



Planning Report

Capricorn BESS Project

PREPARED FOR

Capricorn BESS Pty Ltd as Trustee
for Capricorn BESS Trust

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Planning Report

Capricorn BESS Project

0729714



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ACRONYMS AND ABBREVIATIONS

Acronym	Description
BESS	Battery Energy Storage System
Council	Rockhampton Regional Council
DWATSIPM	Department of Women, Aboriginal and Torres Strait Islander Partnerships and Multiculturalism
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
ERM	Environmental Resources Management Australia Pty Ltd
Planning Act	<i>Planning Act 2016</i>
Planning Regulation	Planning Regulation 2017
Planning Scheme	Rockhampton Region Planning Scheme 2015 version 4.4
The Proponent	Capricorn BESS Pty Ltd as Trustee for Capricorn BESS Trust c/- Environmental Resources Management Australia Pty Ltd
Proposed Development	Capricorn BESS
SDAP	State Development Assessment Provisions
State Code 1	State Code 1: Development in a State controlled road environment

1. INTRODUCTION

1.1 DEVELOPMENT APPLICATION DETAILS

The details of the Development Application are outlined in **Table 1-1**.

TABLE 1-1 APPLICATION DETAILS

Development Application Details	
Site Details	
Real Property Description	<ul style="list-style-type: none"> • 2 on RP613051 • 1 on RP610887 (Bouldercombe Substation)
Address	<ul style="list-style-type: none"> • 742 Cherryfield Road, Gracemere 4702 (access via Burnett Highway) • 52949 Burnett Highway, Bouldercombe 4702
Tenure	Freehold
Total Land Area	128.13 hectares
Disturbance Footprint	18.09 hectares
Lease Area	16.65 hectares
Local Government	Rockhampton Regional Council
Planning Scheme	Rockhampton Region Planning Scheme 2015 version 4.4
Zone	<ul style="list-style-type: none"> • Rural • Special purpose (Bouldercombe Substation)
Easements	<ul style="list-style-type: none"> • D on RP611868 (electrical) • C on RP611868 (electrical) • F on RP613914 (electrical) • B on RP611868 (electrical) • E on RP611868 (electrical)
Development Application Summary	
Proposed Development Description	The Proposed Development is for a Battery Energy Storage System (BESS) and ancillary infrastructure, which will have a storage capacity of up to 300 MW / 1200MWh. The BESS containers will be connected into the BESS substation using underground cables and then connected to the Bouldercombe (Powerlink) substation via underground cable. The Proposed Development Layout Plan is included as Appendix A .
Application Type	<ul style="list-style-type: none"> • Development Permit for a Material Change of Use – Undefined Use (Battery Energy Storage System); • Development Permit for Reconfiguring a Lot - Creation of a lease exceeding 10 years; • Section 62 (1) approval (access off a State-controlled road).
Assessment Manager	Rockhampton Regional Council
The Proponent	Capricorn BESS Pty Ltd as Trustee for Capricorn BESS Trust c/- Environmental Resources Management Australia Pty Ltd
Level of Assessment	Impact Assessable
Referral	<ul style="list-style-type: none"> • Department of Transport and Main Roads (Referral Agency) • Powerlink (Referral Agency)
State Assessment Benchmarks	State Code 1: Development in a State-controlled road (State Code 1)

Development Application Details	
Regional Plan	Central Queensland Regional Plan The Project Area is not mapped within a designated Priority Agricultural Area or Priority Living Area.
Applicable Planning Scheme Codes	<ul style="list-style-type: none"> • Special Purpose Zone Code (Bouldercombe Substation) • Rural Zone Code • Reconfiguring a Lot Code • Landscape Code • Stormwater Management Code • Water and Sewer Code • Access, Parking and Transport Code • Waste Management Code • Works Code • Bushfire Hazard Overlay Code • Steep Land Overlay Code • Flood Hazard Overlay Code
Applicable Overlays	<ul style="list-style-type: none"> • Bushfire Hazard Overlay • Steep Land Overlay
Public Notification	15 business days

1.2 OVERVIEW / PURPOSE

This Planning Report has been prepared by Environmental Resources Management Australia Pty Ltd (ERM) on behalf of Capricorn BESS Pty Ltd as Trustee for Capricorn BESS Trust, a wholly owned subsidiary of Potentia Energy (the Proponent), in support of a Development Application for a Development Permit for Material Change of Use and Development Permit for Reconfiguring a Lot (creation of a lease exceeding 10 years) under the *Planning Act 2016* (Planning Act), and an approval for access from a State-controlled Road under the *Transport Infrastructure Act 1994*.

The Proposed Development is within the Rockhampton Regional Council Local Government Area, approximately 2.5 km north of Bouldercombe and 16 km south of Rockhampton, Queensland. The Project Area is located within the Rural Zone and Special Purpose of the Rockhampton Region Planning Scheme 2015 version 4.4 (Planning Scheme). As per Section 5.4.6.4 of the Planning Scheme, an Undefined Use within both the Rural Zone and Special Purpose Zone is Impact Assessable, requiring assessment against the Planning Scheme.

As per the Planning Regulation 2017 (Planning Regulation), the Development Application requires referral to the State Assessment Referral Agency, Powerlink, and the Department of Transport and Main Roads.

Relevant specialist plans and reports have been prepared by technical consultants and these have been provided to Council to assist in its interpretation and assessment of the Development Application.

These reports include:

- Traffic Impact Statement (**Appendix B**);
- Hazard Incident Management Plan (**Appendix C**);
- Noise Assessment Report (**Appendix D**);
- Stormwater Assessment Report (**Appendix E**);
- Site-based Stormwater Management Plan (**Appendix F**); and
- Landscape Concept Plan (**Appendix G**).

This report sets out details of the Proposed Development, the background to the application, and addresses relevant issues arising from the Proposed Development. A detailed assessment has been undertaken with respect to relevant State Development Assessment Provisions (SDAP) and other relevant matters of State and local interest.

1.3 PRE-LODGEEMENT DISCUSSIONS

1.3.1 ROCKHAMPTON REGIONAL COUNCIL

A Pre-Lodgement Meeting for the Proposed Development was held on 21 May 2024 with Council, which was attended by representatives of Council, ERM and the Proponent.

A record of the Pre-Lodgement Meeting is provided in **Appendix H**.

1.4 COMMUNITY CONSULTATION

As part of the Proposed Development, the Proponent has undertaken community engagement within the Bouldercombe Area to inform the local community of the Proposed Development and ensure there is transparency throughout the planning and approval stages.

Consultation undertaken to date includes:

- 20 personalised letters sent to residents of Childs Avenue and neighbours within 1.5km of the Project Area introducing the project and providing the opportunity to discuss.
- Letter sent to First Nations Group – Darumbal People Aboriginal Corporation.
- Face to Face meeting with Bouldercombe Renewable Energy Working Group on Tuesday 10 September 2024.
- Phone calls and emails to the Renewable Working Group to organise the Community Information session at a location and time that would be suitable for the wider community.
- Invitation to the Community Information session published in local newspaper – The Bouldy News.
- Creation of project webpage with project details, timelines, community feedback form, contact details, FAQs, site map, assessments completed, and preliminary DA package.
- A Community Survey made available on the project webpage. This was communicated to the Renewable Energy Working Group to share with the wider community.
- A Community Information Session was held on Thursday 24 October 2024. This session covered a wide range of topics informed by the results of the Community Survey.
- Creation of information posters related to topics raised from the Community Survey.
- Face to face meetings with local stakeholders, and businesses, including a meeting with representatives of Rockhampton Regional Council on Friday 25 October 2024.
- An information page on the Holding company's webpage, which includes fact sheets and frequently asked questions on the Proposed Development.
- Face to face meeting with the CEO and a Board member of Darumbal Enterprises on Thursday 28 November 2024.
- Attendance and stall holder at the Rockhampton Energy Forum Lunch on Thursday, 28 November 2024 to provide further details about the Proposed Development.
- Phone calls and emails with President of the Bouldercombe Progress Association.

- Inclusion in the January-March 2025 edition of The Bouldy News with information about Potentia Energy, the project and contact details for further information.
- Attendance at the Bouldercombe Australia Day event on Sunday 26 January 2025 to maintain existing relationships and establish new connections within the community. Providing an opportunity for feedback about the project.
- Face to face meeting with Bouldercombe Rural Fire Services on Sunday 26 January 2025 to discuss the project and gather any feedback.
- Face to face meeting with the Board of Directors of Darumbal Enterprises on Thursday 30 January 2025.
- Face to face meeting with representatives from Rockhampton Regional Council on Thursday 30 January 2025.
- Over 200 interactions with the community including; neighbours, Rockhampton Council, First Nations, wider community members, Bouldercombe Progress Association, Rural Fire Services.

