DEVELOPMENT ASSESSMENT REPORT – DA064/23 - PROPOSED INDUSTRIAL DEVELOPMENT - BOREHOLE DRILLING & PIT EXCAVATION, LOT 101 & 103 DP1164619, LOT 1 DP829065, LOT 191 DP629212 & LOT 2 DP702619, 85 BOULDER ROAD BLACKMANS FLAT NSW 2790

## 1. SUMMARY

On 9 May 2023, the subject Development Application DA064/23 was lodged into Council seeking consent for an industrial development involving borehole drilling and pit excavation on 85 Boulder Road, Blackmans Flat.

The Development Application has been called in pursuant to Policy 7.7 "Calling in of Applications by Councillors. On 22 May 2023, the Call In Report was reported at the Ordinary Meeting of Council (reference Min No. 23-89).

Pursuant to the Lithgow Community Participation Plan, the Application was notified commencing 22 May 2023 and concluded 14 June 2023. No known written submissions were received during the notification period.

The purpose of this report is to assess and recommend determination of Development Application DA064/23 for an industrial development involving borehole drilling & pit excavation on land known as Lot 101 & 103 DP1164619, Lot 1 DP829065, Lot 191 DP629212 & Lot 2 DP702619, 85 Boulder Road Blackmans Flat.

# 2. PROPOSAL

Council is in receipt of a Development Application DA064/23 for an industrial development involving borehole drilling & pit excavation on land known as Lot 101 & 103 DP1164619, Lot 1 DP829065, Lot 191 DP629212 & Lot 2 DP702619, 85 Boulder Road Blackmans Flat.

The subject Development Application DA064/23 will help inform the design and constructability of a proposed future battery system at the site, including environmental and hazard assessments, local geotechnical conditions, potential engineering constraints, potential contaminants, ground levels for the overall project.

It is noted that EnergyAustralia is currently investigating the development of a future grid scale battery energy storage system with a capacity of 500 Megawatt and duration of up to 4 hours, along with associated infrastructure. The subject Development Application DA064/23 will aid in determining the viability of the battery storage system.

The works required under Development Application DA064/23 will also further inform part of the Environmental Impact Statement for the battery energy storage system (BESS) project - State Significant Development (SSD-50903958), as required by the Secretary Environmental Assessment Requirements (SEARs) issued on 23 December 2022.

The subject development Application DA064/23 proposes the following:

- Drilling and subsurface sampling at approximately seventy-one (71) locations over an area of approximately 30ha.
- Clearing and establishment of approximately 1.7km of vehicle track(s) to enable access to all proposed drilling/sampling locations.
- Drilling of approximately sixty-two (62) boreholes to varying depths, of which approximately 5 would be converted to groundwater monitoring wells.
- Excavation of approximately nine (9) test pits.
- Excavation of approximately six (6) shallow test pits, adjacent to the above 9 test pits.
- Geophysical investigation and data collection along approximately five (5) intersecting lines.
- At the completion of the proposed work, all disturbed areas (drill sites) will be picked clean of any drilling related rubbish. Disturbed soil will be covered in straw and grass to prevent erosion.

# 3. LOCATION OF THE PROPOSAL

Legal Description: Lot 101 & 103 DP1164619, Lot 1 DP829065, Lot 191

DP629212 & Lot 2 DP702619

Property Address: 85 Boulder Road BLACKMANS FLAT NSW 2790

The subject site is formally known as Lot 101 & 103 DP1164619, Lot 1 DP829065, Lot 191 DP629212 & Lot 2 DP702619, 85 Boulder Road, Blackmans Flat. Pursuant to the Lithgow Local Environmental Plan (LEP) 2014, the site is zoned SP2 Infrastructure.

The site is surrounded by the Mount Piper Power Station infrastructure and associated land. The site was previously used as the construction compound and laydown area during the power station construction works. Part of the central area of the site includes infrastructure associated with the former Nu-Rock testing facility. Works at this facility have ceased due to the termination of the lease in December 2022 with removal of equipment in progress.

Access to the site is proposed to be via the existing entrance of the Mount Piper Power Station off Boulder Road.

The topography of the land is flat with majority of the site being cleared land with some trees bordering the property. The subject site is approximately 2km from sensitive land uses.

