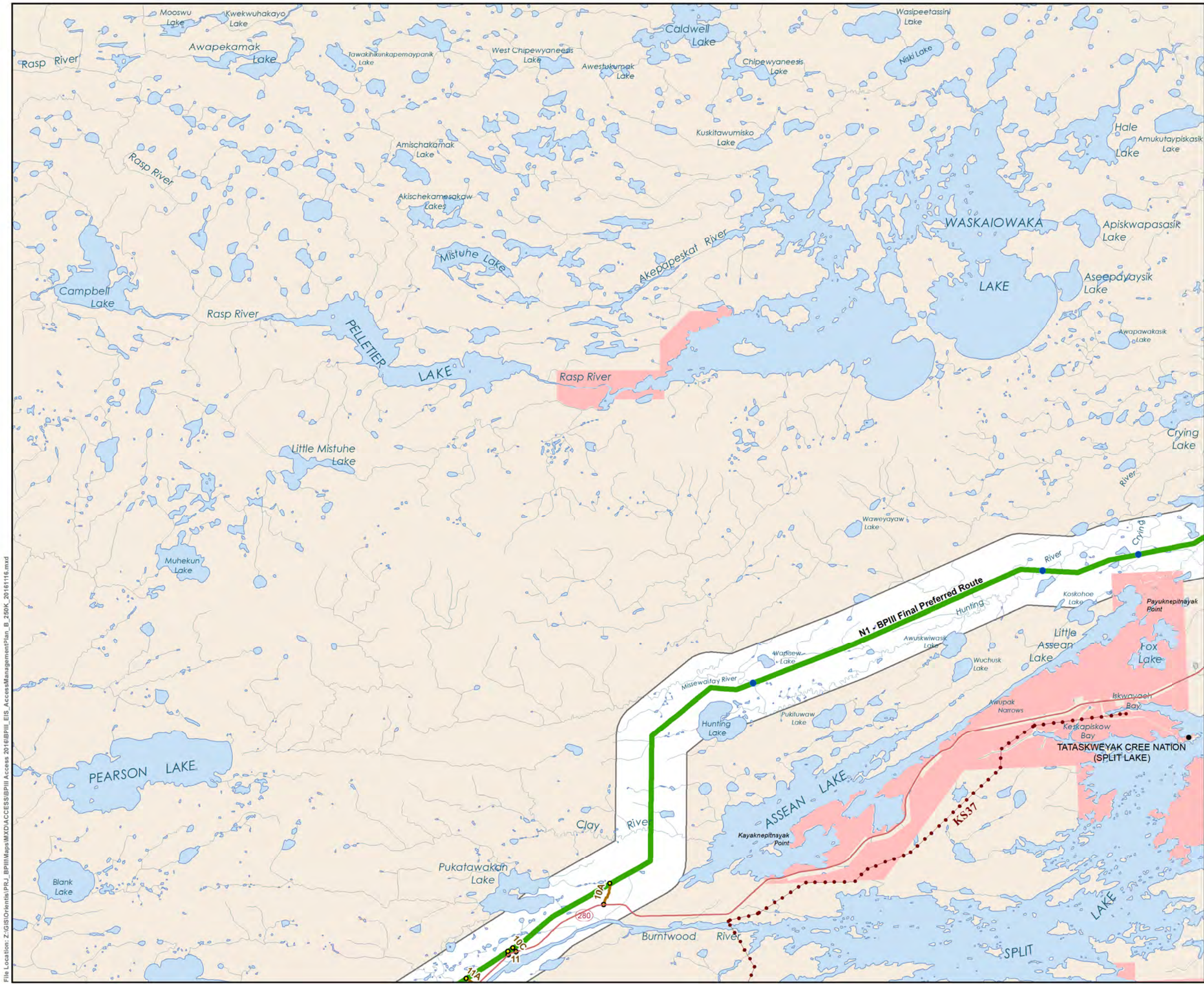
Access Routes

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2	08	New/Existing Access	Unmapped linear disturbance, within study corridor. Then new access trail to FPR	370m to PR 220	692440.2627	6253972.7195	692453.4247	6253603.0872	5.2km	4.1km	5.8km	4.1km
2	08A	New/Existing Access	8A - New trail from old borrow pit off PR 280	221m to PR 280	688576.8863	6252957.6654	688601.6243	6252737.3829	4.1km	360m	4.1km	50m
2	09	Intersection	Intersection with PR280	NA	688236.9643	6252758.5916	688237.4643	6252759.0916	360m	425km	400km	400km
2	08B	Existing Access	8B - Existing Quarry access road off PR 280	954m to PR 280	688545.8937	6252959.492	687811.2023	6252783.9274	425m	58.7km	380m	59km

