

# DEVELOPMENT ASSESSMENT REPORT – DA070/22

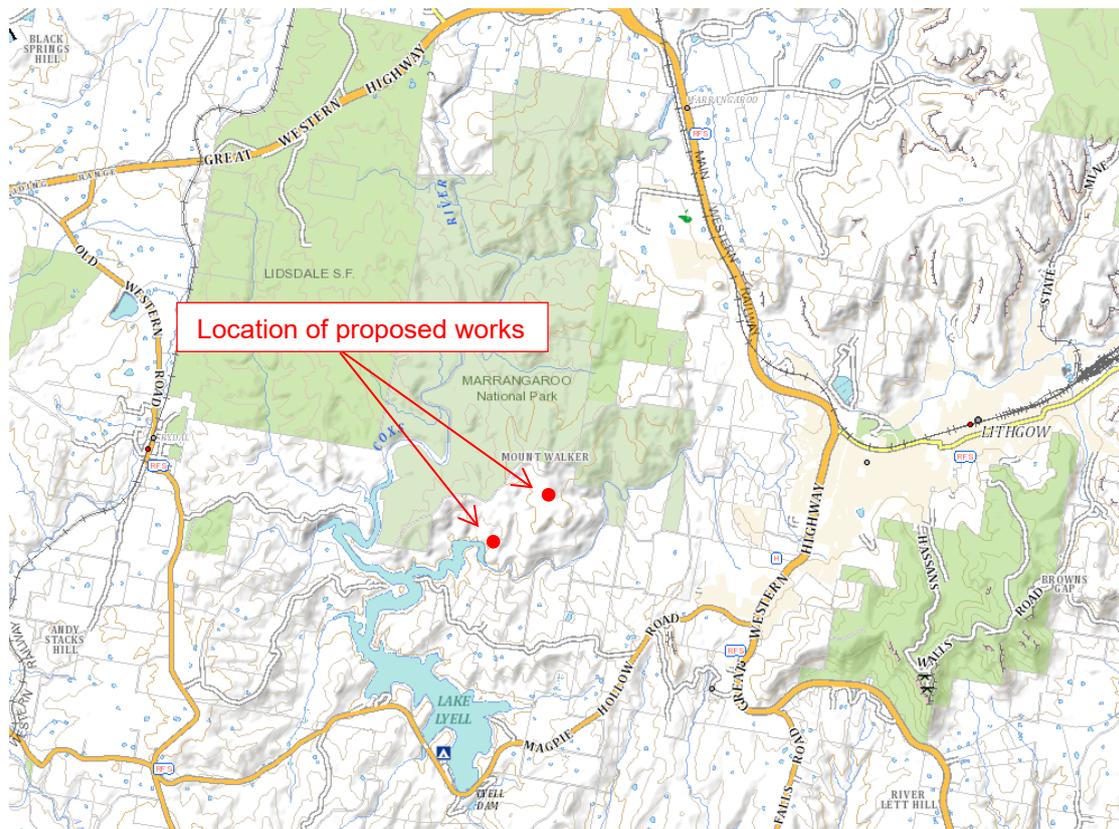
## GEOTECHNICAL INVESTIGATION WORKS

### LAKE LYELL FORESHORE & MOUNT WALKER

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## 1. PROPOSAL

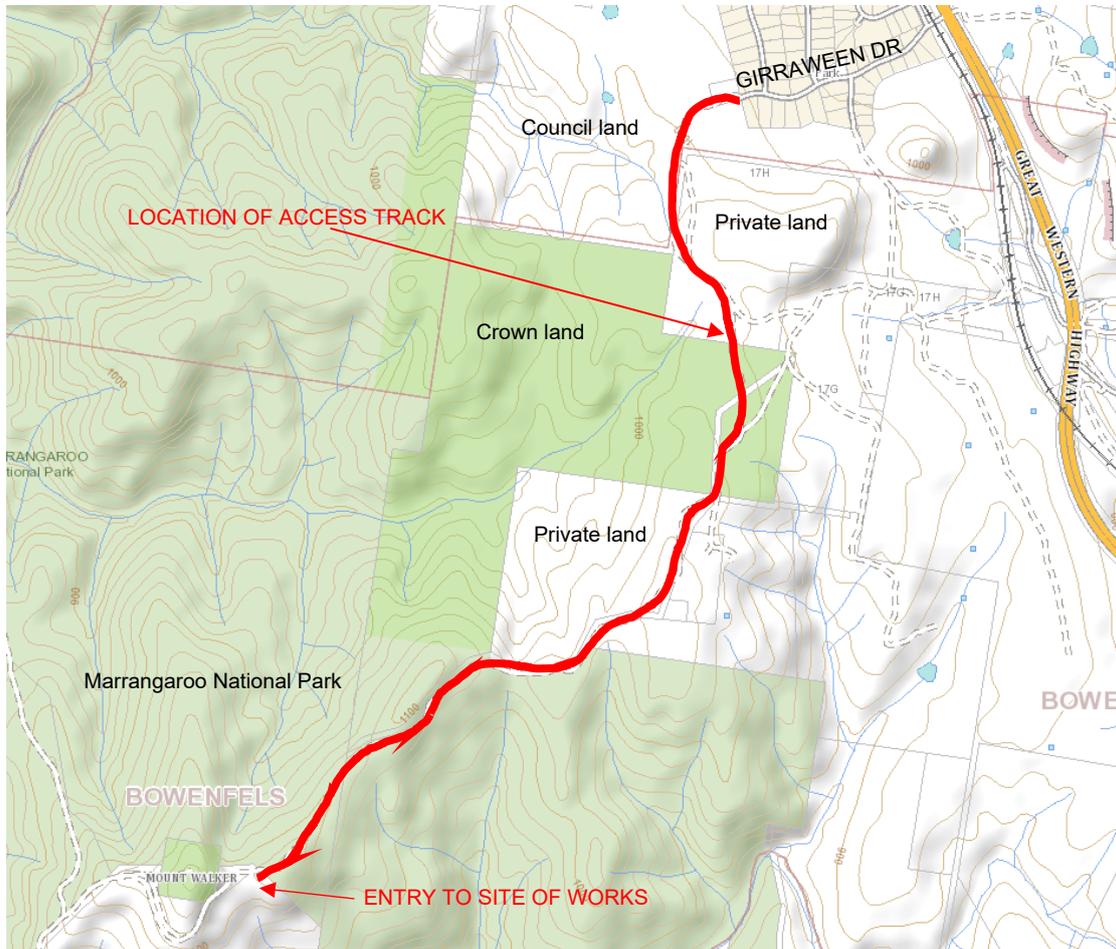
Development Application DA070/22 seeks consent for the temporary use of land to undertake geotechnical investigation on land owned by Energy Australia. The location of the proposal is in a relatively isolated location adjacent to the foreshore of Lake Lyell and below Mount Walker in the locality of Bowenfels as illustrated on the map below.



The development application has been lodged by Energy Australia, the owners of the land, who seek consent to undertake geotechnical investigation works on the site over a short duration. The works are part of Energy Australia’s investigations into the feasibility of a 335 megawatt (MW) pumped hydro energy storage scheme (PHES) adjacent to Lake Lyell. The specifics of the geotechnical investigation works proposal involve the installation of nine temporary boreholes from seven drill pad locations on the site. Associated with the works are the creation of access tracks and site preparation to enable the drilling involving disturbance of less than 1 hectare. The information gathered from the works will enable the assessment of surface and subsurface conditions, site geology and hydrology to inform the feasibility investigations for the PHES.

The works are expected to take between 3 and 6 months with up to 20 workers on site during peak periods. Access to the site is proposed via existing access tracks and

rights of way over private land, Crown land and Marrangaroo National Park. The primary entry point for access is from Girraween Drive, Marrangaroo. The proposed access point and access track to the site is illustrated in the map below:



Access of machinery and plant to the site is limited by the constraints of the existing access track. Following site establishment, machinery will be transported to and will remain on site for the duration of works. During the activities, the only recurring vehicular movement to and from the site will be via light vehicles.

The full details of the proposal, including the location of the borehole sites, access road construction and a full environmental assessment has been provided in the Statement of Environmental Effects and other supporting documentation submitted with the application.

