NI TI MOUNTAIN WIND PROJECT

Project Description

Energy Resource Activities Act Permit Application

November 2026



Table of Contents

1.0 Project Overview 1
2.0 Project Rationale 6
2.1. Purpose of the Project 6
2.2. Project Benefits 6
3.0 Project Information 8
3.1. Project Siting 8
3.2. Project Components 10
3.2.1. Turbines 10
3.2.2. Turbine Foundations and Crane Pads 11
3.2.3. Access and Maintenance Roads 11
3.2.4. Overhead and Buried Collector Lines 12
3.2.5. Project Substation 12
3.2.6. Transmission Line 13
3.2.7. Temporary Construction Areas 13
3.2.8. Permanent Support Infrastructure 13
3.3. Project Activities 13
3.3.1. Construction 14
3.3.2. Operations 16
3.3.3. Decommissioning 16
3.4. Project Schedule 16
4.0 Indigenous-Led Assessments 17
5.0 Legislative and Regulatory Context 18
5.1. Energy Resource Activities Act Permit 18
5.2. Other Authorizations 22
5.2.1. Federal Considerations 22
5.2.2. Provincial Considerations 22
5.2.3. Local Government Considerations 25

5.2.4. Third-Party Considerations 25

List of Figures

Figure 1-1 Project Overview 3
Figure 1-2 Project Overview – Operating Area 4
Figure 1-3 Project Overview – Transmission Line 5
Figure 3-1 Schematic of an Industry Standard 3-Blade Turbine 10

List of Tables

Table 3-1: Project Phases and Timing 17
Table 5-1: Permits Anticipated under the ERAA application 19
Table 5-2: Anticipated Federal Permits, Licenses, and Approvals 23
Table 5-3: Other Anticipated Provincial Permits, Licenses, and Approvals 24
Table 5-4: Anticipated Local Government Permit, Licenses, and Approvals 25

1.0 Project Overview

The Ni Ti Mountain Wind Project (the Project) is a 200-megawatt Indigenous-majority-owned wind energy project being developed by Ni Ti Mountain Power General Partnership (Ni Ti Power), which is comprised of Stellat'en First Nation (Stellat'en) and Innergex Renewable Energy Inc. (Innergex). Ni Ti Power is the owner and developer of the Project. Ni Ti Managing Partner Inc. is the managing partner of Ni Ti Power and is the applicant and permit-holding entity for the *Energy Resource Activities Act* (ERAA) application and associated authorizations, acting in its capacity as managing partner of Ni Ti Power.

Stellat'en participates in the Project as both a rights-holder and equity partner, and expects Project planning, assessment, construction, operations, and reclamation activities to align with the principles of free, prior, and informed consent and meaningful Indigenous participation and stewardship governance.

Originally initiated and proposed by Stellat'en First Nation in 2009 – who identified the wind resource potential within their traditional territory – the Project reflects their vision for a clean energy future grounded in territorial stewardship, economic independence, and intergenerational prosperity. This partnership is grounded in mutual respect and shared intent to design, build, and operate a renewable energy project that reflects both Indigenous knowledge and industry best practices. In 2024, BC Hydro selected nine wind projects through its competitive Call for Power to help achieve these goals. The Project was among those selected and is being developed in direct response to Provincial priorities to supply new renewable energy projects and advance Indigenous participation and leadership in B.C.'s clean energy economy.

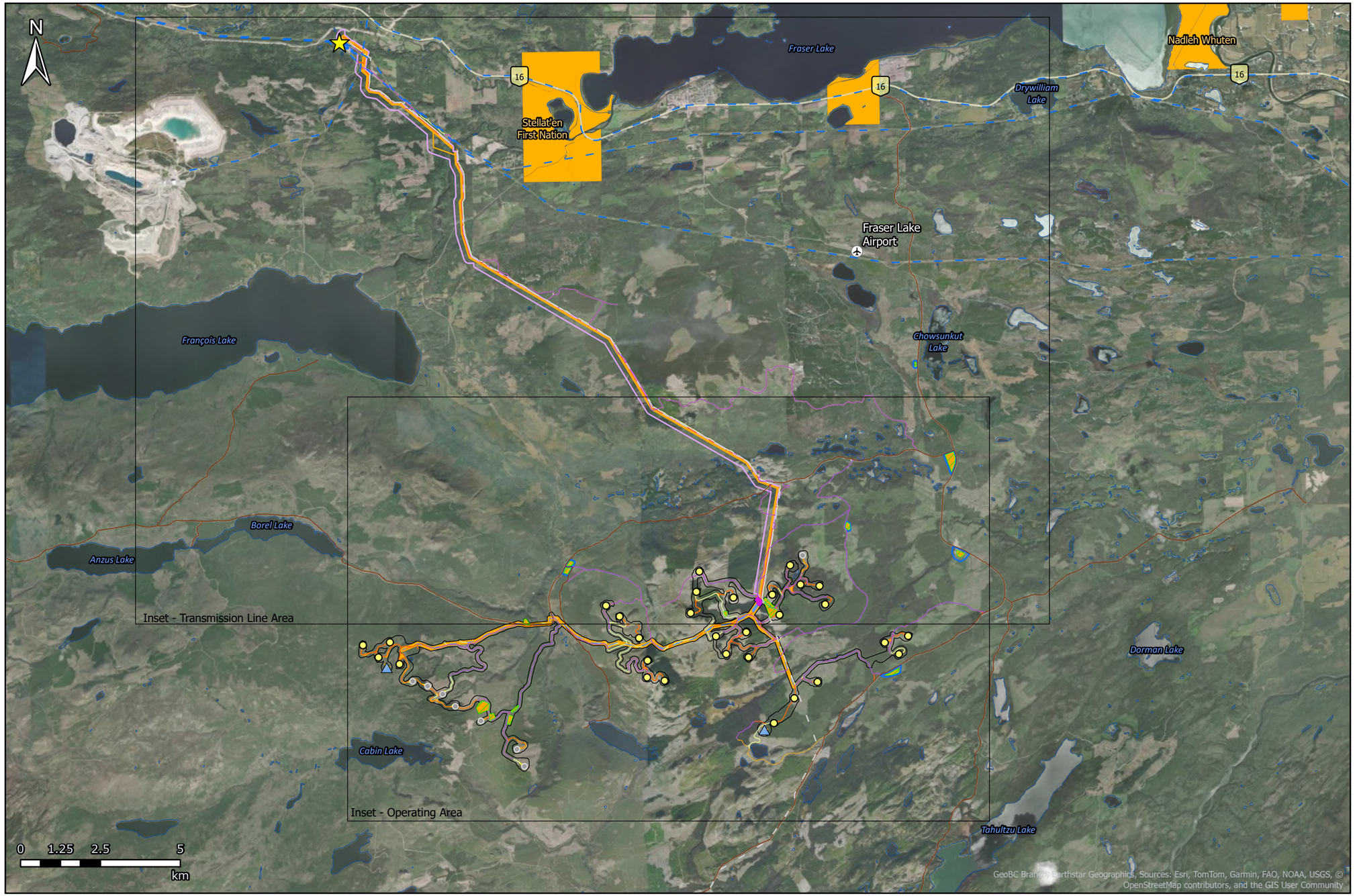
Ni Ti Power is proposing to construct, operate, and maintain the Project, which is located approximately 14 km south of Fraser Lake in the unceded territories of Stellat'en, Nadleh Whut'en First Nation (Nadleh Whut'en) and neighbouring Nations Skin Tyee Nation, Nee Tahi Buhn Indian Band, and Saik'uz First Nation. The Project is sited on provincial Crown land within the Regional District of Bulkley-Nechako (RDBN), who are the acting regional governmental body. Access will be via Highway 16, using existing Holy Cross Forest Service Road (FSR) and forestry roads for site access. Where existing roads are not available, new roads will be required.

