

# ENVIRONMENTAL EVALUATION

SYNAPSE DATA CENTER PROJECT

*Prepared in accordance with AUC Rule 007*

VERSION 2.0 – MARCH 2026

FINAL REPORT

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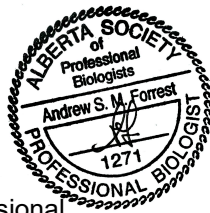


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# 1. INTRODUCTION

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Solstice Environmental Management (Solstice) was retained by Planus Corp. (Planus) to complete an Environmental Evaluation (EE) in support of the construction and operation of the **Synapse Data Centre**, including on-site natural gas thermal power plant facilities (the Project).

Information presented in this EE will be used to support the project application to meet the conditions of the *Guide to Content for Industrial Approval Applications* (2014) under the Environmental Protection and Enhancement Act, as well as conditions of Section 4.5 (Thermal power plant applications), specifically item TP26 Environmental Evaluation, under the *Alberta Utilities Commission (AUC) Rule 007 (2025)* to develop and operate a power plant.

## 1.1. PROJECT DESCRIPTION

As a whole, the Synapse Data Centre will occupy a total of approximately 110.5 ha (273 acres) in the of Town of Olds, Alberta (Figure 1). The project lands occupy the majority of NW and SW 4-33-1 W5, but exclude several parcels with existing commercial and industrial development, including an existing municipal road yard; lands west of Highway 2A are also excluded. The Project includes a 1.4GW nominal capacity natural gas-fired power plant comprising ten (10) 140 MW natural gas plants for a cumulative total of 1.4 GW. Diesel generators will provide back up power if required.

The project will also see the construction of a stormwater reservoir along the east boundary of the site (Appendix A). Surface runoff will be conveyed to the stormwater reservoir through a combination of surface flow and underground piped flows. The pond design is still in development and review, but current plans include a pre-treatment structure at the inlet to the pond and an oil/grit separator between the inlet basin and outlet basin. The stormwater reservoir will be designed to store stormwater up to and including a 1:100 flood event. In the event of surcharge beyond this capacity, the reservoir will discharge tested stormwater (to ensure it meets water quality criteria) via an outfall structure into the natural drainage swale that exists immediately east of the Project lands.

Water supply for the operation of the data centers and infrastructure, including plant usage and use by data centre personnel, is estimated at 60 m<sup>3</sup> per day and will be provided through the Town of Olds' water distribution system.

Several large areas with naturalized landscaping, totalling approximately 20 ha, are also incorporated into the project design. The naturalized areas will be designed to be reflective of central Alberta's parkland and prairie environment and will consist of a mix of native drought-tolerant trees, shrubs and grasses. Proposed pedestrian areas around the periphery of the site will provide approximately 4 ha of additional open space.

Construction is anticipated to begin as soon as all necessary municipal and provincial approvals have been secured. Construction and staging of the Project will progress in correlation with the speed of customer acquisition, but is anticipated to be approximately one data centre building per month.

The Project is being designed with the intention of being a permanent facility for the foreseeable future. Reclamation is not envisioned as being a plausible future requirement of the Project lands. If the data center were to be discontinued, the Project lands will be returned to an industrial-grade condition suitable for future redevelopment or continued industrial use consistent with the current zoning for industrial development.

## 2. METHODOLOGY

### 2.1. STUDY AREA

The project lands comprise the western half of the Town of Olds Northeast Area Structure Plan (ASP; 2024) area and border the Town's shared boundary with Mountain View County to the north and along a portion of the south boundary. The approved ASP land use concept identifies the project lands for future commercial and industrial development. The current land use of the project area is predominantly agricultural.

The scale, size, and scope of the project was considered when defining a local study area (LSA) for each Valued Ecosystem Component (VEC). The LSA includes the area outside of the project lands where there is a reasonable potential for immediate environmental impacts due to project activities (AUC 2025). For all VECs except air quality and groundwater, the LSA was defined as the project lands plus 100 m. This LSA aligns with conservative and generally accepted setback recommendations (e.g., *Master Schedule of Standards and Conditions*) for environmental sensitivities likely to be encountered by the project such as wetlands and wildlife features, and considers the current land zoning for commercial and industrial development. LSAs for air quality and groundwater were determined independently as part of investigations completed by others and cross-referenced in this document.

### 2.2. ENVIRONMENTAL IMPACT ASSESSMENT

#### 2.2.1. Valued Ecosystem Components

Valued Ecosystem Components (VECs) are the important natural features and resources that may interact with the proposed project the LSA. VECs applicable to the project and evaluated within this EE include:

- Terrain and soils,
- Surface water and hydrology,
- Groundwater,
- Wetlands,
- Vegetation species and communities,
- Wildlife species and habitat, and
- Air quality.

The following VECs were determined not to be applicable to the project and were not evaluated:

- Aquatic species and habitat,
- Environmentally sensitive areas.

Aquatic species and habitat were determined to not be applicable to the project as the LSA does not intersect with any mapped natural aquatic habitats or natural waterbodies or watercourses. The LSA also does not intersect any defined environmentally sensitive areas, including mapped Environmentally Significant Areas (Fiera 2014, Summit 2008), recognized natural areas or parks, intact native habitats, or regionally recognized environmental features. No direct or indirect impacts from the project are anticipated for these VECs.

#### 2.2.2. Environmental Effects Evaluation

For each VEC, all potential direct and indirect impacts associated with the proposed project's anticipated construction and operation were evaluated by analyzing mapped locations of work provided by Planus in relation to biophysical conditions identified in the LSA based on the desktop review, field investigation, and the judgement of a qualified Professional Biologist. It is assumed that construction work will be completed in a manner that addresses safety and the environment, using current Best Management

Practices (BMPs) for engineering and construction activities and that facility operations will meet or exceed regulatory guidelines and approvals for monitoring and compliance. Residual effects were described based on the assumed application of recommended mitigation measures, according to the assessment criteria system (Table 1).

**TABLE 1. Assessment Criteria for Residual Environmental Effects**

Criteria	Characteristics
<b>Direction of Effect</b>	
Negative (Adverse)	Loss to the resource
Positive	Benefit to the resource
Neutral	No benefit or loss to the resource
<b>Geographical Extent of Effect</b>	
Project Lands	Project disturbance area including developed or constructed features
LSA	Project footprint and adjacent land within the local study area (100 m from the project lands)
Regional	Extending beyond the LSA
<b>Magnitude of Effect</b>	
Negligible	No discernable or slight change to the indicator, but in the range of natural variation
Low	Impact will be noticeable, but recovery is possible within the short term, or the disturbance will permanently affect only a small portion of the resource relative to its availability (e.g., population, extent) or is within regulatory standards
Moderate	Impact will affect a moderate portion of the resource beyond its capacity to recover (e.g., regional population, adjacent water sources), or the disturbance will permanently affect a moderate portion of the resource relative to its availability (e.g., local population) or relative to regulatory standards
High	Impact will affect a large portion of the resource beyond its capacity to recover, or the disturbance will permanently affect a significant portion of the resource relative to its availability (e.g., regional population) or relative to regulatory standards
<b>Duration of Effect</b>	
Short-Term	<1 year
Medium-Term	1-2 Years
Long-Term	>6 years
<b>Degree of Reversibility of Effect</b>	
Reversible	Expected to return to baseline conditions naturally over the next 10 years
Irreversible	Never expected to return to baseline conditions naturally
<b>Frequency of Effect</b>	
Isolated	Expected to occur during a short timeframe and only once
Intermittent	Expected to occur occasionally
Frequent	Expected to occur continuously
Accidental	Unplanned or accidental occurrence
Seasonal	Expected to occur seasonally
<b>Confidence</b>	
Low	Inconclusive predictions can be concluded from the provided data
Medium	Limited predictions can be concluded from the provided data
High	Strong predictions can be concluded from the provided data

### 2.3. DESKTOP REVIEW

A desktop review was completed to inform the effects evaluation of the recognized VECs. The review was based on available resources, including maps, historical aerial photographs, previous environmental assessments, and government databases and reports.

The following resources, documents and project specific technical studies were reviewed to inform this assessment:

- Government of Alberta’s Fish and Wildlife Internet Mapping Tool (FWMIS c2026)
- Government of Alberta’s Alberta Conservation Information Management System online search tool (ACIMS c2026)
- Natural Regions Committee’s Natural Regions and Subregions of Alberta (NRC 2006)
- Alberta Agriculture and Forestry’s (AAF) Agricultural Region of Alberta Soil Inventory Database online soil viewer (AAI c2026)
- Satellite imagery available through Google Earth and AbaData (Abacus Datagraphics Ltd. 2020)
- Aerial photographs from the Government of Alberta Air Photo Library dating back to 1951 (Table 2)
- Phase 1 Environmental Site Assessment of 04-033-01 W5M prepared for the Town of Olds (McElhanney 2024)
- Olds Northeast Area Structure Plan (Town of Olds 2024)
- Geotechnical Investigation Report – Proposed Data Center – Within SW 04-33-01-W5M, Olds, Alberta. Draft for Discussion. Prepared for Synapse Real Estate Corp. Prepared by ParklandGEO Ltd., File# 26-0048RD, (2026)
- Air Quality Dispersion Modelling Assessment for Synapse Real Estate Corp. Data Center and 1.4 GW Natural-gas Fired Power Plant prepared for Planus Corp. (Calvin Consulting Group Ltd [Calvin] 2026)

Desktop wetland identification and classification included a review of topographic variables derived from bare earth Light Detection and Radar (LiDAR) data and comprehensive aerial photography interpretation by experienced wetland scientists. Wetlands were preliminarily classified based on the Alberta Wetland Classification System (AEP 2015).

**TABLE 2. Historical Air Photos Reviewed for the Project**

Photo Year	Photo ID	Resolution	Season
1963	AS871, 108	1:31,680	Summer
1977	AS2965, 203	1:25,000	Summer
1988	AS3717, 67	1:30,000	Spring
1993	AS4467, 252	1:30,000	Summer
2009	AS5466, 214	1:10,000	Summer

### 2.4. FIELD INVESTIGATION

A site visit of the project lands was completed on January 28, 2026, to characterize upland habitats, to help identify potential environmental constraints, collect preliminary wetland data, and to validate background information collected through the desktop review.

Prior to the site visit, potential natural features (i.e., wetlands, upland habitats, drainage channels) within the project lands were identified and mapped based on desktop analysis. During the field investigation the project lands were assessed on foot; photos and notes were taken to describe the biophysical features, including assessments of vegetation, wetlands, and habitat quality. Specific data recorded included the

observed land use and landcover, weed species observed, incidental wildlife observations, and characterization of disturbed areas.

Representative site photographs are presented in Appendix B.

## 2.5. LIMITATIONS

This Environmental Evaluation was prepared to meet the environmental information requirements specified under item TP26 Environmental Evaluation of the Alberta Utilities Commission (AUC) Rule 007 (2025) to develop and operate a power plant. The preparation of this document was, however, subject to various limitations linked to the project schedule. These limitations comprised the following:

- Assessment of potential project impacts was based on drawings and information available at the time of writing; some design components were still under preparation and/or review. The overall project footprint and project information was, however, considered suitable for preliminary assessment.
- Completion of a field investigation under winter conditions only. Because of this, the following technical limitations apply to this assessment:
  - Detailed assessments of vegetation characteristics were not completed.
  - Species specific surveys were not completed (e.g., breeding bird surveys, sharp-tailed grouse general search surveys).
  - The current wetland information is largely based on desktop analysis. Desktop wetland identifications and delineations are intended to be as accurate as possible, however, they must be considered as preliminary wetland boundaries until field verification is completed to confirm and finalize wetland boundaries. Actual field-verified wetland boundaries may increase or decrease the size of desktop mapped wetlands. Upon field verification, some desktop mapped wetlands may be classified as ephemeral water bodies, not wetlands.

To resolve some of the above limitations and associated data gaps, wetland field investigations are scheduled for early May 2026 under seasonally appropriate growing-season conditions. Upon completion of the field investigations, an addendum to this document will be prepared under separate cover for submission to the relevant regulatory bodies in June 2026.

