

July 2024

Dear Resident / Business Owner,

On behalf of the proponent, Akaysha Energy, we are writing to provide an update on the **Elaine Battery Energy Storage System (BESS)** proposal, and to invite you to a **third Community Information Session**.

A Planning Permit Amendment has been lodged with the Victorian Minister for Planning (the responsible authority), via the Department of Transport and Planning (DTP). The amendment is currently under assessment. It will soon be placed on public exhibition and comments will be invited.

The **Community Information Session** will take place on **Saturday 13 July 2024** between **3:00pm and 5:00pm** at the **Elaine Mechanics Institute Hall, 20 Pearsons Road, Elaine**.

The session seeks to provide the Elaine community with an opportunity to view the amended plans and updated technical reports, ask questions of the project team, and to explore options for community investment. With this letter, we have provided a two-page summary of the amendments currently under assessment.

At the same time as the session, we will be conducting a door knock in Elaine to receive additional feedback from those that aren't able to attend.

Should you have any questions or concerns, please do not hesitate to contact us via the website or the details provided below.

We look forward to seeing you soon.

Warm regards,

Adam Terrill

Co-Founder & Director, Cogency Australia
cogencyaustralia.com.au

For more information, please visit our website or contact Cogency

 www.akayshaenergy.com/projects/elaine-bess

 0452 593 428

 consultation@cogencyaustralia.com.au

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Visual render of the
Elaine BESS





