



High Bridge Wind Project

Virtual Public Information Meeting

September 16, 2020



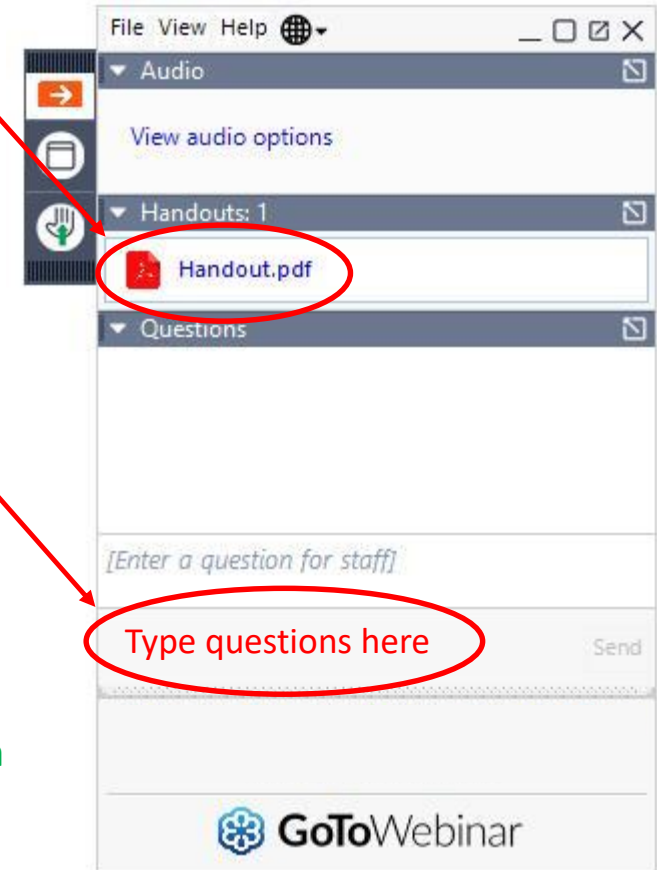
HIGH BRIDGE
WIND FARM

Welcome!

Technological Housekeeping



- Technical assistance handout available in GoToWebinar access panel.
- Presentation will be approximately two hours and will be recorded.
- We will break to address questions in the middle of the presentation and at the end of the presentation.
- To post a question during the Q&A session, utilize the “Questions” section in your GoToWebinar panel.
- If you’re unable to post a question using the GoToWebinar panel, please send questions to erin@innovantpr.com
- Watch video recording of virtual presentation on project website and let us know of any additional questions.
- Contact information is on the bottom right of the screen throughout the presentation.
- If at any time you require IT support, please contact GoToWebinar:
 - URL: <https://support.goto.com/webinar?labelid=4a17cd95>
 - Chat Support: <https://support.goto.com/webinar#856-299>
 - Toll Free Phone: +1(833) 851-8340



Presentation Agenda



1. Background

2. Introductions

- Northland Development Team
- Supporting Partners

3. Overview of Northland Power

4. Initial Questions

5. Article 10 Process

- Overview
- Application Supplement
 - Address comments from NYSDPS
 - Compliance with local laws
 - Facility design updates
- Current Status (Adjudicatory Phase)
- Next Steps

6. Final Question and Answer Session



- **High Bridge Wind has held multiple public information sessions to keep the Town of Guilford and local residents updated on the project over the last few years.**
 - July 2019 presentation, just prior to the filing of the Application.
 - High Bridge Wind also held a public open house at its new local office in October 2019. Project representatives were available throughout the day to provide information and answer questions from the public.
- **This virtual meeting is intended to contribute to High Bridge Wind’s public involvement program and will:**
 - Introduce the new owner of the Project,
 - Provide updates on the Project status,
 - Outline the next steps in the Article 10 process, including the upcoming Recommended Decision and Siting Board Certificate Order, and
 - Provide an opportunity for members of the public to ask questions about the Project.



Introductions

Northland Development Team



Chris Stanton
Project Manager,
Northland Power, Inc.



Michelle Chislett
Managing Director,
Northland Power, Inc.



Paul Kaminski
General Manager,
Construction, Americas
Northland Power, Inc.



Jeffrey Nemeth
Director, Development,
Northland Power, Inc.