The Project will consist of up to 30 wind turbines, associated overhead and buried collector lines, new and upgraded access roads, meteorological towers, an operations and maintenance (O&M) facility, a substation, an approximately 25-km 230-kV transmission line connecting the facility to BC Hydro's Glenannan Substation, and other auxiliary temporary and permanent infrastructure to support the construction and operations of the Project. The transmission line will run parallel to the existing transmission line used by Blackwater Mine (Figure 1-1).

Ni Ti Power has included eight alternative turbine locations and associated roads as part of the ERAA application to allow for flexibility in siting as design is finalized; only 30 turbine locations of the 38 potential locations will be constructed. All turbine locations (primary and alternatives) have been characterized and assessed in the Adverse Impacts Report. The Project is presented in the application as the Primary Footprint for the preferred design, and an Alternative Footprint with only the additional alternate turbine pads and associated roads. During detailed design, portions of the Primary Footprint may be swapped with portions of the Alternative Footprint to accommodate engineering-required changes or alterations during review of this application. All the turbine locations are setback at least 1.5 km from all residences (Interim Guidance for Renewable Energy Permit Applications). Setbacks from properties and roads per the Renewable Energy Projects Regulation (Part 6 Division 1) have been achieved.

A portion of the proposed transmission line will cross the Stellako River Wildlife Management Area. Ni Ti Power is currently considering two crossing alternatives for this portion on the transmission line. Ni Ti Power's preferred route crosses a privately-owned parcel (additional information is presented it Section 3.0). The private parcel has not been included as part of the Construction Corridor as an agreement is not in place at the time of submission. The alternative crossing is included as part of the Construction Corridor for the transmission line, with only one location being selected for the final route. Similarly to the potential turbine locations, both river crossing alternatives were studied as part of the application.

Major construction activities will include clearing and grubbing, earthworks and grading, delivery of equipment and materials, construction of turbine foundations, turbine assembly, tower erection and blade installation, installing collector and communication lines, and construction of the transmission line, Project substation and O&M facility. Temporary laydown areas, storage areas, trailers and offices, on-site batch plant and aggregate / borrow pits will be required for construction.





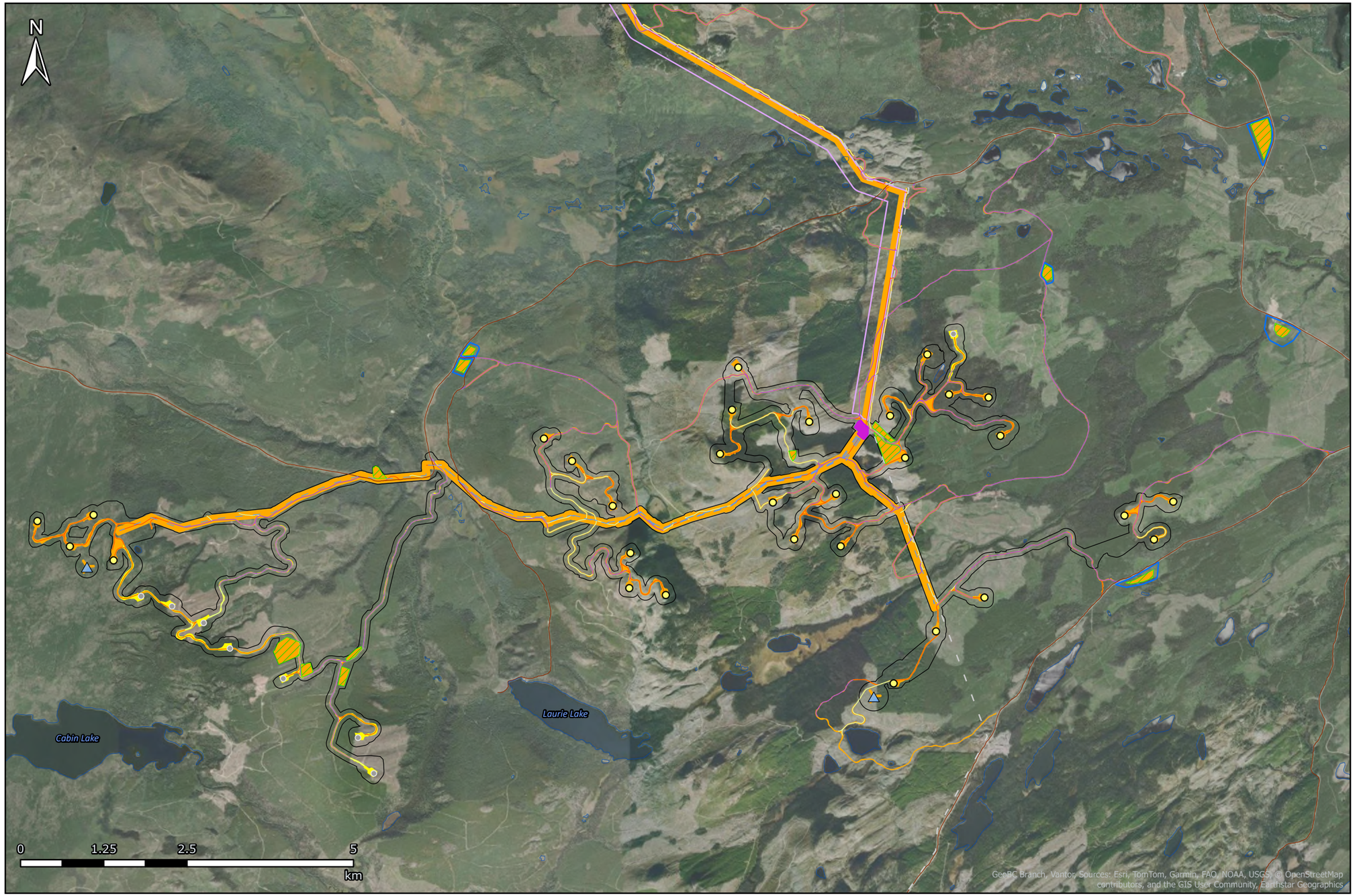
LEGEND

- Point of Interconnection
- Wind Turbine - Primary
- Wind Turbine - Alternate
- Met Mast
- Collector Line
- Blackwater Transmission Line - Orthophoto Delineated
- Existing BC Transmission Line
- New Road
- Non-Status Road
- Permit Road
- Forest Service Road
- Highway
- O&M Facility & Substation
- Laydown/Borrow
- Alternate Project Footprint
- Primary Project Footprint
- Construction Corridor - Transmission Line
- Construction Corridor - Borrow/Laydown
- Operating Area
- First Nation Reserve

NOTES & SOURCES:

- THIS FIGURE IS FOR ILLUSTRATIVE PURPOSES ONLY AND SHOULD BE INTERPRETED IN THE CONTEXT OF THE ACCOMPANYING REPORT.
- THIS LAYOUT INCLUDES ALTERNATE TURBINE LOCATIONS. AT COMPLETION - THE PROJECT WILL HAVE A MAXIMUM OF 30 TURBINES
- PUBLIC DATA: PROVINCE OF BRITISH COLUMBIA

Projection: NAD 1983 BC Environment Albers	Project: NI TI MOUNTAIN WIND PROJECT	Figure: 1-1
Scale: 1:125,000	Prepared for: NI TI MANAGING PARTNER INC.	
Dated: 2026-11-13		
LEGACY ENVIRONMENTAL	Title: **PROJECT OVERVIEW**	





