



BURCHILL WIND PROJECT ADDENDUM

Updated Project Layout

September 2nd, 2020

natural forces

1. Introduction

On Feb 18, 2020, an Environmental Impact Assessment (EIA) for the Burchill Wind Project (BWP or Project) was registered by the province. The EIA for the Project was submitted by Natural Forces Development Limited Partnership.

The Project proposed a 5-10 turbine wind farm within the boundaries of the City of Saint John that would produce between 20-42 MW of wind energy. Since the Project was submitted, it has undergone further micrositing. This addendum showcases micrositing that has occurred to previously proposed turbine locations, and proposes three additional turbine location. Since the submission of the EIA, Natural Forces has confirmed that the Project Size will be set at 42MW therefore requiring 10 turbines.

This addendum is submitted by Natural Forces Development Limited Partnership. It is meant to be read in conjunction with the BWP registration EIA document, as well as the Burchill Wind Project Addendum: Bird, Bat and Electromagnetic Interference Studies submitted on March 26th,2020.

2. Note on Setbacks from Coastal Features

As further information was gathered on the environmental and social context of the Project area, turbines underwent further micrositing and three additional turbine locations have been proposed. Throughout this process, the need to evaluate the setback of turbines from coastal features arose. The setbacks of each proposed turbine from the coast are listed below (Table 1).

Table 1. Setback of proposed and proposed alternate turbine locations from coastal features (UTM 19). "T" indicated a proposed turbine, "A" indicates a proposed alternate turbine.

Turbine	Easting (E)	Northing (N)	Setback from coast
T1i	720789.01 m	5004513.45 m	332 m
T2i	720271.89 m	5005033.05 m	775 m
T3i	719679.00 m	5005504.00 m	1427 m
T4i	720221.35 m	5005583.03 m	1329 m
T5i	719989.00 m	5006028.00 m	1811 m
T6i	720470.42 m	5006607.68 m	2115 m
T7i	720839.05 m	5007110.87 m	2297 m
T8i	720750.00 m	5009458.00 m	1916 m
T9i	720873.41 m	5008786.46 m	1974 m
T10i	719735.31 m	5008428.54 m	3107 m
A11i	719630.00 m	5007204.00 m	2097 m
A12i	721018.00 m	5007897.00 m	2274 m
A13i	719859.14 m	5008188.30 m	2887 m

Natural Forces always takes great care in micro-siting project components to ensure environmental and social impacts are minimized while balancing project needs. The siting of Turbine T1i was selected for the following reasons:

- This turbine location has very favourable wind resource over the project area. Additionally, it is setback from other turbines and will decrease the chance of wake loss for the Project (a phenomenon that occurs when wind turbines too close together decrease overall energy yield);
- This location was selected in order to minimize impacts on wetlands and watercourses that have been delineated within the Project area thus far;
- The project area is constrained by several communication tower links. This area was selected in part due to avoid encroaching on Fresnel zones;
- This location was selected in light of the bird and bat monitoring results, which are discussed in Burchill Wind Project Addendum: Bird, Bat and Electromagnetic Interference Studies submitted on March 26th, 2020. The monitoring results showcased that during fall and spring migration, the majority of flocks migrated over water, 1-5 km from coastline. Additional radar and acoustic monitoring is being conducted to further understand how birds are using the Project area.

3. Conclusion

This addendum is meant to be read in conjunction with the registered BWP EIA and previous documents submitted as part of the EIA. As this layout includes areas that had not been previously studied, additional archeological, wetland and watercourse studies were conducted. The results of these studies along with an environmental management plan, and an adaptive management plan will be submitted in subsequent addendums.