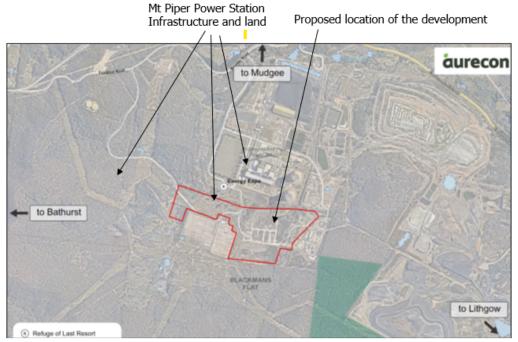


Figure 1 - Proposed Site Investigation



Figure 2 - Location of Proposed Investigation Area

# 4. ZONING & PERMISSIBILITY

The land is zoned SP2- Infrastructure- Electricity Generating Works in accordance with the *Lithgow Local Environmental Plan 2014* (LEP).



Figure 3 - Land Use Zoning (LEP 2014)

The LEP zoning table for the SP2 Infrastructure zone specifies that any development that is ordinarily incidental or ancillary to development for the specified purpose of the infrastructure zone is permitted with consent.

In this case, the works proposed are associated with preliminary investigations and feasibility studies for electricity generation works (being future potential for pumped hydro electricity generation). In addition, the proposed works are also considered consistent with the stated objectives of the SP2 Infrastructure zone.

Given the above, the proposed development is considered to be permitted with consent in the SP2 Infrastructure zone.

# **5.1 POLICY IMPLICATIONS (OTHER THAN DCPs)**

## **Lithgow Community Participation Plan**

Pursuant to the Lithgow Community Participation, the application was notified for a period of twenty-one (21) days commencing 22 May 2023 and concluded 14 June 2023.

The Community Participation Plan only requires notification of development applications to adjoining and adjacent landowners. In this instance, however, given the relative isolation of the site of the works (surrounded by Mt Piper Power Station infrastructure and land owned by Ivanhoe Colliery), the notification of the proposal was extended to landowners along Boulder Road.

In addition to the above, given the location of the works resulting in potential archaeological disturbance and likelihood of cultural significance, additional notification was provided to Aboriginal stakeholders.

No known written submissions were received during the notification period.

# **Policy 7.7 Calling In Of Development Applications By Councillors**

The Development Application has been called in pursuant to Policy 7.7 "Calling in of Applications by Councillors. On 22 May 2023, the Call In Report was reported at the Ordinary Meeting of Council (reference Min No. 23-89).

Item 3 of the Policy 7.7 "Calling in of Applications by Councillors" reads as follows":

- 3. Should written notice signed by a Councillor be provided to the General Manager prior to determination of a development application, the application shall not be determined under delegated authority but shall be:
  - Reported to the next available Ordinary Meeting for the information of Council
    that the development application or development application/construction
    certificate has been 'called in'; and
  - Reported to a Meeting of Council for determination where the application is in a state that it can be determined.

The subject Development Application has been Called In pursuant to Policy 7.7 and as such, this Application has been reported to this Council Meeting for determination.

## **5.2 FINANCIAL IMPLICATIONS**

- Budget approved N/A for the assessment of the development application.
- Cost centre N/A for the assessment of the development application.
- Expended to date N/A.
- Future potential impact
  - **Planning Agreements**

No planning agreement has been sought for the investigation project however should the applicant pursue an application for the battery energy storage system project State Significant Development (SSD-50903958), Council will likely enter into a Planning Agreement for the SSD project.

# **5.3 LEGAL IMPLICATIONS**

## Biodiversity Conservation Act 2016

The proposal has been assessed in relation to clearing of native vegetation and the Biodiversity Offset Scheme threshold under the provisions of this Act. The works proposed do not require any further biodiversity assessment under this scheme as the application does not trigger the area (0.5ha threshold) or map thresholds of the Biodiversity Offset Scheme (BOS). A desktop assessment of threatened species using the BioNet Atlas has also been undertaken and identified a species to be located on and in the vicinity of the property.

The proposed works require clearing of some native vegetation, however majority of the site is cleared land associated with existing infrastructure or largely modified native and exotic vegetation, with some surrounding trees bordering the site perimeter.

A flora and fauna assessment report has been submitted with the application. The flora and fauna report identified 2 plant community types, Central Tableland Granites Grassy Box Woodland and the Southern Tableland Western Hills Scribbly Gum Forest as well as 8 threatened species.

Eucalyptus Aggregata was also observed near the southern and eastern boundaries of the study area. No impacts are proposed to occur as no individual trees will be removed or impacted by the site works.

Environmental management measures for flora and fauna have been identified in the Statement of Environmental Effects and will be conditioned on the consent if the application is approved.

As such no further assessment under the Biodiversity Conservation Act is required.

