BEACON AI CENTERS

Beacon Data Centers Indus Project

Initial Project Description Summary

Prepared for:

IMPACT ASSESSMENT AGENCY OF CANADA

Prepared by:

JOULEGRID

JouleGrid Corp.

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Acronyms / Abbreviations

AAAQO/G	Alberta Ambient Air Quality Objectives and Guidelines
AACSW	Alberta Arts, Culture and Status of Women
ACC	Air-Cooled Condenser
ACO	Aboriginal Consultation Office
AESO	Alberta Electric System Operator
AI	Artificial Intelligence
ASL	Above sea level
ASP	Area Structure Plan
AUC	Alberta Utilities Commission
CCS	Carbon capture and storage
CCGT	Combined-cycle gas turbine
CEMS	Continuous Emissions Monitoring System
CH_4	Methane
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
COD	Commercial Operation Date
CRAZ	Calgary Region Airshed Zone
DFO	Fisheries and Oceans Canada
EPEA	Environmental Protection and Enhancement Act
ESA	Environmentally Significant Area
GGP	Gas Generation Pod
GHG	Greenhouse gas
GT	Gas Turbine
GWh	Gigawatt-hour
GWP	Global Warming Potential
HRA	Historical Resources Act
HRSG	Heat Recovery Steam Generator
IAAC	Impact Assessment, Agency of Canada
IPCC	Intergovernmental Panel on Climate Change
IPD	Initial Project Description
km	Kilometer
kV	Kilovolt
m	meter
MDP	Municipal Development Plan
MW	Megawatt
MWe	Megawatt electrical
NGTL	NOVA Gas Transmission Limited
N_2O	Nitrous oxide
NIA	Noise Impact Assessment
NO_2	Nitrogen dioxide
NO_x	Oxides of nitrogen
OCC	Operations Control Centre
PAH	Polycyclic aromatic hydrocarbons
PCA	Pre-Consultation Assessment
PIP	Participant Involvement Program
PM	Particulate matter
PM_{10}	Particulate matter ≤ 10 µm
$PM_{2.5}$	Particulate matter ≤ 2.5 µm
PSIP	Project-specific information package
PSL	Permissible Sound Level
Q1	First quarter
Q2	Second quarter
Q3	Third quarter
QPAC	Quick-deploy Power and Containerized system
SARA	Species at Risk Act
SASR	System Access Service Request
SCC	Supreme Court of Canada
SCR	Selective catalytic reduction
ST	Steam Turbine
T-Tap	Transmission tap connection
t/GWh	Tonnes per gigawatt-hour
TJ/day	Terajoules per day
TSP	Total suspended particulate
VOC	Volatile organic compounds

PART A: General Information

1. The Project's Name, Type or Sector and Proposed Location

Indus Power Generation LP and its general partner, Northbridge Power GPC Inc. (Indus Power), is submitting this Initial Project Description (IPD) Summary for the 1,494 MWe (Megawatt electrical) "Beacon AI Centers Indus" power generation facility (the Project). The Project is being developed by Beacon AI Centers (Beacon) under the project-specific entity Indus Power.

This document summarizes the Initial Project Description that has been prepared following the Impact Assessment Agency of Canada (IAAC; Agency) Guide to Preparing an Initial Project Description (IAAC 2024a). Although this IPD summary is being submitted in accordance with the Physical Activities Regulations (Canada 2019), Indus Power/Beacon understands that IAAC aligns its implementation of the *Impact Assessment Act* and regulations with the Supreme Court of Canada's ("SCC") decision in Reference re *Impact Assessment Act* (Supreme Court of Canada 2023). If the Project can be carried out without requiring any Federal authorizations or permits, because of the SCC Reference, the Impact Assessment Act ought not to apply to the Project. Furthermore, as demonstrated through the information provided herein, the Project will not result in "non-negligible adverse change" within federal jurisdiction.

1.1 Project Name

Beacon AI Centers Indus

1.2 Type or Sector

The Project is a power generation facility with a maximum installed capacity of approximately 1,494 MWe. It is designed to supply a minimum of 1,200 MWe of continuous, fully dispatchable electricity to four (4) on-site data center hubs. The facility combines fast-response reciprocating engine generation with high-efficiency combined-cycle gas turbine technology (CCGT) to meet both variable and baseload power requirements, while maintaining high reliability and operational flexibility.

The Project will incorporate natural gas as the primary fuel to support rapid load changes, redundancy, and continuous operation, consistent with data-center power reliability requirements.

The major ancillary structures include:

- A natural gas pipeline to provide fuel for the Project. Of which, the Project will require up to 285 Terajoules per day (TJ/day) at capacity. Indus Power is looking at three (3) gas supply and pipeline options:
    - Indus Power/Beacon is developing a proposal to connect natural gas to the existing integrated Nova Gas Transmission Ltd. (NGTL)/ATCO Pipeline system. Indus Power/Beacon is expecting another open season for NGTL pipeline capacity, although NGTL has made no formal announcement. In the previous August 2025 NGTL EGAT open season, Indus Power/Beacon's preassessment was approved at this location, proving technical feasibility and capacity availability; thereby allowing Beacon to submit a bid. Indus Power/Beacon submitted a bid that varied on the contract term but was unsuccessful.

  - Indus Power/Beacon is working with ATCO Gas on pipeline options that could potentially serve the Project, connecting natural gas to the existing integrated NGTL/ATCO Pipeline system.
  - Indus Power/Beacon is working with TC Energy on pipeline options that could potentially serve the Project.

- Four (4) data halls with a power requirement of 300MW each, totalling 1200MW, within a co-located, on-site data center capable of supporting Tier IV data centre operations. Although Indus Power/Beacon is including information related to the data center, it is not relevant to the assessment of the Project because the data center is not a Project component and is not associated with the construction, operation or decommissioning of the Project. Indus Power/Beacon is providing the most accurate information and assumptions known at this time in respect to the data center and doing so exclusively for informational purposes, and;
- New substation and Transmission tap connection (T-tap) connection to an existing 240 kV transmission line owned by AltaLink, with the point of interconnection at AltaLink Langdon 102S substation, about 1km away. Electricity will be delivered from the Project to the Alberta provincial grid through several transmission lines. One (1) new on-site substation with a listed capacity of 400 MWe is currently configured. The final substation capacity and configuration will be determined in the coming months as the Project progresses through the AESO (Alberta Electric System Operator) connection process.

1.3 General Project Location and Land Use

The Project is located approximately three (3) km east of the City of Calgary and approximately two (2) km northwest of the Hamlet of Indus, Alberta, within Rocky View County, immediately south of Township Road 232, as shown in Figure 1.3.1.

The Project coordinates are.

- *Legal land description: SW and SE Quarters 11-23-28-W4M, NW Quarter 11-23-28-W4M and Pt. N.E. Quarter 11-23-28-W4M*
- Deg-Min-Sec Latitude and longitude coordinates: 50°56'36.3"N 113°48'25.9"W ; and
- Decimal Latitude and longitude coordinates: 50.943405, -113.807201.

The Project is located within a 627.2 acre (253.82 hectares) data center campus at an elevation of approximately 1,027 meters above sea level (ASL). The Project will occupy a 45 acre footprint, arranged into two (2) gas generation pods (GGPs) and four (4) CCGT plants, within the data center campus.

The Project sits on privately owned land that is already disturbed and previously used for agricultural purposes, as shown in Figure 1.3.2.