Comparative analysis table

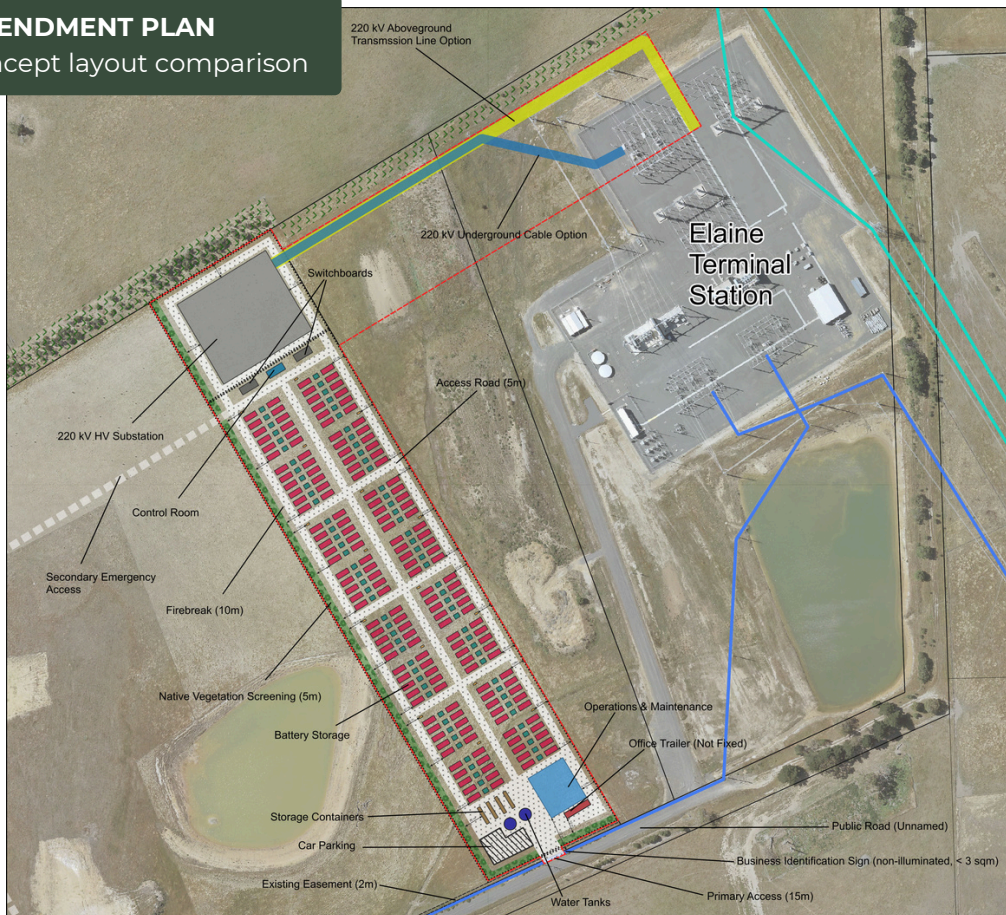
Elaine Battery Energy Storage System

Item	Permit	Amendment
Battery units	200 MW/ 800 MWh 72 units in rows of 6 either side of 6 inverter and transformer units.	311 MW/ 1244 MWh 160 units in rows of 5 either side of 5 transformer units.
Inverter and transformer units positioning		
Switch gear	3 units at the center of 12 battery/inverter and transformer sets.	16 units located, each located adjacent to 5 battery/transformer sets.
220 kV HV substation	North end of site.	No change.
220 kV transmission line	Underground/ overhead transmission line from the substation into the north of the terminal station.	No change.
Electrical works within terminal station	Within the terminal station to connecting the BESS to the National Energy market.	No change.
Operations and maintenance building	South west corner.	South east corner.
Storage containers	No containers.	4 storage containers in southwest corner.

Item	Permit	Amendment
Office trailers	Trailer not proposed.	South east corner of site.
Water tanks	South east corner of site.	South west corner of site.
Access roads	4 meter wide access roads.	5 meter wide access roads.
Emergency access	Secondary access to the east of site.	Secondary access to the west of site.
Native vegetation screening	5 meter wide screening along western and southern boundary.	No change.
Firebreaks	10 meter wide firebreaks along all boundaries.	No change.
Switch and control rooms	1 33 kV Switch Room and 1 Control Room located adjacent to the HV substation.	2 switchboard rooms with 1 control room in the middle, located next to the HV substation.
Security fencing	Perimeter security fencing.	No change.
Signage	Business identification signage at primary site entrance.	No change.
Car parking	South east corner of site.	South west corner of site,

