

Frequently Asked Questions

TransAlta Data Processing Facility Application

Parkland County has received planning applications to amend the County's Land Use Bylaw 2025-12 and the Highvale End Land Use Area Structure Plan Bylaw 2016-12. The purpose of these amendments is to allow for future Data Processing Facilities and their associated uses in proximity to the existing Sundance and Keephills Power Generating Stations.

Please see the below answers to commonly asked questions about the TransAlta Data Processing Facility Application.

Who is leading the Data Processing Facility Application?

TransAlta has submitted the application and is leading the proposed amendments to the Land Use Bylaw 2025-12 and the Highvale End Land Use Area Structure Plan Bylaw 2016-12.

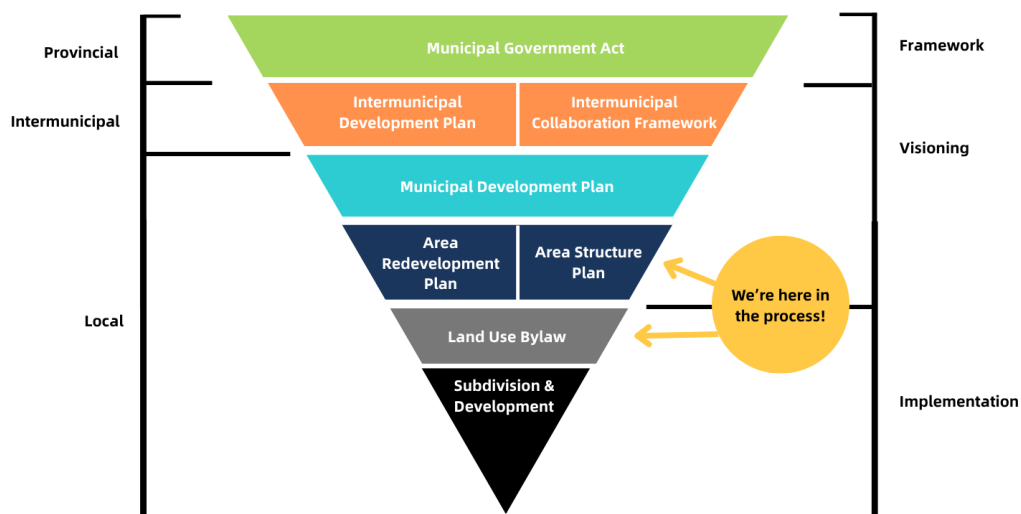
What is a Data Processing Facility and how does it Work?

Please refer to Data Processing Facilities 101 on page 8 for more information.

Planning and Development Process

How does the Planning Process Work for this Application?

The planning process and requirements are provincially regulated by the Municipal Government Act (MGA). The MGA specifies what a municipality can and cannot do, and the formal decision-making process.



Below is a step-by-step outline of the planning process/documents from start to finish:

1. **Municipal Development Plan (MDP):** is the plan that provides strategic direction to how the entire county will develop and grow.
2. **Area Structure Plans (ASP):** are plans that provide more detail on how a specific area will develop. The TransAlta Data Processing Facility applications and the surrounding area are located within the Highvale End Land Use Area Structure Plan (ASP). TransAlta's application is proposing amendments to this ASP to accommodate Data Processing Facilities and their associated uses.
3. **Land Use Bylaw (LUB):** assigns classifications to each parcel of land within the County, determining where residential, commercial, agricultural, industrial, and community uses will be located, along with the standards for their development.
TransAlta's application is proposing to:
 - Amend the existing Keephills Direct Control District (DC Area 4)
 - Amend the Highvale End Land Use Direct Control District (DC Area 1)
 - Create one (1) new District: Data Processing and Infrastructure Direct Control District (DC Area 7)
 - Amend the existing General Development Regulations for Data Processing Facilities (LUB Section 5.80)
4. **Master Site Development Plan (MSDP):** a comprehensive plan for a large-scale Major Development that provides a framework for future Development, offsite impacts, and provisions for public infrastructure.
 - TransAlta will be required to submit an MSDP after Steps 2 and 3, but prior to Steps 5 and 6 of this process.A MSDP addresses building setbacks, building height, site coverage, landscaping, proximity to environmental features, lighting, and impacts to neighbours (including mitigation measures).
5. **Subdivision:** involves the legal division of land in which separate titles are created for new parcels. At this time, no subdivision proposal or application has been received by the County for this application.
6. **Permits:** Development and Safety Code permits are applied for through the County when landowners are ready to build structures on their property. Future buildings on each site must be built in alignment with the applicable County planning documents, the County Land Use Bylaw, and the Alberta Safety Codes Act. At this time, no development or safety codes permits have been received by the County for this application.

