



**Registration Pursuant To The
Environmental Assessment Regulations 2003
under the
Environmental Protection Act
(O.C. 2003-220)
For The Proposed
Installation of Poles within 200 meters of Scheduled Waters on the
Petit Forte Distribution Line**

October 7, 2019

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1.0 Name of Undertaking

Petit Forte Distribution – Install Poles for Fibre Upgrade

1.1 Proponent

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1.2 Principal Contact Person

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2.0 Project Rationale

The scope of the undertaking includes the installation of a single pole and associated anchors on either side of three (3) scheduled salmon rivers along the Petit Forte Distribution Line, Newfoundland and Labrador. The work will be within 200 meters of each of the rivers.

The new poles are required to attach fibre optic cable for work being completed by Bell Aliant. The fibre attachment will add additional strain on the existing distribution structures due to the length of the spans and the sag of the cable. To avoid the potential for additional loading on the existing structures, Hydro has decided that a new pole should be installed next to the existing structures on either side of the scheduled salmon rivers.

The proposed undertaking is required to due to reliability concerns for the electrical distribution system that exsit should the new fibre cable be attached to existing poles in these locations.

3.0 Project Alternatives

The only other potential alternative to using existing overhead infrastructure for fibre cable attachment would be to bury the cable. This would require a continuous trench for a distance of approximately 20 kilometers following the road. Burying the line in the Hydro right of way is about 17 kilometers. Much of the terrain between the two communities is bedrock. As well crossings would have to be made across the mouth of two of the three scheduled rivers. These factors would be a significant impediment to burying the cable which would also be cost prohibitive.

The status quo option of attaching the fibre cable to existing poles at these river crossing is not viable due to reliability concerns for the electrical distribution system caused by additional strains and seasonal ice loading. For this reason, it has been decided that new pole and anchors dedicated for the fibre cable should be installed for the spans across Bay de L'Eau River, Cape Roger Brook and Non Such Brook.

4.0 Project Objectives

This project is intended to allow the delivery of high speed internet to rural communities.

5.0 Project Description

5.1 Geographic Location

The distribution line is located between the communities of Brookside and Petit Forte on the east side of the Burin Peninsula in Placentia Bay (Figure 5-1 and 5-2). It follows the main road to Petit Forte in a generally west to east direction for a distance of 14 kilometers to the outflow of Non Such Brook, where it turns south to the community for a distance of 3.0 kilometers.

5.1.1 Proposed Work Sites

In order to facilitate the installation of the fibre optic cable, new poles will be required on either side of three (3) scheduled salmon rivers as shown in figures 5-3, 5-4 and 5-5. Work will be undertaken within 200 meters of the Bay de l'Eau River, Cape Roger Brook, and Non Such Brook. Poles at Bay de l'Eau will be 112 metres to the west and 114 metres to the east of the river. New poles and associated anchors will be installed adjacent to and within 5 meters to the existing structures on either side of each of these

ivers. At Cape Roger Brook, the new poles will be 87 metres to the west and 15 metres to the east of the river. At Non Such Brook, the poles will be 12 metres west and 60 metres east of the river.