AMENDMENT PLAN

Concept layout comparison



Concept Layout Plan

2226 - Elaine BESS

Proposed Layout

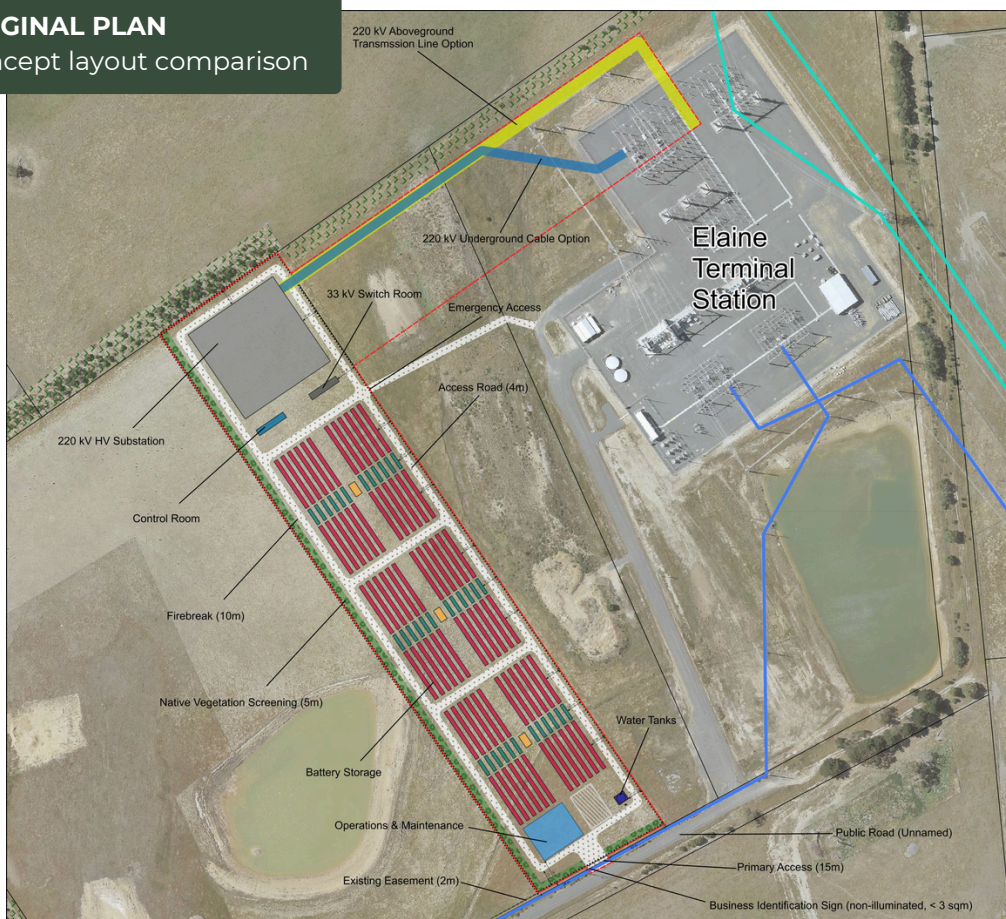
- Project Area
 - Battery Storage
 - Transformer
 - Switch Gear
 - 220kV HV Substation
 - Fence
 - Storage Containers
 - O&M Facility
 - Control Room
 - Switchboard
 - Water Tanks
 - Office Trailer
 - 220 kv Aboveground Transmission Line Option
 - 220 kv Underground Transmission Line Option
 - Car Parking
 - Access Roads
 - Emergency Access
 - Proposed Native Vegetation Screening
- ### Existing Features
- 132 kV Existing Transmission Line
 - 220 kV Existing Transmission Line
 - Power Supply (Underground) Easement
 - Existing Vegetation Screening
 - Property Cadastre