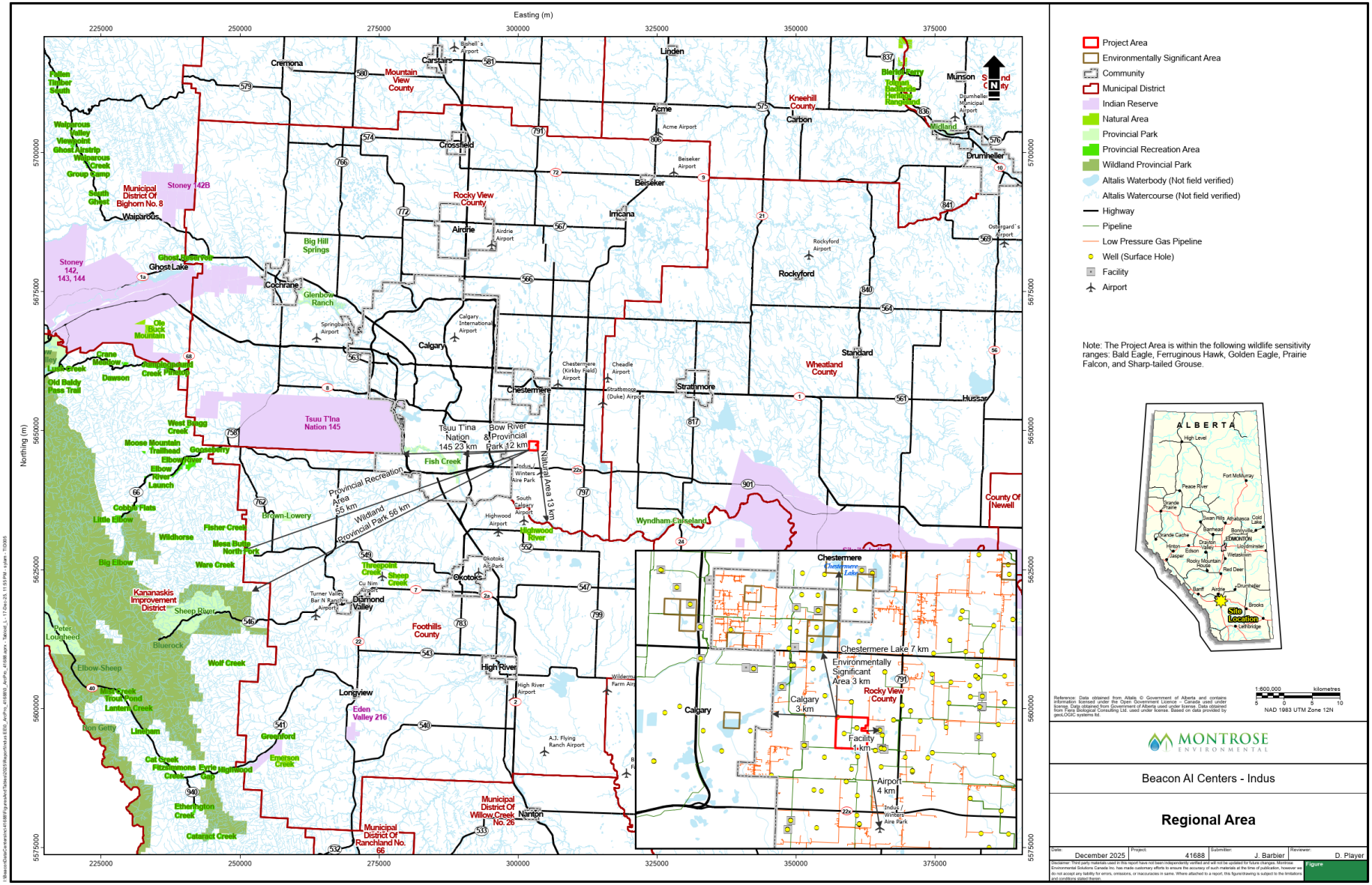

Figure 1 Figure 1.3.1 Regional Area

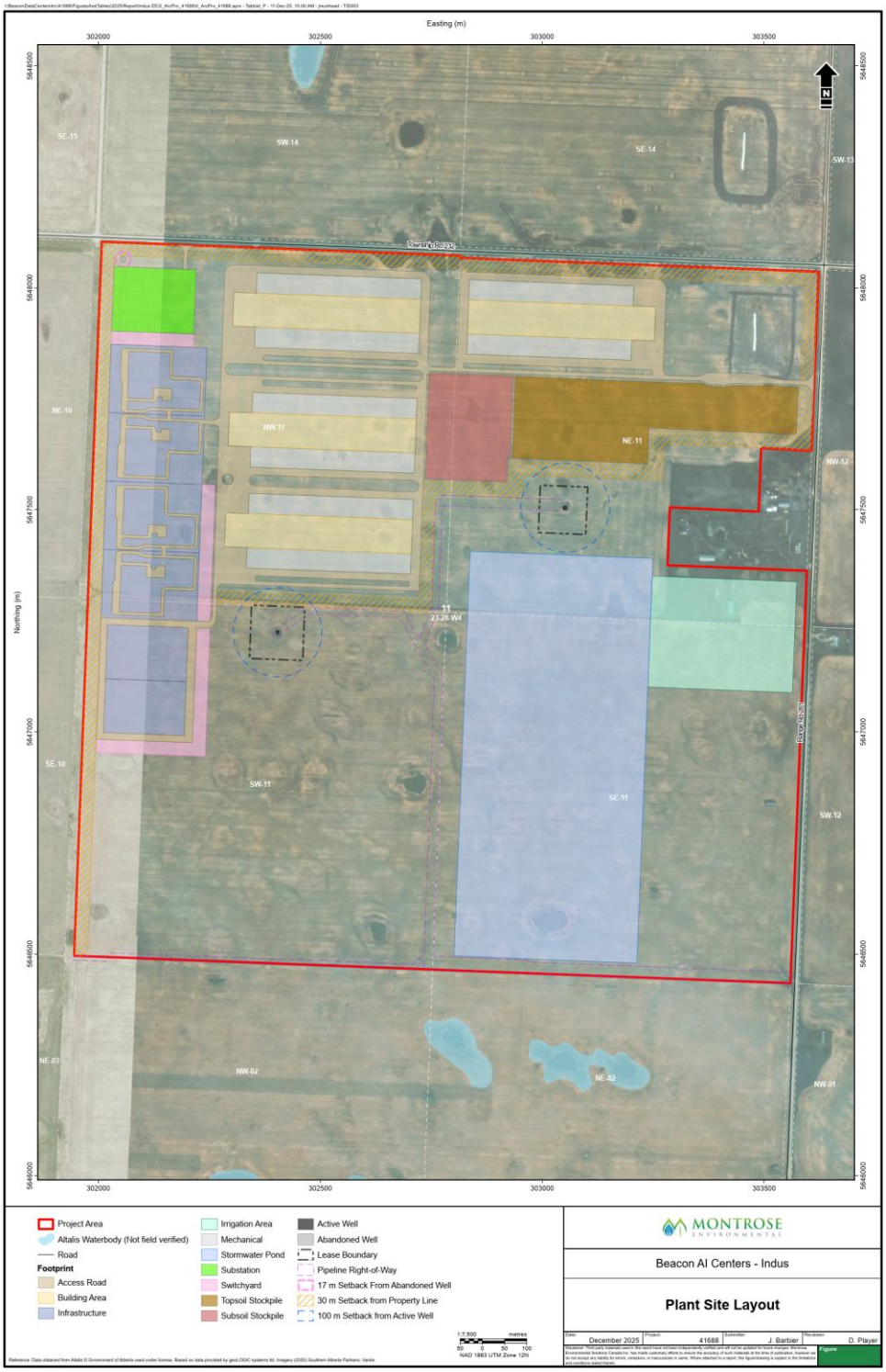

Figure 2 Figure 1.3.2 Project Site

2. Proponent's Name and Contact Information

Table 2.1.1 Proponent's Name and Contact Information

Name of Project:	Beacon AI Centers Indus
Name of Proponent:	Indus Power Generation LP and its general partner, Northbridge Power GPC Inc. (Indus Power).
Address of Proponent:	FL27 -140 4th Avenue SW, Calgary, AB T2P 3N3
Website:	https://beaconaicenters.com/
Principal Contact Person:	Joseph Shovlin, Co-Founder, Beacon Data Centers Email: joseph@beacondatacenters.com Phone: +1 825 964 4339 Address: FL27 - 140, 4th Avenue SW, Calgary, AB, T2P 3N3.
Regulatory Contact Person:	Troy Adams, Regulatory Lead (JouleGrid) Email: Troy.adams@joulegrid.ca Phone: 403.836.3535 (office & mobile) Address: FL27, 140 4th Avenue SW, Calgary, AB T2P 3N3.

3. Summary of Engagement with Jurisdictions or Agencies

Initial engagement with the federal, provincial, and municipal regulatory agencies began in 2025 to introduce the Project and confirm regulatory expectations. Discussions with the Impact Assessment Agency of Canada (IAAC) were initiated in November 2025 to outline the forthcoming submission under the Impact Assessment Act and to receive process guidance in preparation for the Initial Project Description and associated annexes.

At the provincial level, Indus Power/Beacon has engaged Alberta Environment and Protected Areas regarding Environmental Impact Assessment requirements and the Environmental Protection and Enhancement Act (EPEA) Industrial Approval process. Engagement has also occurred with the Alberta Utilities Commission (AUC) with respect to the power plant approval process, and with the Alberta Electric System Operator concerning System Access Service Request (SASR) submissions. A SASR for Demand Transmission Service to support the data center halls has been submitted, and a SASR for Supply Transmission Service is planned. The Aboriginal Consultation Office (ACO) confirmed that Indigenous consultation is not required, as the Project is located on private land. *Historical Resources Act* (HRA) approval has been issued by Alberta Arts, Culture and Status of Women (AACSW), and any chance discovery of historical resources will be managed in accordance with Section 31 reporting requirements (AACSW 2025).

At the municipal level, Indus Power/Beacon has engaged Rocky View County to support local planning, permitting, and coordination. An Area Structure Plan (ASP) was approved in June 2025 for the development of a Data Center Campus. Ongoing engagement with Rocky View County will continue as required to support building permits and municipal coordination throughout Project development. Engagement with all relevant agencies will continue as the Project advances through the applicable regulatory processes.

4. Engagement with Indigenous Groups, Public, Other Stakeholders

4.1 Indigenous Groups

The Project is located on privately owned land in Rocky View County, Alberta, and no Crown land disposition or federal authorization is anticipated. However, as a matter of due diligence and in recognition of the Crown's Duty to Consult, Beacon AI Centers Inc. undertook Indigenous engagement in advance of regulatory applications.

Beacon AI Centers Inc. followed the Government of Alberta's Proponent Guide to First Nations, Métis Settlements and Credibly Asserted Métis Communities and submitted a Pre-Consultation Assessment (PCA) Request to the Alberta Aboriginal Consultation Office (ACO) in November 2025 to confirm Indigenous consultation requirements. Additional information requested by the ACO was provided in December 2025. The ACO confirmed that no formal Indigenous consultation was required, as the Project is located on privately owned land (Beacon AI Centers Inc. 2025).

Notwithstanding the ACO determination, and in recognition of the Project's location within Treaty 7 territory, Beacon AI Centers Inc. provided Project notification and information to the following Indigenous communities:

1. Tsuut'ina Nation;
2. Piikani Nation;
3. Siksika Nation;
4. Blood Tribe;
5. Stoney Nakoda Nation – Bearspaw;
6. Stoney Nakoda Nation – Chiniki;
7. Stoney Nakoda Nation – Goodstoney;
8. Métis Nation of Alberta Region 3;
9. Métis Nation of Alberta – Otipemisiwak Métis Government; and
10. Métis Nation of Alberta – Otipemisiwak Métis Government – Battle River Territory – Rocky View Métis District.

Indigenous communities in the Project's regional area are shown in Figure 4.1.1. Indigenous engagement activities, correspondence, and outcomes are documented in the Project's Participant Involvement Program (PIP) Summary Report (Beacon AI Centers Inc. 2025). Engagement with Indigenous communities will continue as the Project advances through the regulatory process. Project interactions with Indigenous Peoples are further described in Sections 21 and 22.

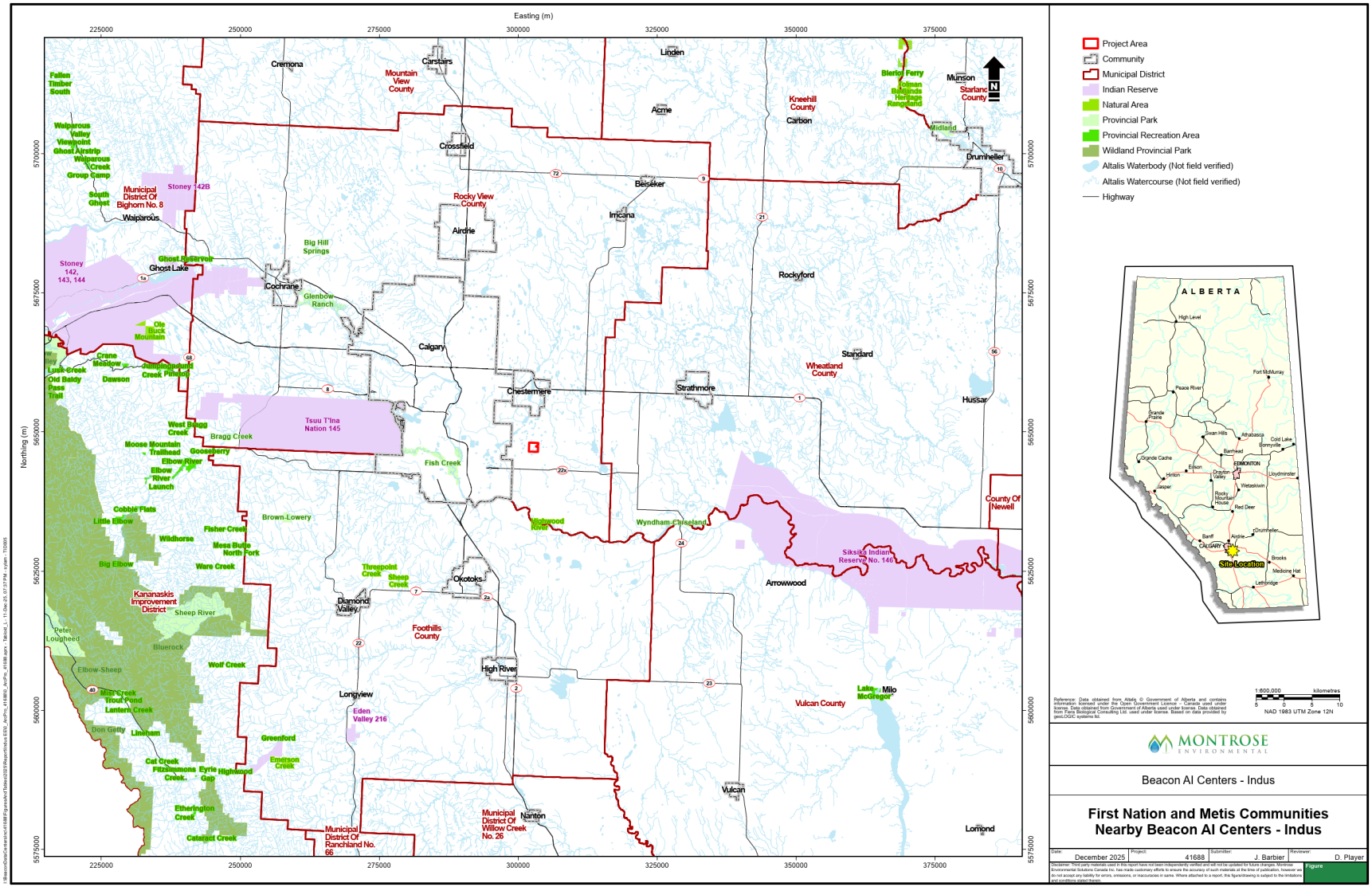

Figure 4.1.1 First Nation and Metis Communities Nearby Beacon AI Centers – Indus Project

4.2 Engagement with Indigenous Groups

Indus Power/Beacon acknowledges and respects the rights of Indigenous people. Indus Power/Beacon sent a Project-specific information package (PSIP) via email on November 20, 2025, to the identified Indigenous Communities listed above. The November 2025 Project notification included:

1 An introductory cover letter with a Project and Proponent description;

2 An open house invitation; and

3 An Alberta Utilities Commission (AUC) brochure titled *Public Involvement in a Proposed Utility Development*.

4.3 Results of Engagement and Key Issues Raised

A public Open House was held on November 24, 2025, by Indus Power/Beacon at the Indus Recreation Center Meeting Room in Indus, Alberta, where Indigenous Communities and Stakeholders were invited to participate. As of December 2025, the Siksika Nation is the only Indigenous Community that has requested a Project information meeting, which is anticipated to occur in the new year. No issues or concerns were raised through Indigenous engagement activities to date (Beacon AI Centers Inc. 2025).