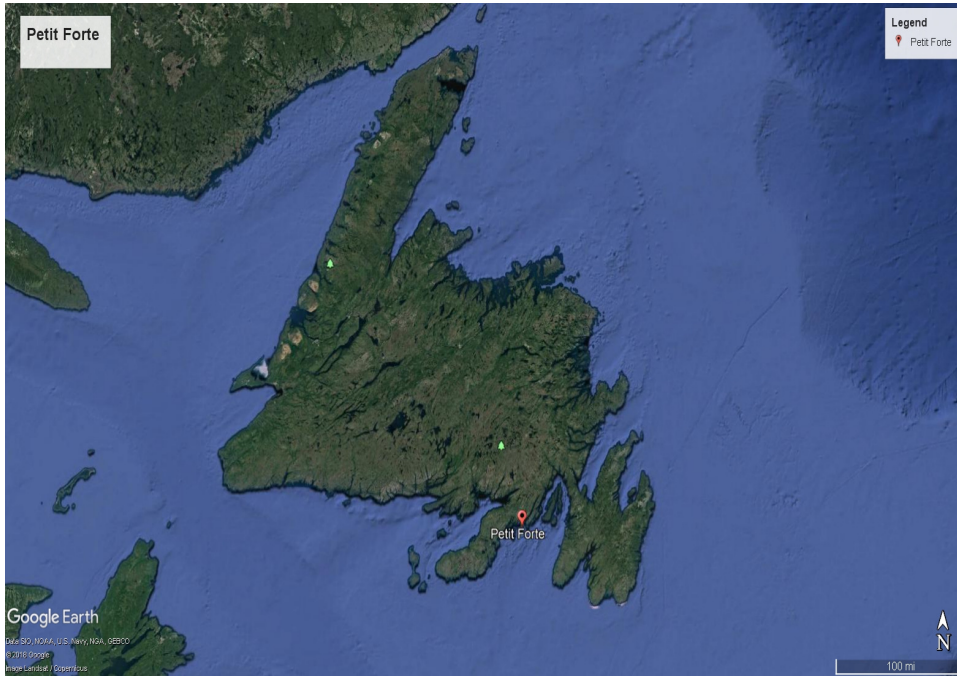


Figure 5-1: Location of the community of Petit Forte

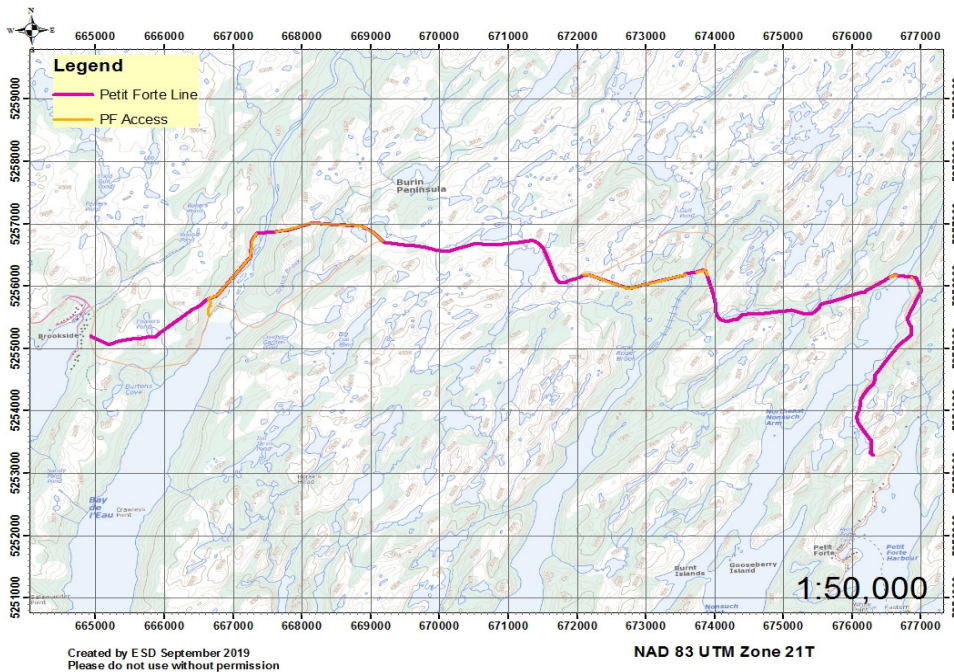


Figure 5-2: Petit Forte Distribution Line (Brookside to Petit Forte)