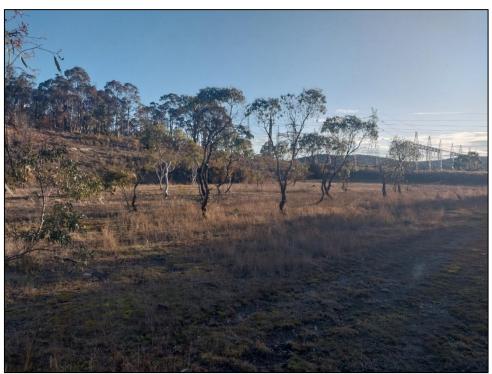


Figure 4 - The Eucalyptus Aggregata On Site

# Environmental Planning and Assessment Act 1979

In determining a development application, a consent authority is required to take into consideration the matters of relevance under Section 4.15 of the *Environmental Planning and Assessment Act 1979*. These matters for consideration are as follows:

# 5.3.1 Any Environmental Planning Instruments

# Lithgow Local Environmental Plan 2014

LEP 2014 – Compliance Check			
Clause		Compliance	
Land Use table	SP2 Infrastructure	Yes	
7.1	Earthworks	Yes	
7.4	Terrestrial biodiversity	Yes	
7.7	Sensitive lands	Yes	

**Comment:** The development is considered to comply with the objectives of the zone. The zone objectives are:

## **Objectives of the SP2 Zone**

• To provide for infrastructure and related uses.

- To prevent development that is not compatible with or that may detract from the provision of infrastructure.
- To maintain or improve the water quality of receiving water catchments.

The site investigation is considered ordinarily incidental or ancillary to development for the purpose of electricity generating works, which are consistent with the zone objectives.

## Clause 7.1 Earthworks

The footprint is relatively flat, with the surrounding area to contain a slight slope to the southeast of the site beyond the existing sealed internal access road.

The proposal comprises site investigation works which will not significantly disrupt drainage patterns or soil stability on the site or within the locality and will not adversely impact future development of the land.

As such, the earthworks required to facilitate the geotechnical investigations are not significant and the requirements of LEP clause 7.1 can be satisfied.

## Clause 7.4 Terrestrial Biodiversity

The objective of this clause is to maintain terrestrial biodiversity by—

- (a) protecting native fauna and flora, and
- (b) protecting the ecological processes necessary for their continued existence, and
- (c) encouraging the conservation and recovery of native fauna and flora and their habitats.

Scattered small sections around the western boundary are identified as containing significant biodiversity (see map extract below). This is further identified as Endangered Ecological Community (EEC) being Tableland Granite Grassy Woodland (Southern Tableland Grassy Woodland).

In general, no significant adverse impact on ecological values or significant flora and fauna is expected. The location of the development, drainage works and civil works take place outside the mapped area.

Potential impacts on biodiversity have been identified in the Statement of Environmental Effects submitted in support of the application. This includes impacts on native vegetation, threatened ecological communities, habitats and species.

Impacts are minimised due to the relatively small footprint of the development (less than 0.5 hectare). The development also has flexibility to avoid items of significance where identified.

A flora and fauna assessment report has been submitted with the application. The flora and fauna report identified 2 plant community types, Central Tableland Granites Grassy Box Woodland and the Southern Tableland Western Hills Scribbly Gum Forest as well as 8 threatened species.

Environmental management measures for flora and fauna have been identified in the Statement of Environmental Effects and will be conditioned on the consent if the application is approved.

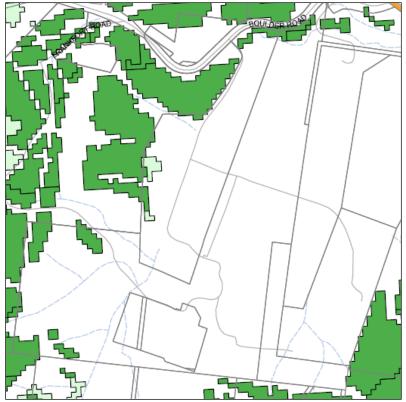


Figure 5 - Terrestrial Biodiversity Map

## Clause 7.7 Sensitive Lands

The objective of this clause is to protect, maintain and improve the diversity and stability of landscapes including the restriction of—

- (a) Development on land generally unsuitable for development due to steep slopes or shallow soils, and
- (b) Development on land subject to salinity, and
- (c) The removal of native vegetation, and
- (d) Development on land that is subject to regular or permanent inundation, and
- (e) Development on land that is within significant karst environments.