TransAlta Data Processing Facility Application Questions

What is an ASP Amendment and when do they occur?

Changing or amending an ASP involves adjusting an existing plan for a specific area in Parkland County. ASP amendments generally take place when a developer wants to build something that may not align with the existing policies in the ASP, or when the County initiates updates to an ASP to encourage new development or align ASP policy with other planning documents.

To make a change, a formal application must be submitted to the County. An ASP is a statutory document (legislated by the Province of Alberta) and requires any proposed change to be approved by Parkland County's

Council. This process includes a formal Council Public Hearing, where members of the public can share their support, non-support, or general comments on the application with Council.

Amending an ASP is one part of a larger process to support development opportunities. The ASP amendment process may run concurrently with other potential application requirements such as an amendment to the Land Use Bylaw.

What is a LUB Amendment and when do they occur?

A Land Use Bylaw amendment occurs when a developer or the County proposes a future development that requires changes to Land Use Bylaw 2025-12 so that the proposed development aligns with County land use regulations. Anyone can submit a formal LUB amendment to the County to review, and all LUB amendment decisions are decided on by County Council.

Typical LUB amendments can range from minor land use district map amendments to the creation of new land use districts, general or specific regulations, and new use classes. All LUB amendments require public engagement, the appropriate application details and technical studies, a referral period to affected landowners, and circulation to external agencies. The decision process for an LUB amendment requires a Council Public Hearing where members of the public can share their feedback, and three Council Readings of the proposed Bylaw amendment.

How are “Must”, “Should”, and “May” Interpreted and Used with Policies?

Parkland County has defined each of these terms within existing statutory plans to identify the varying levels of requirement between policies/bylaws. The table below summarizes how each term is defined and used with the County’s LUB and MDP.

| Plan/Bylaw | Must | Should | May |
|----------------------------|---|---|--|
| Municipal Development Plan | Mandatory, and applicable to all situations. Same definition applies to “will”. | A preferred course of action that must be applied unless it is not feasible or an alternative solution meets the policy intent. | The County can choose to apply the policy when and where it is appropriate. |
| Land Use Bylaw | Mandatory compliance, except where a variance has been granted. Same definition applies to “are”. | Compliance in principle but is subject to the discretion of the Development Authority. | Action is Discretionary and can be implemented at the discretion of the County |

What Type of Public Engagement was Completed for this Application?

Prior to submitting applications, TransAlta hosted the following two open houses for the public to attend:

- June 17, 2025
- June 19, 2025

After submitting the formal application, TransAlta hosted two additional open houses:

- July 29, 2025
- July 30, 2025

Feedback from the open houses has been summarized by TransAlta in two separate What We Heard Reports that were submitted to the County as a part of the application review. These reports are posted on the project webpage (link below).

To facilitate the application process and answer additional questions, the County is hosting *Chat With a Planner* sessions between July 29 to August 26, 2025, where residents can sign up through the project webpage to learn more.

Project Webpage: <https://yourparkland.ca/transaltadatacentre>




What Approval Authority does Parkland County have Regarding Data Processing Facilities?

Parkland County has approval authority over our own statutory plans (e.g., MDP and ASP), which provide a long-range vision for growth and development in the County and regulate specific uses in the Land Use Bylaw. The County also has authority over reviewing and approving development permits. For industrial uses, development permit approval may require the development includes mitigation measures for any nuisances (noise, light, environmental impacts, etc.) that the activity may generate. Development permits can also include conditions which are specific requirements attached to a development permit, to ensure a project aligns with and follows municipal bylaws and policies.

Due to their complexity, every Data Processing Facility built in Alberta must comply with a layered framework of Federal, Provincial, and Municipal regulations. Each body and set of regulations cover a wide range of considerations, including land use, environmental impact, building safety codes, power infrastructure, and occupational health and safety.