Following input from the community, the Proponent has aimed to address community feedback around perceived potential impacts to amenity, water quality, road network and increased fire risk resulting from the Proposed Development. In response, the Proponent has updated the project to include the following:

- The preparation of a Landscape Concept Plan (**Appendix G**) and inclusion of visual screening in the form of a 3-metre-wide vegetation buffer along the northern boundary and 500mm high mound along the Burnett Highway.
- Inclusion of a 100,000 litre water supply tank, and a 10 metre defendable space around the asset. Additionally, in direct response to comments from the Bouldercombe Rural Fire Brigade, the Proponent has committed to the preparation of an Emergency Management Plan which includes detailed emergency procedures to be prepared in consultation with the Bouldercombe Rural Fire Brigade.
- The preparation of a Site-based Stormwater Management Plan (**Appendix F**) which includes the design of a water impounding area.
- The design of the BESS unit will be chosen to meet noise criteria.
- Upgrading the proposed site access intersection for a basic right turn (BAR), to be a channelised right turn (CHR).

2. SITE ANALYSIS

2.1 PROJECT AREA AND LOCATION

The Project Area is located within a rural area adjacent to the Bouldercombe Substation on the Burnett Highway. The Project Area Context Map included as **Figure 2 2** illustrates the location of the Project Area within the wider region.

The Project Area includes an 18.09 ha portion of the larger combined 128.13 ha lot area, to be subdivided via Lease Lot (exceeding 10 years) to facilitate the BESS. The Project Area is characterised by the following features:

- Currently utilised for rural purposes including stock grazing;
- Adjacent to a State-controlled Road, being the Burnett Highway;
- Contains Category X Regulated Vegetation;
- Is adjacent to the existing Bouldercombe BESS operated by Genex;
- Is adjacent to the existing Bouldercombe (Powerlink) substation;
- Is adjacent to the approved yet undeveloped Bouldercombe Solar Farm, with the BESS infrastructure overlapping a small area of the approved development area. The Bouldercombe Solar Farm is owned by Potentia Energy, the holding company of the Proponent.

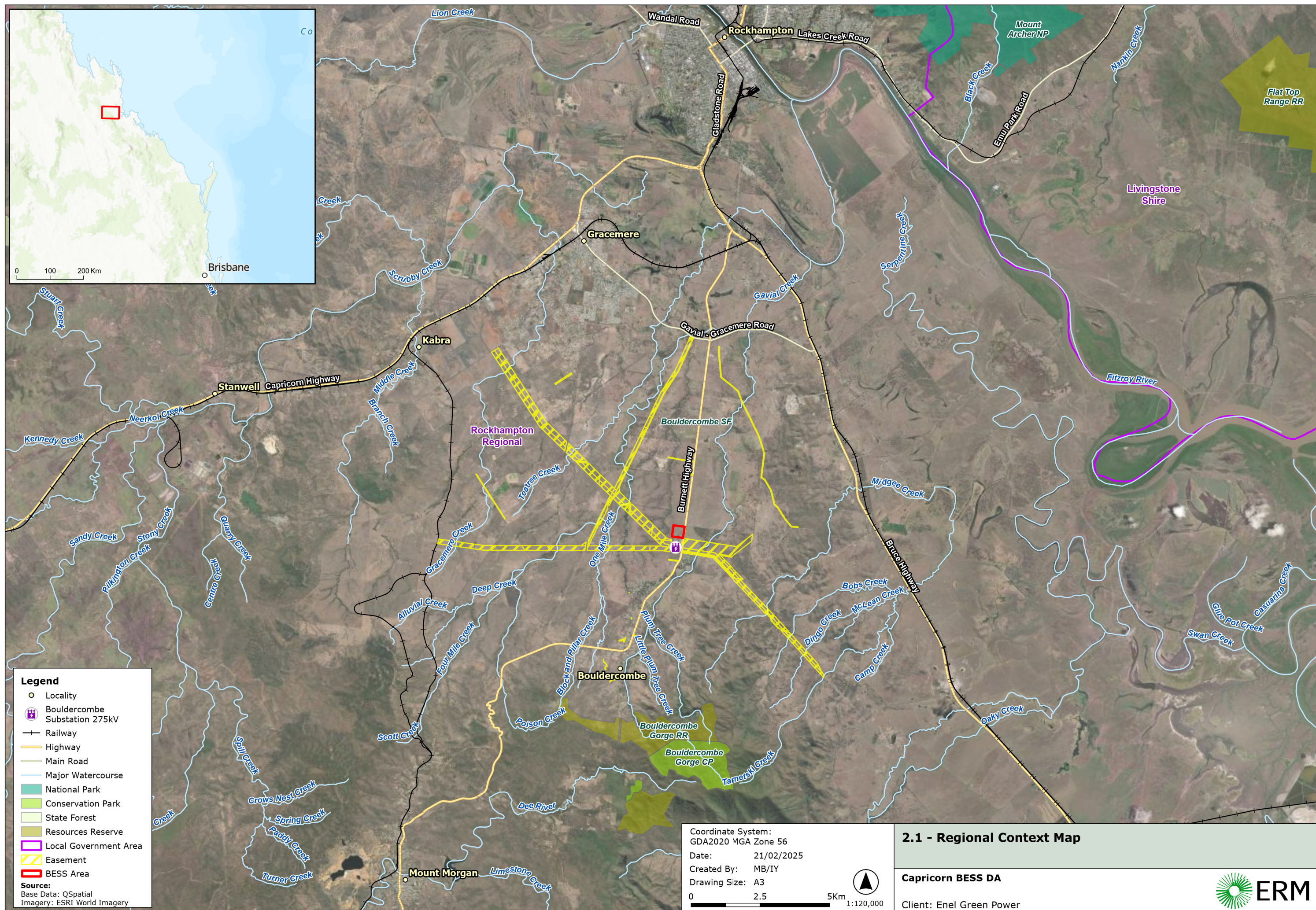
2.2 SITE CHARACTERISTICS

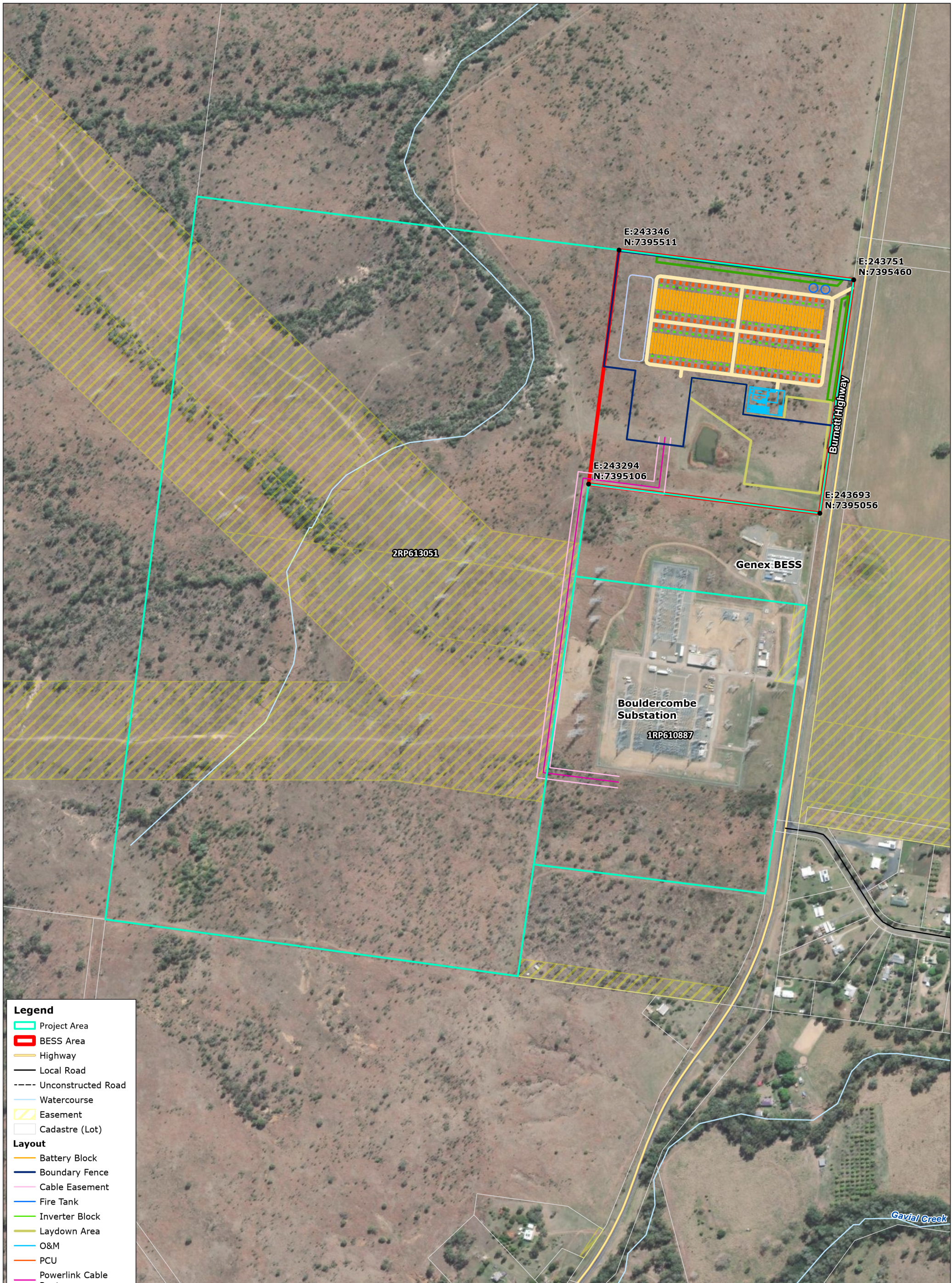
A description of the Project Area characteristics is outlined in **Table 2-1**, with **Figure 2-1** and **Figure 2-2** providing context mapping.

