



COUNCIL ASSESSMENT REPORT

HUNTER AND CENTRAL COAST REGIONAL PLANNING PANEL

PANEL REFERENCE & DA NUMBER	PPSHCC-133 – DA2022/00588			
PROPOSAL	Proposed Battery Storage Facility (Electricity generating works)			
ADDRESS	Lot 22 DP 280089 - 60 Riverside Drive Mayfield West			
APPLICANT	Steel River West Pty Ltd			
OWNER	Steel River West Pty Ltd			
DA LODGEMENT DATE	27 May 2022			
APPLICATION TYPE	Development Application			
REGIONALLY SIGNIFICANT CRITERIA	Pursuant to Schedule 6 of the State Environmental Planning Policy (Planning Systems) 2021, the application is referred to the HCCRPP as the development has a capital investment value of more than \$5 million and falls under Clause (5) Private infrastructure and community facilities over \$5 million as an electricity generating works. The application submitted to Council nominates the capital investment value of the project as approximately \$29.47 million.			
CIV	\$29.47 million (excluding GST)			
CLAUSE 4.6 REQUESTS	No Cl4.6 request			
	 Environmental planning instruments: s4.15(1)(a)(i) State Environmental Planning Policy (Planning Systems) 2021. 			
KEY SEPP/LEP	 State Environmental Planning Policy (Transport and Infrastructure) 2021. State Environmental Planning Policy (Biodiversity and Conservation) 2021; State Environmental Planning Policy (Resilience and Hazards) 2021; Draft Remediation of Land SEPP; Newcastle Local Environmental Plan 2012 Development Control Plan: 4.15 (1)(a)(iii) Newcastle Development Control Plan 2012 			

TOTAL & UNIQUE SUBMISSIONS KEY ISSUES IN SUBMISSIONS	N/A – The application did not require notification in accordance with City of Newcastle's Community Participation Plan (CPP).			
DOCUMENTS SUBMITTED FOR CONSIDERATION	 Acid Sulfate Soil advice by RCA Australia 27/11/20 Site Management Plan by RCA Australia 27/4/22 Cost Report by Denary Quantity Surveying 20/5/22 Engineering Plans by GCA Engineering Solutions 5/5/22 Heritage Report by Eikos Environment & Heritage 4/5/22 Landscape Plan by Terras Landscape Architects 13/11/2020 Lighting Report by Power Solutions 17/5/22 Acoustic Report by Spectrum Acoustics May 2022 Preliminary Hazard Analysis by ARUP 26/4/22 Photomontage Report by Terras Landscape Architects 3/5/22 Statement of Environmental Effects By ADW Johnson May 2022 Subdivision Works Certificate 17/12/2020 Waste Management Plan 			
SPECIAL INFRASTRUCTURE CONTRIBUTIONS (S7.24)	No Special Infrastructure Contributions areas apply.			
RECOMMENDATION	Approval			
DRAFT CONDITIONS TO APPLICANT	No			
SCHEDULED MEETING DATE	11 August 2022			
PREPARED BY	Damian Jaeger Principal Development Officer (Planning)			
DATE OF REPORT	4 August 2022			

EXECUTIVE SUMMARY

Development application (DA2022/00588) has been lodged with the City of Newcastle, seeking consent for the erection of an *electricity generating works* involving a 'battery storage facility' which will storage and resupply power to the electrical grid at 60 Riverside Drive, Mayfield West.

The proposed battery system will comprise of a 28MW lithium-ion battery energy storage facility using one of three different battery options. The three options involve containerized batteries, Tesla Megapack or a 'generic' battery system similar to the Tesla Model.

The operation of the battery storage facility will not require permanent staff to be present on the site, with all maintenance and operational management undertaken by contractors. The operation and maintenance of the proposal would only generate the need for two full time staff.

Permissibility

The applicable planning instrument is Newcastle Local Environmental Plan 2012 (NLEP 2012) and the subject site is zoned IN1 – General Industrial.

The proposal constitutes an *electricity generating works* under Division 4 State Environment Planning Policy (Transport & Instructure) 2021, as defined below: -

electricity generating works means a building or place used for the following purposes, but does not include a solar energy system— (a) making or generating electricity,

(b) electricity storage.

The proposal is permissible with consent as *electricity generating works* under s2.36 (1) within Division 4 of State Environment Planning Policy (Transport & Instructure) 2021.

The assessment within the report below demonstrates that the principle planning controls detailed below have been satisfactorily addressed by the proposal:

- State Environmental Planning Policy (Planning Systems) 2021;
- State Environmental Planning Policy (Transport and Infrastructure) 2021.
- State Environmental Planning Policy (Biodiversity and Conservation) 2021;
- State Environmental Planning Policy (Resilience and Hazards) 2021;
- Draft Remediation of Land SEPP;
- Newcastle Local Environmental Plan 2012
- Newcastle Development Control Plan 2012

There were no concurrence requirements from agencies for the proposal and the application is not integrated development pursuant to Section 4.46 of the Environmental Planning and Assessment Act 1979 ('EP&A Act').

Several key prerequisites are required to be satisfied prior to the granting of consent. These are as follows and are considered to have been satisfactorily addressed by the proposal:

- SEPP (Planning Systems) 2021 Section 2.19(1) declares the proposal as regionally significant development pursuant to Clause 2 of Schedule 6
- SEPP (Resilience & Hazards) Section 4.6 Land contamination
- NLEP 2012 CI 6.1 Acid Sulfate Soils

The development application is reported to the Hunter and Central Coast Regional Planning Panel in accordance with Schedule 6 of the State Environmental Planning Policy (Planning Systems) 2021, as the development has a capital investment value of more than \$5 million and falls under Clause (5) *Private infrastructure and community facilities over \$5 million* as an electricity generating works. The nominated capital investment value of the project is \$29.47 million.

A briefing was held with the Panel on 6 July 2022

Other external referrals

The application was referred to Ausgrid and Australian Rail Track Corporation (ARTC). Ausgrid provided advice indicating that they were satisfied subject to conditions. ARTC has not provided any comments regarding the proposal.

Consultation

The application did not require notification in accordance with City of Newcastle's Community Participation Plan (CPP).

Following consideration of the matters for consideration under Section 4.15(1) of the EP&A Act, the provisions of the relevant State environmental planning policies, NLEP 2012 and NDCP 2012, it is considered that the proposal can be supported.

Following a detailed assessment of the proposal, pursuant to Section 4.16(1)(a) of the *EP&A Act*, DA DA2022/00588 is recommended for approval subject to the conditions of consent at **Attachment A** of this report.