Indus Power/Beacon will continue to communicate with Indigenous Communities and stakeholders throughout Project development and is committed to ongoing, respectful engagement (Beacon AI Centers Inc. 2025).

4.4 Engagement with Public and Other Stakeholders

Public and stakeholder engagement for the Project began with the distribution of introductory information packages to nearby landowners and local municipalities. Indus Power/Beacon also hosted an Open House.

The key concerns raised by Indigenous Communities, Stakeholders, Municipalities and Associations during the Open House event and throughout consultation and engagement are summarized in Table 4.4.1 below.

Table 4.4.1 Issues, Concerns and Mitigations

Key Concerns	Specific Interests	Response/Mitigative Measure
Land Use	Change of Land Use	The Project will be situated on private agricultural land within the Special Data. Center District (S-DAT) in Rocky View County, approximately seven (7) kilometers west of Langdon.
Noise Impact	The impact that sound may have on neighbours, the community or the region.	The Project will comply with AUC Rule 012 noise standards by implementing design- and site-specific mitigation measures, such as silencers and acoustic barriers, to ensure sound levels remain within permissible limits at nearby receptors. Noise modelling predicts compliance with daytime and nighttime limits, excluding low-frequency noise effects (AUC 2024b).
Air Impact	Impacts on air quality from the proposed power generation at the site.	Dispersion modelling indicates that emissions of NO_2 (Nitrogen Dioxide), CO (Carbon Monoxide) and $PM_{2.5}$ (particulate matter with a diameter of 2.5 micrometers or smaller) from the Project will remain below Alberta's Ambient Air Quality Objectives and Guidelines (AAAQO/G).
Water Usage	Project participants have raised concerns that Data Centers use excessive amounts of water.	Beacon has an agreement with Langdon Waterworks Ltd. to receive 1,500 cubic meters per day of potable water, addressing concerns about excessive water consumption by data centers.
Consultation Commitment	When will consultation end.	Beacon is committed to continuing conversations with interested parties for the life of the Project. As a new project in the Special Data Center District (S-DAT), we look forward to continuing to share project information and updates, and to answer any questions interested parties may have.

5. Study or Plan, Relevant to The Project

There are no known regional assessments of the area in which the Project is located that have been carried out under Sections 92 or 93 of the *Impact Assessment Act*.

Two (2) municipal plans establish a policy framework for the Project area: the Rocky View County Municipal Development Plan (MDP) (Rocky View County 2025a) and the Beacon AI Hub Area Structure Plan (Rocky View County 2025b). In addition, the Rocky View County Land Use Bylaw regulates development of the Project site.

The Rocky View County Municipal Development Plan (MDP) is a policy document adopted by Council that provides general direction for growth over the next 20 years. The MDP recognizes the benefits of commercial and industrial development and has identified designated areas for such development. The MDP also provides direction for long-range planning for future growth, including land use, environmental stewardship, infrastructure, and social, cultural, and economic considerations.

Rocky View County adopted the Beacon AI Hub Area Structure Plan (ASP) in June 2025, which delineates the future development blueprint for the specific area where the Project is proposed. It encompasses aspects

such as land use, transportation, environmental protection, emergency services, general design, and utility service needs.

6. Strategic Assessments Relevant to The Project

No strategic assessments under Subsection 95(2) of the *Impact Assessment Act* have been completed that are specific to the Project. However, the *Strategic Assessment of Climate Change* (Government of Canada 2020) applies to designated projects under the *Impact Assessment Act*. It will be relevant to the assessment of greenhouse gas (GHG) emissions and potential climate-related effects for the Project.

PART B: Project Information

7. Project Purpose and Need

7.1 Project Purpose

Indus Power is proposing to construct, own and operate an electricity generation facility within a data center campus called the Beacon AI Centers – Indus project (the "Project") in one of Rocky View County's Industrial areas. The total electrical Project's production capacity is 1,494 MWe, providing 1,200 MWe of continuous, reliable, affordable, and dispatchable electricity to the four on-site data centers and Albertans.

The Project will form the cornerstone of a purpose-built digital-energy campus capable of supporting Tier IV data-center operations while reducing dependence on the provincial grid. It will also help ensure Albertans receive safe, reliable electricity for cooling and heating during extreme events, when output from Alberta's renewable electricity sources has historically been limited or non-existent.

7.2 Project Need

The Project addresses Alberta's growing need for reliable, high-density electrical supply for data-centric industries, particularly artificial-intelligence (AI), high-performance computing (HPC), and cloud-service infrastructure. The Province of Alberta is actively seeking $100 billion in AI investment to drive innovation, create jobs, and diversify its economy.

The Project reduces reliance on provincial transmission infrastructure by integrating on-site electricity generation within the data-centre campus, consistent with current system-planning considerations for large electricity loads and AESO interconnection requirements.

7.3 Project Benefits

The Project is expected to contribute economic and community benefits through construction and long-term employment, increased municipal and provincial tax revenue, infrastructure enhancements, collaboration with local colleges for technical training, and the use of local contractors and suppliers. The Project is part of a 627-acre (254 hectares) data center campus planned with sustainability and community in mind. Key features include environmental buffers, wetlands, and infrastructure upgrades that benefit both industry and residents.

8. Physical Activities Regulation

Under the conditions set out in subsection 2(1) of the *Physical Activities Regulations* (Government of Canada 2019a) and paragraph 30 of the schedule to these regulations, the Project is a physical activity designated for the purpose of the definition of "designated project" in section 2 of the *Impact Assessment Act* (Government of Canada 2019a).

9. Activities, Infrastructure, Permanent or Temporary Structures and Physical Works

This section describes the infrastructure and permanent structures that Indus Power/Beacon intends to build, as well as the activities required to complete the Project. Emphasis is placed on the equipment's design, location and main functions.

9.1 Project Structures

The Project is a power generation facility comprised of several permanent structures. The Project includes 20 Quick-deploy Power and Containerized system (QPAC) modules, each containing 5 INNIO Jenbacher J624 lean-burn natural gas engine generators. Each QPAC module integrates five reciprocating engines, alternators, exhaust-treatment systems, and air-cooled radiators within a single three-storey steel enclosure engineered for industrial acoustic performance and emissions compliance.

The Project also incorporates four individual combined-cycle gas turbine (CCGT) plants, each with its associated accessory & auxiliary systems.

Notably, there will be four (4) generation plants, each comprising three (3) combustion gas turbines (GTs) and one (1) steam turbine (ST), in a 3x1 configuration, commonly referred to as a 3x1 CCGT plant. Turbines, air-cooled radiators, emissions control devices, and heat recovery steam generators (HRSGs) are integrated into each plant as a single structure. The CCGT configuration uses air-cooled condensers (ACC), thereby reducing water consumption to a negligible amount per megawatt-hour (MWh).

In addition to the QPAC modules and CCGT buildings, there will be permanent structures for the maintenance and lubricants storage, including outdoor switchgear.

The Project design incorporates controls to address potential environmental risks associated with:

- Stack emissions of oxides of nitrogen (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), fine particulate matter ($PM_{2.5}$) and carbon dioxide (CO_2);
- Noise from engine modules, radiator banks, and auxiliary equipment;
- Storage and handling of fuels, lubricants, coolants, and selective catalytic reduction (SCR) reagents;
- Stormwater management and runoff from developed industrial surfaces; and
- Decommissioning and removal of above-grade equipment at the end of life.

Environmental-protection elements embedded in the design include:

- Compact generation layout within a 45 acre power-generation zone with acoustic enclosures, vertical exhaust stacks, and dispersion-controlled spacing to reduce off-site noise and air-quality effects;
- High-efficiency INNIO Jenbacher J624 engines with SCR systems providing approximately 90% NO_x reduction (AEPA 2025);
- Continuous Emissions Monitoring System (CEMS) for the three (3) combustion gas turbines exhausts achieving approximately 70% NO_x removal;

- The addition of an HRSG to each trio of gas turbines to increase overall plant efficiency;
- Closed-loop glycol cooling with minimal process-water use or blowdown streams; and
- Stormwater ponds, ditches, and landscaped buffers function as runoff management and environmental separation features within the 627.2 acres (253.82 hectares).

A conceptual site plan is provided in Figure 9.1.1.