TABLE 2-1 SITE CHARACTERISTICS

Site Characteristics	Description
Existing Land Use	The Project Area is in the Rural Zone and Special Purpose Zone of the Planning Scheme. Existing uses include rural purposes (cattle grazing) and the Powerlink Substation, with the Project Area being in a highly disturbed condition.
Existing Structures	<p>There are no existing structures in the proposed area for the BESS facility on Lot 2 on RP613051. The Bouldercombe (Powerlink) substation is located on Lot 1 on RP610887, however it is outside of the proposed footprint for the underground transmission cable connection route.</p> <p>There are multiple residential dwellings along Childs Avenue, approximately 1 km to the South of the Project Area.</p> <p>Additionally, there is an existing BESS operated by Genex Power and existing substation facility operated by Powerlink immediately south of the Project Area.</p>
Access	Access to the Proposed Development is from the Burnett Highway via proposed site access on the frontage of the lot.
Existing Vegetation	The Project Area consists solely of mapped Category X vegetation.

Site Characteristics	Description
Existing Waterways	Existing waterways present within the Project Area include a farm dam and an unmapped stream order 1 waterway. There are no wetlands of international importance associated with the Project Area. There are also no high ecological value waterways and wetlands, nor high ecological significance wetlands that occur within the Project Area.
Surrounding Land Uses	The Project Area is predominantly surrounded by land used for agricultural and rural purposes, with residential dwellings and an existing BESS facility operated by Genex Power, located immediately south of the Project Area.
Cultural Heritage	<p>A search of the Cultural Heritage Database and Register administered by the Department of Women, Aboriginal and Torres Strait Islander Partnerships and Multiculturalism (DWATSIPM) was undertaken on 23 January 2025 DWATSIP has confirmed that no Aboriginal Cultural Heritage is recorded on the Cultural Heritage Database and Register with respect to the subject site. A copy of the search result is provided in Appendix L.</p> <p>The Proposed Development is to be undertaken in accordance with Cultural Heritage Duty of Care Guidelines. The Proponent is currently undertaking consultation with Darumbal Enterprises & Darumbal People Aboriginal Corporation as the relevant Traditional Owners of the Project Area.</p>





Legend

- Project Area
- BESS Area
- Highway
- Local Road
- Unconstructed Road
- Watercourse
- Easement
- Cadastral (Lot)
- Layout**
- Battery Block
- Boundary Fence
- Cable Easement
- Fire Tank
- Inverter Block
- Laydown Area
- O&M
- PCU
- Powerlink Cable Route
- Road
- Vegetation Buffer
- Water Impounding

Source:
BESS Layout: Client Provided
Base Data: QSpatial
Imagery: ESRI World Imagery

Coordinate System:
GDA2020 MGA Zone 56

Date: 30/01/2025

Created By: IY

Drawing Size: A3

0 100 200m



1:6,000

2.2 - Project Area Context Map

Capricorn BESS DA

Client: Enel Green Power



3. PROPOSED DEVELOPMENT

3.1 OVERVIEW OF PROPOSED DEVELOPMENT

The Proposed Development includes a BESS, which will have a storage capacity of up to 300MW / 1200MWh consisting of the following:

- 525 BESS containers;
- 105 inverters and Medium Voltage Power Stations;
- Electrical equipment including primary transformers, high voltage substation, auxiliary transformers, harmonic filters and control rooms;
- Administrative and Operations & Maintenance buildings and facilities.

The proposed battery storage technology with suitable outdoor rated housing will comprise of lithium-ion phosphate cells. Best industry practice will be observed for handling the respective battery components during installation, maintenance, replacement and recycling.

The BESS containers will be connected to inverters, which convert direct current to grid compliant alternating current, then through medium voltage power stations into the BESS substation using buried cables. The BESS substation will be connected to the Bouldercombe (Powerlink) substation via underground cable.

Utilities

The Proposed Development will not be connected to reticulated water or sewage infrastructure. Rainwater will be collected and stored via water tanks and used on site for operational activities. Sewage will be managed by an onsite wastewater treatment facility, with wastewater going to a land application area on the site, requiring treatment to a secondary standard.

Parking and Access

Access to the Proposed Development will be provided from Burnett Highway, with a car parking area provided at the site office to be located at the site frontage. The final location will be subject to detailed design. Informal carparking will be provided during construction.

Lease Area

The leased area for the Proposed Development is 16.65 ha and is required to facilitate the operation of the BESS facility following construction. This leased area will be fenced for safety and security purposes and includes the BESS infrastructure, on site office and utilities, and parking.

Bioretention Basin for Water Quality

A conventional bio-retention basin has been included in the Proposed Development design. This has been proposed to enable the site to meet Water Quality Objectives and is discussed in length in the Site-based Stormwater Management Plan ([Appendix F](#)). It has been assumed that all surface water is able to be directed to the basin, resulting in 0% site bypass catchments.

3.2 CONSTRUCTION PHASE

3.2.1 CONSTRUCTION ACTIVITIES

The Proposed Development will be installed on-site using varying sized construction crews over a 12-to-18-month period.

For the construction phase of the Proposed Development, the following activities will be undertaken:

- Mobilisation and establishment of temporary construction facilities and laydown areas;
- Civil works to create a new access track on the frontage of the project site from the Burnett Highway;
- Civil works to create a level pad/s including hardstands;
- Installation of drainage;
- Installation of overhead or underground transmission line to connect the BESS to the existing Bouldercombe substation;
- Installation of foundations for key equipment including BESS containers, inverters, power stations, switch/control building and other outdoor electrical infrastructure.
- Delivery and placement of all equipment on the foundations;
- Commissioning of the BESS.

The details of the construction phase of the Proposed Development are detailed in **Table 3-1**.

TABLE 3-1 SUMMARY OF CONSTRUCTION ACTIVITIES

Construction Phase Activities	Description
Site Access	A new site access will be created for the Proposed Development from the Burnett Highway as indicated in Appendix A .
Traffic and Car Parking	Construction phase activities are of the most relevance in terms of traffic generation, due to the traffic associated with the following activities: <ul style="list-style-type: none"> • BESS components being delivered to the site via the State Controlled Road Network; • Materials and plant being transported to and from the Project Area; and • Construction workers moving between population centres and the Project Area. Traffic impacts considered during the construction phase of the Proposed Development are further detailed in Appendix B .
Construction Workforce	Up to approximately 120 full time equivalents (FTE) personnel would be required during peak construction.
Waste	Site office is proposed, therefore onsite wastewater facilities may be required
Utilities	Utilities will be required for the site office.
Hours of Operation	Construction would be undertaken during standard construction hours: <ul style="list-style-type: none"> • Monday to Friday: 7.00 am to 6.00 pm • Saturday: 8.00 am to 1.00 pm • No works on Sunday and public holidays

3.3 OPERATIONAL PHASE

The details of the operational phase of the Proposed Development are detailed in **Table 3-2**.

TABLE 3-2 SUMMARY OF OPERATIONAL ACTIVITIES

Operational Phase Activities	Description
Site Access	Site access during the operational phase will be using the newly formed site access from the Burnett Highway. The access will remain unchanged from the construction phase.
Traffic and Car Parking	During the operational phase of the Proposed Development, it is estimated that there will be up to 10 light vehicles to access the site each day. Car parking will be accommodated on hardstand areas during the operational phase of the Proposed Development. Onsite car parking can always be fully accommodated.
Maintenance Workforce	The BESS facility only requires small crews of up to 10 persons to attend the site to manage site operations and maintenance of the facility, including reporting, safety, monitoring, and upkeep of the facility.
Waste	Site office is proposed, therefore onsite wastewater facilities may be required
Utilities	Utilities will be required for the site office.
Hours of Operation	Given the nature of the Proposed Development being an energy storage facility, the hours of operation for the Proposed Development is as required during any 24-hour period.