Introductions

Supporting Partners



James Muscato
*Partner,
Young Sommer, LLC*



Laura Darling
*Associate,
Young Sommer, LLC*



Erin Szalkowski
*Principal,
Innovant Public Relations, LLC*



Greg Liberman
*Associate Principal,
EDR*



Daniel Zvirzdin
*Senior Environmental Analyst,
EDR*



Erica Tauzer
*Project Manager,
EDR*

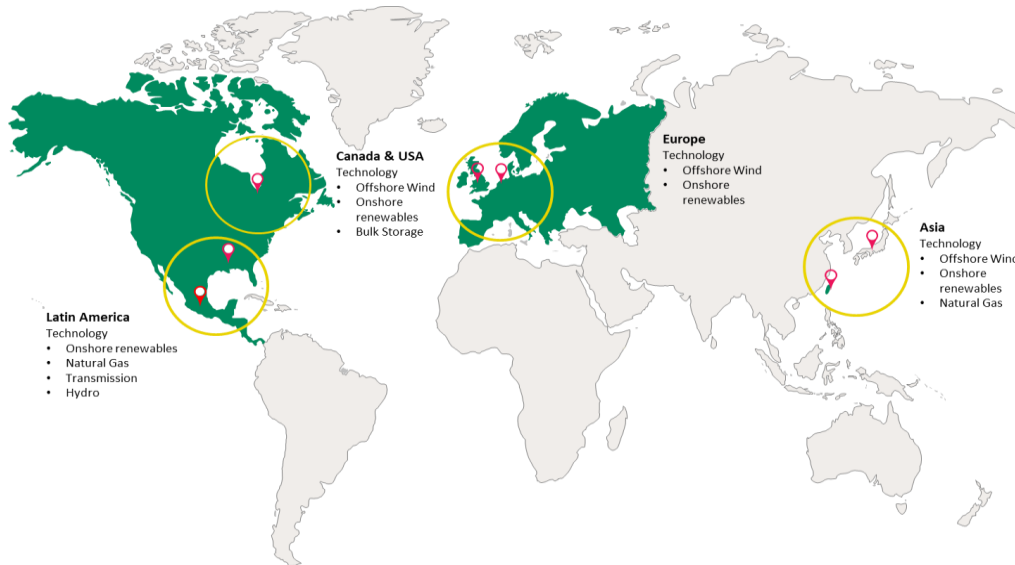


NORTHLAND TODAY

The evolution of Northland Power

- **Global** developer, owner and operator of **sustainable infrastructure assets**
- **Market Capitalization** of approx. CAD\$7.7BB; **Enterprise Value** of approx. CAD\$14BB
- **Over 30 years of successfully** developing, constructing and operating power projects over full lifecycle
- Well-diversified, **modern fleet** of high-quality assets
- **Power Generating Assets:** 2.6+ GW global operating fleet
- **2,700+ MW** of visible renewable power projects pipeline (development + construction)
- **Utility:** Regulated utility servicing 480,000 customers in Latin America
- **Significant development opportunities** across multiple jurisdictions and technologies

Multiple development opportunities across countries and across technologies



NORTH AMERICA

Mature markets for renewables and thermal
Opportunity for bulk storage

EUROPE

Significant offshore wind presence with three projects
Further potential for additional offshore development opportunities across continent

LATIN AMERICA

Markets for renewables and thermal
Qualified supplier/power marketing
Transmission and storage

ASIA

Significant potential for renewables across region
Offshore wind industry in its infancy but has substantial potential

Northland Offices (Toronto, Mexico City, Houston, London, Hamburg, Taipei, Seoul)

Northland by the Numbers



60%

of Power Generation from Green Energy*



95%

Annual Operation Availability



2.4+

Gigawatts in Operation



\$72

Million in Employee Wages and Benefits



320

Employees as of December 2018



0

Days Lost due to Injury or Death

Diversified Asset Portfolio



Technology:

- Offshore Wind ●
- Onshore Wind ●
- Solar ●
- Thermal ●

Total Capacity (Gross)^{1,2}

Operating

Under Construction & Development

Offshore Wind	1,184 MW	~2,600 MW
Onshore Wind	394 MW	324 MW
Solar	130 MW	130 MW
Thermal	973 MW	-
Total Capacity (Gross)^{1,2}	2,681 MW	~3,050 MW

Northland Power owns and operates 2.6 GW of power assets globally

Initial Questions?



Project website: NorthlandPower.com >> What we do >> Development Projects >> Wind >> High Bridge Wind

Project email: HighBridgeWind@NorthlandPower.com

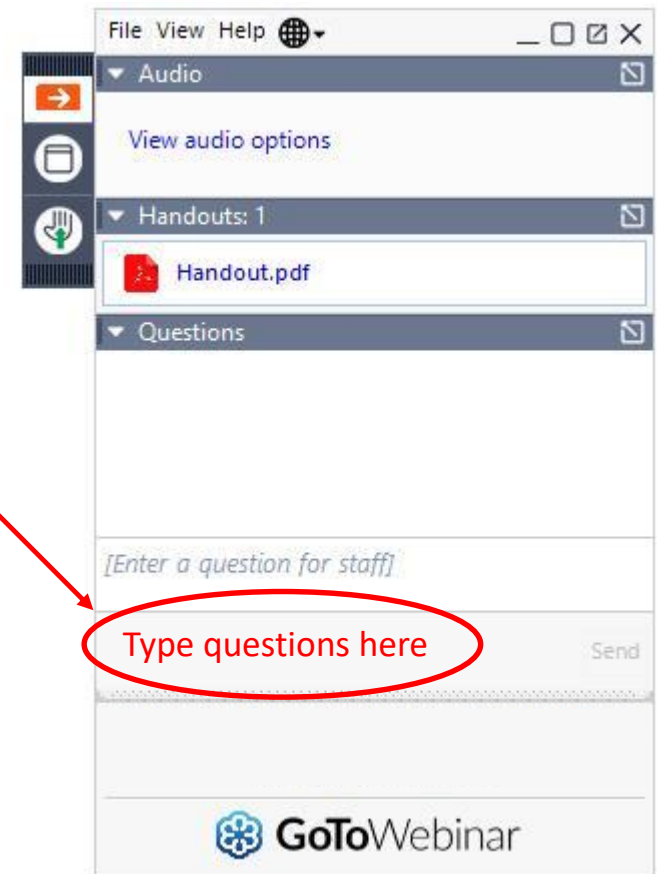
Project Facebook page: High Bridge Wind Project