The property is identified as being sensitive land (land subject to steep slopes). The location of the proposed development is relatively flat. Maximising existing slope and with some earthworks, the development will contain an acceptable gradient (no greater than 20%). The location of the sensitive land area is located towards the western boundary of the investigation area, with the works proposed to be located outside of the mapped area.

The land is deemed suitable for the proposal and is considered to comply with Council's LEP 2014.



Figure 6 - Sensitive Lands Map

# State Environmental Planning Policy (Biodiversity and Conservation) 2021 Chapter 4 - Koala habitat protection 2021

The land has an area greater than 1 hectare and therefore must take into consideration the SEPP. Clause 4.9 (2) of this SEPP applies to the development application and includes the following:

Before a council may grant consent to a development application for consent to carry out development on the land, the council must assess whether the development is likely to have any impact on koalas or koala habitat

The application has considered potential koala habitat and has identified impacts are unlikely due to the extent of works proposed and the limited presence of koala feed trees on the site.

# State Environmental Planning Policy (Biodiversity and Conservation) 2021 Chapter 8 Sydney Drinking Water Catchment

The land is within the Sydney Drinking Water Catchment and this chapter requires consideration of potential impacts on water quality as a result of the development.

Under the provisions of this chapter, the application was referred to Water NSW for concurrence.

WaterNSW response is found later in this report.

# **State Environmental Planning Policy (Resilience and Hazards) 2021**Chapter 4 Remediation of land

Chapter 4 of this SEPP requires Council to consider potential contamination of the land and whether any remediation works are required to make it suitable for the proposed development.

The DA will allow investigative works to be undertaken in the subject area which would assist the applicant to further determine whether the land is contaminated.

Given that the proposed works involves a future industrial development that is not habitable, the development complies with the SEPP and no further requirements apply at this stage.

At the completion of the proposed work, all disturbed areas (drill sites) will be picked clean of any drilling related rubbish. Disturbed soil will be covered in straw and grass to prevent erosion.

5.3.2 Any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority

Nil.

# 5.3.3 Any Development Control Plan

**Lithgow Council's Development Control Plan 2021** 

	Assessment Comments		
Chapter 2 – Site Requirements			
2.2 Site Analysis, Local Character & Context			
2.2.1 Site Selection	The DA is for site investigative works to support the feasibility of the battery energy storage system and design elements relating to the works.  The future use of the site for the battery energy storage system is permissible within the SP2 zone and the site is suitable for the investigative works to facilitate this use. The works are also suitable for the site as it is located within the existing road network, infrastructure and services and will not impact upon the prevailing local character, any known heritage items, environmentally or visually sensitive areas.		
2.2.2 Site Analysis & Development Response	The investigative works are planned to ensure minimal impacts on the site. Mitigation measures will be placed to minimise any potential impacts to watercourses, stormwater systems or biodiversity values within the area.  There will be no disturbance to natural drainage patterns, nor will the proposed works alter the topography of the site.		
2.4 Stormwater Management	The works are proposed within the outer catchment area. Temporary erosion and sedimentation controls will be conditioned on the consent.		

2.6 Vehicle Access & Parking		
2.6.1 Guidelines & Standards  2.6.2 Vehicle Access &	The subject site has sufficient area for onsite parking during the investigation works. Heavy vehicles are also currently permitted on the site.  A new access track, approximately 1.7km, 3m wide will be constructed and avoid as much intact native vegetation where possible.  In relation to traffic, environmental management measures have been identified in the Statement of Environmental Effects and will be conditioned on the consent if the application is approved.  Refer to above comment.	
Driveways	nere to aport comments	
2.9 Solid Waste Manage	ement	
2.9.2 Solid Waste Management Plan – Larger Developments	Waste generation will be minimal. General and technological waste (such as drilling mud, fluids and other consumables) will be contained and removed from the site during works. Green waste will be managed on site and used or spread to reduce environmental impacts.	
2.10 Amenity/Buffers for	or Sensitive Uses	
2.10.1 Noise & Vibration	The subject, surrounding and adjacent sites are not zoned as sensitive land uses.  The proposed investigation works will not generate adverse noise, vibration, odour, dust or air emission impacts to any sensitive land uses where a site is located a significant distance (2km) from any residential development.	
2.10.2 Air Emissions, Odour & Dust	Refer to above comment.	
2.11 Water & Energy Efficiency	All water needed for the site works, including drilling and site facilities would be sourced from the Mt Piper Power Station, as agreed with the proponent.	

