Environmental Protection Plan:
Synapse Data Center Project

February 12, 2026

Site Location

NW and SW quarters of 4-4-33-1 W5

Town of Olds

Alberta, Canada

Version 1.0

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This is a **living document** designed to evolve alongside the project. As we move through different phases and integrate insights from **key stakeholders**, the content will be updated to reflect new data, shifting priorities, and emerging best practices.

By maintaining this flexible approach, we ensure that our strategies remain relevant, collaborative, and aligned with the project's long-term objectives and the expectations of our partners.

1.0 Introduction

Synapse Real Estate Corp (the proponent) is proposing to construct and operate the **Synapse Data Center**, a 1.4GW nominal capacity natural gas-fired power plant co-located with a 1GW Data Center. The Project is designed to function as an "energy island," operating permanently without a connection to the Alberta Electric System Operator (AESO) grid.

The power generation component consists of twenty (20) 50MW natural gas turbines and ten (10) 40MW Heat Recovery Steam Generator (HRSG) units. The project addresses Alberta's growing need for reliable, high-density electrical supply for artificial intelligence (AI) and cloud-service infrastructure.

The project is part of a 270+ acre project on privately owned, zoned industrial land that is currently farmed agriculturally.

1.1 Purpose of Environmental Protection Plan (EPP)

The primary intent of this stand-alone **Environmental Protection Plan (EPP)** is to establish a rigorous, site-specific framework of ecological safeguards and operational commitments for the **Synapse Data Center Project**. This document serves as a centralized directive to be executed throughout the Project's life cycle—spanning initial site preparation and construction through to long-term power generation and data operations—to effectively neutralize or minimize potential environmental stressors.

Specifically, the rigorous implementation of this EPP is designed to:

- **Define Clear Accountability:** Establish a transparent hierarchy of roles and responsibilities for Synapse Real Estate Corp personnel, third-party contractors, and Environmental Inspectors (EIs) to ensure consistent compliance.
- **Bridge Regulatory Gaps:** Translate complex federal and provincial requirements—including those mandated by the **AUC**, **EPEA**, and the **Water Act**—into actionable, field-level instructions.
- **Empower Real-Time Decision Making:** Provide the Project's leadership and site crews with the necessary environmental data and protocols to make informed, proactive adjustments during construction.
- **Codify Mitigation and Monitoring:** Itemize specific measures for air quality, noise attenuation, and soil preservation that are uniquely tailored to the 1.4GW "energy island" configuration.
- **Standardize Inspection Protocols:** Detail the methodologies for ongoing monitoring and documentation to verify that all environmental commitments are being met effectively.

2.0 Regulatory Setting

The following table summarizes the primary regulatory requirements applicable to the Project.

2.1 Provincial

Regulation/Act	Requirement	Status
AUC Rule 007 & Rule 012	Requires approval from the Alberta Utilities Commission to construct and operate, including noise compliance.	The Owner has submitted an application to the AUC and will not start construction of the natural gas plant until approval has been received.
EPEA	Requires approval for plants with a rated production output >1MW.	An application is scheduled to be submitted the week of February 17th. Construction of the natural gas plant will not start until approval has been received.
Historical Resources Act	Requires Historical Resources Approval from the Province of Alberta to complete work.	Application has been submitted and waiting on results before commencing project construction.
Wildlife Act	Provides for the protection of wildlife; requires wildlife sweeps and adherence to restricted activity periods (RAPs).	The Proponent has completed wildlife assessments and identified and implemented mitigation measures for potential wildlife issues.
Water Act (Province of Alberta 2024b) and Alberta Wetland Policy (ESRD 2013a) and Wetland Mitigation Directive (GoA	Requirements to avoid or reduce impacts to wetlands or ephemeral water bodies when activities may occur within these features.	Class D wetlands have been identified on site and will be relocated once approved. A water reservoir will be built on site for storm water runoff control.