1. THE SITE AND LOCALITY

1.1 Introduction

This report provides a detailed overview of the development proposal for an electricity generating works involving the erection of 28Mw lithium-ion battery storage facility and associated landscaping at 60 Riverside Drive, Mayfield West.

1.2 The Site & Locality

The subject site is described as approved Lot 1103 within Lot 22 DP 280089 - 60 Riverside Drive Mayfield West. It is advised that while the subdivision that approves these allotments has been determined (DA2006/2076.02) it has not yet been registered.

The subject site has a frontage of 22.45 metres to the future extension of Riverside Drive and is irregular in shape. The site has side boundaries of 103.935 m and 100.993 m with a rear boundary of 52.0 metres. The overall site area is $5,272 \text{ m}^2$. The site is completely clear of vegetation and relatively level until the western portion at the rear which slopes downhill. This is due to the recent engineering works undertaken as part of the approved subdivision.

The subject site is within an approved industrial subdivision located at the north-western end of the 'Steel River Estate'. To the southwest is Maitland Road and further north-western is a rail line servicing freight movements to Kooragang Island (e.g. coal). There is also a high voltage transmission line located from the southwest to north west of the site. Currently, around the existing site there is limited development as this stage due to the age of the subdivision and that many of the nearby allotments are not yet registered.

2. THE PROPOSAL AND BACKGROUND

2.1 Background – Development History

This is the second proposal for a very similar battery storage facility at 60 Riverside Drive (previously known at 27D Riverside Drive). The original development (DA2021/00007 – approved 20 October 2021) was approved on approved lot 1102. The current development is proposed on approved lot 1103.

The applicant obtained Pre-DA advice was obtained for the original development (PR2020/00046) and that it was agreed that the current proposal, due to being so similar, did not warrant a further Pre-DA advice.

This proposal will replace the approved development (DA2021/00007) and this consent is required to be surrendered as recommended within the conditions at **Attachment A.** It is confirmed that the applicant has proposed the current application on the basis of surrendering on the previous consent.

The site (Lot 1103) is very similar to the previous site (Lot 1102) but is slightly smaller (5,275 m^2 compared to 5,986 m^2) both being the subject of recent engineering works associated with the approved subdivision and, as such, being relatively flat, except for the western most portion which slopes downhill, and clear of vegetation.

The development application was lodged on 27 May 2022. A chronology of the development application since lodgement is outlined below including the Panel's involvement (briefings, deferrals etc) with the application:

Date	Event
27 May 2022	DA lodged
8 June 2022	DA referred to external agencies
6 July 2022	Panel briefing

Table 1: Chronology of the DA

2.2 Background – Battery storage systems

The proposal has been lodged with the same three battery system options as the original proposal (as discussed below)

Battery storage systems are relatively new technology within Australia. The applicants have provided the details below regarding similar systems which have been approved within NSW (inclusive of the previous approval):

Name	Application	Capacity	LGA	Approval Date
Steel River Battery	DA2021/00007	28MW	City of Newcastle	20/10/2021
Hume Battery Energy Storage System	SSD-10460	20MW / 40 MWh	Albury City Council	21/01/2021
Wallgrove Battery energy Storage System	See Link to <u>TransGrid</u> and <u>ARENA</u>	50 MW / 75MWh	Western Sydney Regional Organisation of Councils	2020
Sapphire WF Battery Energy Storage System	SSD-8643	50 MW / 100 MWh	Inverell Shire Council	16/08/2018
Hay SF Battery Energy Storage System	SSD-8113- Mod-2	29 MW / 29 MWh	Hay Shire Council	03/05/2021
Culcairn SF Battery Energy Storage System	SSD-10288	100 MW / 200 MWh	Greater Hume Shire Council	25/03/2021
Quorn Park SF Battery Energy Storage System	SSD-9097	20MW / 20 MWh	Parkes Council	16/07/2020
New England SF Battery Energy Storage System	SSD-9255	200 MW / 400 MWh	Uralla Shire Council	09/05/2020

Name	Application	Capacity	LGA	Approval Date
Tamworth SF Battery	SSD-9264	19 MW / 19	Tamworth	30/11/2020
Energy Storage System		MWh	Regional Council	
Wellington SF Battery	SSD-8573	25 MW / 100	Dubbo Regional	03/03/2020
Energy Storage System		MWh	Council	
Jindera SF Battery	SSD-9549	30 MW / 60	Greater Hume	22/12/2020
Energy Storage System		MWh	Shire Council	

It should be noted that the Hume Battery and Wallgrove Battery Energy Storage Systems are the only two other 'standalone' utility-scale batteries that have been approved in NSW to date. The design of these batteries is similar to the proposed Steel River Battery. There are several other similar battery projects that have been approved and are co-located with either wind or solar farms.

2.3 The Proposal

Development application (2022/00588) has been lodged with the City of Newcastle, seeking consent for the erection of an electricity generating works involving 'battery storage facility' which will storage and resupply power to the electrical grid.

The proposed development involves the installation of 28MW lithium-ion battery energy storage facility which will connect to the local Ausgrid 33kV electrical distribution network.

The overall system will comprise of lithium-ion battery system with a bi-directional (charge and discharge) power conversion system and site controller. The system is highly modular and based on individual smaller power blocks to achieve the required system size. Each battery pack is comprised of thousands of smaller lithium-ion cells which are fully enclosed (within a climate controlled HVAC system) connected together to form an integrated system.

There are three alternate battery model options for installation as follows: -

- i. Modular cubical cabinets (similar to the Megapack system) that are installed in an array around an inverter pack as illustrated in **Figure 1** below); and
- ii. Containerised modules (containerised system) that have been preassembled in modified shipping containers prior to transport to site as illustrated in **Figure 2** below, and
- iii. Modular cubical cabinets similar to the Megapack system described at point i) but using a 'generic' battery brand as yet to be determined at this stage.



Figure 1: Indicative image of a Megapack system (ADW Johnson SEE May 2022)



Figure 2: Indicative image of containerised modules (ADW Johnson SEE May 2022)

The operation of the battery storage facility will not require permanent staff to be present on the site, with all maintenance and operational management undertaken by contractors. The operation and maintenance of the proposal would only generate the need for two full time staff. A dedicated operation and maintenance (O&M) shed is proposed towards the northern boundary of the site.

Refer to **Appendix B** for a copy of the plans and elevations of the proposal.

