

RAGLAN MINE – A GLENCORE COMPANY

SUMMARY OF THE ENVIRONMENTAL IMPACT ASSESSMENT

DEPLOYMENT OF 36 MW OF WIND ENERGY WITH BATTERY
ENERGY STORAGE SYSTEM

NUNAVIK

DECEMBER 2025

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FINAL VERSION





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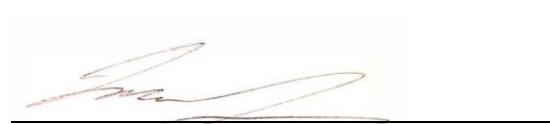
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1 Background

This document summarizes the environmental impact assessment (EIA) for the project to develop a wind farm with battery storage at the Raglan mine (hereinafter the project) to generate 36 MW of wind energy.

The project is subject to the environmental and social impact assessment and review process under Chapter 23 of the James Bay and Northern Quebec Agreement (JBNQA) and Title II of the Environment Quality Act (EQA, chapter Q-2). The Kativik Environmental Quality Commission (KEQC), created under Chapter 23 of the JBNQA, is responsible for evaluating and reviewing the project. A directive was issued by the KEQC for the social and environmental assessment in November 2023 (Ref. No. 3215-10-018).

1.1 Proponent Presentation

The wind farm project is proposed by Raglan Mine, a Glencore company (hereinafter the Proponent). It is wholly owned by the Proponent and will be developed in accordance with the Raglan Agreement (hereinafter the Agreement), signed between Raglan Mine, Makivik Corporation, the northern villages of Salluit and Kangiqsujuaq, and their respective land corporations (Qaqqalik LHC and Nunaturlik LHC).

1.2 Consultant Presentation

WSP Canada Inc. (WSP) was commissioned to conduct the EIS using documentation already prepared and submitted in support of the project. WSP was responsible for the overall management of the EIS, the preparation of sections of the EIS, including the environmental impact analysis, and the production of all visual tools. The proponent worked in tandem with WSP to conduct public consultations. Field surveys were conducted by AtkinsRéalis.

1.3 Project Background

Glencore is committed to reducing its overall greenhouse gas (GHG) emissions from its industrial assets. The targets for reducing Category 1, 2, and 3 emissions are 15% by 2026 and 50% by 2035, compared to 2019 levels, with the goal of achieving net-zero emissions by 2050. As a business unit of the Glencore group, Raglan Mine is committed to contributing to the achievement of corporate targets for the decarbonization of its operations. The mine's life span currently extends to 2037 and beyond. Exploration work could add additional years of operation beyond 2037, justifying the implementation of initiatives to reduce Raglan Mine's carbon footprint.

By adding additional wind turbines, Raglan Mine aims to:

- contribute to Glencore's overall GHG emissions reduction target;
- continue its efforts to reduce GHG emissions;
- reduce the risk of petroleum spills into the environment;
- reduce and control its energy costs (fluctuations in diesel prices);
- reduce financial risks related to Quebec's cap-and-trade system;

- support provincial and federal government efforts to combat climate change and transition to clean energy by bringing low-carbon nickel to market;
- support global climate change objectives as defined in the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement.

2 Project description

The project is located in the immediate vicinity of the Raglan Mine facilities, in the Kativik Regional Government and the municipality of Rivière-Koksoak (unorganized territory), on Category III lands. It is located approximately 80 km and 120 km from the villages of Kangiqsujaq and Salluit, respectively. The general location of the project is shown on Map 1-1 (see Appendix A).

The chosen site stands out for its wind quality, soil stability, and proximity to mining areas, among other factors. The configuration presented is the result of a multi-step process aimed at maximizing wind resources while minimizing potential impacts on the natural and human environments. Table 1 provides a summary of the project elements presented in the various volumes of the EIS. Map 2-1 shows the different wind turbine location options, while Map 3-1 shows the configuration selected for the project infrastructure.

Table 1 General project parameters

| Characteristic | Current configuration |
|--|-----------------------|
| Restricted study area (km ²) | 113.2 |
| Local study area (km ²) | 3086 |
| Number of wind turbines | Maximum 12 |
| Nominal power (MW) | 36 |
| New access roads (km) | 8.5 |
| Collector network (km) | 16.3 |
| Cost (\$ million) | Approximately \$330 |

As the wind turbine model selected for the project has not yet been finalized, a "theoretical" wind turbine model with characteristics corresponding to maximum or most probable values was developed for the EIA. The characteristics considered are presented in Table 2.

Table 2 Parameters of the theoretical wind turbine model used for the EIA

| Parameter | Description |
|---|--|
| Nominal power | 3 MW |
| Nacelle height (m) | 86 m |
| Rotor diameter (m) | 136 m |
| Total height (m) | 154 m |
| Blades (number/length) | 3 / 68 m |
| Swept area (m ²) | 14,527 m ² |
| Direction of rotation | Clockwise |
| Min-max rotation speed and operating wind speed range | Variable depending on the model selected |

| Parameter | Description |
|-------------------|---|
| Coating materials | Foundation: Steel and concrete Tower: Steel and concrete Nacelle: Steel Blades: Fiberglass |
| Lighting | Flashing red light on the nacelle |
| Color | Tower: White or light gray, may have a green gradient at the base (Figure 1). Blades: White or light gray |
| Required features | Lower operating temperature, de-icing and emergency shutdown systems in case of extreme winds, automatic shutdown at low temperatures (-40°C) to prevent component failure. |

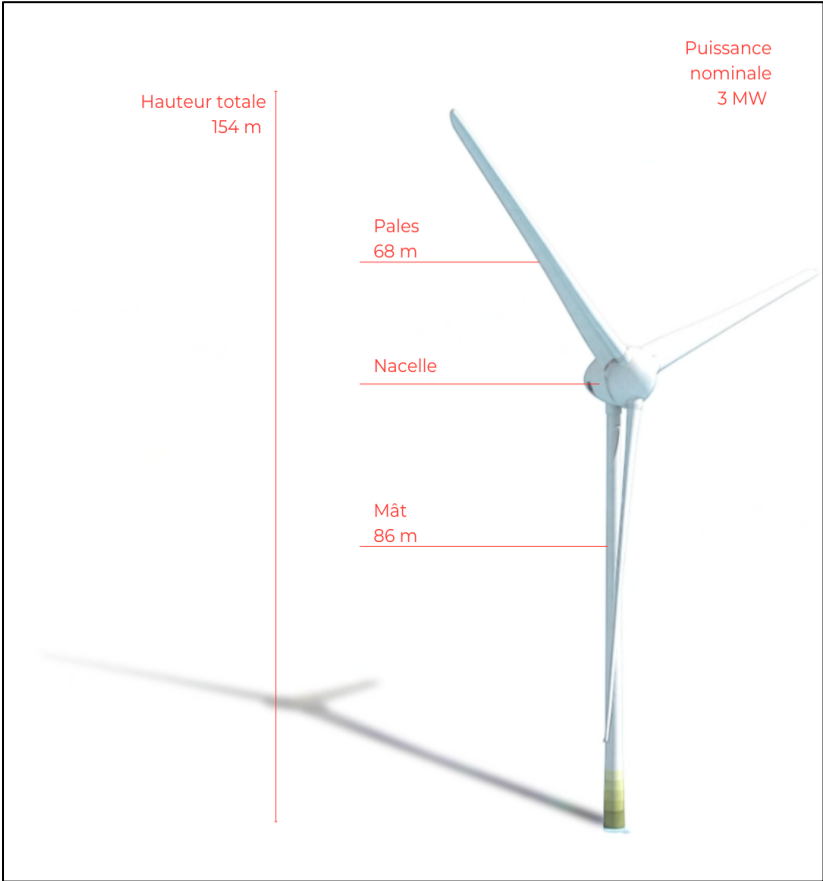


Figure 1 Theoretical model of the wind turbine used to assess environmental impacts

In addition to the wind turbines, the project also includes the infrastructure and equipment necessary to operate a wind farm. This includes the construction of platforms and concrete foundations for each wind turbine, access roads, and a network of 25 kV cables installed on the ground. This network will be connected to a battery energy storage system (BESS) consisting of lithium-ion or lithium-iron-phosphate batteries installed in a container-type building. In addition, certain related developments may be necessary to ensure the transport of components, including certain upgrades to the Salluit Aippangat port dock (Deception Bay) and certain repair work on the road connecting the port to the Katinniq site.

The project activities are divided into four phases: preparation, construction, operation, and dismantling. Preparation activities include stripping and preparing surfaces and building roads. Construction includes the delivery and transport of components, the construction of foundations, the assembly of wind turbines, connection to the grid, the installation of the storage system, the restoration of work areas, and waste management. Operational phase activities include operating the wind turbines, maintaining all project infrastructure, and conducting environmental monitoring activities. Finally, dismantling phase activities include dismantling the wind turbines and other infrastructure, disposing of materials and equipment, and restoring the project areas.

The project timeline remains preliminary and is contingent on ongoing cost reduction strategies at Raglan Mine. Therefore, rather than specifying specific years of completion, activities have been spread over a three-year period, from site preparation to wind turbine commissioning. The estimated duration of activities is indicated, as well as the target period for completion of the work. The preliminary implementation schedule is presented in Table 3.

Table 3 Preliminary completion schedule

| Activity | Year | Period | Duration |
|---|------|----------|---------------|
| Preparation phase | | | |
| Site mobilization | 1 | Q2 | 1 week |
| Stripping and surface preparation | 1 | Q2 to Q4 | 8 months |
| Construction of paths | 1 | Q2 to Q4 | 8 months |
| Construction phase – Wind turbines 1 to 6 | | | |
| Foundation construction | 1 | Q2 to Q4 | 5 months each |
| Assembly of wind turbines | 2 | Q3 | 10 days each |
| Installation of the collector network and connection to existing electrical rooms | 2 | Q3 to Q4 | 3 months |
| Construction phase – Wind turbines 7 to 12 | | | |
| Foundation construction | 2 | Q2 to Q4 | 5 months each |
| Assembly of wind turbines | 3 | Q3 | 10 days each |
| Installation of the collector network and connection to existing electrical rooms | 3 | Q3 to Q4 | 3 months |
| Construction phase – Collector network and battery storage system | | | |
| Construction of the new electrical room | 1 | Q3 to Q4 | 6 months |
| Installation of the battery storage system | 1 | Q3 to Q4 | 6 months |

| Activity | Year | Period | Duration |
|---|------|--------|----------|
| Commissioning | | | |
| Wind turbines 1 to 6 and battery storage system | 2 | Q4 | 3 months |
| Wind turbines 7 to 12 + collector network | 3 | Q4 | 3 months |

It is estimated that between 80 and 120 workers will be involved during the construction phase of the project. The jobs created will involve various trades such as construction workers, truck drivers, machine operators, civil engineers, and technicians from various disciplines. Six to ten jobs will be related to the maintenance and operation of the wind farm, and the dismantling phase is expected to require approximately 40 workers. The cost of the project is estimated at approximately \$330 million. The participation of local and regional workers will be maximized through the preferential hiring of Inuit contractors under the Agreement and through the Tamatumani program, which aims to develop the skills of Inuit and their integration into the company.

The technological risks associated with wind power in the Arctic include blade breakage, flying debris (ice, pieces of blades), lightning strikes, and fires. However, no major incidents have been reported since the installation of the first wind turbine at the Katinniq site in 2014, nor at the Diavik mine site in 2012, which has similar environmental and design characteristics.

3 Relations with the Community

3.1 Proponent Presence in the Community

Raglan Mine is a signatory to the first Impact and Benefit Agreement (IBA) signed in Canada with an Indigenous group. The Raglan Agreement, signed in 1995 and updated in 2017, led to the creation of the Raglan Committee (hereinafter the Committee), which brings together the company, the communities of Salluit and Kangiqsujuaq, and their land corporations, Nunaturlik and Qaqqalik. The Agreement specifies that the Committee is the official forum and primary framework for cooperation between the company and the Inuit parties. It also acts as the primary point of reference for all dialogue and consultation activities aimed at improving Raglan Mine practices and addressing Inuit concerns and environmental, social, and economic performance issues. The Committee's statutory meetings are usually held on a quarterly basis.

In the context of impact assessments, the Committee served as a planning, oversight, and feedback body for the installation of the first two wind turbines at the mine site in 2013, as well as for the expansion of mining activities at the Sivumut project from 2014 to 2017. These consultations also led to the creation of an environmental forum, held annually in the communities, to discuss various topics with citizens, such as air and water quality and biodiversity protection. In addition to these annual events, a Community Mining Liaison Officer (CMLO) is permanently stationed in each community to maintain and strengthen ties with the company and identify any needs or issues that may arise.

3.2 History of Consultations

Over the past 30 years, many stakeholders have undertaken consultation processes with communities in the region. These stakeholders include mining companies, consultants, regional development agencies, and university researchers. The topics most frequently raised during consultations are changes to and accessibility of hunting and fishing grounds, the preservation of traditional activities, environmental impacts, and issues related to employment and training.

Previous consultations specific to wind projects in Katinniq (2013) and the Nunavik Nickel complex (2023) identified noise, vibrations, impacts on wildlife, the safety of land users, and economic benefits as key concerns.

Raglan Mine also conducts a cyclical community perception survey of residents of Salluit and Kangiqsujuaq. The 2021 survey revealed that residents appreciated the employment and training opportunities, subsidies, and the presence of a CMLO in the communities. However, they lamented the lack of information on environmental monitoring, the infrequency of visits to the communities, and the Raglan Committee's inadequate communications.

3.3 Information and Consultation Process for the Project

As the official cooperation body, the Committee played a central role in the discussions. The project was the subject of presentations and discussions at quarterly meetings from December 2022 to the present. Topics included the company's corporate decarbonization objectives, the presentation of different project variants, community concerns, and preferred consultation strategies.

In parallel with the consultation process, Raglan Mine conducted field activities to update its 2021 community perception survey, which assesses the state of its relationship with communities.

3.3.1 Pre-consultation Phase

Several meetings between members of the Raglan Committee, local leaders, and the Proponent were organized to jointly develop an Information and Consultation Plan (ICP) tailored to the realities of local communities. Four meetings, including a visit to the project site, were held to define the objectives and strategy of the PIC. The PIC, as formulated after the pre-consultation activities, aimed to achieve the following objectives:

- Provide relevant and interesting information to stakeholders and communities in Salluit and Kangiqsujuaq.
- Gather concerns for consideration in the project impact assessment.
- Provide varied opportunities for participation tailored to the level of interest and involvement of community members, while reflecting the diverse age, gender, and occupational groups within the communities.
- Collect and integrate local Inuit knowledge (*Inuit Qaujimagatuqangit*) into the project impact assessment and project development.
- Meet the requirements of the Kativik Environmental Quality Commission (KEQC) directive.

To achieve these objectives, the strategy adopted was to divide activities into three complementary levels of engagement tailored to the different groups to be consulted, namely:

- Inform: Share information about the project with the general public and answer questions through a variety of activities using the communities' usual communication channels.
- Consult: Create safe spaces for dialogue with community members and local and regional representatives to gather their concerns and recommendations and incorporate them into the project design.
- Involve: Provide opportunities for community representatives and the Raglan Committee to actively participate in the planning and implementation of the consultation and the project in general.

The PIC implementation strategy aimed to maximize the accessibility of activities for community members, equip Raglan Committee members to communicate information about the project, and align consultation activities with the exchange and dialogue mechanisms already established by the Raglan Agreement, including the 2025 cycle of the community perception survey and the annual environmental forum.

To complement the PIC, a communication plan was developed to create and disseminate multimedia content in order to:

- provide relevant information on the wind farm project in support of consultation and engagement activities in the communities of Salluit and Kangiqsujuaq;
- generate interest in the activities of the two environmental forums, including open houses, in order to increase participation in consultations;
- meet the requirements of the KEQC directive on public communications.

Communication activities included:

- A web page on the Raglan Mine website including a highlights section and frequently asked questions (FAQ).
- A three-minute video produced in Inuktitut detailing the project in simple, accessible language.
- A series of posts on Mine Raglan's social media accounts and those of their community relations managers.
- A PowerPoint presentation and information sheet were made available to Raglan Committee members to facilitate their interactions with the community and answer general questions. The sheets were also posted on public bulletin boards to promote participation in consultation activities.
- A series of radio announcements encouraging participation in consultation activities.

3.3.2 Community Consultation

Consultation activities were conducted using the following tools:

- Consent forms and posters to ensure the free and informed consent of participants;
- five illustrated panels (36' by 48') in English and Inuktitut;
- a virtual model of the study area projected on a screen;
- a physical model of the study area with 3D-printed wind turbines to scale;
- two 30 cm 3D-printed wind turbines, accompanied by representations of a DASH-8 aircraft and a King Air aircraft on the same scale;
- color maps showing the study area and incorporating local place names;
- five simulated photos showing the landscape before and after installation, from viewpoints familiar to users.

Community consultations were held in Salluit during the week of September 9, 2024, and in Kangiqsujuaq during the week of October 21, 2024. They included the following activities:

- open houses for the entire community, including a school visit for students in grades 9 to 11;
- radio broadcasts featuring an information segment and a call-in show for questions and comments;
- targeted discussion groups for youth, elders, women, and land users;
- information activities in schools for grades 7 and 8;

- a formal consultation meeting with the Raglan Committee (Salluit) and local leaders (Kangiqsujuaq).

The total number of community participants was 123 for Salluit and 75 for Kangiqsujuaq. All consultation data were recorded by gender and age. In both cases, there was high participation among women of all ages and underrepresentation among men aged 18 to 35.

3.3.3 Consultation with Community Stakeholders and Employees

In collaboration with the Raglan Committee and based on similar impact studies conducted previously and the CQEK Directive, the stakeholders consulted included:

- Donaldson Airport;
- Pingualuit National Park;
- the Kativik Regional Government;
- the Hunter Support Program;
- Wildlife officers;
- Nunavik Regional Board of Health and Social Services;
- Makivvik Corporation.

In addition, a face-to-face meeting with Raglan Mine employees was held at the mine site in August 2024. All meetings were conducted using the tools described in the previous section.

3.4 Concerns and Issues

Tables 4 and 5 highlight the themes addressed by the various subgroups of the population in the communities concerned. The definition of the themes is detailed in Chapter 4.

