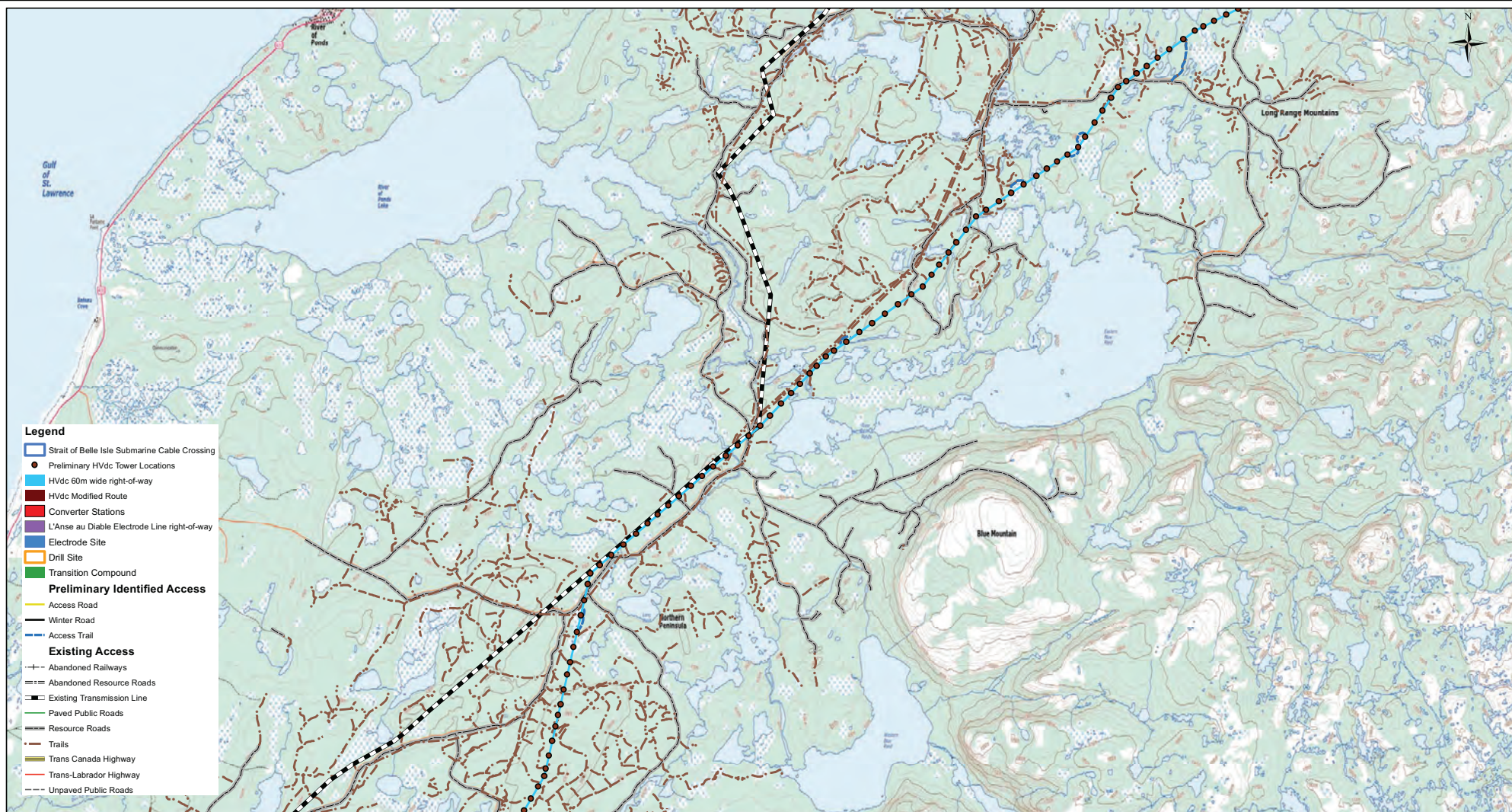




Labrador - Island Transmission Link Additional Project Description*

Figure #: 18

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis

1:100,000

0 1.25 2.5 5 Kilometers



Labrador - Island Transmission Link Additional Project Description*

Figure #: 19

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis

1:100,000

0 1.25 2.5 5 Kilometers

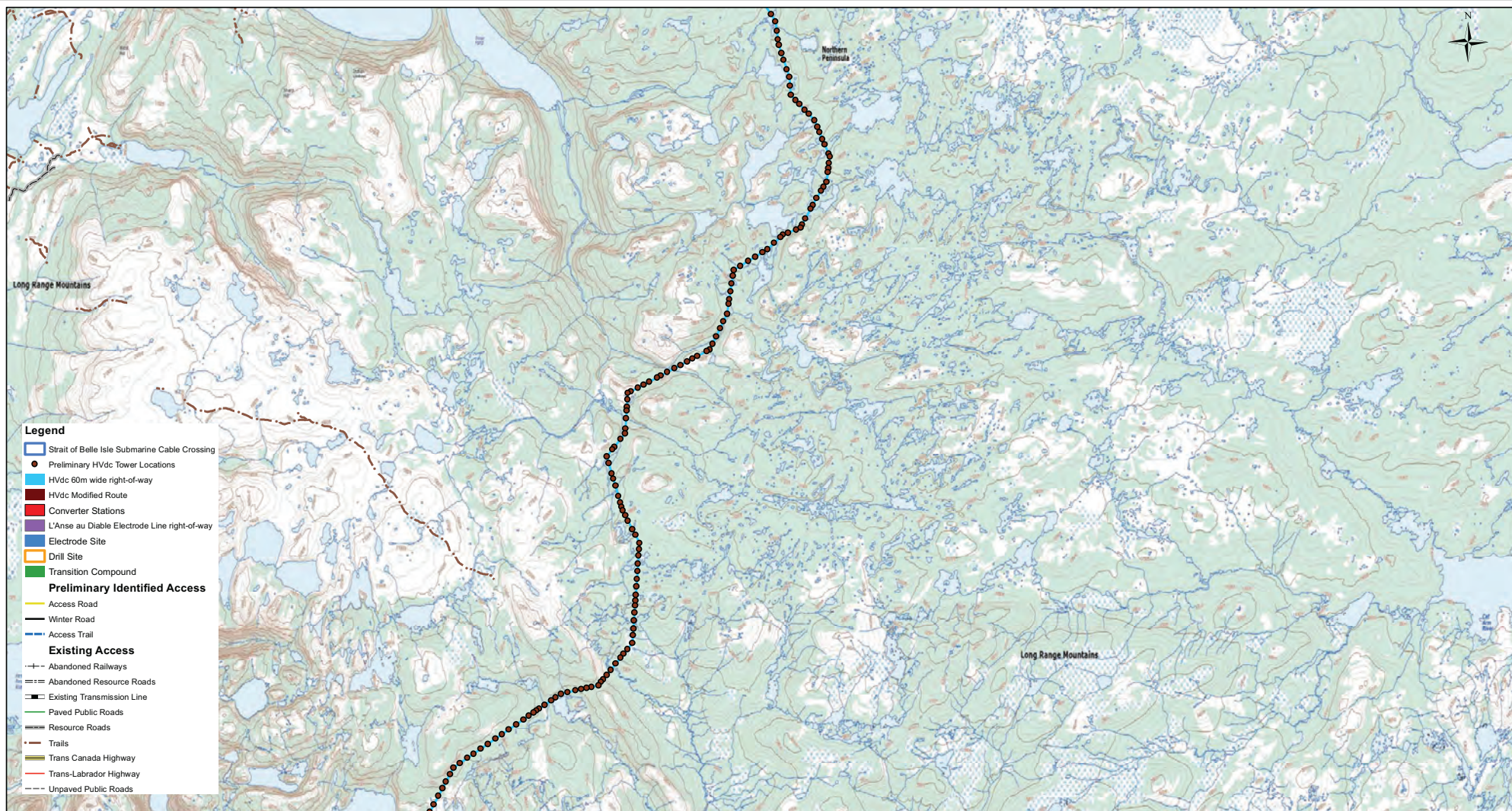


Figure #: 20

DISCLAIMER:

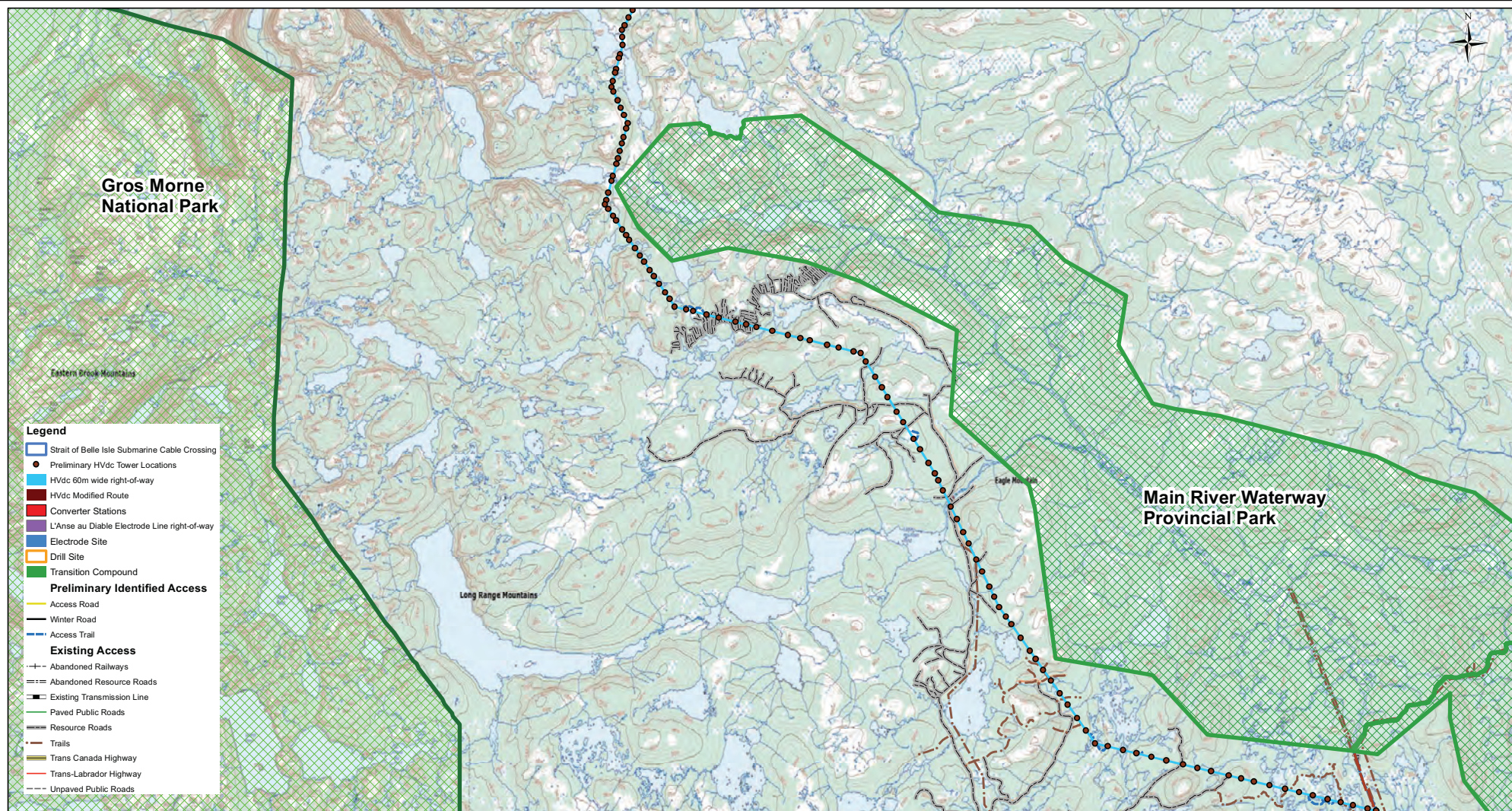
* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis



Labrador - Island Transmission Link Additional Project Description*

1:100,000

0 1.25 2.5 5 Kilometers

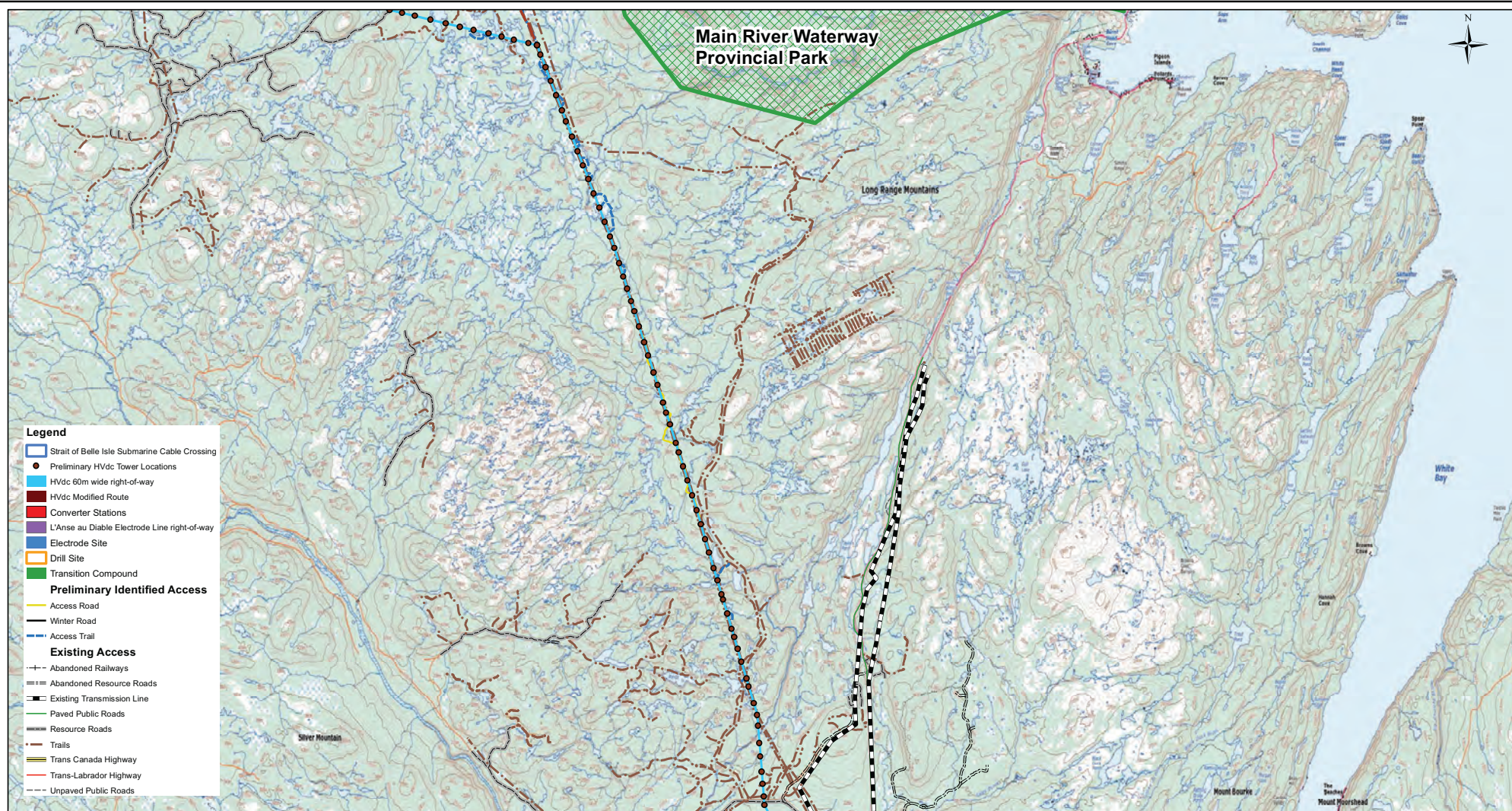


Labrador - Island Transmission Link Additional Project Description*

DISCLAIMER:
* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis

1:100,000

0 1.25 2.5 5 Kilometers



Labrador - Island Transmission Link Additional Project Description*

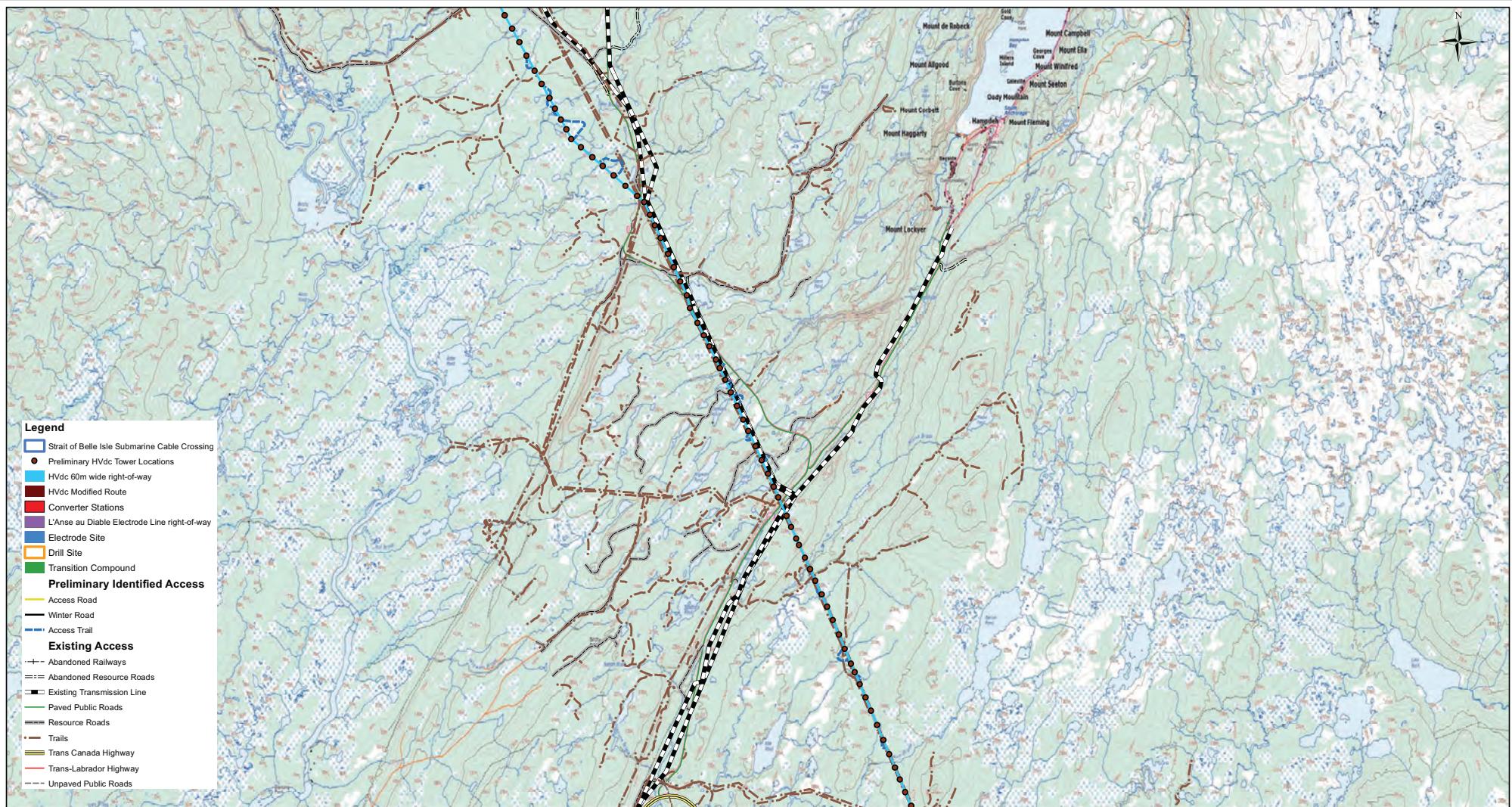
Figure #: 22

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis

1:100,000

