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Appendix I

Gladstone Regional Council
Planning Scheme Code Assessment

Prepared for: Private Energy Partners Pty Ltd

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Prepared for:

Private Energy Partners Pty Ltd

Prepared by:

Attexo Group Pty Ltd attexo.com.au ABN 75 637 138 008

Attexo Group Pty Ltd 2024

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1. Gladstone Regional Council Planning Scheme 2017 – Code Assessment Tables

1.1 Rural Zone Code

An assessment of the proposed battery energy storage system against the relevant assessment benchmarks of the Rural Zone Code

is provided in Table 1. Table 1: Rural Zone Code Assessment Benchmark

Performance Outcomes	Acceptable Outcomes	Response	
Caretaker's Accommodation Not Applicable – The proposed development does not involve the provision of caretaker's accommodation			
Roadside Stall Not Applicable - The proposed development does not involve the provision of roadside stall			
Built Form (if involving building work)			
PO3	AO3.1	Complies with AO3.1	
Buildings are designed and located so as not to adversely impact on the rural character and amenity of the locality.	Building height for a dwelling house does not exceed 8.5m. Building height for Rural activities does not exceed 20m.	The Project does not involve a dwelling house, or buildings associated with Rural activities. The control building (site office, operation and maintenance facility and staff amenities) nor the workshop shed will exceed 8.5 m in height. The substation (transformer) will be the highest structure on site and will not exceed 20 m.	
	AO3.2	Complies with AO3.2	
	Buildings, other than a roadside stall, are setback a minimum of:1. 10m from the front and side boundaries for allotments greater than 2ha, or	The proposed development involves a Battery Energy Storage System (BESS) and a Substation. All allotments designated for buildings are greater than 2 ha in size. Therefore, ancillary uses/buildings such as the control building (site office, operation and	



Performance Outcomes	Acceptable Outcomes	Response
	2. 5m from the front and side boundaries for allotments less than 2ha.	maintenance facility and staff amenities) have adopted a 10 m setback in compliance with A03.2(1).
Residential Density		
Not Applicable - The proposed development does not i	nvolve the provision of residential dwellings.	
Amenity		
PO5	AO5	Not applicable
Accommodation and community activities do not encroach on existing or approved rural and extractive industry operations or uses that may result in an adverse impact on amenity, health or safety.	 Sensitive land uses are separated from: intensive animal industry uses by a minimum of 2km animal keeping (if only catteries and kennels) by a minimum of 1km waste disposal areas connected to an animal husbandry operation by a minimum of 500m cropping on areas of agricultural land by a minimum of 300m other agricultural activities (excluding cropping activities) by a minimum of 50m other rural activities, not elsewhere mentioned, by a minimum of 100m railway activities by a minimum of 100m the Benaraby Motorsport Facility by a minimum of 1,000m extractive industry operations as follows: 	The Proposed development does not involve the provision for accommodation or community activities, nor does it introduce new sensitive land uses.

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Performance Outcomes	Acceptable Outcomes	Response
PO6 Outdoor lighting does not adversely affect the amenity of adjoining properties or create a traffic	Sensitive land uses are separated from: Operation Separation distance Extraction or processing involving blasting or crushing Extraction or processing not involving blasting or crushing. Transport route 100m AO6.1 Light emanating from any source complies with Australian Standard AS4282 Control of the Obtrusive	Complies with AO6.1 and AO6.2 All outdoor lighting will comply with AS4282 and AS 1158.1.1.
hazard on adjacent roads.	Effects of Outdoor Lighting or current version. AO6.2 Outdoor lighting is provided in accordance with Australian Standard AS 1158.1.1 – Road Lighting – Vehicular Traffic Category V) Lighting – Performance and Installation Design Requirements or current version.	Any outdoor lighting will be installed so as to provide appropriate visual conditions which are conducive to the safe and comfortable movement of vehicle traffic at night and contribute to the discouragement of illegal acts. The site and all surrounding land are zoned rural as such there is limited urban development in proximity to the site. Development lighting will not adversely impact on the amenity of surrounding land uses.
PO7	AO7	Complies with AO7
Development does not adversely impact on the amenity of the surrounding rural or residential land uses or rural landscape character.	Plant and air–conditioning equipment, storage areas and processing activities are screened from view of the road or adjoining residential uses.	The Project area is mostly surrounded by existing natural vegetation screening on the boundaries adjoining residential uses and public viewpoints (i.e. public roads).
		There will be minimal to non-impact on the amenity of the surrounding rural landscape character from public viewpoints, or from any residential properties. The

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Performance Outcomes	Acceptable Outcomes	Response
		proposed development is situated behind extensive roadside vegetation which inhibits from most views across the landscape from publicly-accessible locations.
Stock Routes		
PO8	AO8	Not applicable
Development on or adjoining a stock route shown on overlay map Agricultural Land Classification Overlay does not compromise the use of the stock route by travelling stock.	Accommodation activities (excluding dwelling house on an existing allotment, Caretaker's accommodation and Rural workers' accommodation) and community activities are separated from a stock route by a minimum of 200m.	The closest stock route to the Project area is 19 km to the west.
PO9	AO9	Not applicable
Development on or crossing a stock route does not impede the free movement of stock.	 Development provides: for grade separation of transport infrastructure and stock, or alternate unimpeded and watered stock route access. 	The closest stock route to the Project area is 19 km to the west.
For Assessable Development		
Land Use		
PO10	No acceptable outcome is nominated.	Complies with PO10
Development:		The Project is compatible with the surrounding
1. is consistent with the rural character of the locality		agricultural land uses. Class B Agricultural Land Classification is present within the Project site and the
supports the primary rural function of the zone; and		development footprint covers approximately 2.79 ha of these areas. The land surrounding the fenced
protects rural, natural and scenic values of the locality.		BESS/Substation site will remain available for agricultural purposes, such as grazing.



Performance Outcomes	Acceptable Outcomes	Response
		The Project does not create a division between areas of agricultural land and removes only a small portion along the edge of the mapped Class B area.
		There will be minimal to non-impact on the amenity of the surrounding rural landscape character from public viewpoints, or from any residential properties. The proposed development is situated behind extensive roadside vegetation which inhibits from most views across the landscape from publicly accessible locations.
PO11	No acceptable outcome is nominated.	Not Applicable
Tourism (including associated accommodation) and recreation–related uses are:		The proposed development does not involve the provision of a tourist activity.
 small scale, and compatible with rural production, natural resources and landscape amenity. 		
Design and Amenity		
PO12	AO12.1	Complies with AO12.1
Development minimises potential conflicts with, or impacts on, other uses having regard to vibration, odour, dust or other emissions.	Development achieves the air quality design objectives set out in the <i>Environmental Protection</i> (Air) Policy 2008, as amended.	No indicators as provided in Schedule 1 – Air Quality Objectives of the <i>Environmental Protection (Air) Policy 2019</i> (EPP (Air)), will be generated during the construction, operation or decommissioning stages of the Project.
		Dust generated during construction will be managed in accordance with the measures outlined in the Preliminary Erosion and Sediment Control Plan (P-ESCP) provided at Appendix H of the Planning Report. Site-specific measures will be determined by ESCP's and / or CEMPs to be developed prior to the commencement of construction.

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Performance Outcomes	Acceptable Outcomes	Response
	 AO12.2 Development that involves the storage of materials on site that are capable of generating air contaminants either by wind or when disturbed are managed by: being wholly enclosed in storage bins, or a watering program so material cannot become airborne. 	Complies with AO12.2 The proposed development will involve the storage of materials on site during construction works. Whilst no contaminants as defined in EPP (Air) will be present, dust management measures will form part of ESCPs and / or CEMPs to manage any potential dust generation during the construction of the Project. No Project activities during the operational phase are anticipated to generate air contaminants.
 PO13 Development prevents or minimises the generation of noise so that: 1. nuisance is not caused to adjoining premises or other nearby sensitive land uses, and 2. desired ambient noise levels in residential areas are not exceeded. 	AO13 Development achieves the noise generation levels set out in the Environmental Protection (Noise) Policy 2008, as amended.	Complies with AO13 Most construction work, including trenching and deliveries, will be undertaken during standard construction hours: Monday to Saturday 6:30am to 6:30pm. Where necessary, low noise generating construction activities may be undertaken outside of standard construction hours. The operation of the BESS (fans) and substation (transformers) are the highest noise generating activities for the Project which may occur at any part of the day. The Noise Assessment (Appendix J of the Planning Report) undertaken for the Project concludes there will be no exceedances of noise level criteria at nearby sensitive receivers.
 PO14 Development does not unduly impact on the existing amenity and character of the locality having regard to: 1. the scale, siting and design of buildings and structures 2. visibility from roads and other public view points, screening vegetation and landscaping 	No acceptable outcome is nominated.	The location of the proposed BESS and substation are in an area well-removed from the public view and screened by existing natural screening vegetation. As such, there will be minimal to non-impact on the amenity of the surrounding rural landscape character from public viewpoints, or from any residential properties. The proposed development is situated behind extensive roadside vegetation which inhibits