## 2. SUMMARY

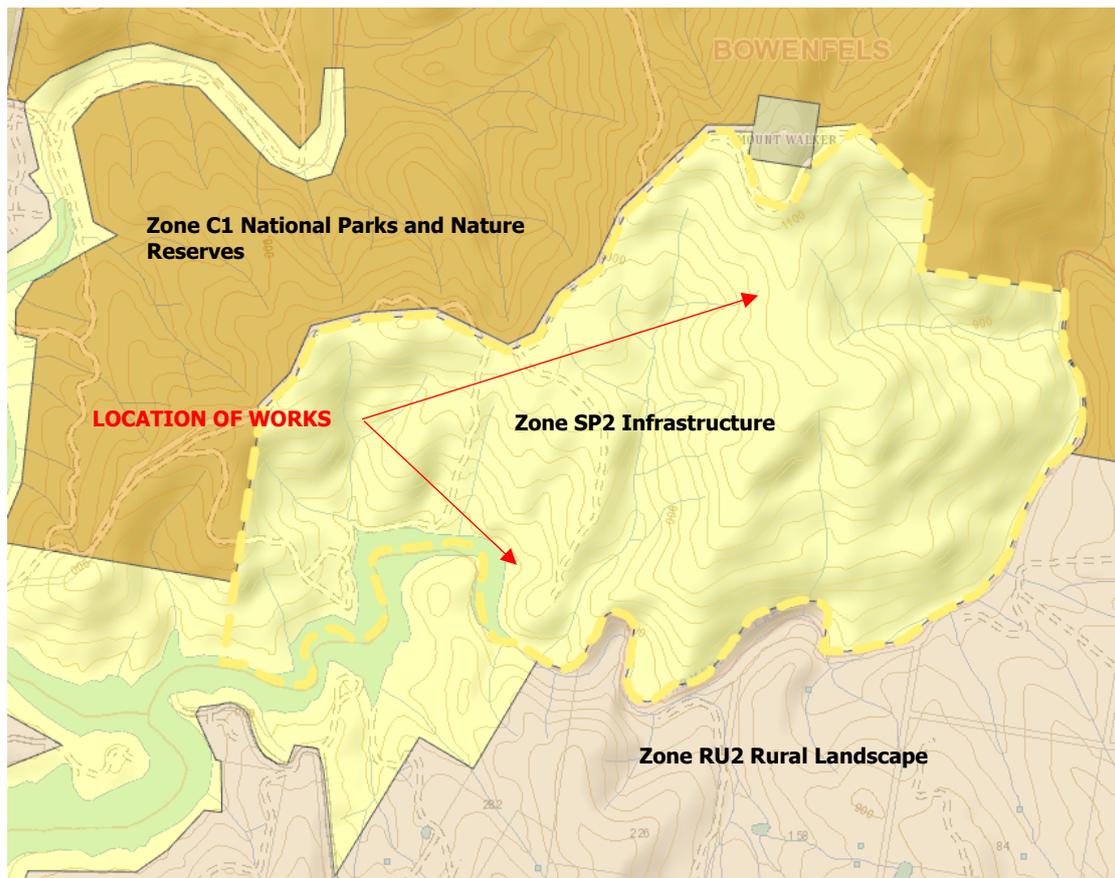
To assess and recommend determination of DA070/22 with recommendation for approval subject to conditions.

## 3. LOCATION OF THE PROPOSAL

Lot 103 DP 751651 – adjacent to Lake Lyell and Mount Walker, Bowenfels

## 4. ZONING

The land on which the development is proposed is zoned SP2 Infrastructure under the *Lithgow Local Environmental Plan 2014* (LEP) as illustrated on the map extract below. The land is part of the overall holding containing Lake Lyell and associated infrastructure established for the purposes of electricity generation. In this regard, the designated purpose for the SP2 Infrastructure zone in this instance is for the purpose of “electricity generating works”.



## 5. PERMISSIBILITY

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, being:

- *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.*

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

### **Lithgow Community Participation Plan**

The development application has been subject to public exhibition in accordance with this Plan. This included the publication of the DA details on Council's website as well as provision of hard copies for viewing at Council's customer service counter.

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 as well as the potential (although minor and short term) visual and amenity impacts, the notification of the proposal was extended to landowners on the other side of Lake Lyell and Farmers Creek in the immediate vicinity as well as landowners affected by the use of the existing access track. Residents on Girraween Drive were also notified of the proposal based on the intended access to the site via Girraween Drive.

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.

Ten written submissions were received in response to the public notification of the proposal, the majority of which are from residents on or close to Girraween Drive raising objections to the use of this road for access.

The issues raised in the submissions are addressed further below.

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

This application has been called in pursuant to Policy 7.7 "Calling in of Applications by Councillors" by Councillors Eric Mahony, Stephen Lesslie and Cassandra Coleman on 27 April 2022. The application will be reported to an Ordinary Meeting of Council for determination.

## **5.2 FINANCIAL IMPLICATIONS**

None.

## **5.3 LEGAL IMPLICATIONS**

### ***Environmental Planning and Assessment Act 1979***

The development includes works adjacent to Lake Lyell and is integrated development under the provisions of the *Environmental Planning and Assessment Act 1979*. The application has been referred to the Department of Primary Industries (Fisheries) and the Natural Resource Access Regulator for integrated approval under the integrated development provisions. The Department of Primary Industries (Fisheries) rejected the application indicating no approval is required. At the date of writing this assessment, no response has been received from the Natural Resources Access Regulator.