3.4 DECOMMISSIONING PHASE

3.4.1 OPERATIONAL LIFE

BESS facilities are typically operational for 20 to 30 years, after which the BESS infrastructure may be decommissioned and removed from the site and the land rehabilitated. Alternatively, the asset life may be extended by the refurbishment of existing infrastructure or consideration of potential new BESS technology. The approximate operational life of the BESS infrastructure is delineated as follows:

- Battery Life: the batteries themselves typically last around 10 to 20 years, depending on the type of battery used.
- Power and Electrical Infrastructure: Additional components of BESS facilities including inverters, transformers and control systems, all of which have typical lifespans of 20 to 30 years.
- Site Infrastructure: Supporting infrastructure, including buildings and security systems, typically have a useful operational life of 20 to 30 years, dependent on construction quality and environmental conditions.

3.4.2 DECOMMISSIONING AND REHABILITATION PLAN

In the event of planned decommissioning of the asset, a detailed decommissioning plan will be prepared in consultation with the following stakeholders:

- Council: Engagement with Council will be required to determine which permit conditions need to be discharged, or whether new development permits are required (in the event the project life is extended). Engagement with Council may also be required for input on the BESS facility decommissioning plan.
- Landowners: in the event the project life is extended, lease agreements are required between the Proponent and landowners. However, if the Proposed Development is decommissioned at the end of operational life, a decommissioning and rehabilitation plan will need to be provided.
- Community: Engagement with the local community will be undertaken as part of preparing the decommissioning plan for the Proposed Development as the community supports ongoing social and economic sustainability.

The decommissioning plan is to outline the following information (as a minimum):

- Decommissioning Work Method Statements (or similar) for key decommissioning activities;
- Community and Stakeholder Consultation;
- Waste Management;
- Stormwater Management;
- Noise Management;
- Dust Management;
- Traffic Management; and
- Water and Contamination Management.

Decommissioning and rehabilitation activities will adhere to the requirements imposed by the appropriate governing authorities. The process will comprise of the removal of structures and rehabilitation of vegetation where applicable. Effectively, the reclamation of the Proposed Development if required, will proceed in the reverse order of the installation. Additionally, appropriate temporary erosion and sediment control practices will be utilised during the reclamation phase of the Proposed Development, similar to those proposed for use during construction. These control practices will be inspected on a regular basis to ensure their function.

If required, the reclamation of each phase of the Proposed Development will begin within six months of the cessation of operations in association with the project's final power contract. The duration of infrastructure removal is estimated to be 6 months. Further details on the decommissioning and rehabilitation of the Project Area will be decided and provided when applicable in the required Decommissioning Plan.

3.5 POTENTIAL IMPACTS AND MANAGEMENT

3.5.1 ROAD NETWORK

A Traffic Impact Statement (**Appendix B**) has been prepared by Cambray Consulting Pty Ltd to assess potential impacts to the road network. The most significant impact on the State controlled and local controlled road networks are anticipated during the construction phase of the Proposed Development. A summary of the results of the assessment are as follows:

- The development is proposed to be accessed from the State-controlled road network via access from the Burnett Highway;
- Burnett Highway is identified as a 25/26m B-Double and PBS 2A (B25/26) Network;
- The State Controlled Road network servicing the site has the capacity to carry up to 35.0m OSOM vehicles to deliver construction equipment and BESS components;
- The turn treatment is proposed to be provided as a;
 - Channelised Right-hand turn lane treatment for vehicle approaching from the north; and
 - A Basic Auxiliary Left Turn land treatment for vehicles approaching from the south.
- Sight distances to/from the Project Area access appears sufficient to/from the north to meet the design speed in accordance with Austroads *Guide to Road Design Part 4a*;
- The proposed access configuration caters for heavy vehicle access;
- Internal access tracks are intended to be utilised for the Proposed Development and improvements to the existing flat Project Area may be undertaken for set down and car parking arrangements; and
- The peak traffic generation period does not appear to require any turn treatment upgrades based on the highly conservative traffic generation estimate.

Given the above, it is considered that the Proposed Development is compliant with the requirements of Council's Access, Parking and Transport Code (refer to **Appendix H**), and the Performance Outcomes within State Code 1 (refer to **Appendix I**).

3.5.2 HAZARD INCIDENT ASSESSMENT

Fire Risk (Internal)

A Hazard Incident Management Plan has been undertaken for the Proposed Development by Riskcon Engineering Pty Ltd (refer to **Appendix C**). As part of the assessment, hazards that have the potential to cause fire or explosion impact have been identified and assessed. Consequently, the following hazardous scenarios were developed as part of the assessment:

- Li-ion battery fault, thermal runaway and fire.
- Li-ion battery fire, toxic smoke plume.
- Electrical equipment failure and fire.
- Transformer internal arcing, oil spill, ignition and bund fire.
- Transformer electrical surge protection failure and explosion.
- Diesel release, ignition and pool fire.

Recent advancements in battery technology have moved away from lithium metal to lithium ions (held within composite materials), which reduce the incidence of lithium dendrites, creating an overall safer battery. Despite these improvements, there still exist several degradation mechanisms which are present within the battery which can result in thermal runaway. Consequently lithium-ion batteries are equipped with several safety features to prevent batteries from charging or discharging at voltages which result in battery degradation, leading to shorting of the battery and thermal runaway. The battery product proposed for use in the Proposed Development is the I-Shit SAFT BESS unit. Further details on this product are delineated within **Appendix C**. In summary, the selected battery technology does not cause flaming fire in the event of thermal runaway occurrence. Should fire be developed within one BESS enclosure, it would not transfer to nearby enclosures due to the fire safety design features.

Bushfire Risk (external)

External fire impacts have been assessed as part of the developed hazardous scenarios within the Hazard Incident Management Plan. There exists the potential for an external fire event to impact the BESS facility. The Project Area is mapped as being adjacent to medium potential bushfire intensity prone land (refer Figure 4.3 of **Appendix C**). The distance between this vegetation and the project site is an estimated 200m and is classified as a potential impact buffer; hence the potential for direct radiant heat impact from a bushfire on the site is considered negligible.

Notwithstanding, prevailing winds can cause fire embers to travel several kilometres, posing potential risk of ignition of vegetation at the BESS facility. A Bushfire Management Plan will be developed for the Proposed Development and will include vegetation management strategies to prevent the accumulation of combustible fuel loads.

Additionally, the water tank stored on site is anticipated to contain a sufficient water supply for use in combating grass fire or provide cooling to critical infrastructure as necessary.

Therefore, the potential for incident escalation because of external fire impact is deemed negligible for the Proposed Development.

Prevention, Protection and Mitigation Measures

The following fire prevention, protection and mitigation measures have been identified for the Proposed Development:

- Control of ignition sources, these include controls for fixed potential ignition sources and controls for introduced ignition sources;
- Separation of incidents, which is used to prevent the generation of potential 'domino' effects;
- Housekeeping, whereby the risk of fire can be significantly reduced by maintaining high standards of housekeeping;
- Work practices, including a variety of workplace health and safety measures detailed in section 6.1.4 of **Appendix C**;
- The creation of an emergency response plan;
- Maintaining site security;

- Fire detection, gas detection and alarming devices;
- Fire water supply, whereby the site is equipped with an 80,000 L water tank, which is deemed adequate to deal with the potential fire hazards at the site;
- Explosion venting and ventilation.

Additionally, a series of recommendations were outlined in the assessment. The recommendations relevant to bushfire management are outlined below. Refer to **Appendix C** for a complete list of recommendations for the Proposed Development.

- All site personnel shall be inducted in site procedures and emergency response protocols relevant to their roles.
- All site personnel who require training must undergo formal training in the required procedures and emergency response protocols relevant to their role.
- A team of site personnel to be trained in the use of the water cart and first-attack firefighting methods, during manned hours on site.
- Site management to prepare and maintain operational procedures to minimise the number of hazardous incidents regarding the handling of dangerous goods and chemicals.
- A site Emergency Response Plan shall be prepared and shall include measures to advise neighbouring premises in the event of an emergency with potential offset impacts

Battery Unit Fire Risk Management

BESS units will be equipped with smoke detectors and thermal detectors to detect the early signs of a fire. In the event that elevated temperatures or smoke is detected, an audible fire alarm and visual fire strobes fitted on the BESS unit will be activated. In addition, corresponding alarms will be sent to the EMS systems to alert site personnel to begin emergency procedures.

Battery units are also fitted with a ceiling mounted aerosol fire suppression system. In the event of detection of a fire within the BESS unit, the aerosol suppression system is triggered, releasing a gaseous suppressant inside the BESS.

The site is provided with water tanks that can be accessed to provide water supply in the event of fires to other sources of fire (i.e. transformers, site buildings, etc.)