Installation of Poles with 200m of Scheduled Waters – Petit Forte Distribution

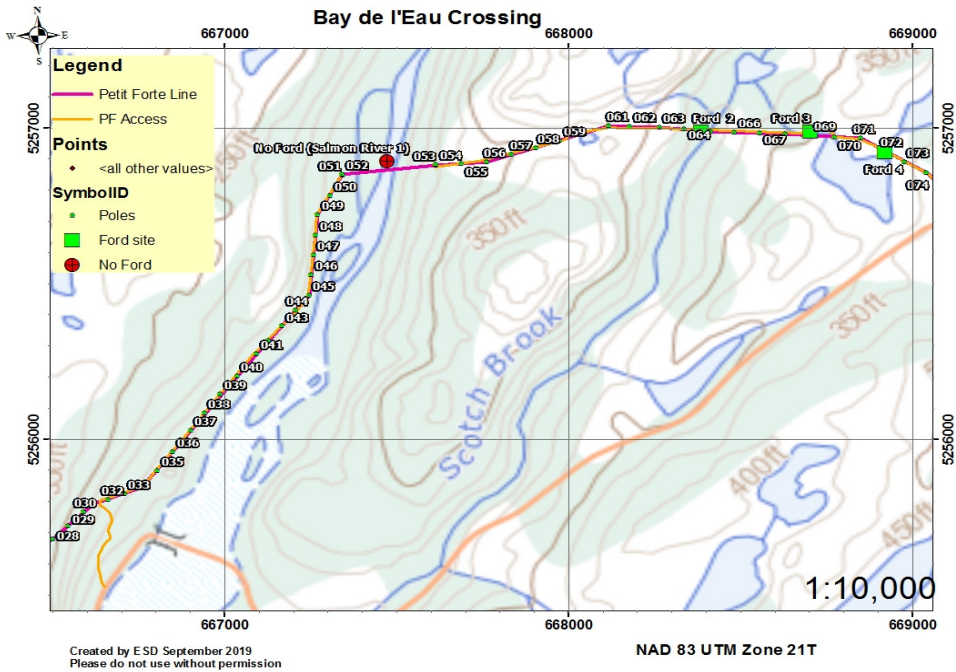


Figure 5-3: Bay de L'Eau River Crossing and Travel Route

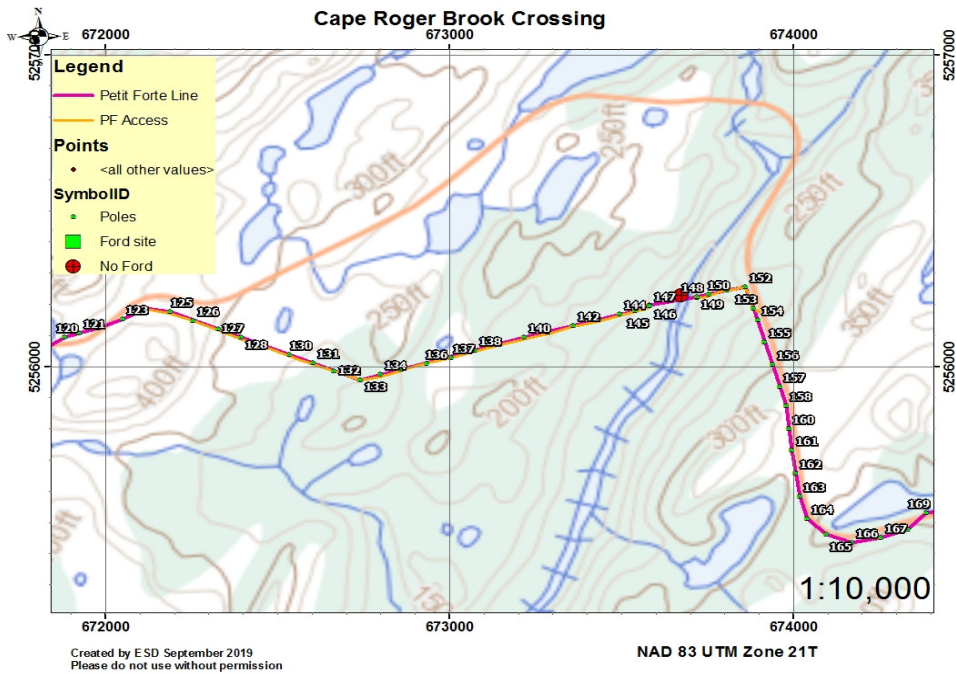


Figure 5-4: Cape Roger Brook Crossing and Travel Route

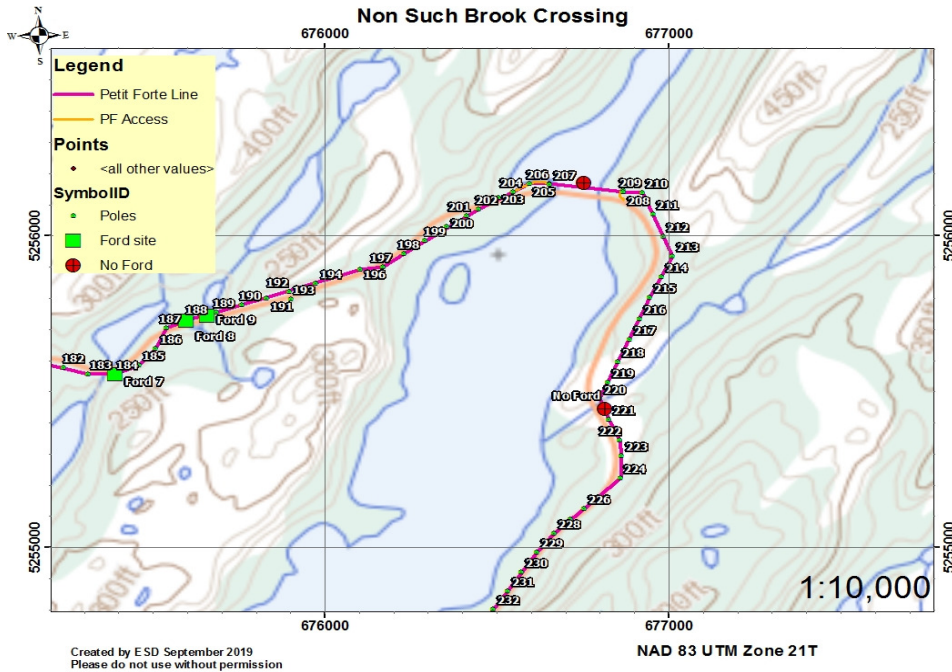


Figure 5-5: Non Such Brook Crossing and Travel Route

6.0 Project Key Environmental Aspects

6.1 Scheduled Waters Within 200 metres of Project Site

Based on Section 28 in the *Environmental Assessment Regulations, 2003* “: An undertaking that will occur within 200 metres of the high water mark of a river that is a scheduled salmon river under the Fisheries Act (Canada) shall be registered”.

The works proposed by this undertaking will occur within the 200 metre buffer of three (3) scheduled waters, however does not require any in-water work or physical alteration of the water body. The closest installation of the three rivers will be at Non Such Brook where one pole will be 12 meters from the river, installed bedrock (See Appendix A). At this location, a rock drill will be used to install the new pole. This methodology will not pose any risk to the water body. Blasting is not required at any of the work sites.

6.2 Potential Sources of Pollutants

The potential sources of pollutants during the construction period would include the possible siltation of streams or water bodies and hydrocarbon leakage from construction equipment. Work sites shall be closely monitored to ensure siltation does not occur. This is an unlikely event as most poles are in bedrock or are located a safe

distance from the water body. Equipment will be inspected prior to entering each work site to ensure there are no drips or leaks of hydraulic oil, fuel or antifreeze. Unless there is an emergency, there will be no refueling or maintenance at either of the work locations.

6.3 Wildlife

There is one Osprey nest located on structure 51 on the west side of the Bay de l’Eau River (Figure 6-1). This nest was active in 2019. Young were observed flying in the vicinity of the nest on August 14. As the young have fledged, the timing of this work should not conflict with nesting birds.



