

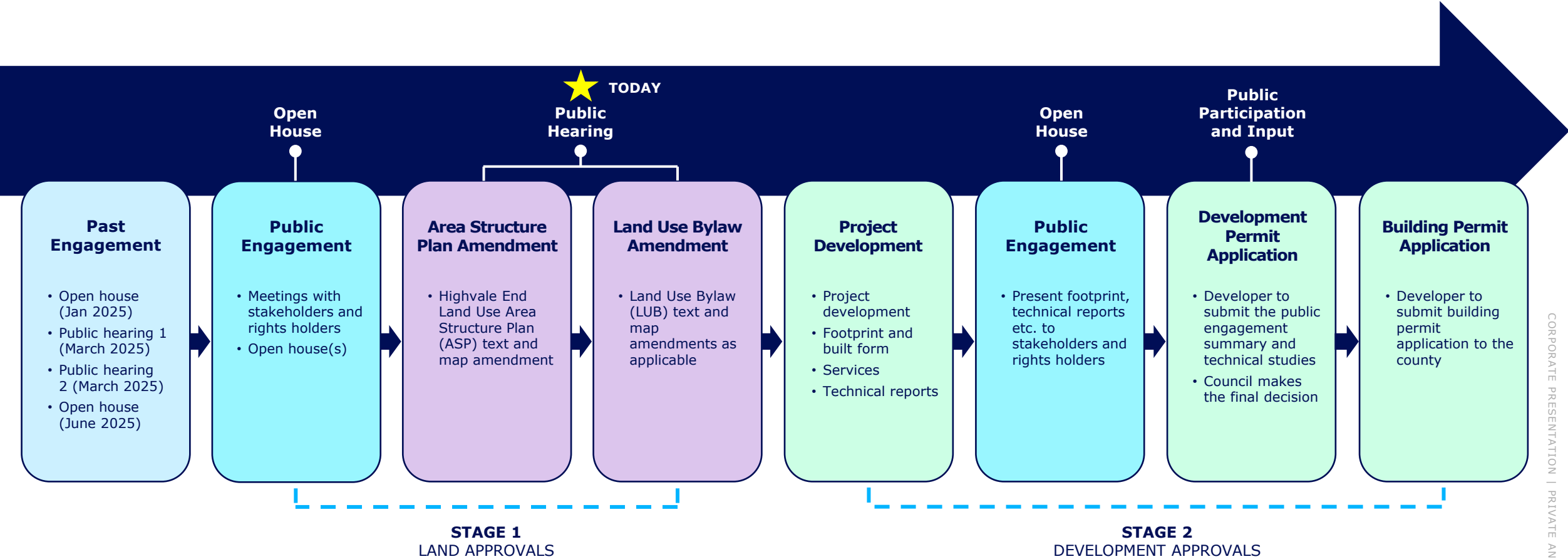
# **Highvale End Land Use Area Structure Plan and Land Use Bylaw Amendment**



## Power

- » Since grid emergency alert in 2024, 1,900 MW of incremental gas fired generation has been added to the grid
  - » AESO has publicly announced that there is 1,200 MW of surplus electricity generation available to connect to data centre loads
- » Not all power outages are a result of supply shortages – some may be caused by transmission/distribution line damage
  - » These types of events would not be impacted by Data Centre development