Given the above, it is considered that the Proposed Development is compliant with the requirements of Council's Bushfire Overlay Code (refer to **Appendix J**).

3.5.3 NOISE

ERM has completed a Preliminary Noise Assessment of the Proposed Development (refer to **Appendix D**) The findings indicate that the predicted project noise levels are within the *Environmental Protection (Noise) Policy Acoustic Quality Objectives and Background Creep Criteria*.

The nearest Sensitive Receptors are at 1 Childs Avenue and 2 Childs Avenue, Bouldercombe which is 612m and 625m respectively from the project site boundary. To understand the existing noise environment at this location with respect to the noise influence from the existing Bouldercombe Substation and the existing Bouldercombe BESS, short-term noise monitoring was conducted.

The project criteria applicable to the Sensitive Receptors are the Acoustic Quality Objectives and the Background Creep criteria from the Environmental Protection (Noise) Policy 2019 (EPP(Noise)). The Background Creep criteria was derived from the noise monitoring results.

Noise modelling using the environmental noise modelling software, SoundPLAN v9 was conducted utilising representative and realistic noise data for the proposed project equipment.

The predicted project noise levels are within the EPP (Noise) Acoustic Quality Objectives and Background Creep criteria, and no project-specific noise mitigation measures are proposed based on this assessment or necessary to achieve legislative criteria compliance.

As the BESS technology to be implemented for the project will not be finalised until project detailed design, realistic assumptions on the equipment have been made in the noise modelling conducted. Assumptions made represent the maximum noise emissions for the project, through detailed design, it is possible that actual project noise emissions will be less than that predicted. Once a final equipment selections and relevant manufacturers' have been selected at the detailed design stage of the project, it is recommended that re-assessment be conducted to ensure ongoing compliance with the noise criteria and general environmental duty.

Given the above, it is considered that the Proposed Development is compliant with the performance outcomes of the Planning Scheme.

3.5.4 STORMWATER ASSESSMENT

A Stormwater Assessment was undertaken for the Proposed Development (refer to **Appendix E**). The Proposed Development will likely result in a small increase in imperviousness within the contributing catchment. However, it is of a scale which is considered unlikely to result in any significant changes to overland flow characteristics of the catchment.

The Proposed Development infrastructure is located within an area of minor flooding within the 1% AEP flood event. Flood modelling is to be undertaken during the detailed design phase to ensure sufficient controls are in place to avoid flood impacts.

Normal best practice stormwater designs and management measures are to be implemented during construction, operations and post-construction decommissioning of facilities. Additional information will become available at the detailed design stage of the project when the proposed construction methods and schedule are finalised.

3.5.4.1 SITE-BASED STORMWATER MANAGEMENT PLAN

A Site-based Stormwater Management Plan (SSMP) has been undertaken by GHD Australia (refer to **Appendix F**), which considers the 1% AEP storm event and outlined the stormwater quantity and quality assessments for the site. As part of the stormwater quantity assessment, existing site conditions (pre-development) were assessed to provide an understanding of the flood behaviour across the site.

Stormwater Quantity

The flood analysis for both pre- and post-development conditions at the site indicate that the design of the Proposed Development will effectively manage flood risks while minimising downstream impacts, with the Burnett Highway maintaining flood immunity. The retention of the existing farm dam on site ensures similar storage capacity between pre- and post-development conditions, mitigating potential flood risks downstream.

Based on the flood velocity results appropriate measures such as rock protection at the culvert outlets and inlets have been recommended to reduce erosion risks. Additionally, the proposed access track adjustments and culvert placements will address local flood conditions without significantly impacting surrounding properties.

Overall, the proposed design effectively manages flood risks and minimizes adverse effects on the surrounding areas. The flood afflux results indicate that the increase in water level downstream of the Project Area is less than 50 mm for most surrounding areas, except for upstream of proposed culvert CD02.

Stormwater Quality

A stormwater quality analysis was undertaken in MUSIC for the Proposed Development. The site was modelled with the inclusion of a bio-retention basin with a filter media area of 1750 m², to achieve the Water Quality Objectives (WQO) for the site. This assumes that all surface water is able to be directed to the basin and hence there is 0% site bypass catchments.

A sensitivity analysis was undertaken to investigate the effect of increasing site bypass catchments on the required bioretention filter area. This analysis indicated that if 5% of the site catchment bypasses the bioretention basin, the basin filter area would need to be increased to 2250 m² to still achieve the site's WQO. Similarly for a 10% site catchment bypass, the basin filter area would need to increase to 3750 m². When bypass catchments grew to 20% of the site, results indicated that the bioretention filter area would need to increase to greater than 10,000 m² to achieve the sites WQO, which was not considered to be practical. It is recommended that future earthwork and drainage designs minimise the amount of site bypass catchments, by ensuring positive fall and grading to the proposed bioretention basin. This will minimise the required bioretention filter area and avoid the introduction of additional Stormwater Quality Improvement Devices to meet the target water quality objectives. It is recommended that once earthwork and pipe drainage designs are progressed, the MUSIC model is updated to incorporate the final design areas and bypass catchments to ensure that the bioretention basin still achieves the required site WQOs.

Given the above, it is considered that the Proposed Development complies with Council's Stormwater Management Code, Flood hazard Overlay Code, and relevant Performance Outcomes of State Code 1 (refer to **Appendix J** and **Appendix I**).

3.5.5 LANDSCAPE CONCEPT PLAN

A Landscape Concept Plan has been prepared by Covey Associates for the Proposed Development (refer to **Appendix G**). The Landscape Concept Plan details a proposed 3-metre-wide vegetation buffer on a 500mm high mound along the Burnett Highway (refer to **Photograph 1** for existing view of the site from the Burnett Highway), and a 3-metre-wide vegetation buffer along the northern boundary of the site to provide appropriate screening. An indicative native planting palette has also been provided for consideration. The objective of the buffer is to provide a dense and fast-maturing screen to filter views of the Proposed Development from the Burnett Highway. The height of the proposed mounding will serve to provide additional screening at ground level.

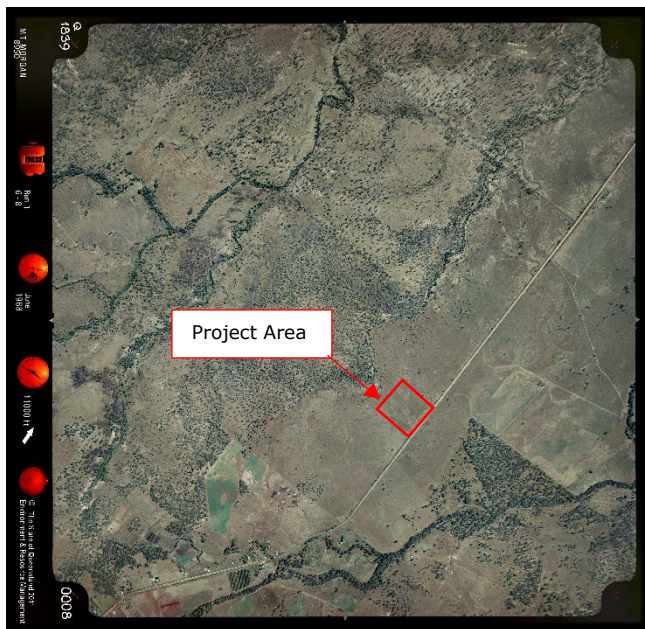


PHOTOGRAPH 1 GOOGLE STREET VIEW OF PROJECT SITE

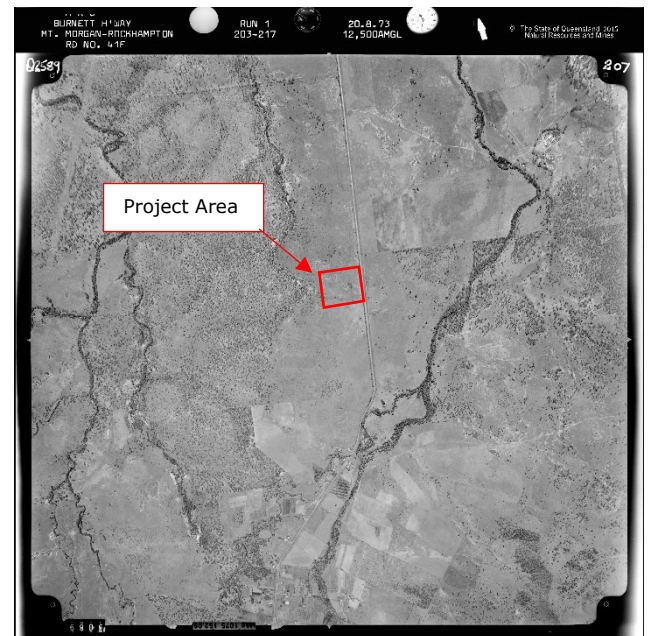
3.5.6 AGRICULTURAL LAND

The Project Area is mapped within Council's Agricultural Land Overlay, being specifically mapped as Class B Agricultural Land which is defined as being "limited crop land that is suitable for a narrow range of current and potential crops due to severe limitations" (DSITI, DNRM, 2015). Approximately 9.34 ha of the Project Area is located within land mapped for Class B Agricultural Land. Desktop analysis of the site (refer to **Photograph 1**) shows the Project Area is currently not utilised for cropping purposes, with vegetation on site being highly disturbed due to historic use for cattle grazing. It is therefore considered unlikely that this area would serve as quality agricultural land for cropping purposes as evidenced through historic imagery (refer to **Photograph 2 - Photograph 5**).