	Table	2:	Devel	opment	Data
--	-------	----	-------	--------	------

Control	Proposal
Site area	5,272 m ²
FSR (retail/residential)	No FSR standard is appliable under NLEP 2012
Max Height	No height standard is appliable under NLEP 2012
Clause 4.6 Requests	None
Landscaped area	24% (complies with the minimum 20% required under NDCP 2012)
Car Parking spaces	No formal spaces which is considered to be acceptable in this instance having regard to the nature of the use – sufficient informal space is available for the irregular service/maintenance vehicles.
Setbacks	Front – 15.0 metres plus North side – 6.00 metres South side – 13.00 metres West (rear) – 24.6 metres

3. STATUTORY CONSIDERATIONS

When determining a development application, the consent authority must take into consideration the matters outlined in Section 4.15(1) of the *Environmental Planning and Assessment Act 1979* ('EP&A Act'). These matters as are of relevance to the development application include the following:

- (a) the provisions of any environmental planning instrument, proposed instrument, development control plan, planning agreement and the regulations
 - (i) any environmental planning instrument, and
 - (ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and
 - (iii) any development control plan, and
 - (iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and
 - (iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),

that apply to the land to which the development application relates,

- (b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,
- (c) the suitability of the site for the development,

- (d) any submissions made in accordance with this Act or the regulations,
- (e) the public interest.

These matters are further considered below.

It is noted that the proposal is not considered to be:

- Integrated Development (s4.46)
- Designated Development (s4.10)
- Requiring concurrence/referral (s4.13)
- Crown DA (s4.33) written agreement from the Crown to the proposed conditions of consent must be provided

Designated Development (Section 4.10)

Schedule 3 of the *Environmental Planning and Assessment Regulations,* 2021 details what constitutes *designated development.*

The proposed development **does not** meet the criteria for an **Electricity generating stations** as detailed under Clause 7 or 24 of Schedule 3 as extracted below noting that the proposal does not exceed the 30 megawatt criteria or any other triggers below.

7 Battery storage facilities

Development for the purposes of a battery storage facility is designated development if the facility supplies or is capable or supplying more than 30 megawatts of electrical power.

24 Electricity generating stations

- (1) Development for the purposes of an electricity generating station is designated development if the station supplies or is capable of supplying—
 - (a) electrical power where—
 - *(i) the associated water storage facilities inundate land identified as wilderness under the Wilderness Act 1987, or*
 - (ii) the temperature of the water released from the generating station into a natural waterbody is more than 2 degrees centigrade from the ambient temperature of the receiving water, or
 - (b) more than 1 megawatt of hydroelectric power requiring a new dam, weir or inter-valley transfer of water, or
 - (c) more than 30 megawatts of electrical power from other energy sources, including coal, gas, wind, bio-material, hydroelectric stations on existing dams or co-generation, but excluding solar powered generators.
- (2) Development for the purposes of an electricity generating station is designated development if the station supplies or is capable of supplying more than 30 megawatts of electrical power from a thermal solar powered generator.
- (3) Development for the purposes of an electricity generating station is designated development if the station—
 - (a) supplies or is capable of supplying more than 30 megawatts of electrical power from a photovoltaic solar powered generator, and
 - (b) is located on a floodplain.
- (4) This section does not apply to a power generation facility used exclusively for stand-by power purposes for less than 4 hours per week averaged over a continuous 3-month period.
- (5) In this section—

electricity generating station includes associated water storage, ash or waste management facilities.

Integrated Development (Section 4.46)

The proposal does not constitute integrated development under Section 4.46 of the EPA Act, 1979. Notably, the proposal does not trigger any requirement for an Environment Protection Licence under Schedule 1 of the *Protection of the Environment Operations Act 1997*.

3.1 Environmental Planning Instruments, proposed instrument, development control plan, planning agreement and the regulations

The relevant environmental planning instruments, proposed instruments, development control plans, planning agreements and the matters for consideration under the Regulation are considered below.

(a) Section 4.15(1)(a)(i) - Provisions of Environmental Planning Instruments

The following Environmental Planning Instruments are relevant to this application:

- State Environmental Planning Policy (Planning Systems) 2021;
- State Environmental Planning Policy (Transport and Infrastructure) 2021.
- State Environmental Planning Policy (Biodiversity and Conservation) 2021;
- State Environmental Planning Policy (Resilience and Hazards) 2021;
- Newcastle Local Environmental Plan 2012;

A summary of the key matters for consideration arising from these State Environmental Planning Policies are outlined in **Table 3** and considered in more detail below.

EPI		Matters for Consideration	Comply (Y/N)
State Environmental Planning Policy (Biodiversity & Conservation) 2021	Cha The exis appl	pter 2: Vegetation in non-rural areas proposed development is part of an existing approved subdivision and the ting area is predominantly devoid of vegetation/trees, and, as such the lication is acceptable under this policy.	Y
State Environmental Planning Policy (Planning Systems) 2021	Cha • S pi ca The the	pter 2: State and Regional Development ection 2.19(1) declares the proposal regionally significant development ursuant to Clause 5 of Schedule 6 as it comprises <i>Private infrastructure and</i> <i>ommunity facilities over \$5 million</i> application submitted to Council nominates the capital investment value of project as approximately \$29.47 million.	Y
SEPP (Resilience & Hazards)	Cha • S a • S	pter 2: Coastal Management Section 2.10(1) & (2) - Development on land within the coastal environment rea Section 2.11(1) - Development on land within the coastal use area	Y

 Table 3: Summary of Applicable Environmental Planning Instruments

	 Chapter 3 Hazardous and offensive development The requirements of Chapter 3 have been addressed and the proposal does not trigger any mandatory requirements for the preparation of a <i>Preliminary Hazard Analysis</i> (PHA). Notwithstanding this, the applicants have provided a PHA report to demonstrate that the proposal is acceptable in terms of overall risks, <i>potentially hazardous and potentially offensive development</i> Chapter 4: Remediation of Land Section 4.6 - Contamination and remediation has been considered in the Contamination Report and the proposal is satisfactory subject to conditions. 	
State Environmental Planning Policy (Transport and Infrastructure) 2021	 Chapter 2: Infrastructure Section 2.36 Electricity generating works or solar energy systems- Development permitted with consent Section 2.48(2) (Determination of development applications—other development) – electricity transmission - the proposal is satisfactory subject to conditions. Section 2.98 Development adjacent to rail corridors 	Y
Proposed Instruments	No compliance issues identified.	Y
LEP	 Clause 2.3 – Zone Objectives and Land Use Table Clause 4.3 – Height of buildings Clause 4.4 – Floor space ratio Clause 4.6 - Exceptions to development standards Clause 5.1/5.1A – Land acquisition Clause 5.10 – consideration of Aboriginal and non-aboriginal heritage Clause 5.21 – consideration of flood impacts Clause 6.1 – consideration of Acid Sulfate Soils Clause 6.2 – consideration of earthworks 	Y
DCP	 Section 3.13 – Industrial Development Section 4.01 – Flood Management Section 4.04 – Safety and Security Section 4.05 – Social Impact Section 5.01 – Soil Management Section 5.02 – Land Contamination Section 5.03 – Vegetation Management Section 5.04 – Aboriginal Heritage Section 5.05 – Heritage Items Section 6.02 – Archaeological Management Section 7.02 – Landscape, Open Space and Visual Amenity Section 7.03 – Traffic, Parking and Access Section 7.08 – Waste Management 	Y

Consideration of the relevant SEPPs is outlined below:

State Environmental Planning Policy (Planning Systems) 2021 ('Planning Systems SEPP')

Chapter 2: State and Regional Development

The proposal is *regionally significant development* pursuant to Section 2.19(1) as it satisfies the criteria in Clause 5 of Schedule 6 of the Planning Systems SEPP as the proposal is development for *Private infrastructure and community facilities over \$5 million*. Accordingly,

the Hunter Central Coast Regional Planning Panel is the consent authority for the application. The proposal is consistent with this Policy.

