



PROJECT OVERVIEW

HIGGINS MOUNTAIN WIND FARM PROJECT

MARCH 2023

HIGGINS WIND - EXPERIENCED PARTNERSHIP TEAM WITH LOCAL CONNECTIONS

- The Higgins Wind Farm Project is being developed by Higgins Wind Farm LP, a partnership between Sipekne'katik FN, Elemental Energy, and Stevens Wind.
- The partners have extensive experience developing and operating renewable energy projects across Canada, including five Community Feed-In Tariff (COMFIT) wind energy projects in Nova Scotia and two utility scale wind energy projects in Newfoundland.
- Together we possess a diversity of project development experiences and extensive knowledge of Canadian renewable markets that incorporates local ownership and representation into successful community supported projects.



ELEMENTAL ENERGY PORTFOLIO



OPPORTUNITY FOR HIGGINS WIND

- In Spring 2022 Higgins Wind submitted a proposal to build a 100 MW wind energy project in response to the Nova Scotia's competitive Rate Based Procurement to source renewable energy for Nova Scotians.
- Purpose of the Rate Based Procurement call for power is to support Nova Scotia with its goal of achieving a 53% reduction in GHG emissions by 2030 and achieving net-zero GHG emissions by 2050.
- In August 2022 the Higgins Wind project was picked as a successful project and awarded a power purchase agreement (PPA) to feed renewable energy into Nova Scotia's Power's electricity grid.



HIGGINS WIND PROJECT OVERVIEW

Ideal Site for Wind Energy



Strong and proven wind resource

Among the windiest onshore sites in Nova Scotia enabling a competitive power price.



Making use of existing infrastructure

Close proximity to existing transmission lines with available capacity. Project designed to utilize existing roads and disturbance areas (gravel pits) to site project infrastructure.



Large setbacks from occupied residences

large property allows for turbines to be >2 km from occupied dwellings which are among the largest setback distances in the province.

Project Designed to Fit into the Existing Environment



Use of a previously disturbed site for Project

Project sited to make use of previously logged areas and access roads minimizing new disturbance areas.



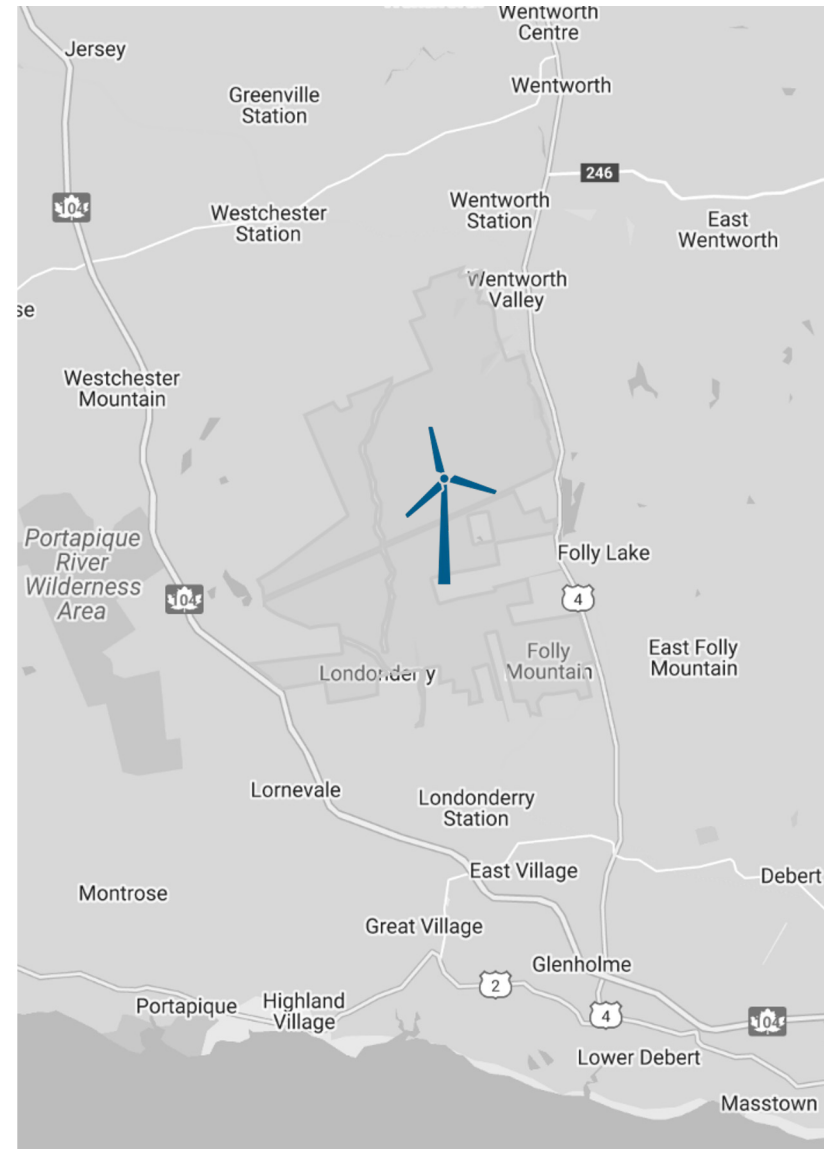
Results from environmental surveys used to refine project design