## 3. EFFECTS EVALUATION AND MITIGATION

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### 3.1. TERRAIN AND SOILS

#### 3.1.1. Existing Conditions

The LSA has a gently rolling topography that has an overall slope to the south and southeast. The high point of the project lands is in its southwest corner with an elevation of approximately 1044 mASL and the low point of the project lands is in its southeast corner at an elevation of approximately 1029 mASL. The land use within the LSA was observed to be primarily agricultural, including crop, a small area of livestock corrals and shelters, a dugout, as well as two residences.

The project is in the Central Parkland natural subregion (NRC 2006). The dominant soils of this subregion are Black Chernozems (NRC 2006). A review of the Agricultural Region of Alberta Soil Inventory Database indicates the project lands intersect three soil polygons (12932, 12864, and 12956) the details of which are described in Table 3 (AAI c2024). Desktop mapping provided through the Canada Land Inventory (CLI) Agricultural Land Capability Classification indicates that soils within the LSA are classified as Canada Land Inventory (CLI) Class 1, representing prime agricultural soils with minimal limitations for crop production.

Preliminary data from borehole soil sampling completed in the SW quarter in January 2026 found that topsoil depths varied from 25 mm to 200 mm (ParklandGeo 2026).

**TABLE 3. Soil Series and Landforms within the LSA**

Soil Polygon ID	Landform	Subgroups and Soil Series by Slope Position	Saline Soils Present within Polygon
12932	DL - disturbed land	Misc.disturbed.land	No
12864	U1h - undulating - high relief	Mid slope positions (50% of extent): Orthic Black Chernozem (Antler soil series) Mid slope positions (50% of extent): Orthic Gray Luvisol (Lonepine soil series)	No
12956	U1h - undulating - high relief	Mid slope positions (60% of extent): Orthic Black Chernozem (Antler soil series) Mid slope positions (20% of extent): Orthic Black Chernozem (Didsbury soil series)	No

### 3.1.2. Potential Effects

Effects were assessed based on the assumption that topsoil will be stripped and salvaged and that fill required for grading will be sources from within the project lands. This approach complies with the *Soils Conservation Act* and the *Environmental Protection and Enhancement Act (EPEA)*.

#### 3.1.2.1. Changes to Soil Quantity

Project construction will involve extensive stripping of topsoil and subsoil, followed by regrading of the entire Project area to achieve design elevations. These activities will result in a permanent loss of soil quantity through soil removal, compaction, mixing, and redistribution. Should surplus soil be exported off-site, it would result in a direct and irreversible reduction to on-site soil volume. The conversion of agricultural land to developed land uses will permanently eliminate soil volume from biological and agricultural functions. Soil salvage and management measures will be implemented to minimize soil loss and support beneficial reuse where feasible. Some soils will be stockpiled on site while and some topsoil will be used as part of site landscaping. Once stripped, graded, and compacted, soils cannot be fully restored to their pre-disturbance condition, representing a long-term to permanent loss of soil quantity.

The potential impacts related to soil quantity are expected to be adverse, limited to the Project lands, moderate in magnitude, long-term, irreversible, isolated, and predicted with high confidence.

#### 3.1.2.2. Erosion

Soil can be impacted by both wind and water erosion during construction, which can result in loss of soil, including topsoil. Water erosion also has the potential to mix topsoil and subsoils if erosion reaches down to the subsoil layers. The potential for soil erosion exists along any sloped areas, including the ditches bordering the Project area. The risk for soil erosion increases in steeper terrain and where soil materials are coarse-textured (e.g., sandy soils). Eroded soils that enter a waterbody (including wetlands) may also cause a secondary impact due to sedimentation.

Risk of water erosion is highest during spring runoff conditions and summer rainfall events. Heavy rain events during construction may increase the risk of erosion and sedimentation from exposed soil. Since construction activities can change local drainage patterns, the design and implementation of temporary erosion controls will be an important mitigation measure to reduce any risk of sediment release into

adjacent lands or waterbodies. Carefully matching ground surface elevations at the interface between the Project lands and adjacent lands and ensuring prompt landscaping and/or revegetation of sloped areas will be important to reduce soil erosion potential without the need for permanent erosion controls.

Provided that BMPs and appropriate mitigation measures are implemented and maintained, the impacts to soil due to erosion, and the secondary impacts of sedimentation, are expected to be negative, limited to the LSA, negligible in magnitude, short-term, irreversible, intermittent, and predicted with high confidence.

### **3.1.2.3. Contamination due to Accidental Spills and Releases**

Contamination of soils can occur during construction and operations due to accidental spills during refueling, materials storage and handling, equipment repair activities, and as a result of leaks associated with improperly maintained equipment. Such contamination is typically from oil, fuel, grease, or other lubricants associated with construction equipment. The release of contaminants into the soil can impair vegetation growth, negatively impact surface water quality, and damage aquatic ecosystems through contaminated runoff or direct release into water.

Implementation of construction BMPs to minimize and avoid the release of contaminants are key measures in reducing contamination risks. This includes designating areas for refueling and the storage of oil and other lubricants that are away from water and protected against spills (i.e., use of double-walled fuel tanks or stored in areas with spill containment). The use of spill pans underneath stored equipment (including gensets and lights) and when fueling or completing onsite repairs, and the provision for spill kits on and near equipment are other mitigation measures utilized in construction. Regular maintenance inspections and repairs can also help to avoid accidental releases from leaks and breaks that could release contaminants into soil or water during equipment operation. A spill response plan should be in place for construction and operation, and have all onsite personnel trained in its implementation in the event of a release. As a result of the Project's proposed stormwater management system, all potential spills that may occur during operations should be fully contained within the Project lands. If required, contaminated stormwater runoff will be captured and treated off-site. No contaminated material will be released off site.

Assuming all precautions and mitigation measures are implemented, potential contamination impacts to soil or water are expected to be negative, limited to the Project lands, negligible in magnitude, short-term, reversible, isolated, and predicted with high confidence.

### **3.1.3. Mitigation Measures**

Mitigation measures that will help reduce impacts to soils and terrain include the following:

- Temporary erosion and sedimentation controls (ESCs) should be designed, implemented, and maintained until site construction is complete. These controls will need to be monitored and reviewed to ensure their effectiveness.
- Soil stockpiles must be placed on stable foundations. Topsoil must be stockpiled on undisturbed topsoil and subsoils must be stockpiled and areas where the topsoil has been removed. Soil stockpiles should be seeded if they remain in place for long periods, wetted, or covered to reduce the risk of erosion and sedimentation.
- The salvage and storage of topsoil and subsoils should be separated to reduce the likelihood of admixing. Where topsoil and subsoil contrasts are not clear, an environmental monitor should be onsite to aid in the soil handling process.
- A spill response plan should be created that includes proper secondary containment and handling practices, and should address the following:
  - Designated areas for fuel, oil, and lubricant storage that are 30 m away from potential wetlands.

- Recommended measures to protect against spills, such as the use of double-walled fuel tanks and storage in areas with spill containment.
- The use of spill pans underneath stored equipment (including gensets and lights), and spill kits provided on and near equipment.
- Regular equipment maintenance inspections and repairs to help avoid accidental leaks or breakages.
- All equipment arriving onsite should be inspected prior to commencing work. All equipment should be free of leaks that may result in a release event.

### 3.1.4. Residual Effects

The loss of agriculturally viable topsoil volume within the Project lands, comprised predominantly of Class 1 soils, will permanently and adversely impact that value of soil for agricultural functions. Although of moderate magnitude, this effect would be comparable for almost all potential land development within the Project area that was originally envisioned and approved by the Town of Old's approval of the Northeast Area Structure Plan which designated these lands for commercial and industrial development. As such, the loss of Class 1 soils from within the Project area is consistent with long-term municipal land use objectives. Residual effects on soil quantity and quality beyond the Project lands are expected to be negligible, as impacts can effectively be mitigated through implementation of the mitigation measures discussed above and outlined in Table 4. Key mitigation measures that should be implemented include effective erosion and sedimentation controls and revegetation of exposed soil areas.

**TABLE 4. Evaluation of Project Residual Effects on Landform and Soil Valued Ecosystem Components**

Potential Effect	Mitigation Measures	Effect Characteristic	Residual Effect
Loss of Soil Quantity	Erosion and sediment control measures	Direction	Negative
		Extent	Project Lands
		Magnitude	Moderate
		Duration	Long-term
		Reversibility	Irreversible
		Frequency	Isolated
		Confidence	High
Erosion	Erosion and sediment control measures, revegetation of stripped areas, and seeding of stockpiles	Direction	Negative
		Extent	LSA
		Magnitude	Negligible
		Duration	Short-term
		Reversibility	Irreversible
		Frequency	Intermittent
		Confidence	High
Contamination due to Accidental Spills and Releases	Create a spill response plan, implement containment methods, use safe handling methods for deleterious substances, and install temporary ESC measures	Direction	Negative
		Extent	LSA
		Magnitude	Negligible
		Duration	Short-term
		Reversibility	Reversible
		Frequency	Isolated
		Confidence	High

## 3.2. SURFACE WATER AND HYDROLOGY

### 3.2.1. Existing Conditions

Provincial watercourse mapping (FWIMT) does not identify any known watercourses within the LSA. Mapping completed by McElhanney (2024) identified an ephemeral draw running north to south along the central part of NW-4-33-1 W5. Review of aerial photography and the field investigation confirmed the presence of this draw. Overall, surface water drainage within the LSA is directed towards the south and south-east of the LSA. Analysis of aerial photography suggests that surface flows from within the LSA ultimately flow south under Highway 27 and towards an unnamed indefinite watercourse mapped as originating at Range Road 13 south of Highway 27. This mapped watercourse is an order 1 tributary to Lonepine Creek located east of Highway 2.

There is one dugout present within NW-4-33-1 W5; a second large dugout is present within the LSA to the north of the project lands.

A drainage ditch runs along the east side of the road maintenance yard, directing flow south to a natural low area.

Because there are no natural defined waterbodies within the LSA, no surface water sampling or assessment took place as a part of this evaluation.

### 3.2.2. Potential Effects

#### 3.2.2.1. Alteration of Overland Drainage Patterns

Surface grading, paving and the introduction of other impervious surfaces (e.g., roofs, paved surfaces) will increase surface water runoff within the Project lands. All stormwater from within the Project will be captured by the stormwater management system and conveyed for storage to two a stormwater detention pond. The collection and storage of surface runoff within the Project lands will impact the natural drainage of the surrounding lands. Only in storm events greater than the 1:100 flood event are any emergency discharges from the stormwater detention pond anticipated. Emergency discharge from the storm pond will be directed into the ephemeral draw. Due to its collection of stormwater, the Project will remove nearly two-quarter sections of land from the very upper reaches of the catchment area that contributes to Lonepine Creek. Overall, considering the full extent of the catchment area, it is anticipated that this will represent a negligible loss of contributing area. Furthermore, the magnitude of this effect would be similar for other potential land development scenarios considered and approved by the Town of Olds as part of the Northeast Area Structure Plan. As such, the alteration of overland drainage patterns anticipated as a result of the Project is consistent with approved long-term municipal land use objectives for the Project lands.

Impacts to overland drainage patterns are expected to be negative, regional, negligible in magnitude, long-term, irreversible, isolated, and predicted with high confidence.

#### 3.2.2.2. Release of Deleterious Substances to Surface Water

Impacts to surface water quality (overland flow) are also possible during construction and operation due to soil erosion or release of deleterious substances. Exposed soil areas created or enhanced by construction works are more susceptible to erosion from wind and water. Soil erosion can lead to the potential release of eroded sediments into surface and stormwater. Other potential impacts include spills of hazardous or deleterious materials, such as hydrocarbons, which could contaminate surface water.

Typical construction BMPs, such as the use of temporary ESC measures and the proper storage and handling of hazardous materials, will limit the risk of release during construction. A spill response plan will also limit the severity of a spill during construction and operation. During operation, the Project's stormwater management system will function as a contaminant spill containment system. Any

contamination from within the Project lands will be captured and held within the stormwater detention ponds. This will provide the opportunity to properly test, treat and/or remove any contaminated material or water from within the site before it has the potential to spread beyond the Project lands.