State Environmental Planning Policy (Resilience and Hazards) 2021

Chapter 2: Coastal Management

The proposal is affected by both coastal environment area and coastal use area. The proposed development is part of an existing approved subdivision and the existing area is devoid of vegetation/trees, and, as such the application is acceptable under this policy.

Chapter 3 Hazardous and offensive development

This policy provides provisions to address and reduce the impacts of hazardous and offensive development.

The proposed battery storage facility does not strictly trigger the requirement for a Preliminary Hazard Assessment (PHA) under the Department of Planning Industry and Environment's (DPIE) 'Applying SEPP 33 Guidelines' as a hazardous development.

Notwithstanding this, the applicant's consultants ARUP have prepared a Preliminary Hazard Assessment (PHA) under the terms of SEPP (R&H) in accordance with the NSW DPIE's Multilevel Risk Assessment and Hazardous Industry Planning Advisory Papers (HIPAPs) No. 4 – Risk Criteria for Land Use Safety Planning [2] and No. 6 – Hazard Analysis [3] so to address the potential risks of the proposed development.

Battery Systems

Two types of battery solutions are currently being considered for the site based on lithium-ion battery technology:

- Modular cubical cabinets (which could be the Tesla Megapack system or another similar generic battery system) that are installed in an array around an inverter pack (see **Figure 3** below).
- Containerised modules (containerised system) that have been preassembled in modified shipping containers prior to transport to site (see **Figure 4 & 5** below).



Figure 3: Indicative Tesla Megapack (example modular/cabinet unit) (ARUP PHA June 2021)



Figure 4: Indicative containerised module (ARUP PHA June 2021)



Figure 5: Indicative arrangement of containerised module (ARUP PHA June 2021)

PHA Assessment

A PHA has been submitted with the application (prepared by ARUP). ARUP has confirmed (26 April 2022) that the previous report for DA2021/00007 (submitted again as part of this application) also pertains to this development proposal (i.e. that the underlying proposed technology and risks are the same).

As the final battery technology has not yet been chosen for the site, the hazards were considered for both modular/cabinet and containerised solutions.

The hazard assessment considered and assessed the following key risks associated with the proposed development:

- Security breach leading to injury The proposed risks will be acceptable with the inclusion of security fencing, CCTV and regular inspections to monitor breaches.
- *Electrocution from an electrical facility* The risks will be acceptable where electrical assets are installed in accordance with AS 3000: Electrical Installations and appropriately qualified maintenance personnel being employed.
- *Injury to construction or operations personnel* To ensure risks during construction/operation of the facility are acceptable it is recommended that a detailed *Work, Health and Safety* plan is undertaken.

- *Exposure to dangerous goods during a site emergency* Considering the nature of the lithium-ion battery technology used, to minimize the risks, it will be necessary to undertake a site-specific Emergency Management Plan, include appropriate signage and labelling to identify site-specific hazards and ensure that emergency response workers are to be made aware of the response requirements.
- *Release of firewater runoff* The release of contaminated firewater, following extinguishment of a fire event, needs to be contained via permanent bunding or a temporary bunding system. Having regard to the nature of the proposal being an open site, as opposed to housed within a building, it is considered that a permanent bunding system would be inappropriate and, as such, a temporary bunding system would form part of the required Emergency Management Plan.
- *Battery fire* A fire could credibly form in a lithium-ion battery system because of a thermal runaway in one or more cells or from an external source such as a fire at the facility.

The risk assessment has tested the combined worst-case scenario of the battery management system failing, the fire suppression system failing, and all associated doors left open. The assessment found that where the recommended separation distances detailed below are adopted, the risks for fires associated with the proposed battery systems would be acceptable. The recommended distances include internal batteries separations and external setbacks to boundaries, each being intentionally conservative.

• Battery explosion - Flammable vapours may accumulate in the battery unit. This could result in a confined vapour cloud explosion (VCE) occurring. It is advised that at high temperatures (100C plus) the battery cells are designed to vent so to release internal gas pressure. It is estimated that the proposed 40 foot container could accumulate a vapor cloud of 800 litres. The gas composition will vary depending on the battery brand used but typically consists of ethylene and carbon monoxide (i.e. approximately 64% and 35% by mass respectively).

The assessment found that where the recommended separation distances, as detailed below, are adopted, combined with explosion venting or prevention systems, the risks for explosions associated with the proposed battery systems would be acceptable. The recommended distances include internal batteries separations and external setbacks to boundaries, each being intentionally conservative.

The PHA indicates that without any controls or mitigation measures a 24-metre separation distance would be required. The hazard assessment makes various recommendation summarised as below to address the risks. The resultant risk contours for the development are shown on drawings DA01 Revision 5 and DA04 Revision 5.

- i) Designed with means to safely vent to prevent an explosion
- ii) The containerized batteries shall be separated from one another by not less than 3.25 m end to end and not less than 3 m side to side and separated from the site boundary by not less than 10 m (See DA01 Revision 5).
- iii) The front/end of modular/cabinet batteries (e.g., Tesla Megapack) shall be separated from boundaries by not less than 2 m and not less than 5 m side to side, and separated from the site boundary by not less than 10 m (See DA04 Revision 5).
- iv) Provision of fire test report in accordance with UL9504A
- v) Provision of fire suppression systems with includes potential explosion hazards

It is further noted that where specific test data exist, the recommended separation distances between units provided may be varied, such as the Tesla Megapack can be separated be 6 inches (155 mm) side-to-side or back-to-back (i.e. the sides of the unit without doors) as demonstrated by fire testing performed using the UL9504A Test Method.