# Development Approval Process





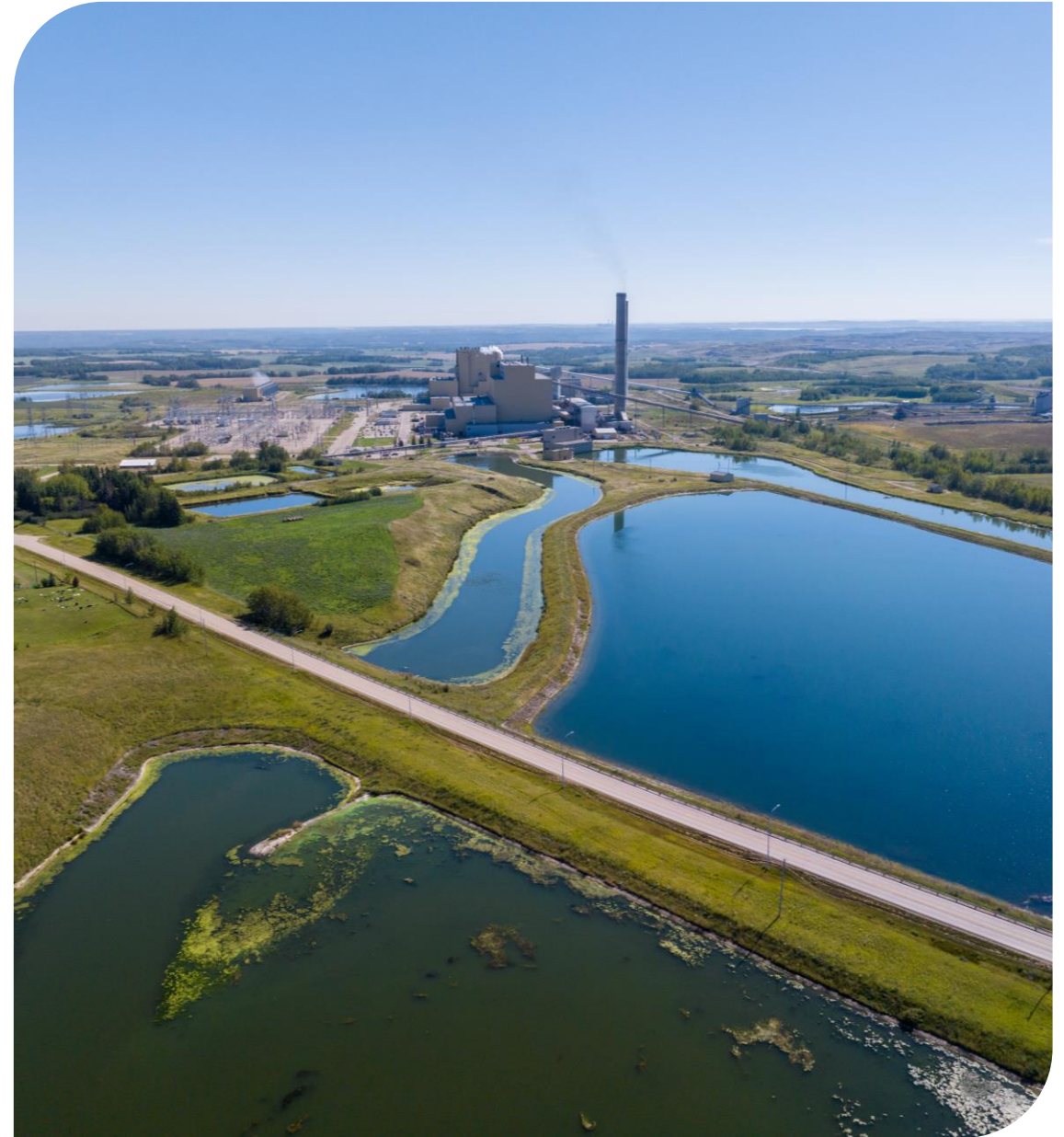
## Land

- » All land is owned by TransAlta
- » Reviewed the purchase contracts of nearby landowners – land was sold as-is where-is
- » Evaluating buy-out options at the development permit phase
  - » Once the footprint, mitigation options and impacts to specific residents are understood



# Water

- » Water Source (*if required*) would be the existing Keephills and/or Sundance Cooling Ponds
  - » Expect to use a closed-loop system similar to what is currently used by the existing power plant facilities
- » Do not expect impacts to, or usage of groundwater
- » Alberta Environment regulates water management
  - » TransAlta does not expect to require modifications to, or additional water licenses for the proposed facility
  - » Currently ~80% of natural flows of North Sask River are still available
- » Stormwater is required to be tested prior to release to ensure water quality
- » TransAlta added 3.614 million cubic meters of water to support the lake water levels



# Environment

- » Waste Heat – potential for agriculture co-location considered in proposed amendments
- » The project will follow all federal and provincial regulatory requirements
- » TransAlta is supportive of a fulsome review of the Highvale End Land Use ASP
- » Highvale Mine Reclamation Plan has been submitted to AER – currently awaiting approval





# Key Concerns

Concerns were expressed by stakeholders regarding how a data centre might affect light, noise, traffic and water quantity and quality.

Data centre design and operational plans that would allow some of those concerns to be addressed aren't available until a data centre proponent submits a Municipal Development Permit application.

To address some of those concerns, TransAlta is proposing amendments to **Section 5.80 (Data Processing Facility)** of Parkland County's **Land Use Bylaw (Bylaw 2025-12)** to include the following:



## Noise

- The applicant may be required to provide a noise impact assessment
- Provision and compliance with a noise impact assessment, including installation of a noise monitoring system, may be imposed as a condition of approval
- Appropriate Acoustic Barriers must be included if deemed necessary by a noise impact assessment



## Water Use

A Development Permit application for a Data Processing Facility Use may require the following information to be provided:

- Estimated water demand and anticipated source
- Wastewater and effluent treatment and disposal



## Light

- Lights must be designated dark sky compliant and direct light below the horizon and away from adjacent properties