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Performance Outcomes	Acceptable Outcomes	Response
the natural landform and avoidance of visual scarring, and		from most views across the landscape from publicly-accessible locations.
4. vibration, odour, dust, spray drift and other emissions.		At the end of the Project life following decommissioning and rehabilitation works, the final landform will not be inconsistent with the broader amenity of the locality and will also allow for the recommencement of agricultural land uses.
PO15	No acceptable outcome is nominated.	Complies with PO15
 All uses: minimise noise, dust, odour or other nuisance from existing lawful uses including rural and industrial uses minimise nuisance caused by noise, vibration and dust emissions generated by the state-controlled road and rail network in the vicinity of the land. 		The proposed development is not sensitive to noise, dust, odour or other nuisance from existing lawful uses. The closest state-controlled road is Bruce Highway which is approximately 3 km east of the Project site, and closest rail network further east of the state-controlled road. As such, no nuisance generated by either of these major transport networks are expected to the proposed development.
PO16	No acceptable outcome is nominated.	Complies with PO16
Development ensures ecological values, habitat corridors and soil and water quality are protected, having regard to: 1. maximising the retention of vegetation and the protection of vegetation from the impacts of development		An Ecological Assessment Report (EAR) (Appendix F of the Planning Report) has been prepared and the recommendations have been incorporated into the Project design and construction methodology to avoid/reduce impacts to ecological values. The proposed development avoids the clearing of
2. minimising the potential for erosion and minimisation of earthworks		regulated vegetation and further commits to the development of management plans including a
3. maximising the retention and protection of natural drainage lines and hydrological regimes, and		biosecurity management plan and a broader environmental management plan.
avoidance of leeching by nutrients, pesticides or other contaminants, or potential for salinity.		Site-specific ESCP(s) will be developed for the Project and will ensure leeching by nutrients, pesticides, or other contaminants to waterways within and surrounding the Project site are avoided.



Performance Outcomes	Acceptable Outcomes	Response	
PO17 to PO21			
Not Applicable to the works being undertaken			

1.2 **Biodiversity Overlay Code**

An assessment of the proposed battery energy storage system against the relevant assessment benchmarks of the Biodiversity Overlay Code is provided in Table 2.

Table 2: Relevant Assessment Benchmarks for the Biodiversity Overlay Code

Performance Outcomes	Acceptable Outcomes	Response	
Environmental Protecting and Buffering			
PO1	AO1	Complies with PO1	
 Development maintains and protects MNES (Matters of National Environmental Significance) and MSES (Matters of State Environmental Significance) by: locating in areas that avoid adverse impacts on MNES and MSES, or where adverse environmental impacts cannot be avoided, impacts are minimised and an environmental offset is provided for any residual adverse impacts, and the underlying ecological processes and biodiversity values of MNES and MSES are maintained or enhanced. Note—For MNES, consideration must be given to the requirements of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). 	Development locates outside of an area supporting MSES (Matters of State Environmental Significance).	The Project has been considered under the EPBC Act for potential impacts on MNES. The Project, which includes the Project subject to this Development Application, has been referred to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW). The referral and supporting MNES Report detail the site selection and Project design process that was undertaken to avoid and minimise impacts of the Project. As a result of this process, remnant vegetation, including high-value riparian vegetation has been avoided and does not form part of the development footprint. The assessment process under the EPBC Act will ensure that where adverse environmental impacts to MNES cannot be avoided, that suitable mitigation measures and offsets are in place. Complies with AO1 An Ecological Assessment Report (EAR) (Appendix F to the Planning Report) has been prepared and summarises the assessment of MNES but details an assessment of MSES	



Performance Outcomes	Acceptable Outcomes	Response
Note—To assist in demonstrating achievement of this performance outcome, a detailed environmental and ecological assessment to confirm the extent and nature of values is required to be undertaken by applicants.		related to the Project. The EAR identifies that the Project's development footprint avoids impact to MSES as mapped by the State. A Watercourse Assessment (Appendix K of the Planning Report) undertaken for the Project concluded the watercourse on site mapped as Stream Order 1 (or Low Risk – Green) does not possess the physical and hydrological attributes necessary for a waterway under the <i>Fisheries Act 1994</i> . As there was no observable difference between the surrounding pasture and the mapped water feature, the waterway was deemed likely to be a shallow drainage line that provides no aquatic habitat value under present conditions. Regardless, the development footprint avoids the watercourse and is setback approximately 130 m from the mapped MSES – regulated vegetation (defined watercourse).
PO2 Development is setback from and provides an adequate vegetated buffer to significant vegetation, habitats and areas containing MSES in order to: 1. protect these areas and their values from threatening processes 2. avoid edge effects such as undesirable microclimate effects and threats from non–native or pest fauna or flora, and 3. maintain and enhance ecological connectivity. Note—Any setbacks or other areas required for bushfire management, safety, recreation, maintenance or any other purpose are provided in addition to a vegetated	AO2 A buffer extending from the outside edge of an area of MSES is provided and has a minimum width of: 1. 200m where located outside an urban area, or 2. 50m where located within an urban area.	Alternative buffer solution to AO2 The Project site has been selected to avoid ecological values, including State mapped MSES (i.e. regulated vegetation), high stream order watercourses and high-quality species habitat. The development footprint is mainly cleared, non-derived grassland with low utilisation of flora and fauna species as the land is previously disturbed and cleared from previous intense grazing use and private timber plantation (Tasmanian Blue Gum). Several patches of historical timber plantation remain spread across the Project area however are isolated from other large tracts of remnant vegetation and are infested with weed species (e.g., Lantana and Prickly Pear). A buffer has not been applied to the area of MSES (defined watercourse) which also overlaps with the Steam Order 1



Performance Outcomes	Acceptable Outcomes	Response
buffer provided for ecological and environmental protection purposes. Note—An alternative buffer width may be proposed where buffers for significant species and ecological communities, including areas of habitat for listed threatened and migratory species, are based on best practice and current scientific knowledge of individual species requirements and supported by an ecological assessment. Other legislation, including the Nature Conservation Act and EPBC Act may establish other requirements with which applicants must comply.		watercourse within the Project area. As determined by Attexo, this watercourse does not possess the physical and hydrological attributes necessary for a waterway under the <i>Fisheries Act 1994</i> . As there was no observable difference between the surrounding pasture and the mapped water feature, the waterway was deemed likely to be a shallow drainage line that provides no aquatic habitat value under present conditions. Regardless, the development footprint is setback approximately 130 m from the MSES – regulated vegetation (defined watercourse) area and is deemed an acceptable alternative to AO2.
PO3	AO3.1	Not applicable
 Development within 500m of turtle nesting beaches is located, designed and operated to: protect the habitat values of the rookery for turtle breeding maintain a vegetated buffer adjacent to the beach ensure access to the beach nesting area is managed in a way that protects a turtle nesting area, and ensure lighting does not impact on the ecological and habitat values of turtle nesting areas and rookery. 	Development within 500m of a turtle nesting beach ensures any lighting: 1. does not spill onto beach areas 2. is on a structure no higher than 8.5m 3. is directed away from the beach, and 4. includes characteristic wavelengths that will not affect turtles. AO3.2 Development is setback from and maintains at least a 200m wide vegetated buffer to turtle nesting beaches. The buffer is maintained in a natural state and is kept free from development.	The proposed development will not occur within identified turtle nesting habitat.
Wetland and waterway buffers		
PO4	AO4	Not applicable
An adequate buffer to a wetland in a wetland protection area is provided and maintained to:		The proposed development is not located within a wetland in a wetland protection area.



Performance Outcomes	Acceptable Outcomes	Response
 protect and enhance habitat values, connectivity and other ecological processes and values protect water quality and aquatic conditions maintain natural micro-climatic conditions maintain natural hydrological processes prevent mass movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion, or scalding, and prevent loss or modification of chemical, physical or biological properties or functions of soil. Note—Any setbacks or areas required for bushfire management, safety, recreation, maintenance or any other purpose, are provided in addition to a vegetated buffer provided for ecological purposes	A development free buffer surrounding a wetland in a wetland protection area is provided and has a minimum width of: 200m where the wetland is located outside an urban area, or 50m where the wetland is located within an urban area. Note—To avoid conflict, where a development requires multiple buffers to be established by this code to protect waterways, ecological corridors, wetlands or MSES, the greatest distances required by this code will prevail to the extent of any inconsistency.	
For all assessable development		
Alterations to natural landforms, hydrology and drainage patterns do not adversely impact on areas containing MSES.	AO5 No acceptable outcome is nominated.	As noted above, the development footprint is setback approximately 130 m from the area mapped as containing MSES – Regulated vegetation (defined watercourse). The BESS and substation site may require elevation above the 0.5% Annual Exceedance Probability (AEP) flood immunity level which may result in localised increases and decreases to flood levels surrounding the proposed fill pad. Flood mapping produced demonstrates no difference in flood levels within areas of MSES (refer to Appendix D of the Planning Report).
PO6	AO6	Complies with PO6