Impacts to surface water due to the release of deleterious substances are expected to be negative, limited to the Project lands, negligible in magnitude, short-term, reversible, isolated, and predicted with high confidence.

### 3.2.3. Mitigation Measures

Recommended mitigation measures to help minimize or avoid impacts to overland drainage patterns and surface water quality include the following:

- Temporary erosion and sedimentation controls (ESCs) should be designed, implemented, and maintained until site construction is complete.
- A spill response plan covering both the construction phase and operations phase should be created that includes proper secondary containment and handling practices, see 3.1.3.
- Monitoring and maintenance of the stormwater management system to ensure proper functioning.

### 3.2.4. Residual Effects

Construction of the Project will effectively remove nearly two quarter-sections of land from natural overland drainage flows. This impact is anticipated to represent a negligible loss of contributing area and is consistent with approved long-term municipal land use objectives for the Project lands. The Project's stormwater management system will effectively isolate potential deleterious substances. During the construction phase, appropriate and standard mitigations are anticipated to be effective at mitigating potential impacts to surface water; no other residual effects are anticipated (Table 5).

**TABLE 5. Evaluation of Project Residual Effects on Hydrology Valued Ecosystem Components**

Potential Effect	Mitigation Measures	Effect Characteristic	Residual Effect
Alteration of Overland Drainage Patterns	Site grading plans should follow existing drainage patterns, such that overland flows will not be impeded  Use of engineered surface water management (i.e., stormwater pond, tie into existing stormwater management)	Direction	Negative
		Extent	Regional
		Magnitude	Negligible
		Duration	Long-term
		Reversibility	Irreversible
		Frequency	Isolated
		Confidence	High
Release of Deleterious Substances to Surface Water	Create a spill response plan, implement containment methods, use safe handling methods for deleterious substances, install temporary ESC measures and maintain functionality of the stormwater management system	Direction	Negative
		Extent	LSA
		Magnitude	Negligible
		Duration	Short-term
		Reversibility	Reversible
		Frequency	Isolated
		Confidence	High

## 3.3. GROUNDWATER

### 3.3.1. Existing Conditions

Site specific groundwater measurements were recently completed by ParklandGEO (in prep.). They measured depth to groundwater to range from 2.35 m to 4.19 m below grade, in boreholes with depths

ranging from 2.86 to 6.24 m below grade (ParklandGEO in prep.). Based on the regional topography, McElhanny (2024) inferred the groundwater flow direction of the project lands to be to the southeast.

The highway maintenance yard along Highway 2A on the west side of NW 4-33-1 W5 that is immediately adjacent to the project lands was flagged as potentially having groundwater impacts (i.e., salinization) from onsite activities (McElhanny 2024). Recent testing of groundwater, however, has confirmed that levels of conductivity, chloride and sodium are all meet the Tier 1 Guidelines (ParklandGEO in prep.).

### 3.3.2. Potential Effects

#### 3.3.2.1. Contamination of Groundwater

Project construction and operation have the potential to adversely affect groundwater quality through the accidental release of fuels, lubricants, hydraulic fluids, and other construction-related substances. Potential sources of contamination during construction include equipment fueling and maintenance, material storage areas, concrete handling, and temporary construction laydown areas.

During operations, new potential contaminant sources may be introduced, including stormwater runoff from impervious surfaces, road salts, hydrocarbons (e.g., diesel), and other urban pollutants. Infiltration of untreated or poorly managed stormwater may contribute to long-term groundwater quality degradation.

The design of the Project’s stormwater management systems will include impermeable barriers and liners to effectively minimize the potential for contaminant release into groundwater. With the implementation of standard environmental protection measures, including secondary containment for fuels and chemicals, spill prevention and response procedures, controlled equipment fueling, erosion and sediment control measures, and appropriate stormwater management systems, the risk of measurable groundwater contamination is expected to be negative, limited to the Project lands, negligible in magnitude, short-term, reversible, isolated, and predicted with high confidence.

#### 3.3.3. Mitigation Measures

Nothing beyond the standard mitigation measures outlined above will be required.

#### 3.3.4. Residual Effects

Residual effects from the Project on groundwater are anticipated to be negligible.

**TABLE 6. Evaluation of Project Residual Effects on Groundwater Valued Ecosystem Components**

Potential Effect	Mitigation Measures	Effect Characteristic	Residual Effect
Contamination of groundwater	Standard environmental protection measures and maintenance of functional stormwater management system	Direction	Negative
		Extent	Project Lands
		Magnitude	Negligible
		Duration	Short-term
		Reversibility	Reversible
		Frequency	Isolated
		Confidence	High

## 3.4. WETLANDS

### 3.4.1. Existing Conditions

Based on the information available at the time of writing, including analysis of historical imagery and a winter field investigation, there is one confirmed wetland within the Project lands. Preliminary classification identifies this wetland (W02) as a seasonal graminoid marsh (MG-II) measuring 3.71 ha in size (Figure 1). A dugout was present within the boundaries of Wetland W02. At the time of the January field investigation, observed plant species within Wetland W02 included common cattail (*Typha latifolia*), reed canary grass (*Phalaris arundinacea*), and dock (*Rumex* sp.).

Preliminary mapping has identified 6 additional potential wetlands (Figure 1); if confirmed, these wetlands would likely all be classified as temporary graminoid marshes (MG-I). Some of these potential wetlands may, however, be confirmed to not be wetlands and may, instead, be ephemeral water bodies. Wetland field investigations to confirm wetland presence, delineation and classification are scheduled for early May 2026 under seasonally appropriate growing-season conditions. Upon completion of the field investigations, an addendum to this document will be prepared under separate cover for submission to the relevant regulatory bodies.

An eighth potential wetland area was identified within the LSA on the east side of Highway 2A (Figure 1).

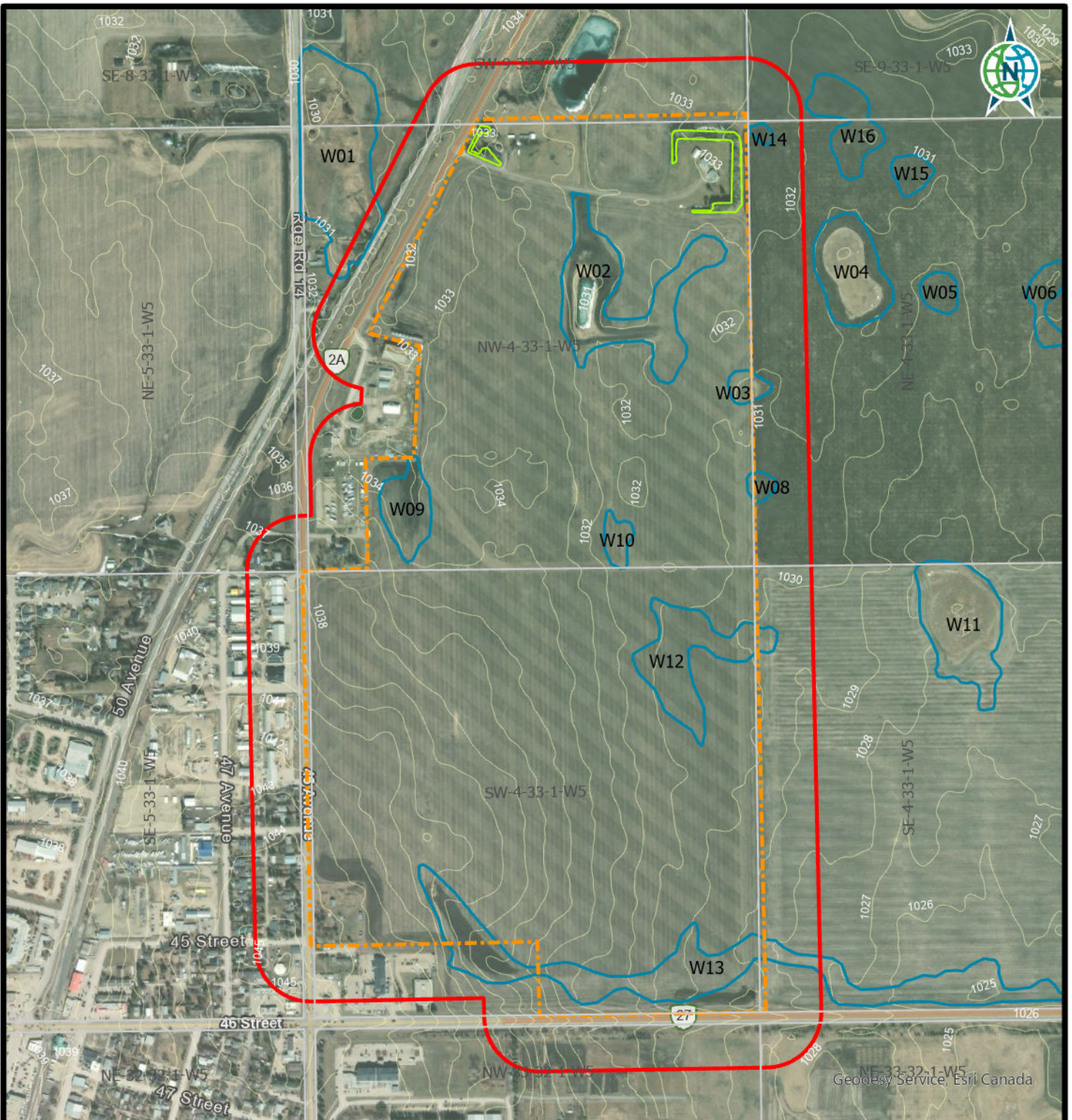
### **3.4.2. Potential Effects**

#### **3.4.2.1. Loss of Wetland Habitat**

Development of the Project will require the permanent removal of all existing wetlands from within the Project lands. For some wetlands, this will result in the entire loss of the wetland area, while for some wetlands that straddle the Project boundary, the Project will result in partial loss of wetlands. All impacts to wetlands will require a *Water Act* approval for wetland disturbance which will require submission of a Wetland Assessment Impact Report (WAIR). Permanent loss of wetland area will require replacement in accordance with the Alberta Wetland Policy. Wetland impacts from the Project cannot be quantified until wetland presence and wetland boundaries have been confirmed through a field investigation completed during the growing season. Despite the lack of wetland confirmation, analysis to date indicates that all potential wetlands within the Project lands that may be subject to disturbance are either seasonal or temporary graminoid marshes that have been directly impacted as a result of historical agricultural land use within the parcel; the majority of the potential wetland areas have been consistently cultivated in recent years. Loss of wetland area will translate into a loss of natural wetland function.

The Project includes one proposed stormwater detention pond. The preliminary design of this pond indicates that there will be an effort to incorporate native wetland plant species and to promote the establishment of some naturalized marsh vegetation communities. This pond may provide for some limited natural wetland functionality.

Overall, the wetland loss anticipated as a result of the Project is expected to be negative, limited to the Project lands; low in magnitude (based on the disturbed nature of the wetlands and abundance of wetlands in the surrounding landscape), long term, irreversible, isolated, and predicted with high confidence.

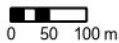


**LEGEND**

-  Project Lands
-  Local Study Area
-  Treed Shelterbelt
-  Potential wetland (preliminary boundary)
-  1 m Contour

\*note: Potential wetland delineations are intended to be as accurate as possible, however, they must be considered as preliminary wetland boundaries until field verification is completed to confirm and finalize wetland boundaries. Actual field-verified wetland boundaries may increase or decrease the size of desktop mapped wetlands. Upon field verification, some potential wetlands may be classified as ephemeral water bodies, not wetlands.

SOURCE:  
 HYDROLOGY DATA CONTAINS INFORMATION LICENSED UNDER THE OPEN  
 GOVERNMENT LICENCE – ALBERTA.  
 IMAGERY FROM ESRI, MAXAR, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/  
 AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER COMMUNITY.