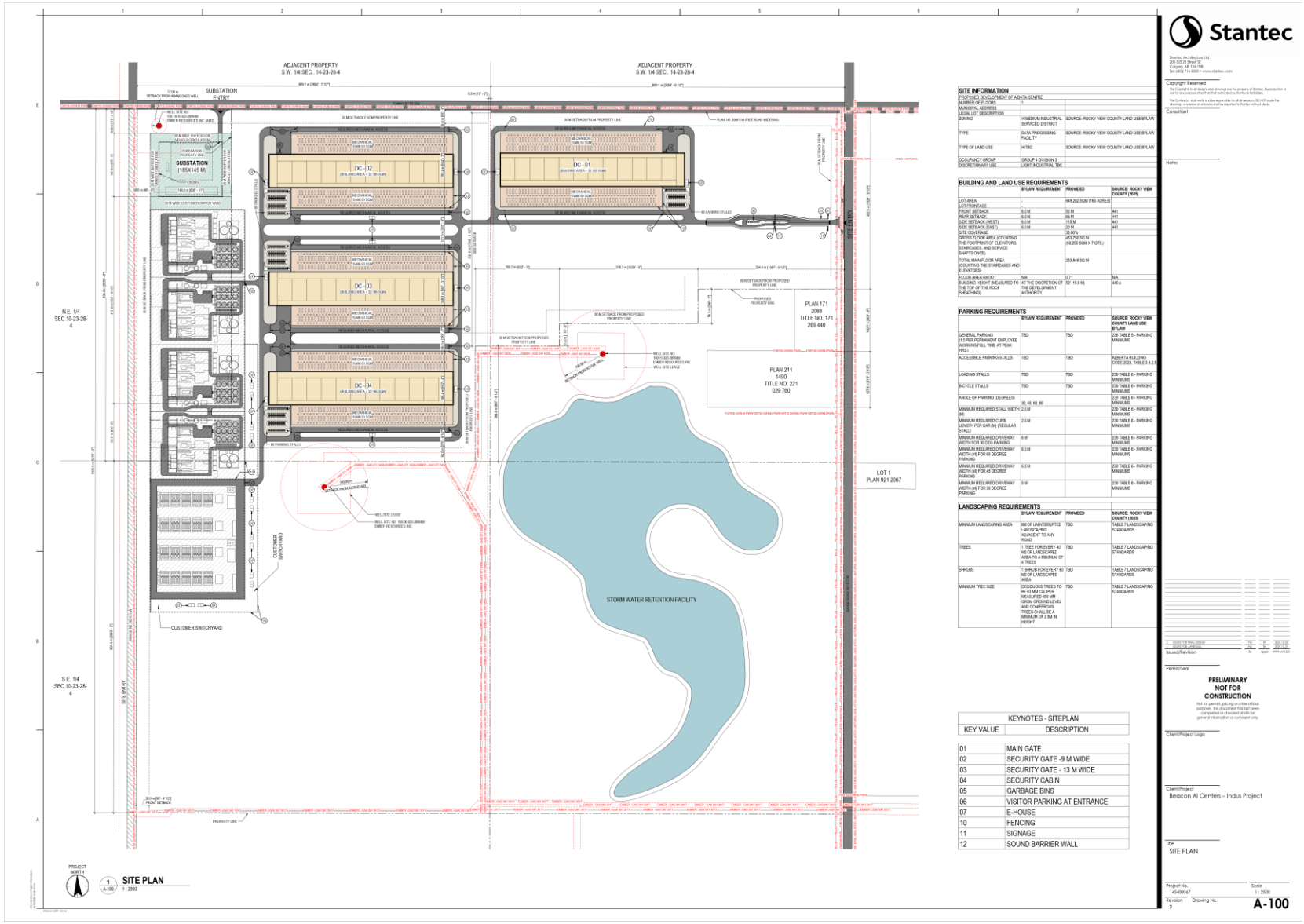

Figure 5 Figure 9.1.1 Site Plan

9.2 Plant Process Overview

The Project comprises 100 INNIO Jenbacher J624 lean-burn natural-gas engine generators, organized into QPAC modules, and four CCGT plants comprising three (3) GTs with one steam turbine (ST) in an air-cooled configuration. These will generate electricity for the on-site Data Center Campus. Natural gas will be supplied through a new pipeline lateral and processed on-site, before distribution to the generation modules.

Within each module, engines combust natural gas to generate electricity, and exhaust gases pass through emission-control systems before release to the atmosphere. Engine heat will be managed through closed-loop cooling systems and air-cooled radiators.

The gas turbines burn natural gas to generate electricity. The exhaust then heats water, which powers the steam generator, producing additional electricity.

Electrical power generated by the engines and turbines will be collected via internal switchgear and distributed to the data center facilities and the on-site substation.

The facility will operate using automated control, protection, and monitoring systems housed within a central operations control center.

9.3 Major Equipment

The Project will include natural gas–fired reciprocating engine generators and combined-cycle gas turbine (CCGT) units, together with associated fuel supply, emissions-control, cooling, and electrical distribution systems.

Supporting infrastructure will include a natural gas pipeline with metering and conditioning facilities, exhaust treatment systems, HRSG, electrical switchgear and transformers, an on-site substation, control and operations buildings, internal access roads, and stormwater management features.

9.4 Raw Material

Natural gas will be the primary raw material used as fuel for electricity generation. Additional consumables for the CCGTs will include lubricating oils, emissions-control reagents, cooling-system fluids (glycol), and process water. Potable and domestic water for personnel and building services are not part of the industrial process.

9.5 Products and By-Products

The principal product of the Project is electrical energy, with an installed generation capacity of approximately 1,494 MWe and anticipated annual production of approximately 10,500 GWh, depending on operating conditions.

Project by-products will include treated combustion exhaust gases, waste heat dissipated through air-cooled systems, and routine operational wastes. All by-products and wastes will be managed in accordance with applicable regulatory requirements.

9.6 Facilities

The Project will include buildings and industrial enclosures required to support power generation and associated site operations. These will include modular enclosures for the reciprocating engine generators, structures housing combined-cycle gas turbine equipment, air-cooled condenser platforms, electrical switchgear and substation facilities, gas metering and regulating buildings, control and operations facilities, maintenance and storage areas, and reagent and water-treatment systems. Buildings associated with the data-centre campus will also be located on site.

Major equipment will include natural gas–fired reciprocating engine generators, combined-cycle gas turbine units, heat-recovery steam generators, air-cooled condensers, emissions-control systems, electrical transformers and switchgear, and plant-wide control and monitoring systems. Final equipment quantities and configurations will be confirmed during detailed design.

9.7 Ancillary Infrastructure

Ancillary infrastructure will include a new electrical interconnection to the Alberta Interconnected Electric System, a dedicated natural gas pipeline connection, municipal water supply connections, internal access roads, buried utilities, drainage and stormwater management systems, and telecommunications infrastructure. Transmission and pipeline facilities will be designed, permitted, and constructed in accordance with applicable provincial regulatory requirements.

9.8 Project Activities

Project activities, spanning construction, operation, and eventual decommissioning, are discussed below.

Construction

Construction of the Project is expected to span approximately two years. It will include site preparation, foundation and underground utility installation, delivery and placement of modular generation units, and installation of electrical and control systems. Temporary laydown areas, construction facilities, and access routes will be established for the duration of construction.

Sitework

Sitework will include vegetation clearing, topsoil stripping and stockpiling, grading, installation of drainage features, internal road construction, and preparation of areas for buildings and equipment. Soil will be salvaged for later reclamation. Erosion and sediment controls will be implemented throughout construction.

Power Transmission Line and Interconnection

The Project will connect to the Alberta Interconnected Electric System through an AltaLink-developed transmission interconnection. AltaLink will be responsible for permitting and constructing the required facilities in coordination with the Alberta Electric System Operator.

Natural Gas Pipeline

Natural gas will be provided by a new dedicated lateral. The new lateral will be constructed and permitted. Final routing and construction details are still pending the open gas season.

Water Supply

The total water demand for the data center campus is projected to be approximately 1,500 m^3 per day, subject to final design specifications. To meet these requirements, water will be supplied through the Langdon Waterworks municipal system.

Data Halls

The data halls are currently under design. Currently, four (4) separate data hall structures are planned, each with a capacity rating of 300 MWe.

Ancillary Roads and Utilities

Internal access roads, utility corridors, and required service connections will be developed within the Project site.

Telecommunications

Telecommunications services for plant operations and monitoring will be provided through fibre-optic networks and other communication systems.

Operation and Maintenance

The facility will be operated by a qualified operator and staffed with operations and maintenance personnel. Activities will include routine monitoring, inspection, and maintenance of equipment and supporting infrastructure. The Project will comply with provincial and federal requirements related to air emissions, noise, water use, wastewater, and waste management (AEPA 2024; AUC 2024b).

Decommissioning and Abandonment

At the end of the facility's operating life, above-grade equipment will be removed and the site reclaimed in accordance with applicable regulations. A detailed decommissioning plan will be prepared prior to closure.

Incidental Activities

Incidental activities not under Indus Power/Beacon's direct control include telecommunications services, fuel and power supply from third-party providers, and public-road access to the Project site.

10. Estimate of the Maximum Production Capacity and Description of the Production Processes

10.1 Estimated Maximum Production Capacity

The Project is a hybrid natural-gas-fired power generation facility designed to supply electricity to an on-site hyperscale data-center campus.

The Project includes:

- One hundred (100) natural gas-fired reciprocating engine generators; and
- Four (4) combined-cycle gas turbine (CCGT) plants.

The total installed electrical generation capacity is approximately 1,494 megawatts electric (MWe). The facility is designed to deliver up to 1,200 MWe of continuous, fully dispatchable power to four on-site data halls, each with a maximum load of 300 MWe.

Based on expected operating profiles, the Project is anticipated to generate approximately 10,500 gigawatt-hours (GWh) of electricity per year, subject to dispatch strategy, data-center load requirements, and any grid-export arrangements.

10.2 Description of the Production Processes

Electricity will be generated using natural gas supplied from the regional transmission system through a dedicated pipeline connection. Natural gas will be conditioned on site and distributed to both the reciprocating engine generators and the combined-cycle gas turbine units.

The reciprocating engines provide flexible generation capable of responding to variations in data-center power demand, while the combined-cycle gas turbine plants provide high-efficiency baseload generation through heat recovery and steam turbine systems.

Exhaust gases from both generation systems will be treated using emission-control technologies prior to atmospheric release. Cooling and thermal management are achieved using closed-loop, air-cooled systems, eliminating the need for cooling towers or evaporative water use.

Electricity generated on site will be collected through internal switchgear and transformers and distributed through an internal electrical system to supply the data-center facilities. The Project is designed to operate independently of the provincial grid if required, while maintaining the ability to export power subject to regulatory approvals.

11. Project Schedule

The anticipated Project schedule is presented in Table 11.1.1

Table 3 Table 11.1.1 Project Schedule

Project Phase	Schedule
Permitting & Design Work	Q1 2025 – Q3 2026
Civil Works & Foundations	Q2 2026 – Q4 2026
Module Delivery & Mechanical Installation	Q3 2026 – Q2 2027
Electrical Integration & Testing	Q1 2027 – Q2 2027
Commissioning & Performance Testing – Site Wide	Q2 2027 – Q3 2027
Commercial Operation Date (COD)	Q3 2027
Project decommissioning and abandonment (after an estimated 25-year life)	2050-2055

If the IAAC determines that a federal Impact Assessment is required, the schedule will be extended by approximately two years, with an estimated in-service date in 2030 Q3 (IAAC 2024).

12. Potential Alternatives

12.1 Alternative Means of Carrying Out the Project

Indus Power/Beacon considered alternative approaches related to facility siting, cooling methods (e.g., water versus air), and power-generation technology (e.g., configuration and sizing). The selected Project site was identified as the preferred location due to its proximity to existing natural gas and electrical infrastructure. Development of the Project will occur within a previously disturbed parcel, minimizing additional land disturbance.

Air-cooled, closed-loop cooling was selected over water-based systems to reduce water use and simplify operations. Natural gas–fired reciprocating engines in modular enclosures were chosen as the preferred generation technology to meet the Project's power, reliability, and operational requirements.

Indus Power/Beacon evaluated other means of power production and settled on having the majority of its power production be supplied by the Siemens CCGT. The combination of gas turbines and a steam turbine generator yields highly efficient power production, reducing fuel consumption while maintaining high energy output.

12.2 Alternatives to The Project

No technically or economically feasible alternatives were identified that could provide the required level of continuous electrical supply needed to support the data-center campus.

PART C: Location Information

13. Description of the Proposed Location

13.1 Geographic Description

The Project will be situated on the lands privately owned/ controlled by Indus Power located at SW and SE Quarters 11-23-28-W4M, NW Quarter 11-23-28-W4M and Pt. N.E. Quarter 11-23-28-W4M (Indus Power land) located in Rocky View County, Alberta at 50°56'36.3"N 113°48'25.9"W . This parcel of land is in the "S-DAT Special, Data Centre District" according to the Rocky View County Land Use Bylaw C-8000-2020 and subsequent amendments (Rocky View County 2025).

13.2 Site Maps

The Project location and conceptual site layout are shown in Figures 1.1.1 and 9.1.1.

13.3 Legal Description of Land

The Project is located approximately three (3) km east of the City of Calgary and approximately two (2) km northwest of the Hamlet of Indus, Alberta, within Rocky View County, immediately south of Township Road 232, as shown in Figure 1.3.1.

The Project coordinates are:

- *Legal land description: SW and SE Quarters 11-23-28-W4M, NW Quarter 11-23-28-W4M and Pt. N.E. Quarter 11-23-28-W4M*
- Deg-Min-Sec Latitude and longitude coordinates: 50°56'36.3"N 113°48'25.9"W ; and
- Decimal Latitude and longitude coordinates: 50.943405, -113.807201.