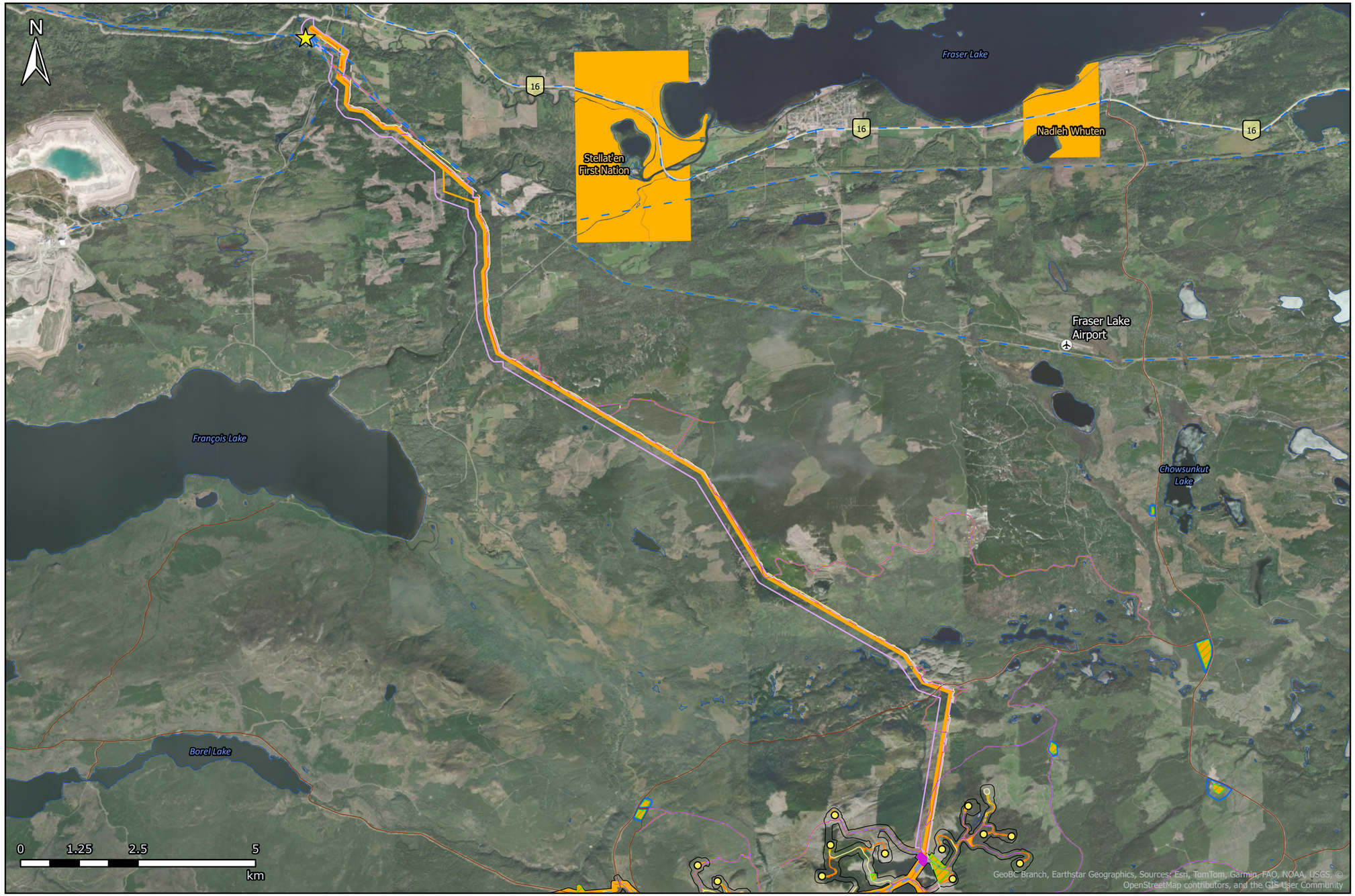
LEGEND

- Wind Turbine - Primary
- Wind Turbine - Alternate
- Met Mast
- Collector Line
- Blackwater Transmission Line - Orthophoto Delineated
- New Road
- Non-Status Road
- Permit Road
- O&M Facility & Substation
- Laydown/Borrow
- Alternate Project Footprint
- Primary Project Footprint
- Construction Corridor - Transmission Line
- Operating Area
- Forest Service Road
- Construction Corridor - Borrow/Laydown

NOTES & SOURCES:

- THIS FIGURE IS FOR ILLUSTRATIVE PURPOSES ONLY AND SHOULD BE INTERPRETED IN THE CONTEXT OF THE ACCOMPANYING REPORT.
- THIS LAYOUT INCLUDES ALTERNATE TURBINE LOCATIONS. AT COMPLETION - THE PROJECT WILL HAVE A MAXIMUM OF 30 TURBINES
- PUBLIC DATA: PROVINCE OF BRITISH COLUMBIA

Projection: NAD 1983 BC Environment Albers	Project: NI TI MOUNTAIN WIND PROJECT	Figure: 1-2
Scale: 1:60,000	Prepared for: NI TI MANAGING PARTNER INC.	
Dated: 2026-11-13		
LEGACY ENVIRONMENTAL	Title: **PROJECT OVERVIEW** **OPERATING AREA**	





LEGEND

- Point of Interconnection
- Wind Turbine - Primary
- Wind Turbine - Alternate
- Collector Line
- Blackwater Transmission Line - Orthophoto Delineated
- Existing BC Transmission Line
- New Road
- Non-Status Road
- Permit Road
- O&M Facility & Substation
- Laydown/Borrow
- Alternate Project Footprint
- Primary Project Footprint
- Construction Corridor - Transmission Line
- Operating Area
- First Nation Reserve
- Forest Service Road
- Construction Corridor - Borrow/Laydown

NOTES & SOURCES:

- THIS FIGURE IS FOR ILLUSTRATIVE PURPOSES ONLY AND SHOULD BE INTERPRETED IN THE CONTEXT OF THE ACCOMPANYING REPORT.
- THIS LAYOUT INCLUDES ALTERNATE TURBINE LOCATIONS. AT COMPLETION - THE PROJECT WILL HAVE A MAXIMUM OF 30 TURBINES
- PUBLIC DATA: PROVINCE OF BRITISH COLUMBIA

Projection: NAD 1983 BC Environment Albers	Project: NI TI MOUNTAIN WIND PROJECT	Figure: 1-3
Scale: 1:85,000	Prepared for: NI TI MANAGING PARTNER INC.	
Dated: 2026-11-13		
LEGACY ENVIRONMENTAL	Title: **PROJECT OVERVIEW** **TRANSMISISON LINE AREA**	

2.0 Project Rationale

The following section outlines the purpose and rationale of the Project and the potential Project benefits.

2.1. Purpose of the Project

One of the key actions from BC Hydro's 2025 Integrated Resource Plan was expanding the presence of renewable energy in their grid through competitive bids. The need for the Project has been also outlined in BC Hydro's 2024 Call for Power requirements for new sources of electricity that are reliable and affordable, and that reflect environmental responsibility, indigenous leadership and long-term community benefit and resilience.

The Project was conceived to meet the moment of transformation in British Columbia's energy landscape: a sharp rise in electricity demand, a transition away from fossil fuels, and a growing call for projects that reflect the above expectations while keeping electricity affordable for British Columbians.

The Ni Ti Mountain Wind Project responds directly to these priorities. Its purpose is to:

- Help meet the province's growing electricity demand through clean or renewable energy generation that is cost-effective for BC Hydro ratepayers
- Deliver electricity to the BC Hydro grid as early as fall 2029 and no later than December 2030
- Create an environmentally sustainable and Indigenous-majority-owned business that respects and reflects the history, culture, and traditions of Stellat'en and the environment in which they live
- Promote economic initiatives that will enhance the quality of life and prosperity of Stellat'en by building capacity for their members to be successful entrepreneurs
- Advance Stellat'en's self-determination, long-term prosperity, and inherent right to access the natural resources of the land and waters within their traditional territory through meaningful ownership, revenue and governance
- Deliver low footprint impacts by including the co-use or re-use of existing resource roads and disturbances, including building the transmission line in parallel with an existing linear disturbance
- Foster sustainable development that offers opportunities and benefits to Ni Ti Mountain Power, the host community of Fraser Lake

2.2. Project Benefits

The electricity generated by the Project will be sold to BC Hydro under a 30-year Electricity Purchase Agreement (EPA) and will supply low-carbon renewable energy to the BC grid and in the process support the growth and transition to low-carbon energy sources. Benefits of the Project include development of an economically sustainable and low environmental impact business that is co-owned by the Stellat'en First Nation.