**SYNAPSE DATA CENTER  
 NW & SW 4-33-1 W5M  
 PROJECT OVERVIEW**

DATE: FEBRUARY 13, 2026	PROJECTION: 10TM AEP FOREST	DATUM: NAD83
PROJECT CODE: 25-14738-25		<b>FIGURE 1</b>
SCALE: 1:10,000		

### 3.4.2.2. Release of Deleterious Substances to Wetlands

Impacts to wetlands adjacent to the project are also possible during construction and operation due to soil erosion or release of deleterious substances. Exposed soil areas created or enhanced by construction works are more susceptible to erosion from wind and water. Soil erosion can lead to the potential release of eroded sediments into nearby wetlands. Other potential impacts include spills of hazardous or deleterious materials, such as hydrocarbons, which could contaminate nearby wetlands.

Typical construction BMPs, such as the use of temporary ESC measures and the proper storage and handling of hazardous materials, will limit the risk of release during construction. A spill response plan will also limit the severity of a spill during construction and operation.

Potential wetland impacts due to the release of deleterious substances are expected to be negative, limited to the LSA, negligible in magnitude, short-term, reversible, isolated, and predicted with high confidence.

### 3.4.3. Mitigation Measures

The following mitigation measures are recommended:

- In accordance with the Alberta Wetland Policy, avoid wetland impacts to the extent possible, where impacts are unavoidable minimize impacts to wetlands. As noted above, for all unavoidable wetland impacts obtain *Water Act* approval and complete necessary wetland replacement. Abide by all conditions included as part of any approval that is issued to the Project.
- If construction and earthworks commence prior to *Water Act* approval, a setback of *at least* 10 m will be established around the preliminary wetland boundaries to mitigate against any unauthorized wetland disturbance. Appropriate ESC measures will be in place around the setback boundary to ensure no unauthorized wetland impacts prior to *Water Act* approvals.
- Ensure that ESCs, proper hazardous material handling, and spill prevention and response plans are implemented.
- Designate refueling and fuel, oil, and lubricant storage areas away from wetlands and avoid refueling equipment near wetlands. Any hydrocarbons should be stored in a clean and contained manner, well away from wetlands (i.e., 100 m away or in an area unlikely to drain toward wetlands).

### 3.4.4. Residual Effects

Permanent wetland loss will occur as a result of the project. The loss of wetlands within the Project lands is consistent with long-term municipal land use objectives as outlined in the approved Northeast Area Structure Plan (2024). A summary of residual effects to wetlands is described in Table 7.

**TABLE 7. Evaluation of Project Residual Effects on Wetland Valued Ecosystem Components**

Potential Effect	Mitigation Measures	Effect Characteristic	Residual Effect
Loss of Wetland Habitat	Follow regulatory pathway requirements for approval of impacts to wetlands Complete requirements of Water Act approval (i.e., offset payment)	Direction	Negative
		Extent	Project Lands
		Magnitude	Low
		Duration	Long-term
		Reversibility	Irreversible
		Frequency	Isolated
		Confidence	High
Release of Deleterious Substances to Wetlands	Develop and implement appropriate erosion and sediment controls, hazardous materials storage and	Direction	Negative
		Extent	LSA
		Magnitude	Negligible

Potential Effect	Mitigation Measures	Effect Characteristic	Residual Effect
	handling procedures, and a spill response plan, and revegetate as soon as possible after construction	Duration	Short-term
		Reversibility	Reversible
		Frequency	Isolated
		Confidence	High

### 3.4.5. Regulatory Requirements

The project will require a *Water Act* application and the submission of a Wetland Assessment Impact Report (WAIR) to document and characterize the loss of wetland habitat. In accordance with Provincial directives, a field assessment during the growing season will be required to confirm wetland delineations and classifications as a part of completing the applications required under the *Water Act*.

## 3.5. VEGETATION

### 3.5.1. Existing Conditions

No natural, undisturbed vegetation communities were present within the LSA. The predominant land cover was agricultural crop. Small patches of disturbed vegetation communities were present around the residences on the north half of NW-4-33-1 W5 and along the edges of the cultivated fields. Disturbed communities included areas of grasses and weeds, as well as a couple of areas supporting mature, planted shelterbelt vegetation. The shelterbelts comprised mature spruce (*Picea* sp.), jack pine (*Pinus banksiana*), and balsam poplar trees (*Populus balsamifera*), with observed understory species including prickly rose (*Rosa acicularis*), smooth brome (*Bromus inermis*), and some Canada thistle (*Cirsium arvense*).

#### 3.5.1.1. Weeds and Invasive Species

Sow thistle (*Sonchus arvensis*), a “Noxious” species under the *Weed Control Act* (2008), was observed around the dugout and in disturbed vegetation communities. Canada thistle is also listed as a “Noxious” species and was observed in several areas throughout the LSA. Weeds known to be of concern within Mountain View County are described in Table 8 (Mountain View County c2026b).

**TABLE 8. Weeds of Concern within the Mountain View County**

Common Name	Scientific Name	Provincial Weed Designation <sup>1</sup>
Absinthe wormwood	<i>Artemisia absinthium</i>	Invasive Elevated to Noxious by neighbouring municipalities
Canada thistle	<i>Cirsium arvense</i>	Noxious
Common tansy	<i>Tanacetum vulgare</i>	Noxious
Field scabious	<i>Knautia arvensis</i>	Noxious
Hound’s tongue	<i>Cynoglossum officinale</i>	Noxious
Leafy spurge	<i>Euphorbia esula</i>	Noxious
Oxeye daisy	<i>Leucanthemum vulgare</i>	Noxious
Perennial sow thistle	<i>Sonchus arvensis</i>	Noxious
Scentless chamomile	<i>Tripleurospermum perforatum</i>	Noxious Elevated to Prohibited Noxious in Mountain View County
Tall buttercup	<i>Ranunculus acris</i>	Noxious
White cockle	<i>Lychnis alba</i>	Noxious

Common Name	Scientific Name	Provincial Weed Designation <sup>1</sup>
Wild caraway	<i>Carum carvi</i>	Invasive Elevated to Noxious in Mountain View County
Yellow toadflax	<i>Linaria vulgaris</i>	Noxious

<sup>1</sup>Weed designations as per *Weed Control Act* (2008): “Prohibited Noxious” weeds need to be destroyed and “Noxious” weeds need to be controlled. “Invasive” species are not controlled under the *Act* but are considered nuisance weeds by some municipalities.

### 3.5.1.2. Rare Plants

A search of the Alberta Conservation Information Management System (ACIMS) database did not identify any sensitive or non-sensitive element occurrences within the LSA (ACIMS c2026). In disturbed and agricultural areas, the potential for rare species presence would be negligible, given the higher probability for weedy species to dominate such areas and the routine disturbance from agricultural activities.

### 3.5.1.3. Clubroot

Clubroot is a soil-borne disease that affects agricultural crops and is a declared pest under the *Agricultural Pests Act*. The Town of Olds is located within Mountain View County, which has recorded clubroot infestations (AAI 2025). Mountain View County has developed specific policies trying to protect canola producers from clubroot; similar policies should be considered for activities and development in agricultural areas within the Town of Olds.

## 3.5.2. Potential Effects

### 3.5.2.1. Introduction of Weeds and Disease

Equipment may introduce noxious and prohibited noxious weeds or facilitate the proliferation of weed species currently onsite. The owner or occupier of a property is required to control noxious weeds and destroy prohibited noxious weeds as per the Alberta *Weed Control Act* (2008), which can lead to ongoing weed maintenance issues. Effective weed management can be implemented through various BMPs, including cleaning equipment prior to entering sites, revegetating exposed areas as soon as possible with approved weed-free certified seed mixes, and implementing weed control or eradication measures, as required. Care should be taken to thoroughly clean equipment, especially using borrow material from an unknown source, to prevent the spread of clubroot or other flora-related diseases.

With the implementation of these mitigation measures, the impact of weed or disease introduction is expected to be negative, limited to the LSA, low in magnitude, long-term, reversible, isolated, and predicted with high confidence.

### 3.5.3. Mitigation Measures

Mitigation measures, to further reduce the severity of potential impacts, include the following:

- A weed management program should be developed and implemented into all phases of construction. All equipment should be cleaned prior to arrival at site to minimize the transportation of seeds from weed species from other sites.
- A clubroot management plan should be developed and implemented into all phases of construction and include control measures specified in the *Alberta Clubroot Management Plan* (GoA 2014) and considering Mountain View County’s equipment cleaning requirements (Mountain View County c2026a), including:
  - equipment brought in from outside the County or between projects in the County is to be cleaned and free of soil and debris prior to entry.

- Equipment should be disinfected with a 1-2% active ingredient bleach solution if coming from a known Clubroot infected area or municipality.
- Species selection for landscaping of the proposed natural landscape areas, vegetated security wall, and natural soft landscape areas should comprise only native plant species typically of the region.

**3.5.4. Residual Effects**

Given the lack of natural vegetation communities within the LSA, residual effects to vegetation from the project are expected to be negligible (Table 8).

**TABLE 9. Evaluation of Project Residual Effects on Vegetation Valued Ecosystem Components**

Potential Effect	Mitigation Measures	Effect Characteristic	Residual Effect
Introduction of Weeds and Disease	Design and implement a weed management program; thoroughly clean equipment of all soils prior to entering the project site	Direction	Negative
		Extent	LSA
		Magnitude	Negligible
		Duration	Long-term
		Reversibility	Reversible
		Frequency	Isolated
		Confidence	High

**3.6. WILDLIFE SPECIES AND HABITAT**

**3.6.1. Existing Conditions**

Overall, the condition of the wildlife habitat available within the LSA is poor. Very limited natural vegetation cover is present and, for the communities that are present, their condition is highly disturbed. Within the context of the urban and agricultural landscape of the surrounding area, the treed shelterbelts and areas of naturalized vegetation within the project lands provide some limited quality wildlife habitat. Songbirds and other avian species, ungulates, and small mammal species common to the central parkland natural subregion would be expected to use the vegetated habitat present for shelter, foraging, and breeding within the fragmented landscape.

The shelterbelt habitat would support various edge-adapted and generalist species such as red squirrel, song sparrow (*Melospiza melodia*), American robin (*Turdus migratorius*), house wren (*Troglodytes aedon*) and American crow (*Corvus brachyrhynchos*). During the field investigation, multiple (>10) inactive stick nests were observed within the treed shelterbelts, likely constructed by black-billed magpie and American crow. These features have the potential to support secondary nesting use by common raptor species, including great-horned owl (*Bubo virginianus*).

Many common songbird species, including clay-coloured sparrow (*Spizella pallida*) and savannah sparrow (*Passerculus sandwichensis*), would inhabit the naturalized and grassy vegetation within the disturbed vegetation community areas. The open crop fields and areas of naturalized vegetation provide hunting areas for mammals and raptors.

Coyote (*Canis latrans*) and deer (*Odocoileus virginianus*) are expected to be the most prominent medium to large-bodied mammal species found within the study area and there was evidence that these species were using the treed shelterbelt areas for shelter. Many smaller bodied mammals are likely to use the available habitats for foraging and burrowing and would include various microtine species, hares (*Lepus americanus*), and red squirrel (*Tamiasciurus hudsonicus*). Bat species such as big brown bat (*Eptesicus fuscus*) and hoary bat (*Lasiurus cinereus*) may also be supported in some of the abandoned agricultural buildings and treed areas as these species roost in foliage or decaying coniferous and deciduous trees.

Wetland W02 may be sufficiently inundated in most springs to be used by common frog species (e.g., wood frog [*Lithobates sylvaticus*] and boreal chorus frog [*Pseudacris maculata*]), however, many of the other potential wetland areas within the LSA appear unlikely to provide suitable habitat for frogs and other potentially-occurring amphibian species.

Species observed on site during the field visit in January 2026 and FWMIS records of species likely to occur within the LSA are presented in Table 9. The scope of this assessment did not include comprehensive wildlife surveys; the absence of records of wildlife species does not preclude the potential for them to utilize habitat within the study area.