Office address: 125 Marble Road in Guilford

Office phone number: (607) 226-9004

To post a question, utilize the “Questions” section in your GoToWebinar panel.

If you’re unable to post a question using the GoToWebinar panel, please send questions to erin@innovantpr.com.



Article 10 Process

Application Timeline



Milestone	Date
Public Involvement Program (PIP) Plan	April 27, 2018
Preliminary Scoping Statement (PSS)	January 24, 2019
Application	August 12, 2019
Deficiency Letter from NYS Siting Board	October 11, 2019
Application Supplement	January 17, 2020
Application deemed complete by the NYS Siting Board	March 16, 2020
Notice of Settlement Negotiations	June 8, 2020
Settlement on Certification Conditions (with exceptions)	July 13, 2020
Direct Testimony	July 13, 2020
Rebuttal Testimony	August 3, 2020
Initial Briefs	October 02, 2020
Reply Briefs	October 16, 2020
Recommended Decision	November 2020 (expected)
Certificate Order	March 2020 (expected)

Current Status



Article 10 Process

Application and Supplement Materials



- **Paper copies – available at local repositories**

- Guilford Town Hall
- Guernsey Memorial Library
- Oxford Memorial Library
- Gilbertsville Free Library

- **Electronic copies – available online**

- Department of Public Services Document and Matter Management (DMM) website

<http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterSeq=56497&MNO=18-F-0262>

- Applicant's website

<https://www.northlandpower.com/What-We-Do/Development-Projects/Wind/High-Bridge-Wind.aspx>



Article 10 Process

Application Supplement



The layout of the Facility, the Application, and supporting Appendices and Figures were updated to:

- Address comments from the NYSDPS;
- Ensure compliance with Town of Guildford’s Local Law No. 3 of the year 2019, entitled “Renewable Energy Systems Local Law and Road Use and Preservation Law (Local Law 4 of 2019) on October 9, 2019;” and
- Further progress the design of the Facility.

The Application Supplement included:

- Updates to 18 out of the original 41 exhibits;
- Three new figures, including a layout comparison map and a steep slopes map;
- Updates to 11 other figures;
- Five new appendices, including permanent met tower drawings, the Phase 1B Report, and copies of the Town’s newly adopted local law; and
- Updates to 8 other appendices.

The Application Supplement did not propose any changes to the number of turbines (25) or the total nameplate capacity of the Facility (100.8 MW).

Article 10 Process

Application Supplement



1. Addressed NYSDPS Comments on the Application

- Only 17 comments were received.
- Comments generally requested that High Bridge Wind provide supplemental data, information, or clarification needed for NYSDPS and other State agencies to complete their analyses (e.g., construction hours, stump disposal methods, mitigated noise data, etc.).