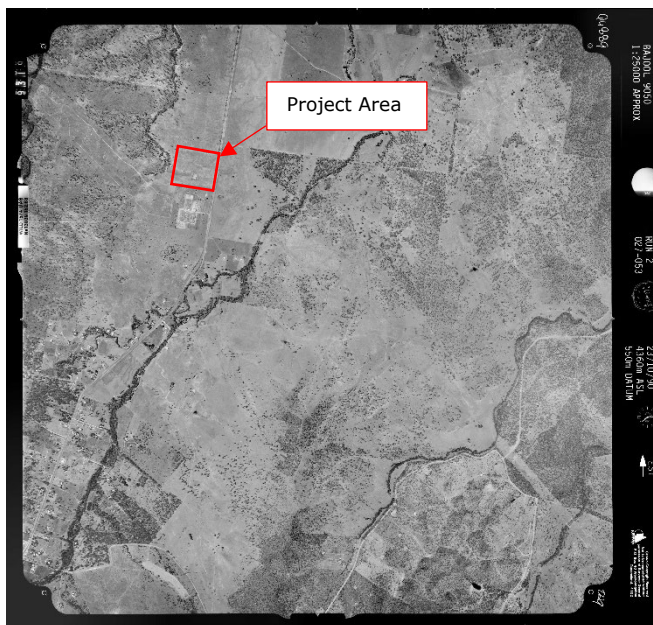
A Development Approval (Council Reference D18-2017) over the Project Area for the construction and operation of a Solar Farm facility is in place, consenting to the approval for the mapped Class B Agricultural Land for use as a solar farm facility. Considering the Project Area falls within this existing approval area, it is reasonably considered that this area does not constitute priority agricultural land. It is concluded that the strategic co-location of the Proposed Development with similar infrastructure will not serve to alienate or impact the agricultural productivity of the surrounding landscape, as it is directly adjacent to existing infrastructure.



PHOTOGRAPH 2 HISTORIC IMAGERY OF SITE
1968



PHOTOGRAPH 3 HISTORIC IMAGERY OF SITE
1973



PHOTOGRAPH 4 HISTORIC IMAGERY OF SITE
1990



PHOTOGRAPH 5 HISTORIC IMAGERY OF SITE
2004

4. PLANNING ASSESSMENT

4.1 PLANNING ACT 2016

The Planning Act provides the overall statutory planning framework and development system for Queensland. The purpose of the Planning Act is to establish an efficient, effective, transparent, integrated, coordinated, and accountable system of land use planning, development assessment and related matters that facilitates the achievement of ecological sustainability.

To facilitate the provision of the Proposed Development over the proposed area, a Development Application for a Material Change of Use (Undefined Use (BESS)) and Reconfiguring a Lot is required.

4.1.1 IMPACT ASSESSMENT

As outlined in the following, Impact Assessable Development Applications are required to be lodged with the assessment manager identified by the Planning Regulation 2017.

Further, the assessment manager is required to assess the Proposed Development in accordance with section 45(5) of the Planning Act:

1. An impact assessment is an assessment that –
 - a. *Must be carried out –*
 - i. *Against the assessment benchmarks in a categorising instrument for the development; and*
 - ii. *Having regard to any matter prescribed by regulation for this subparagraph; and*
 - b. *May be carried out against, or having regard to, any other relevant matter, other than a person's personal circumstances, financial or otherwise.*

4.1.2 PUBLIC NOTIFICATION

As per section 53(4) of the Planning Act, given that the application is Impact Assessable, public notification is required. The Development Application is required to be publicly notifiable for a period of at least 15 days.

4.2 STATE PLANNING MATTERS

4.2.1 APPLICABLE STATE MAPPING

The State Development Assessment Mapping System provides a central representation of all available mapping that may assist in identifying relevant assessment or referral triggers under the Planning Regulation 2017 and relates to provisions contained within the SDAP. A copy of the DAMS mapping is available within **Appendix K**, with the following matters of State interest identified specifically for the Project Area.

State Controlled Road – Area within 25m of a State Controlled Road

The Burnett Highway is located immediately to the east of the Proposed Development, with access to the site proposed via Burnett Highway.

4.2.2 STATE ASSESSMENT AND AGENCY REFERRALS

Schedule 10 of the Planning Regulation outlines the following referral triggers that applicable for the Proposed Development and are addressed as part of this report.

- Schedule 10, Part 9, Division 4, Subdivision 2, Table 4 – Material change of use that is within 25 m of a State-controlled Road; and
- Schedule 10, Part 9, Division 2, Table 1 and Table 2 – Reconfiguring a lot subject to an easement or near a substation site and material change of use near a substation site or subject to an easement.

4.2.3 STATE DEVELOPMENT ASSESSMENT PROVISIONS

The Proposed Development triggers referral to the State Assessment and Referral Agency for assessment against State Code 1: Development in a State Controlled Road environment.

An assessment of State Code 1 is provided in **Appendix I**. The assessment demonstrates that the proposed development complies with State Code 1. The proposed development is consistent with the intent of the Code and will not have any adverse impacts on the State-controlled road or State-controlled road network.

4.2.4 CENTRAL QUEENSLAND REGIONAL PLAN

The Project Area is located within the Central Queensland Regional Plan 2013 (Regional Plan) area.

Part 2.2 of the Planning Scheme identifies that the Regional Plan has been appropriately integrated into the Planning Scheme and therefore the development application does not require separate assessment against the Regional Plan.

Specifically, the Regional Plan identifies regional outcomes, regional policies for achieving the regional outcomes, and the State's intent for the future spatial structure of the region including Priority Agricultural Areas, Priority Living Areas, and priority outcomes for infrastructure.

The Regional Plan identifies Priority Living Areas, which are to be utilised to provide opportunities for towns to expand in the next 20 years (i.e. 2033). Local governments can approve other activities within Priority Living Areas should they deem they are appropriate and in the community's interest. The Project Area is not located within a mapped Priority Living Area.

The Regional Plan identifies a Priority Outcome for electricity infrastructure in the region to grow energy generation capabilities through the public and private sector. Particularly, the Regional Plan identifies the need for transmission/ distribution systems to respond to growth in the region.

Given that the Proposed Development will allow energy generation in the region to be connected to the adjacent substation, the Proposed Development is considered consistent with the intent of the Regional Plan and will contribute to achieving its outcomes.

4.2.5 STATE PLANNING POLICY

Section 2.1 of the Planning Scheme identifies that the State interests under the State Planning Policy have been appropriately integrated into the Planning Scheme and therefore the development application does not require separate assessment against the Policy.

The State Planning Policy was released on 3 July 2017 and is the State instrument made under the Planning Act. The State Planning Policy contains 17 State interests that are important to protect and enhance through Queensland's continued development. The State interests are arranged under five broad themes:

- Liveable communities and housing;
- Economic growth;
- Environment and heritage;
- Safety and resilience to hazards; and Infrastructure.

4.3 ROCKHAMPTON REGION PLANNING SCHEME 2015 VERSION 4.4

The Planning Scheme provides the framework for managing development in a way that advances the purpose of the Planning Act and to meet the needs of the Rockhampton region.

The Strategic Plan within the Planning Scheme sets the policy direction for the scheme and forms the basis for ensuring appropriate development occurs in the Planning Scheme area.

4.3.1 DEVELOPMENT DEFINITION

Council have not yet adopted the BESS definition provided by the Queensland Planning Provisions into the Planning Scheme. As such, under Schedule 1 of the Planning Scheme, the BESS is defined as 'Undefined Use'. Recently, the Planning Regulation was amended to include a use definition for a Battery Storage Facility. The Planning Regulation amendment has not been reflected in the Planning Scheme. Under Schedule 24 of the Planning Regulation, 'Battery Storage Facility' is defined as:

"The use of premises for the operation of 1 or more battery storage devices."

4.3.2 ZONING

The Project Area is in the Rural Zone and Special Purpose Zone of the Planning Scheme.