Performance Outcomes	Acceptable Outcomes	Response
Development retains and enhances riparian vegetation along watercourses and drainage corridors, and vegetation along timbered ridgelines.	No acceptable outcome is nominated.	A watercourse assessment undertaken for the Project concluded the watercourse on site mapped as Stream Order 1 (or Low Risk – Green) does not possess the physical and hydrological attributes necessary for a waterway under the <i>Fisheries Act 1994</i> . As there was no observable difference between the surrounding pasture and the mapped water feature, the waterway was deemed likely to be a shallow drainage line that provides no aquatic habitat value under present conditions. The development footprint is setback approximately 130 m from the shallow drainage line.
PO7	AO7	Complies with PO7
 Buffering, rehabilitation or restoration, protects and enhances MSES and their underlying ecological processes, habitat and biodiversity values by: 1. using site appropriate and locally occurring native species 2. replicating as far as practicable, the species composition and structural components of healthy remnant vegetation and associated habitats, including understorey vegetation, and 3. excluding environmental weeds, declared plants and other non–native plants likely to displace native flora or fauna species or degrade habitat. Note—To assist in demonstrating achievement of this performance outcome, an ecological assessment and rehabilitation plan is undertaken by the applicant. 	No acceptable outcome is nominated.	The proponent's biosecurity management plan and a broader Environmental Management Framework will aim to protect these areas and values from threatening processes through actions such as weed and pest eradication and fencing. Landscaping within the development footprint will utilise native species.
PO8	AO8	Complies with PO8
Degraded areas supporting MSES or other environmental values important to the maintenance of	No acceptable outcome is nominated.	The proposed development is setback from areas mapped as supporting MSES by approximately 130 m, as such the



Performance Outcomes	Acceptable Outcomes	Response
underlying ecological processes required to maintain biodiversity, are rehabilitated as near as is practical to the naturally occurring state of native plant species and ecological communities.		Project is not expected to directly impact on MSES. The implementation of a biosecurity management plan is anticipated to minimise weed infestation across the site and will subsequently contribute to the enhancement of biodiversity values.
PO9	AO9	Complies with PO9
 Development: avoids the introduction of pest species (plant or animal) that pose a risk to the ecological integrity and biodiversity values of MSES, and includes appropriate pest management practices to control any existing threat of pest species in a way that provides for the long term ecological integrity of MSES. 	No acceptable outcome is nominated.	A site-specific biosecurity management plan will be prepared based on the values present within the Project development footprint and broader Project area (where MSES is mapped). The biosecurity management plan will aim to avoid the introduction of weed and pest species that pose risk to the ecological processes of the environmental values and MSES (within the broader Project area). As well as measures to avoid the introduction of non-native species, the biosecurity management plan will also aim to eradicate weeds and pest currently within the site. The strategies proposed to enhance biodiversity within areas not impacted by the Project will also ensure the management of weeds and pests.
Significant species, wildlife nesting and breeding ar	eas	
PO10	AO10	Complies with PO10
Development avoids direct and indirect impacts on significant ecological communities and significant species and their habitats, including disturbance from the presence of vehicles, pedestrian use, increased exposure to domestic animals and noise and lighting impacts. Note—To assist in demonstrating achievement of this performance outcome, a detailed environmental and ecological assessment to identify any significant species	No acceptable outcome is nominated.	No significant ecological communities or significant species and their habitats are present within the Project area (refer to Appendix F of the Planning Report). A field assessment was undertaken as part of the ecological assessment to identify the presence of conservation significant species or features that may provide habitat for conservative significant species. Overall, significant species listed under both the NC Act and the EPBC Act were not identified within the Project area.



Performance Outcomes	Acceptable Outcomes	Response
or communities that may be impacted by development, is undertaken by applicants.		The development footprint proposes infrastructure in areas cleared of vegetation.
		Direct impact on habitat was avoided through site selection (avoidance of remnant and high-value regrowth). However, the Project was assessed in accordance with the During construction and operation of the Project, environmental impacts will be managed through an Environmental Management Framework with management plans to ensure disturbance to fauna and flora is minimised and mitigated (including disturbance from the presence of vehicles, pedestrian use, increased exposure to domestic animals and noise and lighting impacts).
PO11	AO11	Complies with PO11
Areas of habitat that support a critical life cycle stage such as feeding, breeding or roosting or ecological function for threatened species, ecological communities or migratory species are protected and not impacted by development	No acceptable outcome in nominated.	No conversation significant species are evident within the Project's development footprint and wider Project area.
Ecological corridors		
PO12	AO12.1	Complies with PO12
Development protects ecological corridors, enhances ecological connectivity to habitats on and/or adjacent	Development does not occur in an ecological corridor.	As presented in the EAR (Appendix F of the Planning Report), the Project area has been historically grazed intensively and clearing has been maintained dating back to 1981 for agricultural purposes and private hardwood timber plantation of Tasmanian Blue Gum. Ecological surveys undertaken demonstrates no utilisation of the site by MNES and MSES conservation significant species.
 to the site. Ecological corridors and habitat linkages have dimensions and characteristics to support: 1. ecological processes and functions that enable the natural change in distributions of species and provide connectivity between populations of species over long periods of time 2. ecological responses to climate change 	AO12.2 No acceptable solution is nominated where in an urban residential zone or centre zone. In all other zones including the Rural Zone, Environmental Management Zone, Conservation Zone, all Industry Zones, Emerging Community Zone and Limited Development Zone: Where an ecological corridor is intended to facilitate fauna movement,	



Performance Outcomes	Acceptable Outcomes	Response
 connectivity between large tracts and patches of remnant vegetation, habitat areas and areas supporting MNES and MSES, and effective and unhindered day-to-day and seasonal movement of avian, terrestrial and aquatic fauna. 	 access or use of an area supporting MNES or MSES, the ecological corridor is maintained and restored to achieve a minimum width of 350m consisting of: 1. a 250m wide core corridor to support avian species and most arboreal mammals, and 2. a 50m wide vegetated buffer extending from the outside edges on both sides of the core corridor. 	
PO13	AO13	Complies with PO13
Isolated habitat areas are linked by a continuous corridor to provide effective ecological connectivity and to create additional linkages along waterways, wetlands, drainage lines, ridgelines, coastlines and other areas where possible.	Development provides a continuous corridor having a minimum width of 100m linking areas of protected vegetation to each other and other vegetation areas off–site.	As presented in the EAR (Appendix F of the Planning Report), ecological surveys undertaken demonstrates no utilisation of the site by MNES and MSES conservation significant species.
PO14	AO14	Complies with PO14
Development facilitates the unimpeded use and movement of terrestrial and aquatic fauna accessing the site or likely to use an ecological corridor as part of their normal life cycle by: 1. ensuring that development (e.g. roads, pedestrian access, in–stream structures) during both construction and operation does not create barriers to the movement of fauna along or within ecological corridors	No acceptable outcome is nominated.	The perimeter for the development footprint will be fenced for safety and security purposes which will prevent fauna accessing these areas on a permanent basis. As presented in the EAR (Appendix F of the Planning Report), ecological surveys undertaken demonstrates no utilisation of the site by MNES and MSES conservation significant species and therefore movement of fauna is unlikely to be impacted by the Project.
 providing wildlife movement infrastructure where necessary and directing fauna to locations where wildlife movement infrastructure has been provided to enable fauna to safely negotiate a development area, and 		



Performance Outcomes	Acceptable Outcomes	Response
 separating fauna from potential hazards through the use of appropriate barriers, fencing and buffers. 		
Monitoring		
PO15	AO15	Complies with PO15
During construction and operation of development, ongoing management, monitoring and maintenance is undertaken to ensure impacts on areas supporting MNES or MSES and their underlying ecological processes and biodiversity values are avoided or minimised. Note—Compliance with this requirement can be achieved by preparing a Monitoring and Remediation Plan in accordance with best practice. Where necessary, remedial action is identified and carried out on land managed by the entity carrying out the development.	No acceptable outcome is nominated.	Vegetation and habitat features that may support MNES will be determined through the EPBC Act assessment process. If the Project is a controlled-action and is approved by DCCEEW, the proponent may be conditioned through approval to monitor MNES. MSES values have been avoided by the development footprint through Project site selection. As presented in the EAR (Appendix F of the Planning Report), ecological surveys undertaken demonstrates no utilisation of the site by MNES and MSES conservation significant species and therefore movement of fauna is unlikely to be impacted by the Project. Ongoing management, monitoring and maintenance requirements will be incorporated into the Environmental Management Framework.
Environmental Offsets		
PO16	AO16	Complies with PO16
Where it is not possible to avoid adverse impacts on MSES and development has minimised adverse impacts to the greatest extent possible, development provides an offset for any significant residual impact in accordance with the <i>Queensland Environmental Offset Policy 2014</i> .	No acceptable outcome is nominated	The proposed development has directly avoided MSES values mapped by the State therefore offsets as per the requirements of the <i>Queensland Environmental Offset Policy 2014</i> are not required.
Wetland protection area		