13.4 Permanent, Seasonal or Temporary Residences and to The Nearest Affected Communities

The Project is located within the S-DAT area zoned for Data Center development.

There are ten (10) residences within 1.5 km of the Project, the nearest one (1) located approximately 35 meters (m) south of the Project. The City of Calgary and the Hamlet of Indus are approximately three (3) km west and two (2) km respectively to the south.

13.5 Proximity to Land Use for Traditional Purposes

The Project is located in Treaty Seven (7) territory. Proximity to Indigenous groups and organizations is shown in Figure 4.1.1, based on the Landscape Analysis Indigenous Relations Tool (LAIRT) and the Impact Assessment Agency of Canada directory (IAAC 2024).

13.6 Proximity to Federal Land

The Project is not located on federal land. The nearest federally owned lands to the Project include the Crown interest at the shoreline of the Bow River where Indigenous Treaty Rights and Metis Settlements Harvesting Rights apply (approximately nine (9) km southwest), Banff National Park (approximately 110 km to the west), CFB Currie Military Barracks (approximately 22 km west), HMCS Tecumseh Canadian Forces Naval Reserve (approximately 23 km northwest of the Project).

14. Physical and Biological Environment

The information below was compiled and delivered by Montrose Environmental Solutions Canada (Montrose) and Stantec.

14.1 Project Environmental Setting

The Project is located on privately owned agricultural land within Rocky View County, Alberta, in the White Area of the province. Surrounding land use is primarily agricultural, consisting of cultivated fields and tame pasture, with an enhanced recovery scheme facility located approximately 1.5 km west of the Project site. The nearest named waterbody is the Bow River, located approximately 12 km to the west (Montrose 2025a).

Several wetlands and water bodies occur within the terrestrial assessment area, defined as the Project area and a 100 m buffer. In comparison, the wildlife assessment area comprises the Project area and a 1,000 m buffer. The Project is situated within the Area Structure Plan study area identified in the Master Drainage Plan, which exhibits gently undulating to relatively flat topography, with a maximum slope of approximately 0.77% and elevations ranging from 1,025 m to 1,041 m above sea level. Surface drainage to the Project area includes contributions from off-site agricultural lands and an existing eastern catchment (Stantec 2025; Montrose 2025a).

The Project does not overlap with any Environmentally Significant Areas (ESA) as defined in Environmentally Significant Areas in Alberta: 2014 Update. The nearest mapped ESA is located approximately 3.4 km northwest of the Project site (Fiera 2014).

The Project is located within the Foothills Fescue Natural Subregion of Alberta's Grassland Natural Region, which is characterized by agricultural land use, rolling to gently undulating terrain, and limited remnant native prairie. The Project site itself is situated on cultivated land and does not contain undisturbed native habitat (Natural Regions Committee 2006; Montrose 2025a).

No surface water quality sampling was conducted, as there are no watercourses located within the Project area and no receiving watercourses are proposed (Montrose 2025).

14.2 Air Quality

The Project is located in a rural setting within Rocky View County and within the Calgary Regional Airshed Zone (CRAZ). There are no permanent ambient air quality monitoring stations located near the Project site. Existing CRAZ monitoring stations are primarily located in urban centers such as Calgary, Airdrie, and Cochrane and are not considered representative of baseline conditions at the Project location.

Representative baseline ambient air quality concentrations were therefore derived using regional monitoring data from locations with similar rural characteristics. Continuous nitrogen dioxide (NO_2) and fine particulate matter ($PM_{2.5}$) data were obtained from monitoring stations in Brooks, while carbon monoxide (CO) data were obtained from a monitoring station in Lethbridge. These data were sourced from the Alberta Environment and Protected Areas Data Management Platform and analyzed in accordance with the Alberta Air Quality Modelling Guideline using the most recent three-year period with complete records (2022–2024) (AEPA 2025a; Stantec 2025a).

Baseline concentrations for NO_2, $PM_{2.5}$, and CO were found to be well below the applicable Alberta Ambient Air Quality Objectives and Guidelines, representing a small fraction of the relevant thresholds. These baseline concentrations were used to support the Project's air quality assessment.

14.3 Acoustic Environment

A Noise Impact Assessment (NIA) was completed for the Project in accordance with Alberta Utilities Commission (AUC) Rule 007 and the methodology prescribed in AUC Rule 012 (AUC 2024b). The assessment evaluated baseline sound levels from existing ambient conditions and third-party energy-regulated facilities, the Project's noise contribution, and cumulative sound levels resulting from the combination of baseline and Project sources (Stantec 2025b).

The noise modelling results indicate that predicted cumulative sound levels comply with applicable daytime and nighttime Permissible Sound Levels (PSL) at all assessed receptors. Based on the prescribed AUC Rule 012 approach and Health Canada noise guidance, low-frequency noise effects are not expected at any receptor. The Noise Impact Assessment concluded that the Project complies with all applicable AUC noise requirements (AUC 2024b; Stantec 2025b).

14.4 Geology and Hydrogeology

The Project is located on gently undulating terrain within Rocky View County. Surficial materials consist primarily of glacial till associated with stagnant ice moraine deposits, underlain by bedrock of the Paskapoo Formation, composed of interbedded sandstone, siltstone, and mudstone. Bedrock is generally encountered at shallow depths beneath the site (Fenton et al. 2013; Prior et al. 2013; Atkinson et al. 2020a; Abacus 2025).

Groundwater in the area occurs primarily within regional bedrock aquifers of the Paskapoo Formation. Groundwater recharge is expected to occur in upland areas, with regional groundwater flow directed southward toward the Bow River. No springs have been identified within the Project area (Stewart 2014; Montrose 2025).

Groundwater wells in the surrounding area are used primarily for domestic, agricultural, and small-scale commercial or industrial purposes, and a limited number of licensed groundwater and surface water diversions are in place. Based on the Project location, geological setting, and design, the Project is not expected to interact with regional aquifers or adversely affect existing groundwater users (GOA 2023a, 2023b; Montrose 2025).

14.5 Surface Water and Fish and Fish Habitat

The Project is located within the South Saskatchewan River watershed, in the Middle Bow River sub-watershed, on previously cultivated private land. Several wetlands, isolated waterbodies, and ephemeral drainage features occur within the broader assessment area; however, no fish-bearing watercourses are located within the Project footprint.

The nearest major fish-bearing watercourse is the Bow River, located approximately 10 to 12 km from the Project site. Bull Trout, listed as threatened under the federal *Species at Risk Act* (SARA) and the provincial Wildlife Act, occur in the Bow River; however, the river is poorly connected to the Project area, and no aquatic species at risk, critical habitat, or fish-bearing streams are present within or near the Project footprint (GoA 2025; DFO 2025).

The Middle Bow River sub-watershed is classified as having a moderate to high risk for whirling disease. The Project will not involve instream works or direct interaction with fish habitat, and standard biosecurity measures would be implemented if contact with surface waters were required (AEPA 2020).

Overall, the Project is not expected to result in adverse effects on surface water, fish, or fish habitat.

14.6 Soils

The Project is located on cultivated agricultural land within Rocky View County, where soils are typical of the region and have been subject to long-term agricultural use. Soils consist primarily of Black Chernozemic soils with localized Gleysolic conditions in low-lying, poorly drained areas, occurring on gently undulating terrain with slopes generally less than or equal to 5% (Bock 2016; Montrose 2025).

A soil and terrain assessment confirmed that surface soils are generally loam to sandy loam in texture, with finer-textured soils in depressional areas. Wind erosion risk across the Project footprint is generally moderate, while water erosion risk is low due to gentle slopes. Reclamation suitability for surface and subsurface soils ranges from good to fair across most of the Project area, with localized limitations in poorly drained areas (AAFRD 2004; Coote and Pettapiece 1989; Tajek and Coote 1993).

Overall, baseline soil conditions are typical of cultivated agricultural lands in the region, with no unique or sensitive soil features identified, and soils are considered suitable for conservation and reclamation using standard soil management practices (Montrose 2025).

14.7 Vegetation and Wetlands

The Project is located on cultivated agricultural land within the White Area of Alberta. Vegetation within the Project area reflects long-term agricultural use and consists primarily of cultivated fields, with limited native vegetation remaining. Field verification confirmed that upland areas are characterized by disturbed agricultural vegetation on gently undulating terrain, with moderately well to poorly drained soils in low-lying areas (Montrose 2025).

Wetlands and ephemeral water features occur within low-lying portions of the broader assessment area and are generally associated with agricultural depressions. These wetlands show evidence of historical disturbance related to cultivation. No provincially listed rare plant species or rare ecological communities

were identified within the Project area or surrounding assessment areas based on desktop review and field surveys (GOA 2021; Montrose 2025).

Wetlands and ephemeral drainage features within the Project boundary will be managed through site design and stormwater management measures, and the planned post-reclamation land use for the Project area is agricultural (Montrose 2025).

Terrestrial Vegetation

Terrestrial vegetation within the Project area is dominated by cultivated agricultural land and disturbed upland communities typical of the Foothills Fescue Natural Subregion. No native upland vegetation of conservation concern was identified within the Project area or surrounding assessment areas (Natural Regions Committee 2006; Montrose 2025).

Wildlife and Wildlife Habitat

A wildlife assessment was completed to describe wildlife species and habitat within the Project area and a surrounding 1,000 m wildlife assessment area. The assessment included desktop review and field surveys conducted in 2024 and 2025 for sharp-tailed grouse, breeding birds, and raptors, and was used to confirm habitat conditions, identify species of management concern, and inform mitigation measures (Montrose 2025b; EPA 2025a).

The surrounding landscape is dominated by cultivated agricultural land, with smaller areas of tame pasture, modified grassland, wetlands, and ephemeral water bodies that provide localized habitat for birds, amphibians, and other wildlife. Review of provincial databases indicates that several wildlife species at risk have been historically recorded within the broader region; however, suitable habitat for many of these species is limited within the Project area due to extensive cultivation (GoA 2022; EPA 2025a).

Field surveys did not identify any sharp-tailed grouse leks or other key wildlife features within or adjacent to the Project area. One active red-tailed hawk nest was identified within the wildlife assessment area; the associated setback overlaps the Project area but does not overlap planned disturbance, and no effects on the nest are anticipated. Breeding bird surveys recorded species typical of agricultural and wetland-edge environments, including several provincially listed Sensitive species. No raptor species at risk or other significant wildlife features were identified that would constrain Project development (Montrose 2025b).

Standard wildlife mitigation measures will be implemented where required, including pre-construction wildlife and nest sweeps, timing restrictions, and setbacks consistent with provincial best management practices, to minimize potential effects on wildlife during construction and operation.

Historical Resources

Heritage resources are regulated by the Historical Resources Act and administered by the Archaeological, Archives and Collections Services of Alberta (AACSW).

Historical Resources Act approval (HRA number 4835-25-0121-001) has been granted on December 02, 2025. Any chance discovery of historical resources must be reported to AACSW.

15. Health, Social and Economic Context in the Region

The Project is located in Rocky View County, Alberta, which surrounds much of the City of Calgary and forms part of the broader Calgary regional economy. The County supports a mix of agricultural, residential, logistics,

and industrial land uses and provides land and infrastructure for rural living and industrial development. The Project is situated on privately owned agricultural land in an area transitioning toward logistics and industrial uses, adjacent to the Prairie Economic Gateway planning area (Beacon AI Centers Inc. 2025a).

Rocky View County has experienced steady population growth between the 2016 and 2021 census periods, consistent with trends across the Calgary region. Nearby municipalities such as Chestermere and Calgary have also grown, while the closest population centers to the Project are the hamlets of Indus and Langdon. Indus is a small rural hamlet with a limited residential population, whereas Langdon is a larger and growing unincorporated community serving as a residential area for the Calgary workforce (Statistics Canada 2016; Statistics Canada 2021, as cited in Beacon AI Centers Inc. 2025a).