The Project is aligned with BC Hydro's strategic objective of reducing GHG emissions through clean and efficient electrification[1], as well as BC's broader climate goals under the *Clean Energy Act*. In advancing these goals, the Project creates other additional lasting public, environmental, and Indigenous-led benefits that go beyond power generation to the Bulkley-Nechako region and the Province of BC. The Project benefits:

[1] BC Hydro's Electrification Plan

Clean Local Power Delivery

- Add 200 MW of new renewable wind energy to the BC grid under a 30-year EPA
- Strengthen regional electricity reliability and reduce dependence on imported power
- Support BC's growth and transition to a low-carbon economy by providing clean energy where demand is growing
- Protect energy affordability and reduce energy poverty through the provision of a reliable and fixed price new source of electricity

Indigenous Equity and Governance

- Deliver long-term revenue and decision-making power to Stellat'en through majority ownership
- Advance reconciliation with Indigenous peoples by realizing the economic opportunity created by Stellat'en
- Embed Indigenous values into environmental design, permitting and land use
- Create business, governance, and technical training opportunities that builds capacity for future generations
- Enable Stellat'en to enhance its cultural/ceremonial, economic, environmental, and social well-being
- Promote education and capacity building in environmental management and monitoring for Indigenous nations through participation in field surveys, monitoring, compliance and information sharing

Local Economic Resilience

- Promote sustainable economic growth that utilizes the resources, skills, and knowledge of the local community by creating construction, operation and maintenance jobs in a region affected by recent industry closures
- Generate annual provincial and local government tax revenue
- Accommodate projects that have a demand for electricity, in an area with few other sources of clean and renewable electricity generation
- Offer contracting opportunities to Indigenous and local businesses
- Align with Stellat'en's economic development strategy and regional economic renewal efforts

Low-Impact and Respectful Development

- Minimize land disturbances by reusing existing roads, clearings, and transmission corridors
- Minimize impacts to culturally sensitive sites and old-growth forests
- Use silviculture practices that promote growth of high-quality food sources and other vegetation that supports ungulates, birds, and other wildlife
- Support regional air and water quality by providing a local non-polluting source of electricity
- Promote completion of archaeological, environmental, socio-economic, and technical studies, surveys, analysis, and monitoring programs

Community and Cultural Benefit

- Support of local and Indigenous environmental stewardship (conservation) and cultural preservation programs/initiatives, including contributing to the Endako Chinook Strategic Enhancement Project (salmon enumeration and stocking program) to address potential watershed interactions with the Project
- Provide hands-on environmental monitoring and learning opportunities for Indigenous youth
- Create a foundation for long-term community well-being and resilience by providing a long-term clean energy generation project

3.0 Project Information

The Project is located on provincial Crown land within the Regional District of Bulkley-Nechako on the Nechako Plateau, a slightly hilly region characterized by a thick layer of glacial till. The closest communities to the Project are Stellat'en's community of Stellaquo and the Village of Fraser Lake, approximately 14 km north of the Project. The Project is accessed directly off Highway 16 via Holy Cross FSR. The region has a relatively long history of natural resource development particularly in forestry and mining. A network of existing forestry roads will provide internal access, and smaller resource roads, both existing and newly constructed, will lead to turbine locations.

One of the potential transmission line routes for the Stellako River crosses a private property (PID 15135233). Ni Ti Power has signed a Memorandum of Understanding with the landowner (Nature Trust of British Columbia) to allow for continued discussions around the potential right-of-way through their parcel.

The Project consists of the following components:

- Up to 30 utility-scale wind turbines, with a maximum capacity of 7.2 MW, maximum hub height of 120 m and a rotor diameter of up to 175 m
- Associated overhead and buried collector lines to convey electricity to a Project substation;
- One Project substation centrally located within the Project site;
- An approximately 25-km, 230-kV transmission line connecting the Project substation to the point of interconnection with BC Hydro's existing Glenannan Substation;
- Two long-term meteorological towers;
- Temporary and permanent laydown, batch plant, aggregate / borrow areas;
- New and upgraded access roads for construction and operations;
- An on-site operations and maintenance (O&M) facility and associated infrastructure; and
- Groundwater well to service construction needs and the O&M facility.

3.1. Project Siting

The Project's siting and infrastructure layout was directly influenced by feedback from Stellat'en, Nadleh Whut'en and engagement with neighbouring Indigenous nations. In response to this input, the Project has been designed to:

- Strategically reuse previously disturbed areas, such as clearcuts and existing roads to minimize new landscape disturbances
- Route the transmission line along existing linear disturbances rather than create new rights-of-way
- Avoid high-value wildlife habitats, such as Wildlife Habitat Areas (WHA), Ungulate Winter Ranges (UWR), Fisheries Sensitive Watersheds (FSW), and minimize Project overlaps with Indigenous Nation identified biodiverse management areas, and old-growth forests and wetlands
- Incorporate additional buffer areas for wildfire-resilience

Ni Ti Power will be implementing a 'design envelope' approach to permitting the areas that may contain project components (i.e., Operating Area and Construction Corridors). All Project components are located within either the Operating Area or Construction Corridors. Some new and existing roads associated with the Project may be permitted as ERAA roads. Collectively, the Operating Area, Construction Corridors, and ERAA roads are defined as the Project Area. Archaeological, environmental and engineering studies, both field and desktop, have informed the siting of 38 potential turbines locations and associated infrastructure within Project Area. The

design envelope approach also accounts for alternative turbine locations. Only up to 30 of turbine locations will be included in the issued for construction design. The design envelope provides allowance for minor re-alignments in the location of Project infrastructure to avoid or minimize interactions with sensitive archaeological and environmental values and allow for the possibility to reduce other potential impacts.

The Project Operating Area and Construction Corridors have been developed based on the following footprint dimensions (note these specifications are subject to change as detailed design has not been completed):

- Project Operating Area
    - The footprint for wind turbines, including crane pads, cut/fill slopes, and clearing areas is approximately 2 ha per turbine. The Operating Area accounts for turbine-specific buffers for siting flexibility.
    - The footprint for overhead collector lines assumes a larger clearing width to account for multiple circuits (maximum clearing width of 120 m). The Operating Area provides a small buffer around the clearing width to account for collector realignments. The total length of overhead collector lines is anticipated to be approximately 15 km.
    - The footprint for new and existing (i.e., permit and non-status) roads associated with the Operating Area is based on clearing widths ranging from 12 m to 75 m to account for wide turning radii needed for long loads. Clearing boundaries were defined based on road geometry, drainage needs, and topography. These clearing boundaries also encompass buried collector lines. The Operating Area for each road segment allows for minor potential re-alignment needs.
    - Substation and O&M facility will be co-located, with an approximate total footprint of 4 ha for both buildings.
    - Meteorological towers assume an approximate footprint of 1.5 ha per tower. The Operating Area provides a 170-m buffer around met tower locations for siting flexibility.

- Construction Corridors
    - The transmission line will have a 40 m right-of-way, with the exception of the Stellako River crossing which has a 55 m cleared right-of way. The footprint used for this application (90 m total width) accounts for potential vegetation management for danger trees. The transmission line construction corridor has a total width of 240 m to allow for flexibility in route siting.
    - Laydown and borrow areas range from 0.5 to 11 ha, prioritizing areas with existing disturbances. Worksite borrow pits will not exceed 3 ha. Construction corridors for these temporary areas include additional buffers for siting flexibility.