2. Ensured compliance with Town of Guildford's newly adopted Local Law

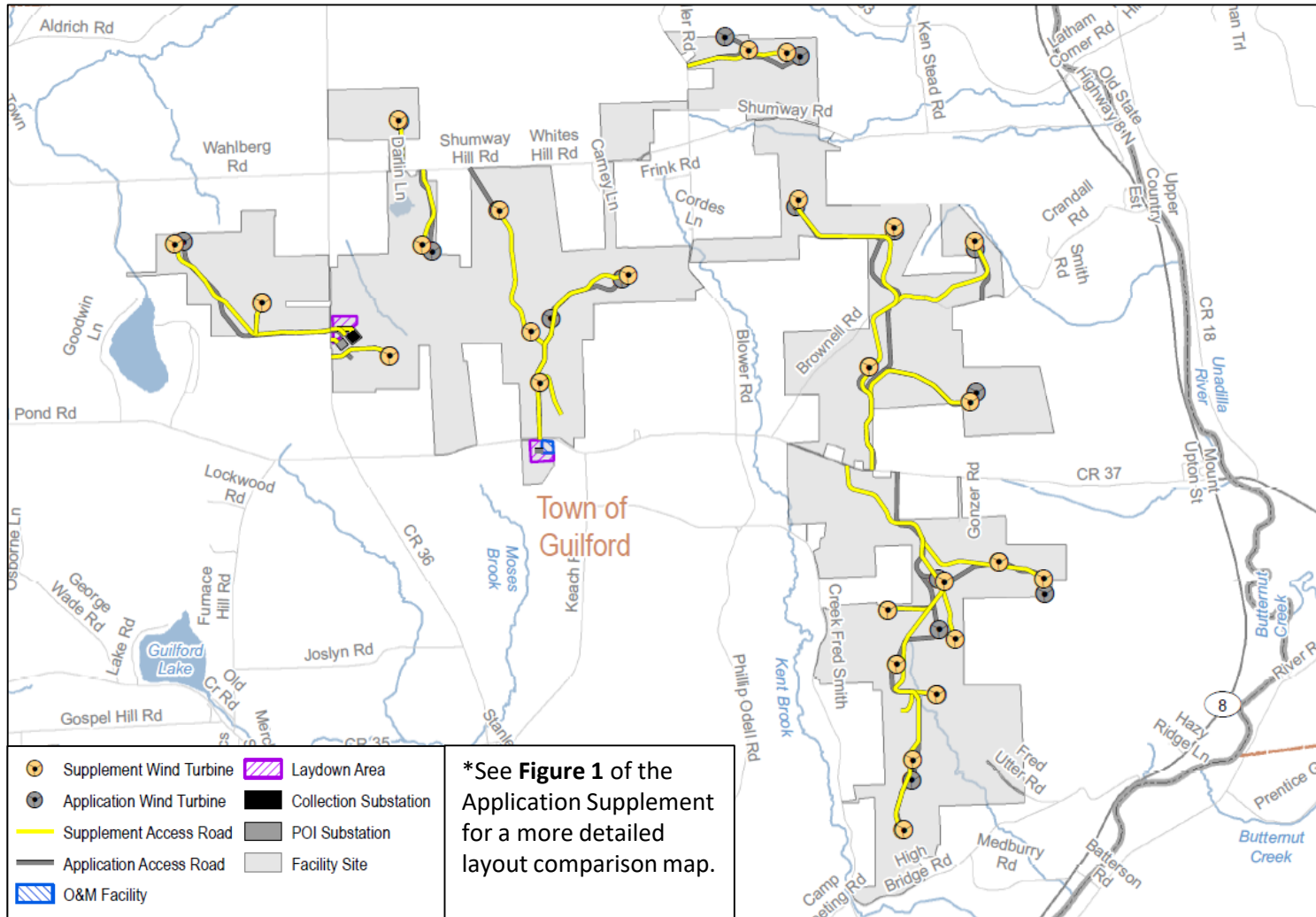
3. Further progressed the design of the Facility



Most of the Supplement was dedicated to ensuring compliance with the Town of Guilford's new law, reducing impacts, and improving constructability.

Article 10 Process

Application Supplement



Article 10 Process

Application Supplement - Facility Design Updates



Turbines – 18 turbines were shifted

Turbine	Shift (feet)	Direction	Reason
T101	268	West	Wetland impact avoidance
T104	255	Northwest	Compliance with local law
T105	34	Northwest	Compliance with local law
T106	47	West	Compliance with local law
T112	830	Southeast	Compliance with local law
T113	419	West	Compliance with local law and Steep slope impact avoidance
T115	229	North	Compliance with local law
T117	79	North	Compliance with local law
T118	221	North	Compliance with local law
T121	341	Southwest	Steep slope impact avoidance
T123	706	Southwest	Wetland impact avoidance and Steep slope impact avoidance
T124	208	East	Compliance with local law
T126	194	East	Compliance with local law
T128	450	North	Compliance with local law
T129	574	Southeast	Design Improvement
T133	20	West	Design Improvement
T134	604	North	Wetland impact avoidance and Design improvement
T135	52	Southeast	Design Improvement



Article 10 Process

Application Supplement - Facility Design Updates



Turbine Setback Requirements – The most conservative setbacks (highlighted) will be followed.

Feature	Setback		
	Applicant	Town of Guilford	Manufacturer
Drinking Water Well	100 feet	100 feet	None
Gas Well	None	None	None
Natural Gas Pipeline	1.25x Tip Height (839 feet)	None	1.1x Blade Length (285 feet)
Non-Participating Parcel	1.25x Tip Height (839 feet)	1.25x Tip Height (839 feet)	1.1x Blade Length (285 feet)
Non-Participating Residential Struct.	1.5x Tip Height (1,007 feet)	1,500 feet	1.1x Tip Height (738 feet)
Non-Residential Non-Participating Building	1.25x Tip Height (839 feet)	1.5x Tip Height (1,007 feet)	1.1x Blade Length (285 feet)
Other Wind Turbines	None	None	None
Overhead Utilities (i.e. electric distribution, communications)	None	None	None
Participating Residential Structure	1.5x Tip Height (1,007 feet)	None	1.1x Tip Height (738 feet)
Public Road	1.25x Tip Height (839 feet)	1.5x Tip Height (1,007 feet)	1.1x Tip Height (738 feet)
Private Road	None	None	1.1x Tip Height (738 feet)
State Land	1.25x Tip Height (839 feet)	None	None
Substation	1.25x Tip Height (839 feet)	None	1.1x Blade Length (285 feet)
Transmission Line (i.e., Power Line)	1.5x Tip Height (1007 feet)	None	1.1x Tip Height (738 feet)
NYSDEC Wetlands	100 feet	None	None
Sensitive Site (as defined in the Town of Guilford Local Law)	None	1,500 feet	None