Table 4 Summary of the main themes addressed by members of the Salluit community based on the information and consultation activities carried out

| Theme | Activity | | | | | | |
|-----------------------------------|------------|------------------|---------------|------------|-------|-------|---------------|
| | Open house | Raglan Committee | Seniors (men) | Land users | Youth | Women | Elderly women |
| Caribou | X | X | X | X | X | X | X |
| Birds | X | X | X | X | X | X | X |
| Safety | X | | X | X | X | X | |
| Consultation process | | X | | X | | X | X |
| Benefits for the community | X | X | | X | | | X |
| Project design/location | X | X | | X | | X | |
| Hunting/gathering/fishing | X | X | | X | X | | |
| Waste management (dismantling) | X | | X | X | | | |
| Wildlife | | | X | X | | | |
| Dust | X | | | | | | X |
| Similar studies | | X | | | | X | |
| Noise | | | X | | | X | |
| Access to territories | | X | | X | | | |
| Job opportunities | | | | | X | X | |
| Operations | | | X | | | | |
| Economic viability of the project | | | X | | | | |
| Economic impact | | | | X | | | |
| Environmental value | | | | X | | | |

Table 5 Summary of the main topics discussed by members of the Kangiqsujuaq community based on the information and consultation activities carried out

| Topic | Activity | | | | | | |
|----------------------------|------------|-----------------|---------------|-----------------|--------------|-------|---------------|
| | Open house | Partner meeting | Seniors (men) | Local residents | Young people | Women | Elderly women |
| Project design / Location | X | X | X | X | | X | X |
| Consultation process | X | X | X | X | | X | X |
| Benefits for the community | X | | X | X | X | X | X |
| Wildlife | X | | | X | X | X | X |
| Environmental value | X | X | X | X | | | X |
| Caribou | X | X | X | X | | | X |
| Economic viability | | X | X | | X | X | X |
| Safety | X | | | X | | X | X |
| Birds | X | | | X | | | X |

| Topic | Activity | | | | | | |
|--------------------------------|------------|-----------------|---------------|-----------------|--------------|-------|---------------|
| | Open house | Partner meeting | Seniors (men) | Local residents | Young people | Women | Elderly women |
| Waste management (dismantling) | X | | X | | | | X |
| Dust | | X | | | | | X |
| Noise | | | | | | X | X |
| Visual impacts | | | X | | | X | |
| Hunting/gathering/fishing | | | X | | | | |
| Access to territories | | | | X | | | |
| Economic impact | | | | | X | | |

Meetings with stakeholders highlighted concerns about bird mortality, caribou protection, noise impact, visual impact, and the continuation of a transparent collaborative process for the remainder of the project. Table 6 presents all of the issues raised during the consultations based on the concerns expressed.

Table 6 Issues arising from information and consultation activities related to this project

| Concerns raised | Issues arising from information and consultation activities | Community stakeholders |
|--|--|---|
| Risk of spills and equipment failure | Avoid additional sources of pollution Avoid habitat degradation | Members of the Salluit community Members of the Kangiqsujuaq community |
| Changes in caribou migration routes due to: – the presence of wind turbines – noise generated by wind turbines – vibration Risk of bird collisions with moving blades Risk to small mammals (e.g., foxes) | Avoid resource depletion – changes in migration routes (caribou, waterfowl) and bird mortality | Raglan Committee Members of the Salluit community Members of the Kangiqsujuaq community Representatives of Pingualuit National Park ARK |
| Desire to see profits shared with communities | Creation of local jobs and awarding of local contracts, improvement of profit sharing | Raglan Committee Members of the Salluit community Members of the Kangiqsujuaq community |

| Concerns raised | Issues arising from information and consultation activities | Community stakeholders |
|---|---|---|
| <p>Risk of collision with wind turbines when traveling by snowmobile in low visibility conditions</p> <p>Questions about the expected noise level</p> | <p>Maintaining air quality between Salluit Aippangan (Deception Bay) and the mining site, as well as the sound environment. Maintaining visibility of wind turbine structures during blizzards</p> | <p>Members of the Salluit community</p> <p>Members of the Kangiqsujuaq community</p> |
| <p>Restricted access to traditional activity areas</p> | <p>Maintaining access to the territory and traditional and contemporary uses</p> <p>Maintenance of snowmobile trails on sea ice in complete safety as late as possible in the spring and access to the road</p> | <p>Members of the Salluit community</p> <p>Members of the Kangiqsujuaq community</p> |
| <p>Presentation of the preliminary impact study to the members consulted</p> <p>Importance of communication and access to information for community members</p> | <p>Consideration of community interests in project development and monitoring during the operational and dismantling phases.</p> | <p>Members of the Salluit community</p> <p>Members of the Kangiqsujuaq community</p> <p>ARK</p> |
| <p>Cumulative impact of light from the sector</p> | <p>Maintenance of low-intensity light pollution, landmarks, and visibility of wind turbine structures during blizzards</p> | <p>Pingualuit National Park</p> <p>ARK</p> |

4 Methodological Approach

Map 5-1 shows the boundaries of the study areas within which the project's impacts were assessed. Four distinct areas were defined based on the sensitive components of the environment likely to be affected by the project.

- Project footprint: corresponding to the areas directly affected by the work, i.e., a 200-meter radius around the wind turbines and 25 meters on either side of the access roads and collector network. Environmental components in this zone are considered to be directly affected.
- Restricted study area: corresponding to a 2 km radius around the wind farm and access roads. Components in this area (e.g., species with special status) could be indirectly affected by the project.
- Local study area: corresponding to sensitive areas located in the vicinity of the project, i.e., a 30-km radius around the wind farm. Components of this area (e.g., Pingualuit National Park) could be indirectly affected by the project.
- Extended study area: no defined boundary, intended to account for the social impacts of the project on the communities of Salluit and Kangiqsujuaq, as well as on the road connecting Salluit Aippangat (Deception Bay) to the mining facilities.

Sources of impact that could affect the natural or human environment were identified for the four phases of the project: preparation, construction, operation, and dismantling. In addition, valued components (VCs) were determined based on the issues identified by the Directive and the consultation process. Their value was then determined based on the relative importance of the component within a given ecosystem (ecosystem value) or its importance to populations, specialists, and interest groups (socioeconomic value). The identified VCs and their respective values are presented in Table 7.

Table 7 Description and value of valued environmental components

| Component | Description | Value |
|---|---|--------|
| Air quality | Physicochemical characteristics of the air, mainly dust and particle content, as well as GHG emissions during construction. | High |
| Terrestrial environments and vegetation | Terrestrial plant communities. | Low |
| Wetlands and vegetation | Wetland plant communities. | Medium |
| Plant species with special status | All plant species with special status in Quebec or Canada. | High |
| Birds | All bird species and their habitats. | Large |
| Terrestrial mammals | All terrestrial mammal species and their functional habitats. | Medium |
| Wildlife species with special status | All wildlife species with special status in Quebec or Canada and their habitats. | Large |
| Economic framework | All elements related to the production, distribution, and consumption of goods and services in the communities of Salluit and Kangiqsujuaq, as well as in the Nunavik region. | Large |

| Component | Description | Value |
|--|---|--|
| Quality of life, health, and traditional knowledge | Characteristics of the environment in terms of the well-being, health, and safety of the population. Cultural values and all knowledge related to traditions and passed down from one generation to the next. | ZE ¹ local and broader: Large ZE ¹ Restricted: Medium |
| Land use | All land uses by the people living there, including traditional and cultural uses by the Inuit. | ZE ¹ local and extended: High ZE ¹ Restricted: Low |
| Infrastructure | Road network, port and airport, mining complexes. | ZE ¹ local: Medium Project footprint: Low |
| Noise climate | Characteristics of the sound environment (noise). | Local ZE: Medium Restricted ZE: Low |
| Landscape | Integrity of landscape character and visual fields. | Low to high |

¹ ZE: Study area

The significance of the impacts is then classified according to three levels: minor, moderate, or major. It is determined based on the following parameters:

- the value assigned to the components of the environment concerned;
- the characteristics of the anticipated impacts: duration, extent, and intensity;
- the effect of planned mitigation and compensation measures (see Appendix B).

The probability of occurrence of these impacts is assessed separately from their significance, as these are two independent criteria that do not influence each other. It is considered in order to qualify the results concerning the significance of the impacts.

5 Description of the Receiving Environment

5.1 Description of the Physical Environment

The 36 MW wind project at the Raglan mine, located in the semi-arid polar climate of Nunavik, is part of a harsh physical environment. The climate is characterized by an average annual temperature below -6°C, annual precipitation of 250 to 469 mm, and a short growing season of 120 days. Modeled data indicate very cold winters (average of -26.5°C) and cool summers (average of 5.1°C). Precipitation occurs mainly in the summer, with a peak of 240 mm in the summer compared to only 70 mm in the winter.

Winds measured at the Orion station reach an annual average of 32.4 km/h at a height of 78 m, with peaks in May and November. The prevailing winds come from the southwest and west-northwest. Sunshine varies greatly depending on the season, ranging from 12.6 hours in December to 236.8 hours in July, and annual solar radiation reaches approximately 970 kWh/m².

Permafrost is continuous in the region, often exceeding 400 m in thickness. The active layer varies between 1.5 m and 5 m depending on the substrate. Drilling in Sector 8 has revealed permafrost thicknesses of up to 640 m. Global warming poses a threat to soil stability and infrastructure.

The local geology is dominated by the Ungava Orogen, rich in nickel-iron deposits. The relief is relatively flat, with rocky ridges oriented east-west. The geomorphology is marked by glacial deposits (till, eskers) and periglacial features such as ostioles and polygonal soils.

The hydrography is influenced by permafrost and sparse vegetation. The study area is located at the head of the Tuttuqaluuti Kuunga (Deception River) watershed, with mainly intermittent streams. Surface water quality is generally good, although some mine effluents exceed criteria for metals such as nickel and copper.

Air quality is rated "good" 97% of the time, based on dust and heavy metal monitoring. Measured concentrations are generally below regulatory standards, with a few isolated exceedances for nickel and chromium.

Finally, sediments naturally contain high concentrations of metals, particularly nickel, arsenic, and chromium, due to local geology. However, recent analyses show no significant impact of mining activities on sediment quality.

Map 6-1 in Appendix A shows the physical environment elements present in the study area.

5.2 Description of the Biological Environment

The biological environment of the area covered by the Raglan mine wind project includes several valued components, including terrestrial vegetation, wetlands, birds, terrestrial mammals, and wildlife and plant species with special status.

Terrestrial Environments, Wetlands, and Vegetation

The local study area is located in the Arctic climate zone, more specifically in the prostrate shrub tundra bioclimatic domain, characterized by low vegetation consisting of prostrate shrubs, herbaceous plants, bryophytes, and lichens. The dominant terrestrial environments are boulder fields, felsenmeers, and polygonal soils with ostioles. Dry bare ground, where vegetation is very sparse, covers most of the area. Musk grasslands and herbaceous prairies are also present at the eastern and western ends of the study area.

An inventory carried out in 2025 near the future infrastructure sites identified the types of terrestrial environments, the most common of which are boulder fields and boulder fields with ostioles. Snow hollows, found in depressions with little exposure to sunlight, are richer habitats, mainly in terms of vascular species and bryophytes. Terrestrial vegetation covers on average less than 40% of terrestrial environments, with a predominance of herbaceous strata. The inventory identified 49 taxa, mainly from the Brassicaceae, Caryophyllaceae, Ericaceae, Juncaceae, Polygonaceae, Poaceae, Papaveraceae, Salicaceae, and Saxifragaceae families. This low diversity can be explained by the homogeneous topography, rocky substrate, and harsh climate.

With regard to plants used for traditional purposes, around 40 species were identified in the wider study area, several of which are used for food, medicine, or fuel. However, the project footprint does not have a sufficient abundance of these plants to be considered a gathering site.

Wetlands, although not very dominant, are present in the form of minerotrophic peat bogs and marshes. The vegetation is dominated by species such as *Carex membranacea*, *Eriophorum angustifolium*, *Calamagrostis lapponica*, and *Cassiope tetragona*. These wetlands cover 254.7 ha in the restricted study area, but only 1.25 ha in the project footprint. However, there are no wetlands directly in the path of the work.

Two plant species with special status have been identified in the area: *Draba cayouettei*, which has not been observed since 1981, and *Draba corymbosa*, which was observed in 2023 outside the project footprint. The area also has habitat potential for 11 other species with special status, but these were not observed during the most recent inventory.

Wildlife Species

Aquatic fauna is not very diverse due to the intermittent nature of the watercourses and their coarse substrate. Benthic invertebrates are dominated by chironomids and enchytraeids, while Arctic char (*Salvelinus alpinus*) is the only fish species recorded in Tuttuqaluuti Kuunga (Deception River) and its tributaries.

No amphibian or reptile species have been observed in the study area, which is consistent with the northern limits of their distribution. Similarly, no bats were detected during acoustic surveys conducted in 2023.

Terrestrial fauna includes species such as the Arctic fox (*Vulpes lagopus*), Ungava lemming (*Dicrostonyx hudsonius*), ermine (*Mustela erminea*), and Arctic hare (*Lepus arcticus*), although their presence is more pronounced in the wider area, well away from the planned infrastructure.

Finally, several wildlife species with special status are likely to be present in the local study area, including the woodland caribou (*Rangifer tarandus caribou*), polar bear (*Ursus maritimus*), wolverine (*Gulo gulo*), the least weasel (*Mustela nivalis*), the golden eagle (*Aquila chrysaetos*), the peregrine falcon (*Falco peregrinus tundrius*), and the short-eared owl (*Asio flammeus*). However, none of these species use the area adjacent to the proposed project.

The caribou of the Rivière aux Feuilles herd (TRAF), for which sport hunting has been suspended since 2018, is vital to the culture and subsistence of the Cree, Inuit, and Naskapi nations. Its legal status remains precarious: it is not listed as a threatened or vulnerable species (Act E-12.01) or in Schedule 1 of the Species at Risk Act (S.C. 2002, c. 29), despite the recommendation of COSEWIC in 2017. However, approximately 153,400 km² of calving areas north of the 52nd parallel are protected as critical wildlife habitat (Act C-61.1). Threats include habitat loss, predation, exploitation, industry, and climate change. Telemetry data (2014-2024), compiled in a study conducted specifically for this project, show that caribou frequent the local study area between mid-May and mid-September, with migration corridors largely avoiding the wind project. The boundary of the protected calving area for the species is located approximately 40 km from the present project.

Maps 6-2, 6-3, and 6-4 in Appendix A show the biological environment elements present in the study area.

5.3 Description of the Human Environment

Administrative and Sociodemographic Framework

Nunavik is governed by a unique administrative structure defined by the Northern Villages and Kativik Regional Government Act (LVNARK, RLRQ c V-6) and by agreements such as the James Bay and Northern Quebec Agreement (JBNQA). The Kativik Regional Government (KRG), created in 1978, acts as a supra-municipality and provides public services to the Nunavimmiut, particularly in the areas of transportation, civil security, economic development, the environment, recreation, and municipal infrastructure. It comprises eleven departments and nearly 400 employees, 65% of whom are Inuit and 44% of whom are women. The Makivik Corporation, also founded in 1978 (LSM, RLRQ c S-18.1), administers financial compensation under the agreements and supports the economic and cultural development of Inuit communities.

The fourteen northern villages of Nunavik, including Salluit and Kangiqsujuaq, are municipalities with special status. Each is administered by a municipal council, one member of which sits on the ARK. The lands are divided into three categories: Category I lands are the exclusive property of Inuit land corporations, Category II lands are co-managed with the Government of Quebec, and Category III lands are public but with exclusive rights for the Inuit. In Salluit, the Qaqqalik Land Corporation administers 625 km² of Category I land and 7,000 km² of Category II land, while in Kangiqsujuaq, the Nunaturlik Land Corporation manages 607 km² of Category I land and 5,200 km² of Category II land.

In terms of demographics, Nunavik has a population of approximately 14,050, more than 90% of whom are Inuit, spread across 14 isolated villages with no road access. The population is young (average age of 27.5 compared to 43 in Quebec) and growing rapidly (+6.6% between 2016 and 2021), particularly in Kangiqsujuaq (+11.6%). Households are larger (3.3 people on average) and families have more children, with a high rate of single-parent families (40%). Demographic projections indicate sustained growth until 2041. Access to housing is critical: nearly half of Inuit live in overcrowded conditions and a quarter of homes require major repairs. Inuktitut remains the dominant language (over 88%), with English as a second language, while French is rarely used.

The Nunavik health and social services network (region 17) is based on the Nunavik Regional Board of Health and Social Services (RRSSSN) and two centers: Inuulitsivik (CSI) and Tulattavik in Ungava (CSTU). Created in 1995, the RRSSSN coordinates and adapts services for the 14 villages, ensuring quality and resource management. The centers offer a variety of services: CLSC, youth protection, acute and long-term hospital care, rehabilitation for young people, and community services. Primary care is provided by nurses, sometimes doctors or midwives, with the use of telemedicine to limit transfers to Montreal. The CSI serves the Hudson Bay coast and the CSTU serves the Ungava Bay coast, with a service point in Montreal for specialized care.

The Kativik School Board (KSB), created in 1975, offers a trilingual curriculum (Inuktitut, English, French) and manages 18 elementary and secondary schools as well as vocational training centers such as Nasivvik in Kangiqsujuaq and Quannaq in Salluit. Despite these efforts, the school dropout rate remains high: 79% of young people leave school without a diploma. The school enrollment rate is low: 56.4% of adults in Nunavik have no diploma, compared to 11.8% in Quebec as a whole.

Economic Context

Between 2019 and 2020, the incomes of Nunavik residents increased but remain below the Quebec average. In 2020, the average total income in Nunavik was \$49,120, compared to \$51,160 for Quebec. In Salluit, it reached \$45,400, while in Kangiqsujuaq, it stood at \$49,400. The share of income from the market was 77% in Kangiqsujuaq and 68% in Salluit, slightly below the provincial average (80%). Government transfers increased in 2020, particularly as a result of COVID-19 measures, which also changed the distribution of income brackets. Despite the increase in individual income, the median after-tax household income in Salluit has declined by 12.6% since 2015, partly due to fluctuations in the labor market.

There are disparities in the labor market between communities. In Salluit, the labor force participation rate is 53.8%, below the regional average (63.1%), with a marked gender gap (10%). In Kangiqsujuaq, participation reaches 70.9%, exceeding the Nunavik average, and the gender gap is less pronounced (7%). The main employment sectors include health care and social assistance, public administration, and educational services, with local variations: in Salluit, health care dominates (19.6%), while in Kangiqsujuaq, education leads (19.5%). The economy remains mixed, combining subsistence activities and wage employment. To support entrepreneurship and employability, initiatives such as Nursuti and the Tamatumani program promote training, mentoring, and professional integration for Inuit, particularly in the mining sector.

Quality of Life, Health, and Traditional Knowledge

The health network is managed by the Nunavik Regional Board of Health and Social Services (RRSSSN), which coordinates services in northern villages. The Inuulitsivik and Tulattavik health centers provide medical, social, and community services. Care that is not available locally is provided by transfer to Montreal. Life expectancy in Nunavik is significantly lower: 64.4 years for men and 70.4 years for women, compared to 75.4 and 81.2 years in Canada. Chronic diseases such as diabetes, cardiovascular disease, and tuberculosis are more prevalent than the provincial average.

The communities of Salluit and Kangiqsujuaq place a high value on social cohesion. In Salluit, community radio, transportation infrastructure, and support services such as the women's shelter strengthen social ties. In Kangiqsujuaq, intergenerational events, the seniors' center, and sports activities promote community engagement. Food sharing, particularly through community freezers and traditional feasts, is central to both villages.