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- Limestone Stores Area
- Manitoba Hydro and Contractor Work Areas

Infrastructure

- Converter Station
- Generating Station
- Bipoles I and II
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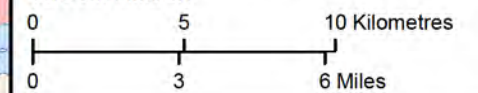
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- Approved Access Route
- Approved Access Point*
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- Rail crossing
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Landbase

- Community
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Construction Access Opportunities

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					UTM Easting	UTM Northing	UTM Easting	UTM Northing	Distance to Previous Access Point	Distance to Next Access Point	Distance to Previous Access Point	Distance to Next Access Point
3	10A	New/Existing Access	10A - Access route utilizes existing clearing off PR280 than a new trail to the FPR	1.4km to PR 280	640163.6003	6225798.298	640596.5776	6227208.1072	58.7km	6.8km	59km	8km
3	10C	New Access	10C - New Access Trail off PR 280	289m to PR 280	634200.7757	6222589.9849	633997.1024	6222832.0545	6.8km	416m	8km	576m
3	11	Existing Access	Existing linear disturbance from PTH 280	230m to PR 280	633668.1763	6222373.4622	633646.484	6222606.7076	416m	3.4km	576m	3km





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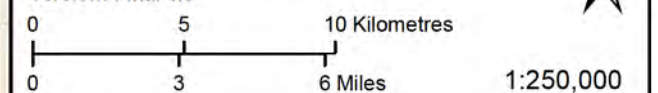
Access

- | | |
|---------------------------------------------------------------------------------------|----------------------------|
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4	11A	New/Existing Access	11A - Access route utilizes existing clearing off PR280, than new access to FPR	843m to PR 280	631507.4525	6220335.3027	630819.5441	6220788.8431	3.4km	9.1km	3km	9.6km
4	12	Intersection	12- Existing/New Trail off PR 280	NA	623149.0927	6215856.3874	623149.5927	6215856.8874	9.1km	2.8km	9.6km	3km
4	12A	New/Existing Access	12A - Existing/New Trail off PR 280	198m to PR 280	620925.1586	6214205.6707	621064.9064	6214061.301	2.8km	3.6km	3km	2.8km
4	12B	Existing Access	12B - Existing Trail off PR 280	1.8km to PR 280	618769	6212546	619112.5745	6211040.7005	3.6km	4.8km	2.8km	22km
4	13	Existing Access	Existing Winter road and t-line (KT1/KT2)	21km to PR 280	598623.0799	6205617.628	616425.7581	6207070.1319	4.8km	12.8km	22km	50km
4	14B	Existing Access	Existing Transmission Line(K24W) and New Trail	20km	596674.5728	6185125.6652	609181.8851	6196687.4952	12.8km	18.5km	NA	NA
4	14	Existing Access	Existing Forestry road and t-line (K24W)	34km to PTH 6	571605.3685	6176652.8954	596678.5906	6185128.0638	18.5km	4km	50km	5.7km
4	155	Existing Access	Additional existing access off of Forestry road; Tolko Isbister Buckingham Lake Rd Jonas Road category 2, road number 70	1285m	595152.5894	6180589.7772	595956.4284	6181265.3603	4km	1.1km	NA	NA
4	15B	Existing Access	Existing Forestry road; Tolko Isbister Buckingham Lake Rd Jonas Road category 2, road number 70	24km to PTH 6	584761.5237	6162662.3766	595549.962	6180168.2505	1.1km	5km	NA	NA
4	15B-2	Existing Access	Exisiting trail off of Buckingham road	6.2km	591755.1472	6175713.3177	594252.0938	6175340.4932	5km	2.8km	NA	NA