<b>Development Control</b>	<b>Assessment Comments</b>					
Chapter 3 – Natural Environment & Hazards						
3.2 Bush Fire Prone Lar	nd					

Note: Section 4.14 of the Environmental Planning and Assessment Act requires a consent authority to be satisfied a development conforms to the specifications and requirements of Planning for Bushfire Protection prior to granting consent.

The property is identified to be located within the bushfire prone area. Given the nature of the development no bushfire requirements are applicable.

# 3.3 Biodiversity & Vegetation Clearing

Scattered small sections around the western boundary are identified as containing significant biodiversity. This is further identified as Endangered Ecological

Community (EEC) being Tableland Granite Grassy Woodland (Southern Tableland Grassy Woodland).

In general, no significant adverse impact on ecological values or significant flora and fauna is expected. The location of the development, drainage works and civil works take place outside the mapped area.

Potential impacts on biodiversity have been identified in the Statement of Environmental Effects submitted in support of the application. This includes impacts on native vegetation, threatened ecological communities, habitats and species. Impacts are minimised due to the relatively small footprint of the development (less than 0.5 hectare). The development also has flexibility to avoid items of significance where identified.

A flora and fauna assessment report has been submitted with the application. The flora and fauna report identified 2 plant community types, Central Tableland Granites Grassy Box Woodland and the Southern Tableland Western Hills Scribbly Gum Forest as well as 8 threatened species.

Environmental management measures for flora and fauna have been identified in the Statement of Environmental Effects and will be conditioned on the consent if the application is approved.

## 3.4 Land & Soils

The property is identified as being sensitive land (land subject to steep slopes). The location of the proposed development is relatively flat. Maximising existing slope and with some earthworks, the development will contain an acceptable gradient (no greater than 20%).

The location of the sensitive land area is located towards the western boundary of the investigation area, with the works proposed to be located outside of the mapped area.

5.3.4 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?

No.

5.3.5 Any matters prescribed by the regulations that apply to the land

Nil.

5.3.6The likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality

**Adjoining Landuse:** The property is surrounded by the Mount Piper Power Station infrastructure and land. The subject site is approximately 2km from sensitive land uses.

As such the development will be compatible with surrounding landuses.

**Drainage:** The site contains existing vegetation and excavated open channels around the perimeter. The northern channel receives runoff from the site and conveys this runoff around the existing infrastructure to the north. Drainage channels converge to

the north of the site before discharging to an online basin downstream of the Mt Piper Power Station Facility.

Environmental management measures for drainage, sediment and erosion have been identified in the Statement of Environmental Effects and will be conditioned on the consent if the application is approved.

**Context and Setting:** The proposed development will be located within an established industrial area and will have no major impact on the context and setting of the area. The development has been designed to complement existing features of similar development in the area.

**Access:** Access to the site investigation area would be via an existing access road from Boulder Road. Once at the site investigation area, existing site access tracks, existing disturbed areas or grassed areas would be utilised as much as practicable to access each of the proposed drilling/sampling locations and associated working areas.

A new access track, approximately 1.7km, 3m wide will be constructed and avoid as much intact native vegetation where possible.

In relation to traffic, environmental management measures have been identified in the Statement of Environmental Effects and will be conditioned on the consent if the application is approved.

**Aboriginal Heritage:** The proposed site investigation area has low Aboriginal archaeological potential due to past land use practices and levels of ground disturbances associated with the construction of the Mt Piper Power Station. If Aboriginal sites do occur, they will most likely include artefact scatters and isolated artefacts in surface and sub-surface context.

An Aboriginal Heritage Information Management System was undertaken and identified no known Aboriginal sites to be located within the investigation area. Within 5km radius from the investigation area, 90 sites have been identified to be of heritage importance, with two closely located to the southern boundary.

Environmental management measures for Aboriginal heritage have been identified in the Statement of Environmental Effects and will be conditioned on the consent if the application is approved.

**Flora and Fauna:** The proposed works require clearing of some native vegetation, however majority of the site is cleared land associated with existing infrastructure or largely modified native and exotic vegetation, with some surrounding trees bordering the site perimeter.

A flora and fauna assessment report has been submitted with the application.

The flora and fauna report identified 2 plant community types, Central Tableland Granites Grassy Box Woodland and the Southern Tableland Western Hills Scribbly Gum Forest as well as 8 threatened species.

Environmental management measures for flora and fauna have been identified in the Statement of Environmental Effects and will be conditioned on the consent if the application is approved.