The mining industry is viewed with caution. The aftermath of the Asbestos Hill project has left its mark, particularly among elders, who speak of the environmental impacts and loss of trust in mining companies. Consultations revealed that communities want clear commitments on risk management and site closure.

Land Use

Land use is central to the culture and well-being of the Nunavimmiut. Hunting, fishing, and gathering are practiced throughout the year and are essential to food security. In the Hudson Strait region, 97% of residents consume caribou, 87% consume Arctic char, and 86% consume wild berries. Women play an important role in gathering and passing on traditional knowledge. Climate change is affecting access to the land, with less stable ice and changes in the migration *patterns* of several species.

The areas of importance for customary activities in the territory are mainly located between Salluit Aippangat (Deception Bay) and Lake (Kangillialuk) Watts. The camps around Pangaliriak (François-Malherbe) and Kangillialuk (Watts) lakes are used for fishing, hunting, and community life. In Kangiqsujaq, the areas around Kangirsujuap Kangirsunga (Wakeham Bay), Iqalliviup Kuunga (Wakeham River), and Pingualuit Park are key locations for traditional activities. The park facilitates access to the territory and offers educational and therapeutic activities.

Transportation infrastructure is limited: no villages are connected by road. Transportation is by plane or boat, depending on the season. The port of Salluit Aippangat (Deception Bay) and Kattiniq-Donaldson Airport are essential for supplying the Raglan mine. The Raglan mining complex includes underground mines, a concentrator, diesel power plants, and two wind turbines. It plans to install a wind farm to reduce its fuel consumption.

Waste management follows the principles of the regional plan, with incineration, sorting, recycling, and shipment to the south. Drinking water is delivered by truck and wastewater is treated locally.

The project area has well-documented heritage and archaeological significance. Eight archaeological sites and seven contemporary cultural sites have been identified in the local study area, including inukshuks and camp remains, but none are located within the restricted study area. In addition, several areas with archaeological potential have been mapped, particularly near bodies of water and on plateaus, without overlapping with the project footprint.

Soundscape and Landscape

The soundscape is influenced by mining activities, with levels ranging from 39.8 to 51.8 dBA depending on the location around the activities currently underway. Finally, the Nunavik landscape is characterized by tundra, rocky ridges, and bodies of water. The Puvirnituk Mountains, Pingualuit Park, and Tursukattaq Fjord Reserve are recognized for their aesthetic value. Identified landscape units include folded mountains, plateaus, rivers, and mining areas.

Map 6-7 in Appendix A shows the elements associated with the landscape in the study area.

6 Impact Assessment

A summary of the assessment and results of the residual potential impact assessment is presented in Tables 8 and 9. These results imply the application of impact mitigation measures (Appendix B).

Table 8 Summary of impacts on valued environmental components

| Component | Project phase | Project activity | Potential impact | Categories of common mitigation measures | Impact characterization | Significance of residual impact |
|---|------------------------------|--|---|--|---|---------------------------------|
| Air quality | Preparation and construction | Site preparation and mobilization; Land transportation and traffic; Marine transportation and traffic; Surface stripping and preparation; Road construction; Installation of equipment and infrastructure; Restoration of temporary work areas and demobilization of equipment; Waste management | Risk of deterioration in ambient air quality due to greenhouse gas emissions, air pollutants, and dust raised. | Road safety and network maintenance Climate change and GHG emissions reduction | Value: High Intensity: Medium Duration: Short Scope: One-time | Minor |
| | Dismantling | Land transport and traffic; Dismantling of equipment and other infrastructure; Disposal of materials and equipment; Restoration of project areas | Risk of deterioration in ambient air quality due to greenhouse gas emissions, air pollutants, and dust disturbance. | Land transport and traffic Dismantling of equipment and other infrastructure Disposal of materials and equipment Restoration of project areas | Value: High Intensity: Medium Duration: Short Scope: One-time | Minor |
| Terrestrial environments and vegetation | Preparation and construction | Site preparation and mobilization; Stripping and preparation of surfaces; Road construction; Restoration of temporary work areas and demobilization of equipment | Loss of vegetation and terrestrial habitats Potential loss of plants used for traditional purposes | Reduction in project area Avoidance and reduction of impacts on soils, wetlands, and water environments | Value: Low Intensity: Low Duration: Short Scope: One-off | Minor |
| | Dismantling | Restoration of project areas | Restoration of disturbed sites | Site restoration and dismantling | Value: Low Intensity: Low Duration: Short Scope: One-off | Minor |
| Wetlands and vegetation | Preparation and construction | Site preparation and mobilization; Road construction; Restoration of temporary work areas and demobilization of equipment | Risk of encroachment due to the presence of 1.25 ha of wetlands within the project footprint. | Reduction of project areas Avoidance and reduction of impacts on soils, wetlands, and water environments | Value: Medium Intensity: Low Duration: Short Scope: One-off | Minor |
| Plant species with special status | Preparation and construction | Site preparation and mobilization; Stripping and preparation of surfaces; Road construction; Restoration of temporary work areas and demobilization of equipment | Risk of disruption or encroachment due to the presence of a plant species with special status within the project footprint. | Reduction of project areas Avoidance and reduction of impacts on soils, wetlands, and water environments | Value: High Intensity: Medium Duration: Short Scope: One-off | Minor |
| Birds | Preparation and construction | Site preparation and mobilization; Delivery and transport of components – land component; Delivery and transport of components – marine component; Surface stripping and preparation; Road construction; Installation of equipment and infrastructure; Restoration of temporary work areas and demobilization of equipment | Risk of disturbance and loss of functional habitat. | Reduction in project area | Value: High Intensity: Medium Duration: Short Scope: One-off | Minor |
| | Operation | Presence of equipment and infrastructure; Operation of equipment | Risk of disturbance and collision with wind turbines. | Protection of biodiversity | Value: High Intensity: Medium Duration: Long Scope: Occasional | Medium |
| | Dismantling | Transportation and traffic; Dismantling of equipment and other infrastructure; Restoration of project areas | Risk of disruption. | Reduction in project area | Value: High Intensity: Medium Duration: Short Scope: One-off | Minor |

| Component | Project phase | Project activity | Potential impact | Categories of common mitigation measures | Impact characterization | Significance of residual impact |
|--------------------------------------|------------------------------|--|--|---|--|---------------------------------|
| Terrestrial mammals | Preparation and construction | Site preparation and mobilization; Transportation and traffic; Surface stripping and preparation; Road construction; Delivery and transportation of components – land component; Installation of equipment and infrastructure; Restoration of temporary work areas and demobilization of equipment | Risk of disturbance, loss of functional habitat, and collision with vehicles. | Reduction in project area Road safety and network maintenance | Value: Medium Intensity: Low Duration: Short Scope: One-off | Minor |
| | Operation | Presence of equipment and infrastructure; Operation of equipment | Risk of disruption. | N/A | Value: Medium Intensity: Low Duration: Long Scope: Occasional | Minor |
| | Dismantling | Transportation and traffic; Dismantling of equipment and other infrastructure; Restoration of project areas | Risk of disturbance and collision with vehicles. | Reduction in project areas Road safety and network maintenance | Value: Medium Intensity: Low Duration: Short Scope: One-off | Minor |
| Wildlife species with special status | Preparation and construction | Site preparation and mobilization; Transportation and traffic; Surface stripping and preparation; Road construction; Delivery and transportation of components – land component; Delivery and transportation of components – marine component; Installation of equipment and infrastructure; Restoration of temporary work areas and demobilization of equipment | Risk of disturbance, loss of functional habitat, and collision with vehicles. | Reduction in project area Road safety and network maintenance Biodiversity protection Specific measures for caribou: The principles aimed at avoiding disturbance to caribou in procedure PG-42 on driving a road vehicle in the Arctic must be respected. This means giving way, not driving toward caribou, and not honking the horn. Raise awareness among workers, particularly as the calving season approaches, of the risks of disturbing caribou and the appropriate behaviors to adopt. | Value: High Intensity: Medium Duration: Short Scope: One-time | Minor |
| | Operation | Presence of equipment and infrastructure; Operation of equipment | Risk of disturbance, loss of functional habitat, and collision with wind turbines. | Biodiversity protection | Value: High Intensity: Medium Duration: Long Scope: One-off | Medium |

| Component | Project phase | Project activity | Potential impact | Categories of common mitigation measures | Impact characterization | Significance of residual impact |
|--|------------------------------|--|--|---|--|---------------------------------|
| | Dismantling | Transportation and traffic; Dismantling of equipment and other infrastructure; Restoration of project areas | Risk of disturbance and collision with vehicles. | Reduction in project areas Road safety and network maintenance Protection of biodiversity Specific measures for caribou: The principles aimed at avoiding disturbance to caribou in procedure PG-42 on driving a road vehicle in the Arctic must be respected. This means yielding the right of way, not driving toward caribou, and not honking the horn. Raise awareness among workers, particularly as the calving season approaches, about the risks of disturbing caribou and the appropriate behaviors to adopt. | Value: High Intensity: Medium Duration: Short Scope: One-time | Minor |
| Economic context | Preparation and construction | Purchase of goods and services and employment of labor | Job creation or maintenance, economic spinoffs for local and regional suppliers, and increased employability of the regional workforce (positive). | Socioeconomic development | Value: High Intensity: Medium (positive) Duration: Short Scope: Regional | Medium (positive) |
| | Exploitation | Purchase of goods and services and employment of labor | Job creation or maintenance, economic spinoffs for local and regional suppliers, and increased employability of the regional workforce (positive). | Socioeconomic development | Value: High Intensity: Medium (positive) Duration: Long Scope: Regional | Medium (positive) |
| | Dismantling | Disposal of materials and equipment; Purchase of goods and services and use of labor | Job creation or maintenance, economic benefits for local and regional suppliers, and increased employability of the regional workforce (positive). | Socioeconomic development | Value: High Intensity: Medium (positive/negative) Duration: Short Scope: Regional | Medium (positive/negative) |
| Quality of life, health, and traditional knowledge | Preparation and construction | Transportation and traffic; Delivery and transportation of components – land component; Delivery and transportation of components – marine component; Waste management | Increase and disruption of road and marine traffic. Indirect impacts caused by changes in land use. Indirect impact of changes in land use on social determinants of health. | Road safety and network maintenance Health, safety, and incidents Communication and consultation Waste and hazardous materials management Socioeconomic development Preservation of land use and cultural heritage | Value: High Intensity: Medium Duration: Short Scope: Local | Medium |
| | Operation | Presence of equipment and infrastructure; Operation of equipment | Risk to the safety of land users. Disturbance caused by the stroboscopic effect and risk associated with magnetic fields for land users on the move. Sociocultural and psychosocial disruptions to local populations. Indirect impact of changes in land use on social determinants of health. | Road safety and network maintenance Health, safety, and incidents Communication and consultation Waste and hazardous materials management Socioeconomic development Preservation of land use and cultural heritage | Value: Medium Intensity: Low Duration: Long Scope: Local | Medium |

| Component | Project phase | Project activity | Potential impact | Categories of common mitigation measures | Impact characterization | Significance of residual impact |
|----------------|------------------------------|--|--|---|---|---------------------------------|
| | Dismantling | Transportation and traffic; Disposal of materials and equipment | Increase and disruption of road traffic. Indirect impact of land use changes on social determinants of health (positive). | Road safety and network maintenance Health, safety, and incidents Communication and consultation Waste and hazardous materials management Socioeconomic development Preservation of land use and cultural heritage | Value: High Intensity: Medium (positive/negative) Duration: Short (negative) Long (positive) Scope: Local | Medium |
| Land use | Preparation and construction | Transportation and traffic; Delivery and transportation of components – land component; Delivery and transportation of components – marine component; Road construction and improvement of existing roads; Installation of equipment and infrastructure; Waste management; Restoration of temporary work areas and demobilization of equipment | Disruption of activities on the territory. Potential displacement of hunting activities due to impact on wildlife. Indirect impacts of potential changes on wildlife, flora, and landscape. Potential impediment to snowmobile travel. | Road safety and network maintenance Health, safety, and incidents Communication and consultation Waste and hazardous materials management Socioeconomic development Preservation of land use and cultural heritage Specific measures for land use: Use pre-established shipping lanes to limit the impact on the integrity of the ice in Salluit Aippangat (Deception Bay). In partnership with local communities, organize maritime routes to reduce the impact on the ice in Salluit Aippangat (Deception Bay). | Value: High Intensity: Medium Duration: Short Scope: Local | Medium |
| | Operation | Presence of equipment and infrastructure; Operation of equipment; Maintenance of equipment and access roads | Potential impediment to snowmobile travel. Reduction in marine and land traffic (positive). Indirect impacts of potential changes on wildlife, flora, and landscape. Visual impacts on Pingualuit Park. | Road safety and network maintenance Health, safety, and incidents Communication and consultation Waste and hazardous materials management Socioeconomic development Preservation of land use and cultural heritage | Value: Low Intensity: Low (positive/negative) Duration: Long Scope: Local | Medium |
| | Dismantling | Transportation and traffic; Dismantling of equipment and other infrastructure; Disposal of materials and equipment; Restoration of project areas | Removal of obstacles to snowmobile traffic (positive). Increased accessibility and productivity of the territories used. | Road safety and network maintenance Health, safety, and incidents Communication and consultation Residual and hazardous waste management Socioeconomic development Preservation of land use and cultural heritage | Value: High Intensity: Medium Duration: Short Scope: One-off | Minor |
| | Preparation and construction | Transportation and traffic; Delivery and transportation of components – land component; Delivery and transportation of components – maritime component; | Slowdown in land traffic and increase in traffic density, which may affect road infrastructure. Increase in air and maritime traffic, increasing the use of airport and port infrastructure. | Road safety and network maintenance | Value: Medium Intensity: Low Duration: Short Scope: Local | Minor |
| Infrastructure | Operation | Transportation and traffic; Equipment operation | Reduction in traffic related to diesel transport (positive). | Road safety and network maintenance | Value: Medium Intensity: Low (positive) Duration: Long Scope: Local | Medium (positive) |

| Component | Project phase | Project activity | Potential impact | Categories of common mitigation measures | Impact characterization | Significance of residual impact |
|------------|------------------------------|--|---|--|---|---------------------------------|
| | Dismantling | Transportation and traffic | Slowdown in land traffic and increase in traffic density, which may affect road infrastructure. Increase in air and sea traffic, leading to greater use of airport and port infrastructure. | Road safety and network maintenance | Value: Average Intensity: Low Duration: Short Scope: Local | Minor |
| Soundscape | Preparation and construction | Site preparation and mobilization; Transportation and traffic; Delivery and transportation of components – land component; Delivery and transportation of components – marine component; Surface stripping and preparation; Road construction and improvement of existing roads; Installation of equipment and infrastructure; Restoration of temporary work areas and demobilization of equipment | Increased ambient noise levels. | Communication and consultation Climate change and GHG emissions reduction | Value: Medium Intensity: Low Duration: Short Scope: Local | Minor |
| | Operations | Transportation and traffic; Equipment operation; Equipment and access road maintenance | Increased ambient noise levels. | Communication and consultation Climate change and GHG emissions reduction | Value: Low Intensity: Low Duration: Long Scope: Ad hoc | Minor |
| | Dismantling | Transportation and traffic; Dismantling of wind turbines and other wind farm structures; Restoration of project areas | Increase in ambient noise levels | Communication and consultation Climate change and GHG emissions reduction | Value: Medium Intensity: Low Duration: Short Scope: Local | Minor |
| Landscape | Preparation and construction | Site preparation and mobilization; Transportation and traffic; Delivery and transportation of components – land component; Delivery and transportation of components – marine component; Surface stripping and preparation; Road construction; Waste management; Restoration of temporary work areas and demobilization of equipment; | Modification of landscape and visual field. | Reduction of project areas Avoidance and reduction of impacts on soils, wetlands, and water environments Road safety and network maintenance | Value: Low Intensity: Low Duration: Short Scope: One-off | Minor |
| | Operation | Presence of equipment and infrastructure | Modification of the landscape and visual field | Reduction in project area Avoidance and reduction of impacts on soil, wetlands, and water environments Road safety and network maintenance | Value: Low to high Intensity: Low Duration: Long Scope: One-off | Minor |
| | Dismantling | Transportation and traffic; Dismantling of equipment and other infrastructure; Disposal of materials and equipment; Restoration of project areas | Modification of the landscape and visual field, followed by restoration to the original landscape. | Reduction of project areas Avoidance and reduction of impacts on soils, wetlands, and water environments Road safety and network maintenance | Value: Low to high Intensity: Low (positive/negative) Duration: Short (negative); Long (positive) Scope: One-off | Minor |

Table 9 Summary of project impact results based on identified issues

| Issues identified | Response or action taken to mitigate potential impact ¹ | Result of the impact assessment on related components | Value of residual impact on the issue |
|--|--|---|---------------------------------------|
| Protection of wetlands, water bodies, and the Kovik River watershed | The local study area is not located in the Kovik River watershed. No watercourses or wetlands are directly affected by project activities. The work avoided them from the outset of the development plan. | The project's impact on hydrography, surface water quality, and wetlands is not considered significant. Following the impact analysis, this issue is no longer applicable to the project. | N/A |
| Protection of soil quality and surface water Avoiding additional sources of pollution | No watercourses are affected by the project activities. They were all avoided during the design of the development plan. Best practices for the prevention and control of any failures that could lead to pollution will be implemented. | The project's impact on soil and sediment quality and water quality is not considered significant. Following the impact analysis, this issue is no longer applicable to the project. | N/A |
| Maintaining biodiversity Avoid resource depletion through changes to migration routes (caribou, waterfowl) and bird mortality | A specific study on caribou was conducted, as well as exhaustive bird inventories. The principles aimed at avoiding disturbance to caribou and wildlife management will be maintained. Bird mortality monitoring will be implemented. | No waterways or wetlands are directly affected by project activities. The area is not heavily used by birds and mammals, and the quality of the habitat is poor, so there is little risk of collision. Without reducing the overall biodiversity of the local study area, avoidance of the mining area could be maintained. The mine's spill and waste management principles should prevent any pollution related to the project. | Minor |
| Maintaining the quality and quantity of plant and animal habitats Avoid habitat degradation (risk of spills and pollution) | The work areas and project footprint have been reduced to a minimum. Best practices for the prevention and control of any failures that could lead to pollution will be implemented. | The mine's spill and waste management principles should prevent any pollution related to the project. | Minor |
| Maintaining snowmobile trails on sea ice safely as late as possible in the spring and access to the road Avoid additional pressure on air, road, and marine transportation resulting from the delivery of materials and personnel | All maritime activities related to the project will respect navigation corridors to avoid additional impacts on the bay's ice. Land transportation activities will follow standard guidelines. | The six marine transport trips planned for the project are not expected to have a significant impact on sea ice. Land and air transport represent a very small relative increase in the volume of activity on existing infrastructure | Minor |
| Promoting local economic development and job creation Creation of local jobs and awarding of local contracts, increased profit sharing | The provisions of the Raglan Agreement related to local employment and economic opportunities will be applied to this project in order to maximize benefits for communities | Potential contracts and jobs are mainly related to the preparation and construction phase, and these could benefit local workers and businesses with the required qualifications. Few new jobs are expected during the operational phase. | Minor |

| Issues identified | Response or action taken to mitigate potential impact ¹ | Result of the impact assessment on related components | Value of residual impact on the issue |
|--|--|---|---------------------------------------|
| Maintaining quality of life (Air quality, noise environment, and safety) | Maintaining visibility of wind structures during blizzards | Air quality Living conditions Noise levels | Minor |
| Maintaining access to the territory, traditional and contemporary uses, local knowledge, and reconciliation of uses of the territory | All mitigation measures related to the biological environment and infrastructure also aim to ensure the continuity of traditional land uses by ensuring access and vitality. The Raglan Committee, as a forum for dialogue between the proponent and the communities, allows for the identification and resolution of potential conflicts related to land use that could arise from the project. | Since the impact on the biological environment is considered low to moderate, the impact on infrastructure is considered low, and the restricted study area remains relatively unfrequented, the indirect impacts on land use will be limited. | Minor |
| Social acceptability of the project Consideration of community interests in project development and monitoring during the operational and dismantling phases. | The Raglan Committee acts as a forum for dialogue between the proponent and the communities. In addition, existing underlying mechanisms such as the closure subcommittee, annual environmental forums, and the complaint management mechanism will remain in place and will be able to integrate project-related monitoring into their activities. | During consultations for the project, communities expressed their satisfaction with the comprehensive in-person consultation process. In addition, there is a well-established tradition of dialogue with the community, governed by formalized processes that can incorporate the issue of the wind farm. | N/A |
| Protection of built and archaeological heritage and landscapes Maintenance of low-intensity light pollution and landmarks. | The wind turbines will be built on an already disturbed site characterized by a mining landscape. | The impact on the landscape will be limited due to the nature of the surrounding landscape unit and the ability of other landscape units to conceal the presence of the wind turbines from most viewpoints. Also, the light impact will not be significant due to its low intensity relative to nearby installations. | Minor |

6.1 Description of Impacts on the Physical Environment

The only physical component with a significant interrelationship with the project's activities or components is air quality. During the preparation and construction phases, as well as during the dismantling phase, the planned activities involving the use of vehicles and machinery could temporarily alter air quality due to greenhouse gas emissions, air pollutants, and dust. No significant impact is expected during the operational phase.