*All areas and dimensions are indicative and subject to change



ORIGINAL PLAN

Concept layout comparison

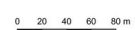


Concept Layout Plan

2226 - Elaine BESS

- Property Cadastre
 - Power Supply Easement
 - Existing Vegetation Screening
 - 132 kV Existing Transmission Line
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- ### Proposed Layout
- Site Area
 - Battery Storage
 - Inverters and Transformers
 - Switch Gear
 - 220 kV HV Substation
 - 33 kV Switch Room
 - 220 kv Aboveground Transmission Line Option
 - 220 kV Underground Cable Option
 - Control Room
 - Operation & Maintenance
 - Fence
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 - Car Parking
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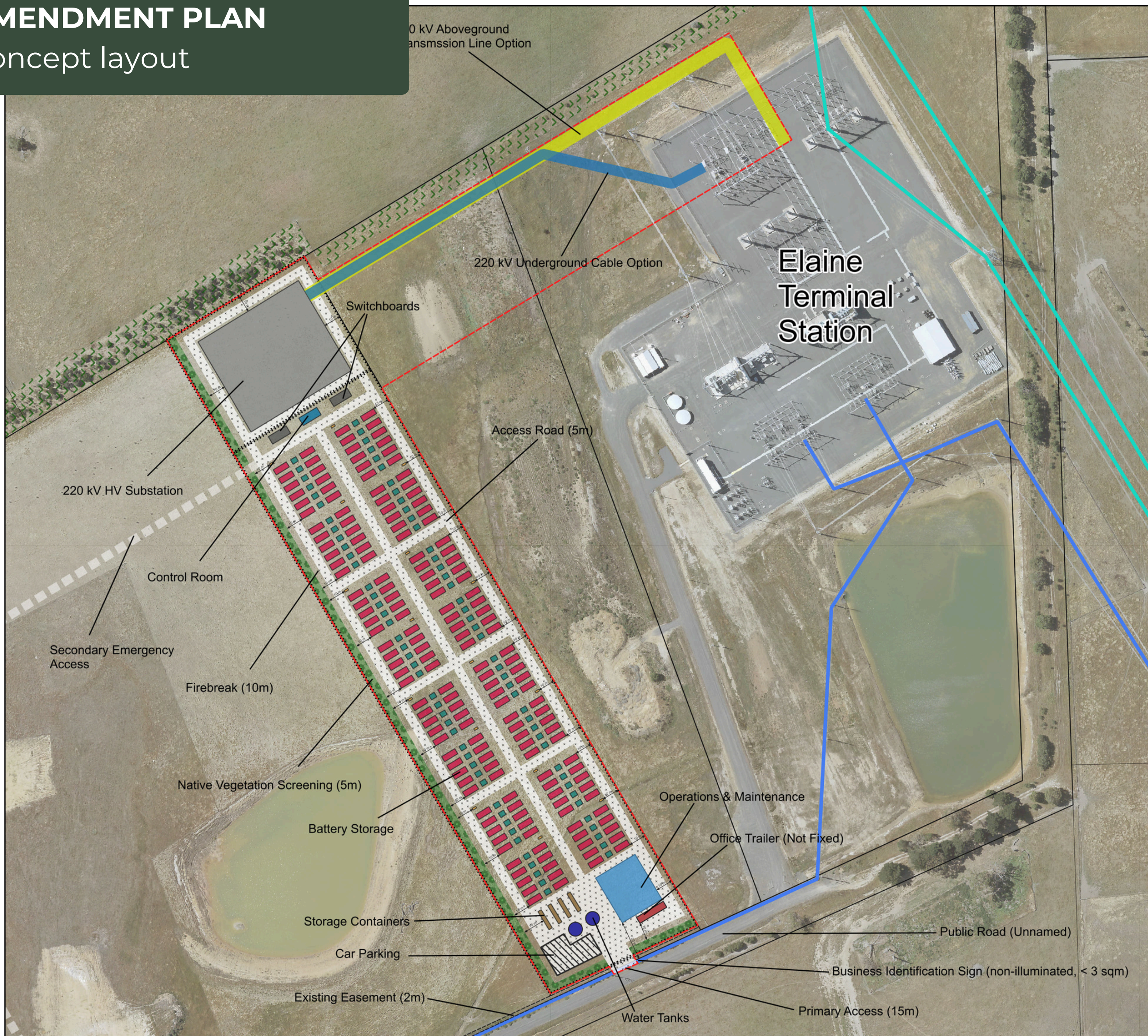
Aerial Photomontage