**Ground Water:** The site is in an area identified as having groundwater vulnerability. The proposed drilling works have the potential to intercept and interact with ground water resources. The application documents indicate the drilling activities will be undertaken in accordance with relevant standards and guidelines for water bores. In addition, the proposed method of drilling is such that inflow of groundwater is restricted with no significant volume of groundwater extraction expected or required.

**Social and Economic Impacts:** The isolation of the site of works relative to urban centres and other areas of human activity as well as the temporary nature of the works (3-6 months) mean there will be no significant or direct social or economic impacts of the development. Some indirect positive social and economic impacts may result with employment opportunities and related business activity (e.g. servicing and accommodation).

**Waste:** Waste generation will be minimal. General and technological waste (such as drilling mud, fluids and other consumables) will be contained and removed from the site during works. Green waste will be managed on site and used or spread to reduce environmental impacts.

**Visual Impacts:** The isolation of the site and the short duration of the works mean there will be almost no significant visual impacts. No negative impacts on visual amenity is expected.

**Natural Hazards:** The property is identified to be located within the bushfire prone area. Given the nature of the development no bushfire requirements are applicable.

**Noise and Vibration:** The proposed investigation area is surrounded by a number of existing operational industrial developments such as the Mt Piper Power Station, Transgrid substation, Veolia Water Treatment Plant and coal mines, that all contribute to the noise environment. Additional noise sources in the area include road traffic noise from the Castlereagh Highway.

The investigation area is located within earth mounds in all directions, which has the potential to naturally reduce noise levels.

Environmental management measures for noise and vibration have been identified in the Statement of Environmental Effects and will be conditioned on the consent if the application is approved.

**Site Rehabilitation:** The site access works and drilling pads will be retained following works pending outcomes relating to the battery energy storage system proposal on the site. Should the proposed battery energy storage system not proceed, the drilling pad sites will be restored and rehabilitated.

## 5.3.7 The Suitability of the site for the development

Based on the site's zoning, the relative small scale of the works and their temporary nature, the site is generally considered suitable for the development with minimal impacts expected during the works and no residual or long term negative impacts expected.

# 5.3.8 Any submissions made in accordance with this Act or the Regulations

The development application was subject to public consultation in accordance with the Lithgow Community Participation Plan. This included the public exhibition of the application documentation and the notification of surrounding landowners likely to be affected by the proposal.

Further to the above, given the location of the works and the potential of cultural significance of the site and its surrounds, specific notification of the application was provided to recorded stakeholders and potentially interested parties in the Aboriginal community.

Given that the application is a type of industrial activity, the development was referred to WaterNSW for comment.

#### **WATERNSW**

Reference is made to WaterNSW referral received 12 July 2023 in response to Council's Planner's referral dated 23 May 2023.

As such WaterNSW has no objection to the application subject to conditions on the consent. These conditions are located under Schedule A.

## **PUBLIC SUBMISSIONS**

During the notification period, no submissions were received.

# 5.3.9 The public interest

The proposal has been assessed in accordance with the statutory heads of consideration under the *Environmental Planning and Assessment Act 1979* with no significant environmental issues identified. The proposal is permissible with consent in the zone and relevant environmental considerations have been addressed. There will be no significant or irreparable environmental impacts of the development and its approval is considered to be in the public interest.

# 6. DISCUSSION AND CONCLUSIONS

The proposal is considered to generally comply with the relevant provisions of the applicable Environmental Planning Instruments. The proposal is not considered likely to have any significant negative impacts upon the environment or upon the amenity of the locality. As such it is recommended that development consent is issued subject to the conditions outlined below.

## 7. ATTACHMENTS

Schedule A- Conditions of consent.

# 8. RECOMMENDATION

**THAT** development application DA 064/23 is approved subject to conditions set out in Schedule A.

Report prepared by: Lauren Stevens	Supervisor:
Signed:	Signed:
Dated:	Dated:

# **REASONS FOR CONDITIONS**

- The conditions in Schedule A have been imposed for the following reasons:
- To ensure compliance with the requirements of relevant environmental planning instruments.
- Due to the circumstances of the case and the public interest.
- To protect the environment.
- To prevent, minimise and/or offset adverse environmental impacts.

# Schedule A

# **Conditions of Consent (Consent Authority)**

**Please Note:** It should be understood that this consent in no way relieves the owner or applicant from any obligation under any covenant affecting the land.

#### **GENERAL**

## 1. Approved plans and documentation

The development is to be undertaken in accordance with the plans, specifications and documentation submitted with the application as indicated below except as modified by any conditions of this consent.