Performance Outcomes	Acceptable Outcomes	Response	
Wetland and waterway barriers			
PO18 An adequate buffer to a waterway is provided and maintained to: 1. protect and enhance habitat values, connectivity and other ecological processes and values 2. protect water quality and aquatic conditions 3. maintain natural micro—climatic conditions 4. maintain natural hydrological processes 5. prevent mass movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion or scalding, and 6. prevent loss or modification of chemical, physical or biological properties or functions of soil. Note—Any setbacks or areas required for bushfire management, safety, recreation, maintenance or any other purpose, are provided in addition to a vegetated buffer provided for ecological purposes.	In all other zones including the Rural Zone, Environmental Management Zone, Conservation Zone, all Industry Zones, Industry Investigation Zone, Emerging Community Zone and Limited Development Zone: Other than where cropping for forestry for wood production, a vegetated and development free buffer is provided and maintained extending from the high bank of the waterway or plan position of a waterway (whichever is the greater) and with a minimum width of: 1. stream order 1 or 2: 25m, or 2. stream order 3 or 4: 50m, or 3. stream order 5 and above: 100m. Note—Stream order is mapped on Fish habitat area mapping in OM.	Complies with PO18 An assessment of water features mapped under the Queensland waterways for waterway barrier works spatial data layer has been undertaken to verify conditions and subsequent mapping in order to inform design. Stream order 1 The Stream order 1 mapped waterway (Green – Low Risk) was deemed to not possess the physical and hydrological attributes necessary for a waterway under the Fisheries Act 1994 (Fisheries Act). As there was no observable difference between the surrounding pasture and the mapped water feature, it was considered to likely be a shallow drainage line that provides no aquatic habitat value under present conditions. Regardless, the development footprint is setback approximately 130 m from the feature.	
Wetland hydrology and stormwater management Not Applicable – The proposed development is not local	ted within or near to a wetland area		
Wetland ecological values Not Applicable - The proposed development is not local	ted within or near to a wetland area		
Environmental offsets			
PO27 For development, where it is not possible to enhance existing values or avoid adverse effects or alternatively minimise adverse effects any remaining environmental	AO27 Where environmental offsets are required in this code, they must be provided in accordance with the Queensland Environmental Offset Policy 2014.	Complies with PO27 No offsets are required for the Project.	



Performance Outcomes	Acceptable Outcomes	Response
impacts are offset in accordance with the <i>Queensland Environmental Offset Policy 2014</i> .		
Monitoring		
Not Applicable - The proposed development is not located within or near to a wetland in a wetland protection area		

1.3 **Bushfire Hazard Overlay Code**

An assessment of the proposed battery energy storage system against the relevant assessment benchmarks of the Bushfire Hazard Overlay Code

is provided in Table 3. Table 3: Relevant Assessment Benchmarks for the Bushfire Hazard Overlay Code

Performance Outcomes	Acceptable Outcomes	Response	
Site Suitability	Site Suitability		
PO1	AO1	Complies with PO1	
Development maintains the safety of people and property by not exposing them to an unacceptable risk from bushfire.	No acceptable outcome is nominated	A bushfire management plan (BMP) (Appendix G of the Planning Report) has been prepared for the Project and demonstrates how the Project complies with this Bushfire hazard overlay code.	
		The bushfire hazard assessment and radiant heat exposure assessment in the BMP has been undertaken in accordance with Bushfire Resilient Communities Technical Reference Guide for the State Planning Policy State Interest 'Natural Hazards, Risk and Resilience – Bushfire' 2019 (Bushfire resilient communities), which was prepared by the Queensland Fire and Emergency Services to provide technical guidance for the implementation of Natural Hazards, Risk and Resilience – Bushfire, State Planning Policy	

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Performance Outcomes	Acceptable Outcomes	Response
		State Interest guidance material 2019 (SPP guidance material – bushfire).
		The BMP also considers guidelines for battery energy storage systems by the Australasian Fire and Emergency Services Authorities Council in Incidents involving PV array and battery energy storage systems 2020.
PO2	AO2	Complies with AO2
Development does not result in a higher concentration of people living, working or congregating in a high or very high bushfire hazard area unless it can be demonstrated: 1. there is an overriding community need in the public interest, and 2. no other site is suitable and reasonably available. Note—A 'medium, high or very high bushfire risk hazard area' means land mapped on the bushfire overlay map as having medium, high or very high potential bushfire risk.	The following uses are not located on land within a confirmed medium, high or very high bushfire hazard area: 3. childcare facility 4. community care centre 5. educational establishment 6. hostel 7. hospital 8. multiple dwelling 9. non-resident workforce accommodation 10. residential care facility 11. retirement facility 12. shopping centre 13. short-term accommodation 14. tourist attraction 15. tourist park	The Project does not involve the land uses identified in AO2.
Water Supply		
PO3	AO3	Not applicable
	The water supply network has a minimum sustained pressure and flow of at least 10L per second at 200kPa	The Project is not in a reticulated water supply area.



Performance Outcomes	Acceptable Outcomes	Response
Development in areas with a reticulated water supply has adequate flow and pressure for fire–fighting purposes at all times.		
PO4	AO4.1	Complies with PO4
Development in areas without a reticulated water supply has an appropriate dedicated water supply for fire–fighting purposes that are safely located and	Development involving a gross floor area greater than 50m2 where a reticulated water supply is not available is:	The BMP (Appendix G of the Planning Report) identifies the Project will have a water storage tank for the purpose of bushfire fighting.
freely accessible for fire–fighting purposes at all times.	 provided with an easily accessible fire resistant onsite water storage of not less than 5,000L (e.g. concrete tank with fire brigade fittings, in–ground swimming pool, dam fed by a permanent water source) that is within 100m of each class 1, 2, 3, or 4 building, and has a hard standing area allowing a heavy rigid fire appliance safe access to within 6m of the storage facility. Note—Plastic water tanks are not considered to be fire	Section 6.5 of the BMP provides specifications for the water storage tanks (which are based on AO4.1) and their proposed location is identified in Figure 6.1 of the BMP.
	resistant unless they are submerged.	
	AO4.2	Complies with AO4.2
	The location of water supplies is readily identifiable from the street frontage with clear signage directing firefighters to its access point.	Water storage tanks will be identified with reflective wayfinding signage as per Section 6.5 of the BMP (Appendix G of the Planning Report).
Roads, fire access trails and firebreaks		
PO5	AO5.1	Complies with PO5
Roads and fire access trails are designed and constructed to:	Roads and fire access trails are designed and constructed to: 1. separate the development from the hazardous vegetation	The Project includes a vehicle access track around the perimeter of the BESS, switching station and substation.



Performance Outcomes	Acceptable Outcomes	Response
 enable efficient access to buildings and structures for fire–fighting purposes for emergency services, and swift evacuation in emergency situations. 	 have a maximum gradient of 12.5% a minimum cleared width of 6m and a minimum formed width of 4m have adequate drainage and erosion control devices provides passing and turning areas for fire–fighting appliances at intervals of not less than 200m have a vehicular access at each end to roads or a bushfire trail not involve any cul–de–sac have gates locked with a system authorised by QFES, and have suitable arrangements in place to ensure maintenance in perpetuity. 	Vehicle access tracks are designed for rural fire trucks and are specified in Section 6.4 of the BMP (Appendix G of the Planning Report). The specifications are based on compliance with the minimum requirements for a category 1 fire-fighter vehicle by the New South Wales (NSW) Rural Fire Service. This specification has been used in lieu of specifications in the various Queensland guidelines because the NSW guidelines are well defined and documented and practical to implement.
	AO5.2 Development has direct access to an evacuation route with a potential fire intensity exposure no greater than 2kw/m2. Note—The distance from hazardous vegetation to achieve 2kw/m2 is generally: 58m in a very high bushfire hazard areas 52m in a high bushfire hazard area, and 44m in a medium bushfire hazard area	Complies with AO5.2 The access and egress for the Project is via existing public roads, being Burgess Road (main access location) and Cawthrays Road (alternative access) which both connect onto Blackman Gap Road and then to the Bruce Highway.
	AO5.3 Development incorporates an area of managed vegetation that separates lot boundaries from hazardous vegetation by a distance of: 1. 20m to a high or very high bushfire risk area, or	Complies with AO5.3 Radiant heat exposure modelling has been used to advise the width of the asset protection zone (APZ). It has been designed to separate the BESS, switching station and substation from hazardous vegetation by