Environmental and MEKS studies have been underway since 2020 from which the results have informed environmental design constraints and project layout.



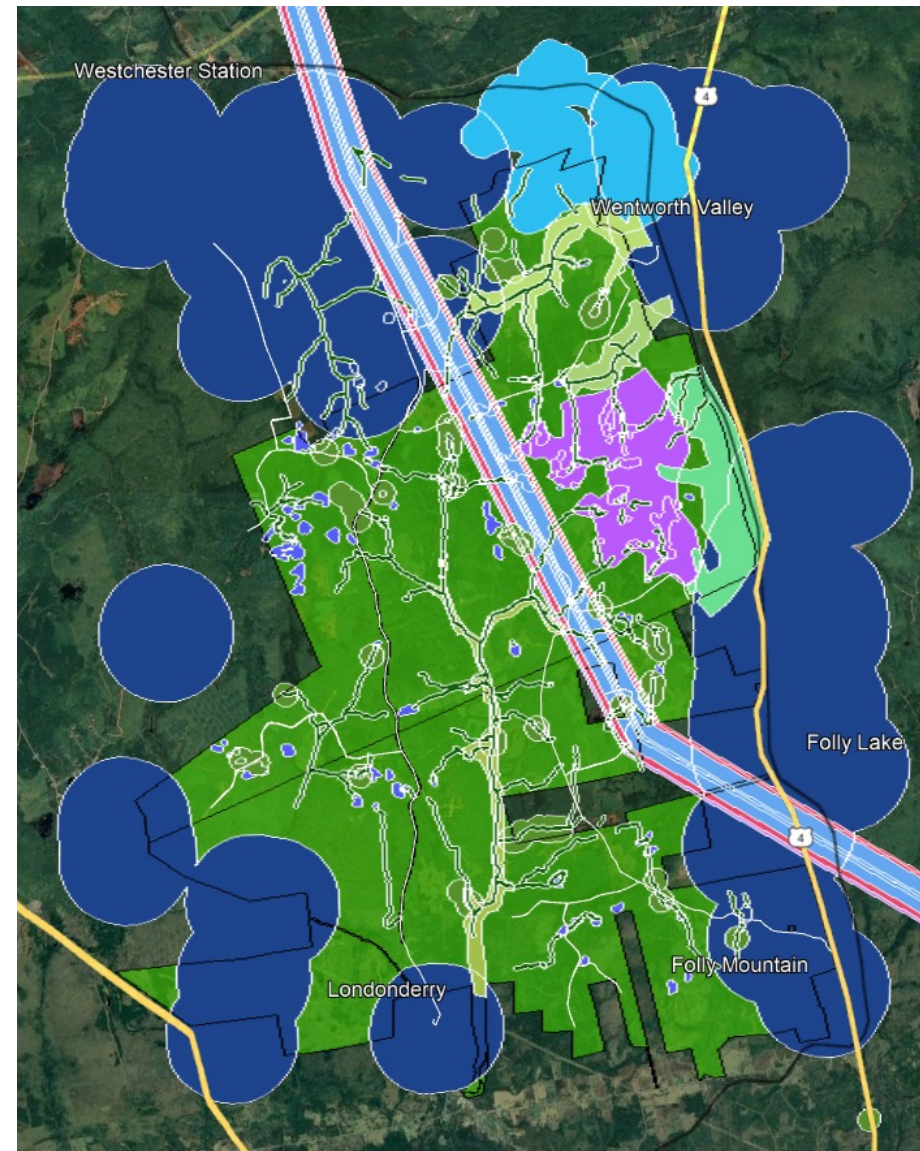
Minimize visual impact of Project

Turbines strategically placed to minimize/eliminate visual impacts from sensitive viewpoints raised by residents and community stakeholders