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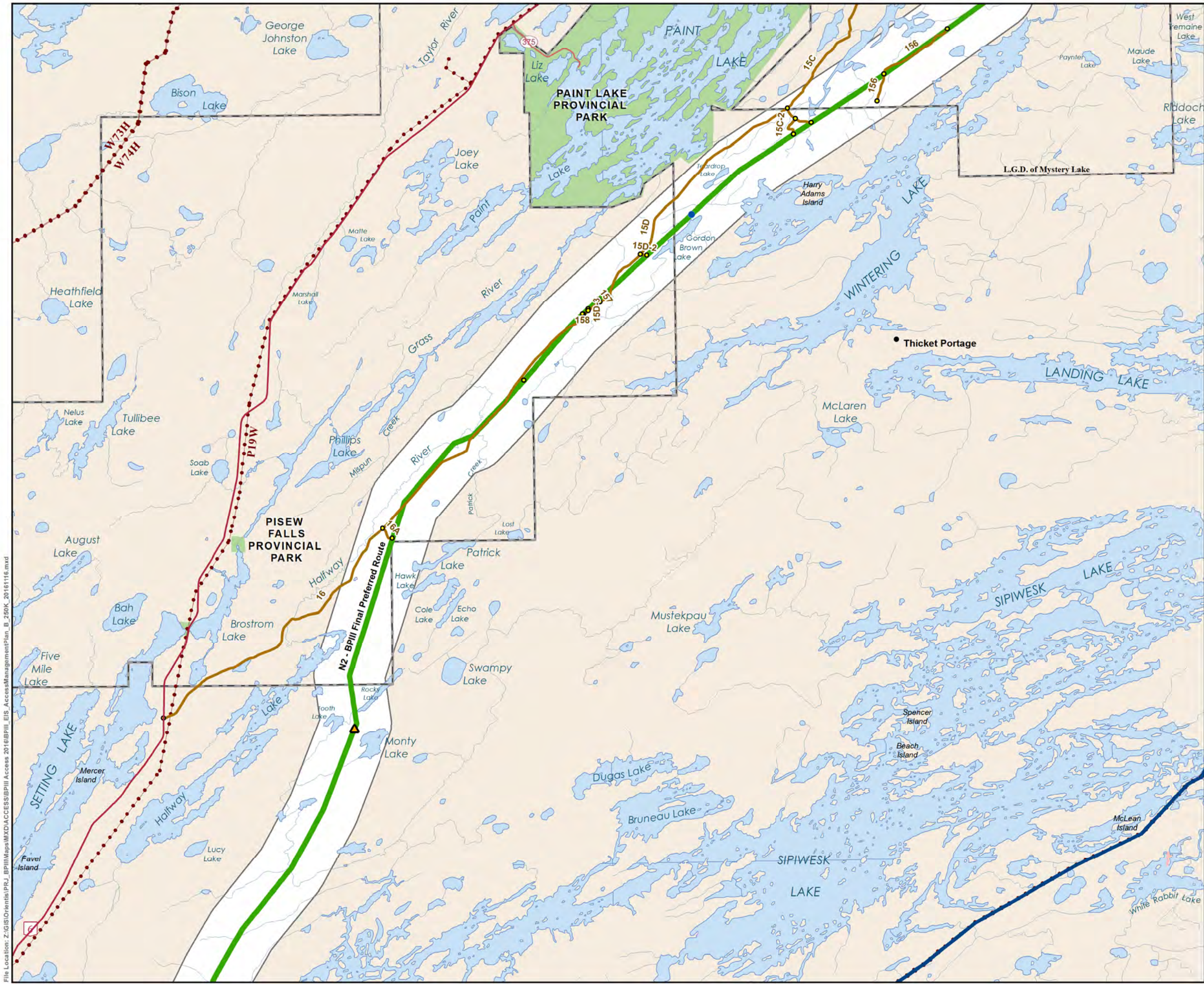
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4	15B-3	Existing Access	Branch off of existing Route 15	6km	590029.0894	6170813.2811	594134.4008	6172520.7839	2.8km	4.6km	NA	NA
4	15	Existing Access	Existing Tolko Halfway River Jonas Road category, 1 road number 4 onto NRN Winter Rd; maintained; pot camp site at rail xing	33km to PTH 6	568636.87	6171789.8008	593724.7854	6167716.2231	4.6km	23km	5.7km	79km
4	15C	Existing Access	Existing Access route along forestry road; Tolko Halfway River Jonas Road category 1 road, number 4	22km to PTH 6	583140.8958	6163048.1132	577518.3376	6145750.0621	6km	1.4km	NA	NA