6.1.1 Summary of Residual Impacts on the Physical Environment

Following the implementation of mitigation measures, the significance of residual impacts is considered minor for components of the physical environment.

6.2 Description of Impacts on the Biological Environment

The biological components deemed to have a significant interrelationship with the project activities or components are: terrestrial environments, wetlands, vegetation, birds, terrestrial mammals, and species with special status.

Preparation and Construction Phase

The preparation and construction phase of the wind turbines will result in the loss of vegetation and terrestrial habitats, but unused work areas will be restored after construction. This work will disturb the vegetation directly along the route of the work. The 2023 inventory shows low vegetation cover and limited plant diversity in the project area compared to Pingualuit National Park and some other surrounding areas. Plants traditionally used by the Inuit are scarce, and the region is heavily anthropized due to mining activities. Sites of interest for gathering are mainly located in the Salluit Aippangat sector, far from the work areas. The dismantling work will use machinery similar to that used for construction. It will allow for the restoration of the sites, resulting in natural recolonization by vegetation.

The study area provides potential habitat for ten species of special status, but the only one listed in the inventories, the corymbose drabe, will not be affected by the project since it has not been listed in the planned work route. Unused work areas will be restored after construction, and wind turbine sites will be returned to a condition close to their original state during the dismantling phase, allowing plant communities to recover and habitats for species of special status to return.

Although wetlands are present within the project footprint, none are located directly in the work area (roads or wind turbine platform). Therefore, the impact on these environments will be limited.

However, the preparation and construction work could disturb or destroy the habitats of nine bird species identified in the restricted study area, five of which are nesting species. In addition, 24 migratory species have been recorded in the local study area, with greater numbers during the fall migration than during the spring migration. Habitats suitable for nesting are limited, as vegetation covers less than 40% of the terrestrial environments under study. Preparation and construction work carried out during the nesting and migration periods could cause birds to temporarily avoid the area due to noise, although the expected noise levels remain below provincial limits.

Preparation and construction work could disrupt the habitats of various species of terrestrial mammals, including woodland caribou, meadow voles, Ungava lemmings, Arctic hares, and foxes. However, the low vegetation cover (40% of the footprint) reduces the quality of habitats suitable for breeding and feeding. Construction noise could cause some species to temporarily avoid habitats near project areas, although noise levels will remain below provincial limits.

The presence of undisturbed habitats nearby and the mobility of species should reduce the impact. However, increased traffic could increase the risk of collisions with wildlife.

Operational Phase

During the operational phase, the wind turbines will produce noise levels of 55 dBA at the base of the tower and 30 dBA within 2 km of the turbines. Since the entire area is already subject to activities that generate movement and noise, the operation of the wind turbines alone is not expected to significantly alter the current disturbance of terrestrial mammals.

Wind turbine noise could disrupt bird vocal communication and even interfere with their reproduction, although it is possible that they will be able to adapt. Inventories and sound modeling indicate that noise from construction and wind turbines should not reach areas sensitive to caribou, but caribou may increase their avoidance behavior in the area. The presence of undisturbed habitats nearby and the mobility of wildlife species should help reduce overall impacts.

Wind turbines can also cause collisions with birds depending on the density of individuals present, landscape characteristics, and weather conditions. However, several studies show that mortality rates due to wind turbines are low and have too negligible an effect to have a significant impact on bird populations, especially when compared to other anthropogenic factors such as windows and communication towers. Furthermore, between 2015 and 2019, no bird mortality was reported for the two wind turbines at the Raglan Mine site.

Dismantling Phase

The dismantling phase will generate impacts similar to those of the preparation and construction phases in terms of noise and associated disturbance. However, this phase will also allow for the rehabilitation of the project areas.

6.2.1 *Summary of Residual Impacts on the Biological Environment*

Following the implementation of mitigation measures, the significance of residual impacts is considered minor for most components of the biological environment. However, birds and wildlife species with special status could experience a moderate impact during the exploitation phase.

6.3 **Description of Impacts on the Human Environment**

Preparation and Construction Phase

Investments for the wind turbine preparation and construction phase are estimated at approximately \$300 million, covering equipment purchases, transportation, civil works, and construction activities. This work will take place over three years, with winter breaks, and will involve between 80 and 120 workers. Although most of the equipment and specialized jobs will come from outside the region, measures are planned to maximize local economic benefits, including hiring Inuit workers, awarding contracts to qualified Inuit companies, and continuing the mine's workforce training program. The impact of this phase on the local economy is considered positive. The increase in land and marine traffic during the summer will be limited, but it could cause disruption to local communities due to noise, dust, and vibrations. The work will not directly affect areas of customary activities, but could indirectly affect land use and wildlife. These effects could also have an impact on the health of local communities in Nunavik, which is closely linked to land use, including food security and knowledge transfer. The impact of the preparation and construction phase on land use is considered low and therefore has no significant effect on health or traditional knowledge.

Increased traffic could cause limited inconvenience to settlements along the road, which will be mitigated by transportation management measures. Marine delivery will consist of six trips spread over the preparation and construction period, using the same shipping route as the Raglan Mine supply operations. This increase is not expected to cause significant deterioration of port facilities. For land traffic, 374 oversized transports and 227 regular transports are planned between Salluit Aippangat (Deception Bay) and the mine site, mainly during the construction phase, and are not expected to result in a significant increase in traffic density. However, the transport of certain components and equipment will require specialized vehicles and trailers, which could cause premature deterioration of the road. If damage occurs, repairs will be carried out as soon as possible by the proponent, but could slow or interrupt road traffic. Additional traffic is expected at Kattiniq-Donaldson Airport, but this increase is not expected to have a significant impact on the use or deterioration of airport infrastructure.

The noise impacts of the preparation, construction, and dismantling phases will be limited. Noise levels will be below provincial guidelines for all locations considered.

Operational Phase

For the operational phase, the operational life of the wind turbines is estimated at 20 years due to northern climatic conditions. Between six and ten workers will be required each year for equipment operation and maintenance. The provisions of the Raglan Agreement will promote the hiring of Inuit workers and the awarding of contracts to qualified Inuit businesses. However, regional hiring may be limited by the specialized nature of the skills required and training challenges. In this regard, Raglan Mine plans to collaborate with regional authorities to increase training opportunities in Nunavik. Operating expenses are estimated at \$4 million per year, totaling \$80 million over 20 years, with a portion allocated to local subcontractors. Local concerns about accidents and failures could adversely affect quality of life by discouraging access to the territory. Also, although several studies conducted in the southern part of the province show that wind energy projects can cause stress and anxiety, these results are difficult to transfer. Furthermore, their impact on the health and vitality of the traditional knowledge of Indigenous peoples living in the territory is poorly documented. Any impact on wildlife, flora, or the territory may also influence land use and, consequently, the traditional knowledge and health of local communities.

Some residents of Salluit and Kangiqsujuaq travel by snowmobile north of the facilities, and users are concerned about the risk of collision with equipment in poor visibility conditions. Wind turbine operations will not directly affect customary activity areas, as disturbances caused by the mining industry have reduced the use of this territory. The facilities could affect the experience of users engaged in hunting, fishing, and gathering activities due to their visibility over a large area. Impacts on wildlife could also affect land use, but these impacts will be limited according to the assessment. During the operational phase, a reduction in transportation due to decreased demand for diesel fuel could have a positive impact on infrastructure use while potentially reducing the negative effects of transportation on land use.

The wind turbines will generate noise levels of 55 dBA at the base of the mast and 30 dBA within 2 km. The installations are located on a site characterized by a mining landscape. However, they will be visible from other landscape units. From the north and west, in a landscape characterized by a plateau, it will be possible to see the wind turbines from certain points on the road connecting Salluit Aippangat (Deception Bay) to Katinniq up to 20 km away. However, they will not be visible from Lake Kangillialuk (Watts), whose surroundings are used for traditional activities. To the east, in an industrial landscape, they will be visible to observers traveling on the road connecting Donaldson Airport to Katinniq. From the south, they will be partially visible from Guindault Lake at a distance of 15 km. Pingualuit Park, located 30 km further south, is mostly situated in a river landscape whose twists and turns will conceal the presence of the facilities from observers. At certain high points in the park, they could potentially be visible, but only very faintly, mainly due to the distance.

Dismantling Phase

The wind turbine dismantling phase could last six months and require specialized labor. In addition to hiring Inuit workers and awarding contracts to qualified Inuit companies, the Agreement provides local communities with a right of first refusal on the purchase of dismantled components. This could have positive economic benefits for Inuit communities. However, the end of the project will result in the loss of jobs related to the operation and maintenance of the wind farm, as well as a decrease in purchases of goods and services from regional suppliers.

During the dismantling phase, increased traffic related to the work could cause temporary inconvenience. However, restoring the site to its natural state could have a positive impact on the health of local populations by strengthening the social determinants of health related to the territory. Collaboration with communities during dismantling could increase the sense of control and maximize positive impacts. Dismantling could lead to increased maritime and road traffic during the summer season due to the return of dismantled components to the south. Although the number of boat trips has not yet been determined, maritime traffic is not expected to have a significant impact. Road traffic will increase in proportion to the amount of material being returned south, which could affect land use due to noise, dust, and vibration. Reclamation will have a positive impact, especially if carried out in collaboration with local communities. During all phases, residual materials will be managed in accordance with current practices at Raglan Mine.

6.3.1 Summary of Residual Impacts on the Human Environment

Following the application of standard mitigation measures, the significance of residual impacts is considered moderate (positive) for the economic environment and moderate (negative) for quality of life. It is moderate for land use during the preparation and construction phases and during the operating phase. It is minor for the dismantling phase. For infrastructure, it is minor during the preparation/construction and dismantling phases and moderate (positive) during the operational phase. The significance of the impact is considered minor for the soundscape and landscape.

6.4 Cumulative Impacts

Maps 7-1 and 7-2 in Appendix A illustrate the study area and the components considered for the assessment of cumulative impacts on the environment. The analysis highlights significant impacts for four valued components: air quality, migratory caribou, Inuit land use, and landscape.

With regard to air quality, dust emissions come mainly from the transport of materials needed for the construction and maintenance of the wind farm, as well as from existing mining activities. Monitoring data show that ambient air contamination remains low and localized near sources, particularly roads and mining sites. The anticipated cumulative impact is therefore considered low, although a moderate effect may occur in the summer near certain lakes. To limit these effects, measures such as the application of dust suppressants and speed reduction on sensitive roads are being maintained.

With regard to migratory caribou, cumulative impacts are related to habitat loss and fragmentation, disturbance of animals, and the risk of collisions with vehicles. The wind project, combined with other mining infrastructure, contributes to a moderate to high cumulative impact, mainly due to the westward displacement of the herd and increased fragmentation of the territory. Existing protective measures, such as traffic regulation, restrictions during calving season, and scientific monitoring, remain essential to limit these effects.

Inuit land use is also affected by the accumulation of infrastructure (mines, roads, airports, wind farms), which restricts access and the practice of traditional activities. The cumulative impact is considered moderate, as it results in reduced use of the area and a sense of cultural loss within communities. To mitigate these effects, it is recommended that members of Inuit communities be more involved in project design and development, that road control measures be maintained, and that community participation be encouraged.

Finally, in terms of landscape, the addition of wind turbines is part of a series of regional transformations that began several decades ago, notably with mining development and the construction of roads and airports. While the individual impact of the wind farm is considered minor, the cumulative effect on the landscape is moderate, as it alters the cultural perception of the territory and the orientation of users. Consultations with communities are encouraged to preserve landmarks and ensure better integration of infrastructure into the landscape.

7 Effects of the Environment on the Project

Certain atmospheric conditions and natural phenomena could have an impact on the project, particularly in a context where the effects of climate change are felt disproportionately in the Arctic. The analysis of environmental effects was conducted over a short-term (2050) and long-term (2080) horizon.

Projections indicate that average and maximum temperatures are expected to increase significantly, resulting in an increased number of annual thaw days, which will affect permafrost melting. Solid and liquid precipitation will also increase, while extreme wind events are expected to remain stable.

The increase in temperatures will result in a decrease in the number of days favorable to frost events, while extreme freezing rain events are expected to remain unchanged. Although there is no data on lightning in the region, data from other Arctic regions suggest an increase in the annual number of lightning strikes.

Nunavik has no areas of seismic activity within its territory.

To mitigate these risks, certain adaptation measures will be implemented for wind turbines. Among other things, protective measures will be put in place to prevent injuries resulting from flying ice. Lightning protection systems will also be inspected regularly, and spare parts for critical components will be kept on site. The foundations will be inspected each dry season to repair any cracks in the concrete caused by freeze-thaw cycles.

The roof of the electrical room will be adapted to cope with increases in precipitation and frost, and its side attachments will be reinforced in case of extreme winds. The BESS container will be inspected regularly to verify its stability in case of permafrost thaw, and its foundations will be protected from flooding by installing it on raised foundations surrounded by adequate drainage. Communication devices will be protected from lightning by an effective grounding system and a surge protection system. Finally, access roads that may be affected by permafrost thaw or freeze-thaw cycles will be inspected annually, and culverts will be equipped with a thawing system.

Analysis of data obtained from the project's measurement masts makes it possible to identify areas where winds can reach extreme speeds. For technical reasons, these areas, if present on the site, are avoided when developing the final configuration of the wind farm. Furthermore, no areas of extreme winds have been identified in the study area. Although all components of the wind turbines are designed to withstand high wind speeds, the rotation speed of the turbines can be slowed down or even stopped automatically if necessary, using the safety device that controls the angle of the blades.

8 Environmental and Social Monitoring

A monitoring and follow-up program will be implemented to ensure compliance with the project's environmental commitments as defined in the impact study and related to government authorizations. This program will cover the construction, operation, and dismantling phases, with a designated manager responsible for its implementation, monitoring of mitigation measures, and management of non-compliance issues. Environmental and social monitoring will verify the accuracy of impact assessments and the effectiveness of proposed measures, while ensuring ongoing communication with local communities, particularly through the Raglan Committee and other information-sharing tools. Greenhouse gas emissions will also be monitored in accordance with current standards.

The components subject to specific monitoring are presented in Table 10.