The submitted PHA has been assessed by both CN and the DPIE's Hazards Section. SafeWork for NSW was no required to be consulted as the proposal does not constitute a *major hazard facility.*

The two main hazards that were identified as having the potential to cause offsite impacts; battery fire and battery explosion, were carried forward for quantitative consequence analysis. An assessment by the Technical Specialists (Hazards) from the NSW DPIE provided relevant comment on the Statement of Environmental Effects, PHA and recommended conditions of consent for the project.

The final selection of the battery storage technology has not been made and the PHA has undertaken assessment of separation distances for battery containers, Tesla Megapack batteries and generic battery modules.

The DPIE Hazards found the Applicant has verified that the proposed containizers and Tesla modular battery systems meet the required separation distances. These separation distances proposed are appropriate and would minimise risk to surrounding land use. Appropriate conditions are recommended in this respect at **Attachment A**.

A site layout plan demonstrating that the 'generic' battery modules system can meet required separation distances and setbacks) has not been provided but conditions have been recommended to address this option as recommended at **Attachment A.** A decrease in the number of non-Tesla branded battery modules may be necessary if the required Final Hazard Analysis, as detailed below, cannot demonstrate that the approved setbacks are sufficient for any generic battery system proposed.

The following advice was provided by the DPIE (Hazards Team):

- 1. The battery energy storage system shall not exceed a delivery capacity of 30 MW and shall be installed and operated in a manner consistent with the Preliminary Hazard Analysis of 3 June 2021.
- 2. The battery energy storage system shall be either containerised (*Drawing DA01*) or modular (*Drawing DA04*). If the battery modules, other than Tesla Model 1462965-XX-Y Megapack, are chosen as the final design for this development, at least one month prior to installation of the battery modules, the Applicant shall prepare and have approved by Council a **Final Hazard Analysis** of the development, consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 6, '*Hazard Analysis*' and *Multi-level Risk Assessment*, and consider recent developments in research and standards for battery energy storage systems.

<u>Note:</u>

With respect to condition 2 above, the Final Hazard Analysis should consider standards and codes such as and not limited to NFPA 855, AS 5139, IEC 62897, UL 9540, FM Global DS 5-33. The PHA should verify that the proposed Battery Energy Storage System (BESS) capacity would be able to fit within the land area designated for the Battery Energy Storage System (BESS) while taking into account separation

distances between the BESS sub-units (racks, modules, enclosures, etc.) ensuring that a fire from a sub-unit do not propagate to neighbouring sub-units and the overall BESS and other on-site or off-site receptors, ensuring fire safety.

Where testing of the BESS unit (container or cabinet) has been undertaken in accordance with UL9540A, the UL9540A test report should be submitted where separation distances are based on the results of this report.

3. Prior to commissioning of the development, the Applicant shall develop and implement a comprehensive Emergency Plan and detailed emergency procedures of the development. The plan shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 1, '*Emergency Planning*'.

As such, the proposed development is acceptable providing that the recommendations in the amended PHA, as detailed above, the proposal would be acceptable subject to conditions of consent.

The Hunter Central Coast Regional Planning Panel in determining DA2021/00007 did not support the 'generic' battery option for the proposal. In this respect, the draft conditions of consent recommended at **Attachment A** these reflect the same final conditions for DA2021/00007 and do not include the 'generic' battery option.

Chapter 4: Remediation of Land

The provisions of Chapter 4 of *State Environmental Planning Policy (Resilience and Hazards)* 2021 ('the Resilience and Hazards SEPP') have been considered in the assessment of the development application. Section 4.6 of Resilience and Hazards SEPP requires consent authorities to consider whether the land is contaminated, and if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out.

The proposal has been assessed by the Environmental Protection Officer and is considered acceptable in terms of the requirements of SEPP (R&H) and land contamination as detailed below.

The site being part of the 'Steel River' estate, has been subject of a detailed investigation and a remediation action plan that approved remediation of the overall Steel River precinct. URS Australia Pty Ltd has developed, as part of this previous approval, a set of protocols for verifying remediation and validation of each allotment. The proposal has met these requirements of the remediation strategy, outlined below.

The project will involve minor earthworks such as ground levelling, construction of the driveway and landscaping (most earthworks already being undertaken as part of the approved subdivision). The following controls and consideration will ensure that the development is designed, constructed, and otherwise carried out to comply with the Contamination Guidelines to preserve the integrity of the Remediation Strategy of the Steel River precinct.

A Site Management Plan was prepared by RCA dated 27 April 2022, which gives information on site procedures during the building phase, including consideration of contaminated soil and measures to ensure the integrity of the estate specific validation process is maintained.

The site is considered suitable for commercial/industrial development, provided that the development is conducted in accordance with the Site Development Guidelines, Site Management Plan and relevant Environmental Management Plans. This is addressed by conditions of consent recommended at **Attachment A**.

Contamination Certificates A and B have been provided. Certificate C is required prior to Construction Certificate when final comments are provided. Certificate D will confirm the construction has been completed regarding the remediation strategy and will be required prior to occupation. It is considered that the proposal has addressed the provisions of SEPP (R&H) and is satisfactory subject to the conditions recommended at **Attachment A**. for the the management of the site.

State Environmental Planning Policy (Coastal Management)

State Environmental Planning Policy – Coastal Management aims to protect and manage the New South Wales coast and foreshores and requires certain development applications in sensitive coastal locations to be referred to the Director-General for comment.

The subject site is located within the coastal environment area and coastal use area under the provisions of s2.10 and s2.11 of the SEPP.

The proposed development in this location will not have any impacts on the foreshore or coastal environments being part of an existing approved subdivision, and, as such the application is acceptable under this policy. The current proposal will not further increase the impacts in the area and it is noted that this general area has been highly disturbed by industrial development in excess of 50 years.

State Environmental Planning Policy (Transport and Infrastructure) 2021

Section 2.36 Electricity generating works or solar energy systems- Development permitted with consent

The proposal constitutes an *electricity generating works* under Division 4 State Environment Planning Policy (Transport & Instructure) 2021, as defined below: -

electricity generating works means a building or place used for the following purposes, but does not include a solar energy system—

- (a) making or generating electricity,
- (b) electricity storage.

The proposal is permissible with consent as *electricity generating works* under s2.36 (1) within Division 4 of State Environment Planning Policy (Transport & Instructure) 2021.

Section 2.48(2) (Determination of development applications—other development) – electricity transmission - the proposal is satisfactory subject to conditions.

Section 2.48(2) of the SEPP (T&I) requires certain development applications to be referred to the relevant electricity supply authority, further that any concerns raised by the electricity supply authority are to be considered as part of the assessment.