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Weed Control Act	Mandates the eradication of prohibited noxious weeds and control of noxious species.	Wild life assessment has been completed. Mitigation to be implemented as required. See section 4.
Soil Conservation Act (Province of Alberta 2022a)	Provincial legislation that protects soils in Alberta from loss or deterioration.	Environmental protection measures outlined in section 4.
Recommended Land Use Guidelines for Protection of Selected Wildlife Species and Habitat within Grassland and Parkland Natural Regions of Alberta (ASRD 2011)	Provides guidance to reduce or avoid potential negative effects on wildlife and wildlife resources within the Grassland and Parkland regions of Alberta. Outlines the requirements and guidelines under the Government of Alberta for the protection and maintenance of key wildlife areas.	The Proponent has completed wildlife assessments and identified and implemented mitigation measures for potential wildlife issues. See section 4.

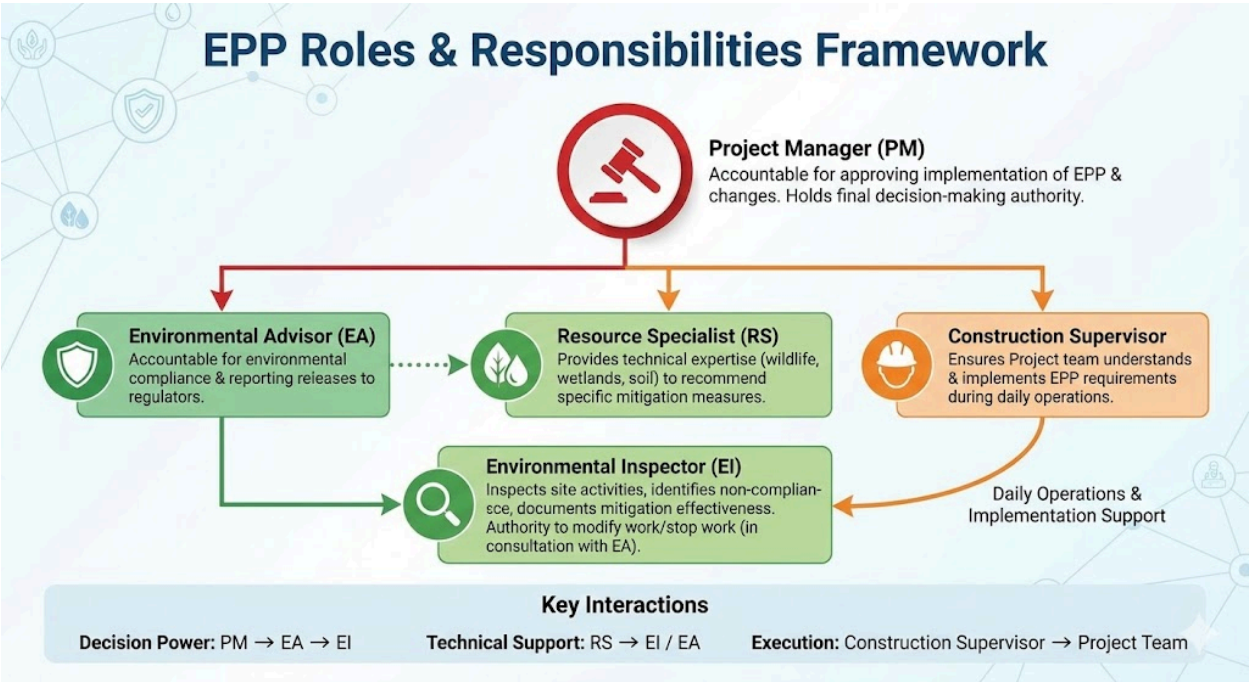
2.2 Federal

Regulation/Act	Requirement	Status
Impact Assessment	The project is on private land, not situated near federal or crown land.	Given recent supreme court rulings it is not believed an impact assessment is required at this time.
Migratory Birds Convention Act	Prohibits the disturbance or destruction of nests and eggs of migratory birds.	Wild life assessment has been completed. Mitigation to be implemented as required. See section 4.

3.0 Roles and Responsibilities

Clear accountability is essential for the effective execution of environmental commitments.

- **Project Manager (PM):** Accountable for approving the implementation of the EPP and any subsequent changes. Holds final decision-making authority.
- **Environmental Advisor (EA):** Accountable for ensuring environmental compliance and reporting releases to applicable regulators as required by legislation.
- **Environmental Inspector (EI):** Responsible for inspecting site activities, identifying non-compliance, and documenting the effectiveness of mitigation strategies. The EI has the authority to modify work or initiate a work stoppage in consultation with the EA.
- **Resource Specialist (RS):** Provides technical expertise in areas such as wildlife biology, wetlands, or soil science to recommend specific mitigation measures.
- **Construction Supervisor:** Ensures the Project team understands and implements the EPP requirements during daily operations.