Table 10 Components subject to environmental and social monitoring

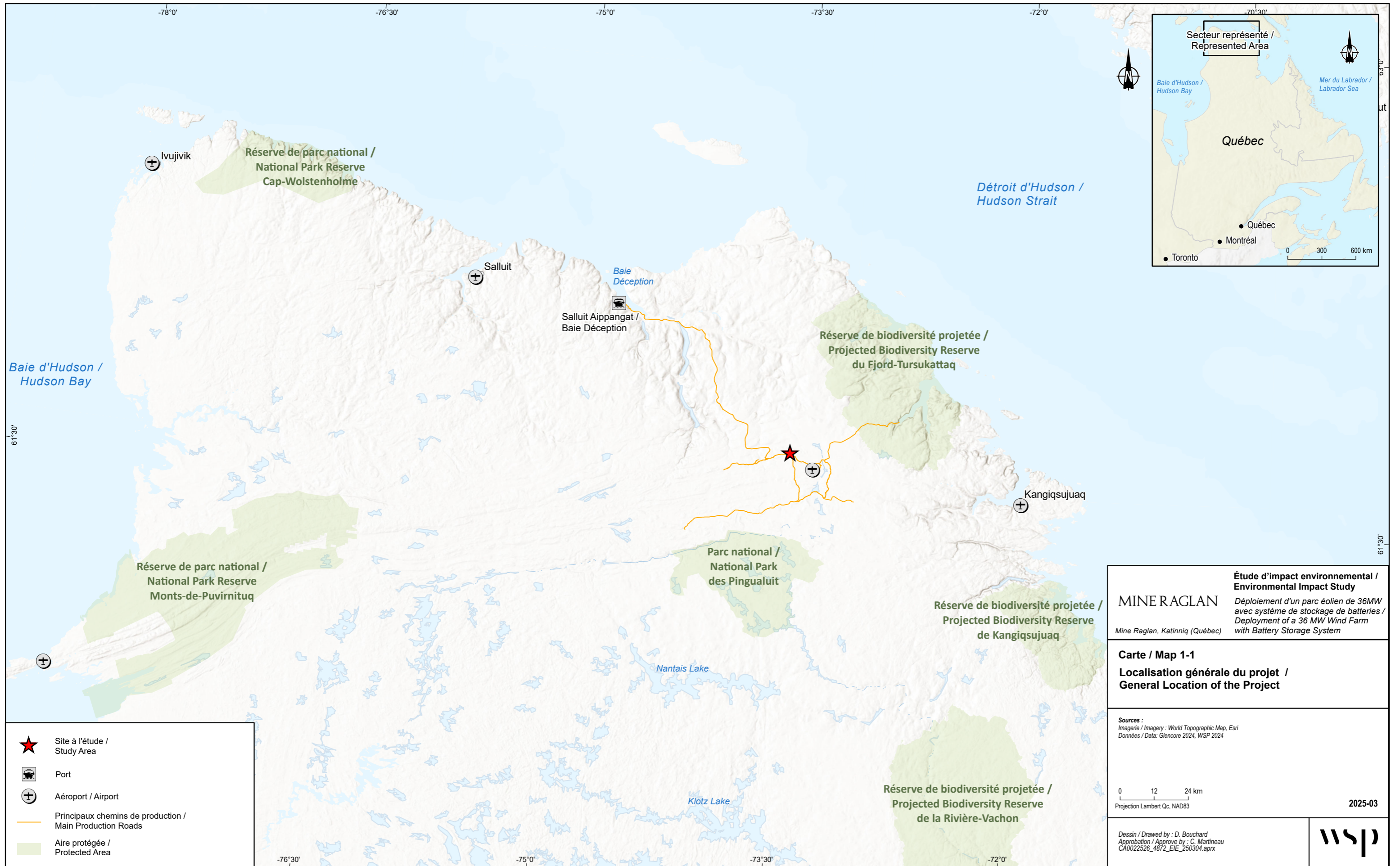
| Component | Objectives | Frequency and duration of monitoring | Production and transmission of results |
|--------------------|--|---|--|
| Peregrine falcon | Document the range and delineate home ranges. | Annual during two nesting seasons. | Report produced by the Ministry and transmitted to Raglan Mine. The results will be included in the environmental monitoring and follow-up report and transmitted to the Ministry. |
| Birds | Assess bird mortality rates that may be associated with the presence and operation of wind turbines. | Annual during the first three years after commissioning, and/or according to the conditions of the certificate of authorization. | The results will be included in the environmental monitoring and follow-up report and sent to the Ministry. |
| Wildlife | Document the presence and behavior of wildlife in relation to the presence of wind turbines. | Annually during the first three years following commissioning, and/or according to the conditions of the authorization certificate. | The results will be included in the environmental monitoring and follow-up report and sent to the Ministry. |
| Social environment | Collect quantitative and qualitative data to provide measures to guide impact management. | Annually until the end of mining activities. | The results will be submitted annually to the Raglan Committee in writing and will also be summarized and presented. The social monitoring report will be sent to the Ministry. |
| Light pollution | To be determined with stakeholders. | To be determined with stakeholders. | To be determined with stakeholders. |






APPENDIX

A

MAPS





-  Site à l'étude / Study Area
-  Port
-  Aéroport / Airport
-  Principaux chemins de production / Main Production Roads
-  Aire protégée / Protected Area

MINE RAGLAN
Mine Raglan, Katinniq (Québec)

Étude d'impact environnemental / Environmental Impact Study
Déploiement d'un parc éolien de 36MW avec système de stockage de batteries / Deployment of a 36 MW Wind Farm with Battery Storage System


Carte / Map 1-1
Localisation générale du projet / General Location of the Project

Sources :
 Imagerie / Imagery : World Topographic Map, Esri
 Données / Data : Glencore 2024, WSP 2024

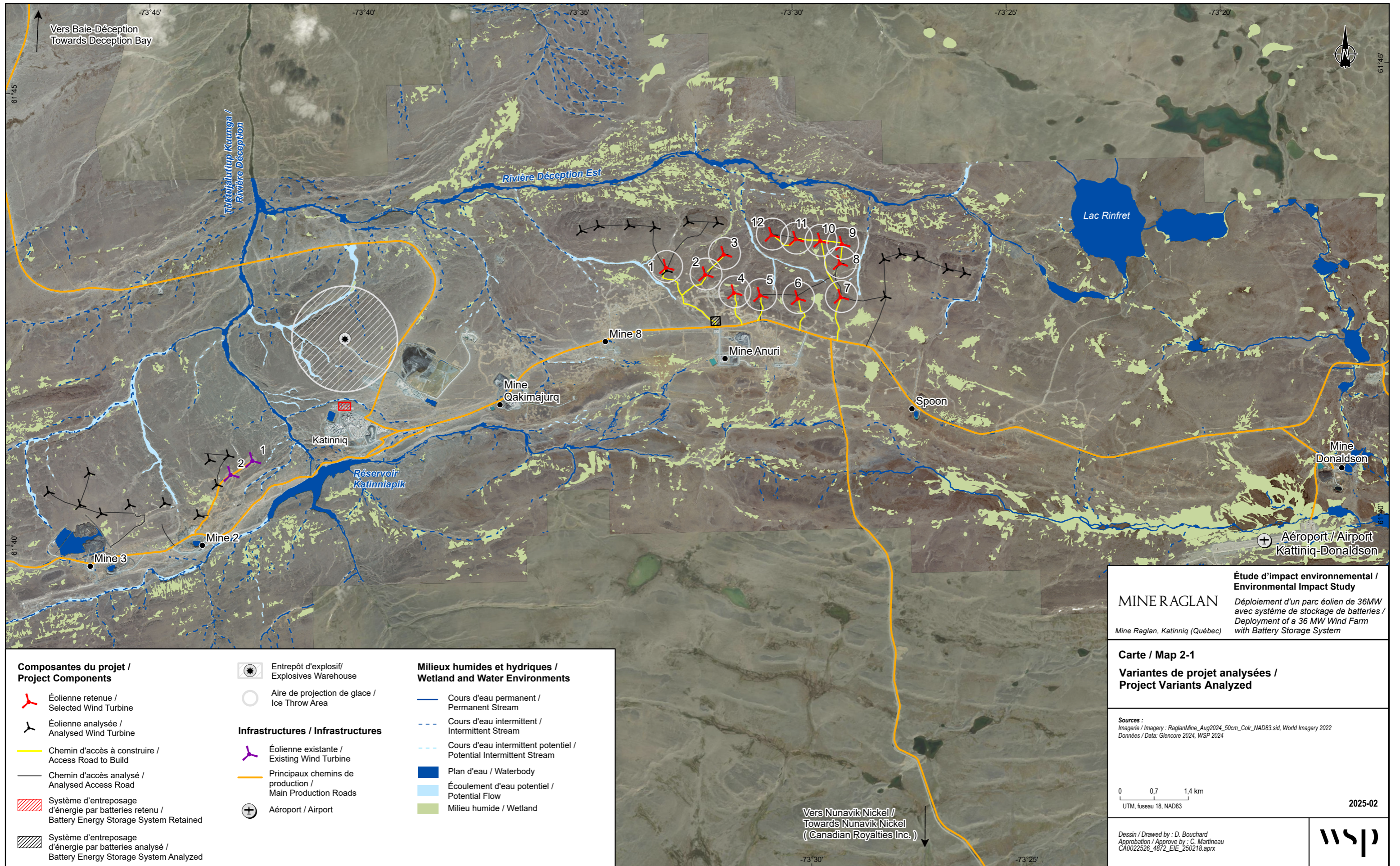
0 12 24 km
 Projection Lambert Qc, NAD83

2025-03

Dessin / Drawed by : D. Bouchard
Approbation / Approve by : C. Martineau
 CA0022526_4872_EIE_250304.aprx



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- Composantes du projet / Project Components**
- Éolienne retenue / Selected Wind Turbine
 - Éolienne analysée / Analysed Wind Turbine
 - Chemin d'accès à construire / Access Road to Build
 - Chemin d'accès analysé / Analysed Access Road
 - Système d'entreposage d'énergie par batteries retenu / Battery Energy Storage System Retained
 - Système d'entreposage d'énergie par batteries analysé / Battery Energy Storage System Analyzed

- Infrastructures / Infrastructures**
- Entrepôt d'explosif / Explosives Warehouse
 - Aire de projection de glace / Ice Throw Area
 - Éolienne existante / Existing Wind Turbine
 - Principaux chemins de production / Main Production Roads
 - Aéroport / Airport

- Milieus humides et hydriques / Wetland and Water Environments**
- Cours d'eau permanent / Permanent Stream
 - Cours d'eau intermittent / Intermittent Stream
 - Cours d'eau intermittent potentiel / Potential Intermittent Stream
 - Plan d'eau / Waterbody
 - Écoulement d'eau potentiel / Potential Flow
 - Milieu humide / Wetland

MINE RAGLAN
Mine Raglan, Kattiniq (Québec)

Étude d'impact environnemental / Environmental Impact Study
Déploiement d'un parc éolien de 36MW avec système de stockage de batteries / Deployment of a 36 MW Wind Farm with Battery Storage System

Carte / Map 2-1
Variantes de projet analysées / Project Variants Analyzed

Sources :
 Imagerie / Imagery : RaglanMine_Aug2024_50cm_Colr_NAD83.sid, World Imagery 2022
 Données / Data : Glencore 2024, WSP 2024

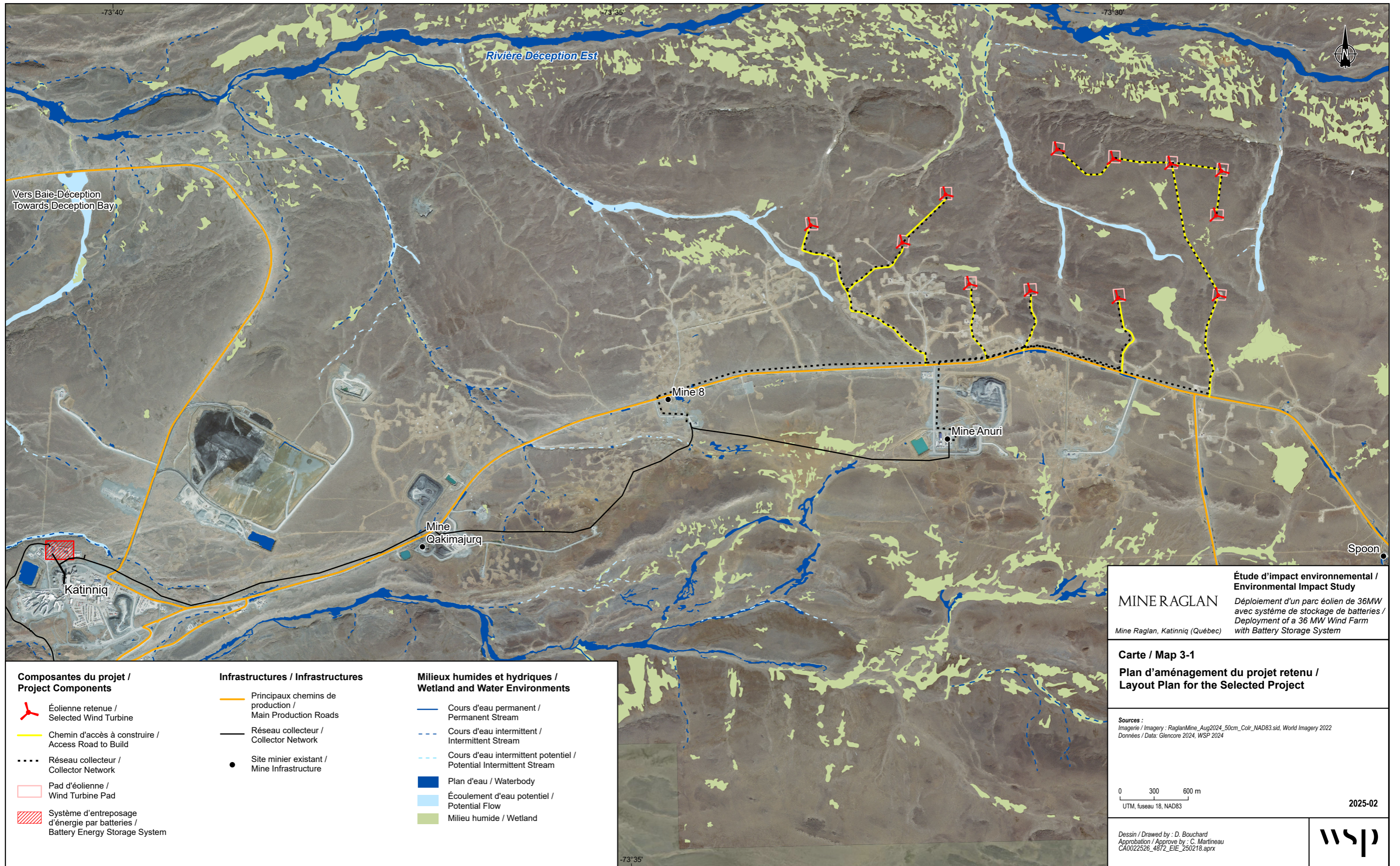
0 0,7 1,4 km
 UTM, fuseau 18, NAD83

2025-02






Dessin / Drawn by : D. Bouchard
 Approbation / Approve by : C. Martineau
 CA0022526_4872_EIE_250218.aprx






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

Composantes du projet / Project Components

-  Éolienne retenue / Selected Wind Turbine
-  Chemin d'accès à construire / Access Road to Build
-  Réseau collecteur / Collector Network
-  Pad d'éolienne / Wind Turbine Pad
-  Système d'entreposage d'énergie par batteries / Battery Energy Storage System

Infrastructures / Infrastructures

-  Principaux chemins de production / Main Production Roads
-  Réseau collecteur / Collector Network
-  Site minier existant / Mine Infrastructure

Milieux humides et hydriques / Wetland and Water Environments

-  Cours d'eau permanent / Permanent Stream
-  Cours d'eau intermittent / Intermittent Stream
-  Cours d'eau intermittent potentiel / Potential Intermittent Stream
-  Plan d'eau / Waterbody
-  Écoulement d'eau potentiel / Potential Flow
-  Milieu humide / Wetland

MINE RAGLAN

Mine Raglan, Katinniq (Québec)

Étude d'impact environnemental / Environmental Impact Study

Déploiement d'un parc éolien de 36MW avec système de stockage de batteries / Deployment of a 36 MW Wind Farm with Battery Storage System

**Carte / Map 3-1
Plan d'aménagement du projet retenu / Layout Plan for the Selected Project**

Sources :
Imagerie / Imagery : RaglanMine_Aug2024_50cm_Colr_NAD83.sid, World Imagery 2022
Données / Data : Glencore 2024, WSP 2024