The purpose of the Rural Zone is to:

1. *Ensure that land with productive capacity is maintained for a range of existing and emerging rural uses that are significant to the economy of the planning scheme area;*
2. *Recognise that different types of rural land are suited to specific uses such as animal industries, horticulture, cropping, intensive animal industries, intensive grazing and extractive industries;*
3. *Prevent the establishment of development which may limit the productive capacity of the land;*
4. *Provide for diversification of rural industries where impacts can be managed; and*
5. *Maintain the environmental values of all rural land.*

The purpose of the Special Purpose Zone is to:

1. *Protect important special purpose sites from the establishment of inappropriate land uses;*
1. *Minimise land use conflict and ensure that development does not adversely affect the amenity and characteristics of the surrounding area; and*
2. *Ensure that development within the zone has appropriate standards of infrastructure and essential services.*

4.3.3 CATEGORY OF ASSESSMENT

4.3.3.1 MATERIAL CHANGE OF USE

In accordance with Section 5.4.6.4 of the Planning Scheme, a Material Change of Use Development Application for 'Undefined Use' within the Rural Zone is 'Impact Assessable Development.' As such, the Proposed Development is to be assessed against the entire Planning Scheme and requires public notification.

4.3.3.2 RECONFIGURING A LOT

The Proposed Development seeks to divide the land of Lot 2 on RP613051 into parts by agreement via a lease exceeding 10 years. In accordance with Table 5.5.1 of the Planning Scheme, reconfiguring a lot via the creation of a lease exceeding 10 years is not listed within the table of assessment and thus is considered 'Code Assessable Development.'

Notwithstanding, as the Material Change of Use Development Application is to be assessed as 'Impact Assessable Development' this aspect of the application will also be treated as such. Therefore, the Proposed Development is to be assessed against the entire Planning Scheme and requires public notification.

4.3.4 STRATEGIC FRAMEWORK

The Planning Scheme Strategic Framework sets the policy direction for the Planning Scheme and forms the basis for ensuring appropriate development occurs with the Planning Scheme area for the life of the Planning Scheme. As per the Planning Scheme, an Impact Assessable application is to be assessed against the Strategic Framework.

Table 4-1 provides an assessment of the Proposed Development against the Strategic Framework outlined in the Planning Scheme.

TABLE 4-1 STRATEGIC FRAMEWORK ASSESSMENT

Strategic Theme	Response
Settlement pattern	<p>The Proposed Development has been strategically co-located immediately adjacent to existing infrastructure, being the BESS operated by Genex and the Bouldercombe Substation operated by Powerlink. Through the location of the Proposed Development with like facilities, the surrounding landscape is maintained through the avoidance of fragmentation should the development be located elsewhere. Additionally, the Proposed Development would not be suitably located outside of the chosen Project Area as no viable substation connection is available.</p> <p>The Proposed Development has been assessed for its potential impacts on natural hazards, including bushfire and flooding, and is compliant in avoiding and mitigating potential impacts to the surrounding environment.</p>
Natural environment and hazards	<p>The Project Area is not mapped as being within Council's Biodiversity Overlay Code, Character Overlay Code or Heritage Overlay Code. It can therefore be concluded that the Proposed Development will not negatively impact on these elements as they have not been identified within the Project Area.</p>

Strategic Theme	Response
	<p>A Hazard Incident Management Plan (Appendix C), Stormwater Assessment Report (Appendix E), and Site-based Stormwater Management Plan (Appendix F) have been completed for the Proposed Development, concluding that the project will not result in unsustainable impacts on the natural functioning of floodplains and the quality of water entering waterways and local catchments. Additionally, no significant risk to human life and property from Proposed Development in the areas surrounding the project have been identified.</p>
Community identity and diversity	<p>The Proposed Development involves the construction of a BESS facility and ancillary infrastructure which will enable the Rockhampton region to increase their energy generation capabilities.</p> <p>The Proposed Development does not relate to, nor will it adversely impact housing diversity, sport and recreation, social, arts and cultural infrastructure.</p> <p>Community identity should not be impacted, as the project does not relate to the creation of a place intention for public use. Additionally, as the Project Area is not mapped within a heritage or character place, the Proposed Development will not impact these elements.</p>
Access and mobility	<p>The Proposed Development is for a BESS facility and ancillary infrastructure, and as such is unsuitable for access by the public. The lease area for the development will be fenced for safety and security purposes.</p> <p>A Traffic Impact Statement (Appendix B) has been prepared for the development and does not identify any significant impacts to the State-controlled or local road network. Additionally, the application requires referral to the Department of Transport and Main Roads to ensure the safety of the road network is maintained.</p>
Infrastructure and services	<p>The Proposed Development will address the existing and long-term energy needs of the community by allowing generated energy to be stored and connected to the adjacent substation for distribution.</p>
Natural resources and economic development	<p>The Proposed Development provides the opportunity for increased employment opportunities during the construction and operational phases, as identified in Table 3-1 and Table 3-2.</p> <p>Additionally, as detailed in Section 3.5.6, whilst a portion of the Project Area is mapped as being Class B Agricultural Land, the removal of this portion will not result in significant impacts as the Project Area has historically not been utilised for productive cropping purposes. Additionally, as delineated in Section 3.5.6, the Project Area has already been designated for use as a Solar Farm facility under an existing Council Approval (Council Reference D18-2017).</p>

Additionally, **Table 4-2** provides a response to the relevant identified Strategic Outcomes in the Strategic Framework.

TABLE 4-2 STRATEGIC OUTCOME ASSESSMENT

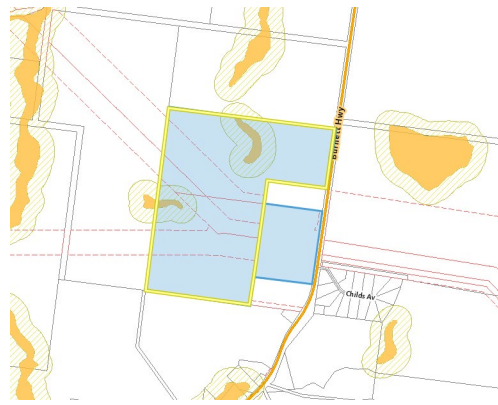
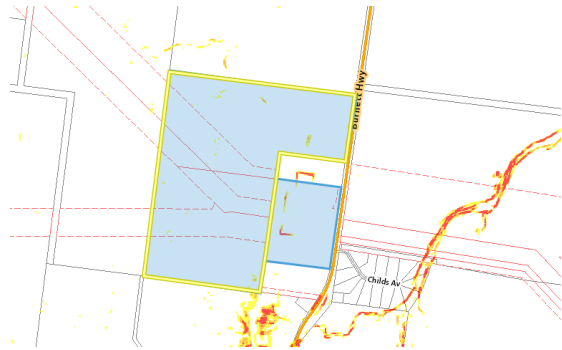
Strategic Outcome	Response
Settlement Pattern (Element – Rural)	
1. Rural land has important economic, environmental, and scenic values and provides for uses including primary production, mining and tourism	The Proposed Development, while is not a mining, tourism or primary production land use, will not have any impact on environmental and scenic values. The Proposed Development will provide economic benefit to the region through the employment of workers during construction and the provision of energy stability and security to the region during operation.
2. Rural land is not used for urban development and is to be protected for its productive, landscape and natural resource values.	The Proposed Development is not for urban development and will not impact the productive landscape and natural resource values.
4. Development will not alienate or impact on the productive agricultural capacity of rural areas.	The Project Area is in the Rural Zone, however, is located adjacent to an existing BESS and substation. The use of the Project Area as a BESS will not alienate or impact on surrounding rural land uses.
6. Subdivision of rural land will be regulated by minimum lot sizes established to maintain the productive potential of the land. The amalgamation of existing smaller lots into larger proportions is encouraged.	
14. Other uses that are required to coexist with rural uses will be accommodated where they do not: <ul style="list-style-type: none"> a. diminish the productivity of agricultural land; b. impact on adjoining or nearby uses; c. impact on the capacity and safety of State-Controlled roads; and d. result in fragmentation of rural land. 	The Project Area is located within the Rural Zone, however, is located adjacent to an existing BESS and substation. The use of the Project Area as a BESS will not alienate or impact on surrounding rural land uses. Additionally, the Proposed Development will not diminish the productivity of surrounding agricultural land nor the capacity and safety of the State-controlled road.
Natural Environment and Hazards	
2. Development does not create unsustainable impacts on: <ul style="list-style-type: none"> a. the natural functioning of floodplains; b. environmentally significant areas, including areas of State and locally significant vegetation, which provide fauna habitat and support biodiversity; and c. the quality of water entering waterways, wetlands and local catchments. 	The Proposed Development is located on Category X vegetation (Appendix K) and will not impact any environmentally significant areas. Additionally, the functioning of floodplains and water quality will not be impacted.
3. Development does not increase the risk to human life and property in areas that are affected, or potentially affected, by storm-surge, erosion, sea-level rise or other coastal processes, flooding, bushfire, or landslide. This occurs through the avoidance of natural hazards in new development areas.	The subject site is affected by bushfire hazards however the Proposed Development will not increase the risk to human life and property in the area.