The Project is located within Treaty 7 territory, the traditional lands of the Blackfoot Confederacy, the Tsuut'ina First Nation, and the Stoney Nakoda Nations, and within the Rocky View Métis District of the Otipemisiwak Métis Government. Approximately 1,250 Indigenous people reside in Rocky View County, representing about 3.1% of the population. While the Project footprint itself is not used for Indigenous harvesting or other traditional practices due to its location on private land, traditional land use activities occur elsewhere within Treaty 7 territory (Statistics Canada 2021, as cited in Beacon AI Centers Inc. 2025a; Beacon AI Centers Inc. 2025b).

Rocky View County's economy has evolved from a primarily agricultural base to a diversified economy anchored by logistics and warehousing, agriculture, manufacturing, construction, and retail and tourism. Industrial hubs in areas such as Balzac and Conrich support significant employment in distribution and supply chain sectors, and the County has positioned itself as a business-friendly jurisdiction through comparatively lower non-residential property tax rates and the availability of land suitable for industrial development (Beacon AI Centers Inc. 2025a).

Residents access healthcare services through a combination of local facilities in nearby communities and regional hospitals in Calgary, within the Alberta Health Services Calgary Zone. Regional health indicators for Alberta and the Calgary Zone indicate that most residents report very good or excellent overall and mental health, with rates of chronic disease, substance use, and perceived stress generally comparable to provincial averages. These indicators are provided for regional context only and are not intended to represent Project-specific health effects (Beacon AI Centers Inc. 2025a; Alberta Health Services 2023).

Overall, the regional context is characterized by steady population growth, a diversified and resilient economy influenced by industrial and logistics development, access to comprehensive healthcare services, and the presence of Indigenous communities within Treaty 7 territory.

PART D: Federal, Provincial, Territorial, Indigenous and Municipal Involvement

16. Financial Support from Federal Authorities

The Project does not require financial support from federal authorities. Beacon may explore federal grant or funding opportunities in the future, if available.

17. Use of Federal Lands for Project

The Project will not be constructed or operated on federal lands (Canada 1999; Canada 2019).

18. Jurisdictions That Have Powers, Duties or Functions in Relation to an Assessment of the Project's Environmental Effects

18.1 Federal Regulatory Requirements

In addition to requirements under the *Impact Assessment Act*, the Project may interact with the following federal legislation:

- *Fisheries Act* – Authorization may be required if Project activities involve disturbance to a fish-bearing waterbody or fish habitat.
- *Migratory Birds Convention* Act – Construction activities will follow federal guidance to avoid harm to migratory birds, including measures such as nest surveys and activity timing, if required.
- *Species at Risk Act* (SARA)– If species listed under Schedule 1 of SARA are identified during environmental surveys, avoidance and mitigation measures will be developed in accordance with federal direction.
- Other federal legislation may be relevant depending on design and permitting needs, including the *Canadian Navigable Waters Act and Aeronautics Act*. No interaction with navigable waters is expected. An application to Transport Canada in regards to Obstruction Marking and Lighting and to Nav Canada relating to land use submission is being prepared.

(Government of Canada 1994; Canada 1985; Canada 2002; Canada 2019).

18.2 Provincial Regulatory Requirements

The Project is subject to several provincial regulatory requirements associated with power generation, environmental protection and land-use planning, including:

- *Hydro and Electric Energy Act* — Approval under AUC Rule 007 for construction and operation of the power plant. AltaLink L.P. will be responsible for the transmission development application.
- *Electric Utilities Act* — AESO will review the Project's grid connection through a system access service request to confirm the design meets Alberta's competitive electricity market and reliability requirements.

- *Environmental Protection and Enhancement Act* — Approval required for construction and operation of a power plant, including pre-disturbance site assessments and soil conservation planning.
- *Water Act* — No surface water diversion license is anticipated. Wetlands within the Project area will be directly impacted by the Project, resulting in loss of wetland area. A Wetland Assessment Impact Report and Water Act Application will be submitted for proposed impacts to wetlands. To address impacts to the ephemeral water bodies in the Project area, Indus Power/Beacon will seek approval under the Water Act before construction commences.
- *Historical Resources Act* (HRA)— HRA clearance has been granted (HRA #4835-25-0121-001). Any chance finds must be reported to AACSW.
- *Pipeline Act* — Nova Gas Transmission Ltd. or TC Energy will apply separately for pipeline permitting associated with the natural gas lateral.
- *Public Lands Act* — The Public Lands Act applies mainly to Crown land and water bodies. The Project is on private land, except for Crown-claimable wetlands.

18.3 Municipal Regulatory Requirements

The Project is located in Rocky View County and must adhere to applicable municipal plans and bylaws, including:

- Rocky View County Municipal Development Plan
- Rocky View County Land Use Bylaw (C-8000-2020)
- Rocky View County Area Structure Plan – Beacon AI Hub Bylaw (C-8638-2025)

18.4 Regional Plans and Management Frameworks

Relevant management frameworks include:

- South Saskatchewan Regional Plan (SSRP)
- Water for Life: Alberta's Strategy for Sustainability

PART E: Potential Effects of the Project

The Project consists of a natural-gas-fired power generation facility. Related infrastructure to the Project includes a new power transmission line (to be developed by AltaLink), a natural gas lateral pipeline (to be developed by NGTL or TC Energy), and ancillary infrastructure regulated under provincial legislation.

The Project is co-located with four (4) data halls as part of an on-site data center capable of supporting Tier IV data-center operations.

As noted above, although the data center is not a Project component, Indus Power has included consideration of the data center in its assessment where relevant to provide the Impact Assessment Agency of Canada with a fulsome representation of the data center campus based on most accurate information and assumptions known at this time.

19. Potential Changes under Federal Legislative Authority

The following information is intended to provide a complete and thorough overview of the anticipated effects arising from the Project; however, none of these effects are anticipated to cause non-negligible adverse changes to the environment falling within Federal jurisdiction.

The representations in this section apply to the entire data center campus (i.e., Project and data center).

19.1.1 Fish and Fish Habitat

The Project is not expected to result in adverse effects on fish or fish habitat as defined under the *Fisheries Act*. No natural watercourses occur within or adjacent to the Project footprint, and construction will not involve work below the ordinary high-water mark. All water required for construction will be sourced from municipal sources; therefore, no withdrawals from the Bow River or its tributaries are anticipated.

Stormwater will be managed through an engineered system that maintains existing drainage patterns and prevents uncontrolled releases.

No interactions with aquatic species at risk are anticipated during construction, operations, or decommissioning.

19.1.2 Aquatic Species at Risk

No effects on aquatic species at risk listed under the *Species at Risk Act* are expected. The Project footprint does not contain aquatic habitat, and no activities will occur within or near fish-bearing waters. Avoidance of aquatic habitat eliminates the need for additional mitigation.

19.1.3 Migratory Birds

The Project is anticipated to have negligible effects on migratory birds and wildlife.

Potential interactions primarily involve vegetation and wetland clearing during construction, which may result in habitat loss and short-term sensory disturbance. Ground disturbance during the migratory bird nesting period may pose a risk of incidental nest disturbance, which can be avoided through standard mitigation, such as pre-construction nest sweeps in accordance with applicable federal guidance.

During operations, residual effects are expected to be minimal, limited to low-level sensory disturbance from noise and lighting. No barriers to wildlife movement are expected, and mortality risks from traffic or facility infrastructure are anticipated to be low.

Mitigation measures that will be implemented include:

- Conducting nest and wildlife sweeps prior to vegetation removal;
- Establishing buffers around active nests or sensitive habitats where required;
- Using directional or shielded lighting to reduce light spill; and
- Managing construction traffic and site access to reduce disturbance.

Decommissioning will involve temporary activities similar to construction, with expected effects low, short-term, and reversible.

19.2 Overview of Other Environmental Effects

As demonstrated in Section 19, the potential changes to the environment in respect to the Project relate primarily to air quality during construction and operation.

The following informational regarding other changes to the environment is intended to provide a complete and thorough overview of the anticipated changes to the environment arising from the Project; however, none of these changes are anticipated to cause non-negligible adverse changes to the environment falling within Federal jurisdiction.

The assessment includes the entire data center campus (i.e., Project and data center).

19.2.1 Other changes to the environment

Air Quality

Effect Pathway

Construction

Air quality effects during construction will be limited and temporary. Exhaust emissions from diesel-powered equipment and fugitive dust generated by vegetation removal, soil stripping, grading, and vehicle movement on unpaved areas represent the primary pathways. These activities may generate total suspended particulate (TSP), particulate matter with an aerodynamic diameter of 10 micrometers or less (PM_{10}), particulate matter with an aerodynamic diameter of 2.5 micrometers or less ($PM_{2.5}$), and trace combustion products typical of large construction projects.

Because detailed construction planning is not yet completed, emission quantities cannot be estimated at this stage; however, effects are expected to be short term and reversible.

Operation

During operation, air contaminant emissions will originate primarily from natural-gas combustion in lean-burn reciprocating engines. Key pollutants include oxides of nitrogen (NO_x), carbon monoxide (CO), and particulate matter with an aerodynamic diameter of 2.5 micrometers or less ($PM_{2.5}$), with negligible emissions

of metals or polycyclic aromatic hydrocarbons (PAHs). The entire Data Center Campus (i.e., the Project and the data center) has been considered in the Air Quality Assessment.

Preliminary maximum annual emissions, from Stantec 2025a, are—based on continuous operation (8,760 hours per year)—are:

NO_x: 1,128 tonnes/year;

CO: 781 tonnes/year; and

$PM_{2.5}$: 180 tonnes/year.

The Project will use clean-burning natural gas and advanced controls such as selective catalytic reduction (SCR) to meet federal and provincial emission requirements. If carbon capture is added in the future, it may slightly change the emissions profile.

Decommissioning

Air quality effects during decommissioning will be similar to or less than those expected during construction and are anticipated to be temporary.

Acoustic Environment

The entire data center campus (i.e., Project and data center) has been considered in the Noise Impact Assessment (Stantec 2025b).

Effects Pathway

Construction

Construction noise will originate from typical equipment and vehicle use during site preparation, excavation, road construction, foundation work, and installation of major equipment. Noise sources include excavators, graders, dozers, haul trucks, concrete trucks, mobile cranes, generators, and worker vehicles. These activities will cause short-term increases in sound levels, comparable to other construction projects in the region.

Construction noise will generally occur during daytime and is expected to cause only temporary nuisance-type effects.

Operation

Operational noise will result primarily from engines, exhausts, ventilation systems, coolers, pumps, and transformers.

As described in Section 14.1.2, A Noise Impact Assessment (NIA) has been completed for the Project, comparing Baseline, Project, and cumulative ("Application Case") sound levels at nearby receptors against permissible sound level (PSL) thresholds. The modelling results indicate that the predicted cumulative sound levels for the Application Case meet the daytime and nighttime PSLs at all receptors. Also, based on the AUC Rule 012 prescribed approach, low low-frequency noise effect is not expected at any receptors. The NIA concluded that the Beacon AI Centers – Indus Project complies with the AUC Rule 012 requirements (Stantec, 2025).

Mitigation

Construction

Standard mitigation measures will be implemented to minimize temporary construction noise, including:

- limiting high-noise activities to daytime where practicable;
- maintaining equipment and noise-abatement devices in good working order;
- minimizing idling;
- locating staging and laydown areas away from sensitive receptors;
- enclosing generators or compressors where required;
- avoiding simultaneous operation of multiple high-noise equipment when feasible; and
- notifying nearby residents prior to particularly loud activities.