**TABLE 10. Incidental Wildlife Observations and FWMIS Records**

Common Name	Scientific Name	Provincial Status <sup>1</sup>	Wildlife Act Designation <sup>2</sup>	COSEWIC Designation <sup>3</sup>	SARA Designation <sup>3</sup>	FWMIS <sup>4</sup>	Field <sup>5</sup>
Black-billed Magpie	<i>Pica hudsonia</i>	Secure	-	-	-		✓
Black-capped Chickadee	<i>Poecile atricapillus</i>	Secure	-	-	-		✓
Coyote	<i>Canis latrans</i>	Secure	-	-	-		✓
Gray Partridge	<i>Perdix perdix</i>	Exotic/Alien	-	-	-		✓
Hoary Bat	<i>Lasiurus cinereus</i>	Sensitive	(recommended for listing as Endangered)	Endangered	Not on Schedule 1 (under consideration for addition)	✓	
Microtine sp.	-	-	-	-	-		✓
Rock Pigeon	<i>Columba livia</i>	Exotic/Alien	-	-	-		✓
Snowshoe Hare	<i>Lepus americanus</i>	Secure	-	-	-		✓
White-tailed Deer	<i>Odocoileus virginianus</i>	Secure	-	-	-		✓
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	Secure	-	-	-		✓

<sup>1</sup> AEP 2022, <sup>2</sup> EPA 2024, <sup>3</sup> COSEWIC 2025, <sup>4</sup> Returned on the 3 km FWMIT search report, <sup>5</sup> Incidental wildlife species observed during the January 2026 site visit.

### 3.6.1.1. Special Status Species, Sensitive Wildlife Ranges, and Important Wildlife Features

One listed wildlife species, hoary bat, was identified within 3 km search of the project lands. Hoary bat is a Sensitive species in Alberta and is considered Endangered by COSEWIC; this species has been recommended to be listed as Endangered under the Wildlife Act and SARA (Table 9). Within the LSA, it is possible that hoary bat may utilize some of the available habitat for roosting and foraging. They are known to roost in mature coniferous and deciduous trees and will utilize open area and forest edges for foraging (COSEWIC 2023).

Although some of the observed inactive stick nests may have some potential to support secondary nesting use by common raptor species, including great-horned owl, these unoccupied features hold no protected status and do not require mitigation at this time. No other important wildlife features were observed.

The study area is located within the sensitive raptor and sharp-tailed grouse (*Tympanuchus phasianellus*) sensitive wildlife species ranges (FWMIS c2020). The lack of suitable nesting structures and hunting opportunities for bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*), and prairie falcon (*Falco mexicanus*) within the LSA or surrounding area indicate that there is not suitable nesting habitat for these species within the LSA. Similarly, the lack of intact grassland or parkland vegetation

communities within the study area and surrounding area indicate that the LSA does not provide suitable breeding habitat for sharp-tailed grouse.

### **3.6.2. Potential Effects**

#### **3.6.2.1. Mortality to Wildlife and Migratory Birds**

Mortality or disturbance to migratory breeding birds, their eggs, and their nest is prohibited under the *MBCA* and the *Alberta Wildlife Act*. The *Alberta Wildlife Act* also prohibits disturbing and causing mortality to other wildlife species and wildlife features found in Alberta (e.g., raptors, snake hibernacula, etc.). Migratory bird species listed under the *Species at Risk Act* (SARA) have additional protections under the Act that are applicable on both private and crown land.

Mortality to wildlife may occur directly (e.g., collision with vehicles or buildings) or indirectly (e.g., disturbance causing nest failure or abandonment of young).

Impacts to migratory breeding birds and wildlife species may occur during construction if birds are nesting or denning in vegetation or existing structures within the project lands that will be removed or disturbed when construction activities are underway.

The release of sediment or other deleterious substances (e.g., fuel, oil, or grease) into waterbodies supporting migratory birds can also cause mortality to adults or young, which specifically contravenes the *MBCA*. Depending on design and availability of other habitat (e.g., open water during winter months), migratory birds such as waterfowl will readily utilize stormwater ponds. The use of temporary ESC measures during construction, and the implementation of hazardous materials storage and handling procedures and spill response plans, will help minimize impacts related to deleterious substance release.

A pre-disturbance wildlife sweep should be completed prior to the start of vegetation clearing or earth works at any time of year to help identify active wildlife features that may be negatively impacted by construction activities. Scheduling vegetation clearing (if required) outside of the migratory bird nesting period for this area (mid-April to late August; GoC 2024) will minimize the risk of disturbing or harming nesting migratory bird species.

With the implementation of these BMPs, the impacts resulting in the mortality or disturbance of migratory bird species and wildlife species are expected to be negative, limited to the LSA, negligible in magnitude, short-term, irreversible, isolated, and predicted with high confidence.

#### **3.6.2.2. Disturbance of Wildlife and Migratory Birds**

Wildlife and migratory birds in Alberta are protected from disturbance and harassment under federal and provincial legislation. Disturbance to wildlife may occur from or increased levels or proximity to human, human-wildlife conflict, and sensory disturbance from noise and/or artificial lights. Disturbance may occur during construction from noise and activity from heavy equipment, removal of habitat or other sound and visual barriers, and artificial lighting. Disturbance may occur during construction and operation of the project to birds or wildlife nesting or denning on project infrastructure (e.g., American robin readily nest on infrastructure and equipment) or in the naturalized landscape areas (e.g., Canada geese will readily nest at urban/industrial stormwater ponds).

Minimization of the potential impact can be achieved by limiting disturbances to wildlife when possible through scheduling, physical setbacks (i.e., buffers), or barriers (e.g., light shields). Proper waste storage and disposal will help avoid attracting wildlife to the project area during construction and operation and will help mitigate against human-wildlife conflict.

#### **3.6.2.3. Loss of Habitat and Connectivity**

Although limited throughout the LSA, the Project will result in some wildlife habitat loss and decreased permeability on the landscape. Habitat loss will include the loss of the shelter provided by the existing

vegetation and hunting opportunities in the crop and vegetated areas for mammals and raptors. Small patches of shelter and habitat are important for wildlife connectivity in fragmented agricultural landscapes such as those within and around the LSA. The entire data centre site will be surrounded by a chain-link security fence. This fence will function as an effective barrier to most medium and large bodied terrestrial wildlife movement.

Overall, considering the small extent of existing habitat and the overall quality of the available habitat, the impact of wildlife habitat loss and connectivity is expected to be negative, limited to the LSA, low in magnitude, long-term, irreversible, isolated, and predicted with high confidence.

### 3.6.3. Mitigation Measures

The following mitigation measures are recommended:

- Develop and implement a wildlife management plan to manage wildlife impacts related to garbage handling, harassment, wildlife conflict, and disturbance to potential nesting migratory bird species. This will help minimize the risk of mortality and disturbance and avoid the contravention of environmental legislation.
- Schedule vegetation clearing and earthworks to occur outside of the migratory bird breeding season. This measure is generally accepted by the regulator (Environment Canada) to mitigate mortality or disturbance to migratory breeding birds. For this part of the province (Zone B4), most nesting activity occurs between mid-April and late August (GoC 2024).
- To help ensure compliance with provincial and federal Acts and regulations, a pre-disturbance wildlife and nest sweep be completed by a qualified professional prior. This sweep should also include assessment of abandoned structures to be demolished; depending on the time of year they may be utilized by wildlife for shelter and rearing young.
- Avoid construction during the evening or at night to minimize the impact on wildlife movement through the area. Ensure that workers receive wildlife conflict training to understand appropriate techniques to avoid or de-escalate potentially harmful interactions with wildlife.
- Consider Bird-Friendly Building Design (CSA 2019, FLAP Canada c2022) standards for project, including reducing the amount of glazed surfaces, responsible lighting design, and treatment of remaining glazed surfaces.

### 3.6.4. Residual Effects

Habitat quality in the LSA is low. Wildlife species present in the LSA are adapted to the existing conditions and likely adapted to moderate levels of intermittent disturbance associated with existing land use activities. Construction activities are expected to be more frequent and prolonged than existing disturbances, though the effects will only be present during the period of active construction. Disturbance activities can be mitigated to some degree through the implementation of a wildlife management plan, which will reduce the risk of human-wildlife conflicts, particularly the risk of habituation associated with improper garbage handling. Despite this, some level of avoidance by wildlife is anticipated to occur for the duration of construction and throughout the operation of the Project

Mortality effects on migratory birds and wildlife can largely be avoided through the implementation of the mitigation measures described above. Residual effects are summarized in Table 11.

**TABLE 11. Evaluation of Project Residual Effects on Wildlife Valued Ecosystem Components**

Potential Effect	Mitigation Measures	Effect Characteristic	Residual Effect
Mortality of Wildlife and Migratory Birds	Develop and implement a wildlife management plan Avoid disruptive activities during the breeding period for migratory birds (mid-April to mid-August)	Direction	Negative
		Extent	LSA
		Magnitude	Negligible
		Duration	Long-term

Potential Effect	Mitigation Measures	Effect Characteristic	Residual Effect
	Complete a pre-disturbance wildlife sweep prior to the start of vegetation clearing or earth works	Reversibility	Irreversible
		Frequency	Intermittent
		Confidence	High
Disturbance to Wildlife and Migratory Birds	Develop and implement a wildlife management plan	Direction	Negative
		Extent	LSA
		Magnitude	Negligible
		Duration	Long-term
		Reversibility	Reversible
		Frequency	Frequent
		Confidence	Medium
Loss of Habitat and Connectivity	Minimize the clearing of undisturbed habitat	Direction	Neutral to Positive
		Extent	LSA
		Magnitude	Low
		Duration	Long-term
		Reversibility	Irreversible
		Frequency	Frequent
		Confidence	Medium

### 3.7. AIR QUALITY

#### 3.7.1. Existing Conditions

Calvin (2026) assessed current and historical monitoring data available on the Alberta Ambient Air Data Management System (AEPA, Airdata Warehouse) to obtain background concentrations and describe existing air quality conditions. Calvin (2026) states this: “Data from the Caroline Monitoring Station were used to estimate the background NO<sub>2</sub>, SO<sub>2</sub> and PM<sub>2.5</sub> concentrations for this Assessment. This station is located ~45 km west-northwest of the Plant. The data obtained from the station cover the period from 01-Dec-2022 to 30-Nov-2025. The 90th percentile value of the measured hourly NO<sub>2</sub> data was used to estimate a one-hour background concentration using the available data for each of the three most recent years. The three values were then averaged to obtain a one-hour average background NO<sub>2</sub> concentration of 9.0 µg/m<sup>3</sup>. Based on the reduced hourly data set for each year with the greater than 90th percentile data removed, the annual concentrations were calculated and then the maximum of the three years was used as the annual background NO<sub>2</sub> concentration of 3.7 µg/m<sup>3</sup>. The 90th percentile value of all measured hourly SO<sub>2</sub> data was used to estimate a one-hour background SO<sub>2</sub> concentration of 2.6 µg/m<sup>3</sup>. The maximum calculated 24-hour average based on the reduced hourly data set with the greater than 90th percentile data removed was used to estimate a 24-hour average background SO<sub>2</sub> concentration of 2.5 µg/m<sup>3</sup>. Similarly, the 90th percentile value of all measured hourly PM<sub>2.5</sub> data was used to estimate one-hour and a 24-hour background PM<sub>2.5</sub> concentrations of 15.2 and 18.9 µg/m<sup>3</sup>, respectively.”

#### 3.7.2. Potential Effects

##### 3.7.2.1. Emissions and Decreased Air Quality

During the operation phase, the natural gas-fired power plant and back-up diesel generators will produce SO<sub>2</sub> and PM<sub>2.5</sub>, and NO<sub>2</sub> that have the potential to negatively impact air quality. Calvin Consulting Group Ltd. (Calvin; 2026) completed air quality modelling for the Project under several different scenarios

ranging from normal operations to having all plants operating normally and all emergency backup diesel generators firing at the same time for testing. Results from the modelling were compared to One-Hour and Annual NO<sub>2</sub> Alberta Ambient Air Quality Objectives (AAAQOs). Modelled results from all normal operation scenarios comply with the relevant objectives and Calvin (2026) determined that no significant air quality impact is predicted to occur as a result of normal operations at the proposed Project. Minor exceedances of the one-hour NO<sub>2</sub> and 24-hour PM<sub>2.5</sub> AAAQOs are only predicted to occur in the very unlikely scenario of all 10 natural gas-fired power plants experiencing a shutdown simultaneously.