Elaine Battery Energy Storage System



AMENDMENT PLAN

Concept layout



Concept Layout Plan

2226 - Elaine BESS

Proposed Layout

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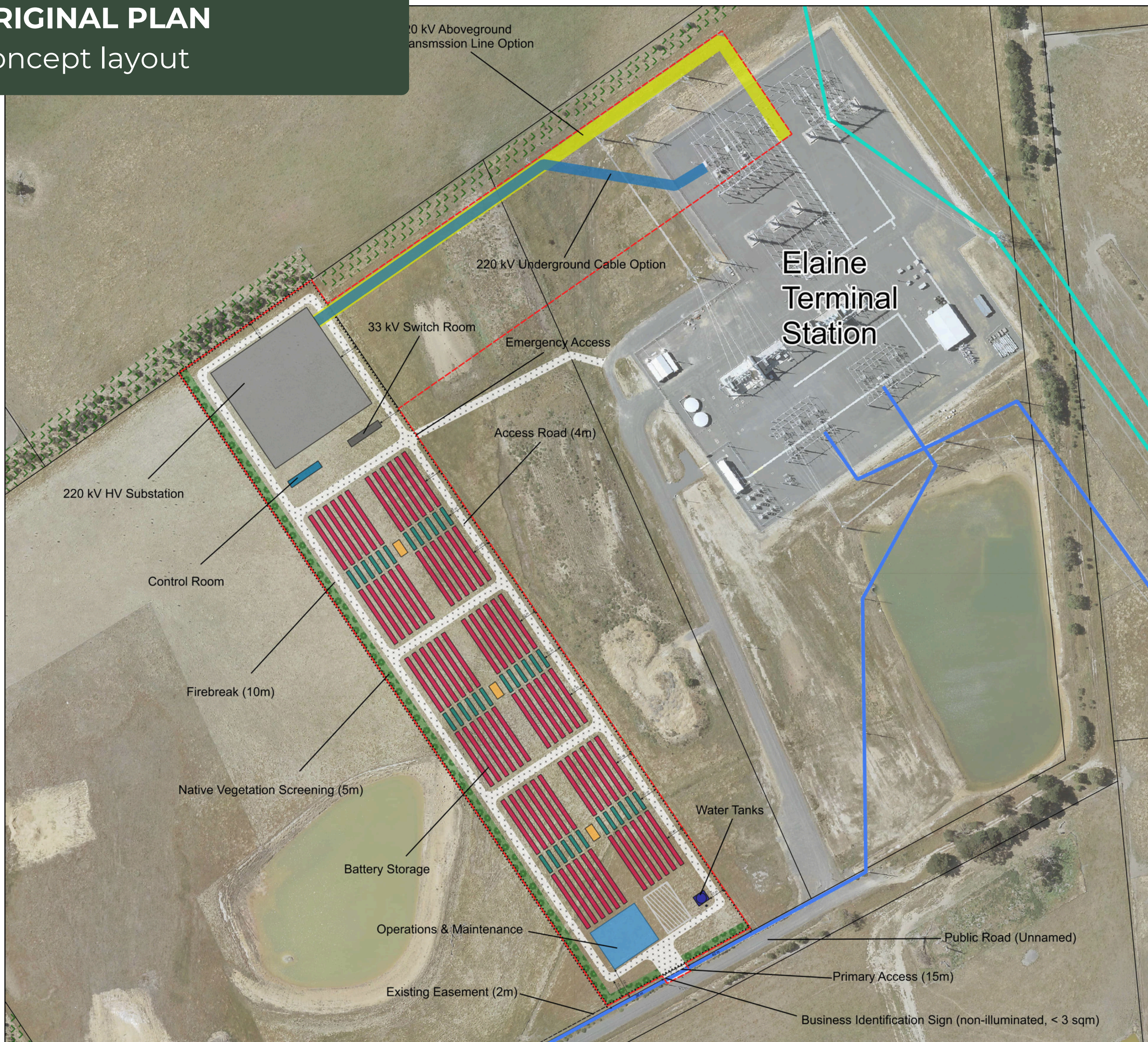
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0 20 40 60 80 m



ORIGINAL PLAN

Concept layout



Concept Layout Plan

2226 - Elaine BESS

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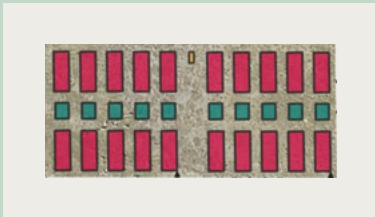
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Comparative analysis table

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The amendment is currently under assessment. It will soon be placed on public exhibition and comments will be invited.