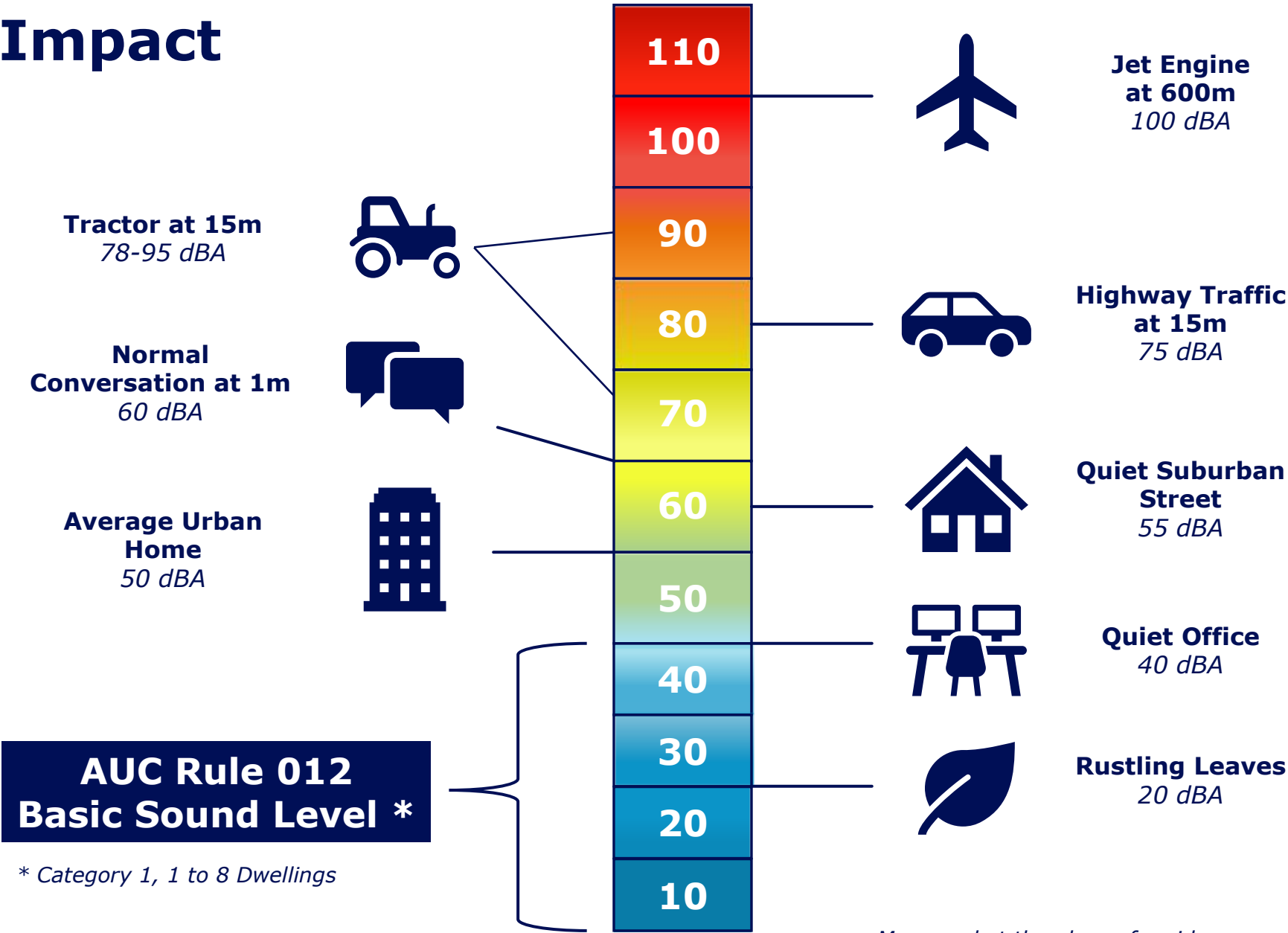


## Traffic

A Development Permit application for a Data Processing Facility Use may require the following information to be provided:

- Traffic impact assessment
- Requirements for off-site improvements

# Noise Impact



Measured at the place of residence



# Key Regulatory Bodies

AESO – Grid reliability

AUC – Power Plants

AEPA – Water Usage / Discharges

AER – Mining / Reclamation

*Public engagement opportunities are available throughout permitting process.*

# Jobs & Economic Development

- » Opportunities include, but are not limited to:
  - » Cleaning / Administrative
  - » Security
  - » HVAC Technicians
  - » Electricians
  - » IT Support
- » Opportunity to restore some of the jobs lost through the off-coal transition
- » For each dollar contributed to GDP by the U.S. data center industry, 2.5 dollars were contributed to GDP elsewhere in the U.S. economy



# Contact Us

## Questions or Comments?

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