A Construction Noise Management Plan may also be used to guide scheduling, mitigation, communication, and complaint response.

Operation

The NIA demonstrates compliance with all provincial requirements; however, additional design-phase measures may be used where appropriate, including:

- procuring equipment with low-noise specifications;
- using acoustic enclosures on dominant noise sources;
- applying attenuation on exhausts, ventilation openings, or cooling equipment; and
- incorporating noise-control materials into buildings and structures if needed.

Residual effects on the acoustic environment during operations are expected to be low and compliant with the applicable noise requirements.

Geology and Hydrogeology

Effect Pathways

Construction

The Project is underlain by the Paskapoo Formation with interbedded sandstone, siltstone and mudstone lithologies. Groundwater levels in the area are relatively shallow, meaning interaction with groundwater during excavation is possible.

Construction activities such as excavation, trenching, and limited dewatering may temporarily influence shallow groundwater levels or flow rates. Disturbance to soil and parent material may alter localized hydraulic properties.

Accidental spills pose a potential risk to groundwater quality, particularly where shallow groundwater is present, and construction activities may encounter previously unidentified contaminated material.

Overall, potential construction-phase pathways include:

- changes to groundwater quality from accidental spills;
- disturbance of pre-existing contamination (if encountered);
- temporary alterations to shallow groundwater levels due to excavation or dewatering; and
- minor changes to subsurface hydraulic properties.

Construction dewatering will follow standard provincial best practices. Discharge water will be directed away from watercourses, wetlands, and drainage features. Drawdown is expected to be limited given the shallow excavations and short duration of dewatering.

Operation

Operational effects on groundwater are expected to be negligible.

Potential pathways include:

- accidental spills of fuels or chemicals; and
- minor alterations to shallow groundwater levels associated with water diversions or site drainage.

Stormwater will be managed within a lined on-site pond, preventing infiltration to groundwater. Operational runoff will be isolated from groundwater. A site-specific spill response and reporting plan will be implemented prior to commissioning.

Decommissioning and Abandonment

Decommissioning activities may involve shallow excavation, limited dewatering, and removal of infrastructure. Potential pathways are similar to construction but temporary and of low magnitude.

Mitigation

Construction

Standard construction practices and best management procedures will limit potential interactions with groundwater. Key measures include:

- Implementing spill-prevention and spill-response procedures, including secondary containment during refueling and spill trays under stationary equipment;
- Immediately containing, removing, and remediating contaminants if a spill occurs, and meeting all reporting requirements;
- Implementing contamination-management procedures if previously unknown contaminated soil or groundwater is encountered;
- Managing dewatering to minimize drawdown, including monitoring water levels in excavations, limiting open-trench durations, and directing discharge away from wetlands, watercourses, and drainage pathways; and
- Monitoring discharge areas for erosion, saturation, or unintended flow and adjusting dewatering rates as needed.

With these measures, construction-phase effects on groundwater quantity or quality are not anticipated.

Operation

During operations, groundwater protection will focus on monitoring and spill prevention. The groundwater monitoring network will be confirmed once the hydrogeological investigation is complete.

If required, the Detailed Project Description will include an evaluation of residual groundwater-related effects and monitoring requirements.

Decommissioning and Abandonment

Mitigation measures will be consistent with construction practices, including spill prevention, dewatering controls, and erosion/sediment management.

Soils

Effect Pathways

The Project lies on land under annual cultivation and is within Soil Correlation Area 6. Effects on soil quality and quantity may occur during construction, operation, and decommissioning.

Construction

Construction activities will require clearing, grading, trenching, and topsoil stripping. Topsoil will be salvaged and stored on site until reclamation during decommissioning. Exposed soils will be susceptible to wind and water erosion before vegetation is re-established.

Vehicle and equipment traffic, particularly under wet conditions, may cause compaction, rutting, and loss of soil structure. Soil handling and stockpiling may also result in admixing of horizons, especially where colour contrasts are subtle.

Alterations to microtopography and surface drainage can influence soil moisture and erosion potential. Accidental spills or disturbance of previously contaminated material—though unlikely in cultivated areas—could affect soil quality.

Overall, construction-phase pathways include:

- erosion of stockpiled or exposed soils;
- compaction and rutting from vehicle/equipment traffic;
- admixing of topsoil and subsoil during handling and grading;
- minor changes to drainage patterns or soil stability due to grading; and
- soil contamination from accidental spills or previously undiscovered contamination.

Operation

No new soil disturbance is anticipated during the operations phase. However, exposed areas remaining after construction may continue to experience wind and water erosion until fully stabilized.

Operational traffic (e.g., facility vehicles) may cause localized compaction, rutting, or degradation of soil structure, particularly under wet conditions. Accidental spills of fuels or chemicals may affect soil quality, although the risk is low with proper controls in place.

Decommissioning and Abandonment

Decommissioning activities will include equipment removal, re-grading, and topsoil replacement. Similar to construction, these activities may result in:

- erosion during re-grading and replacement of topsoil;
- compaction or rutting from vehicle/equipment movement;
- admixing of soil horizons during handling and replacement; and
- soil contamination due to accidental spills.

Effects are expected to be temporary and reversible with appropriate mitigation.

Mitigation

Construction

Standard soil-management and erosion-control practices will be implemented to limit effects on soil quality and quantity. Representative measures include:

- Salvaging and storing topsoil separately from subsoil in accordance with the Project's Topsoil Conservation and Use Plan.
- Suspending soil stripping during excessively wet or high-wind conditions;
- Restricting vehicle/equipment traffic during wet conditions to prevent compaction and rutting;
- Using appropriate handling to minimize admixing of contrasting soil horizons; oversight by a qualified soil professional where required;
- Avoiding placement of stockpiles in low areas prone to spring breakup or runof;.
- Stabilizing disturbed areas and stockpiles, employing erosion and sediment control measures, and repairing erosion or rutting as neede;.
- Implementing spill-prevention and spill-response procedures; developing a soils contingency plan if suspected contamination is encountered; and
- Restoring grades and drainage to pre-construction conditions or stable, approved configurations.

With these measures in place, construction-related effects on soils are expected to be low magnitude and reversible.

Operation

Mitigation measures similar to construction will apply during operations, including:

- Monitoring disturbed areas and stockpiles for erosion, sedimentation, and weed growth;
- Implementing erosion and sediment control plans where required;

- Maintaining spill-prevention and spill-response procedures to prevent soil contamination;
- Restricting vehicle movements to designated areas to limit compaction and rutting; and

Residual effects on soils during operation are expected to be minimal.

Decommissioning and Abandonment

Soil-management practices used during construction will also be applied during decommissioning, including:

- Salvaging, storing, and replacing soils in the correct order (subsoil first, then topsoil);
- Minimizing admixing during soil handling and grading;
- Controlling erosion during re-grading and final reclamation;
- Managing vehicle/equipment traffic to reduce compaction and rutting; and
- Implementing spill-prevention and response procedures.

Topsoil replaced during reclamation will be spread evenly and stabilized to support revegetation and long-term soil recovery.

Vegetation and Wetlands

Effect Pathways

The Project site is predominantly cultivated, surrounded by cultivation and industrial land. Small areas of natural vegetation and wetlands occur within portions of the footprint and may be disturbed during Project construction.

Construction

Construction activities—including clearing, grading, topsoil stripping, and wetland alteration—will result in direct loss of native vegetation and wetland area within portions of the Project footprint.

Indirect effects may include weed introduction and spread from materials, equipment, and vehicle movement. Disturbance of wetland vegetation may also alter hydrology, storage capacity, or ecological function.

Overall construction-phase pathways include:

- Direct loss or alteration of native vegetation due to clearing and ground disturbance;
- Disturbance or removal of wetland vegetation, including localized changes to wetland function;
- Changes to hydrology where grading modifies surface-water flow or storage; and
- Introduction or spread of invasive or noxious weeds via equipment, topsoil storage, or vehicle movement.

Operation

Operation of the facility will not create additional vegetation or wetland disturbance beyond what occurs during construction.

However, weeds may continue to establish and spread if not actively managed. Localized compaction or minor disturbance from routine vehicle traffic may influence vegetation in disturbed areas. No further direct effects on wetland area or function are anticipated.

Decommissioning

Removal of infrastructure and reclamation activities will provide opportunities to restore vegetation cover.

Depending on the final topography and hydrologic conditions created during reclamation, new wetland features may develop; however, this is not guaranteed.

Potential pathways during decommissioning include:

- Indirect changes to vegetation through weed introduction or spread from equipment;
- Increases in native vegetation cover following reclamation;
- Potential development of new wetland areas if suitable hydrologic conditions emerge;
- Short-term disturbance of soils and vegetation during final grading and stabilization; and

Residual effects are expected to be temporary and reversible, except where wetlands were permanently removed during construction (which will be compensated under the Alberta Wetland Policy).

Mitigation

Construction

Mitigation measures will be implemented to reduce effects on vegetation and wetlands. Representative measures include:

- Ensuring equipment and materials arrive on site clean and free of weeds, soil pathogens, or contaminants.
- Identifying and flagging noxious and invasive weed areas prior to disturbance;
- Monitoring topsoil stockpiles for weeds and treating as needed;
- Limiting vegetation clearing to within surveyed and approved boundaries;
- Using minimal-disturbance techniques where grading is not required;
- Stabilizing disturbed surfaces (e.g., seeding, mulching) to minimize erosion and weed establishment;
- Avoiding unnecessary vehicle movement in wet or sensitive areas;
- Minimizing clearing and ground disturbance within wetlands;
- Obtaining all required Water Act approvals for wetland impacts and providing compensation where permanent loss occurs, consistent with the Alberta Wetland Policy;
- Installing erosion and sediment control measures to prevent siltation or hydrologic effects on adjacent wetlands;

- Maintaining cross-drainage and natural flow paths where temporary access routes intersect wetlands; and
- With mitigation, residual construction effects will include long-term loss of vegetation in permanently developed areas and permanent loss of any wetlands removed during construction. All permanent wetland impacts will be compensated.

Operation

Mitigation during the operations phase will focus on weed control and preventing further disturbance, including:

- Monitoring disturbed areas and controlling weeds in accordance with applicable requirements;
- Restricting vehicle movement to established access routes;
- Maintaining erosion and sediment controls where necessary; and
- Residual effects are expected to be low and reversible.

Decommissioning and Abandonment

Decommissioning mitigation will be similar to construction and will include:

- Weed prevention and management during reclamation;
- Minimizing vegetation disturbance during equipment removal;
- Stabilizing final grades and revegetating reclaimed areas;
- Restoring soils and drainage patterns to support native vegetation recovery;
- Residual effects following reclamation are expected to be low magnitude and reversible, with potential for long-term improvement of vegetation cover.

19.3 Marine Environment

No adverse effects to the marine environment are anticipated as a result of Project activities. The Project is located entirely within inland Alberta and has no interaction with marine ecosystems.

19.4 Interprovincial Waters

No adverse effects to interprovincial waters, boundary waters, or international waters are anticipated. The Project will rely on municipal water supply and does not involve water withdrawals, diversions, or discharges that would affect interjurisdictional water bodies.

20. Summary of Federal Jurisdiction Considerations

The Project is not expected to have effects on lands outside of Alberta or elsewhere in Canada. The Project is not located on federal lands, although there are Indigenous reserve lands in the vicinity of the Project (see Section 21). As such, no changes to the environment are expected from the Project on federal lands or in a province other than Alberta.

20.1 Extra-Provincial Lands

The Project is not expected to affect air, land, or water outside Alberta. The nearest Indigenous reserve lands (Tsuut'ina Nation at 23 km and Siksika Nation at 36 km) are sufficiently distant that no measurable effects are anticipated based on the Project scale and anticipated effect pathways (GOA 2024c).