Document Reference	Prepared By	Date
Statement of Environmental Effects, Report No. P521009 Revision 1	Aurecon	26 April 2023
Mount Piper Battery Energy Storage System- Site Investigations Development Application: Bush Fire Emergency Management Plan	Aurecon	22 March 2023
Nosie and Vibration Assessment	Aurecon	26 April 2023
Flora and Fauna Assessment	Ecoplanning	18 April 2023
Technical Addendum to Flora and Fauna Assessment	Ecoplanning	9 June 2023
Drainage, Sediment and Erosion Management	Aurecon	20 April 2023

# 2. **Investigation Area**

No works are to occur outside the site investigation area.

# **WATER NSW REQUIREMENTS**

## General

- 1. The site investigation program shall be undertaken as:
  - shown on Figure 1-1 Proposed Site Investigation Area of Statement of Environmental Effects (Reference: P521009, Revision 1, dated 2023-04-26) prepared by Aurecon Australasia Pty Ltd, and
  - described in Section 3 and Appendix A of the Statement of Environmental Effects (Reference: P521009, Revision 1, dated 2023-04-26) prepared by Aurecon Australasia Pty Ltd. No significant revisions to the extent of works, or staging that will impact on water quality, shall be permitted without the agreement of Water NSW.

#### 2. Site access shall:

- maximise the use of existing tracks and disturbed or grassed area in the site investigation area Page 2 of 2 Water NSW Ref: 23054-a1,
- ensure the new access track width will be minimised, and
- limit any vegetation clearing less than 0.5 hectares.
- 3. Test pits shall be immediately backfilled with excavated material after completion of sampling and the site shall be stabilised.

4. All wastes associated with the earthworks and geotechnical investigation shall be managed as described in Section 3.6 of the Statement of Environmental Effects (Reference: P521009, Revision 1, dated 2023-04-26) prepared by Aurecon Australasia Pty Ltd.

#### 4. Earthworks and Construction Activities

- 1.The Mt Piper Ground Investigation Drainage, Sediment and Erosion Management Memorandum (Reference: P521009, dated 2023-04-20) prepared by Aurecon Australasia Pty Ltd shall be updated for all works for the development by a person with knowledge and experience in the preparation of such plans prior to the issuance of a Construction Certificate. The Plan shall:
  - meet the requirements outlined in Volume 1 Chapter 2 of the NSW Landcom's Soils and Construction: Managing Urban Stormwater (2004) and Volume 2E – Mines & Quarries (DECC 2008),
  - outline details on the location, storage, use and management of fuels, flammable materials and chemicals including designated location for refuelling of equipment and plant
  - include controls to prevent sediment and contaminated water leaving the construction site or entering drains or natural drainage system, and
  - specify how suitable groundcover will be achieved within required timeframes.

The Soil and Water Management Plan shall be implemented, and no works shall commence until effective erosion and sediment controls have been installed. The controls shall be regularly inspected, maintained, and retained until works have been completed and groundcover established or ground stabilised.

## CONDITIONS APPLYING BEFORE WORKS COMMENCE

# 5. **Construction Environmental Management Plan**

A Construction Environmental Management Plan (CEMP) is to be prepared for the proposed geotechnical works prior to activity commencing on the site. The CEMP is to address (but is not limited to):

- Details of key personnel,
- Site training information,
- Audit and monitoring protocols,
- Emergency and incident response procedures,
- Plans showing vegetation to be removed and the location of erosion and sediment control measures,
- Process and procedure to manage noise complaints.

A copy of the CEMP is to be provided to Lithgow City Council prior to the commencement of works and be implemented for the duration of the site investigation works.

## 6. **Toilet facilities**

- (1) Toilet facilities must be available or provided at the work site before works begin, and must be maintained until the works are completed, at a ratio of one toilet plus one additional toilet for every 20 persons employed at the site.
- (2) Each toilet must—
  - (a) be a standard flushing toilet connected to a public sewer, or

- (b) have an on-site effluent disposal system approved under the Local Government Act 1993, or
- (c) be a temporary chemical closet approved under the Local Government Act 1993.

# 7. Waste management

- (1) Adequate provision for waste containment must be provided at the work site before works begin and must be maintained until the works are completed.
- (2) Waste receptacles must have tight fitting lids and be suitable for the reception of food scraps and papers.