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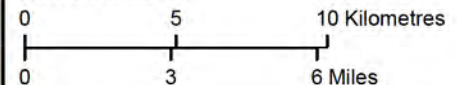
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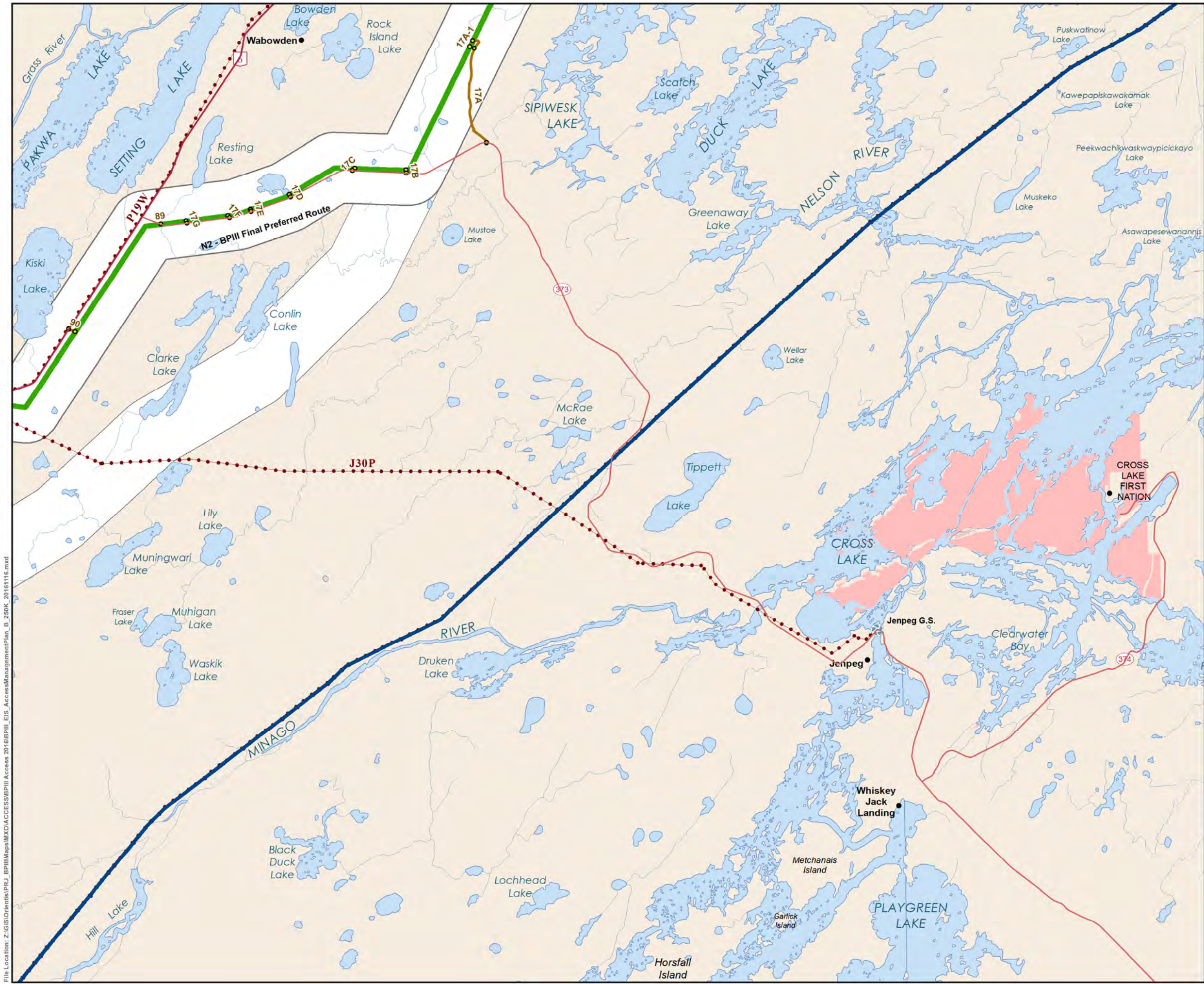
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5	156	<null>	17-JAN-16 156 ACCESS	<null>	582483.5051	6149038.8527	586789.878	6152132.3174	<null>	<null>	<null>	<null>
5	156	Existing Access	Access off of existing forestry road	1.3km	582012.0918	6147226.6569	582483.2298	6149043.1927	23km	6km	NA	NA
5	15C-2	Existing Access	Route branches off of existing Route 15	5.6km	576446.3433	6146014.9831	576318.7574	6144963.4324	1.4km	13km	NA	NA
5	15D-2	Existing Access	Existing access off of South Jonas Road	498m	565858.1108	6136771.6647	566301.1847	6136717.0565	13km	4.5km	NA	NA
5	157	Existing Access	Additional access off of Access route along forestry road parallels row centerline; Tolko Halfway River Jonas Road category 1 road number 4	231m	563139.6807	6133515.2079	563013.0806	6133692.9631	4.5km	1km	NA	NA
5	15D-3	Existing Access	Route branch off of existing Route 15	124m	562299.4674	6133036.6481	562301.3172	6132913.2425	1km	500m	NA	NA
5	158	New Access	Additional new access off of 15DR/T access route along forestry road parallels row centerline; Tolko Halfway River Jonas Road category 1 road number 4	88m	562004.1127	6132675.8661	561915.6163	6132683.6172	500m	6km	NA	NA
5	15D	Existing Access	Access route exists along forestry road parallels row centerline; Tolko Halfway River Jonas Road category 1 road number 4	27km paralleling row, 69 km to PTH 6	575910.3326	6146740.3389	557928.1603	6128208.5288	6km	0m	NA	NA
5	16	Existing Access	Existing Access route forestry road parallels row centerline; Tolko Halfway River Jonas Road category 1, road number 4	13km along ROW, 36 km to PTH 6	533381.0879	6105165.6154	557924.1879	6128203.8822	0m	14km	79km	58km
5	16A	Existing Access	Exisiting trail from South Jonas Road	1km	548305.0799	6118073.2402	548978.8324	6117406.6385	14km	36km	NA	NA