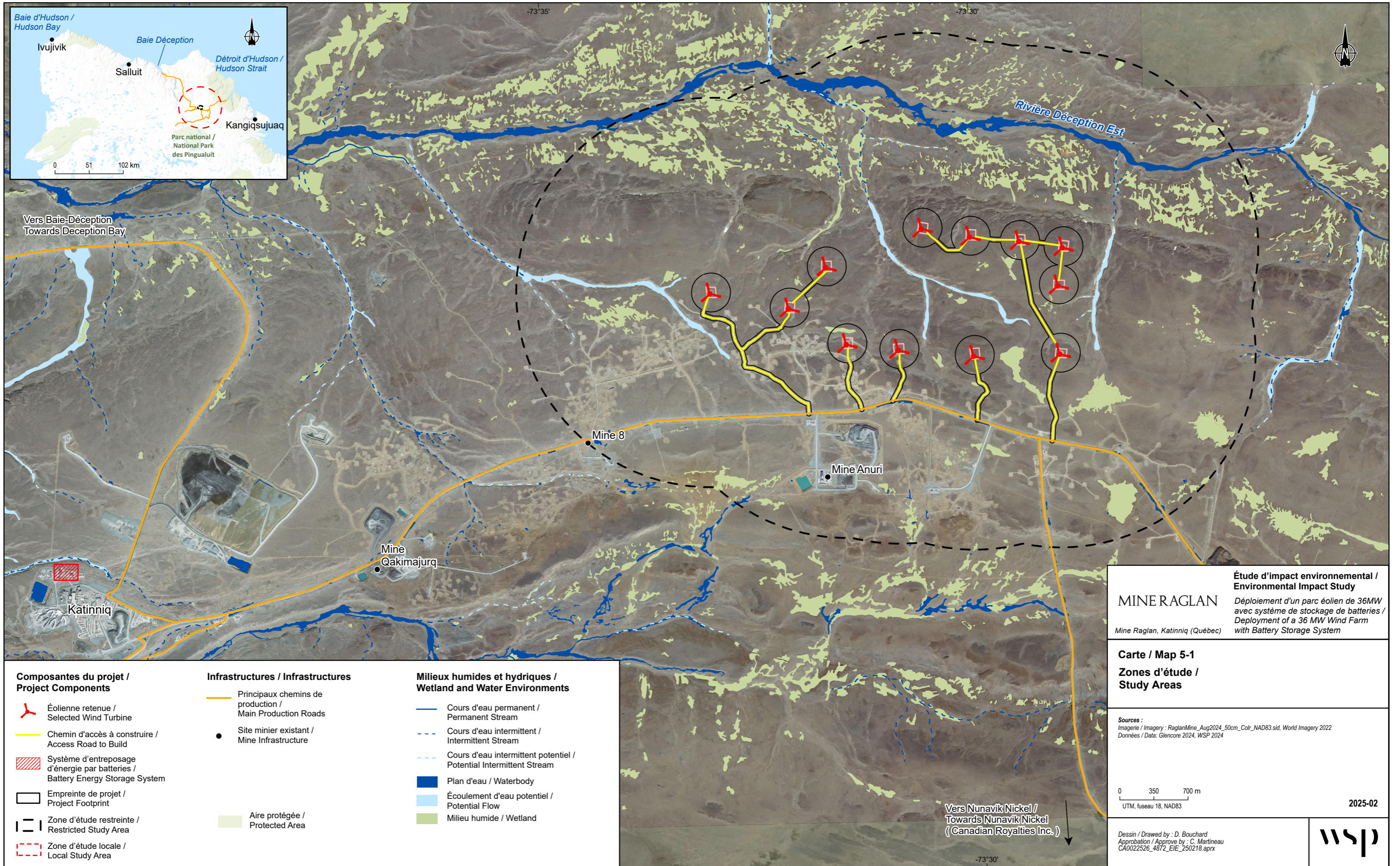
0 300 600 m
UTM, fuseau 18, NAD83

2025-02

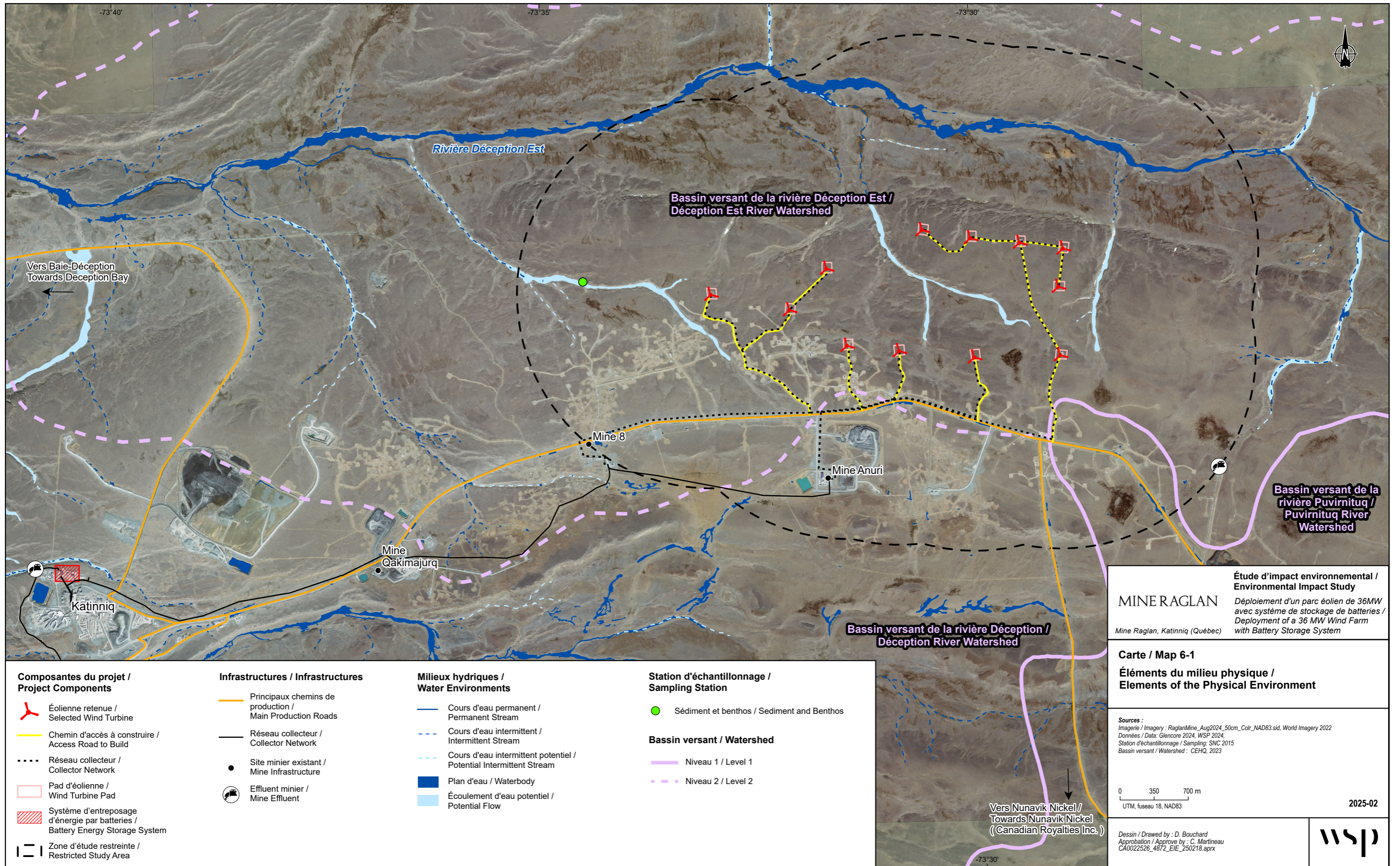
Dessin / Drawn by : D. Bouchard
Approbation / Approve by : C. Martineau
CA0022526_4872_EIE_250218.aprx



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Composantes du projet / Project Components

- Éolienne retenue / Selected Wind Turbine
- Chemin d'accès à construire / Access Road to Build
- Réseau collecteur / Collector Network
- Pad d'éolienne / Wind Turbine Pad
- Système d'entreposage d'énergie par batteries / Battery Energy Storage System
- Zone d'étude restreinte / Restricted Study Area

Infrastructures / Infrastructures

- Principaux chemins de production / Main Production Roads
- Réseau collecteur / Collector Network
- Site minier existant / Mine Infrastructure
- Effluent minier / Mine Effluent

Milieux hydriques / Water Environments

- Cours d'eau permanent / Permanent Stream
- Cours d'eau intermittent / Intermittent Stream
- Cours d'eau intermittent potentiel / Potential Intermittent Stream
- Plan d'eau / Waterbody
- Écoulement d'eau potentiel / Potential Flow

Station d'échantillonnage / Sampling Station

- Sédiment et benthos / Sediment and Benthos

Bassin versant / Watershed

- Niveau 1 / Level 1
- Niveau 2 / Level 2

MINE RAGLAN

Mine Raglan, Katinniq (Québec)

Étude d'impact environnemental / Environmental Impact Study

Déploiement d'un parc éolien de 36MW avec système de stockage de batteries / Deployment of a 36 MW Wind Farm with Battery Storage System

Carte / Map 6-1

Éléments du milieu physique / Elements of the Physical Environment

Sources :
 Imagerie / Imagery : RaglanMine_Aug2024_50cm_Colr_NAD83.sid, World Imagery 2022
 Données / Data : Glencore 2024, WSP 2024
 Station d'échantillonnage / Sampling : SNC 2015
 Bassin versant / Watershed : CEHQ, 2023

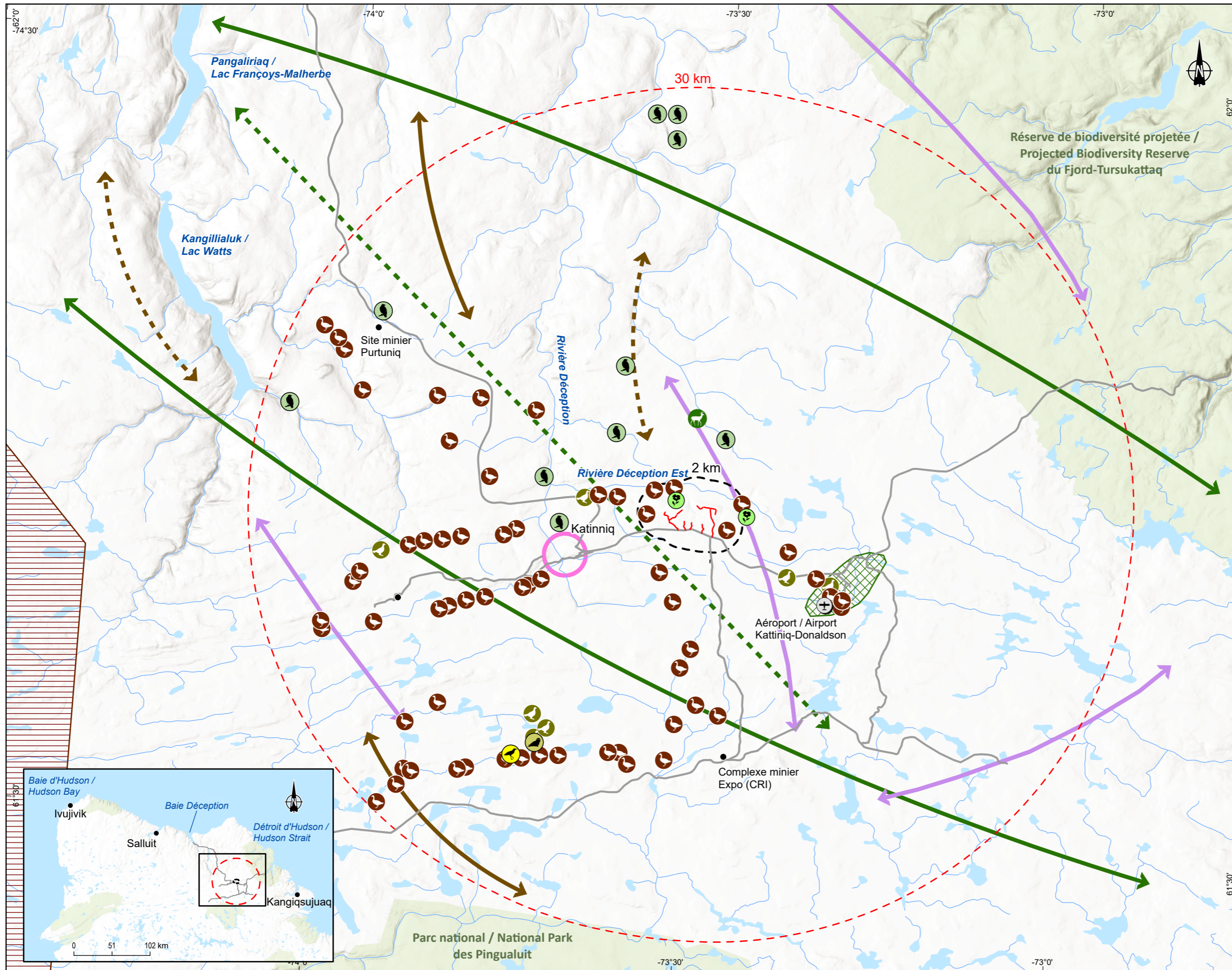
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 UTM, fuseau 18, NAD83

2025-02

Dessin / Drawn by : D. Bouchard
 Approbation / Approve by : C. Martineau
 CA0022526_4872_EIE_250218.aprx



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Composantes du projet / Project Components

- Chemin d'accès à construire / Access Road to Build
- - - Zone d'étude locale / Local Study Area
- - - Zone d'étude restreinte / Restricted Study Area

Infrastructures / Infrastructures

- Principaux chemins de production / Main Production Roads

Oiseaux à statut particulier / Special Status Birds

- Hibou des marais / Short-Eared Owl
- Faucon pèlerin / Peregrine Falcon
- Phalarope / Red-Necked Phalarope

Oiseaux d'intérêt culturel / Birds of Cultural Interest

- Bernache du Canada et Oie des Neiges / Canada Goose and Snow Goose*
- Lagopède alpin / Rock Ptarmigan*

* Observation d'un ou plusieurs individus

Observations issues des consultations autochtones / Observations from Aboriginal Consultations

- 2024 — 2012 — 2008
- Caribou / Caribou ⊠ Terrier de renard / Fox Hole
- - - Direction migratoire de la sauvagine / Waterfowl Migration Direction
- ↔ Direction migratoire du caribou / Caribou Migration Direction

Espèces floristiques à statut particulier / Special Status Plant Species

- Drave en corymbe / Flat-top Whitlow-grass
- Drave de Cayouette / Cayouette's Draba (CDPNQ)*

* Mention historique

Aires protégées / Protected Areas

- Aire de mise bas du caribou / Caribou Calving Area

MINE RAGLAN **Étude d'impact environnemental / Environmental Impact Study**
Mine Raglan, Katinniq (Québec) Déploiement d'un parc éolien de 36MW avec système de stockage de batteries / Deployment of a 36 MW Wind Farm with Battery Storage System

Carte / Map 6-2
Éléments du milieu biologique / Elements of the Biological Environment

Sources / Imagery / Imagerie : RaglanMine_Aug2024_50cm_Colr_NAD83.sid, World Imagery 2022
Données / Data : Glencore 2024, WSP 2024, SNC 2008-2015
Espèce à statut / Status Species: MELCC_CDPNQ BDTA 250k

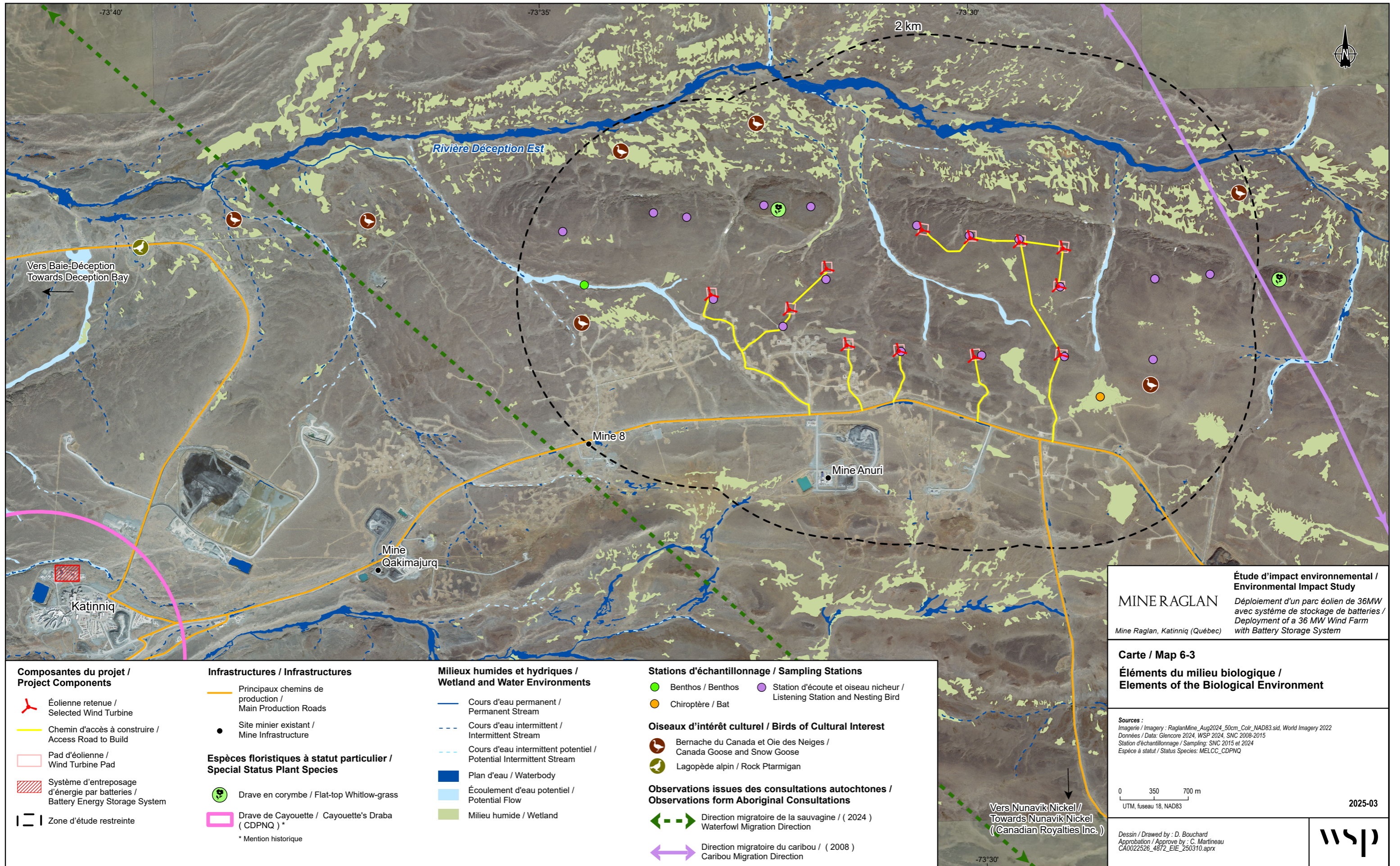
0 2,75 5,5 Km
 Projection Lambert Qc, NAD83

2025-03

Dessin / Drawed by : D. Bouchard
 Approbation / Approve by : C. Martineau
 CA0022526_4872_EIE_250310.aprx



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MINE RAGLAN
 Étude d'impact environnemental /
 Environmental Impact Study
 Déploiement d'un parc éolien de 36MW
 avec système de stockage de batteries /
 Deployment of a 36 MW Wind Farm
 with Battery Storage System
 Mine Raglan, Katinniq (Québec)

Carte / Map 6-3
 Éléments du milieu biologique /
 Elements of the Biological Environment

Sources :
 Imagerie / Imagery : RaglanMine_Aug2024_50cm_Colr_NAD83.sid, World Imagery 2022
 Données / Data : Glencore 2024, WSP 2024, SNC 2008-2015
 Station d'échantillonnage / Sampling : SNC 2015 et 2024
 Espèce à statut / Status Species : MELCC_CDPNQ

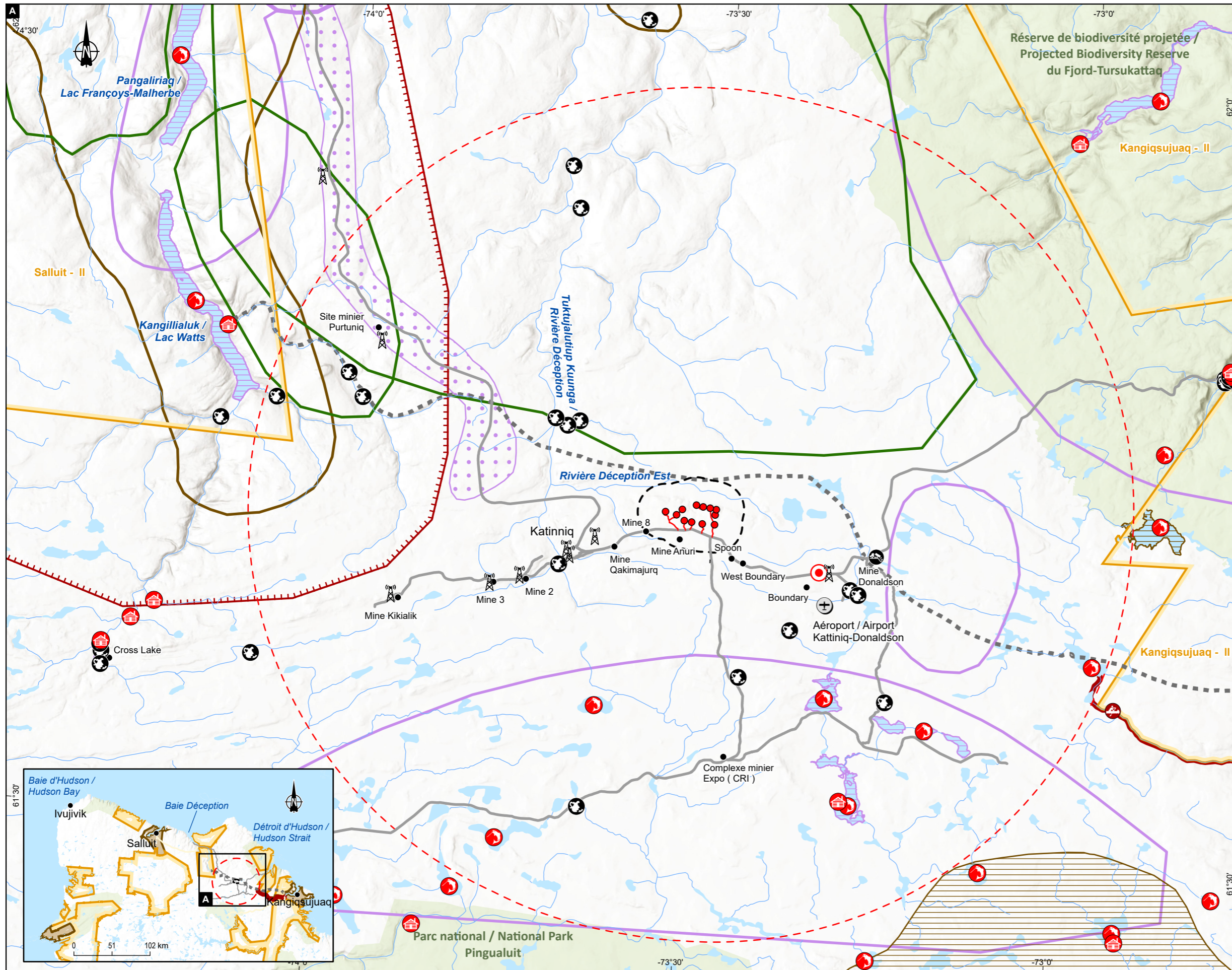
0 350 700 m
 UTM, fuseau 18, NAD83
 2025-03

Dessin / Drawn by : D. Bouchard
 Approbation / Approve by : C. Martineau
 CA0022526_4872_EIE_250310.aprx

| | | | |
|--|---|--|--|
| <p>Composantes du projet / Project Components</p> <ul style="list-style-type: none"> Éolienne retenue / Selected Wind Turbine Chemin d'accès à construire / Access Road to Build Pad d'éolienne / Wind Turbine Pad Système d'entreposage d'énergie par batteries / Battery Energy Storage System Zone d'étude restreinte | <p>Infrastructures / Infrastructures</p> <ul style="list-style-type: none"> Principaux chemins de production / Main Production Roads Site minier existant / Mine Infrastructure <p>Espèces floristiques à statut particulier / Special Status Plant Species</p> <ul style="list-style-type: none"> Drave en corymbe / Flat-top Whitlow-grass Drave de Cayouette / Cayouette's Draba (CDPNQ) * * Mention historique | <p>Milieus humides et hydriques / Wetland and Water Environments</p> <ul style="list-style-type: none"> Cours d'eau permanent / Permanent Stream Cours d'eau intermittent / Intermittent Stream Cours d'eau intermittent potentiel / Potential Intermittent Stream Plan d'eau / Waterbody Écoulement d'eau potentiel / Potential Flow Milieu humide / Wetland | <p>Stations d'échantillonnage / Sampling Stations</p> <ul style="list-style-type: none"> Benthos / Benthos Chiroptère / Bat Station d'écoute et oiseau nicheur / Listening Station and Nesting Bird <p>Oiseaux d'intérêt culturel / Birds of Cultural Interest</p> <ul style="list-style-type: none"> Bernache du Canada et Oie des Neiges / Canada Goose and Snow Goose Lagopède alpin / Rock Ptarmigan <p>Observations issues des consultations autochtones / Observations from Aboriginal Consultations</p> <ul style="list-style-type: none"> Direction migratoire de la sauvagine / (2024) Waterfowl Migration Direction Direction migratoire du caribou / (2008) Caribou Migration Direction |
|--|---|--|--|

La précision des limites et les mesures montrées sur ce document ne doivent pas servir à des fins d'ingénierie ou de délimitation foncière. Aucune analyse foncière n'a été effectuée par un arpenteur-géomètre.