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3.1 Communication Process

The dissemination of the Environmental Protection Plan (EPP) and ongoing awareness are managed through several structured communication channels:

- **Environmental Orientation:** Mandatory training is provided to all construction personnel and Project staff prior to commencing work.
- **Daily Site Communication:** Continuous awareness is maintained through morning tail-board meetings and ad hoc field discussions.
- **EPP Maintenance**: The proponent is responsible for the upkeep and annual review of the EPP, with updates performed by consultants as site conditions or regulatory requirements evolve.
- **Information Accessibility:** The proponent ensures that all Project personnel have ready access to the EPP and associated environmental documents.
- **Monitoring and Feedback**: A formal monitoring program is used to identify and address non-compliance issues via immediate corrective actions.

3.2 Compliance Monitoring and Enviro. Inspection

The Project ensures environmental compliance through a proactive information-sharing and inspection program. The following key activities define this process:

- **Approvals and Licences:** The proponent is responsible for securing all necessary permits prior to construction and ensuring all personnel adhere to specific conditions.
- **Information Sharing:** The Environmental Inspector (EI) and Environmental Advisor (EA) facilitate the timely transfer of environmental updates to all field personnel.
- **Document Distribution:** Controlled copies of the EPP and related environmental assessments are provided to the contractor and key personnel before work begins.
- **Pre-construction Surveys:** Resource Specialists (RS) will perform necessary environmental surveys, including year-round wildlife sweeps and seasonal nest sweeps (April 1 to July 15).
- **Inspector Qualifications:** The EI must possess significant experience in environmental planning and construction techniques, supported by specialists as required.
- **Inspection Responsibilities:** The EI's primary role is to ensure all commitments and regulations are met, which includes providing expert guidance, regular reporting releases, and preparing daily compliance reports.
- **Training and Orientation**: All personnel must complete an environmental orientation program developed by the proponent to understand site-specific sensitivities.
- **Non-compliance and Resolution:** The EI has the authority to modify work procedures or initiate a work stoppage in consultation with the EA if environmental non-compliance is identified.

4.0 Environmental Protection Measures

4.1 Pre-construction Phase

- **Surveying and Marking:** Delineate construction boundaries and mark all sensitive resources (e.g., potential nesting sites) prior to ground disturbance.

- **Wildlife Sweeps:** Conduct wildlife and nest sweeps within 100m of the footprint prior to clearing to identify protected features like dens or nests. Document any observed nests and implement restrictions around construction as required.

- **Utility Locates:** Mark all foreign lines and cables using Utility Safety Partners services.

4.2 Construction and Operation Phase

The following protocols prioritize minimizing surface disturbance and restricting construction footprint in order to protect the local ecosystem components at the Olds site:

- **Construction Equipment and Vehicles:** All machinery must arrive in a clean, well-maintained state, verified free of debris or fluid leaks. Utilize secondary containment (drip trays) for hazardous fluid-filled equipment during overnight parking or servicing.
- **Access Routes and Traffic:** Personnel must restrict movement to approved routes and designated travel lanes to prevent damage to newly seeded areas.
- **Soil Salvage and Handling:**
    - Topsoil and upper subsoil must be salvaged separately and stored in contoured stockpiles to prevent erosion.
    - Topsoil shall not be used for grading.
    - A soil specialist will be engaged as required.
    - Suspend soil salvage operations during high winds or wet conditions to preserve soil structure.
    - Local with local county and resents to manage dust control
- **Wetlands**
    - It is expected all Class D wetlands will be directly impacted by the Project. Where wetlands cannot be avoided, loss of wetlands will be assessed within a Wetland Assessment and Impact Report and, pending approval from Alberta Environment and Parks (AEP), compensated in accordance with the Alberta Wetland Policy (ESRD 2013a).
    - A Water Act Application will be submitted for approval of impacts to wetlands and ephemeral water bodies.
    - In the event construction begins prior to wetland relocation a boundary of not less than 10m, or as otherwise marked by an onsite environmental inspector (EI) shall