PROJECT DESIGN APPROACH

- Identify of developable lands and project area by overlaying development constraints against available land.
- Development constraints were informed by desktop studies, environmental field work and industry best practice setbacks for siting wind farms.
- Identified environmental constraints and other setbacks that informed the potential developable project area included:
 - Residential setbacks (dark blue)
 - Hostel trail setbacks (light blue)
 - Important moose habitat area (purple)
 - Talus slopes (mint green)
 - Lichens (green with white outline polygons)
 - Wetlands and watercourses (blue + yellow)
 - Power line (light blue)

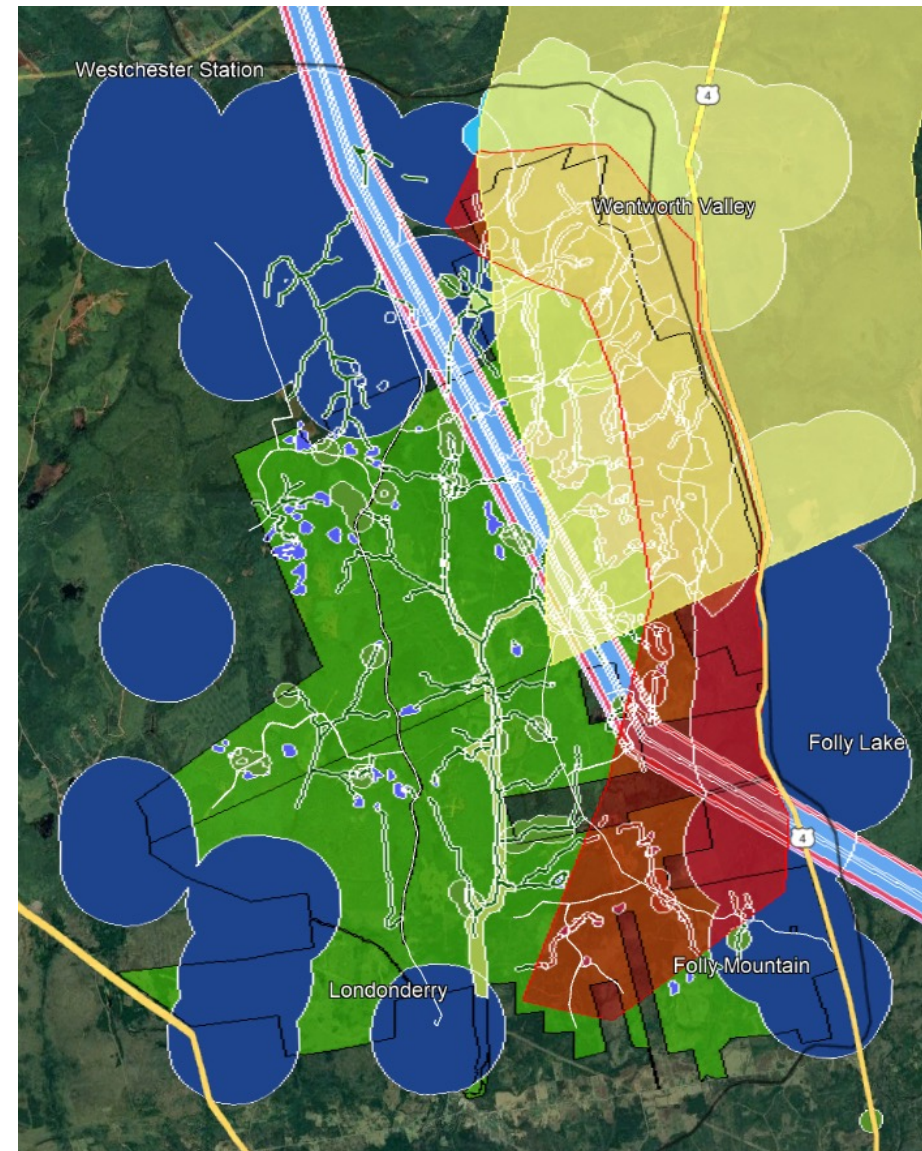


VISUAL ASTHETIC PROJECT SETBACKS

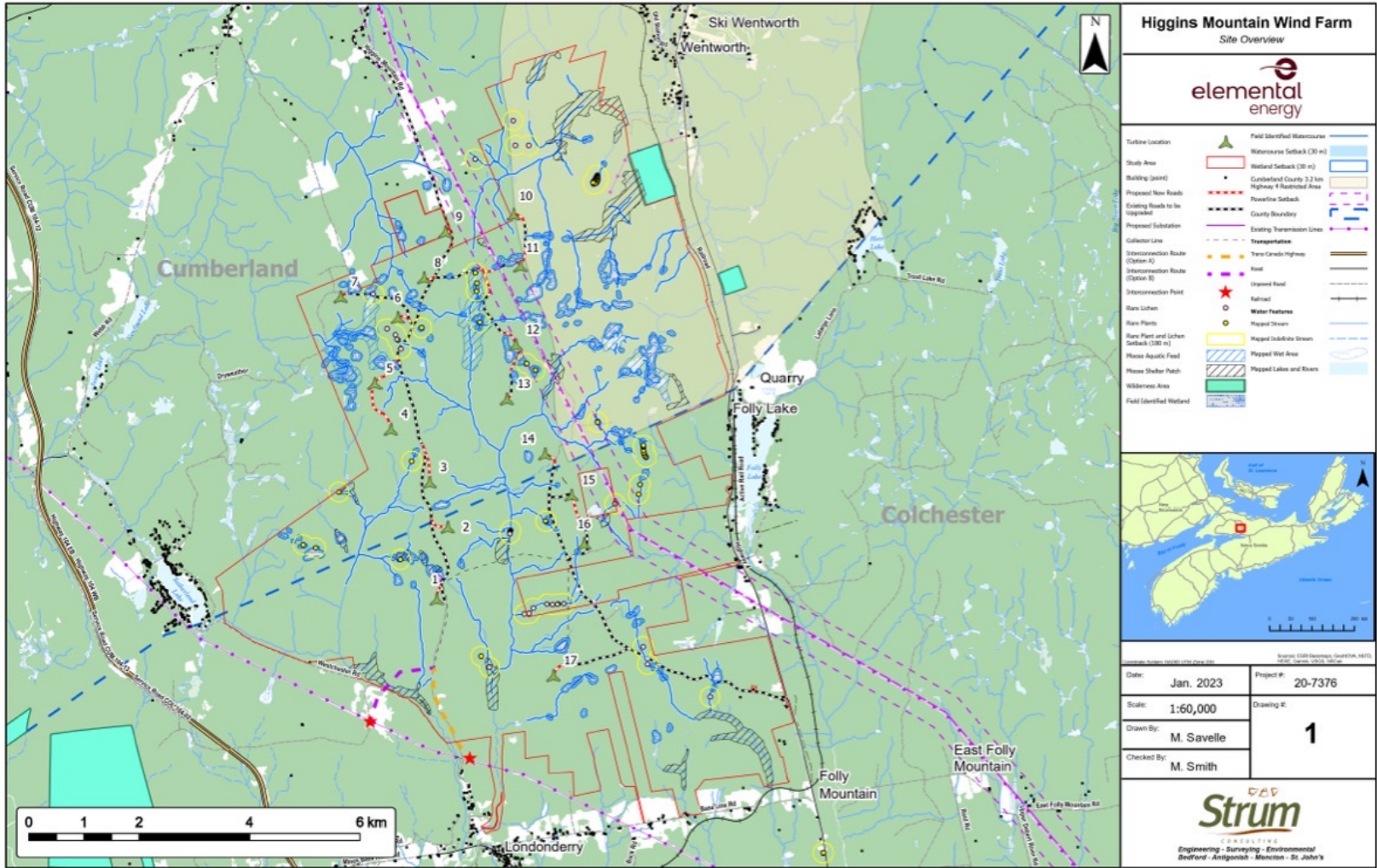
It was communicated through engagement activities that protection of naturalized views was important to residents, tourists and visitors to the Wentworth Ski Hill. Protection of naturalized views was achieved through the application of the following setbacks:

- **Zone of Visual Impact (red)** – a commitment made to the community at the last Open House in late 2021, to avoid siting turbines in visually impactful locations identified by the community
- **Cumberland Wind Turbine Restricted Overlay (yellow)** – a setback that was negotiated between Higgins Wind and the community, and adapted in the revised county bylaw and municipal planning strategy.

These design considerations and constraints have informed the current project layout that will be carried through environmental assessment and permitting.