***Map 6-4: Confidential Data
Map provided only in the version
submitted to the MELCCFP***



Composantes du projet / Project Components

- Éolienne retenue / Selected Wind Turbine
- Chemin d'accès à construire / Access Road to Build
- - - Zone d'étude locale / Local Study Area
- - - Zone d'étude restreinte / Restricted Study Area

Infrastructures / Infrastructures

- Principaux chemins de production / Main Production Roads
- 📶 Tour de télécommunication / Telecommunication Tower
- 🗑️ Lieu d'enfouissement en milieu nordique / Northern Landfill

Observations issues des consultations autochtones / Observations from Aboriginal Consultations

- 🏠 Camp / Camp
- 🎣 Pêche / Fishing
- 🏠 Pierre à savon / Soapstone
- Sentier de connexion entre le Lac Watts et Kangiqsujuaq / Connection trail between Lake Watts and Kangiqsujuaq
- 🌊 Cours d'eau d'intérêt significatif / Watercourses of significant interest
- 🏠 Aire d'intérêt significatif / Significant Interest Area

Aire de subsistance (années de consultations) / Subsistence Area (Years of Consultations)

- 2024
- 2015
- 2008
- 🏹 Chasse / Hunting
- 🎣 Pêche / Fishing
- 🍷 Cueillette / Picking

Patrimoine et archéologie / Heritage and Archaeology

- 🌐 Site d'intérêt culturel / Cultural Heritage Site

Aire protégée / Protected Area

- 🌿 Parc nationale et réserve de biodiversité / National Park and Biodiversity Reserve

Catégories des terres / Lands Categories

- 🏠 Catégorie / Category I
- 🏠 Catégorie / Category II

Étude d'impact environnemental / Environmental Impact Study

MINE RAGLAN
Mine Raglan, Katinniq (Québec)
 Déploiement d'un parc éolien de 36MW avec système de stockage de batteries / Deployment of a 36 MW Wind Farm with Battery Storage System

Carte / Map 6-5

Éléments du milieu humain / Elements of the Human Environment

Sources :
 Imagerie / Imagery : RaglanMine_Aug2024_50cm_Colr_NAD83.sid, World Imagery 2022
 Données / Data : Glencore 2024, WSP 2024, SNC 2008-2015
 Catégories des terres / Land Categories : Carto-média, 2001
 BDTA 250k

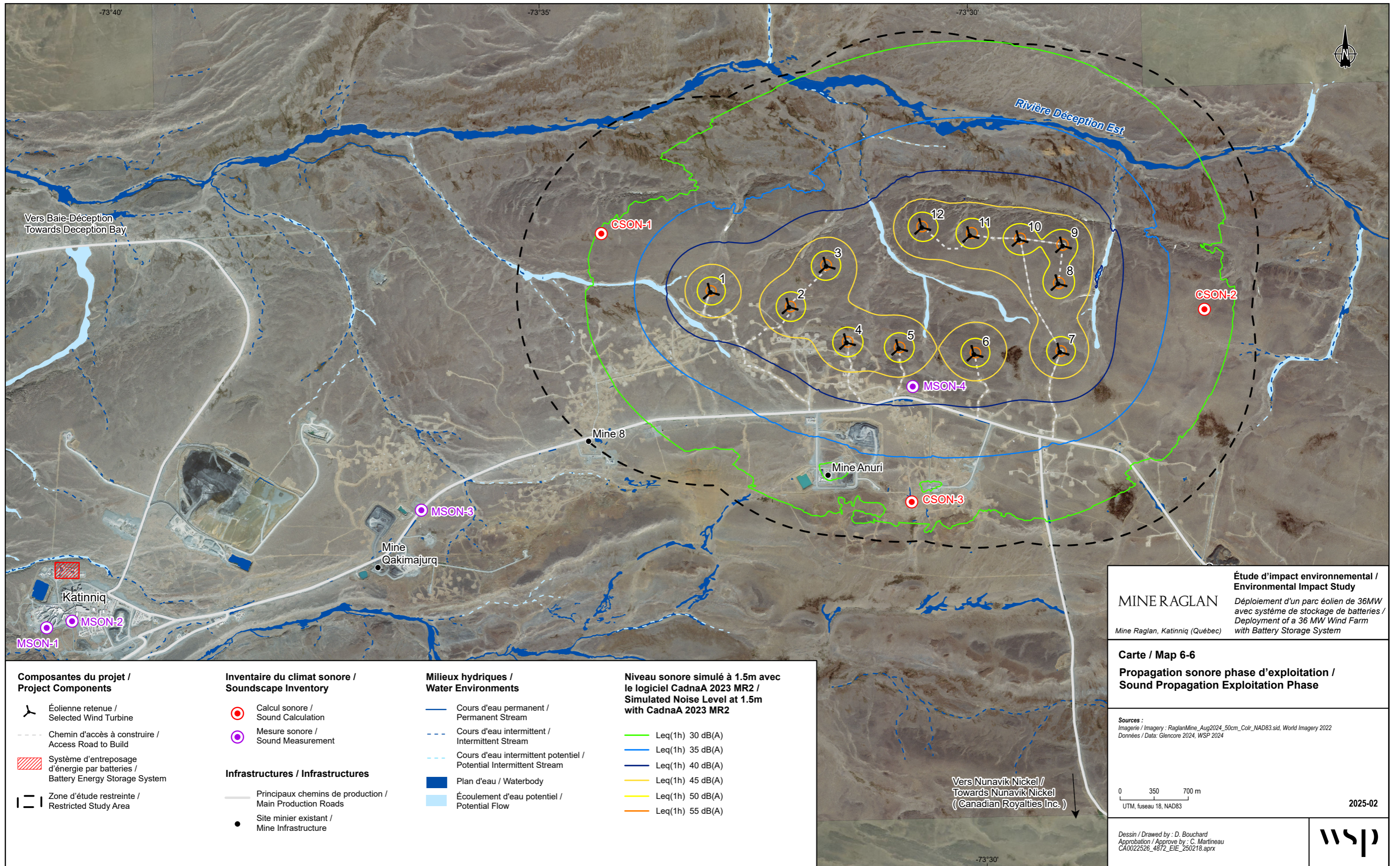
0 2,75 5,5 Km
 Projection Lambert Qc, NAD83

2025-11





Dessin / Drawed by : D. Bouchard
 Approbation / Approve by : C. Martineau
 CA0022526_4872_EIE_251121.aprx





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Composantes du projet / Project Components

-  Éolienne retenue / Selected Wind Turbine
-  Chemin d'accès à construire / Access Road to Build
-  Système d'entreposage d'énergie par batteries / Battery Energy Storage System
-  Zone d'étude restreinte / Restricted Study Area






Inventaire du climat sonore / Soundscape Inventory

-  Calcul sonore / Sound Calculation
-  Mesure sonore / Sound Measurement







Infrastructures / Infrastructures

-  Principaux chemins de production / Main Production Roads
-  Site minier existant / Mine Infrastructure

Milieux hydriques / Water Environments

-  Cours d'eau permanent / Permanent Stream
-  Cours d'eau intermittent / Intermittent Stream
-  Cours d'eau intermittent potentiel / Potential Intermittent Stream
-  Plan d'eau / Waterbody
-  Écoulement d'eau potentiel / Potential Flow

Niveau sonore simulé à 1.5m avec le logiciel CadnaA 2023 MR2 / Simulated Noise Level at 1.5m with CadnaA 2023 MR2

-  Leq(1h) 30 dB(A)
-  Leq(1h) 35 dB(A)
-  Leq(1h) 40 dB(A)
-  Leq(1h) 45 dB(A)
-  Leq(1h) 50 dB(A)
-  Leq(1h) 55 dB(A)

MINE RAGLAN
Mine Raglan, Katinniq (Québec)

Étude d'impact environnemental / Environmental Impact Study
Déploiement d'un parc éolien de 36MW avec système de stockage de batteries / Deployment of a 36 MW Wind Farm with Battery Storage System

Carte / Map 6-6
Propagation sonore phase d'exploitation / Sound Propagation Exploitation Phase

Sources :
 Imagerie / Imagery : RaglanMine_Aug2024_50cm_Colr_NAD83.sid, World Imagery 2022
 Données / Data : Glencore 2024, WSP 2024

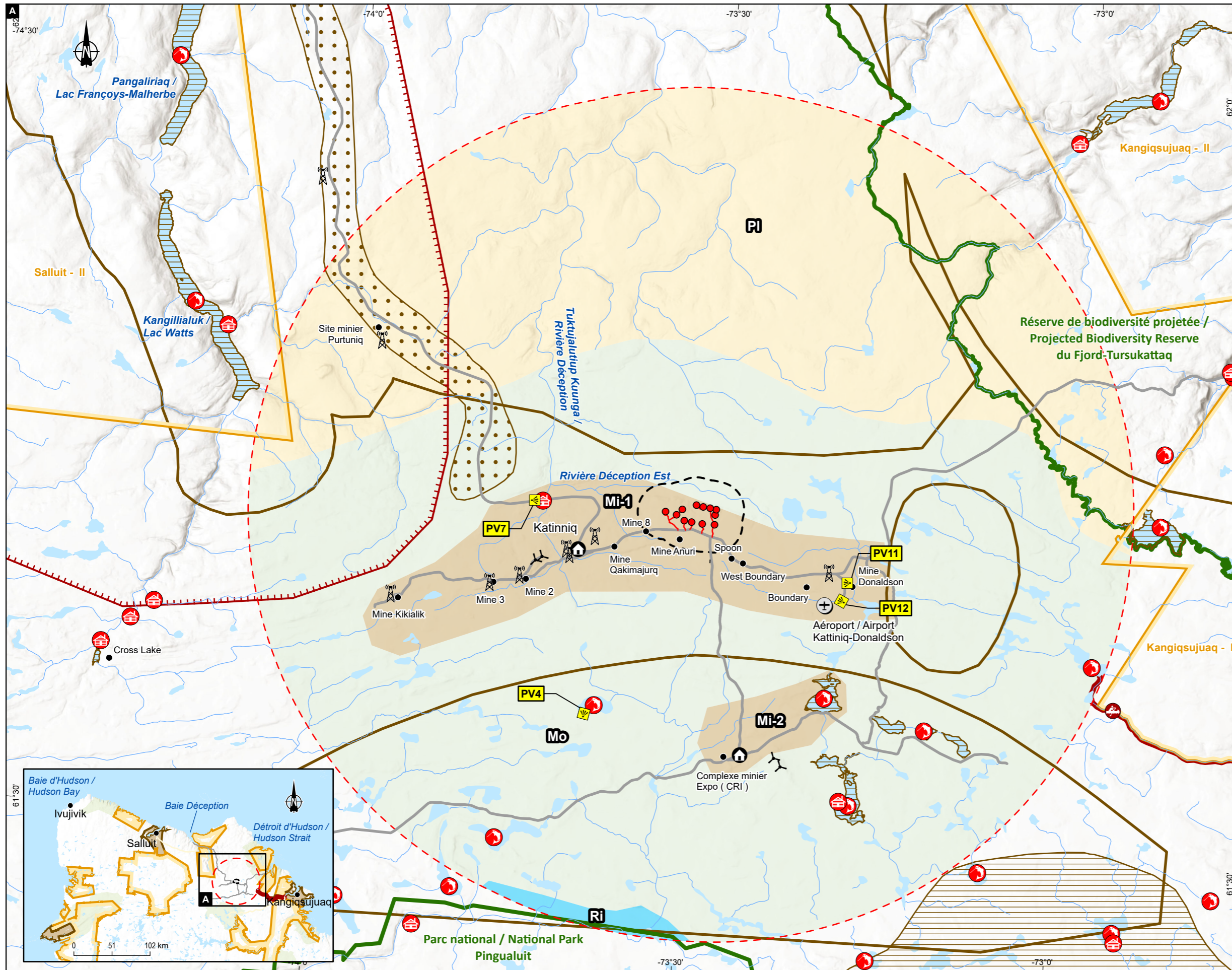
0 350 700 m
 UTM, fuseau 18, NAD83

2025-02

Dessin / Drawed by : D. Bouchard
 Approbation / Approve by : C. Martineau
 CA0022526_4872_EIE_250218.aprx



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Composantes du projet / Project Components

- Éolienne retenue / Selected Wind Turbine
- Chemin d'accès à construire / Access Road to Build
- - - Zone d'étude locale / Local Study Area
- - - Zone d'étude restreinte / Restricted Study Area

Infrastructures / Infrastructures

- Principaux chemins de production / Main Production Roads
- ✈ Éolienne / Wind Turbine
- 📶 Tour de télécommunication / Telecommunication Tower
- 🏠 Complexe d'hébergement / Accomodation Complex

Observations issues des consultations autochtones / Observations from Aboriginal Consultations

- 🏠 Camp / Camp
- 🎣 Pêche / Fishing
- 🌊 Cours d'eau d'intérêt significatif / Watercourses of significant interest
- 🏠 Aire d'intérêt significatif / Significant Interest Area
- 🏠 Chasse / Hunting
- 🎣 Pêche / Fishing
- 🍷 Cueillette / Picking

Unité de paysage / Landscape Unit

- 🏠 Minier / Mining (Mi)
- 🏞 Monts plissés / Pleated Mountains (Mo)
- 🏞 Plateau / Plateau (PI)
- 🌊 Rivière / River (Ri)

Simulation visuelle / Visual Simulation

- 📍 Localisation des points de vue / Location of Viewpoints

Aire protégée / Protected Area

- 🏞 Parc national et réserve de biodiversité / National Park and Biodiversity Reserve

Catégories des terres / Lands Categories

- 🏠 Catégorie / Category I
- 🏠 Catégorie / Category II

MINE RAGLAN
Mine Raglan, Katinniq (Québec)

Étude d'impact environnemental / Environmental Impact Study
Déploiement d'un parc éolien de 36MW avec système de stockage de batteries / Deployment of a 36 MW Wind Farm with Battery Storage System

Carte / Map 6-7
Éléments du paysage / Elements of Landscape

Sources :
 Imagerie / Imagery : RaglanMine_Aug2024_50cm_Colr_NAD83.sid, World Imagery 2022
 Données / Data : Glencore 2024, WSP 2024, SNC 2008-2015
 Catégories des terres / Land Categories : Carto-média, 2001
 BDTA 250k

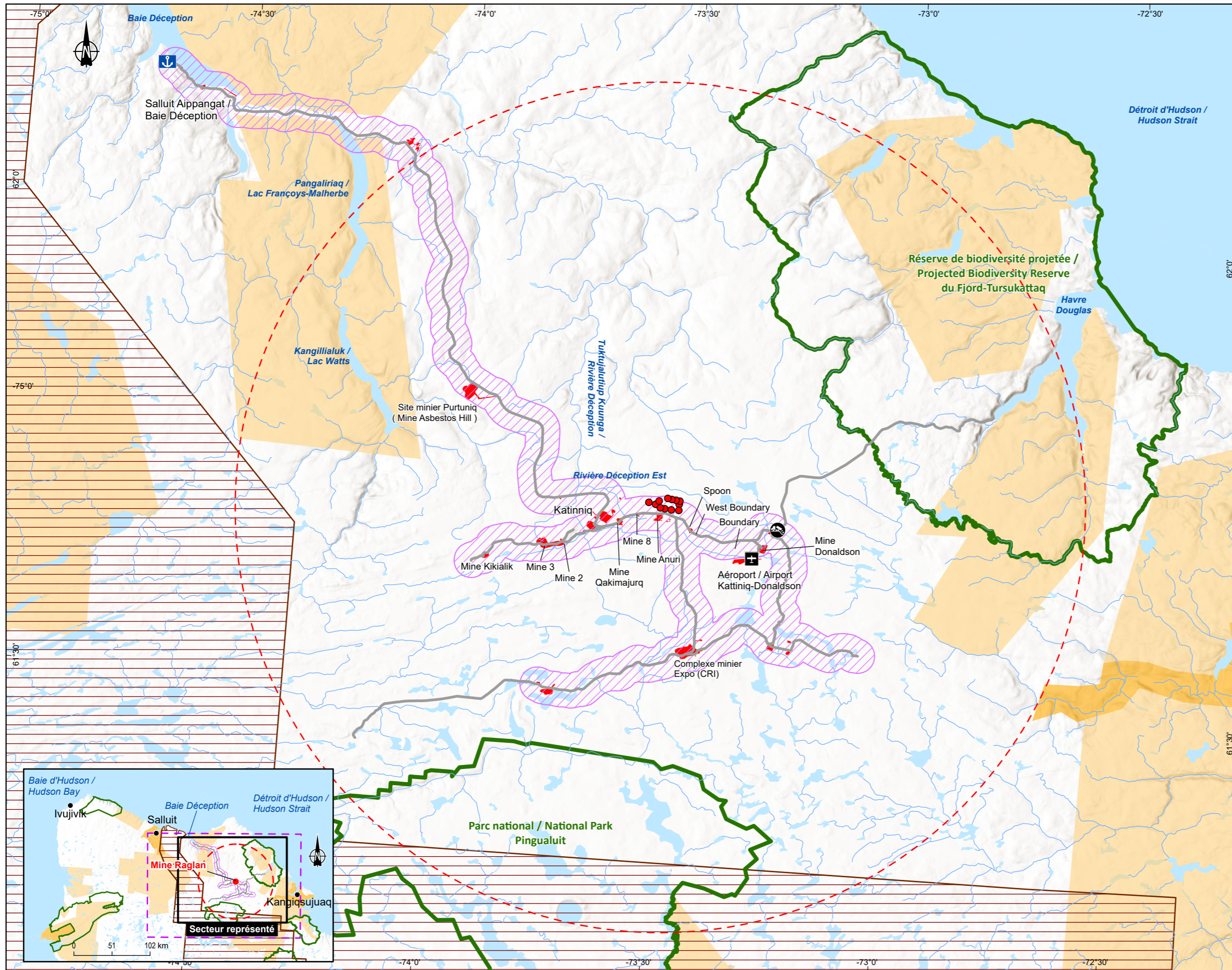
0 2,75 5,5 Km
 Projection Lambert Qc, NAD83