## 8. Run-off and erosion controls

Run-off and erosion controls must be implemented to prevent soil erosion, water pollution or the discharge of loose sediment on the surrounding land by—

- (a) diverting uncontaminated run-off around cleared or disturbed areas, and
- (b) erecting a silt fence and providing any other necessary sediment control measures that will prevent debris escaping into drainage systems, waterways or adjoining properties, and
- (c) preventing the tracking of sediment by vehicles onto roads, and
- (d) stockpiling top soil, excavated materials, construction and landscaping supplies and debris within the lot.

## **CONDITIONS APPLYING DURING THE WORKS**

Note. The Protection of the Environment Operations Act 1997 and the Protection of the Environment Operations (Noise Control) Regulation 2008 contain provisions relating to noise.

# 9. Standard hours for construction and activity

Construction and site works are permitted between the hours of 6.00am and 6.00pm Monday to Sunday. No construction, site works or activity is permitted by this consent outside the above specified hours.

## 10. Flora and fauna

- 1) Native vegetation removal and soil disturbance is to be minimised to the fullest extent practical to facilitate access and the investigation works.
- 2) Equipment storage, washdown, effluent irrigation and other ancillary activities are to be completed within existing cleared areas.

## 11. Noise

- The principle contractor must ensure all equipment and machinery are regularly serviced and maintained at optimum operating conditions, to ensure excessive noise emissions are not generated from faulty, overused or unmaintained machinery.
- 2) At least 24 hours notification is to be given to nearby receivers who may be affected by noise and vibration generating activities.

## 12. Water

There is to be no release of dirty water into drainage lines and/or waterways.

# 13. Maintenance of site

(1) All materials and equipment must be stored wholly within the work site unless an approval to store them elsewhere is held.

- (2) Waste materials (including excavation, demolition and construction waste materials) must be managed on the site and then disposed of at a waste management facility.
- (3) Any run-off and erosion control measures required must be maintained within their operating capacity until the completion of the works to prevent debris escaping from the site into drainage systems, waterways, adjoining properties and roads.
- (5) During construction—
  - (a) all vehicles entering or leaving the site must have their loads covered, and
  - (b) all vehicles, before leaving the site, must be cleaned of dirt, sand and other materials, to avoid tracking these materials onto public roads.
- (6) At the completion of the works, the work site must be left clear of waste and debris.

# 14. Earthworks, retaining walls and structural support

- (1) Any earthworks
  - (a) must not cause a danger to life or property, and
  - (b) that is fill brought to the site—must contain only virgin excavated natural material (VENM) as defined in Part 3 of Schedule 1 to the *Protection of the Environment Operations Act 1997*, and
  - (c) that is excavated soil to be removed from the site—must be disposed of in accordance with any requirements under the *Protection of the Environment Operations (Waste) Regulation 2005*.
- (2) Any excavation must be carried out in accordance with Excavation Work: Code of Practice (ISBN 978-0-642-785442 [PDF] and ISBN 978-0-642-785459 [DOCX]), published in July 2012 by Safe Work Australia.

# 15. **Protection of public infrastructure**

Unless the applicant and the applicable authority agree otherwise, the applicant must:

- (a) Repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development, and
- (b) Relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

## 16. Operation of plant and equipment

All plant and equipment used on the site or in connection with the development must be maintained in a proper and efficient condition and operated in a proper and efficient manner.

## 17. Archaeology discovered during excavation

If any object having interest due to its age or association with the past is uncovered during the course of the work—

- (a) all work must stop immediately in that area, and
- (b) the Office of Environment and Heritage must be advised of the discovery.

Note. Depending on the significance of the object uncovered, an archaeological assessment and excavation permit under the Heritage Act 1997 may be required before further the work can continue.

# 18. Aboriginal objects discovered during excavation

If any Aboriginal object (including evidence of habitation or remains) is discovered during the course of the work—

- (a) all excavation or disturbance of the area must stop immediately in that area, and
- (b) the Office of Environment and Heritage must be advised of the discovery in accordance with section 89A of the *National Parks and Wildlife Act 1974*.

Note. If an Aboriginal object is discovered, an Aboriginal heritage impact permit may be required under the National Parks and Wildlife Act 1974.

## **CONDITIONS APPLYING FOLLOWING COMPLETION OF WORKS**

# 19. Removal of machinery and infrastructure

Following the completion of the geotechnical investigation works, all machinery, plant and related infrastructure is to be removed from the site.

## 20. Rehabilitation of site

Should the proposed Battery Energy Storage System development not proceed, the borehole pad sites are to be rehabilitated within 6 months of the decision not to proceed. This includes all disturbed areas (drill sites) to be picked clean of any drilling related rubbish with disturbed soil to be covered in straw and grass to prevent erosion.