Provincially, Data Processing Facilities must receive Alberta Electrical System Operator (AESO) approvals to ensure these projects do not strain the power grid. Data Processing Facilities must also get approval from the Alberta Utilities Commission (AUC) to develop and operate a power generation facility. The AUC sets out noise control requirements and permissible sound levels as well as application requirements for power plants. In addition to the above approvals, depending on the scope of the Data Processing Facility, they may also require approval from several other Provincial authorities.

Please refer to the diagram below, which provides additional detail regarding approval authorities.

| JURISDICTION | WHO APPROVES WHAT? |
|---|---|
|  | Personal Information Protection and Electronic Documents Act (PIPEDA) and other Privacy Regulations Sets the ground rules for how private-sector organizations collect, use, and disclose personal information in the course of for-profit, commercial activities across Canada. |
|  | Alberta Utilities Commission (AUC) Regulates the utilities sector, natural gas and electricity markets to protect social, economic and environmental interests of Alberta. Approval from the AUC is required to develop and operate a power generation facility. <i>The AUC has their own rules on noise control requirements, permissible sound levels and requirements for power plants.</i> |
| | Alberta Energy Regulator (AER) Responsible for regulating the development of energy resources in Alberta including the life cycle of oil, oil sands, natural gas and coal projects. The AER has exclusive jurisdiction over energy-related infrastructure such as wells and pipelines, meaning these projects do not require municipal approval. |
| | Aboriginal Consultation Office Consultation is a process intended to understand and consider the potential adverse impacts of anticipated Crown decision on First Nations and Metis settlements, with a view to substantially address them. The applicant must consult with First Nations and Metis settlements that are affected. |
| | Alberta Electric System Operator (AESO) AESO operates and provides electricity throughout the province. AESO plans for transmission solutions to ensure customers can access the grid. Major projects require approval to secure access to the electric grid and system. |
| | Other Relevant Legislation (Dependant on Scope of Project) <ul style="list-style-type: none"> • Alberta's Occupational Health and Safety (OHS) Act and Alberta OHS Code • The Alberta Environmental Protection and Enhancement Areas (AEPA) • Alberta Transportation and Economic Corridors (ATEC) • Alberta's Building Code and Fire Safety Code |
|  | Land Use (Statutory Plans) Statutory plans (like the municipal development plan and area structure plans) are long-range plans that establish a vision for future County growth. They set this future direction by identifying where specific land uses are planned to be located including residential, industrial and recreational development as well as the transportation and utility infrastructure required to support growth – all future development must align with statutory plans. |
| | Zoning (Land Use Bylaw) Regulates development within the County with a goal of ensuring that neighbouring land uses are compatible. Zoning ensures that local development aligns with the County's vision for land use, as set out in statutory plans. |
| | Development Development permits help ensure that buildings and activities on a property are suitable for the land use district, specific parcel, and are compatible with neighbouring properties. A development permit is written approval from Parkland County that a development aligns with the regulations in the Land Use Bylaw. |
| | <i>Development permits focus on matters like intensity of land use, building height, site coverage, setbacks from property lines, proximity to environmentally sensitive areas, impacts to neighbours (and mitigation measures), landscaping, lighting, and parking requirements. For industrial style uses, development permits may outline requirements that the development must include mitigation measures for any nuisances (noise, light, environmental impacts, etc.) that the activity may generate.</i> |

How will Potential Visual, Noise, Traffic, and Lighting Impacts be Mitigated?

TransAlta has proposed mitigating potential impacts by including specific visual, noise, traffic, and lighting regulations within the proposed Direct Control Districts, and the General Development Regulations for Data Processing Facilities. Additional policies, like the County's Community Standards Bylaw 2023-19, also provide standards to mitigate against these potential impacts. Where applicable, provincial standards and regulations for impacts, such as noise, will also be in effect.

What Technical Reports were Completed for this Application?

To support their application, TransAlta submitted the following technical reports:

- Transportation Memo
- Biophysical Assessment
- Agricultural Impact Assessment
- Pre-application What We Heard Report
- Mid-application What We Heard Report
- Area Structure Plan Text and Map Amendments – Redline Version
- Land Use Bylaw Text and Map Amendments – Redline Version

Technical Reports are available to the public in-person at the Parkland County Centre (53109A HWY 779, Parkland County, AB T7Z 1R1) from Monday-Friday between 8:30AM-4:30PM. Technical reports must be reviewed at the County. Copies will not be provided to the public for review.