The proposal was referred to Ausgrid due to the nearby high voltage powerlines and the provisions $s_{2.48(2)}$ of the SEPP (T&I). Ausgrid has raised no objections as detailed at **Attachment C**.

Section 2.98 Development adjacent to rail corridors

The proposal was also referred to Australian Rail Track Corporation (ARTC) under s2.98 -*Development adjacent to rail corridors*. ARTC has not responded to the current referral. Noting that this proposal and the previous (DA2021/00007) are very similar in location and potential impacts, it is advised that previously ARTC raised no objections (see letter at **Attachment C)** regarding the proposal subject to issues of stormwater, fencing, lighting, external finishes and limitations on excavations. CN considers that the matters that were previously raised by ARTC are predominately addressed (e.g. stormwater, fencing and lighting). The layout of the development would not result in excavation within the 25 metre zone (the closest building element being 24.6 metres from the ARTC boundary). It is considered unlikely that the external finishes would be considered to be 'reflective' by the ARTC. To ensure there is no potential conflict or issues arising, notwithstanding that CN's assessment expects this to be unlikely, a condition is recommended at **Attachment A** requiring the applicant to meet the requirements of ARTC's previous letter.

Other State Environmental Planning Policies

The proposal is not contrary to the provisions of any other relevant State Environmental Planning Policy.

Regional Environmental Plan

There are no regional environmental plans that are relevant to this proposal.

Newcastle Local Environmental Plan 2012 (NLEP 2012)

Clause 2.3 Land Use Table - Zoning

The site is zoned IN1 – General Industry under the Newcastle LEP 2012. The proposed development is defined as an *electricity generating works* under the LEP and is not listed as permissible in the zone. The proposal gains its permissibility as *electricity generating works* under s2.36 (1) within Division 4 of State Environment Planning Policy (Transport & Instructure) 2021.

The zone objectives include the following (pursuant to the Land Use Table in Clause 2.3):

Objectives of zone

- To provide a wide range of industrial and warehouse land uses.
- To encourage employment opportunities.
- To minimise any adverse effect of industry on other land uses.
- To support and protect industrial land for industrial uses.
- To allow commercial, retail or other development where it is-
 - (i) ancillary to the use of land in this zone for industrial, research, service or storage purposes, or
 - (ii) primarily intended to provide personal services and community facilities to persons occupied or employed in activities otherwise permitted in this zone or for the benefit of the local community.
- To ensure that any such commercial, retail or other development is unlikely to be prejudicial— (i) to employment-generating activities, or

(ii) to the viability of existing commercial centres.

Notwithstanding that the use is not permissible within the IN1 zone, the proposal is acceptable in terms of the objectives of the IN1 zone.

General Controls and Development Standards (Part 2, 4, 5 and 6)

The LEP also contains controls relating to development standards, miscellaneous provisions and local provisions. The controls relevant to the proposal are considered in **Table 4** below.

Control	Requirement	Proposal	Comply
Minimum subdivision Lot size (Cl 4.1)	4,000 m²	5,272 m ²	Yes
Height of buildings (Cl 4.3(2))	None Apply		Yes
FSR (Cl 4.4(2))	None Apply		Yes
Land acquisition (Cl 5.1/5.1A)	None Apply		Yes
Heritage (Cl 5.10)	Local Heritage Item I291	Acceptable – see cl5.10 below	Yes
Flood planning (Cl 5.21)	Site is not affected by flooding		Yes
Acid sulphate soils (Cl 6.1)	Class 2	Acceptable – see cl6.1 below	Yes
Earthworks (Cl 6.2)	No detrimental impact on environmental	Acceptable – see cl6.2 below	Yes

Table 4: Consideration of the LEP Controls

The proposal is generally consistent with the LEP.

Clause 4.3 Height of Buildings

The Height of Buildings Map does not provide for any height standards within the IN1 zone.

Clause 4.4 Floor Space Ratio

There is no maximum floor space ratio development standard applicable within the IN1 zone.

Clause 5.10 Heritage Conservation

The subject site is located approximately 160 metre from the site of the Local Heritage Item I291 known as the former Migrant Camp (with approximately 330 metres between the subject site and the actual heritage item). The subject site is not identified as containing any items of Aboriginal or European Heritage Significance.

Clause 5.10(4) requires the consent authority must consider the effect of the proposed development on the heritage significance of an item including those items within the vicinity of the site.

The applicants have provided a Statement of Heritage Impact prepared by Eikos Environment and Heritage which has demonstrated that the proposal will have sufficient separation not to have any impact on the heritage item.

Clause 6.1 Acid Sulfate Soils

The subject site is identified as containing Class 2 Acid Sulphate Soils (ASS). The applicants sought advice from RCA Australia regarding potential Acid Sulfate Soils and which indicated that Acid Sulfate Soils would not be encountered within the upper 2m of the site and unlikely until depths of up to 9m at the site, pre-subdivision works levels. It is considered that the proposal is acceptable in terms of Acid Sulphate Soils and there is no requirement to prepare an Acid Sulphate Soils Management Plan in this instance.

Clause 6.2 Earthworks

The proposed development will maintain the same levels as those approved in association with the approved subdivision (DA2006/2076.02).

(b) Section 4.15 (1)(a)(ii) - Provisions of any Proposed Instruments

There are several proposed instruments which have been the subject of public consultation under the EP&A Act, and are relevant to the proposal, including the following:

• Draft Remediation of Land SEPP

These proposed instruments are considered below:

A proposed Remediation of Land State Environmental Planning Policy ('Remediation of Land SEPP'), which was exhibited from 31 January to 13 April 2018, is currently under consideration. The proposed Remediation of Land SEPP is intended to repeal and replace the provisions of Chapter 4 of SEPP (Resilience and Hazards) 2021) and *Contaminated Land Planning Guidelines*, and seeks to provide a state-wide planning framework to guide the remediation of land, including; outlining provisions that require consent authorities to consider the potential for land to be contaminated when determining development applications; clearly list remediation works that require development consent; and introducing certification and operational requirements for remediation works that may be carried out without development consent.

The Remediation of Land SEPP is aimed at improving the assessment and management of land contamination and its associated remediation practices. The proposal is consistent with the draft provisions and is considered to be acceptable subject to conditions of consent having

been assessed in detail against the current provisions of SEPP (Resilience and Hazards) 2021.

The proposal is generally consistent with these proposed instruments.

(c) Section 4.15(1)(a)(iii) - Provisions of any Development Control Plan

The following Development Control Plan is relevant to this application:

The main planning requirements of relevance in the Newcastle Development Control Plan 2012 (DCP) are discussed in detail below.

3.13 – Industrial Development

The subject site is part of the 'Steel River Estate' and is to be assessed having regard to the Strategic Impact Assessment Study (SIAS) which sets out both design and environmental requirements for the estate.