Performance Outcomes	Acceptable Outcomes	Response
	2. 10m to a medium risk bushfire area and includes a fire access trail.	a distance which achieves a radiant heat flux level ≤ 10 kilowatts/square metre (kW/m2).
		Access tracks are located within the APZ.
PO6	AO6	Complies with PO6
Development provides for adequate fire breaks that minimise bushfire hazard by:	No acceptable outcome is nominated	Section 6.1 of the BMP (Appendix G of the Planning Report) requires an APZ to be established around the
 separating hazardous vegetation from development areas, and facilitating access for firefighting and emergency vehicles. 		BESS, switching station and substation. An access track will be located within the APZ.
Hazardous Materials		
PO7	AO7	Complies with PO7
The potential for the release of hazardous materials as a result of a bushfire event is avoided. Note—The term 'hazardous material' is defined in the	The potential for the release of hazardous materials as a result of a bushfire event is avoided. Note—The term 'hazardous material' is defined in the	The Project involves hazardous materials, ie batteries within the BESS, that are present at levels or in quantities that would constitute the use being a hazardous chemical/materials facility. In accordance with guidance in Bushfire resilient
Glossary of the relevant State Planning Policy.	Glossary of the relevant State Planning Policy.	communities, the Project includes an APZ which is designed to provide a separation distance from hazardous vegetation which achieves a radiant heat flux level ≤ 10 kWm2 at the perimeter of the battery storage area.
		The battery storage area will also be located on a mineral earth surface.
		The BMP also requires the storage or handling of hazardous materials to be in accordance with Managing risks of hazardous chemicals in the workplace – Code of Practice 2023, applicable safety data sheets, and otherwise in accordance with



Performance Outcomes	Acceptable Outcomes	Response
		Queensland Work Health and Safety Act 2011 and its regulations.
Reconfigure of a lot		
PO8	AO8	PO8 is not applicable.
Additional lots avoid the risk of bushfire hazard to personal and property safety and increased risk of damage to assets.	New residential lots (including rear lots) do not occur in a bushfire hazard area.	The Project does not involve the reconfiguring of a lot.
Note—A site specific bushfire hazard assessment may demonstrate that the site is not within a bushfire hazard area or has a low degree of bushfire risk. Any site specific bushfire assessment should be carried out in accordance with the method set out in Appendix 3 of State Planning Policy 1/03 Guideline Mitigating the adverse impacts of Flood, Bushfire and Landslide.		
Community Infrastructure		
PO9	AO9	Complies with PO9
Development for community infrastructure is located, designed and sited to:	No acceptable outcome is nominated.	In accordance with guidance in Bushire resilient communities, the Project includes an APZ which is
 protect the safety of people during a bushfire not increase the exposure of people to the risk from a bushfire event, and 		designed to provide a separation distance from hazardous vegetation which achieves a radiant heat flux level ≤ 10 kWm2 at the perimeter of the BESS, switching station and substation.
3. function effectively during and immediately after bushfire events.		The APZ will be complimented by compliance with National Construction Code - Building Code of Australia 2022 and Queensland Development Code 2021 requirements and the other mitigation measures specified in Chapter 6 of the BMP.

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1.4 Development Design Code

An assessment of the proposed battery energy storage system against the relevant assessment benchmarks of the Development Design Code is provided in Table 4.

Table 4: Relevant Assessment Benchmarks for the Development Design Code

Performance Outcomes	Acceptable Outcomes	Response
Utility infrastructure and services		
PO1	AO1.1	Complies with AO1.2
Development is serviced by an adequate, safe and reliable supply of potable and general use water, connected to reticulated water supply where possible. Note-Council's documented Maximum Service Level (MSL) is to be considered	Development is connected to Council's reticulated water supply network, including the installation of easily Ao25.2 accessed water meters, in accordance with the <i>Engineering design planning scheme policy</i> . OR	The proposed development is not within Council's reticulated water supply network and instead will be serviced by onsite water tanks of a minimum total capacity of 40,000 L. This will ensure sufficient water is available for fire-fighting purposes.
	AO1.2 If connection to Council's reticulated water supply is not possible, a potable on-site water supply is provided in accordance with the <i>Engineering design planning scheme policy</i> .	The proposed development will not be required to be connected to Council's reticulated water supply, as the site will have an on-site potable water supply, that meets the requirements of the <i>Engineering design planning scheme policy</i> .
PO2	AO2.1	Complies with AO2.2
Development is serviced by appropriate sewerage disposal infrastructure which ensures: 1. no adverse ecological impacts on the receiving environment	Development is connected to Council's reticulated sewerage treatment system, in accordance with the Engineering design planning scheme policy.	The proposed development is not within Council's reticulated sewerage infrastructure nor is connection to reticulated sewerage required given the nature of the uses proposed. Portable toilet hire will be utilised
 cumulative impacts of onsite waste water treatment is considered in assessing the likely environmental impacts; public health is maintained; the location, site area, soil type and topography is suitable for any on site waste water treatment; and 	AO2.2 If connection to Council's reticulated sewerage treatment system is not possible, development wastewater is treated in accordance with Council's Engineering design planning scheme policy and relevant Australian Standards (including AS1547) and State requirements as amended.	during construction with waste taken to a licensed facility to be disposed of safely. A Home Sewerage Treatment Plant (HSTP) servicing a workforce of up to 4 people will be used during the operation of the Project.



Performance Outcomes	Acceptable Outcomes	Response
5. the reuse of waste water does not contaminate any surface water or ground water.		
PO3	AO3.1	Not applicable.
Where not located in the Rural zone, electricity supply network and telecommunication service connections are provided to the site and are connected.	The development is connected to electricity and telecommunications infrastructure in accordance with the standards of the relevant regulatory authority prior to the commencement of any use of the site.	The proposed development is located in the Rural Zone.
	AO3.2	
	Where not included in the development, provision is made for future telecommunications services (such as fibre optic cable) in accordance with the standards of the relevant regulatory authority.	
PO4	AO4.1	Not applicable.
Development in areas serviced by a reticulated water supply where:1. areas of the development are accessed by common private title or2. the council infrastructure is not sufficient to	Development, including buildings, both attached and detached, and not covered in other legislation or planning provisions mandating fire hydrants, conform with SPP Code: Fire services in developments accessed by common private title.	The area in which the proposed development is located is not serviced by a reticulated water supply.
provide fire fighting service in terms of pressure,	AO4.2	
flow or proximity, 3. is serviced with appropriate privately owned internal fire hydrant infrastructure and provides unimpeded emergency access.	Fire fighting infrastructure located within private property (excluding reticulated mains and hydrants on reticulated mains) is owned maintained by a party other than Council	
PO5	AO5.1	Complies with PO5 and PO6
Stormwater management is designed and operated to: 1. ensure that adjoining land and upstream and	Development does not result in an increase in flood level flow velocity or flood duration on upstream, downstream or adjacent properties.	The Stormwater Management Plan in Appendix D of the Planning Report demonstrates that the Project will be designed to meet the requirements of PO5 and
downstream areas are not adversely affected through any ponding or changes in flows, and	AO5.2	PO6.

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Performance Outcomes	Acceptable Outcomes	Response
 direct stormwater to a lawful point of discharge through competently designed and constructed outlet works in a manner that reflects the predevelopment status. 	Stormwater (including roof and surface water) is conveyed to the kerb and channel or other lawful point of discharge in accordance with the requirements of the Engineering design planning scheme policy.	
PO6 Stormwater drainage network elements are designed	AO6 Stormwater infrastructure is designed and constructed	
and constructed with the capacity to control stormwater flows under normal and minor system blockage conditions for the applicable defined flood event ensuring there is no damage to property or hazards for motorists.	in accordance with the requirements of the Engineering design planning scheme policy.	
Wastewater		
PO7	AO7	Complies with AO7
Wastewater is managed to:	Development does not discharge wastewater into any	The development will not discharge wastewater into
1. avoid wastewater discharge to any waterway, and	waterways.	any waterways.
2. if wastewater discharge to waterways cannot be practically avoided, discharge is minimised by reuse, recycling, recovery and treatment for disposal to sewer, surface water and groundwater.		
Note—Wastewater is defined in accordance with Environmental Protection (Water) Policy 2009, schedule 2).		
Note—A wastewater management plan (WWMP) is prepared by a suitably qualified person and addresses:		
• wastewater type, and		
• climatic conditions, and		
 water quality objectives (WQOs), and 		



Performance Outcomes	Acceptable Outcomes	Response
best–practice environmental management.		
Earthworks and retaining walls		
,	AO8.1 Earthworks and any retaining structures (including anchors, sheet piling, seepage drains, construction requirements and retained soil etc.) and their zone of influence must: 1. be wholly contained within the development site; 2. ensure the top and toe of any batter slope (excluding those associated with road works) is a minimum of 0.9m horizontally from the boundary of the development site; 3. not be located on land in Council ownership (e.g. road reserves, parks and drainage reserves) 4. not include any services within the retained soil (as determined by the internal friction angle of the soil being retained) or the zone of influence of the retaining structures' foundation; and 5. allow for the installation and maintenance of services within any retaining structures 6. excavating or filling is no greater than 1m.	Complies with PO8 There will be earthworks associated with raising the BESS, substation and associated infrastructure pad with fill above the 0.5% AEP flood immunity level, as required by the GRC Planning Scheme for substations. An operational works (earthworks) application will be submitted to GRC for assessment once the civil design requirements for the Project are more fully understood. The plans provided for this operational works permits will ensure that earthworks minimise disturbance to the natural contour of the site and do not increase the risk of landslide.
on nearby land.	AO8.2 Development is designed such that the steepest	Complies with AO8.2 The proposed development can comply.
	formed batter slope is 1 vertical to 4 horizontal. AO8.3 Earthworks and any associated retaining structures are designed and constructed in accordance with the Engineering Design Planning Scheme Policy.	Complies with AO8.3 Any earthworks and associated retaining structures for the proposed development will be designed and constructed in accordance with the Engineering Design Planning Scheme Policy.