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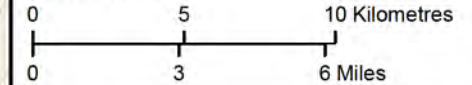
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6	17A-1	New/Existing Access	Additional access route off of 17R/T north of PR373 near Wabowden with potential intersect of FPR approximately 5.36 Kms West from Sipiwesk Lake	1km	535562.6511	6084135.7635	535443.3877	6084667.1301	36km	500m	NA	NA
6	17A	Existing Access	Existing access route north of PR373 near Wabowden with potential intersect of FPR approximately 5.36 Kms West from Sipiwesk Lake	7.4km to PR 373	536375.0025	6077706.0039	535234.7517	6084252.4646	500m	9.5km	58km	5.9km
6	17B	New Access	New access off of PR 373	208m	530925.3174	6075644.1077	530898.5796	6075849.1056	9.5km	3.5km	5.9km	3.7km
6	17C	Existing Access	Existing access off of PR 373	262m	527210.816	6075804.78	527386.0963	6075963.4031	3.5km	5km	3.7km	4.7km
6	17D	Existing Access	Existing access off of PR 373	188m	523007.9037	6073968.1874	522921.6213	6074135.2955	5km	2.8km	4.7km	2.8km
6	17E	Existing Access	Existing access off of PR 373	146m	520339.6585	6073010.8224	520302.2978	6073152.1262	2.8km	1.6km	2.8km	1.5km
6	17F	Existing Access	Existing access off of PR 373	183m	518880.7874	6072597.5058	518761.4277	6072725.3859	1.6km	2.8km	1.5km	2.9km
6	17G	Existing Access	Existing access off of PR 373	153m	515968.715	6072224.1968	515912.1491	6072366.6718	2.8km	1.7km	2.9km	1.7km
6	89	Intersection	Intersection with PR 373 crossing	NA	514202.9226	6072151.1463	514203.4226	6072151.6463	1.7km	9.7km	1.7km	10.5km
6	90	Existing Access	Existing access along Clarke and Manibridge Tolko roads from PTH 6	475m from PTH 6	507931.0329	6064971.9728	508358.7117	6064790.1507	9.7km	9.7km	10.4km	10.5km

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