Given these findings, potential impacts to air quality from normal project operation are anticipated to be neutral, limited to the LSA, negligible in magnitude, long-term, reversible, frequent, and predicted with high confidence.

### **3.7.3. Mitigation Measures**

Project operation will comply with recommendation from Calvin (2026) as well as approval conditions for monitoring and air quality compliance.

### **3.7.4. Residual Effects**

Calvin (2026) has determined that there is no significant air quality impact predicted to occur as a result of normal operations at the proposed Project.

## 4. CUMULATIVE EFFECTS

The Project is located within lands approved by the Town of Olds for industrial and commercial development as part of the Northeast Area Structure Plan (ASP; 2024). As such, the Project will contribute to the rapid development of these lands and the land use changes this will represent, from agricultural to industrial. Approval and development of the Project has the potential to accelerate further land development within the Town’s Northeast ASP area, including potential future expansion of the Synapse Data Centre. Owing to the similar nature of the biophysical conditions within the eastern portion of the Plan area, potential environmental impacts of future development of those lands are anticipated to be similar to those assessed and described in this document. Further development will contribute to ongoing and reasonably foreseeable land use changes within the municipality, including increased soil disturbance, loss of agricultural land, expansion of impervious surfaces, increased wetland loss and localized increases in stormwater runoff, traffic, air emissions, and noise. In combination with other approved and planned developments in the area, the Project will contribute to cumulative effects on land use, reduction and fragmentation of wildlife habitat, alteration of surface drainage patterns, and alteration of environmental quality at the local scale.

The Project will require a dedicated source of natural gas. Accordingly, approval of the proposed Synapse Data Centre would trigger the need for the construction of additional natural gas pipelines in the surrounding landscape to service the needs of the Project. Preliminary estimates indicate approximately 90 km of new pipeline will be required. In the context of cumulative effects, the pipelines will contribute to localized, temporary disturbances during construction and incrementally to linear disturbance, habitat fragmentation, and sensory disturbance within the agricultural landscape of central Alberta, but is not expected to materially alter regional environmental conditions when considered alongside existing and reasonably foreseeable developments.

The Project is anticipated to create 2,000 construction jobs and more than 1,000 long-term, highly-skilled jobs during operation. The scale of this community and employment benefit is anticipated to have positive cumulative economic impacts to the Town. Rapid population growth within Olds has the potential to result in other social effects as well.

Development within the proposed Project area, including future development, must still align with municipal plans and policies and all relevant environmental legislation. As such, cumulative effects are expected to remain within anticipated regulatory and planning thresholds.

## 5. KEY ENVIRONMENTAL REGULATIONS AND GUIDELINES

A review of potentially applicable environmental legislation was completed to assist in the evaluation of this project; details of anticipated requirements are described in Table 11.

**TABLE 12. Summary of Anticipated Regulatory Requirements**

Legislation or Policy	Responsible Authority	Purpose or Intent	Anticipated Requirement
<b>Federal</b>			
<i>Fisheries Act</i>	Fisheries and Oceans Canada	To prevent the harmful alternation, degradation, or destruction of fish or fish habitat	No anticipated permits or approvals.
<i>Migratory Birds Convention Act</i>	Environment Canada	To protect and conserve migratory bird individuals and populations, their nests, and habitats	Respect clearing restrictions during the breeding season. If construction is to occur during the breeding season, a nest sweep should be completed prior to activities commencing.

Legislation or Policy	Responsible Authority	Purpose or Intent	Anticipated Requirement
<i>Species at Risk Act</i>	Environment Canada	To prevent the extirpation or extinction of wildlife species, as well as to provide for the recovery of species currently at risk due to human activity, and to prevent species of special concern from becoming at risk	Protect individuals and their critical habitat from disturbance or damage during construction or operation should they be encountered.
<b>Provincial</b>			
<i>Alberta Wetland Policy</i>	Alberta Environment and Protected Areas	To conserve, protect, and restore Alberta's wetlands to sustain the associated ecosystem services and benefits.	Submission of a Wetland Assessment and Impact Report in support of <i>Water Act</i> application and payment of wetland replacement fees.
<i>Agricultural Pests Act</i>	Alberta Agriculture and Irrigation	To declare any wildlife or plant species or disease as a pest or nuisance if it is known to or is likely to destroy or harm land, livestock, or property in Alberta	Identification of existing infestation areas and pest management during construction and operation
<i>Code of Practice for Watercourse Crossings</i>	Alberta Environment and Protected Areas	To prevent temporary or permanent damage to aquatic and fish habitats during the construction of watercourse crossings	No watercourse crossings as a part of the project; no anticipated permits or approvals.
<i>Code of Practice for Outfall Structures on Water Bodies</i>	Alberta Environment and Protected Areas	To prevent temporary or permanent damage to aquatic and fish habitats during the construction of outfall (stormwater) structures	Potential requirement for Code of Practice notification if outfall structures are constructed as part of stormwater management system.
<i>Environmental Protection and Enhancement Act</i>	Alberta Environment and Protected Areas	To support and promote the protection, enhancement, and use of the environment	EPEA approval for project construction and operation. Application to meet the conditions of the Guide to Content for Industrial Approval Applications. Compliance during construction to prevent the release of contaminants into land, water, or air.
<i>Historical Resources Act</i>	Alberta Arts, Culture and Status of Women	To protect historic, archeological, and paleontological resources across the province	Acquisition of an approval under the <i>Act</i>
<i>Public Lands Act</i>	Alberta Forestry and Parks	To manage and protect Crown-owned land for sustainable use, including the bed and shores of all waterbodies	Project occurs on private lands; no anticipated permits or approvals.
<i>Soil Conservation Act</i>	Alberta Agriculture and Irrigation	To protect and conserve topsoil (quantity and quality)	Identification of appropriate soil salvage, storage, and replacement methods
<i>Water Act</i>	Alberta Environment and Protected Areas	To promote the conservation and management of water in Alberta, including wetlands	<i>Water Act</i> approval required for permanent wetland impacts.
<i>Weed Control Act</i>	Alberta Agriculture and Irrigation	To prevent the spread of invasive weeds, including Noxious and Prohibited Noxious Weeds listed under the <i>Act</i>	Identification of existing infestation areas and weed management during construction and operation

Legislation or Policy	Responsible Authority	Purpose or Intent	Anticipated Requirement
<i>Wildlife Act</i>	Alberta Environment and Protected Areas	To protect plants and wildlife species in the province, including through harvest or hunting, and management of species at risk	Compliance to site specific wildlife management plan during construction and operation, and prevention of harm to listed species.
Guiding Plans			
<i>Town of Olds Northeast Area Structure Plan (2024)</i>	Town of Olds	“To allow the Town to be a diverse and economically feasible place to live, work and play”	Reconcile contradicted proposed infrastructure (e.g., arterial road) within land use concept

## 6. CONCLUSION

The impacts described in the preceding analysis suggest that the construction and operation of the proposed Synapse Data Centre will result in various impacts to valued environmental components in a manner typical of most urban industrial and/or commercial land development as approved for the Project lands in the Town of Olds’ Northeast Area Structure Plan (2024). No additional substantive environmental effects from the Project are anticipated provided that appropriate mitigation measures, standard BMPs, and all regulatory approval conditions are followed.

A spill response procedure, erosion and sediment control plan, and a wildlife management plan should be developed and incorporated into the stand-alone project-specific environmental protection plan required in accordance with TP28 of AUC’s Rule 7. In response to one of the noted limitations of this document, wetland field investigations are scheduled for early May 2026 under seasonally appropriate growing-season conditions. Upon completion of the field investigations, an addendum to this document will be prepared under separate cover for submission to the relevant regulatory bodies in June 2026.

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## APPENDIX A. DESIGN DRAWINGS

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CLIENT:  
**SYNAPSE REAL ESTATE CORP**  
PROJECT:

**PROPOSED**  
**DATA CENTER**

LEGAL LAND DESCRIPTION:  
**5;1;33;4;SW & 5;1;33;4;NW**

LOCATION:  
**OLDS, ALBERTA**

RELEASE DATE:  
**FEBRUARY 27, 2026**

**ISSUED FOR  
DEVELOPMENT PERMIT**

DRAWING INDEX		
DRAWING NUMBER	DRAWING NAME	DRAWING ISSUED
C01	EXISTING CONDITION PLAN	B.0
C02A	SW ¼ SECTION SITE GRADING PLAN	B.0
C02B	NW ¼ SECTION SITE GRADING PLAN	B.0
C03	UTILITIES PLAN	B.0
C04A	SW ¼ SECTION WATER DISTRIBUTION PLAN	B.0
C04B	NW ¼ SECTION WATER DISTRIBUTION PLAN	B.0
C05A	SW ¼ SECTION SANITARY PLAN	B.0
C05B	NW ¼ SECTION SANITARY PLAN	B.0
C06A	SW ¼ SECTION STORM SYSTEM	B.0
C06B	NW ¼ SECTION STORM SYSTEM	B.0
C06C	STORM POND DESIGN	B.0



8015-49 AVENUE  
RED DEER, AB, CA, T4P 2V5  
PHONE: 403-347-0559

**NOTES:**

1. ALL CONSTRUCTION PROCEDURES AND MATERIALS TO MEET TOWN OF FLOES DESIGN REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE TOWN OF FLOES DESIGN MANUAL, CONDITIONS AND CONSTRUCTION REQUIREMENTS, AND CONTRACT DOCUMENTS FOR EXISTING UTILITIES.
2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND SERVICES FROM THE TOWN OF FLOES PUBLIC WORKS DEPARTMENT AND ENVIRONMENTAL SERVICES.
3. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE EFFORTS AND SCHEDULING OF ALL UTILITY LOCATIONS AND DEPTIC OF ALL EXISTING UTILITIES ARE TO BE COVERED BY THE CONTRACTOR. ALL UTILITIES WITH PROPOSED UTILITIES ARE TO BE REPORTED TO THE PROJECT MANAGER.
4. THE CONTRACTOR IS RESPONSIBLE FOR DETOURING AND CONSTRUCTION SHORING AND AS201 ADRIAL.
5. CONSTRUCTION SHALL BE REFERENCED TO 1:100000 BARE-EARTH MODEL AND AS201 ADRIAL.
6. ALL DIMENSIONS ARE IN METRIC UNITS UNLESS OTHERWISE NOTED.
7. ALL DIMENSIONS ARE TO FINISHED ELEVATION (OR TOP OF ASPHALT) UNLESS OTHERWISE NOTED.
8. FOR ALL BOREHOLE INFORMATION, PLEASE REFER TO THE REPORT PROVIDED BY PAMPHIGEO.