2025-03

Dessin / Drawed by : D. Bouchard
 Approbation / Approve by : C. Martineau
 CA0022526_4872_EIE_250304.aprx



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- Composantes du projet / Project Components**
- Éolienne retenue / Selected Wind Turbine
- Infrastructures / Infrastructures**
- Principaux chemins de production / Main Production Roads
 - ⚓ Port en eau profonde / Deep-water Port
 - ✈ Aéroport / Airport
 - 🗑 Lieu d'enfouissement en milieu nordique / Northern Landfill
 - Milieu minier / Mining Environment
- Aires spatiales considérées / Spatial Areas Considered**
- ▨ Qualité de l'air / Air Quality (2 km)
 - - - Paysage et Grande faune (Caribou migrateur) / (50 km)
Landscape and Large Fauna (Migratory Caribou)
 - ▤ Utilisation du territoire par les autochtones /
Use of the Territory by Indigenous People
- Aire protégée / Protected Area**
- ▭ Parc national et réserve de biodiversité /
National Park and Biodiversity Reserve
 - ▭ Aire de mise bas du caribou / Caribou Calving Area
- Catégories des terres / Lands Categories**
- Catégorie / Category I
 - Catégorie / Category II

MINE RAGLAN Étude d'impact environnemental /
Environmental Impact Study

Déploiement d'un parc éolien de 36MW
avec système de stockage de batteries /
Deployment of a 36 MW Wind Farm
with Battery Storage System

Mine Raglan, Kattiniq (Québec)

Carte / Map 7-1
**Zones d'étude pour l'analyse des impacts cumulatifs /
Study Areas for Cumulative Impact Analysis**

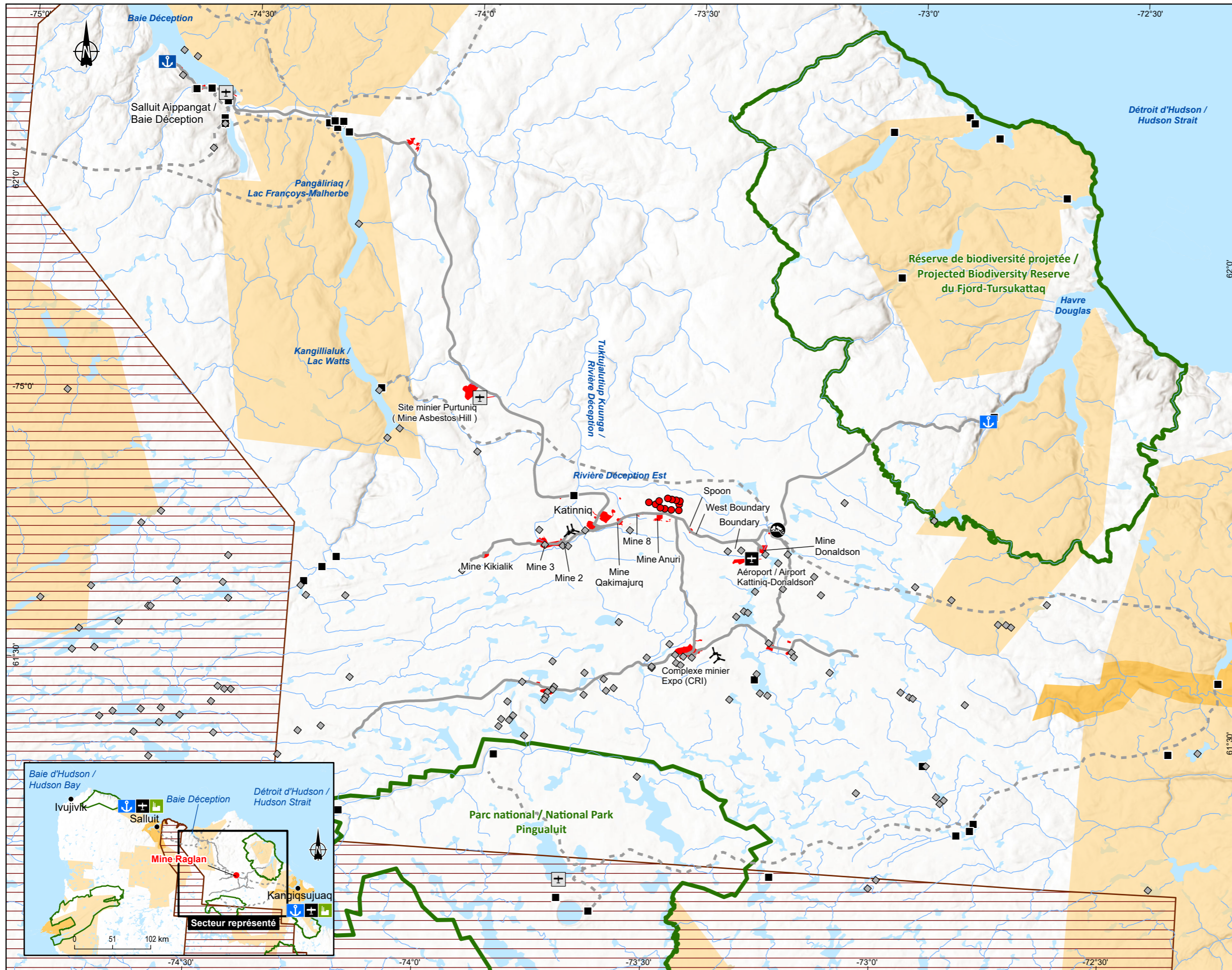
Sources :
Données / Data: Glencore 2024, WSP 2024, SNC 2008-2015
BDTA 250k

0 4.5 9 Km
Projection Lambert Qc, NAD83

2025-12

Dessin / Drawed by : D. Bouchard
Approbation / Approve by : C. Martineau
CA0022526_4872_EIE_251212.aprx

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Composantes du projet / Project Components

- Éolienne retenue / Selected Wind Turbine

Infrastructures / Infrastructures

- Principaux chemins de production / Main Production Roads
- ⚓ Port en eau profonde / Deep-water Port
- ⚓ Quai de débarquement / Disembarkation Dock
- ✈ Aéroport / Airport
- ✈ Aérodrome / Airfield
- 🗑 Lieu d'enfouissement en milieu nordique / Northern Landfill
- 🏭 Centrale thermique / Thermal Power Plant
- 🌪 Éolienne / Wind Turbine
- ◇ Site d'exploration minière abandonné / Abandoned Mineral Exploration Site
- 🔴 Milieu minier / Mining Environment

Observations issues des consultations autochtones / Observations from Aboriginal Consultations

- Camp
- - - Sentier de quad ou de motoneige / Quad or Snowmobile Trail

Aire protégée / Protected Area

- 🟩 Parc national et réserve de biodiversité / National Park and Biodiversity Reserve
- 🟠 Aire de mise bas du caribou / Caribou Calving Area

Catégories des terres / Lands Categories

- 🟡 Catégorie / Category I
- 🟠 Catégorie / Category II

Étude d'impact environnemental / Environmental Impact Study

MINE RAGLAN

Mine Raglan, Katiniq (Québec)

Déploiement d'un parc éolien de 36MW avec système de stockage de batteries / Deployment of a 36 MW Wind Farm with Battery Storage System

Carte / Map 7-2

Projets touchant le territoire et considérés dans l'analyse des impacts cumulatifs / Projects Affecting the Territory and Considered in the Cumulative Impact Analysis

Sources :
Données / Data: Glencore 2024, WSP 2024, SNC 2008-2015
BDTA 250k

0 4,5 9 Km
Projection Lambert Qc, NAD83

2025-03

Dessin / Drawn by : D. Bouchard
Approbation / Approve by : C. Martineau
CA0022526_4872_EIE_250312.aprx

La précision des limites et les mesures montrées sur ce document ne doivent pas servir à des fins d'ingénierie ou de délimitation foncière. Aucune analyse foncière n'a été effectuée par un arpenteur-géomètre.

APPENDIX

B

APPLICABLE MITIGATION MEASURES

Categorization of mitigation measures

Reduction of project areas

- Promote the use of existing roads to limit the construction of new roads and crossings.
- Clearly define the minimum right-of-way and area required for the installation and operation of infrastructure in order to limit stripping.
- Limit the movement of heavy machinery and vehicles to access roads and predefined work areas.
- Maintain sufficient and minimal areas around wind turbines.

Avoidance and reduction of impacts on soils, wetlands, and water environments

- The location of the wind turbines and the layout of the new paths have been designed to avoid wetlands and watercourses.
- In erosion-sensitive areas, the contractor must implement erosion and sediment control measures to prevent sediment from spreading outside the immediate work area.
- In the event of an accidental spill, it must be managed in accordance with the provisions of procedure ENV-PRO-003488 [Spill Management].
- During maintenance of the wind turbines and the wind farm, any leaks or seepage shall be collected in receptacles designed for this purpose and located under the equipment. Oil shall be disposed of in accordance with applicable municipal and provincial standards and regulations.
- Use properly sized waterproof surfaces with a rim under small containers (e.g., cans) and fixed equipment (e.g., pumps).

Road safety and network maintenance

- Implement an effective transportation and traffic plan.
- Limit the distances traveled and the time spent using vehicles and heavy machinery. Flaggers will be used in areas where activities are required.
- Comply with speed limits in effect on the entire road network.
- Summer control (as needed) of dust emissions on roads between mining sites and the Katinniq site: watering or use of dust suppressants in accordance with standard NQ 2410-300 "Dust suppressants for unpaved roads and other similar surfaces" of the Bureau de normalisation du Québec (BNQ). Continue the dust suppressant program on the road connecting Katinniq to Salluit-Aippangat (Baie-Déception) and optimize it based on experience gained.
- Repair damage caused by traffic generated by the Project, regardless of the Project phase. Project-specific access roads will be maintained in good condition for the life of the Project.
- Signs will be installed at junctions of roads used to access wind turbines in operation.

Health, safety, and incidents

- Ensure that during the Project phases, subcontractors and wind farm operators have received response training to be able to respond in the event of an accident or failure.
- Ensure compliance with occupational health and safety standards during maintenance work on turbines.
- Clearly identify areas reserved for the wind farm, including the locations of wind turbines and the substation, using signage designed to limit the risk of accidents.
- Wind turbine blades will be equipped with an ice detection system and a de-icing system to reduce ice accumulation. The requirements of the operation and maintenance manual will be followed, including avoiding manual restarting and not approaching the wind turbines if there is frost. The wind turbine shutdown protocol will be sensitive to ice accumulation.
- A safe distance to counter the risk of ice projection will be maintained between the wind turbine sites and other infrastructure or areas regularly occupied by mine employees.
- Install light beacons on wind turbines, in accordance with Transport Canada requirements.
- Ensure that personnel, the public, property, and the environment are protected from the impacts that could result from an accident or failure at the wind farm by establishing and implementing an emergency response plan. The emergency response plan will be updated and reviewed annually and reassessed following any response, if necessary.
The Initiator will ensure that employees and contractors comply with the plan.
- During all phases of construction, operation, and decommissioning, regularly inform workers of the potential presence of Inuit users in the affected area, particularly along access roads.
- Adopt a code of good practice for the use of explosives aimed at optimizing blasting if blasting is required in construction.
blasting if dynamite is required during construction.
- Regular site monitoring will be carried out to document and track construction activities and implement corrective or preventive measures. In general, the supervisor will make regular visits to the work areas, noting compliance with obligations, mitigation measures, and other requirements. He will assess the effectiveness of the measures applied and report his observations to the site manager so that appropriate corrective measures can be agreed upon and adopted as soon as possible.

Site restoration and dismantling

- Rehabilitate disturbed areas according to the mine rehabilitation and restoration plan so that they blend in as well as possible with the natural landscape.
- In the event that an organization wishes to retain the infrastructure related to wind power generation once mining activities have ceased, the road will remain in place. Otherwise, this secondary road will be characterized and dismantled in accordance with the standards in force at the time of restoration.

- The Raglan mine will continue to fulfill its obligations as defined in section 12.6.1 of the Raglan Agreement: "The future status of all roads, airstrips, and port facilities connected to the Raglan project shall be negotiated with the relevant government agencies at the time of final closure." These provisions also apply to the wind turbine road network. Thus, any equipment or infrastructure that has not been transferred under the right of reversion or sold to a third party will be dismantled in accordance with the terms and conditions set out in the mine redevelopment and restoration plan.

Climate change and GHG emissions reduction

- Favor raw materials located near the project site (e.g., borrow pits and concrete planks), when possible.
- Use vehicles and equipment that are in good condition and comply with the Regulation respecting environmental standards applicable to heavy vehicles.
- Promote good practices for reducing GHG emissions (turn off engines, do not run machinery unnecessarily).
- During the operational phase, evaluate the possibility of implementing appropriate controls and/or monitoring measures to detect ground movements related to changes in permafrost temperature and thus prevent any degradation that could affect infrastructure.
- The climate risk analysis will be reviewed every five years to take into account the rapid advancement of knowledge about northern environments in Northern Quebec in the face of climate change.

Communication and consultation

- The initiator undertakes to provide the Raglan Committee with accessible and simplified information on the project at the appropriate time and to communicate information on the progress of the project to the public.
- Assume responsibility for public and media relations in the event of an emergency in order to protect personnel, the population, and the environment.
- Inform the populations, landholding corporations of the villages of Salluit and Kangiqsujuaq, and the management of Pingualuit Park of the scope and schedule of the planned work, as well as the potential dangers for users during the construction, operation, and dismantling phases. Maintain contact with the landholding corporations of both villages throughout all phases of the project to enable them to identify any issues related to land use by members of their communities.
- The wind farm decommissioning and closure plan will be discussed with the closure subcommittee to ensure consultation with stakeholders and will be incorporated into the mine redevelopment and restoration plan.
- Maintain ongoing dialogue through the Raglan Committee, liaison officers, and the annual environmental forum to provide the results of the monitoring program, receive feedback, and make any necessary adjustments.

Maintaining land use and cultural heritage

- In the event of an accidental discovery of an archaeological site, work must be stopped and notification sent to the Department of Culture and Communications and the Avataq Cultural Institute. Conduct an inventory and assess the need for archaeological excavations, evaluate the possibility of preserving the site, and put in place effective signage to prevent its destruction.
- Mark a snowmobile trail at a safe distance from project facilities in collaboration with land users and communities.
- Maintain access to lakes and other areas used by the Inuit of Salluit and Kangiqsujuaq near access roads and work zones during the construction and dismantling phases. If it becomes necessary to temporarily or permanently restrict traffic on trails used by Inuit users, provide detour routes or new safe routes in consultation with the communities of Salluit and Kangiqsujuaq.

Socio-economic development

- Raglan Mine will continue to fulfill its obligations as defined in the Raglan Agreement regarding entrepreneurial capacity and increase contracting opportunities for Inuit businesses.
- Raglan Mine will continue to fulfill its obligations as defined in the Raglan Agreement regarding the hiring of Inuit labor.
- Raglan Mine will continue to fulfill its obligations as defined in the Raglan Agreement regarding the implementation of worker integration mechanisms, particularly for members of Inuit communities.
- Continue regional collaboration through the Kautaapikku Strategic Table and identify opportunities for partnerships with regional education initiatives.
- Strive to increase training opportunities for Inuit Community Partners by working with accredited training centers and supporting the development of training centers in these communities.
- The disposal of all dismantled goods and materials will be carried out in accordance with the Raglan Agreement, which provides for a right of first refusal for local communities.

Biodiversity protection

- Telemetric monitoring will be conducted to better document the home range of birds of prey and their use of the proposed project area.
- Bird mortality monitoring program during the first three years of operation. If mortality rates are deemed problematic, additional measures may be implemented in consultation with government authorities. Monitoring results will be presented in the annual report, to the Raglan Committee, and at annual environmental forums.
- The collector network cables will be equipped with a protective sheath to prevent ingestion by certain land animals.
- Raise awareness among workers, particularly as the calving season approaches, of the risks of disturbance to caribou and the appropriate behaviors to adopt.

- During the operational phase, if the results of bird mortality monitoring show a problem, study the possibility of installing a detection system on the wind turbines on the outskirts of the wind farm to detect groups of birds moving nearby and shut down the wind turbines as necessary according to thresholds that will be established.
- Ensure compliance with procedure ENV-PRO-003486 [Wildlife Management].
- The principles aimed at avoiding disturbance to caribou in procedure PG-42 [Driving a Road Vehicle in the Arctic], such as yielding to wildlife, not honking the horn, and not moving toward caribou observed near the site, must be followed (see section 4.13 and Appendix 4 of the procedure).

Residual and Hazardous Materials Management

- Hazardous and non-hazardous waste will be recovered and managed in accordance with Raglan Mine waste management standards (Waste Management, ENV-PRO-003487). Solid construction waste (rubble, metal, lumber) will be collected in containers provided for this purpose. It will be recycled where applicable, burned at the authorized burning site if combustible, or disposed of at the northern landfill site (LEMN) near Donaldson. The ashes generated are also sent to the LEMN or disposed of at authorized landfill sites.
- Before dismantling the equipment, the facilities will be drained of products such as glycol cooling water, transformer oil, speed multiplier and hydraulic system oil, emergency power supply batteries, and electronic components. These products will be transported to specialized recycling facilities, taking care to avoid accidental spills.
- The Initiator will ensure that the company responsible for concrete operations has the required authorizations and applies best practices with regard to concrete disposal, water use, and wash water, for example: collecting wash water in a sealed basin designed to prevent any runoff into the environment; pouring excess concrete from concrete mixers and concrete pumps into a confined enclosure; managing concrete residues with construction waste.
- Dispose of excavated materials in such a way as to minimize the dispersion of airborne particulate matter.