- Ni Ti Power also intends to permit new and existing roads for accessing the transmission line. These roads will require less upgrades than roads associated with the Operating Area. The anticipated footprint for new and existing (i.e., permit and non-status) transmission line roads is a 25-m clearing width.

3.2. Project Components

Preliminary information on Project components provided below continues to be refined with design input and for environmental feature avoidance. The detailed design will be established by balancing wind resource, site suitability, geotechnical, and construction method considerations alongside environmental and archaeological constraints. Compliance with design standards and engineering specifications, and the Renewable Energy Projects Regulation (Part 6 Division 1) has been followed for developing the Project's design.

3.2.1. Turbines

The Project will be centered around an array of up to 30 wind turbines distributed across the site. Each wind turbine will have a maximum capacity of 7.2 MW, a maximum hub height of 120 m, and a rotor diameter of up to 175 m (Figure 3-1); for a total Project capacity of 200 MW. The selection of a wind turbine model is subject to further engineering analysis and will be finalized closer to the time of construction. The main turbine components include the tower, nacelle, rotor, and blades.

The towers are constructed from steel, concrete, or a combination of both, tailored to structural support needs. Placed on top of the tower is the nacelle and the rotor hub with three blades. The nacelle contains the main mechanical and electrical components of the wind turbine, including the gearbox that increases the rotor speed to the speed required for the generator. Blades are made of fibreglass with carbon fiber caps for enhanced durability and strength The turbines can function in temperatures ranging from -30°C to 40°C. Each blade is equipped with a lightning protection system. A portion of the turbines will include flashing marker lights to comply with federal aeronautical safety regulations.

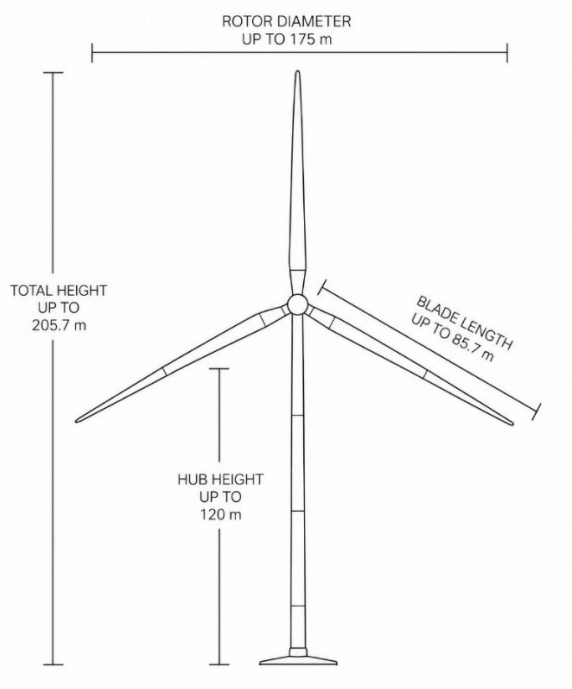


Figure 3-1 Schematic of an Industry Standard 3-Blade Turbine

3.2.2. Turbine Foundations and Crane Pads

Each wind turbine will be mounted on a concrete foundation. It is anticipated that concrete foundations of approximately 20 m in diameter will be required for each wind turbine. A detailed geotechnical investigation will be undertaken at each turbine location to evaluate the nature of the soil and substrate characteristics and to further design the foundation details. A Qualified Person will design the foundations in accordance with the specific geological conditions of the turbine locations and design standards.

Turbine foundations consist of concrete and rebar. Construction of the reinforced concrete foundations will include excavation to a depth of approximately 3 m, placement of concrete forms and steel reinforcement, and pouring of concrete within the forms. Rock chipping and blasting is anticipated to be required to facilitate excavation.

Given the Project location and the length of access roads, sourcing concrete externally may not be feasible. A temporary concrete batch plant on site will also be required during the construction of turbine foundations. The central support pedestal for each foundation would extend 0.20 m above existing ground level to receive the bolted bottom tower section. Suitable excavated material would be compacted in layers on top of the concrete foundation to terminate in line with the existing ground level, leaving room to allow sufficient topsoil reinstatement for vegetation re-growth. The foundations will be regularly inspected for any signs of deterioration during the operations phase. Soil material needed for backfill will be stored temporarily in a designated area until needed.

Mobile cranes will be used to install the turbines, so crane pads are required to be positioned close to the turbine for the crane to be sited on. There are factors which influence crane pad design, such as the terrain, the loads that are to be lifted, and the nature of the soil. Each wind turbine site will have an adjacent crane pad for installation and maintenance, and a transformer at the base of the turbine.

3.2.3. Access and Maintenance Roads

Site access will be via Highway 16, approximately 5 km east of Fraser Lake and using Holy Cross FSR. A network of existing forestry roads will provide internal access, and smaller access roads, both existing and newly constructed, will lead directly to turbine locations. Road running surfaces will range from 6 to 13.5 m wide to facilitate moving large turbine components and equipment. Some existing forestry roads will require upgrades to attain the minimum widths required for use. Roads will be used to move workers and equipment around the site during construction, operation and decommissioning phases.

Road layout and watercourse crossing designs were informed by First Nation recommendations, emphasizing the use of existing routes to reduce environmental impacts through co-use or re-use of existing roads. All roads and associated structures will be engineered to a specification consistent with regulatory and design standards.

3.2.3.1. New Roads

Approximately 28 km of new roads are anticipated within the Operating Area. New access roads are anticipated to involve the removal of soil to a depth of between 0.25 and 1.0 m (depending on the ground conditions encountered during the geotechnical investigations) and placing layers of crushed stone. The stone is usually compacted, with a finished construction depth between 0.25 and 0.5 m, again dependent on the strength of the underlying ground formation. The internal site roads will be maintained in good condition during construction and throughout the lifetime of the Project to facilitate maintenance. Following the eventual decommissioning of the Project, Ni Ti Power will work with BCER to determine if roads will be left in place. Soil needed for backfill would be stored temporarily in low bunds until needed.

3.2.3.2. Existing Roads to be Upgraded

The Project has an existing network of resource roads. It is anticipated that approximately 78 km of existing roads (i.e., permit and non-status roads) within and leading to the Operating Area can be used with minor and moderate upgrades. Portions of existing roads may need to be widened to support large truck and material movements and turning radii of the turbine components. The process for upgrading roads is similar to that of constructing new roads, but clearing and grading is only required where roads need to be widened, which will minimize the area of new disturbance from the Project. Ni Ti Power intends on securing agreements with the current road tenure holders for transferring road jurisdiction.

3.2.3.3. Transmission Line Access Roads

In addition to the main Project access roads that will be used to access turbine locations and the Operating Area, there is also a need for access routes into the new proposed transmission line. Approximately 13.5 km of new roads are anticipated for transmission line access. Approximately 48 km of existing roads (i.e., permit and non-status roads) will be used to access the transmission line. These existing roads may require minor upgrades. While some roads into the transmission line corridor would be temporary for gaining access during construction, most of them may be maintained during the lifetime of the Project to facilitate maintenance. Road selection for the transmission line will be finalized during detailed design.

3.2.4. Overhead and Buried Collector Lines

As electricity is generated, it will be consolidated through a medium voltage (34.5 kV) collection system. These overhead and buried collector lines will connect the turbines to a centrally located Project substation. Overhead collector lines will have up to 2 circuits (3 conductors) and fibre-optic communications on each pole, with a wooden monopole structure, which minimizes collision and electrocution impact risks to birds. Buried collector lines will be installed at a depth of one to two metres, depending on geotechnical and soil conditions. Small electric junction boxes will be installed along the collector route. Collector lines will follow existing roads or new roads as much as possible to take advantage of the access these roads provide, and to reduce the clearing needed to accommodate clearances and safety along the collector line. Where collector lines could not be placed parallel to roads, the route was designed to accommodate setbacks from environmentally sensitive features.