20.2 Federal Lands

The Project will not be carried out on federal lands and does not constitute a federal work or undertaking. No effects on federal lands are anticipated.

21. Potential Impacts on Traditional Land Use, Physical and Cultural Heritage, and Historical, Archaeological and Paleontological Resources

21.1 Indigenous Land Use

The Project lies within Treaty 7 territory, in a region where several Indigenous groups may exercise Treaty and traditional rights. Indus Power/Beacon identified the following groups as potentially interested in the Project:

Tsuut'ina Nation; Piikani Nation; Siksika Nation; Blood Tribe; Stoney Nakoda Nation – Bearspaw; Eden Valley 216; Stoney Nakoda Nation – Chiniki; Stoney Nakoda Nation – Goodstoney; Stoney Nakoda Nation - Bighorn 144A; Metis Nation of Alberta Region 3; Métis Nation of Alberta - Otipemisiwak Métis Government; Metis Nation of Alberta - Otipemisiwak Métis Government - Battle River Territory - Rocky View Metis District.

The Project is located on privately owned land zoned for Data Center Campus, with extensive historical cultivation and limited natural vegetation. As a result, the potential for current traditional land use, such as hunting, plant harvesting, or cultural practices, within the Project area is low.

While Indigenous land use may occur regionally, direct overlap with the Project area is expected to be limited and primarily restricted to temporary construction-related access constraints. Indus Power/Beacon will continue engagement with Indigenous communities (IAAC 2024) to identify interests, gather input, and address concerns. Communication will continue during construction to avoid conflicts with land users where feasible.

Given land status, zoning, and existing industrial disturbance, no significant adverse effects to current use of lands and resources for Indigenous purposes are anticipated.

21.2 Historical Resources

Indus Power/Beacon has been granted a Historical Resources Act approval on December 02, 2025 (HRA Number: 4835-25-0121-001) by AACSW. Therefore, no residual effects on historical resources are anticipated. As with all projects regulated under the HRA, accidental or chance finds during construction or operation must be reported under Section 31 of the HRA (AACSW 2023b).

22. Potential Effects on Indigenous Health, Social, and Economic Conditions

The environmental impacts of Project construction and operation on lands outside the Project area are anticipated to be minimal; therefore, effects on Indigenous peoples are also expected to be minimal. Environmental changes, including those affecting soil, vegetation, wildlife, and heritage resources, are expected to remain largely confined to the Project area, and the Project is not anticipated to affect the aquatic environment.

While impacts on air quality, noise, and human health may extend beyond the Project area, they are not expected to exceed regulatory standards once appropriate mitigation measures are applied. Socio-economic effects will also extend beyond the Project area but are expected to be positive due to the Project's economic benefits, and any impacts on social services can be managed through existing infrastructure. Effects on Indigenous peoples—including health and socio-economic conditions, physical and cultural heritage, historically or archaeologically significant sites, and current traditional land use—are expected to be negligible.

Beacon acknowledges that the Project is within an area where Indigenous groups may exercise rights. Beacon will continue engagement and, if potential effects are identified, will assess the need for additional mitigation. Effects on Indigenous peoples, including land use, socio-economic conditions, health, and cultural heritage, are expected to be negligible, given the Project's private-land status, and low traditional-use potential.

Beacon will continue Indigenous engagement and support long-term opportunities for economic participation.

23. Estimate Of Any Greenhouse Gas Emissions Associated with The Project

GHG emissions will occur during construction, operation, and decommissioning.

Construction Phase:

Construction emissions will be limited to the construction phase and are typically less than operational emissions for most pollutants.

Operations Phase:

Table 23.1.1 Operational GHG Emissions (Maximum Estimated)

Pollutant	GHG Emissions (kilotonne/year)	GHG Emission Intensity (t/GWh)
CO_2	4,067	
CH_4	17.2	
N_2O	0.886	
CO_2e	4,784	455

Notes:

CO_2 (carbon dioxide), CH_4 (methane), and N_2O (nitrous oxide) are greenhouse gases emitted during Project operations. Total greenhouse gas emissions are expressed as carbon dioxide equivalent (CO_2e), which represents the combined climate impact of these gases using their respective global warming potentials (GWPs). CO_2e values were calculated using GWPs from the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (IPCC 2014), consistent with the Strategic Assessment of Climate Change (Government of Canada 2020).

The Strategic Assessment of Climate Change requires projects with a lifetime beyond 2050 to detail how the Project will achieve net-zero emissions by 2050. There are several potential pathways for the Project to achieve net-zero emissions by 2050, including the incorporation of a small amount of renewable (carbon-negative) natural gas or hydrogen into the Project fuel mix, or through offsets. Additionally, the Project has been designed with flexibility to allow for the integration of carbon capture and storage (CCS) infrastructure in the future, including consideration of space allocation that could support future Carbon capture and storage.

Decommissioning Phase:

Emissions will be similar to, or lower than, construction emissions.

24. Types of Waste and Emissions Generated

The Project will generate air emissions, noise, liquid discharges, and solid/hazardous wastes during all phases.

24.1 Air

Air emissions will arise from:

- combustion emissions from construction and operational equipment (e.g., NO_x, CO, and $PM_{2.5}$); and
- fugitive dust during land clearing, grading, and traffic on unpaved surfaces.

These emissions will be managed through equipment standards, operational practices, dust control measures, and facility design.

Dust will be highest during site preparation. Operational emissions will be minimized using clean-fuel combustion and engineered emission controls.

24.2 Noise

Noise sources include:

- construction equipment, consistent with major industrial projects; and
- operational equipment such as turbines, engines, radiators, pumps, ventilation, and transformers.

Noise Impact Assessment concluded that the Project design complies with AUC Rule 012 (AUC 2024b).

Noise complaints will follow the AUC Rule 012 resolution process.

24.3 Liquid Discharges

Liquid discharges include:

- stormwater runoff;
- dewatering water from excavation; and
- domestic wastewater.

Beacon intends to connect to East Rocky View County Regional Waste Water System (RVCRWWS). The RVCRWWS has the capacity to accommodate all process wastewater and wastewater effluent from the Project; however, should it be determined that elements of the process wastewater cannot be processed by the RVCCRWWS, the impacted wastewater will be collected into above-ground tanks and disposed of in accordance with regulatory codes and practices.

24.4 Other Wastes

The Project will generate:

- domestic refuse and industrial garbage;
- recyclables (wood, metal, plastics, paper);
- waste oil;
- hazardous wastes (solvents, paints, batteries, bulbs, herbicides); and
- relief-valve discharges.

All wastes will be stored in appropriate, labelled receptacles or containment areas and removed from the Project for disposal at licensed facilities in accordance with applicable regulations.

References

AACSW (Alberta Arts, Culture and Status of Women). 2023. Historical Resources Act – Requirements and Procedures for Chance Finds and Reporting (Section 31 Guidance). Government of Alberta, Edmonton, Alberta.

AACSW (Alberta Arts, Culture and Status of Women). 2025. Historical Resources Act Approval – Beacon Indus Data Centre (HRA No. 4835-25-0121-001). Historic Resources Management Branch, Government of Alberta. Issued December 2, 2025.

AEPA (Alberta Environment and Protected Areas). 2020. Whirling Disease Decontamination Risk Zone Map. Government of Alberta. Accessed November 2025.

AEPA (Alberta Environment and Protected Areas). 2024. Alberta Ambient Air Quality Objectives and Guidelines (AAAQO/G). Government of Alberta, Edmonton, Alberta.

AEPA (Alberta Environment and Protected Areas). 2025a. Fish and Wildlife Internet Mapping Tool (FWIMT). Government of Alberta. Accessed November 2025.

Alberta Utilities Commission (AUC). 2024a. Rule 007: Applications. Alberta Utilities Commission, Edmonton, Alberta.

Alberta Utilities Commission (AUC). 2024b. Rule 012: Noise Control. Alberta Utilities Commission, Edmonton, Alberta.

Beacon AI Centers Inc. 2025a. Participant Involvement Program (PIP) Summary Report: Indus AI Hub and Gas-Powered Electrical Generation Facility. Submitted to the Alberta Utilities Commission. December 2025.

Beacon AI Centers Inc. 2025b. Socio-economic Health Context – Indus Project. Unpublished internal technical memorandum.

Beacon AI Centers Inc. 2025c. Indigenous Groups and Federal Lands – Indus Project. Unpublished internal technical memorandum.

Environment and Climate Change Canada (ECCC). 2016. Multi-Sector Air Pollutants Regulations (SOR/2016-151). Government of Canada.

Environment and Climate Change Canada (ECCC). 2024. National Inventory Report 1990–2022: Greenhouse Gas Sources and Sinks in Canada. Government of Canada, Ottawa, Ontario.

Environment and Climate Change Canada (ECCC). 2025. Species at Risk Public Registry. Government of Canada. Accessed November 2025.

Fiera Biological Consulting Ltd. (Fiera). 2014. Environmentally Significant Areas in Alberta: 2014 Update. Prepared for the Government of Alberta, Edmonton, Alberta.

Government of Alberta (GoA). 2015. Alberta Wetland Identification and Delineation Directive. Alberta Environment and Parks, Edmonton, Alberta.

Government of Alberta (GoA). 2018. South Saskatchewan Regional Plan 2014–2024. Government of Alberta.

Government of Alberta (GoA). 2022. Alberta Wild Species General Status Listing – 2020. Alberta Environment and Protected Areas.

Government of Canada. 2019a. Physical Activities Regulations (SOR/2019-285). Justice Laws Website.

Government of Canada (GOC). 2020. Strategic Assessment of Climate Change. Impact Assessment Agency of Canada.

Government of Canada. 2025a. Species at Risk Act Public Registry. Government of Canada.

Impact Assessment Agency of Canada (IAAC). 2024a. Guide to Preparing an Initial Project Description and a Detailed Project Description under the Impact Assessment Act. Government of Canada.

Impact Assessment Agency of Canada (IAAC). 2024b. Indigenous Peoples and Communities Directory. Government of Canada.

Montrose Environmental Solutions Canada Inc. (Montrose). 2025a. Environmental Evaluation: Beacon AI Centers – Indus. Prepared for Beacon AI Centers Inc., Calgary, Alberta.

Montrose Environmental Solutions Canada Inc. (Montrose). 2025b. Biophysical Impact Assessment, Indus Data Center and Solar Farm. Prepared for Beacon AI Centers Inc., Calgary, Alberta.

Natural Regions Committee. 2006. Natural Regions and Subregions of Alberta. Government of Alberta.

Rocky View County. 2025a. Municipal Development Plan. Adopted September 16, 2025. Rocky View County, Alberta. Available at: https://www.rockyview.ca/build-plan-and-develop/planning/plans-and-policies/municipal-development-plan

Rocky View County. 2025b. Beacon AI Hub Area Structure Plan. Bylaw C-8638-2025. Rocky View County, Alberta. Available at: https://www.rockyview.ca/media/2152

Stantec Consulting Ltd. 2025a. Beacon AI Centers – Indus Project: Air Quality Assessment. Prepared for Beacon AI Centers Inc., Calgary, Alberta.

Stantec Consulting Ltd. 2025b. Beacon AI Centers – Indus Project: Noise Impact Assessment. Prepared for Beacon AI Centers Inc., Calgary, Alberta.

Statistics Canada. 2016. Census of Population, 2016. Government of Canada.

Statistics Canada. 2021. Census of Population, 2021. Government of Canada.

Supreme Court of Canada. 2023. Reference re Impact Assessment Act, 2023 SCC 23. Supreme Court of Canada, Ottawa, Ontario.