COMMUNITY INFORMATION SESSION

Planning Amendment to Elaine Battery Energy Storage System (BESS)

Date: **13 July 2024**
Time: **3:00pm - 5:00pm**
Location: **Elaine Mechanics Institute
Hall, 20 Pearsons Road**



For more information, please visit our website or contact Cogency

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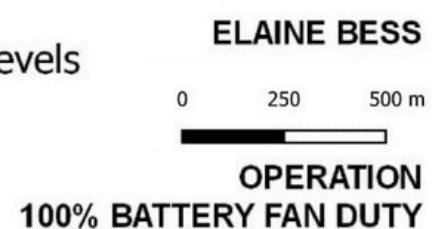
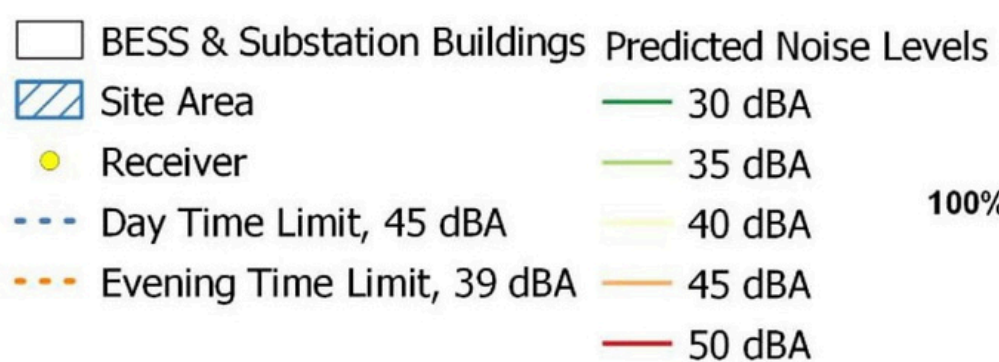
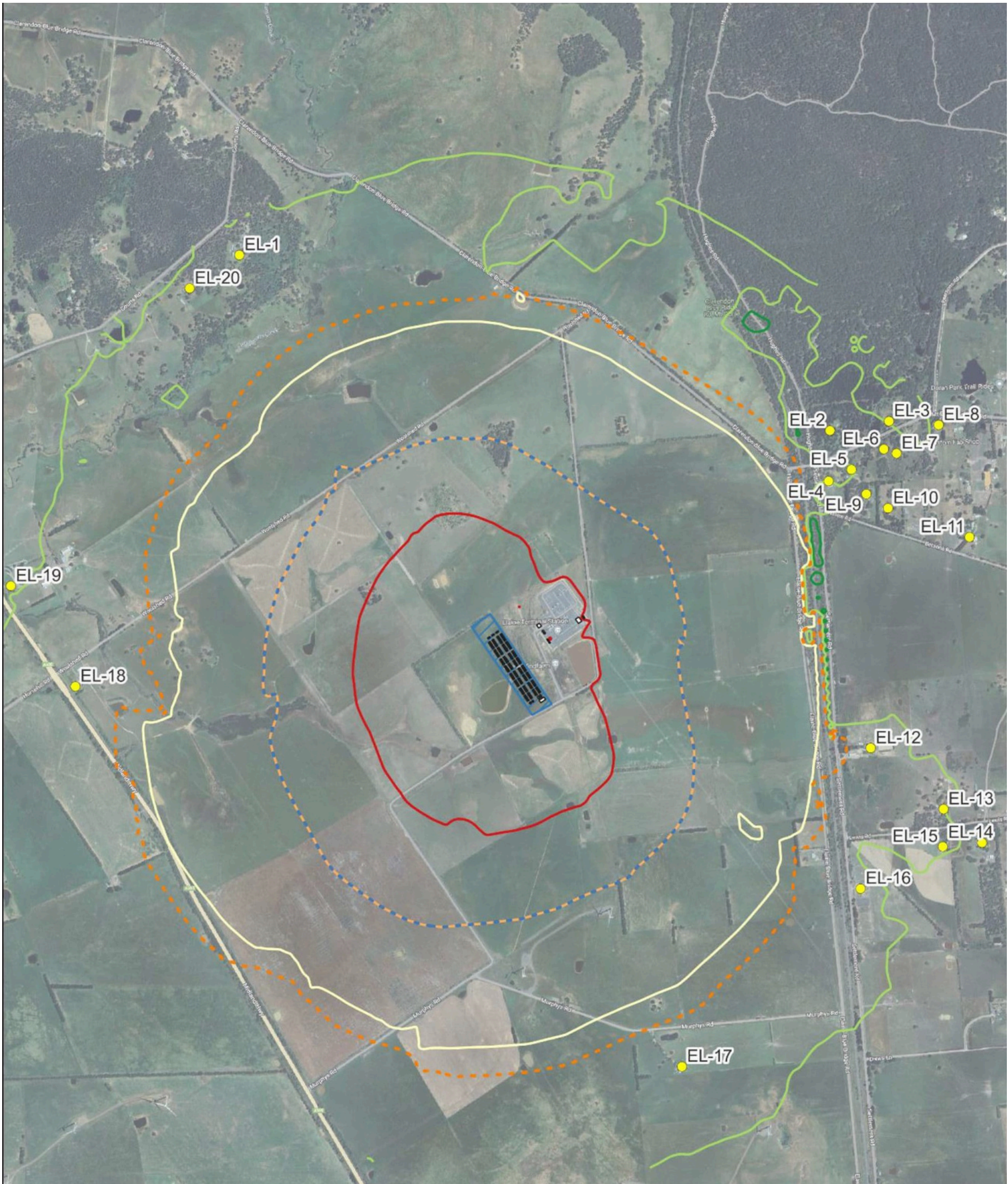
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Planning | Engagement | Strategy