**LEGEND:**

EXISTING CONTOUR      PROPOSED CONTOUR  
 BH 18      BOREHOLE NUMBER  
 ELEV      BOREHOLE GROUND ELEVATION



Issue Description	Dwn.	Chkd.	Apprd.	Date
B ISSUED FOR DEVELOPMENT PERMIT	AA	JS	CL	26.02.27
A ISSUED FOR 50% REVIEW	AA	JS	CL	26.02.11



**Latitude Engineering**

8015 - 49TH AVENUE  
 RED DEER, AB T4P 2V5  
 PHONE: 403.347.0559

Project: PROPOSED DATA CENTER  
 Client: SYNAPSE REAL ESTATE CORP  
 Drawn: AA  
 Checked: JS  
 Designed: CL  
 Date: 25.01.20

Title: EXISTING CONDITION PLAN

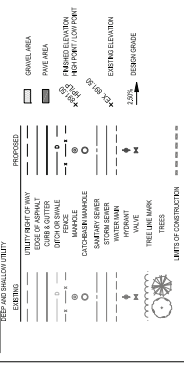
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 26.01  
 Drawing No.: C01  
 Scale: 1:3500 (NOT TO SCALE UNLESS NOTED IN ANCLD PAPER)  
 Sheet: 1 OF 11  
 Revision: 0



**NOTES:**

1. ALL CONSTRUCTION PROCEDURES AND MATERIALS TO MEET TOWN OF COUG DESIGN REQUIREMENTS. REFER TO THE GEOTECHNICAL REPORT AND CONTRACT DOCUMENTS FOR EXISTING CONDITIONS AND CONSTRUCTION REQUIREMENTS.
2. THE CONTRACTOR IS TO COORDINATE THE REPORTS AND SCHEDULING OF ALL UTILITY LOCATIONS WITH THE TOWN OF COUG PUBLIC WORKS DEPARTMENT AND ENVIRONMENTAL SERVICES.
3. THE LOCATIONS AND DEPTHS OF ALL EXISTING UTILITIES ARE TO BE COVERED BY THE CONTRACTOR. ALL UTILITIES WITH PROPOSED UTILITIES ARE TO BE REPORTED TO THE PROJECT MANAGER.
4. CONTRACTOR IS RESPONSIBLE FOR ALL DETOURING AND CONSTRUCTION SPURGE CONTROL. ALL SPURGES ARE TO BE REFERENCED TO ASHA 500.01.
5. CONTRACTOR IS RESPONSIBLE FOR EROSION & SEDIMENT CONTROL THROUGHOUT CONSTRUCTION. ALL EROSION & SEDIMENT CONTROL ARE TO BE REFERENCED TO ASHA 500.01.
6. ALL DIMENSIONS ARE IN METRIC UNITS UNLESS OTHERWISE NOTED.
7. ALL ELEVATIONS ARE TO FINISHED ELEVATION (OR TOP OF ASPHALT) UNLESS OTHERWISE NOTED.

**LEGEND:**



Issue Description	Drawn	Checked	App'd	Date
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A ISSUED FOR 50% REVIEW	AA	JS	CL	26.02.11

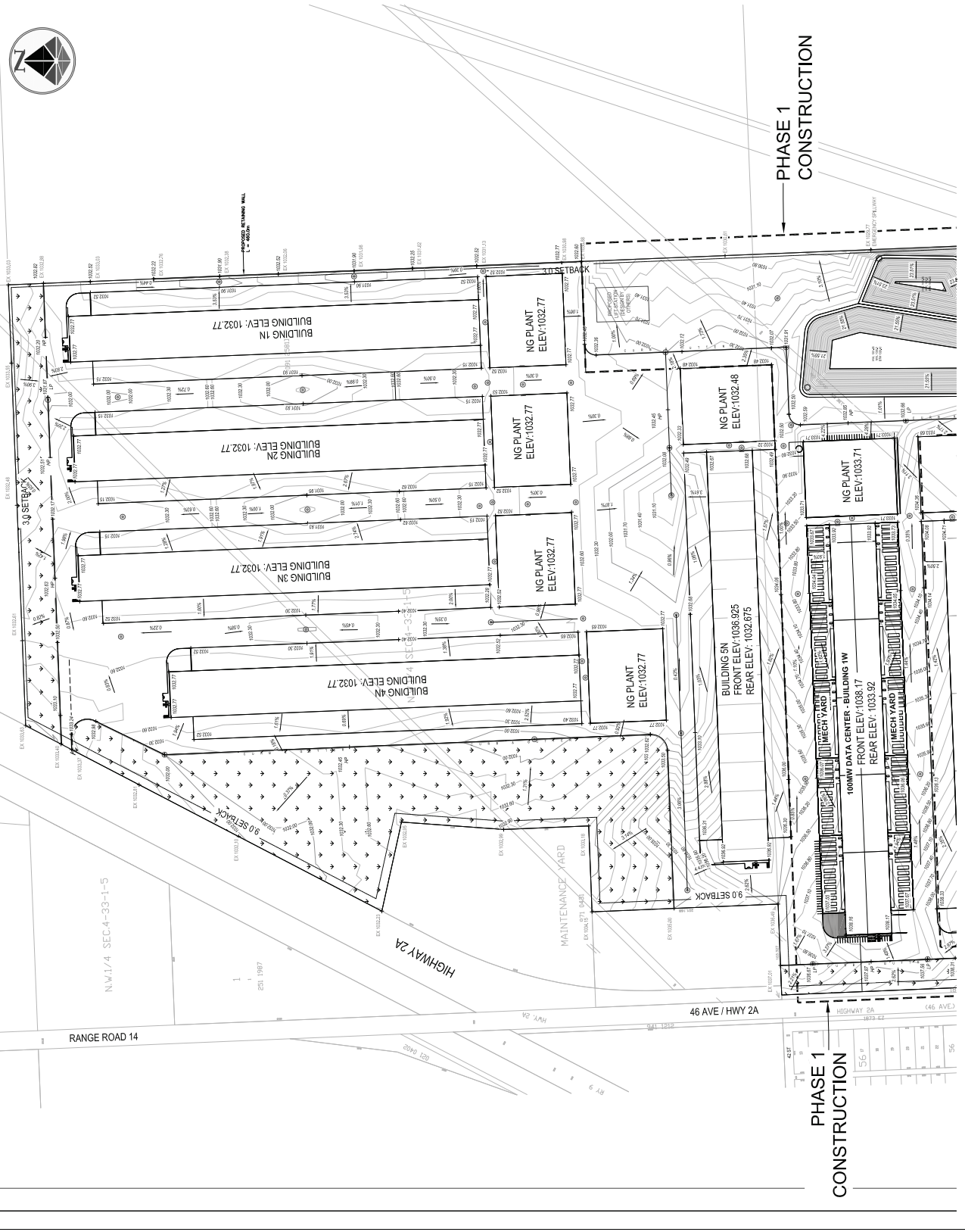


8015 - 49TH AVENUE  
RED DEER, AB T4P 2V5  
PHONE: 403.347.0559

Project: **PROPOSED DATA CENTER**  
Client: **SYNAPSE REAL ESTATE CORP**  
Drawn: AA  
Checked: JS  
Designed: CL  
Date: 25.01.20

Title: **NW 1/4 SECTION SITE GRADING PLAN**

Project No.: 1:2000  
Drawing No.: 26.01  
COZA  
Scale: 1:2000  
Sheet: 3 OF 11  
Revision: 0



PHASE 1 CONSTRUCTION

PHASE 1 CONSTRUCTION





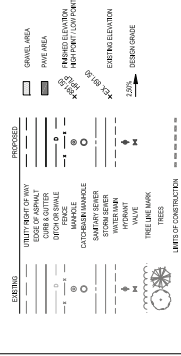




**NOTES:**

1. ALL CONSTRUCTION PROCEDURES AND MATERIALS TO MEET TOWN OF COUG DESIGN REQUIREMENTS AND ALL APPLICABLE REGULATIONS SHALL BE SHOWN ON THIS PLAN.
2. REFER TO THE GEOTECHNICAL REPORT AND CONTRACT DOCUMENTS FOR EXISTING CONDITIONS AND CONSTRUCTION REQUIREMENTS.
3. THE CONTRACTOR IS TO COORDINATE THE SCHEDULING AND SCHEDULING OF ALL UTILITY SERVICES WITH THE TOWN OF COUG PUBLIC WORKS DEPARTMENT AND ENVIRONMENTAL SERVICES.
4. THE LOCATIONS AND DEPTHS OF ALL EXISTING UTILITIES ARE TO BE COVERED BY THE CONTRACTOR. ALL UTILITIES WITH PROPOSED UTILITIES ARE TO BE REPORTED TO THE PROJECT MANAGER.
5. THE CONTRACTOR IS RESPONSIBLE FOR ALL DETOURING AND CONSTRUCTION SIGNAGE.
6. CONSTRUCTION SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
7. ALL DIMENSIONS ARE IN METRIC UNITS UNLESS OTHERWISE NOTED.
8. ALL ELEVATIONS ARE TO FINISHED ELEVATION (OR TOP OF ASPHALT UNLESS OTHERWISE NOTED).

**LEGEND:**



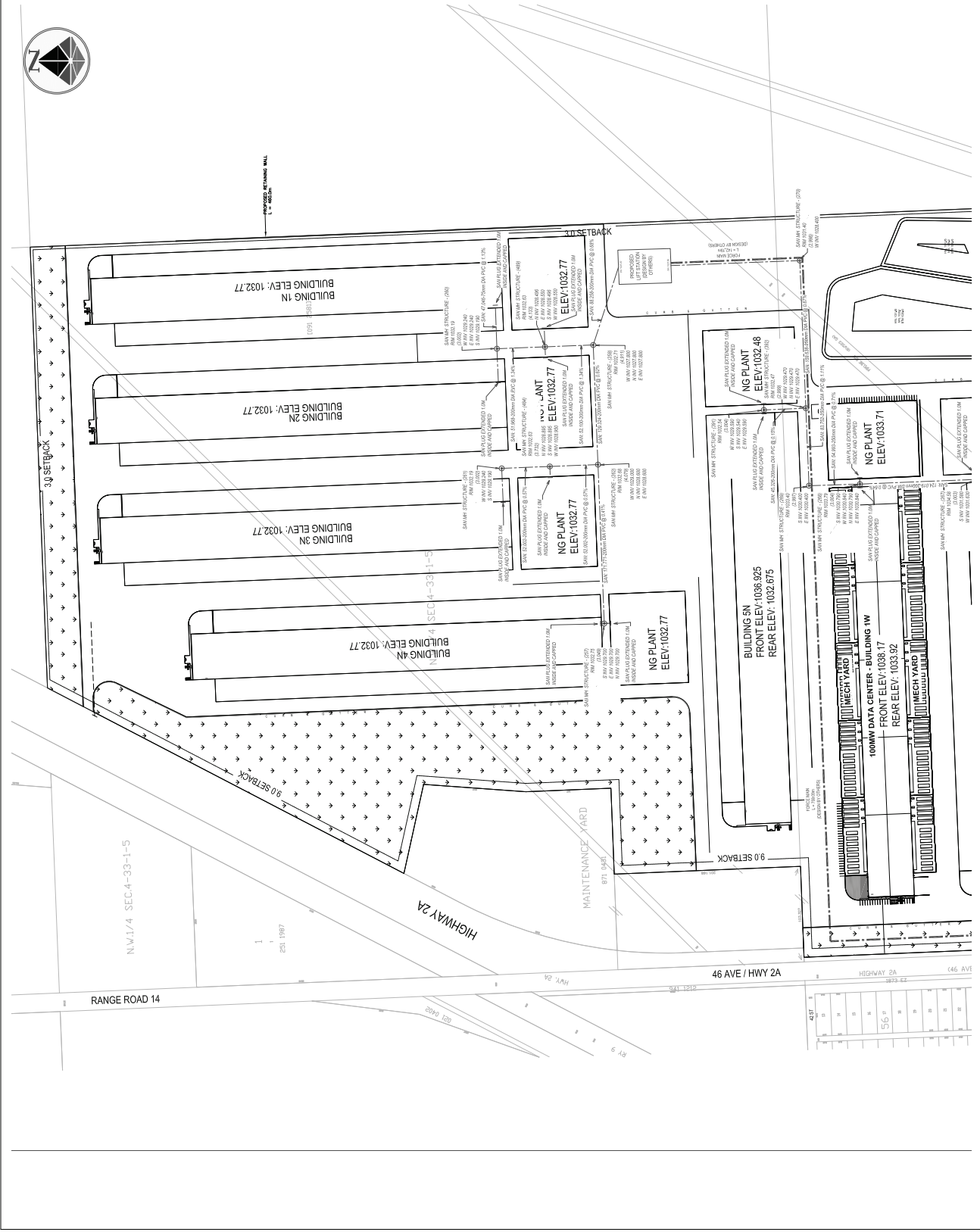
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A	ISSUED FOR 50% REVIEW	AA	JS	CL	26.02.11



8015 - 49TH AVENUE  
RED DEER, AB T4P 2V5  
PHONE: 403.347.0559

Stamp  
Project: PROPOSED DATA CENTER  
Client: SYNAPSE REAL ESTATE CORP  
Drawn: AA  
Checked: JS  
Designed: CL  
Date: 25.01.20