Performance Outcomes	Acceptable Outcomes	Response
	AO8.4	Not applicable.
	 For Reconfiguring A Lot applications: constructed embankment slopes are located along the rear and side boundaries of adjoining allotments and are designed and constructed: within the development site, on land which is not to enter Council ownership, within the allotment located on the low side of the common boundary, and iv. with a top and toe at least 0.9m horizontally from the boundary retaining walls are located along the rear and side boundaries of adjoining allotments and are 	The proposed development does not involve the reconfiguration of a lot.
	designed and constructed either: a. on the low side of the common boundary with a top at least 0.9m horizontally from the boundary; or b. on the high side of the common boundary with a toe at least 5m horizontally from the boundary	
Parking and access		
PO9 Development includes the provision of adequate and convenient car and bicycle parking on–site to satisfy the anticipated requirements of the activity.	AO9 Car parking and bicycle parking is provided on site in accordance with the rates specified in the Parking rates planning scheme policy.	Complies with AO9 The Parking rates planning scheme policy does not specify car parking rates for an Undefined Use or a Substation use. Instead, car parking rates for Major Electricity Infrastructure and Utility Installation have been used as a reference to ensure sufficient car
		parking areas are provided for the proposed development. In accordance with the Traffic Impact Assessment (TIA) (Appendix E of the Planning Report),



Performance Outcomes	Acceptable Outcomes	Response
		sufficient non-formalised car parking will be made available during construction and operation of the Project.
PO10	AO10	Complies with AO10
Where in urban areas, development provides end of trip facilities to encourage people to engage in active transport (bicycles and pedestrians): 1. to meet the needs of users and promote active	Development provides cycling and pedestrian end of trip facilities, in accordance with the requirements of the Queensland Development Code.	The proposed development is not located within an area, nor are there existing active or public transport networks in the vicinity of the site. As cars are anticipated to be the main transport type utilised by
modes of travel		construction workers there is no provision for end of
2. at convenient, easily identifiable, safe locations, and		trip facilities.
3. in locations that do not obstruct vehicular, bicycle or pedestrian movement paths.		
PO11	AO11.1	Complies with AO11.1 & AO11.2
Access driveways are designed and constructed to:	Access driveways are:	Access driveways will be designed to meet the
 provide convenient access to the site and maintain the safety and efficiency of the road, 	1. designed and constructed in accordance with the Engineering design planning scheme policy, and	requirements of AO11.1. The proposed development's design will enable vehicles to enter and exit the site in
2. minimise conflicts with traffic and pedestrians, and	2. in accordance with AS2890 as amended, and	a forward gear.
3. are constructed to a standard that is appropriate to the location and to meet the anticipated volume	3. certified by a Registered Professional Engineer of Queensland.	
and type of traffic.	AO11.2	
	Access driveways allow vehicles (with the exception of dwelling house and dual occupancy) to enter and exit the site in a forward gear.	
PO12	AO12	Complies with AO12
 Vehicle movement areas (including internal driveways, access aisles, manoeuvring areas, parking areas (car and bicycle) and service bays) are designed to ensure: 	Manoeuvring, loading and unloading areas, and parking areas (car and bicycle) are:	Access driveways will be designed to meet the requirements of AO12.



Performance Outcomes	Acceptable Outcomes	Response
 a. a gradient appropriate for the type of vehicles b. a surface suitable for the proposed use c. effective stormwater drainage d. clearly marked and signed spaces e. convenience and safety for drivers and pedestrians, and f. adequate dimensions to meet user requirements, including access and egress for emergency vehicles 	 designed and constructed in accordance with the Engineering design planning scheme policy Imperviously sealed using concrete or asphalt bitumen In accordance with AS2890 as amended, and certified by a Registered Professional Engineer of Queensland. 	
 PO13 Footpaths provide pedestrian and bicycle access to the site, which is designed to: 1. provide safe movement; 2. avoid unnecessary conflict between pedestrians, bicycles and motor vehicles; 3. include durable and stable materials; and 4. match any adjacent footpath. 	 AO13 Footpaths are: 1. provided to the full road frontage and designed in accordance with the <i>Engineering Design Planning Scheme Policy</i> 2. connected to the existing footpath network, and 3. certified by a Registered Professional Engineer of Queensland. 	Not applicable The proposed development is in a rural area. There are no existing active or public transport networks in the vicinity of the site.
 PO14 Pedestrian access to buildings: 1. does not obstruct pedestrian movement (or form physical clutter) on public footpaths 2. are not visually overbearing (or form visual clutter) in the streetscape, and 3. provide safe, efficient, equitable and convenient access including wheelchair access. 	 AO14 Pedestrian access steps, escalators, ramps and lifts are: 1. located wholly within the site 2. setback a minimum of 1.5m from the front boundary, and 3. compliant with the <i>Disability Discrimination Act</i> 1992. 	Complies with AO14 Not relevant given the nature of the proposed uses.
Acoustic and air quality		
PO15	AO15	Complies with AO15



Performance Outcomes	Acceptable Outcomes	Response
Development minimises potential conflicts with, or impacts on, other uses having regard to odour, dust or other emissions.	Development achieves the air quality design objectives set out in the <i>Environmental Protection (Air) Policy 2008</i> , as amended.	No indicators as provided in Schedule 1 – Air Quality Objectives of the <i>Environmental Protection (Air) Policy 2019</i> (EPP (Air)), will be generated during the construction, operation or decommissioning stages of the Project. Dust generated during construction will be managed in accordance with the measures outlined in the Preliminary Erosion and Sediment Control Plan (P-ESCP) provided at Appendix I of the Planning Report. Site-specific measures will be determined by ESCP's and / or CEMPs to be developed prior to the commencement of construction.
PO16 Development prevents or minimises the generation of any noise or vibration so that: 1. nuisance is not caused to adjoining premises or other nearby sensitive land uses, and 2. desired ambient noise levels in residential areas are not exceeded.	AO16 Development achieves the noise generation levels set out in the Environmental Protection (Noise) Policy 2008, as amended. Note—To achieve compliance, development is planned, designed and managed to ensure emissions from activities to achieve the appropriate acoustic objectives (measured at the receptor dB(A)).	Complies with AO16 The operation of the substation (transformers) and BESS are the highest noise generating activities for the Project which may be in operation at any part of the day. The Noise Assessment (Appendix J of the Planning Report) undertaken for the Project concludes no exceedances of daytime, evening or nighttime noise criteria set out by the EPP (Noise) are expected at any of the noise sensitive receiver locations. No other operational activities are anticipated to generate noise levels that would be audible or exceed the noise limits set out in EPP (Noise). Most construction work, including piling, trenching and deliveries, will be undertaken during standard construction hours: Monday to Saturday 6:30am to 6:30pm. Where necessary, low noise generating construction activities may be undertaken outside of standard construction hours.
PO17	AO17	Not applicable



Performance Outcomes	Acceptable Outcomes	Response
Sensitive development adjacent to State controlled roads or Council controlled arterial and sub–arterial roads minimise through their own design the nuisance caused by noise, vibration and dust emissions.	Sensitive development (other than Class 1, 2, 3 or 4 buildings) complies with the requirements of the Department Main Roads – Road Traffic Noise Management Code of Practice and the Environmental Protection (Noise) Policy 2008.	The proposed development is not considered a sensitive development.
Lighting		
PO18	AO18	Complies with AO18
External lighting is provided in urban areas to ensure a safe environment.	Technical parameters, design, installation, operation and maintenance of outdoor lighting comply with the requirements of AS4282 – Control of the Obtrusive Effects of Outdoor Lighting as amended.	The proposed development is not within an urban area. All outdoor lighting will comply with AS4282 and AS 1158.1.1 and will provide appropriate visual conditions which are conducive to the safe and comfortable movement of vehicle traffic at night and contribute to the discouragement of illegal acts.
PO19	AO19	Complies with AO19
Outdoor lighting does not cause undue disturbance to any person, activity or fauna because of emission, either directly or by reflection.	The vertical illumination resulting from direct, reflected or other incidental light coming from a site does not exceed 8 lux when measured at any point 1.5m outside of the boundary of the property at any level from ground level up.	The proposed development will comply. If deemed necessary, conditions may be applied as part of a development approval.
PO20	AO20	Not applicable
Street lighting and signs are provided to ensure the safety of both vehicles and pedestrians, and to facilitate access and movement.	Street lighting and signage comply with the requirements of the <i>Engineering design planning scheme policy</i> .	The proposed development does not front a Council street with lighting.
Waste Management		
PO21	AO21	Complies with AO21
Development: 1. minimises waste generation (including construction, demolition and operational waste)	Waste storage and management arrangements are sited, screened and designed in accordance with the Waste Management Planning Scheme Policy.	The proposed development will comply. If deemed necessary, conditions may be applied as part of a development approval.