be maintained

- **Surface water bodies and Hydrology**
    - Implement sediment control and direct water towards natural water runoffs where possible to minimize impact of construction on waterflow outside project boundary
- **Dust Suppression:** Implement dust control using water or non-hydrocarbon suppressants during dry or windy periods to maintain air quality standards.
- **Waste and Spill Management:** Maintain emergency spill kits onsite and immediately report any releases to the appropriate regulatory authorities. Remove all construction waste and debris promptly once works are complete.
- **Vegetation and Weed Control:**
    - Ensure that trucks arrive without soil to prevent invasive weed spread
    - Implement a weed management plan prioritizing mechanical removal
    - Restrict herbicide use within 30 m of open water bodies.
    - Respond in a timely manner to any weed spread with non chemical control
- **Wildlife Protection:**
    - The close proximity of the project relative to the town of Olds is expected to minimize migration disturbance.
    - No sensitive species have been identified as part of pre-construction wildlife assessment.
    - Conduct wildlife and nest sweeps prior to clearing; if sensitive features are detected, cease work until established setbacks and timing restrictions are applied.
    - Schedule clearing outside the general migratory bird nesting period (mid-April to late August) where possible. If working during the RAP, conduct nest sweeps no more than 7 days prior to activity.

4.3 Post-Construction Clean-Up + Interim Reclamation

The following measures will be implemented to manage vegetation and soil resources after construction to support eventual end-of-life reclamation:

- General Site Restoration:
    - Replace and contour salvaged topsoil according to engineering standards.
    - Ensure any imported topsoil matches the native soil texture/color and is analytically verified as weed, seed, and clubroot-free.
    - Remove all construction waste, temporary fencing, and signage once works are complete.
    - Re-seed bare ground promptly and restrict traffic from newly seeded areas to allow for stable revegetation.
    - Maintain erosion and sediment control (ESC) measures until the site is fully

stabilized.

- Weed Management:
    - Execute control measures to prevent the establishment of non-native, noxious, or prohibited noxious species.
    - Prohibit herbicide spraying within 30 meters of wetlands or watercourses; use mechanical methods (mowing or hand-pulling) instead.
    - Ensure all vehicles and equipment are cleaned before leaving the site to prevent invasive seed transfer.
- Monitoring and Reporting:
    - The Environmental Inspector (EI) will document all reclamation works and address any deficiencies.
    - Representative photographs and efforts will be included in the Project's environmental monitoring reports.

4.4 Decommissioning and Final Reclamation

This section outlines the protocols for project end-of-life to return the site to equivalent land capability. The project life expectancy is in excess of 100 years. Equipment will need to be replaced on a 25 year time horizon however the 2,000,000 sqft of industrial data center space(ie warehouse space) that needs to be constructed is designed to remain through multiple equipment refresh periods.

The objectives are to minimize environmental effects and restrict activities to the approved workspace.

- **Reclamation Planning and Costs:**
  - A site-specific Decommissioning and Land Reclamation Plan (DLRP) will be submitted before operations cease.
  - A preliminary cost estimate will be prepared(if required) in compliance with AUC Rule 007, covering infrastructure removal, road reclamation, and reseeding.
  - The project will comply with all future provincial reclamation security requirements as they evolve.
- **Physical Restoration:**
  - All infrastructure, including natural gas turbines and HRSG units, will be removed or refreshed in place.
  - Data centers and their industrial building shells are expected to remain and be repurposed for future industrial use.
  - Pre-construction contours and natural drainage patterns will be re-established.
  - Compacted subsoils will be deep-ripped prior to topsoil replacement to restore productivity.
- **Vegetation and Weed Control:**
  - Mechanical and chemical weed control will continue until the site is successfully revegetated.
  - Disturbed areas, including former wetlands and buffers, will be re-seeded with a suitable mix selected in consultation with stakeholders.
  - Herbicide application remains prohibited within 30 m of open water bodies or wetlands unless specifically approved.
- **Monitoring and Documentation:**
  - The Environmental Inspector (EI) will document all reclamation activities and address any identified deficiencies.
  - Final reclamation efforts will be verified through representative photographs and environmental monitoring reports