Article 10 Process

Application Supplement - Facility Design Updates



Access Roads – Total length increased by 1 mile

- Reduced Impacts to wetlands
- Limited work on steep slopes
- Minimized Grading
- Optimized turbine delivery routes

Collection Lines – Corridor length reduced by 1 mile

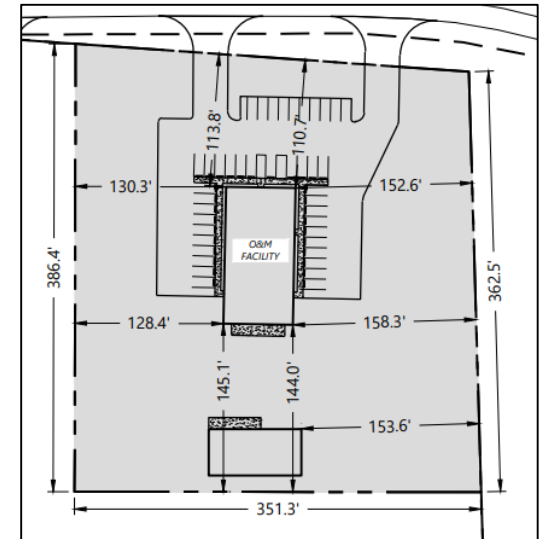
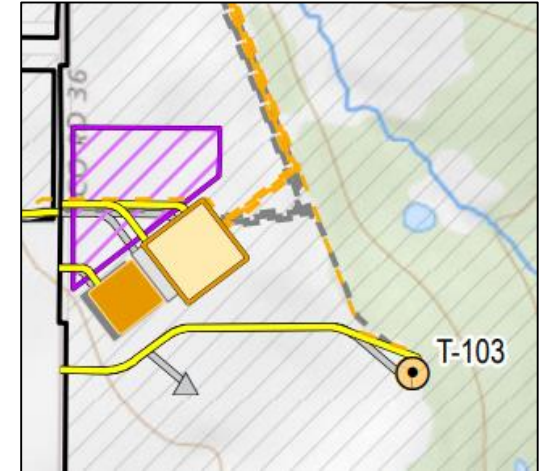
- Installation process simplified
- Reduced impacts to wetlands, streams, and stone features

Collection and POI Substations

- Shifted east to comply with local law setbacks
- New temporary laydown yard added north of substations for turbine component staging