The proposal meets the requirements of the SIAS achieving the 20% landscape area (24% proposed) for the site and maintaining the front, side and rear setbacks. The proposal is acceptable having regard to the existing remediation scheme for land contamination and acoustic impacts.

Visually the outcomes of the proposal are adequate considering the unique nature of the proposal. The visual impacts are assessed in detail within the report below in Section 3.2

The proposed fencing 3.0 metre in height is greater than that which would otherwise be allowed for typical industrial developments within the estate (typically 1.8-2.0m) but this acceptable in this instance having regard to the nature of the facility and the greater safety/risk issues to be addressed.

4.10 - Flood Management

This site is not affected by flooding.

4.04 - Safety and Security

The development is acceptable having regards to Crime Prevention Through Environmental Design (CPTED) principles including surveillance, access control, territorial reinforcement and space management.

The proposal will incorporate both CCTV and lighting to address CPTED principles for the site.

The entire site perimeter will be surrounded with a 3 metre high chainmesh fence including barbwire at the top. The proposed fencing is comparable with other electricity generating works such as substations which need to ensure that access is strictly restricted for safety and vandalism purposes.

4.05 Social Impact

The proposal will have positive social & economic impacts via the investment of \$29.5 million in the Newcastle Local Government Area and the introduction of new innovative technology. The proposal will generate approximately 20 jobs during construction and 2 full time jobs for operation/maintenance of the facility.

Overall, it is considered that the proposal is acceptable having regard to social and economic impacts.

5.01 Soil Management

A Sediment and Erosion Management Plan has been submitted with the application to minimise sediments being removed from the site during the construction period. A condition has been placed on the consent to ensure such measures are in place for the entire construction period.

5.02 - Land Contamination

Land contamination has been assessed under the SEPP (R&H) discussion above. The site is suitable for the proposed development.

Section 5.03 – Vegetation Management

The proposed development is part of an existing approved subdivision and the existing area is predominantly devoid of vegetation/trees, and, as such the application is acceptable under this section.

Section 5.04, 5.05 and 6.02 – Aboriginal Heritage, Heritage Items and Heritage Conservation Areas

Refer to clause 5.10 LEP discussion above.

7.02 - Landscape, Open Space and Visual Amenity

The applicants have submitted a landscape plan by Terras Landscape Architects which provides for a combination of small trees, shrubs and ground covers along the side boundaries and street front. The rear of site (western boundary) is a combination of decorative stone and grasses.

The landscape design, and the width of the boundary landscape screens, is dependent on meeting the required setbacks to address the risks from battery fires and explosions. It is further noted that the landscape plan has been modified to avoid any conflict with easements at the rearmost portions of the site. Overall, it is considered that landscape design is acceptable.

7.03 Traffic, Parking and Access

The proposed development is acceptable in terms of traffic, access and parking impacts as detailed below.

Vehicular Access, Driveway Design and Crossing Location

Vehicle access is proposed from Riverside Drive via 2 separate driveways each providing for entry and exit as required. Swept turning paths have been provided to demonstrate that a 12.5m ridged truck can enter the site and leave the site in a forward direction.

Parking Demand & Traffic Generation

No permanent parking is proposed on site only access by servicing and delivery vehicles. The local road network can accommodate the expected site generated traffic.

7.06 Stormwater

The proposal has been assessed by the Senior Development Officer and is acceptable in terms of stormwater impacts as detailed below.

The development has a large pervious gravel hardstand which is with no formal drainage system proposed excepting for the existing inter-allotment drainage pit in the northwest corner of the site. It is proposed to grade the site to ensure major flows are conveyed to Riverside Drive and the inter allotment drainage pit. A condition is proposed to require detail confirmed at Construction Certificate stage.

7.08 Waste Management

The proposal will not generate any real need for the collection of waste during operation. There will be no permanent staff on site and any waste generated from the maintenance of the facility would be removed by staff (i.e. contractors) as part of the maintenance.

Community Participation Plan

The application was not required to be notified under the provisions of the *Community Participation Plan.*

Newcastle Section 7.12 Development Contribution Plan

The application attracts a Section 7.12 Contribution pursuant to section 4.17 of the *Environmental Planning and Assessment Act 1979* and the City of Newcastle's *Section 7.12 Development Contributions Plan 2021*. A contribution of 1% of the cost of development is recommended at **Attachment A**, in accordance with s208 of the *Environmental Planning and Assessment Regulation 2021*

(d) Section 4.15(1)(a)(iiia) – Planning agreements under Section 7.4 of the EP&A Act

No planning agreements are relevant to the proposal.

(e) Section 4.15(1)(a)(iv) - Provisions of Regulations

There are no matters under Section 61 of the 2021 EP&A Regulation which need to be addressed within the assessment of this application.

3.2 Section 4.15(1)(b) - Likely Impacts of Development

The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality must be considered.

In this regard, potential impacts related to the proposal have been considered in response to SEPPs, LEP and DCP controls outlined above and the assessment below.

The consideration of impacts on the natural and built environments includes the following:

 Context and setting – The character, bulk and scale of the proposal is acceptable having regard to the intended industrial nature of the site and area. The applicants have submitted a visual impact assessment (VIA) which includes photomontages from possible public view lines along Maitland Road (i.e. east bound traffic) to the site.

The proposed battery systems, being either a containerised unit or battery module system, are not overly visually attractive of themselves. Notwithstanding this, it is also noted that the systems at their highest would be approximately 3.0metres in height. Due to the recommended setbacks required to address risks associated with the proposal, there is a need to maintain open setbacks immediately around the battery system units. Furthermore, larger growing trees are not considered to be appropriate in this respect.

The VIA shows that the combination of distance, approximately 190-225 metres, with the existing topography and proposed landscape screening, that the proposal would be of an acceptable impact. It is further noted that the Maitland Road is an 80 kilometre zone and, as such, the views to this area would be shorter duration "glimpses".

The VIA provided photomontages show that, with the combination of the proposed landscape screening, the proposed battery systems will not have a major visual impact (see **Figures 6, 7, 8, 9** and **10** below). Importantly, it is advised that the adjoining industrial sites, especially to the north, northeast and east of the subject site, will allow industrial buildings to be developed which will typically be in the range of 8-12 metres in height, based on the development within the existing estate, and once this further occurs it is expected that the current proposal will be even less noticeable.

Overall, the proposal is acceptable in terms of visual appearance impacts.