HIGGINS WIND PROJECT LAYOUT – MARCH 2023



DEVELOPER RESPONSIVE TO COMMUNITY INTERESTS AND VALUES

Community engagement informs our approach and design of Projects

Work with the community and stakeholders to identify opportunities to meet and methods to which they would like to be engaged on the project:

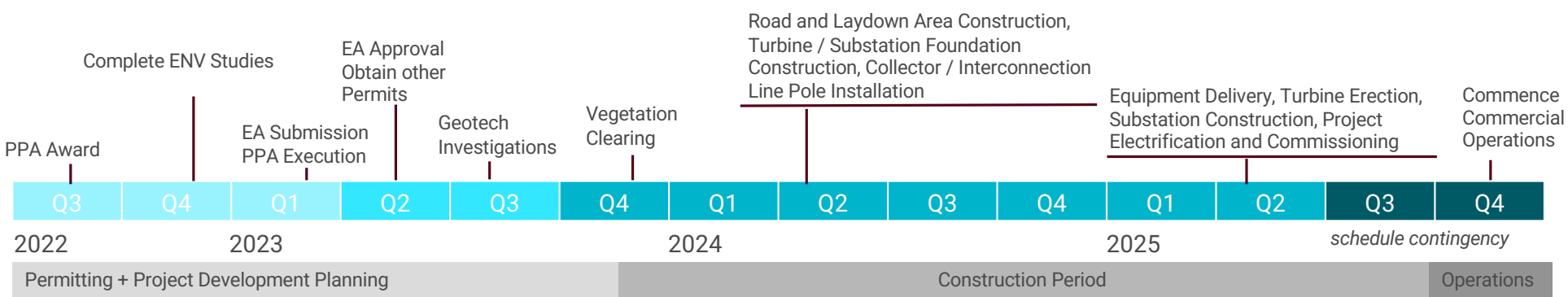
- Community Liaison Committee and Project open house meetings
- 1 on 1 meetings with community groups, individuals, local businesses and landowners
- Meetings with municipal government staff as well as mayor and council
- Maintain project website with latest project information

Areas of interest raised through community engagement activities

- **Impacts to quality of life and health** – visual impacts, noise impacts and shadow flicker
- **Impacts to land use and values** – recreational activities (trails and hunting), tourism, cultural activities and land values
- **Impacts to Flora and Fauna** – impacts to mainland moose, species of conservation interest, old forest, habitat fragmentation, and impacts to aquatic habitats associated with wetlands and creeks

PROJECT SCHEDULE + MILESTONES

- ☒ Elemental joined Higgins Wind as a development partner in 2017 and project began engagement with Mi'kmaq First Nations.
- ☒ Community Liaison Committee (CLC) established in 2019 to enable two-way communication with local stakeholders. The CLC has met 16 times since it was formed; with meetings occurring 3-4 times each year and / or when new project information becomes available .
- ☒ Sipekne'katik joined Higgins Wind 2022;development partner in Q2 2022 and Higgins Wind submitted a project proposal to the Nova Scotia Rate Base Procurement in May 2022. Higgins Wind awarded 100 MW PPA in August 2022.
- ☒ Environmental field work completed in November 2022; project layout / design finalized for environmental assessment.
- ☒ Environmental Assessment registered in March 2023. Other permits and authorizations being prepared for Spring 2023 submission.
- ☐ Project construction slated to begin late 2023. Construction period will last two construction seasons (2024 – 2025)
- ☐ Project commissioning with commercial operations commencing in late 2025.



HIGGINS WIND PROVIDING MEANINGFUL BENEFITS



GHG REDUCTIONS

Offset **~200,000 tCO₂e/year** of coal-fired generation in Nova Scotia in first year of operations.



LOW-COST ELECTRICITY

Low-cost, fixed price clean electricity for the Province of Nova Scotia.



EMPLOYMENT

~100 jobs created during construction and **~12 full time jobs** throughout operations.



LOCAL CONTRACTING

Project proponents have a track record of hiring local contractors.



TAX REVENUE

~\$800,000 per year will go to the municipalities in property taxes which escalates annually.



COMMUNITY INITIATIVES

Committed to establishing a **~\$100,000** per year community benefit fund.



CAPACITY BUILDING

Comprehensive capacity building plan with Sipekne'katik First Nation including employment, contracting, O&M jobs and business mentorship.



EDUCATION

Education and training events planned. Capacity building agreement includes annual bursaries to Sipekne'katik First Nation.





Dan Eaton
Director of Project Development
Elemental Energy
deaton@elementalenergy.ca

Trent MacDonald
Project Manager
Elemental Energy
tmacdonald@elementalenergy.ca

Jon Turner
Development Consultant
Elemental Energy
jturner@elementalenergy.ca