Figure 6-1: Photo of Osprey Nest on Pole 51, west of Bay de L’Eau River

6.4 Operation of the Line Post-Construction

This distribution line is constructed using permanent structures with a minimum operating life of 40 years.

6.4.1 Routine Maintenance

The distribution line will be inspected from the ground annually. All terrain vehicles and snowmobiles will be used to transport workers and equipment during ground inspections. Vegetation management of the right-of-way will be conducted every five (5) to ten (10) years as determined necessary by vegetation surveys of the distribution line.

6.4.2 Potential Sources of Pollutants

Potential sources of pollutants will be limited to those, which may result from the use of all-terrain vehicles along the line during routine inspection and maintenance. All

equipment will be inspected routinely to ensure that no hydrocarbon (i.e.; gasoline, diesel fuel, lubricating oil, hydraulic fluid, etc.) leaks occur.

6.4.3 Potential Resource Conflicts

NL Hydro undertakes an Integrated Vegetation Management Program to manage vegetation within transmission and distribution line rights-of-way. This program involves manual cutting of brush and the application of herbicides depending on the particular section of right-of-way to be managed. No herbicides will be applied in a domestic water supply area.

An Integrated Vegetation Management Plan requires follow up every five (5) to ten (10) years depending on the location within the province. All vegetation management activities are undertaken subject to approval from the Pesticide Control Section, Department of Municipal Affairs and Environment and with adherence to the Pesticide Control Act and Associated Regulations.

Conflicts with the fisheries resources along the right-of-way are not anticipated during maintenance activities.

7.0 Occupations

The occupations required to construct this undertaking are:

- Environmental Monitors;
- Engineering Technicians;
- Heavy Equipment Operators;
- Line Workers; and
- Ground Workers;

Following construction, the site will be operated and maintained by existing staff from NL Hydro.

8.0 Project Schedule

The proposed project date for this undertaking is before the end of 2019, preferably before snow cover. NL Hydro forces will carry out construction over a two (2) week period upon release the Environmental Assessment Regulations.

The major construction activities associated with this distribution line include:

- Material Handling and Distribution;
- Pole Installation;

- Anchor Installation
- Cable Attachment
- Clean Up and Rehabilitation.

9.0 Construction Mitigation

A ground survey will be conducted by NL Hydro’s Environmental Services Department prior to material distribution to assess the location of structures. Mitigation will be employed as required to reduce potential disturbance at all work locations and travel routes. All work near water and fording of water courses shall be executed as per the terms and conditions of permits from Water Resources Division (WRD) and Department of Fisheries and Oceans (DFO). In addition, operating procedures identified in Hydro’s generic Environmental Protection Plan for Construction and Maintenance of Transmission and Distribution Infrastructure will be followed during execution of the work. Standard environmental mitigation will be put in place when working near water bodies and fording as well as adherence to any special requirements identified in the approval process. This work is not anticipated to have adverse environmental impacts. Buffer zones to the streams will be maintained.

There are three (3) stream crossings along the proposed travel route on the east side of the Bay de l’Eau River. Pictures of these stream crossings are included in Appendix A. These streams are stable ford sites and shall be crossed one time in and one time out to facilitate work at this location.

10.0 List of Potential Environmental Approvals

The following is a list of permits, approvals, and authorizations, which may be necessary for the proposed project:

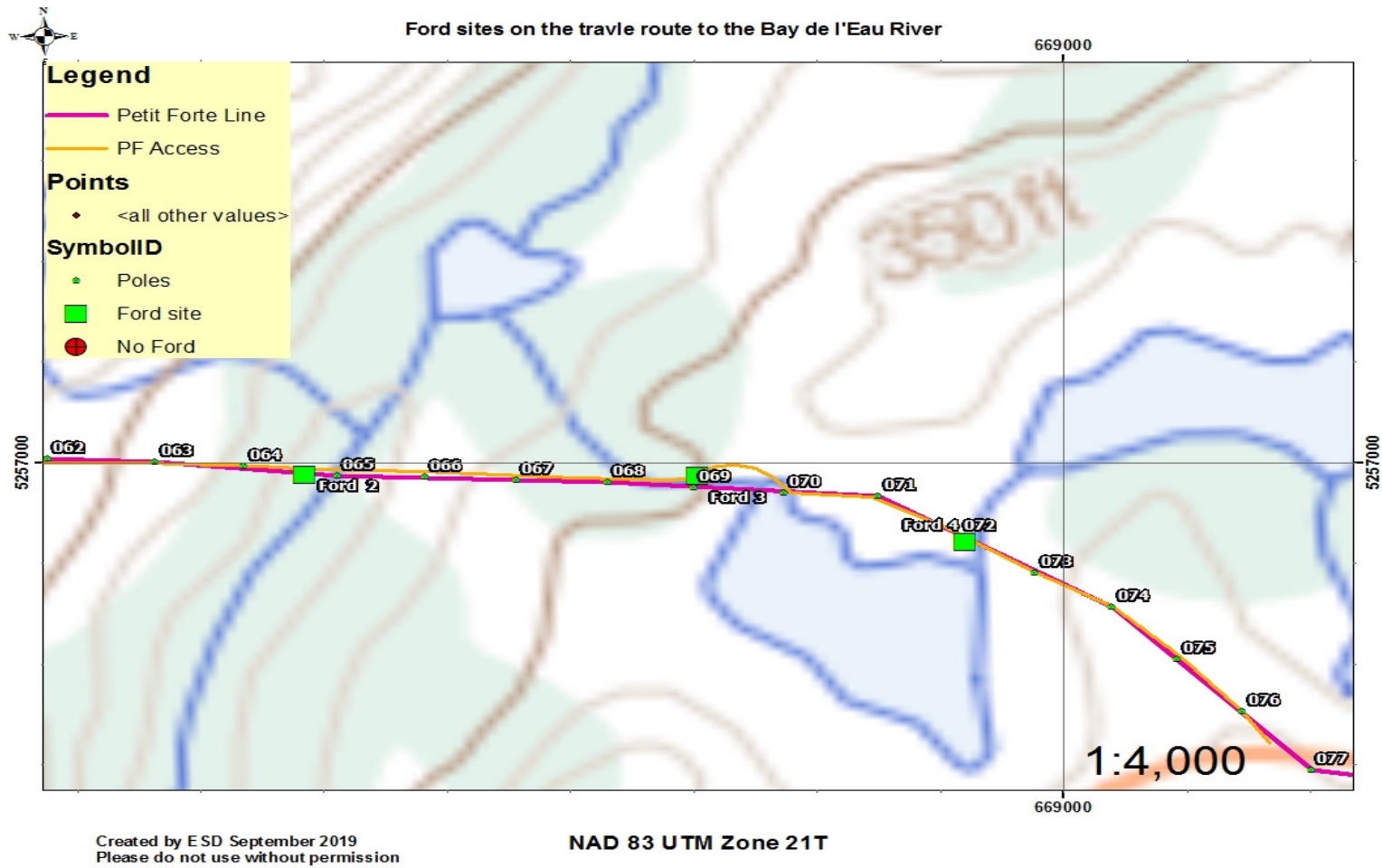
- I. Release of the Undertaking under the Environmental Assessment Regulations – issued by the minister of the Department of Municipal Affairs and Environment;
- II. Permit to Alter a Waterbody – Permit # ALT10066 – 2018;
- III. DFO Blanket Permit 17 HNFL - 00024

11.0 Project Funding

This work is being funded by Bell Aliant.

Appendix A

Ford sites Required for Undertaking and Street View Image of Poles Near Water



Appendix A1-1: Ford Sites for Bay de L'Eau River



Appendix A1-2: Ford Site#2



Appendix A1-3: Ford Site#3



Appendix A1-4: Ford Site#4



Appendix A1-5:Poles 205 & 206 Non Such Brook