How does the Municipal Bylaw Amendment Process Work?

The creation or amendments to a municipal bylaw requires three Council Readings and a Public hearing at County Council. For information of the municipal bylaw process, please see the below helpful video:

<https://www.youtube.com/watch?v=QfUVIcJEnuc>

What is the Notification Process for a Public Hearing?

The Province's Municipal Government Act requires that a Notice of Public Hearing be advertised for two consecutive weeks. Notices of Public Hearing must include the Public Hearing date, time, and location, the purpose of the Public Hearing, and details on how to register to speak or submit written comment. A variety of advertising methods are used by the County to share Notices of Public Hearing, including but not limited to: posting on the County website, calendar, and County social media channels, and publishing in local newspapers.

Who can Speak at the Public Hearing?

Members of the public are welcome to speak at the Public Hearing or submit comments in writing. Any comments you wish to provide will be taken into consideration by Administration and Council. Please be advised that each speaker will have 10 minutes to speak in front of Council, while written submissions will be included in the Council Agenda package.

To register or to provide your written submission, please email governanceagendas@parklandcounty.com by noon on the Wednesday prior to the Public Hearing date.

If Council Approves this Application, what Happens Next?

TransAlta is currently working through Step 2 and Step 3 of the process (the ASP and LUB amendments, as noted on page 1). At this stage in the process, no physical Data Processing Facility buildings have been proposed or are being built. If the County's Council approves the amendment applications, TransAlta must acquire additional Provincial approvals, complete additional technical reports to support a Master Site Development Plan, and subsequent County development and safety codes permit applications.

Master Site Development Plans (MSDP), development permits, and safety codes permits are reviewed and approved by Parkland County.

Access to Application Documents and Information

How to access information at the County:

- **Public content on the Parkland County website:** Public information is available on the County's website, such as council meeting minutes, policies and bylaw documents.
- **Visiting the County Office:** Documents that contain detailed technical information can be viewed when visiting the County office.

- **Freedom of Information and Protection of Privacy (FOIP):** aims to strike a balance between the public's right to know and an individual's right to privacy, as these rights relate to information held by public-sector bodies in Alberta. This is necessary when there is a need to review documentation for someone's personal information that may be located within documents. For more information, please check out this [website](#).

More Questions or Comments?

Please contact Planning and Development Services by phone at 780-968-8888 or by email at buildingparkland@parklandcounty.com.

Data Processing Facilities 101

The Role of Data Processing Facilities in Our Digital World

Data Processing Facilities are the physical infrastructure that powers our digital lives. They are specialized facilities that house the computers, servers, and networking equipment needed to store and process digital information. Every time you stream a movie, use an app, or send an email, a data processing facility is involved. With the digital landscape continually evolving, data processing facilities are the cornerstone of innovation. They provide the robust infrastructure required for advanced technologies like Artificial Intelligence (AI) and Machine Learning (ML), which demand amounts of data processing power.

Hyperscale Facilities and Their Economic Impact

The fastest-growing category of data processing facilities is hyperscale facilities. These facilities are designed to support the immense data storage and processing needs of major tech companies like Amazon (AWS), Google, Microsoft, and Meta.

The presence of data processing facilities, including hyperscale facilities, can be a significant economic driver. They attract complementary businesses and stimulate business activity, creating short-term economic benefits and increasing a region's competitiveness. In fact, data processing facilities already exist in Alberta, with large players like AWS (Amazon Web Services) and Equinix having a presence. Investments in new infrastructure, such as data centers, offer a significant opportunity for economic development within the Province and County. These projects could utilize and expand existing energy resources, like natural gas power plants, to create jobs and make use of our natural resources.

Alberta's Commitment to Data Center Growth

The Alberta's Artificial Intelligence (AI) Data Centres Strategy, released in December 2024 by the Ministry of Technology and Innovation (T&I), illustrates the province's commitment to attracting responsible investment. Alberta's natural resources, cold climate, competitive tax rates, and business-friendly regulatory environment make it an attractive location for these operations.