O&M Facility

- Shifted west to comply with local law setbacks



Article 10 Process

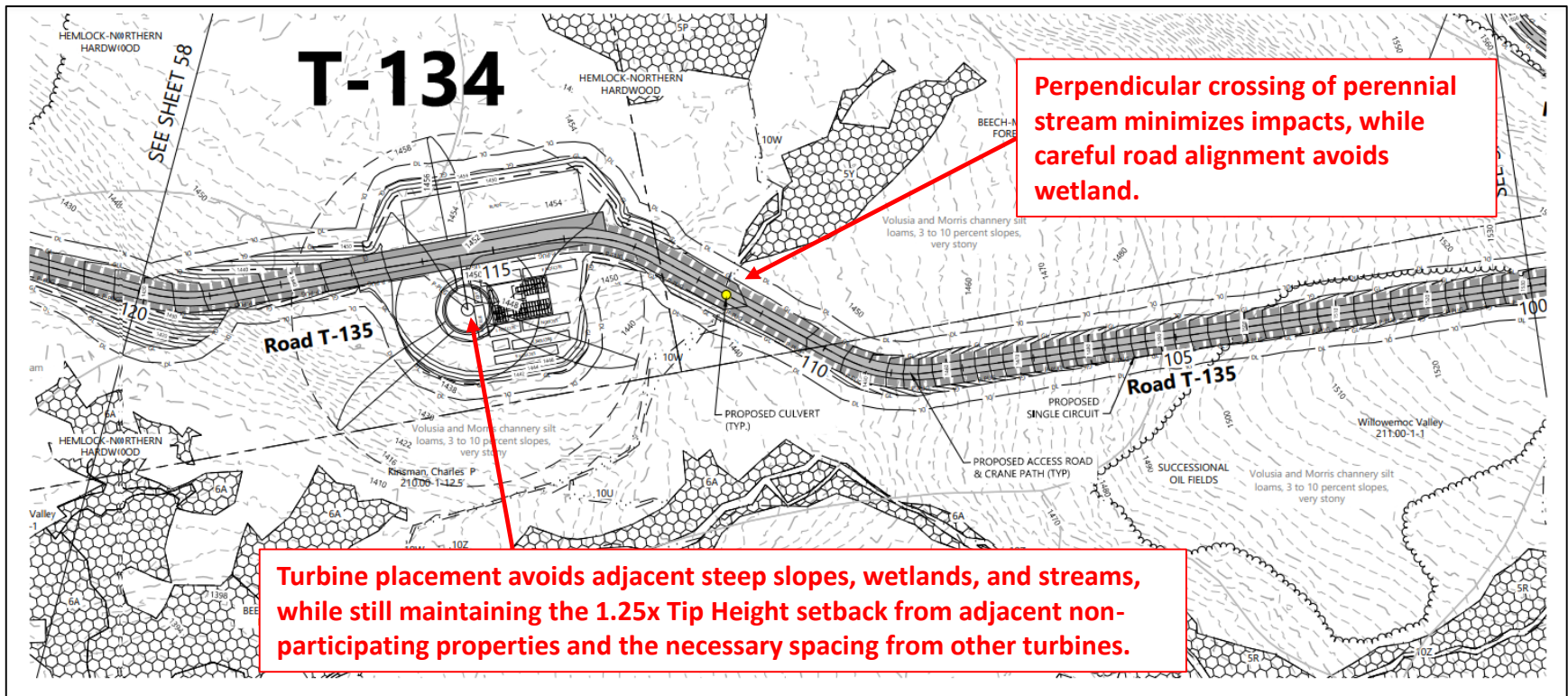
Application Supplement



To Support These Facility Design Updates:

Updated Design Drawings

- Updated drawings show compliance with the local law and provide other details requested by the agencies and Town.



Article 10 Process

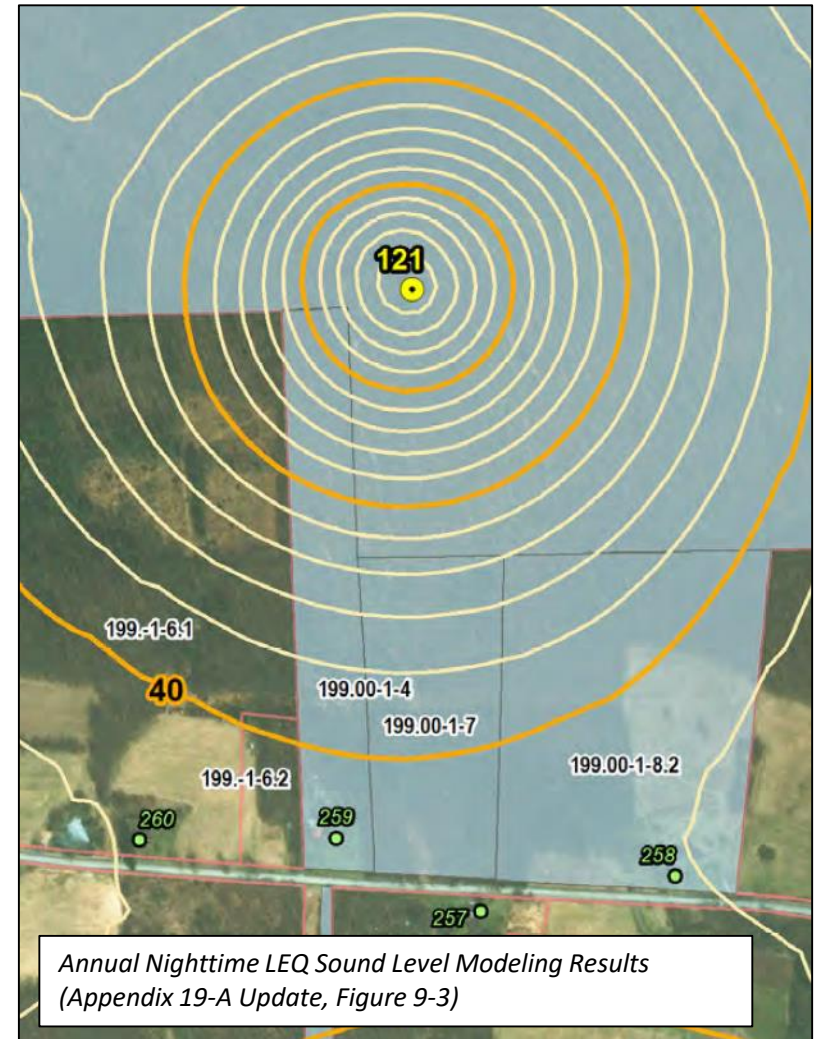
Application Supplement



To Support These Facility Design Updates:

Revised Sound Modelling

- The Final Facility design will meet all noise standards required by the State and the Town. Throughout the final design process, the layout will be optimized with consideration to these standards to ensure compliance.
 - 40 dBA $L_{(night-outside)}$ = Non-participating residence
 - 45 dBA $L_{eq(8-hour)}$ = Non-participating residence
- Noise Reduction Operation (NRO) will be used, as needed, to help achieve this goal.
 - The scenario with the greatest sound impacts (i.e., the loudest turbine) was modeled in the Supplement; under this scenario the updated layout will require NRO to be applied to 4 turbines (T105, T106, T131, and T134) to meet noise design goals.
 - Depending on the turbine selected for this project, NRO may not be required to meet the required sound standards.