Performance Outcomes	Acceptable Outcomes	Response
provides adequate facilities on–site for the storage of waste and recyclables.		
PO22 Development is designed to allow for safe and efficient servicing of waste and recycling containers through: 1. development layout that is designed to facilitate direct and unobstructed servicing of waste and recycling containers, and 2. minimising the potential for nuisances to be caused by way of noise and odour.	 AO22.1 Where on–site waste and recycling collection services are proposed: 1. collection vehicle entry and exit from the site is carried out in a forward motion, and 2. the proposed point of servicing is designed in accordance with the Waste Management Planning 	Complies with AO22.1 & AO22.2 The proposed development will comply. If deemed necessary, conditions may be applied as part of a development approval.
	Scheme Policy. AO22.2 Where on–street (kerbside) collection is proposed for any standard waste and recycling containers or bulk bin waste and recycling, waste management is designed in accordance with the Waste Management Planning Scheme Policy.	
For all assessable development		
Stormwater management		
 PO23 Stormwater management systems: implement water sensitive urban design (WSUD) principles that: a. protect natural systems and waterways b. allow for the detention of stormwater instead of rapid conveyance c. minimise impervious areas d. utilise stormwater to conserve potable water 	AO23 Stormwater management systems are designed and constructed in accordance with the Engineering Design Planning Scheme Policy. Note—A site stormwater quality management plan (SQMP) is prepared in accordance with Engineering Design Planning Scheme Policy and the State Planning Policy requirement for stormwater quality treatment measures.	Complies with PO23 The SMP in Appendix D of the Planning Report provides recommended design and construction of stormwater management systems for the Project in accordance with WSUD principles and prevailing engineering standards.



Performance Outcomes	Acceptable Outcomes	Response
 e. integrate stormwater treatment into the landscape f. ensure water quality values are protected 2. where privately owned must be maintained (including costs) for the life of the system 3. provide for safe access and maintenance 4. maintain natural drainage lines and adequate filtering and settlement of sediment for the protection of watercourses, coastal wetlands and beaches from point source and non-point source stormwater discharges, and 5. are designed to minimise ongoing maintenance costs 		
PO24	AO24	Complies with PO24
Development allows for sufficient site area to accommodate an effective stormwater management system.	No acceptable outcome specified.	The SMP in Appendix D of the Planning Report demonstrates that there is sufficient site area to accommodate an effective stormwater management system.
PO25 Development provides for the orderly development of stormwater infrastructure within a catchment, having regard to: 1. existing capacity of stormwater infrastructure and ultimate catchment conditions 2. discharge for existing and future unstream	AO25 No acceptable outcome specified.	Complies with PO25 and PO26 The SMP in Appendix D of the Planning Report demonstrates that the Project will provide for the orderly development of stormwater infrastructure. Water quality for the construction phase will be addressed through the measures identified in the Preliminary Erosion and Sediment Control Plan in
discharge for existing and future upstream development.		Appendix H of the Planning Report.
PO26	AO26	
Construction activities for the development avoid or minimise adverse impacts on stormwater quality.	The release of sediment–laden stormwater is avoided for the nominated design storm, and minimised when	



Performance Outcomes	Acceptable Outcomes	Response
	the nominated design storm is exceeded, by addressing design objectives listed below in Table 9.3.1.3.2—Construction phase, or local equivalent for: 1. drainage control 2. erosion control 3. sediment control, and 4. water quality outcomes. Note—An Erosion and Sediment Control Plan (ESCP) is prepared by a suitably qualified person that demonstrates: • erosion and sediment control practices (including any proprietary erosion and sediment control products) are designed, installed, constructed, operated, monitored and maintained, and any other erosion and sediment control practices are carried out in accordance with local conditions, or • how stormwater quality will be managed in accordance with an acceptable regional or local guideline so that target contaminants are treated to a design objective at least equivalent to this Acceptable outcome.	
PO27	AO27	Not applicable
Reconfiguration of lots includes stormwater management measures in the design of any road reserve, streetscape or drainage networks to:	No acceptable outcome specified.	The proposed development does not involve the reconfiguration of a lot.
1. minimise impacts on the water cycle		
2. protect waterway health by improving stormwater quality and reducing site run–off, and		
3. avoid large impervious surfaces.		



Performance Outcomes	Acceptable Outcomes	Response
Wastewater management		
PO28	AO28	Complies with PO28
Wastewater discharge maintains ecological processes, riparian vegetation, waterway integrity, and downstream ecosystem health including:	No acceptable outcome specified.	The proposed development will neither produce nor discharge wastewater into any waterway. As such nearby ecological processes and ecosystem health will
 protecting applicable water quality objectives for the receiving waters 		not be compromised.
managing soil disturbance or altering natural hydrology in coastal areas		
 avoiding or minimising the release of nutrients of concern so as to minimise the occurrence, frequency and intensity of coastal algal blooms, and 		
 avoiding lowering groundwater levels where potential or actual acid sulfate soils are present in coastal areas. 		
Note—Compliance with part of this performance outcome may be demonstrated by following the management advice in the guideline: Implementing Policies and Plans for Managing Nutrients of Concern for Coastal Algal Blooms in Queensland by the Department of Environment and Heritage Protection.		
PO29	AO29	Not applicable
Where involving trade waste or contaminated wastewaters, they are managed so that:	No acceptable outcome specified.	The proposed development will not involve trade waste or contaminated wastewaters.
1. the pH of any wastewater discharged is maintained between 6.5 and 8.5 to avoid mobilisation of acid, iron, aluminium, and metals		



1. are designed and located to minimise traffic disruption 2. improve public safety 3. provides for fauna habitat movement where possible, and 4. makes appropriate allowance for active transport. Road design PO31 Bridges and culvert works are provided in accordance with the Engineering Design Planning Scheme Policy. The with the Engineering Design Planning Scheme Policy. AO31 Co	Not applicable The proposed development will not require the provision of bridges and culverts for flood immunity.
Bridges and culverts for flood immunity: 1. are designed and located to minimise traffic disruption 2. improve public safety 3. provides for fauna habitat movement where possible, and 4. makes appropriate allowance for active transport. Road design PO31 AO30 Bridges and culvert works are provided in accordance with the Engineering Design Planning Scheme Policy. When the Engineering Design Planning Scheme Policy. AO31 Control of the Engineering Design Planning Scheme Policy. AO31 Control of the Engineering Design Planning Scheme Policy. AO31 Control of the Engineering Design Planning Scheme Policy. AO31	The proposed development will not require the
1. are designed and located to minimise traffic disruption 2. improve public safety 3. provides for fauna habitat movement where possible, and 4. makes appropriate allowance for active transport. Road design PO31 Bridges and culvert works are provided in accordance with the Engineering Design Planning Scheme Policy. The with the Engineering Design Planning Scheme Policy. AO31 Co	The proposed development will not require the
PO31 AO31 Co	
constructed and maintained to a standard which is adequate for the traffic type and volume likely to be generated by the activities on site. the requirements of the Engineering Design Planning Scheme Policy. Scheme Policy. Approximately 1. The requirements of the Engineering Design Planning Scheme Policy.	Complies with PO31 Due to the negligible volumes of traffic that will be generated only during the construction phase of the Project of the development, road upgrades have not been considered necessary (refer to the TIA - Appendix E of the Planning Report). The existing road network is adequate to accommodate the anticipated daily vehicles trips of 200 (100 AM peak period and



Performance Outcomes	Acceptable Outcomes	Response
PO32	AO32	Complies with PO32
Development:	No acceptable outcome specified.	The proposed development does not compromise the
 supports a road hierarchy which facilitates efficient movement of all transport modes including public transport, and 		existing road hierarchy.
2. appropriately integrates and connects with surrounding movement networks.		
Note—Where roads are required for buses refer to the design and construction requirements in the IDAS code in the Transport Planning and Coordination Regulation 2005, schedule, part 2.		
PO33	AO33	Not applicable
Development enhances connectivity between existing and future public passenger transport facilities and other transport modes through:	No acceptable outcome specified.	There are no existing active or public transport networks in the vicinity of the site.
1. providing direct linkages for passengers between existing and future public passenger transport facilities and other transport modes, and		
way–finding information for existing public transport facilities and interconnecting transport modes.		
PO34	AO34	Not applicable
Development provides direct, safe and equitable access to and use of public passenger transport facilities.	Public passenger transport facilities and any through—site pathway connections, including road crossings, to public passenger transport facilities are provided in accordance with the <i>Engineering Design Planning Scheme Policy</i> and the <i>Disability Discrimination Act</i> 1992.	There are no existing active or public transport networks in the vicinity of the site.