Regulation, Community, and Environmental Responsibility

Every data processing facility built in Alberta must adhere to a comprehensive framework of federal, provincial, and municipal regulations. These regulations cover a wide range of considerations, including:

- Land Use
- Environmental Impact
- Building Safety Codes
- Power Infrastructure
- Occupational Health and Safety

Data processing facilities must receive approval from the Alberta Electrical System Operator (AESO) to ensure they do not strain the power grid. Modern data processing facilities also aim to prioritize the following:

- *Environmental Protection:* Modern data processing facilities use highly efficient cooling and power systems to significantly reduce energy and water consumption. They also undergo comprehensive environmental impact assessments to ensure minimal ecological disruption.

- *Community Integration:* Facilities are built in buffer zones away from residential areas. The development process includes incorporating landscaping and architectural features, such as specific exterior designs, materials, and colors, to help them blend into their surroundings.
- *Safety and Privacy:* These facilities prioritize community safety and privacy. They use advanced acoustic technology, including sound attenuators and acoustic monitors, to ensure operations are quiet and unobtrusive. Additionally, state-of-the-art security systems and comprehensive emergency response protocols are implemented to protect nearby residents and businesses.

Economic Growth and Job Creation

Data processing facility campuses stimulate **economic growth** by creating both temporary and permanent jobs. The development phase of a campus can generate thousands of temporary skilled trade and construction jobs. Once operational, these facilities bring hundreds of permanent jobs. This influx of jobs supports the local economy for many years.

Beyond direct employment, data centers also stimulate local industries like:

- Manufacturing
- Electrical services
- Landscaping
- Professional services

Community Development and Infrastructure

Data processing facility development often leads to significant **community benefits** and **infrastructure improvements**.

They also encourage investment in critical infrastructure that benefits the entire community, including:

- Fiber optic connectivity
- Energy production
- Water systems
- Telecommunications

Why Alberta and Parkland County are an Industry Choice

Alberta and Parkland County offer several strategic advantages that make them attractive to the data processing facility industry:

- *Energy Accessibility and Infrastructure:* Alberta has a well-established energy sector with abundant resources. Its robust infrastructure, including substations and high-voltage transmission lines, can easily support the electrical loads required by data centers. The province also has a deregulated energy market for energy and natural gas, overseen by regulatory bodies like the **Alberta Electric System Operator (AESO)**, **Alberta Energy Regulator (AER)**, and **Alberta Utilities Commissions (AUC)**.
- *Strategic Location:* Northern Alberta's naturally cool climate is a major advantage, as it significantly reduces cooling costs—a primary operational expense for data processing facility. Parkland County is particularly well-located, with access to amenities, a skilled labor force, logistical networks, and international airports.

Artificial Intelligence 101

What is Artificial Intelligence (AI)?

AI is a broad field of computer science dedicated to building machines that simulate human processes. These processes include learning, reasoning, and self-correction.

How does Artificial Intelligence Work?

AI systems work by processing vast amounts of data and using that data to identify patterns and make predictions. There are several key concepts that help define how AI functions:

- **Machine Learning:** A subset of AI that focuses on the development of algorithms that allow computers to learn from and make decisions or predictions based on data. Instead of being explicitly programmed for a specific task, the machine learns to recognize patterns and improve its performance over time.
- **Deep Learning (DL):** A subfield of machine learning, deep learning uses multi-layered networks to analyze various factors. This is particularly effective for complex tasks like image and speech recognition. Each network layer processes a different part of the problem.
- **Natural Language Processing (NLP):** This is a branch of AI that gives machines the ability to understand, interpret, and generate human language. It is what allows virtual assistants like Siri and Alexa to understand voice commands.

What are some Examples of AI in Daily Life?

Some common examples of AI that is integrated into daily life include:

- **Virtual Assistants:** Siri, Alexa, and Google Assistant.
- **Recommendation Engines:** The algorithms on Netflix, Spotify, and Amazon that suggest what you might like next.
- **Social Media:** Facebook and Instagram use AI to filter spam, tag photos, and recommend content in your newsfeed.
- **Self-driving Cars:** These vehicles use AI to perceive their surroundings, make decisions, and navigate without human input.