Article 10 Process

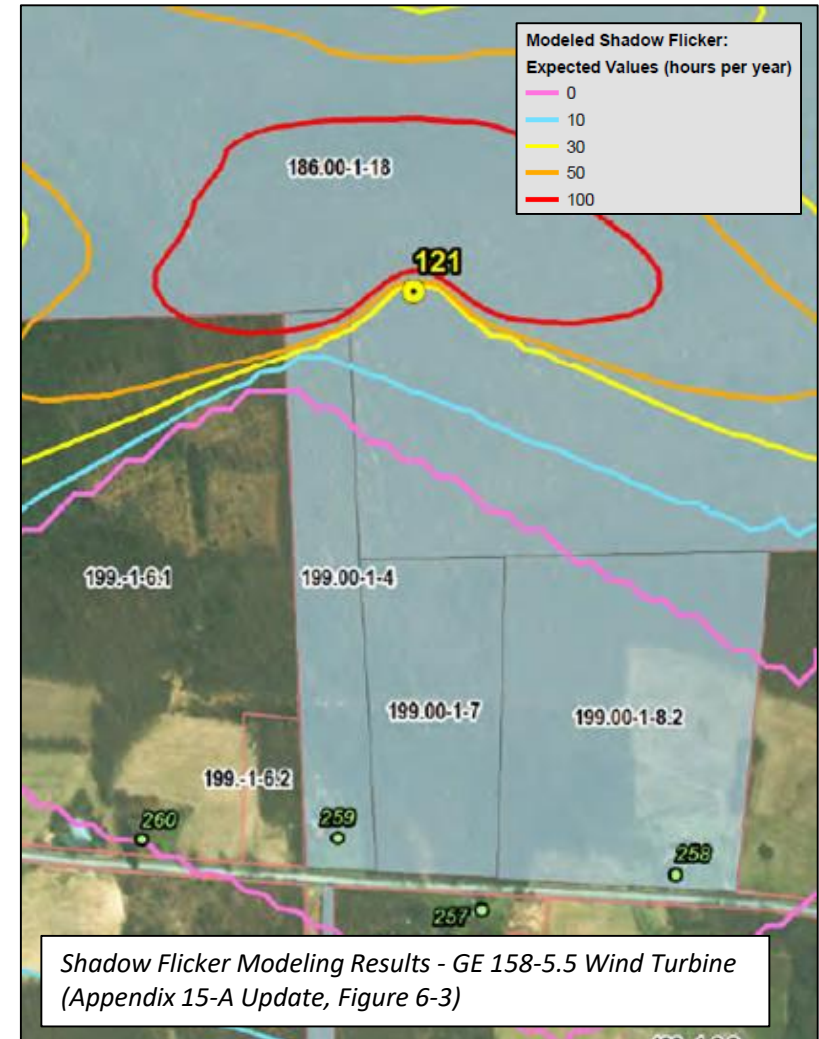
Application Supplement



To Support These Facility Design Updates:

Revised Shadow Flicker Modelling

- Preliminary shadow flicker modeling indicates shadow flicker could potentially exceed the design goal of 30 hours per year at 9 non-participating residences.
 - This modeling is preliminary and is based on several worst-case assumptions (i.e., the model does not account for trees, buildings, or other visual obstructions and it assumes each residence has a window directly facing the wind turbine potentially causing shadow flicker).
- The Final Facility design will meet all shadow flicker standards required by the State and the Town.
 - ≤ 30 hours annually at any non-participating residence, school, busines, or other occupied building.
- Throughout the final design process, the layout will be optimized, and operational controls will be implemented to ensure compliance.



Article 10 Process

Application Supplement

To Support These Facility Design Updates:

Updated Wetland and Stream Impact Drawings

- The updated Facility design has reduced wetland impacts by 43% and stream impacts by 35%.

Steep Slopes Analysis

- To address concerns raised by the agencies and the Town, High Bridge Wind conducted further analyses to review potential impacts associated with siting Facility components on or near steep slopes.
- The updated layout substantially reduces work on steep slopes and reduces the amount of grading that will be needed to construct the Facility.
- With the application of the best management practices outlined in the Application, no impacts to groundwater or surface waters are anticipated.

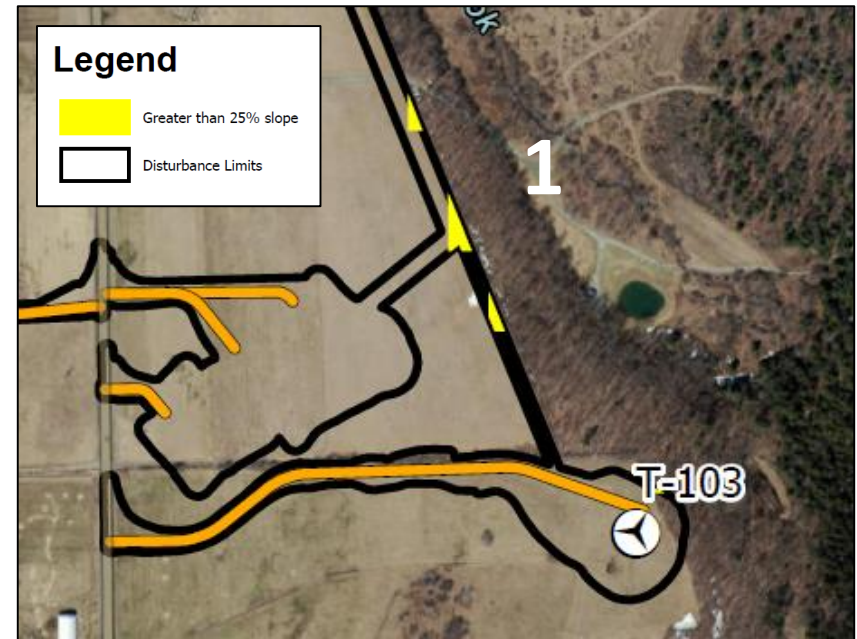


Table 21-2. Potential receptors located down grade from constructions in steep slope areas.