3.2.5. Project Substation

Electricity will enter the Project substation at 34.5 kV and be stepped up to 230 kV for integration into BC Hydro's grid. The Project substation will be sited in a relatively flat area with good drainage and close to the transmission line. Key components include a 230 kV switchyard with breakers, disconnects, and protection equipment; two 230/34.5 kV power transformers; a 34.5 kV switchgear and feeder system; capacitor banks for voltage support and reactive power compensation; protection, control, and SCADA systems; station service power; DC battery systems; communications infrastructure; and a grounding grid and civil works that ensure safe and reliable operation. The entire substation will be enclosed within a chain link fence with gated access.

3.2.6. Transmission Line

A transmission line from the Project substation to the point of interconnection with the BC Hydro electricity grid at Glenannan Substation will be required. The transmission line will be 230 kV and approximately 25 km in length. The transmission line will run parallel to the existing Blackwater Mine transmission line, ultimately connecting to BC Hydro's Glenannan Substation. The routing of this line was guided by input from Stellat'en and Nadleh Whu'ten, who expressed a preference for the route to parallel the existing Blackwater transmission line rather than creating a new, shorter corridor. This route also avoids interactions with the Cheslatta Trail and nearby private landholdings.

3.2.7. Temporary Construction Areas

Several auxiliary areas will be designated to support various stages of construction. This application includes three temporary laydown areas (with a total area of approximately 28 ha), to be established in strategic, and likely already disturbed, locations for material storage. During construction and prior to completion of the wind turbines, parts will be stored in these laydown areas to stage the installation. Aggregate / borrow areas will be required during construction activities. Ni Ti Power is permitting twelve worksite borrow pits as part of this application for material extraction. Worksite borrow pits will not exceed 3 ha. These areas may require clearing, grubbing, and grading to support construction activities. Following construction, temporary disturbance areas will be progressively reclaimed and re-vegetated, where appropriate.

Given the Project location and the length of access roads, sourcing concrete externally may not be feasible. A temporary mobile concrete batching plant will be deployed on site to support turbine foundation construction. The batching plant will be located within one of the temporary construction areas.

3.2.8. Permanent Support Infrastructure

A permanent O&M facility will be co-located with the Project's substation. It will support the long-term operational needs of the wind project and will include a site office portion and warehouse portion. The building will be the on-site operational hub of the project, where operations personnel can monitor wind farm operation, store spare parts and tools, and provide office space and emergency shelter. The building is envisioned to be a 2-story steel-clad warehouse style building. Construction will include clearing, site grading, utility preparation (water, sewage and electricity), foundation installation and building erection. Surrounding the building will be an outdoor operations yard for storage of oversize materials that are not stored within the building. A groundwater well will be required to service the facility.

After construction, two meteorological towers will be installed to monitor wind conditions and assess turbine performance. These towers will be a lattice structure fitted with sensors at three levels.

3.3. Project Activities

Project activities will occur across two primary phases: Construction and Operations. Each phase involves a range of tasks critical to the successful development, commissioning, and long-term functioning of the Project. The lifetime for the Project is determined by the duration of the Electricity Purchase Agreement (EPA) as well as the operational life of the turbine. Based on the approved EPA, the Project is expected to have an operational life of 30 years. After that point in time, the project may be re-powered under a re-negotiated EPA or decommissioned. If the term of the EPA is not extended, decommissioning activities in line with tenure requirements of the Province of BC will commence. A Decommissioning and Restoration Plan will be developed

and submitted to BCER for approval before construction activities begin. This plan will be updated every five years per BCER regulation/requirement.

3.3.1. Construction

The construction phase includes site preparation and vegetation clearing, turbine assembly, infrastructure installation, and commissioning. Activities will occur sequentially, beginning with land and site readiness and progressing through to system integration. There may be a temporary increase in traffic along Highway 16 during the construction period that consists of trucks delivering project equipment. Within the Project area, construction vehicles will use Holy Cross FSR and resource roads, some of which will need upgrading to accommodate vehicle lengths and widths. To minimize impacts on other road users, a Traffic Management Plan will be developed and implemented.

Construction and commissioning will take place over three years, with most activities occurring spring through late fall. The current schedule anticipates commercial operation target in November 2029. If weather allows, the construction schedule may extend into December. The current schedule anticipates commercial operations starting in November 2029. During 2027 and 2028, construction will occur over a five-day week, with Saturdays being a contingency workday that might be used to maintain schedule. During turbine erection work in 2029, nighttime and seven-day work will occur to take advantage of all available low-wind periods for the necessary high elevation work.

Site Preparation and Early Works

Initial activities will involve clearing and grubbing to prepare the land for construction. This includes vegetation trimming and removal and preliminary soil grading using heavy machinery. Pre-clearing environmental surveys will precede any clearing or ground disturbance as required for seasonality (i.e., sensitive wildlife periods) or by legislation. Access to the site will be improved through upgrades to existing access roads and construction of new roads. Temporary laydown areas will be established for the storage of turbine components and other equipment, with these areas largely decommissioned upon completion. Minor laydown areas will be permanently retained for O&M purposes and strategic storage. Borrow pits / aggregate sources will also be established for material extraction to support construction activities. A temporary mobile concrete batching plant will be deployed on site within one of the temporary construction areas to support turbine foundation construction.

Materials will be brought by heavy vehicles into the Project area, including equipment, construction supplies, and aggregate for roads and concrete foundations. Temporary construction offices will also be brought to site for use until the O&M facility is constructed. Water will be sourced from permitted sources for concrete production and to control fugitive dust and particulates.

Civil and Electrical Works

Once the site is prepared, construction will proceed with excavation and foundation work for each turbine and the substation. Each site will be excavated to depth determined by engineering analysis then stabilized with aggregate and fill as specified in the Project design. Then rebar will be installed to build the frame and concrete will be poured. The site will then be backfilled to bring the foundation site to the appropriate contour. Concurrently, surface and underground fibre optic lines to facilitate system communication and overhead and buried collector lines to convey the electricity from the turbines to the on-site substation will be installed.

During this phase, Ni Ti Power will also construct and install the Project's transmission line to connect the substation to BC Hydro's Glenannan Substation, integrating the Project into the provincial grid. Key activities include vegetation clearing within the corridor, grading, foundation work, tower and pole construction, and wire stringing, and commissioning.

Turbine Installation

Following foundation curing and component delivery, turbine assembly will take place. Turbine installation of the tower sections, nacelle, rotor, and blades will require crane pads. Turbine components stored in laydown areas will be assembled on-site, with cranes used to raise and install each unit.

Once delivered, the tower sections will be erected in sequence on the turbine foundations, likely using a large 800 – 1000 tonne main lift crane and a smaller 150-tonne tailing crane. The smaller crane erects the base and lower midsection of the towers. It will also assist the main crane with the erection of the upper midsection, the lower top section, the nacelle, the rotor and the blades. The main erection crane will also lift heavy internal components such as the generator.

The blades are attached one at a time on the hub which will already be installed on the nacelle. The tailing crane helps to control the orientation of the blades during this lift, while the main crane lifts the weight.

Project Substation and O&M Facilities

The Project substation will likely be constructed in parallel to turbine installation. Construction of the substation will involve clearing, grading the substation pad, foundation preparation and concrete pouring, ground grid installation, backfilling and equipment erection, installation and testing. The O&M building will also be built at this stage. Construction of the operations and maintenance building will include clearing, site grading, utility preparation (water, sewage and electricity), foundation installation and building erection. Surrounding the building will be an outdoor operations yard for storage of oversize materials that are not stored within the building.

Commissioning

The commissioning period is the last step before the Project becomes operational. It involves a series of standard electrical tests for checking the turbine and electrical infrastructure, as well as an inspection of mechanical installation and civil surveys. The substation will also be energized and commissioned prior to the start of operations. Engineering checking protocols and as-built design checks will take place. Given the requirements of the Project and adherence to the timeline given by the EPA, the expected commercial operation date is the end of 2029.