Figure 6: Viewpoints 1 and 2 from Maitland Road (Photomontage Report May 2022)



Figure 7: Viewpoint 1 without landscaping (Photomontage Report May 2022)



Figure 8: Viewpoint 1 with mature landscaping (Photomontage Report May 2022)



Figure 9: Viewpoint 2 without landscaping (Photomontage Report May 2022)



Figure 10: View point 2 with mature landscaping (Photomontage Report May 2022)

- Access and traffic The proposal, as discussed above under the NDCP assessment, the proposal is considered to be satisfactory in terms of traffic, parking and access.
- Utilities It is considered that the proposal is adequate in terms of utilities. The proposal will form an important addition to the overall electrical grid by being able to provide on-demand back up power.
- Heritage Heritage was assessment under cl5.10 of the NLEP above.
- Water/air/soils impacts Land Contamination and earthworks were addressed under SEPP (Hazards & Resilience) and cl6.2 of the NLEP respectively above. Potential air or water quality issues that could stem from construction are addressed by recommended condition of consent at **Attachment A**.
- Flora and fauna impacts – It is considered that the proposal does not have flora or fauna impacts.
- Natural environment Earthworks were addressed under and cl6.2 of the NLEP above. Having regard to the highly distributed nature of the site, it is considered that there are no other real impacts on the natural environment.
- Amenity Impacts (Lighting) The applicants have submitted a lighting report demonstrating that the proposal has acceptable impacts having regard to AS4282: Control of the obtrusive effects of outdoor lighting.

• Noise and vibration – The proposal was assessed by CN's Environmental Protection Officer.

A Noise Impact Assessment (NIA) for the proposed battery storage development was prepared by Spectrum Acoustics dated May 2022. The study assumed 12 battery units and 4 transformers (oil distribution type) on site.

The cumulative noise level from operation is predicted to be well below the Strategic Impact Assessment Study of 48 dB(A) (day) and 30 dB(A) (night) at the nearest residential receiver. The NIA found no exceedance of relevant noise criteria at any industrial or residential receiver.

The likelihood of noise impact on industrial or residential neighbours is low considering the results of the NIA and the location being at the western extremity of the Steel River estate.

Construction is expected to be for a duration of approximately 3 months with approximately 90 truck movements. It is estimated that 20 of these will occur over a couple of days during peak construction. Therefore, it is recommended that they deliveries of battery cells, racks etc are undertaken during daytime hours only.

The proposal is acceptable subject to the recommended conditions of consent at **Attachment A.**

• Natural hazards – The subject site is not affected by bushfire prone lands, mine subsidence or flooding.

The subject site is affected by land contamination and Class 2 Acid sulfate soils. The acid sulfate soils has been addressed under cl6.1 above.

Land contamination has been addressed under SEPP (Resilience and Hazards) and is also considered to be acceptable.

- Safety, security and crime prevention The CPTED Principles have been considered under the NDCP assessment above.
- Social & Economic impacts The social and economic impacts have been considered under the NDCP assessment above.
- Construction Impacts Appropriate conditions of consent have been recommended potential construction impacts at **Attachment A**.
- Cumulative impacts Overall it is considered that the cumulative impacts of the proposal are acceptable subject to conditions of consent recommended at **Attachment A**.

Accordingly, it is considered that the proposal will result in any significant adverse impacts in the locality as outlined above.

3.3 Section 4.15(1)(c) - Suitability of the site

The site is suitable for the proposed development, subject to the recommended conditions of consent included at **Attachment A**, having had regard to the nature of the existing site and the locality, the character of the area.

3.4 Section 4.15(1)(d) - Public Submissions

The application did not require notification in accordance with City of Newcastle's Community Participation Plan (CPP).

3.5 Section 4.15(1)(e) - Public interest

The proposal is considered, on balance, to be in the public interest and consistent with the planning controls (i.e. relevant SEPPs, NLEP and NDCP), as detailed within the report. The proposal is considered to be acceptable having regard to the industrial context of the Steel River subdivision. The proposal will form an important part of the overall electrical grid being able to provide back-up power on demand.

4. **REFERRALS AND SUBMISSIONS**

4.1 Agency Referrals and Concurrence

The development application has been referred to various agencies for comment/concurrence/referral as required by the EP&A Act and outlined below in Table 5.

Agency	Concurrence/ referral trigger	Comments (Issue, resolution, conditions)	Resolved
Concurrence Rec	quirements (s4.13 of EP&A Act)		
Rail authority for the rail corridor	Section 2.98(3) - State Environmental Planning Policy (Transport and Infrastructure) 2021	As discussed above, no response was received from ARTC within the 21 days from referral of the proposal. Notwithstanding this, conditions has been recommended at Attachment A to address any potential issues.	Y

Table 5: Concurrence and Referrals to agencies

Referral/Consultat	ion Agencies		
Electricity supply authority	Section 2.48 – State Environmental Planning Policy (Transport and Infrastructure) 2021 Development near electrical infrastructure	The proposal was referred to Ausgrid due to the nearby high voltage powerlines and the provisions s2.48 of the SEPP (T&I). Ausgrid has raised no objections as detailed within Appendix C .	Y

Integrated Development (S 4.46 of the EP&A Act) - no application was made for integrated development

4.2 Council Officer Referrals

The development application has been referred to various Council officers for technical review as outlined **Table 6**.

Officer	Comments	Resolved
Engineering	Council's Engineering Officer reviewed the submitted stormwater concept plan and considered that there were no objections subject to conditions.	Y
Environmental	The proposal has been assessed by CN's Environment Protection Officer and the proposal is satisfactory subject to conditions.	Y
Heritage	The previous application (DA2021/00007) was assessed by Council's Heritage Officer/Consultant and considered to be acceptable. The current proposal, which is largely similar, is even further away from the heritage item on Maitland Road and, as such, is also considered to be acceptable.	Y

Table 6: Consideration of Council Referrals

4.3 Community Consultation

The application did not require notification in accordance with City of Newcastle's Community Participation Plan (CPP).

5. KEY ISSUES

All key issues relevant to the assessment of this application have been considered within the assessment above.

6. CONCLUSION

This development application has been considered in accordance with the requirements of the EP&A Act and the Regulations as outlined in this report. Following a thorough assessment of the relevant planning controls and the key issues identified in this report, it is considered that the application can be supported subject to conditions recommended at **Attachment A**.

7. **RECOMMENDATION**

That the Development Application DA No 2022/00588 for Proposed Battery Storage Facility (Electricity generating works) at 60 Riverside Drive Mayfield West be APPROVED pursuant to Section 4.16(1)(a) of the *Environmental Planning and Assessment Act 1979* subject to the draft conditions of consent attached to this report at **Attachment A**.

The following attachments are provided:

- Attachment A: Draft Conditions of consent
- Attachment B: Architectural Plans
- Attachment C: Agency comments