Title: NW 1/4 SECTION SANITARY PLAN  
Scale: 1:2000  
Project No.: 26.01  
Drawing No.: C05A  
Sheet: 8 OF 11  
Revision: 0



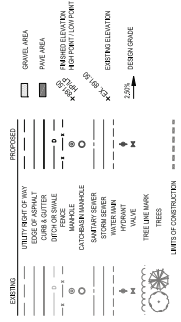




**NOTES:**

1. ALL CONSTRUCTION PROCEDURES AND MATERIALS TO MEET TOWN OF OLDS DESIGN REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE TOWN OF OLDS AND THE STATE OF COLORADO.
2. REFER TO THE GEOTECHNICAL REPORT AND CONTRACT DOCUMENTS FOR EXISTING CONDITIONS AND CONSTRUCTION REQUIREMENTS.
3. THE CONTRACTOR IS TO COORDINATE THE EFFORTS AND SCHEDULING OF ALL UTILITY LOCATIONS WITH THE TOWN OF OLDS PUBLIC WORKS DEPARTMENT AND ENVIRONMENTAL SERVICES.
4. THE LOCATIONS AND DEPTHS OF ALL EXISTING UTILITIES ARE TO BE COMPIRED BY THE CONTRACTOR. ALL UTILITIES WITH PROPOSED UTILITIES ARE TO BE REPORTED TO THE PROJECT MANAGER.
5. THE CONTRACTOR IS RESPONSIBLE FOR ALL DETOURING AND CONSTRUCTION SHORING.
6. THE CONTRACTOR IS RESPONSIBLE FOR EROSION & SEDIMENT CONTROL THROUGHOUT CONSTRUCTION.
7. ALL DIMENSIONS ARE IN METRIC UNITS UNLESS OTHERWISE NOTED.
8. ALL ELEVATIONS ARE TO FINISHED ELEVATION (TOP OF ASPHALT) UNLESS OTHERWISE NOTED.

**LEGEND:**



Issue	Description	Dwn.	Chkd.	Apprd.	Date
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A	ISSUED FOR 50% REVIEW	AA	JS	CL	26.02.11

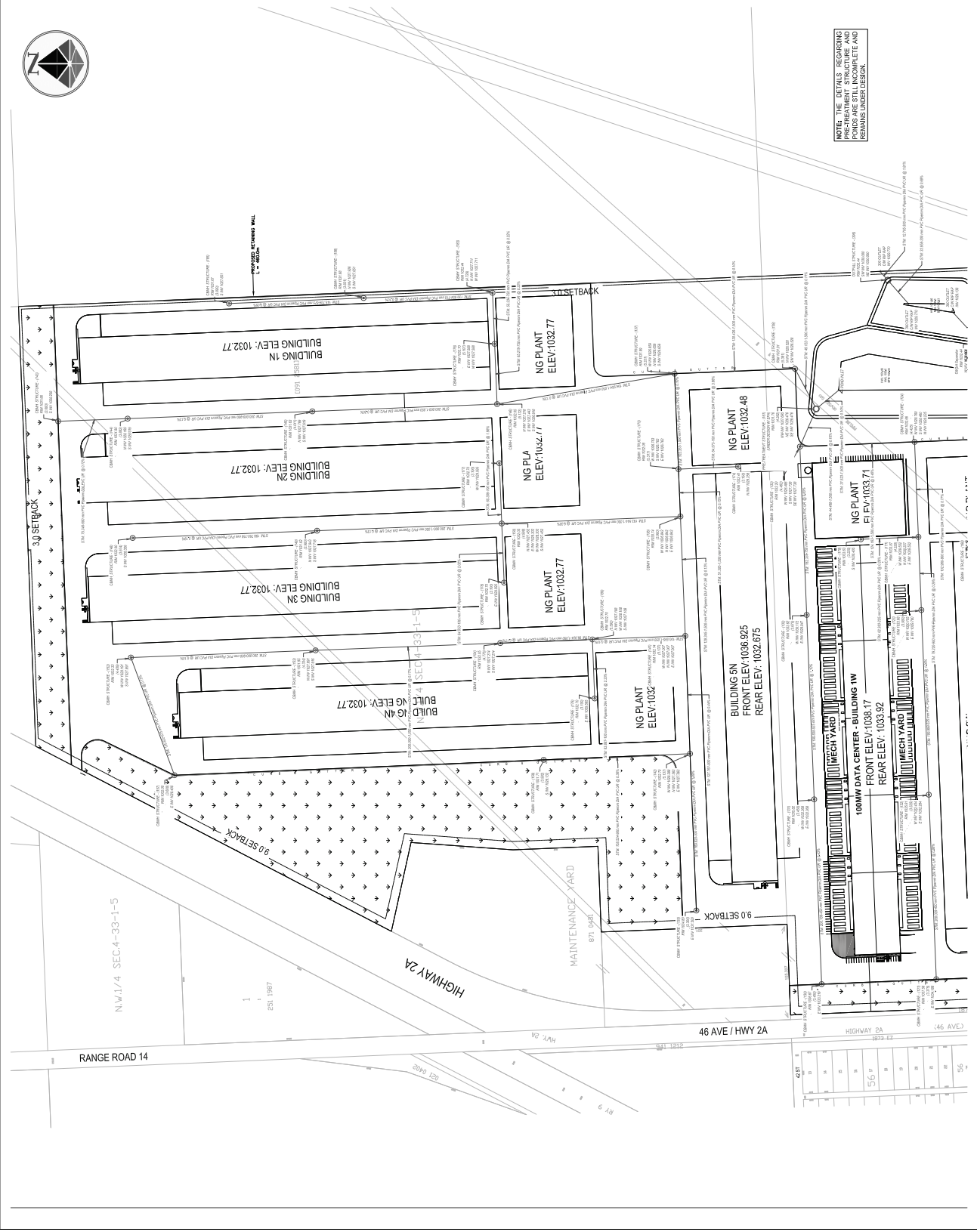


8015 - 49TH AVENUE  
RED DEER, AB T4P 2V5  
PHONE: 403.347.0559

Drawn: AA  
Checked: JS  
Designed: CL  
Date: 25.01.20

Project: PROPOSED DATA CENTER  
Client: SYNAPSE REAL ESTATE CORP  
Title: NW 1/4 SECTION STORM SYSTEM

Project No.: 1:2000  
Drawing No.: 26.01  
Sheet: C06A  
Revision: 10 OF 11



NOTE: THE DETAILS REGARDING PRE-TREATMENT STRUCTURE AND POND ARE STILL INCOMPLETE AND SUBJECT TO BE REVISION.

N.W. 1/4 SEC. 4-33-1-5

RANGE ROAD 14

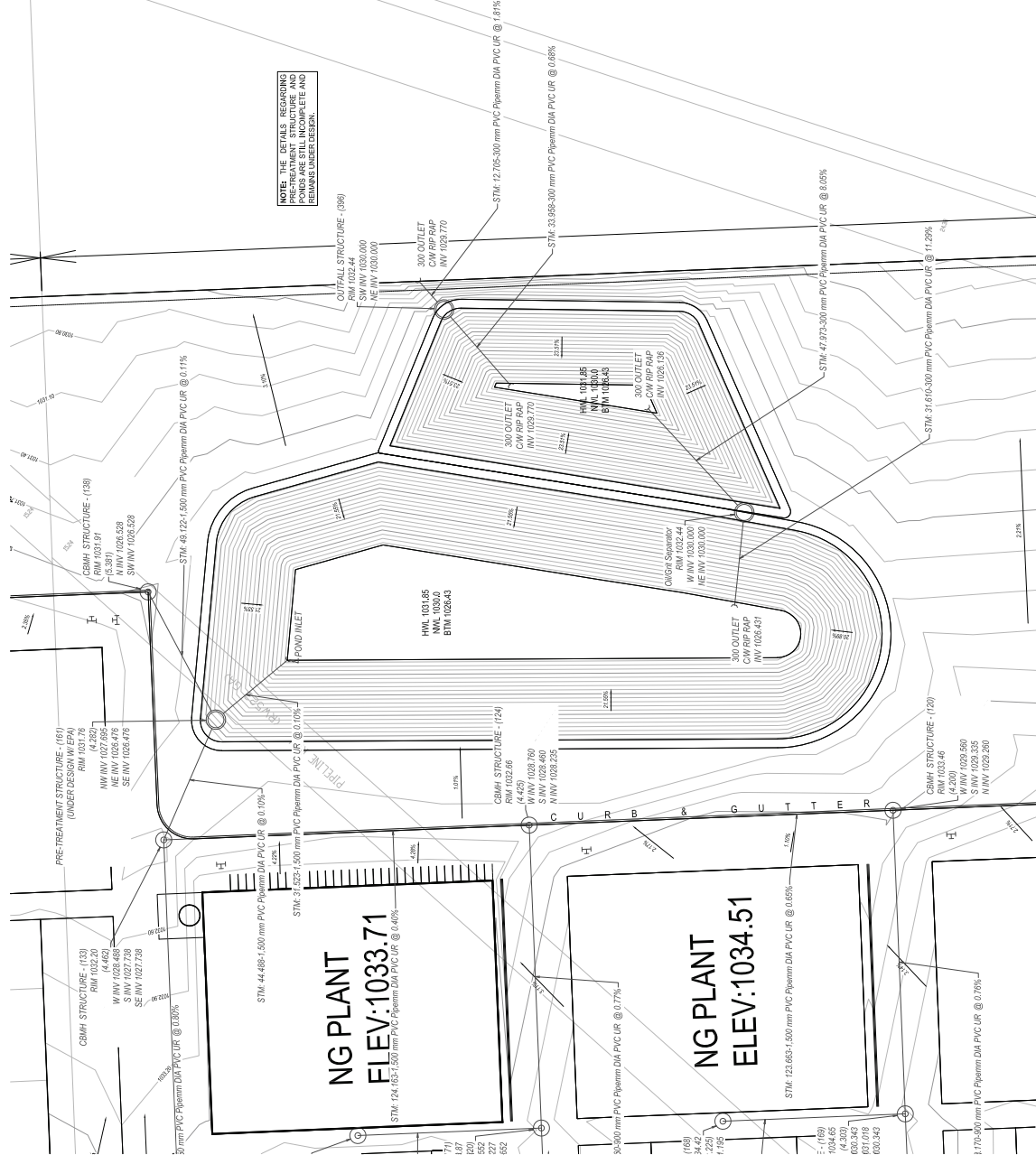
HIGHWAY 2A

46 AVE / HWY 2A

HIGHWAY 2A

56 P

NOTES:



NOTE: THE DETAILS REGARDING POND BASINS ARE STILL IN CONCEPT AND REMAINS UNDER DESIGN.

LEGEND:

Issue	Description	Drawn	Checked	App'd	Date
B	ISSUED FOR DEVELOPMENT PERMIT	AA	JS	CL	26.02.21
A	ISSUED FOR 50% REVIEW	AA	JS	CL	26.02.11



8015 - 49TH AVENUE  
RED DEER, AB T4P 2V5  
PHONE: 403.347.0559

Project: PROPOSED DATA CENTER  
Client: SYNAPSE REAL ESTATE CORP  
Drawn: AA  
Checked: JS  
Designed: CL  
Date: 25.01.20

POND DESIGN

Project No.: 26.01  
Scale: 1:750  
Drawing No.: C06B  
Sheet: 11 OF 11  
Revision: 0

## APPENDIX B. SITE PHOTOS



**PHOTO 1. Crop cover and residences viewed from center of project lands.**



**PHOTO 2. Site conditions and Town of Olds viewed from center of project lands.**



**PHOTO 3. Agricultural infrastructure north of the highway maintenance yard.**



**PHOTO 4. Drainage ditch on east side of highway maintenance yard, viewing south.**



**PHOTO 5. Naturalized habitat within shelterbelt around northeast residence.**



**PHOTO 6. Site conditions at dugout and Wetland W02 within NW-4-33-1 W5.**