Appendix A

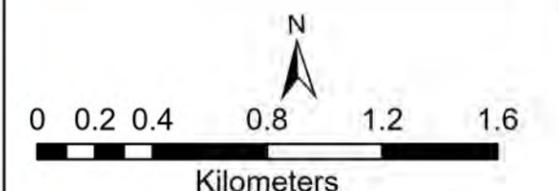
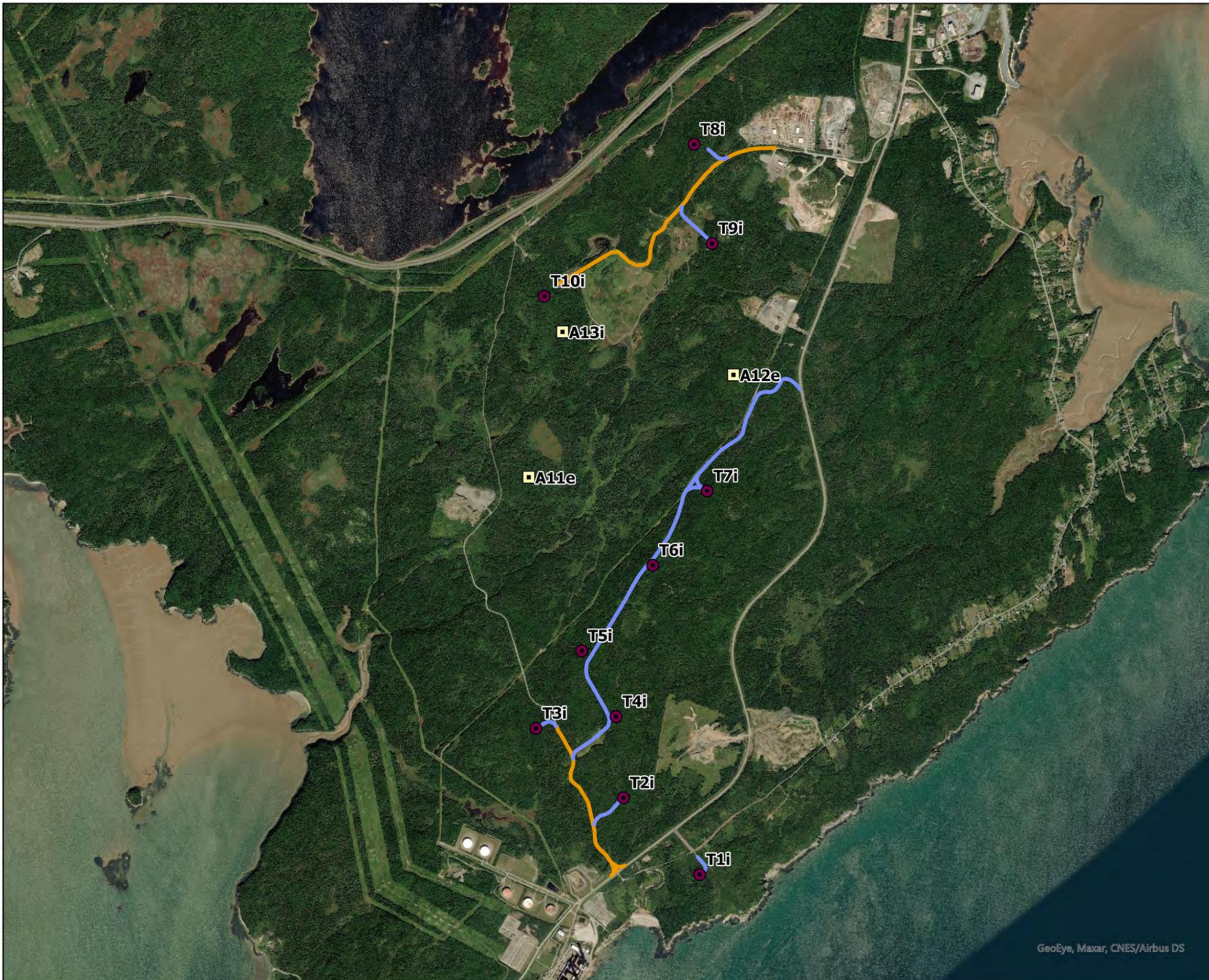
August 2020 Project Layout Updates

Burchill Wind Project

August 2020 Proposed Layout

Proposed Layout

- Proposed Turbine Locations
- Proposed Alternate Turbine Locations
- New Roads
- Upgraded Roads



1:25,000

PCS: UTM Zone 19, Northern Hemisphere

August 31, 2020

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