Performance Outcomes	Acceptable Outcomes	Response
PO35	AO35	Complies with PO35
Development is located and designed to maintain the operational and structural efficiency of public utility infrastructure.	No acceptable outcome specified.	The proposed development will not compromise existing public utility infrastructure.
Acoustic and air quality		
PO36	AO36	Not applicable
Where located in close proximity to an operational railway corridor, sensitive land uses mitigate amenity impacts and maintain the operational integrity of the rail corridors.	No acceptable outcome specified.	The proposed development is not in close proximity to an operational railway corridor. The closest railway line is the North Coast Line located approximately 5 km east of the Project site.
PO37	AO37	Complies with PO37
 Utility services and service structures attached to buildings, do not adversely impact on the acoustic or visual amenity of the surrounding area and are: 1. located as far from sensitive land uses, road frontage boundaries and public open spaces as practical, and 2. acoustically shielded and visually screened so as not to be audible or visible from adjoining and nearby sites, public open spaces and roads. 	No acceptable outcome specified.	The proposed development is satisfactorily distanced from any sensitive uses. The Project will not have an adverse impact on the visual amenity and landscape character of the locality. The Noise Assessment (Appendix M of the Planning Report) demonstrates that the Project will not have a significant impact on the acoustic environment.
Weed control		
PO38	AO38	Complies with PO38
Weed control practices and plant and equipment cleaning and inspection protocols are:1. implemented to avoid the introduction and spread of weeds along transport routes and delivery points	No acceptable outcome specified.	The Project site is host to several prevalent, widespread invasive weed species (refer to EAR – Appendix F). A biosecurity management plan will be developed and implemented as part of the Environmental Management Framework for the construction and ongoing operation of the Project. The biosecurity management plan will include



Performance Outcomes	Acceptable Outcomes	Response
undertaken to control existing declared weeds and pest animals prior to the commencement of and during works.		measures to reduce the spread of new invasive weed species and to manage the existing populations.
Note—Refer also to the Queensland Guideline for Limiting Weed Seed Spread (DNR 2000).		
If a non-tidal artificial waterway Not Applicable – The proposed development is not loca	ited within or near a non-tidal artificial waterway	
If Port services where a marina (ship sourced polluta Not Applicable – The proposed development is not loca		
Structures over multiple lots		
PO45	AO45	Partial compliance with PO45
Where buildings and structures are located on multiple lots, these are amalgamated to form one lot.	No acceptable outcome specified.	The proposed BESS, substation and ancillary infrastructure (laydown areas, control building, workshop etc.) are all located within one lot being Lot 132 FD32. Internal access to the BESS/substation site from the new access point off Burgess Road is achieved through internal access tracks across Lots 136 and 139 on FL40301. It is not deemed appropriate to formally amalgamate the 3 lots into 1 for the sole purpose of internal access.

1.5 Landscaping Design Code

An assessment of the proposed battery energy storage system against the relevant assessment benchmarks of the Landscaping Design Code

is provided in Table 5. Table 5: Relevant Assessment Benchmarks for the Landscaping Design Code

Performance Outcomes	Acceptable Outcomes	Response
General landscape design and works		



Performance Outcomes	Acceptable Outcomes	Response
PO1	AO1	Complies with PO1 and PO2
 Landscape design of both public and private spaces: complements the intended character of the streetscape and zone, and is functional and designed to be visually appealing in the long-term. 	No acceptable outcome is nominated.	The Project will not have an adverse impact on the visual amenity and landscape character of the locality. Any landscaping works for the Project will be locally appropriate and provide screening from the minimal viewpoints by which the proposed development can be viewed.
PO2	AO2.1	
 Landscape works and plant selection ensure: climatically appropriate species are planted the provision of shade in appropriate locations 	Selected tree species within communal recreation areas are to provide at least 30% shade coverage within 5–10 years of planting.	
3. an appropriate mix of soft and hard elements, and	AO2.2	
4. planting densities and stock sizes are suitable for their location, purpose and hardiness.	A minimum of 50% of landscaped areas are to be covered in soft landscaping (turf areas and planting beds), with at least 25% of that area being planting.	
PO3	AO3.1	Not applicable
Street trees are provided in appropriate locations to: 1. provide shade for pedestrians along footpaths 2. reinforce the legibility of the movement network 3. avoid damage to public or private property or	Street trees are provided at the rate whichever is the lesser of: 1. one street tree per lot frontage or one tree per 10 linear metres of road frontage or	The proposed development does not front an urban street.
infrastructure	2. a minimum of 1 tree per 400m² of site area.	
4. enhance the character of the streetscape, and	AO3.2	
ensure visibility is maintained from entrances and exits to properties and at intersections.	Species of street trees are selected in accordance with the plant species list in Table 9.3.4.3.2	
PO4	AO4	Not applicable
Street treatments including pavement, seating, lighting, rubbish bins are provided to:	No acceptable outcome is nominated.	The proposed development does not front an urban street.
 enhance the usability and amenity of streets and public spaces 		



Performance Outcomes	Acceptable Outcomes	Response
2. facilitate social interaction, and		
3. maintain clean streetscapes.		
PO5	AO5.1	Complies with PO5
Wherever possible, landscape design facilitates the retention and integration of mature existing	Existing mature trees and vegetation are retained and incorporated into the landscape design.	The Project will not have an adverse impact on the visual amenity and landscape character of the locality. Any landscaping works for the Project will be locally appropriate and will provide screening from the minimal viewpoints by which the proposed development can be viewed. Existing vegetation, especially areas along the Project area boundary, will be retained.
vegetation, both within and external to the site.	AO5.2 Removed or damaged mature vegetation is replaced with mature vegetation of a comparable quantity and species.	
Landscaping along boundaries and edges		
PO6	AO6	Complies PO6
Planting and landscape elements along boundaries and edges assist in: 1. maintaining privacy between adjoining buildings 2. protecting local views, vistas and sightlines 3. enhancing the visual appearance of the built form 4. screening service, utility and parking areas 5. minimising noise impacts between noise sources and sensitive receiving environments, and 6. reducing the visual impact of acoustic fences, retaining walls and long unbroken walls.	No acceptable outcome is nominated.	The Project will not have an adverse impact on the visual amenity and landscape character of the locality. Any landscaping works for the Project will be locally appropriate and will provide screening from the minimal viewpoints by which the proposed development can be viewed.
Open air carparking		
PO7	AO7.1	Complies with PO7
Open air car parking areas are provided with suitable levels of shade through the use of appropriate	Shade trees are located at the rate of 1 tree per 6 car spaces.	The Project can be designed to comply with these requirements. If deemed necessary, this requirement
planting.	AO7.2	can be condition within the development permit.



Performance Outcomes	Acceptable Outcomes	Response
	Wheel stops are provided to protect vegetation.	
	AO7.3	
	Tree selection is in accordance with plant species list.	
Sustainability		
PO8	No acceptable outcome is nominated	Complies with PO8
Landscape design including irrigation methods optimise water and energy efficiency and responds appropriately to local conditions, by:		The Project can be designed to comply with these requirements. If deemed necessary, this requirement can be condition within the development permit.
1. maximising the exposure to the prevailing summer breezes and the north–east winter morning sun		
2. minimising exposure to the prevailing winter winds and western summer sun		
optimising shade to create useable and comfortable areas, and		
4. maintaining infiltration to subsurface soil.		
Safety		
PO9	AO9.1	Complies with PO9
Landscape elements enhance the safety, legibility of places and do not undermine the surveillance of	Plant selection adjacent to pedestrian movement areas provides a clear trunk of at least 2m at maturity.	The Project can be designed to comply with these requirements. If deemed necessary, this requirement
paths, walkways, parking areas, streets and public spaces by ensuring:	AO9.2	can be condition within the development permit.
 landscape elements (including signage and other infrastructure) does not interfere with sightlines 	Understorey planting maintains a height of less than 600mm at maturity.	
spaces are well lit, free from obstructions and clearly defined by landscape treatments, and		
3. public and private areas are clearly distinguishable and accessible.		



Performance Outcomes	Acceptable Outcomes	Response
Note—Applicants should have regard to Crime Prevention through Environmental Design Guidelines for Queensland.		
Maintenance		
PO10	AO10	Complies with P10
 Landscape elements do not adversely affect stormwater quantity or quality by ensuring: 1. the flow of water along overland flow paths is not restricted 2. opportunities for water infiltration are maximised, and 3. areas of pavement, turf and mulched garden beds are appropriately located and adequately drained. 	No acceptable outcome is nominated	The Project can be designed to comply with these requirements. If deemed necessary, this requirement can be conditioned within the development permit.
PO11	AO11	
 Landscape elements: provide high levels of durability and robustness are cost effective, and have the ability to be maintained conveniently over the long-term. 	No acceptable outcome is nominated	
PO12	AO12	
Drainage of podium planters allows for flush out in future and is adequately drained.	No acceptable outcome is nominated	
PO13 Landscape works and plant selection protects the structural integrity and function of: 1. buildings and structures; 2. overhead and underground services, and	AO13 No acceptable outcome is nominated	



Performance Outcomes	Acceptable Outcomes	Response
3. other forms of infrastructure.		