Site Restoration

During the commissioning period, final site grading and restoration also takes place, weather and seasonally permitting, where final contours are established, large-scape revegetation occurs, and final stabilization is achieved.

3.3.2. Operations

Once construction and commissioning are complete, the Project will enter the operations phase for an initial 30-year term based on the EPA with BC Hydro. After that time, the Project may be re-powered under a re-negotiated EPA (with subsequent permits/approvals) or decommissioned.

During this phase, the wind turbines will generate renewable electricity for distribution to the provincial grid. Routine and preventative maintenance of turbines, collector and transmission lines, and associated infrastructure will be conducted to provide reliable performance. This includes road maintenance, snow clearing, and periodic refurbishment of turbines to extend their service life. Reactive maintenance may take place under certain circumstances.

Meteorological towers will remain in use to monitor wind conditions and validate power production performance throughout the operational life of the Project.

The Project will have a site operations team anticipated to consist of five to ten personnel to carry out periodic maintenance activities. Maintenance and operations workers will access the site periodically; however, this will not result in a material increase in vehicle traffic in the Project vicinity.

3.3.3. Decommissioning

At the end of the Project's operational period, components will either be re-powered and upgraded or decommissioned. There is the potential to extend the operational period if an extension to the EPA is granted or new EPA is negotiated. If an extension of the EPA is not obtained, the Project will be decommissioned by removing the infrastructure and reclaiming the site. If decommissioned, turbines will be deconstructed and removed. Parts and materials will be reclaimed after transport to recycling or waste disposal facilities Decommissioning activities will commence within one year after ceasing operations, and it will follow the Project's Decommissioning and Restoration Plan, to be approved by BCER before implementation.

The following activities are anticipated in the decommissioning phase:

- Turbines will be dismantled and removed from the site for scrap or resale
- Concrete foundations and infrastructure will be removed to a depth of approximately 1m and the remainder will remain buried and covered over with overburden. Underground cables contain no harmful substances and will be left below ground surface. They may be recovered if economically attractive or left in the ground. Terminal connections will be cut back to a depth of approximately 1 m.
- Internal site roads will be decommissioned in consultation with BCER and other industrial users.
- Other infrastructure, including overhead collector lines and the substation, will be dismantled and removed.

The Project area would undergo physical restoration, returning the land to state as dictated by the Crown land tenure agreement(s).

3.4. Project Schedule

The Project will be developed in four phases: Pre-construction, Construction & Commissioning, Operations, and Decommissioning. The proposed timing for these phases is summarized in Table 3-1.

Table 3-1: Project Phases and Timing

Project Phase	Overview	Timing
Pre-construction	Project design, environmental and archaeological studies, engagement with First Nations, community and government, obtaining permits, approvals and licences, and procurement activities.	September 2024 to September 2027
Construction & Commissioning	Construction and turbine installation activities as outlined in **Section 3.3.1** including site preparation, construction, equipment transportation, installation of infrastructure and commissioning. Construction and commissioning will occur over three years, with most activities occurring spring through late fall. The current schedule anticipates commercial operation target in November 2029.	September 2027 to November 2029
Operations	Operations are anticipated to last 30 years, during which time the Project equipment and infrastructure will be refurbished as needed (modern wind turbines have an expected lifespan of 30 years), as well as maintenance of infrastructure (e.g., roads, collector lines, transmission line and access road maintenance). Wind projects can be typically "re-powered" through technological upgrades and parts replacements, extending the life of the Project.	November 2029[2] (30 years)
Decommissioning	Based on the approved EPA, the Project is expected to have an operational life of 30 years. At that point in time, the project may be re-powered under a re-negotiated EPA or decommissioned. Removal of turbines and associated infrastructure, recycling and disposal of materials and land restoration would occur during decommissioning.	To be confirmed Duration is approximately two years

4.0 Indigenous-Led Assessments

Several Indigenous-led assessments were completed to support decision-making during Project development. Stellat'en and Nadleh Whut'en commissioned Cultural Rights Assessments, Indigenous Knowledge and Land Use Studies, and Socio-economic Studies. The studies reviewed potential impacts that the Project may have on identified cultural values and suggested mitigation measures. As a result of the assessments completed, Stellat'en authored an Indigenous-Led Assessment Memorandum, describing their assessments and including a unified list of mitigation measures agreed upon with Ni Ti Power. These mitigation measures have been incorporated into the Adverse Impact Report, Social and Economic Impact Report, and First Nation's Cultural Heritage Plan included in this application. Refer to the Indigenous-led Assessment Memorandum for more details.

[2] The EPA Guaranteed COD is December 2030.

5.0 Legislative and Regulatory Context

This section summarizes the anticipated regulatory and permitting requirements for the project by the federal, provincial and local governments.

5.1. Energy Resource Activities Act Permit

The *Renewable Energy Projects (Streamlined Permitting) Act* designates the BCER as the regulator for wind and solar projects in BC. Through this mandate, BCER has delegated authority for issuing natural resource authorizations for land, water, forests, wildlife and heritage.

Wind energy projects are required to obtain an ERAA Permit to construct and operate. The ERAA Permit Application is a single application for all provincial permits issued by BCER. The ERAA Permit application serves as a consolidated provincial application process through which the BCER administers applicable provincial permits and authorizations under their delegated authority for the Project. Permits anticipated under the ERAA application are shown in Table 5-1.

Table 5-1: Permits Anticipated under the ERAA application

Legislation	Agency	Permit, License, Approval	Requirement	Applicability to Project
Energy Resources Activities Act	BCER	ERAA Permit	Required for the construction and operations of renewable energy projects in British Columbia	The current ERAA permit application package includes sufficient information to understand the Project's potential effects and mitigation strategies. After construction, a legal survey of as-built components to apply for long-term tenures.
		ERAA Road Permits	Required for energy resource roads outside of the Project Operating Area.	ERAA roads will be permitted to access the Project Operating Area and Associated Activities (i.e., transmission lines). These roads will be both new ERAA roads and transfer of jurisdiction permit or non-status roads. A separate ERAA application will be submitted for these roads.
Land Act	BCER	Investigative Licence	An Investigative Licence allows investigative activities on Crown land.	Ni Ti Power (through Stellat'en) holds an Investigative Licence for the Project area.
		General Area Licence of Occupation	Required for the footprint of all permanent infrastructure and temporary construction on Crown land.	Application considered under the ERAA permit application through the Operating Area.
		Licence of Occupation for Associated Activities	This licence is required for Associated Activities (i.e., transmission worksite borrow pits, staging and storage areas).	Required for Associated Activities, including transmission line, worksite borrow pits, and staging and storage areas. Application considered under ERAA permit application through Construction Corridors.
		Lease	A lease will be issued for turbine pads, collector lines, substation and O&M facilities, and facility roads	Ni Ti Power will apply for long-term tenures after construction using legal surveys of as-built components to apply for long-term tenures.
		Statutory Rights-of-Way – transmission line	Required for linear uses of Crown land for communication, energy production, utility developments (e.g., transmission lines).	Ni Ti Power will apply for long-term tenures after construction using legal surveys of as-built components to apply for long-term tenures.