Location ID	Approximate Distance to Nearest Receptor	Receptor(s)	Construction Activity and Potential Impact
1	300 feet	Stream 7F (Moses Brook, a NYSDEC Class C Stream)	Work at this location will consist of collection line installation and trenching. The Applicant will install trench plugs and/or breakers and backfill trenches in a continuous operation to minimize and avoid adverse impacts to down gradient receptors. These practices will minimize potential risks to water quality for this receptor.

Article 10 Process

Application Supplement

To Support These Facility Design Updates:

Updated Visual Impact Analysis

- Facility design updates are generally minor from a visual standpoint and would not affect the conclusions reached in the Visual Impact Assessment included in the Application.



Article 10 Process

Application Supplement



To Support These Facility Design Updates:

Revised Exhibit 31 (Local Laws)

- Exhibit 31 was fully updated to provide a comprehensive assessment of the Facility's compliance with recently adopted local laws.
 - Wind Turbine and Ancillary Facility (e.g., substations, O&M buildings, etc.) Setbacks
 - Design Standards
 - Facility component siting to minimize impacts to sensitive resources (e.g., microwave transmission)
 - Minimized lighting of the turbines and support buildings (with consideration to FAA standards)
 - Blade ice formation detection requirement
 - Turbine size, coloration, and design requirements
 - Shadow Flicker Standards (≤ 30 hours annually at non-participating residences)
 - Turbine Noise Standards ($\leq 45 L_{eq(8-hour)}$; $\leq 40 L_{(night-outside)}$ at non-participating residences)
 - Support Building Noise Standards ($\leq 40 L_{eq(1-hour)}$ at non-participating residences)
 - Environmental Impact Minimization Requirements
 - Visual impact minimization (e.g., landscaping requirements for support buildings)
 - T&E species considerations
 - Underground collection lines
 - Groundwater Protection
 - No blasting within 500 feet of non-participating wells
 - Non-participant well testing for all areas within 1,000 feet of blasting
 - Decommissioning Requirements

Article 10 Process

Current Status (Adjudicatory Phase)



1. Issues

- Parties (i.e., State agencies, the Town of Guilford, and other groups with a stake in the Project) filed Issues Statements on April 24, 2020
- These statements identified the primary issues that the parties were seeking to resolve with High Bridge Wind.

2. Settlement

- Proposed Certificate Conditions filed by High Bridge Wind – June 8, 2020
 - 137 Conditions setting forth compliance filings and additional plans which must be provided to the Siting Board for public comment and approval by the Board prior to construction.
- Negotiations to Resolve Issues (Virtual) – June 25, 2020.
 - High Bridge Wind worked with the Town of Guilford and other parties throughout the summer to resolve issues raised in party issues statements, including:
 - Decommissioning
 - T&E species
 - Noise
 - Agricultural impacts
- Final Settlement Proposal
 - Signed by State agencies – Late July 2020
 - Signed by the Town of Guilford – August 14, 2020

A10 Process

Next Steps



- 1. Briefing Period**
- 2. Recommended Decision**
 - Issued by the Administrative Law Judges (ALJs) that preside over this case.
 - Anticipated November 2020.
- 3. Certificate Order**
 - Issued by the New York State Board on Electric Generation Siting and the Environment (Siting Board)
 - Will include specific Conditions High Bridge Wind will need to comply with in order to be approved to construct the Project.
 - Anticipated by March 16, 2021, at the latest.
- 4. Compliance Filing Phase**
 - High Bridge Wind will complete all design work and submit final Facility design drawings and details.
 - All other required compliance filings will be filed, reviewed by the appropriate agencies, and approved following any required revisions.
- 5. Notice to Proceed with Construction**
 - Issued by the Siting Board Secretary or the Chief of the Environmental Certification and Compliance Section of the DPS Office of Electric, Gas and Water.
- 6. Start of Construction**
 - Start of construction anticipated in summer 2021.

Question and Answer Session



Project website: NorthlandPower.com >> What we do >> Development Projects >> Wind >> High Bridge Wind

Project email: HighBridgeWind@NorthlandPower.com

Project Facebook page: High Bridge Wind Project

Office address: 125 Marble Road in Guilford

Office phone number: (607) 226-9004

To post a question, utilize the “Questions” section in your GoToWebinar panel.

If you’re unable to post a question using the GoToWebinar panel, please send questions to erin@innovantpr.com.