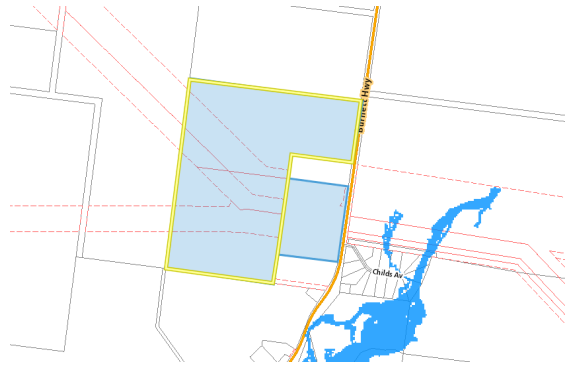
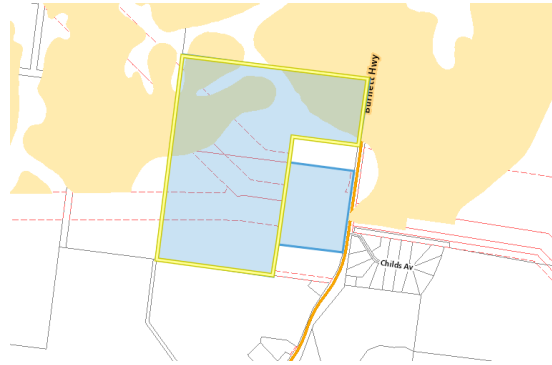
Strategic Outcome	Response
Infrastructure and Services	
Element – Inter-regional networks	
5. Development provides for the safe and efficient provision of energy infrastructure adequate to satisfy community's needs and where possible accommodate sustainable/alternative energy options such as solar.	Given the Proposed Development will allow energy generated in the region to be connected to the adjacent substation, the development will be adequate to accommodate existing and future energy needs of the community.
Element – Local area networks	
6. The design and location of infrastructure maximises the use and benefits of existing infrastructure and minimises the need for additional infrastructure and services.	The strategic location of the Proposed Development immediately adjacent to the Powerlink Substation has been done so to maximise the use and benefits of the existing substation facility, whilst minimising additional infrastructure and services should the development be located elsewhere.

4.3.5 OVERLAY MAPPING

A review of the Planning Scheme was undertaken with applicable mapping identified in **Table 4-3**.

TABLE 4-3 APPLICABLE OVERLAYS

Overlay	Planning Scheme Mapping	Project Relevance
Bushfire Hazard		A small portion of the Project Area is mapped as being a medium potential bushfire intensity. A bushfire risk assessment may not be required; however, the Proponent will submit a Fire Safety Management Plan detailing emergency response and mitigation measures to reduce the risk of fire and adverse impacts to adjacent landowners.
Steep Land		A small portion of the Project Area is mapped as steep land. The current project layout largely avoids these areas, no further assessment is required.

Overlay	Planning Scheme Mapping	Project Relevance
Flood Hazard		The Project Area is not mapped within the flood hazard overlay area by Council. Notwithstanding, Council have advised that previous flood modelling in the area indicates an existing flow path over a section of the Project Area. Subsequently, a Site-based Stormwater Management Plan (refer to Appendix F) has been prepared for the Proposed Development considering the 1% AEP event.
Agricultural Land Class		As detailed in Section 3.5.6 , the Proposed Development is not expected to impact on agricultural land.

4.3.6 APPLICABLE ASSESSMENT BENCHMARKS

Under the provisions of the Planning Scheme and SDAP, the Proposed Development is required to be assessed against the Assessment Benchmarks – Codes, stated in **Table 4-4**.

TABLE 4-4 ASSESSMENT BENCHMARKS - CODES

Development Codes	Overlay Codes	SDAP Codes
<ul style="list-style-type: none"> Special Purpose Zone Code Rural Zone Code Reconfiguring a Lot Code Landscape Code Stormwater Management Code Water and Sewer Code Access, Parking and Transport Code Waste Management Code Works Code 	<ul style="list-style-type: none"> Bushfire Hazard Overlay Code Steep Land Overlay Code 	State Code 1: Development in a State-controlled road environment

4.3.6.1 BENCHMARK COMPLIANCE SUMMARY

A detailed assessment of the Proposed Development against the assessment benchmarks has been undertaken and is provided in **Appendix H** and **Appendix I**.

From the assessment, the Proposed Development is generally compliant with the assessment benchmarks in **Table 4-4**. As per the assessment, the Proposed Development is proposed to seek no alternative outcomes, as such, the Proposed Development is compliant with the intent of the Rural Zone. A benchmark compliance summary, including additional consideration of the Rural Zone and Reconfiguring a Lot Codes is provided below:

Rural Zone Code

As the Proposed Development is located in the Rural Zone, the project has been assessed against the specific benchmarks for assessment of the Rural Zone Code. Site selection within the Rural Zone has been selected due to the provision of existing major electricity infrastructure within the area, being the Bouldercombe BESS facility operated by Genex and Bouldercombe (Powerlink) Substation. The strategic co-location of the Proposed Development with similar infrastructure will not serve to alienate or impact the agricultural productivity of the surrounding landscape, as it is directly adjacent to existing infrastructure. Additionally, impacts to the rural amenity and landscape features of the region is minimised and will not be further degraded, as the Proposed Development will utilise existing electricity infrastructure. It is therefore considered that the co-location of the Proposed Development with like infrastructure is not inconsistent with the purpose of the Rural Zone Code.

Reconfiguring a Lot Code

A Development Permit for a lease lot (exceeding 10 years) is sought to facilitate the operation of the proposed BESS facility and has been assessed against the applicable assessment benchmarks. The site area is proposed to be established via a lease lot (exceeding 10 years) over the parent property, which includes the development site for the BESS facility and underground connections.

5. PROJECT COMMITMENTS

As part of the Proposed Development, the Proponent will make the following commitments to ensure that the Proposed Development provides the best outcome for the local community and maintains the rural amenity of the area:

1. The approved development will comply with the acoustic quality objectives in the Queensland Environmental Protection (Noise) Policy 2019 at all existing noise affected sensitive receptors as at the date of any approval;
2. The Proponent will submit to Council a Traffic Management Plan which includes measures to mitigate adverse impacts to traffic during construction;
3. The Proponent will submit to Council a Fire Safety Management Plan, which details emergency response measures and mitigation measures to reduce risk of fire and adverse impacts to adjacent landowners;
4. The Proponent will submit to Council a Construction Environmental Management Plan;
5. Following project approval, the Proponent will apply to Council for the necessary operational and building works approvals;
6. The proponent commits to developing and implementing a community benefits scheme in consultation with the local community.
7. Preparation of a Decommissioning and Rehabilitation Plan created when the project reaches end of life;
8. The final design shall include the following:
 - a. Suitable equipment to respond to any fires on site, including provision of a 100,000 litre water supply tank fitted with a Bouldercombe Rural Fire Service compatible suction connection;
 - b. A minimum 10 meter defendable space around the perimeter that permits unobstructed vehicle access, and assists the emergency services as much as practicable if there is a fire in the vicinity of the site; and is managed as an asset protection zone (including the defendable space);
Appropriate management of vegetation fire loads on site to reduce bushfire risk.
 - c. Notify the relevant local emergency services following completion of construction of the development, and prior to commencing operations; and
9. Preparation of an Emergency Management Plan including detailed emergency procedures in consultation with Bouldercombe Rural Fire Brigade prior to commencement of operations

6. CONCLUSION

This Planning Report is in support of an Impact Assessable Development Application for a Development Permit for a Material Change of Use – Undefined Use (Battery Energy Storage System) and Reconfiguring a Lot – creation of a lease exceeding 10 years, to authorise the construction and operation of a BESS facility and ancillary infrastructure, including lease for the life of the Proposed Development.

This Planning Report demonstrates that the Proposed Development is consistent with the relevant State and local planning intents for the Rural Zone and Special Purpose Zone in the Rockhampton Regional Council Local Government Area.

The proposed BESS has been assessed against the relevant assessment benchmarks and has demonstrated compliance with the Overlay Codes and SDAP (**Appendix I** and **Appendix J**). The Proposed Development satisfies the overall outcomes of the applicable codes and does not significantly impact on the existing rural amenity of the surrounding area.

Based on the assessment undertaken in this Planning Report, it is concluded that the Proposed Development supports the overall planning intent for the Rural Zone and Special Purpose Zone. Accordingly, it is requested that Council approve the Development Application, subject to reasonable and relevant conditions.



APPENDIX A PROPOSED DEVELOPMENT LAYOUT PLAN



APPENDIX B TRAFFIC IMPACT STATEMENT



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