0 1.25 2.5 5 Kilometers



Labrador - Island Transmission Link Additional Project Description*

Figure #: 23

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis

1:100,000

0 1.25 2.5 5 Kilometers

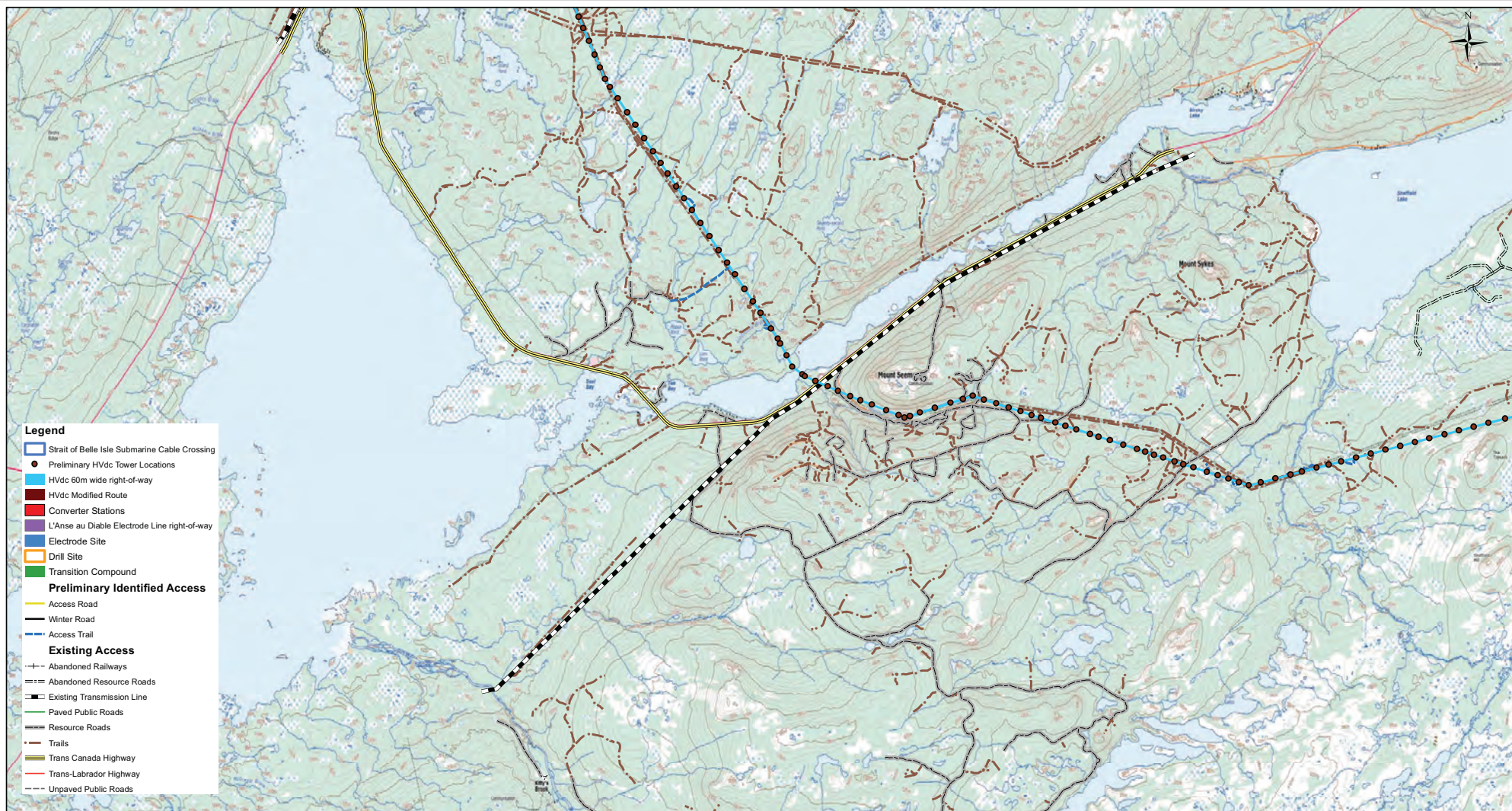


Figure #: 24

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis



Labrador - Island Transmission Link Additional Project Description*

1:100,000

0 1.25 2.5 5 Kilometers

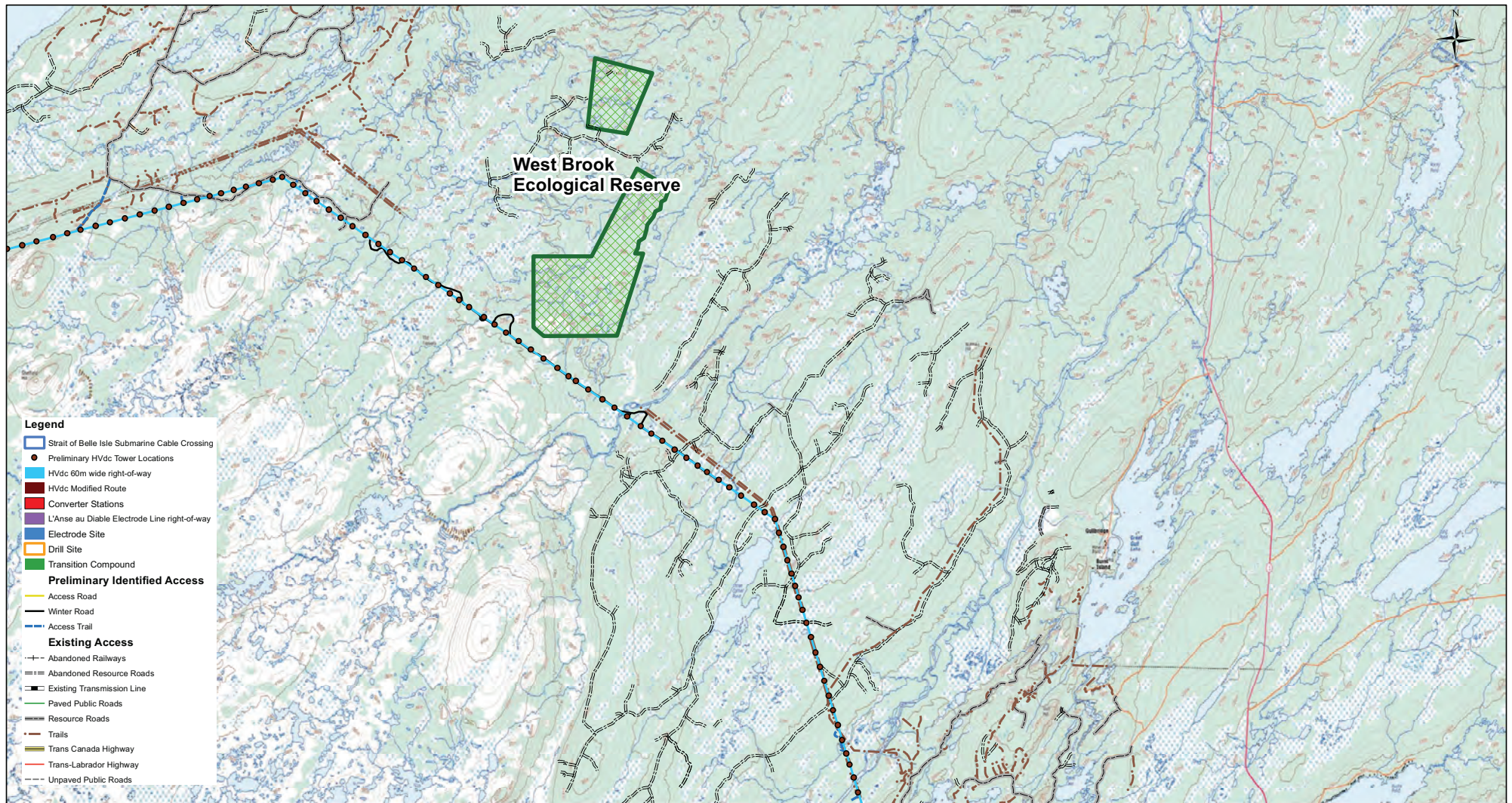


Figure #: 25

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis



Labrador - Island Transmission Link Additional Project Description*

1:100,000

0 1.25 2.5 5 Kilometers

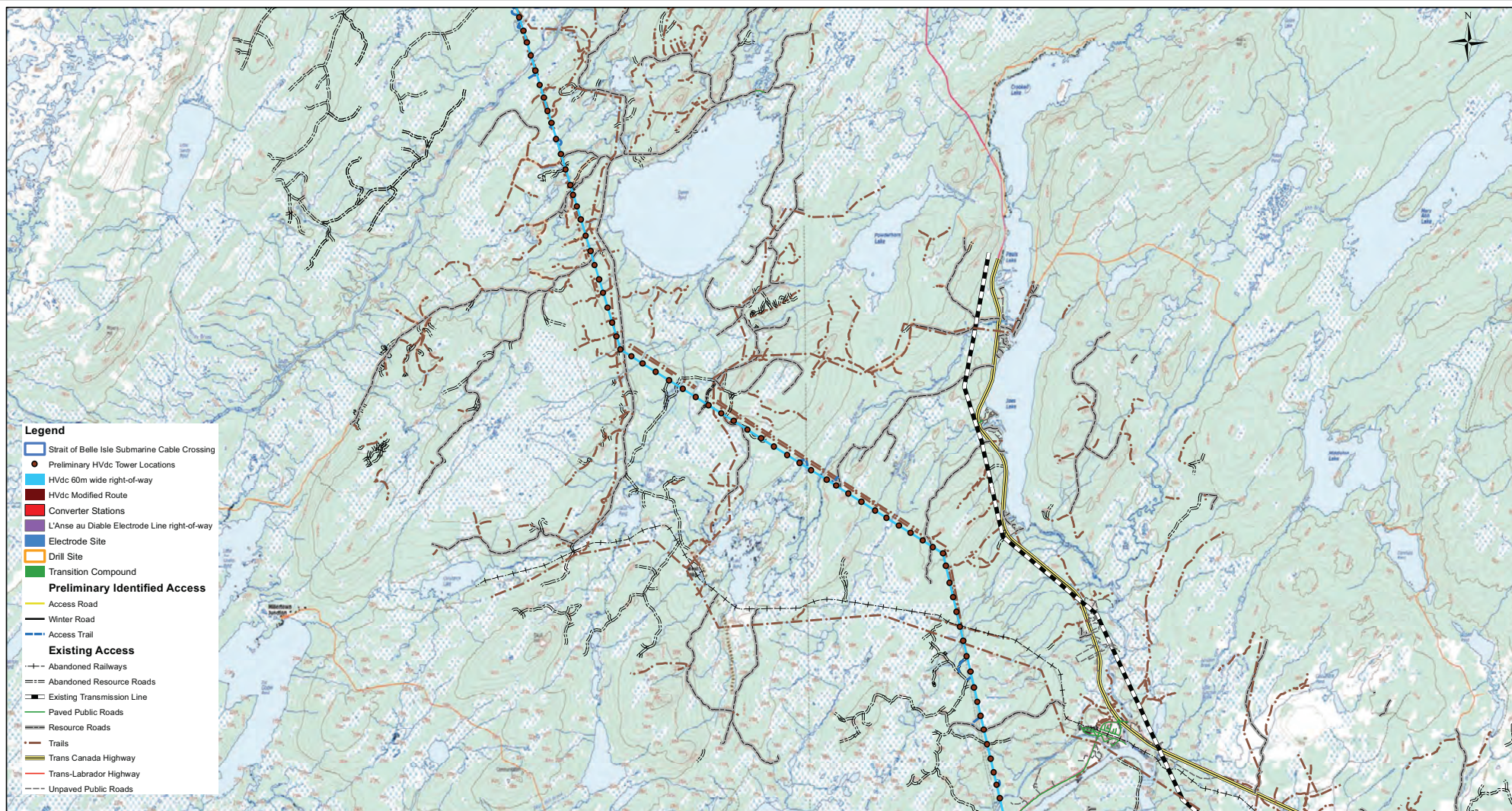


Figure #: 26

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis



Labrador - Island Transmission Link Additional Project Description*

1:100,000

0 1.25 2.5 5 Kilometers

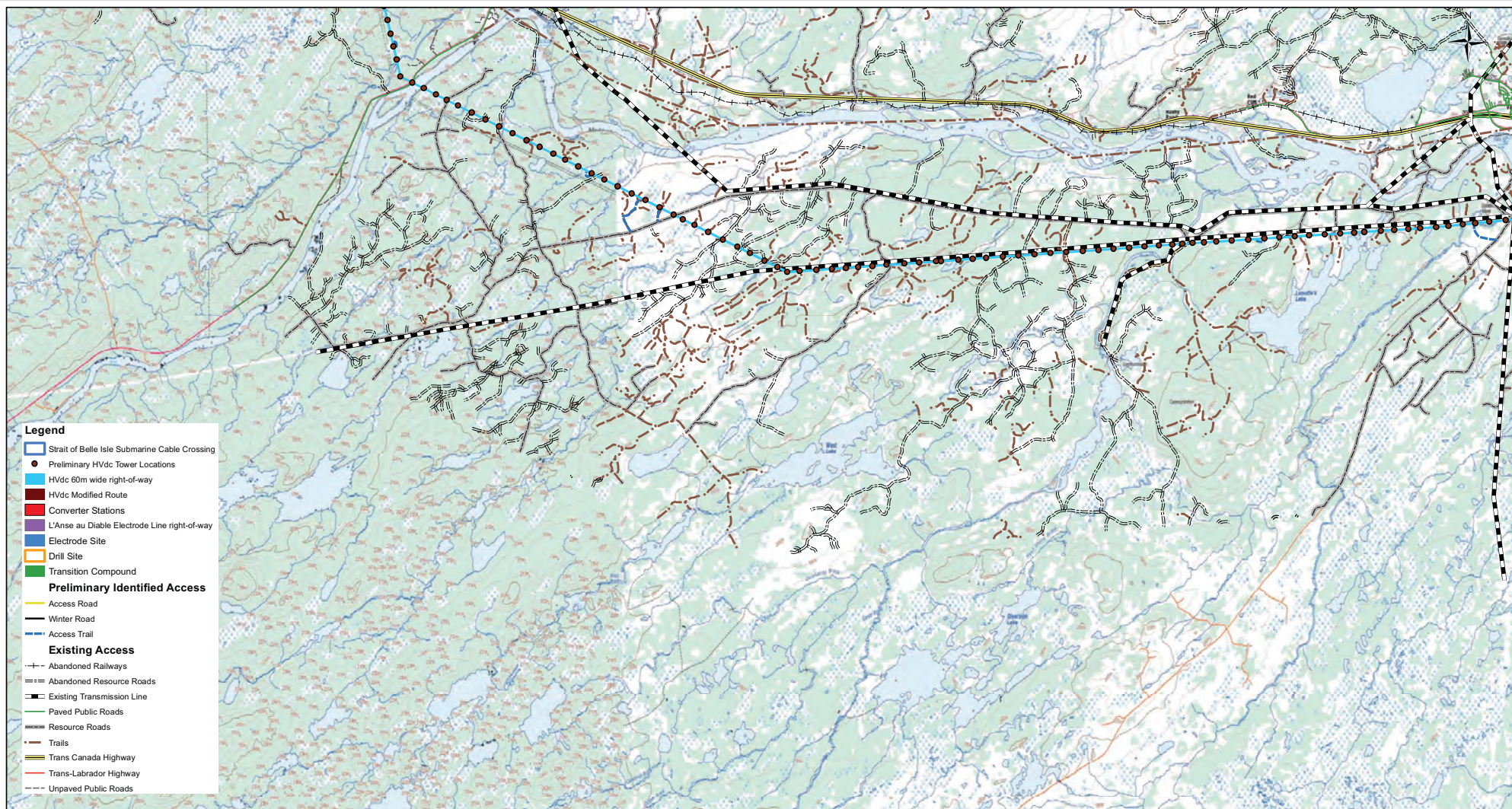


Figure #: 27

DISCLAIMER:

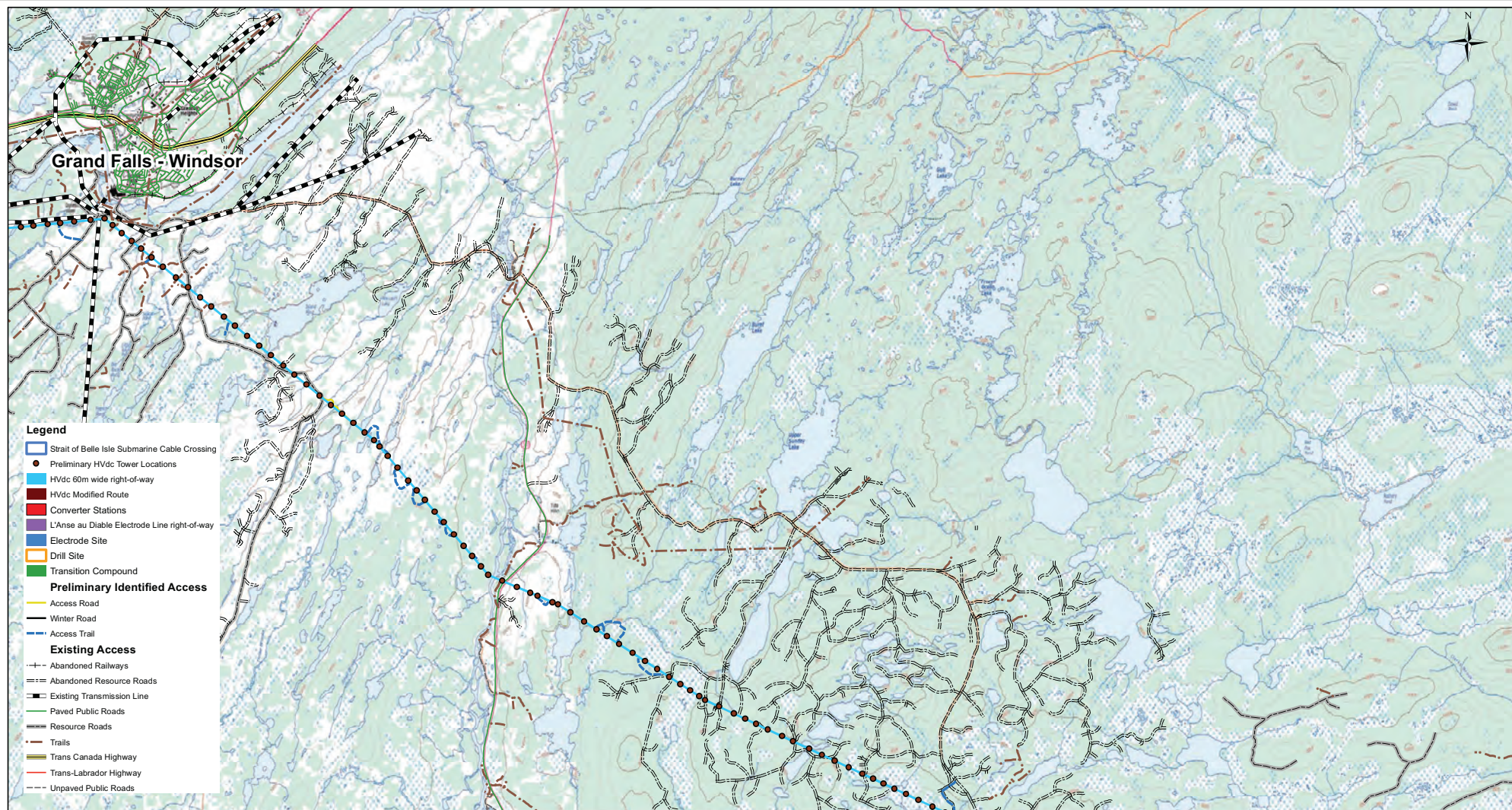
* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis



Labrador - Island Transmission Link Additional Project Description*

1:100,000

0 1.25 2.5 5 Kilometers



Labrador - Island Transmission Link Additional Project Description*

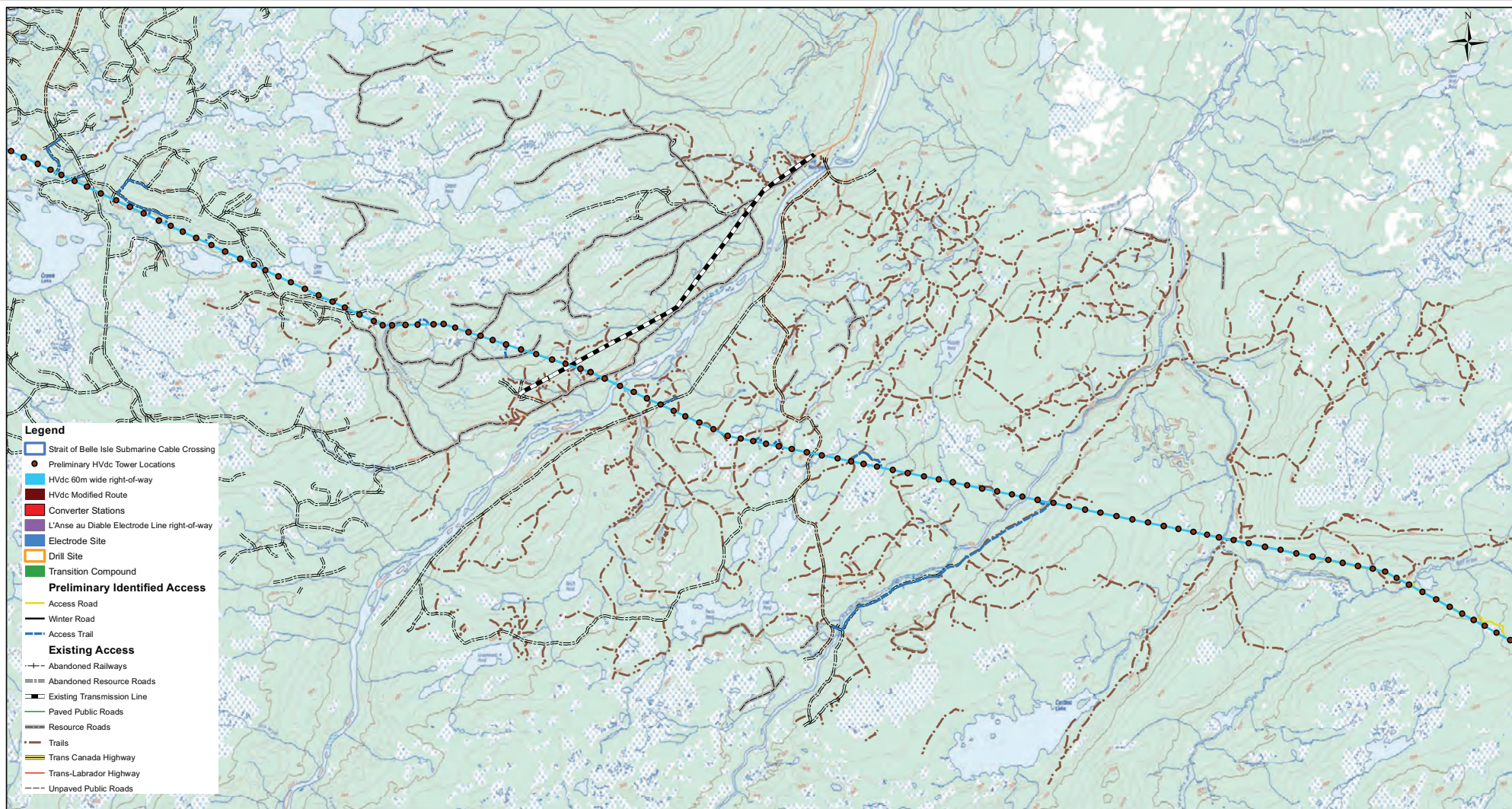
1:100,000

0 1.25 2.5 5 Kilometers

Figure #: 28

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis



Labrador - Island Transmission Link Additional Project Description*

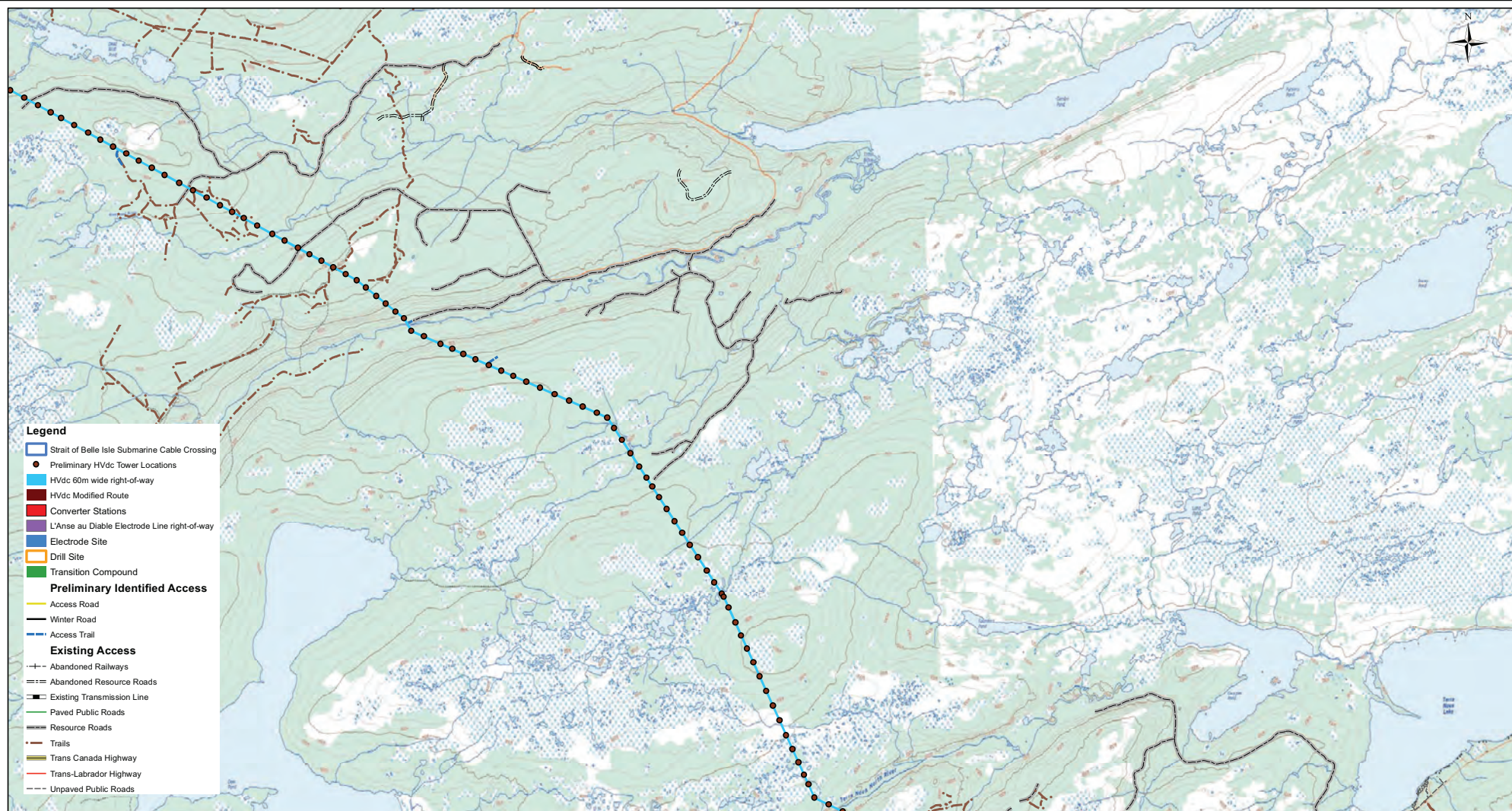
Figure #: 29

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis

1:100,000

0 1.25 2.5 5 Kilometers



Labrador - Island Transmission Link Additional Project Description*

Figure #: 30

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis

1:100,000

0 1.25 2.5 5 Kilometers

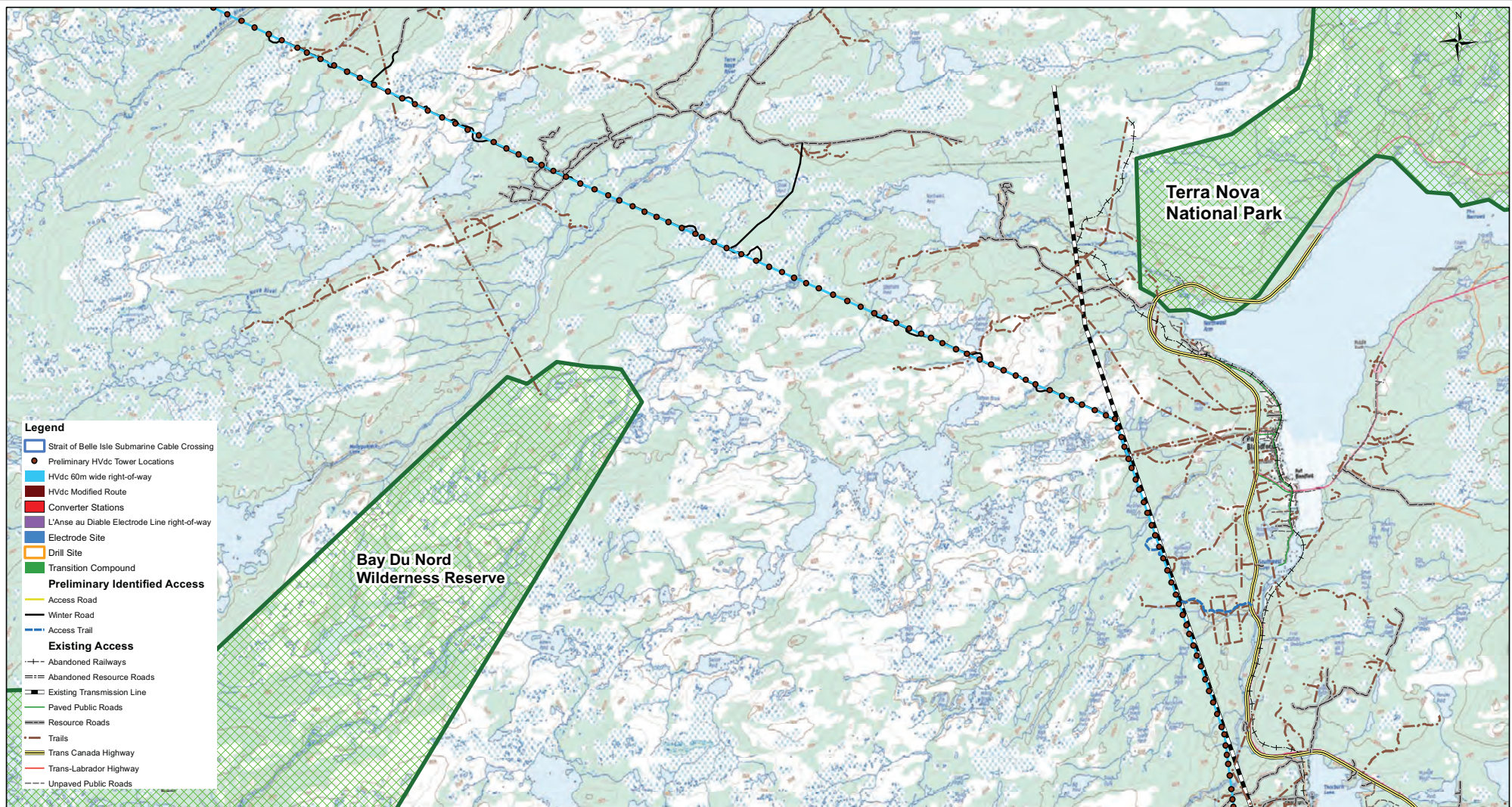


Figure #: 31

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis



Labrador - Island Transmission Link Additional Project Description*

1:100,000

0 1.25 2.5 5 Kilometers

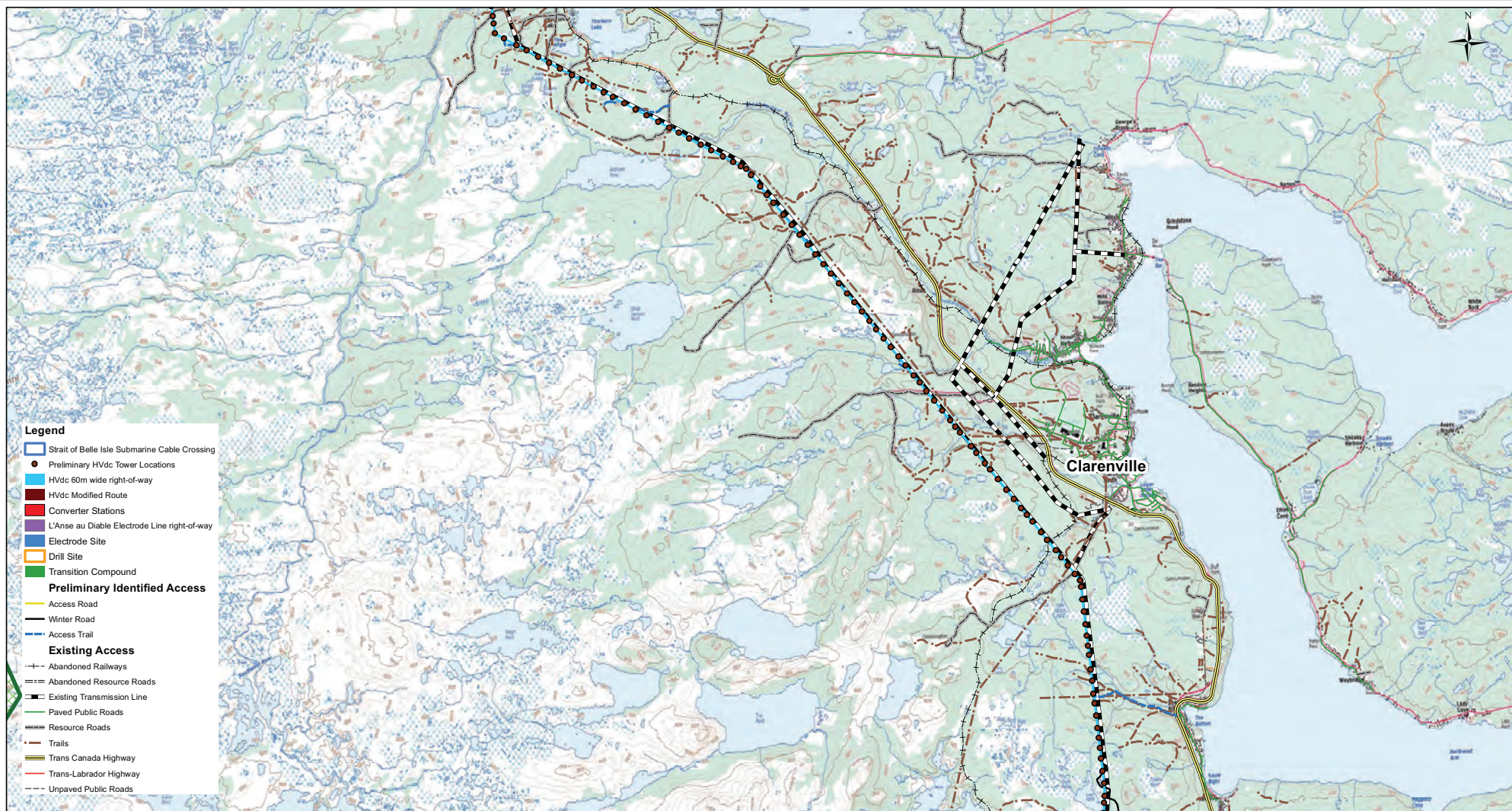


Figure #: 32

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis



Labrador - Island Transmission Link Additional Project Description*



Figure #: 33

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis



Labrador - Island Transmission Link Additional Project Description*

1:100,000

0 1.25 2.5 5 Kilometers



Figure #: 34

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis



Labrador - Island Transmission Link Additional Project Description*

1:100,000

0 1.25 2.5 5 Kilometers

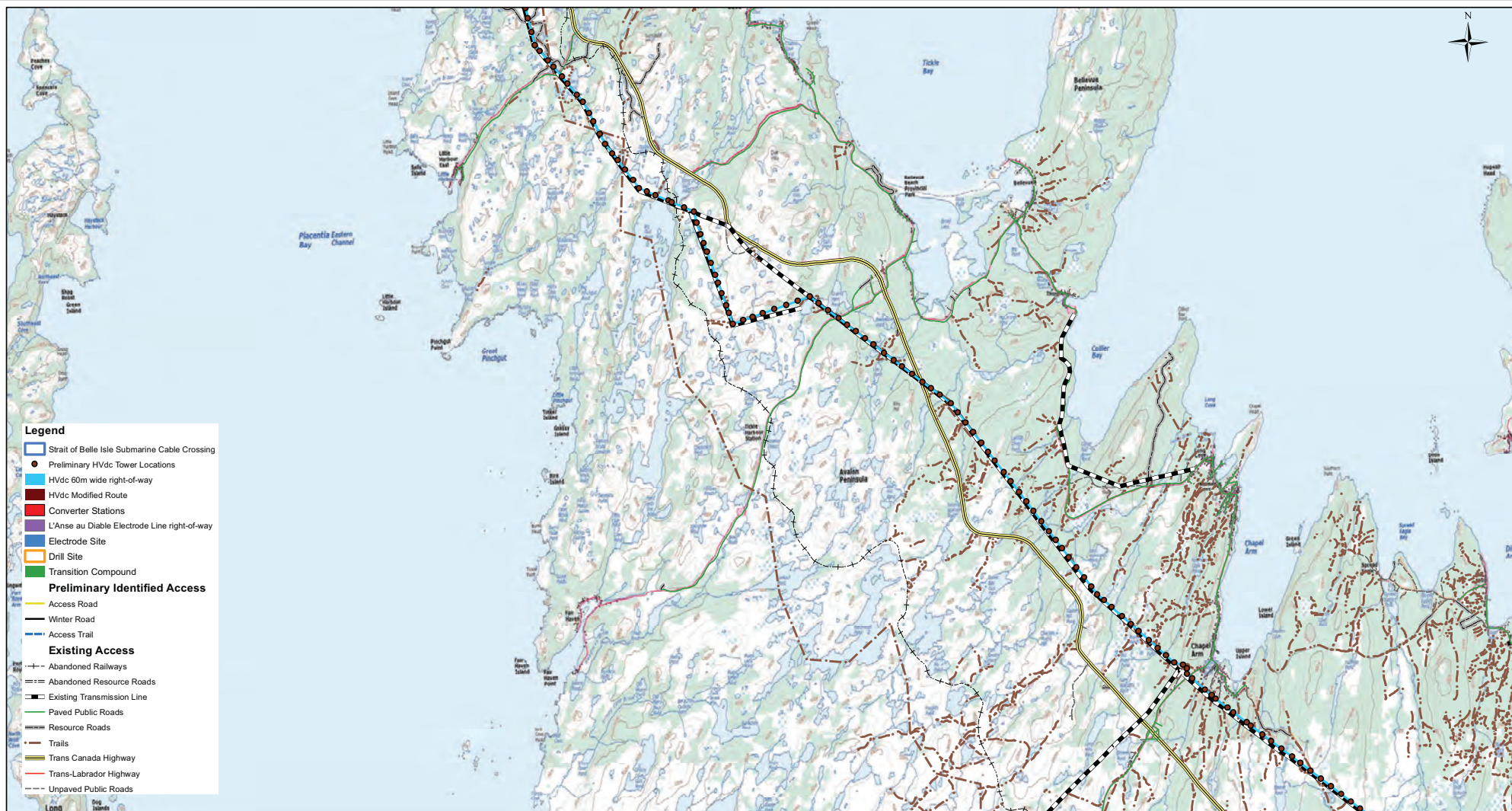


Figure #: 35

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis



Labrador - Island Transmission Link Additional Project Description*

1:100,000

0 1.25 2.5 5 Kilometers



Labrador - Island Transmission Link Additional Project Description*

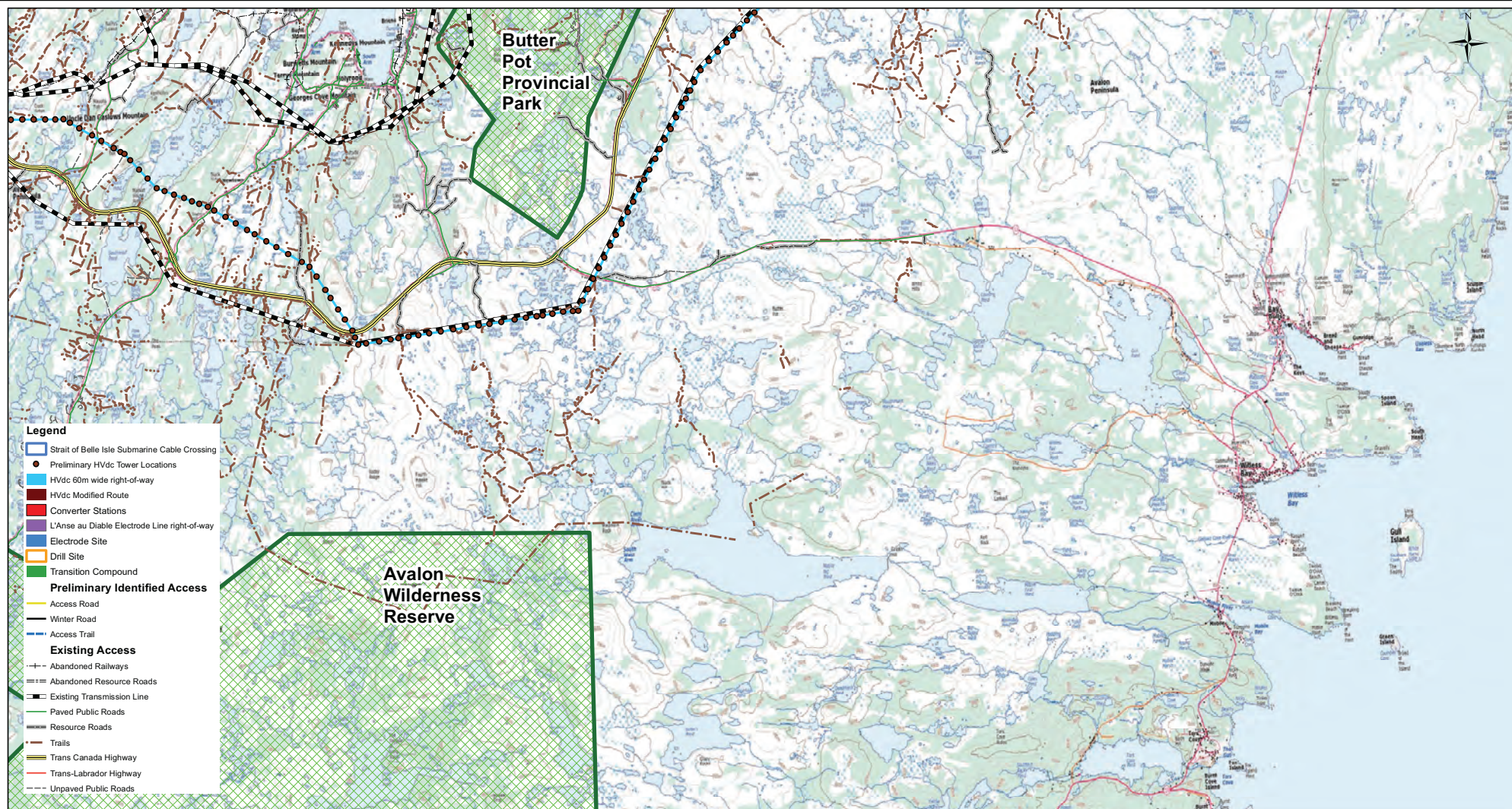
Figure #: 36

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis

1:100,000

0 1.25 2.5 5 Kilometers



Labrador - Island Transmission Link Additional Project Description*

Figure #: 37

DISCLAIMER:

* Based on Nalcor's current stage of detailed engineering and design (November 2012) - subject to change based on further analysis

1:100,000

0 1.25 2.5 5 Kilometers

2 ATMOSPHERIC ENVIRONMENT: ENVIRONMENTAL EFFECTS ASSESSMENT – UPDATED

This document is an addendum to the Environmental Impact Statement (EIS) originally submitted in April 2012. One of the principles of environmental assessment is that it is a planning tool (see Section 2.1 of the Environmental Impact Statement Guidelines and Scoping Document [Government of Newfoundland and Labrador and the Government of Canada 2011]). As Nalcor Energy (Nalcor) continues with the engineering and ongoing planning of the Labrador-Island Transmission Link additional details related to the quarry and the loading facilities have been developed. This document is the environmental assessment for the Atmospheric Environment (which includes Climate (Greenhouse Gas [GHG] emissions), Air Quality and Sound) for the quarrying and transport of 1,000,000 tonnes of rock and the construction of a loading facility (herein defined as the Project) in support of the Labrador-Island Transmission Link.

The exact locations of the quarry, haul route, and loading facility have not been finalized, however, the general area where the Project is likely to be located is shown in Figure 1. Nevertheless, the assessment is carried out with conservative assumptions about the potential for adverse effects on the environment, to ensure that the assessment is precautionary and appropriate. As stated in Section 1, Nalcor notes that the successful rock placement contractor will ultimately be responsible for quarrying rock, loading rock on a placement vessel, and constructing protective berms over the submarine cables in the Strait of Belle Isle. A number of options are available to the successful rock placement contractor. At least two quarries on the Island of Newfoundland have marine loading facilities and could be used to supply rock for cable placement. They are:

- Atlantic Minerals Ltd., Lower Cove; and
- Bay Bulls Marine Terminals Inc., Bay Bulls.

The Project involves three main activities: rock sourcing at a quarry, transport of rock to a nearby site, and construction of a loading facility. Rock sourcing is planned for one quarry which will be transported and placed as the protective rock berm for each of the three submarine cables across the Strait of Belle Isle.

The quarried rock will be transported via dump trucks travelling from the quarry to the loading facility. Currently, the locations of the quarry and the loading facility have not been finalized. However, in conducting this environmental assessment, it is conservatively assumed that there are residences located adjacent to the rock quarry and along the proposed haul route as well as near to the proposed loading facility.

The Project activities are planned to be carried out from November 2015 to December 2016. During this period the activities will occur 24 hours per day. Blasting in the quarry is assumed to take place periodically during this period, and may take place during daytime and nighttime.

The activities at the quarry consist of site preparation (overburden removal), blasting events, material collection, size screening, and crushing of large pieces. The following assumptions were used for the assessment:

- The entire 100,000 m² quarry area (the general area where the quarry will be located shown in Figure 1) is subject to overburden removal (fugitive dust generation).
- The entire 100,000 m² quarry area is subject to blasting events (fugitive dust generation).
- 50 blast events take place over the November 2015 to December 2016 period, each with an explosive quantity of 2 tonnes (ammonia dynamite).
- There are negligible dust emissions from the drilling of blast holes (based on experience with the mining sector in several jurisdictions in Canada).
- The list of assumed mobile equipment operating at the quarry, including number, horsepower, and operating hours is provided in Table 2-3.