Legislation	Agency	Permit, License, Approval	Requirement	Applicability to Project
Water Sustainability Act	BCER	Notification under s.39 of the Regulation	Culvert construction and maintenance require notification per criteria in s.39(1)(a) of the Regulation.	A notification under s.39 of the regulation may be required. Application considered under the ERAA permit application.
		Water Use Approval under s.10	Allows diversion and use of water from a stream or aquifer for up to 24 months.	Information to support a short-term water use application is included in the ERAA Permit application.
		Change Approval under s.11	Approval for changes in and about streams and wetlands, where there is no existing stream crossing infrastructure.	Approval for several stream and wetland crossings is required. Information to support changes in and about a stream applications is included in the ERAA permit application.
		Groundwater License	Required to divert and use groundwater for non-domestic purposes, such as irrigation, commercial or industrial use.	Required for groundwater well to service construction needs and the O&M facility. Application for water licence will be submitted through FrontCounter BC.
Wildlife Act	BCER	Permission under s.4	Permission from the regional manager is required to use land or resources in a wildlife management area.	A portion of the transmission line will cross the Stellako River Wildlife Management Area. Permission will be required for activities within the Wildlife Management Area. Information to support this authorization is included in the ERAA permit application.
Forest Act	BCER	Master Licence to Cut	A Master Licence to Cut application form must be completed and submitted before applying for any energy resource activity.	The Proponent holds a Master Licence to Cut. The Master Licence to Cut governs cutting permits authorizing the removal of timber on Crown land.
		Cutting Permit	A cutting permit authorizes the removal of timber on Crown land.	A cutting permit will be required for clearing on Crown land. Information to support issuance of a cutting permit is included in the ERAA permit application.

Legislation	Agency	Permit, License, Approval	Requirement	Applicability to Project
Environmental Management Act	BCER	Waste Discharge Authorization	Required to release waste into the environment (e.g. air contaminants, effluent, garbage, and hazardous waste).	The temporary concrete batch plant may require a waste discharge authorization. An application will be submitted by Ni Ti Power or their Prime Contractor when concrete batch plant specifications are finalized.
Heritage Conservation Act	BCER	Heritage Inspection Permit	Allows work to determine archaeological resources, and to assess development impacts.	A Heritage Inspection Permit was obtained to conduct an Archaeological Impact Assessment in the Project area.
		Heritage Site Alteration Permit	Allows work to determine archaeological resources, and to assess developments.	If avoidance of known archaeological resources is not possible, or if an archaeological site is discovered during construction, Ni Ti Power will obtain a Heritage Site Alteration Permit.

5.2. Other Authorizations

The sections below outline the anticipated federal permits, select provincial permits and local government permits that will require standalone application for authorization.

5.2.1. Federal Considerations

Anticipated federal permits, licenses and approvals and listed in Table 5-2. The Project is not expected to trigger a federal impact assessment under the *Impact Assessment Act* as the Physical Activities Regulation does not set turbine thresholds for onshore wind power projects, the proposed transmission line is under 75 km in length, and its voltage is below 345 kV. Additionally, the Project is not situated on federal land, nor within a national park or other protected area.

A *Fisheries Act* authorization under s.35 is also not anticipated to be necessary because existing road crossings will be used. When a new crossing is required, design will avoid harmful alteration, disruption, or destruction of fish habitat.

It is unlikely a *Species at Risk Act* permit or exemption is required for the Project. Ni Ti Power is not aware of any Project-related interactions with federally regulated species at risk. There are no federal land interactions and limited in-water works. A Damage or Danger Permit under the *Migratory Birds Convention Act* Migratory Birds Regulation is also unlikely to be required, as nests will be avoided by scheduling tree felling during non-breeding period for birds.

5.2.2. Provincial Considerations

In addition to permits anticipated under the ERAA application, other selected provincial permits, licenses, and approvals are anticipated to be required for the Project and are outlined in Table 5-3. Effluent and acid rock drainage requiring a Waste Discharge Authorization are not expected. Materials with ML/ARD potential will be managed through construction design to avoid impacts.

Table 5-2: Anticipated Federal Permits, Licenses, and Approvals

Legislation	Agency	Permit, License, Approval	Requirement	Applicability to Project
Canadian Navigable Waters Act	Transport Canada	*Canadian Navigable Waters Act* Notification	Approval is needed to construct, alter, or remove a work in, on, or across navigable water. Minor Works Orders allow for certain works that do not interfere.	The Stellako River transmission line crossing will require a *Canadian Navigable Waters Act* notification. Evaluation of the requirements for Navigable Waters Approvals for access road and transmission line watercourse crossings will be completed as design is refined.
Aeronautics Act Canadian Aviation Regulations	Transport Canada and National Defence Canada	Aeronautical Assessment Form	Requirements for the marking and lighting of structures that are obstacles to air navigation (i.e., wind turbines > 60 m height).	The Aeronautical Assessment Form will be submitted during detailed design.
		NAV CANADA Land Use Program	Land uses near airports and air navigation infrastructure are assessed at least 60–90 days before construction to maintain safety.	Three applications will be needed: (i) General Submission Form (wind farm), (ii) Crane Submission Form (construction) and (iii) DND Wind Turbine Submission Form. These applications will be submitted during detailed design.
Fisheries Act	Fisheries and Oceans Canada	Licence to Fish for Scientific Purposes	The Fishery (General) Regulations require a licence for fishing for surveys.	A license was obtained for the 2025 fieldwork.
Migratory Birds Convention Act	Environment and Climate Change Canada	Nest Notification	Notification and up to three years of monitoring is required under the Migratory Birds Regulations, when activities may impact nests of certain migratory birds.	No nests have been observed to date. Pre-clearing surveys will be required to understand the the presence of migratory bird nests listed under Schedule 1 of the Migratory Birds Regulation.

Table 5-3: Other Anticipated Provincial Permits, Licenses, and Approvals

Legislation	Agency	Permit, License, Approval	Requirement	Applicability to Project
Forest and Range Practices Act	Ministry of Forests	Road Use Permit	Authorizes use of an existing Forest Service Road for industrial traffic.	A road use permit will be required for Forest Service Roads in the Project area. This application will be submitted through BCER.
		Significant Road Work Authorization	Required for significant work (e.g., widening, realigning, installing major culvert or bridge) within an FSR right-of-way.	A Significant Road work Authorization will be required for significant work on an FSR. This application will be submitted during detailed design.
Transportation Act	Transportation and Transit	Controlled Access Permit	Allows the acquisition of the title on parcel land subject to the specific conditions in the Regulation.	Ni Ti Power will obtain a Controlled Access Permit prior to delivery of oversized loads, such as turbine components. Deliveries will also be coordinated with MOTT to minimize disruptions where oversized loads turn off Highway 16 into the Project area.

5.2.3. Local Government Considerations

The Project is located in the Regional District of Bulkley Nechako. Table 5-4 outlines the potential zoning bylaws applicable to the Project.

Table 5-4: Anticipated Local Government Permit, Licenses, and Approvals

Bylaw	Agency	Permit, Licence, Approval	Applicability to Project
Regional District of Bulkley Nechako, Zoning Bylaw No. 1800, 2020 Endako, Fraser Lake, Fort Fraser Rural Official Community Plan, Bylaw No. 1865, 2019 Building Bylaw No.1634, 2012	Regional District of Bulkley Nechako	Proof of compliant zoning Rezoning Development / Building Permits	The transmission line passes through several District Lots currently zoned as Rural Resource (RR1) under Bylaw No. 1800, 2020 and as Resource (RE) under Bylaw No. 1865, 2019. Under Bylaw No. 1800, unattended utilities are permitted in all zoning areas. Utility use for RE designated properties is permitted under Bylaw No. 1865, 2019. The Project does not anticipate rezoning. Bylaw No. 1634, 2012 specifies that the bylaw does not apply to buildings or structures that are exempt by Part 1 of the British Columbia Building Code, i.e., utility towers and poles not located on or attached to buildings. Innergex will work with the regional district to accommodate any zoning and building requirements are addressed as needed.

5.2.4. Third-Party Considerations

Several third-party road use or access agreements are anticipated to be required to permit roads that are already tenured to existing road users or private landowners. Discussions are ongoing with relevant existing forest licensees, road users, and private landowners. Appropriate access agreements and/or transfer of road permits will be put in place prior to commencement of activities.