Noise contour model

Elaine Battery Energy Storage System





BESS Technology

Elaine Battery Energy Storage System

What is a BESS?

A Battery Energy Storage System (BESS) is large scale energy storage that stores and releases energy from the electricity grid to maintain a constant level of energy for consumers.

A BESS comprises a number of "enclosures" or battery units (broadly resembling a shipping container), inverters, transformers and other electrical equipment. It also includes access tracks, water tanks, offices, amenities and screening vegetation (See Concept Plan for further details).

The technology seeks to ensure the National Electricity Market (NEM) remains reliable and stable. At times of excess supply in the grid, such as the middle of a sunny day, the BESS will charge by importing electricity from the grid. During times of lower supply, such as the early evening, the BESS will discharge, exporting electricity into and stabilising the grid.

In repeating this cycle daily, it helps balance out intermittent energy sources, such as wind and solar power, including from the adjacent Lal Lal Wind Farm.



Sample imagery of a BESS enclosure

BESS Benefits



Providing additional storage capacity for the National Electricity Market.



Increasing energy reliability at times of low renewable energy generation.



Facilitates the transition to clean and renewable energy sources.

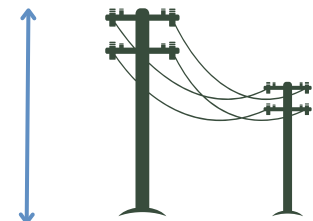
Grid Connection

The BESS will connect to the adjacent Elaine Terminal Station. This will involve either a short (200m) underground or above ground connection.

If underground, this will involve digging a narrow trench, burying the cable and reinstatement of the ground surface.

If above ground, it will involve a number of single pole transmission towers, up to approximately 21 meters high (see graphic below).

21 meters
(approx)



Potential overground transmission

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Sorry, we missed you!

We are in the area today conducting a door knock for the approved **Elaine Battery Energy Storage System (BESS)** to discuss the planning permit amendment and options around community investment.

If you would like more information, please feel free to contact us at the details listed below.

Kind regards,
Akaysha Energy and Cogency Australia

For more information, please visit our website or contact Cogency

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Elaine Battery Energy Storage System

The approved **Elaine BESS** project on the Midland Highway is designed to store and release energy and provide grid support services. It includes battery units, inverters, associated infrastructure, grid connection, access roads, vegetation screening and security fencing.

ENGAGEMENT FORM



Personal information

Name:		
Address:		
Email:		☐
Phone:		☐

Comments or Queries