Section 45 of the *Environmental Planning and Assessment Regulation 2021* requires an approval body (NRAR) for integrated development to give written notice to the consent authority (Council) of its decision about the general terms of approval in relation to the development application within 40 days or receiving the development application. The application was referred to the NRAR for general terms of approval on 7 April 2022. Despite several attempts to follow up on a response, at the date of writing this assessment, no response has been received from NRAR issuing general terms of approval. In accordance with section 4.47 of the *Environmental Planning and Assessment Act 1979* if the approval body fails to inform the consent authority whether or not it will grant the approval, the consent authority may determine the development application.

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
<b>Land Use table</b>	SP2 Infrastructure	Yes
<b>7.1</b>	Earthworks	Yes
<b>7.4</b>	Terrestrial biodiversity	
<b>7.5</b>	Groundwater vulnerability	Yes
<b>7.6</b>	Riparian land and watercourses	Yes
<b>7.7</b>	Sensitive lands	Yes

The works will take place within zone SP2 Infrastructure which has been designated to cover the Lake Lyell area and surrounds due to its primary purpose being established to support electricity generation in the Mount Piper and former Wallerawang Power Stations. The works are consistent with the zone objectives and permitted with consent.

#### **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.*

#### Clause 7.1 Earthworks

Ancillary earthworks are proposed as part of the development. 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 area of the proposed works is identified on the Environmentally Sensitive Areas – Biodiversity Overlay Map as having biodiversity significance. 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 1 hectare). The development also has flexibility to avoid items of significance where identified. The application includes details of a Test of Significance undertaken to assess potential impacts on species under relevant legislative requirements. This Test of Significance identifies that the development is unlikely to have a significant impact on any of the species assessed. This satisfies the requirements of LEP clause 7.4.

#### Clause 7.4 Groundwater vulnerability

The site is identified as having groundwater vulnerability. The application documentation has considered potential groundwater impacts from the development. Due to the scale and limited extent of the works, potential groundwater impacts will be minimal. The applicant has identified procedures to reduce potential groundwater impacts and the requirements of LEP clause 7.5 are satisfied.

#### Clause 7.6 Riparian land and watercourses

Works will take place adjacent to the shores of Lake Lyell which is subject to the provisions of this clause. The development is unlikely to significantly impact on water quality and measures can be taken to minimise and avoid impacts on riparian areas and aquatic ecosystems. The Statement of Environmental Effects has adequately addressed potential impacts on riparian areas and water quality which has addressed the requirements of LEP clause 7.6.

### ***State Environmental Planning Policy (Biodiversity and Conservation) 2021***

#### Chapter 4 – Koala habitat protection 2021

This chapter requires the assessment of 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.

#### 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. Water NSW responded issuing concurrent approval to the development on 18 May 2022.

### ***State Environmental Planning Policy (Resilience and Hazards) 2021***

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. Council is satisfied that the land is not contaminated based on historic land uses.

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**

Due to the particulars of the development and its scale and temporary nature, there are no elements of the development control plan applicable to the proposal.

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.

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

### **Biodiversity**

The development will take place on undisturbed land adjacent to Lake Lyell and Mount Walker with high biodiversity values. Some clearing of vegetation is required to enable access and to establish the work sites. The application documentation has addressed in detail potential impacts on vegetation communities, threatened species and habitats, aquatic species and habitat with some low level impacts identified. A Test of Significance has been undertaken with regard to potential impacts on threatened species and habitats. This has found that significant impact on biodiversity and threatened species and their habitats are unlikely.

### **Aboriginal Heritage**

The application is supported by an Aboriginal Heritage Due Diligence Assessment report which has assessed the site of the works, the activities proposed and the potential impacts of the activity on items of cultural heritage. The report specifies that the locations of the proposed works are unlikely to contain items of cultural significance. Standard precautionary conditions of approval are recommended.

### **Surface Water**

The DA documentation has considered potential impacts of the development on water quality including disturbance of soils and erosion, water contamination, storage, containment and management of chemicals and waste and impacts on floodwaters. The application proposes the implementation of a Construction Environmental Management Plan (CEMP) prior to works commencing that will address sediment and erosion control measures for the works to prevent water quality impacts. This

approach is supported by Water NSW who have requested conditions be imposed to protect water runoff quality from the site during and after works.

Flooding impacts on the site of works is low and expected to only potentially impact on the part of the site adjacent to the Lake Lyell foreshore. While this risk is low, it will be managed during construction works with appropriate measures incorporated in the proposed CEMP.

### **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.

### **Traffic and Access**

Vehicular access to the site is proposed via an existing access track of Girraween Drive, Marrangaroo that traverses through private property and public land under existing access agreements (see Section 1 of this assessment above). All access to the site is proposed via this track which is constrained by width and slope thus reducing the size and scale of machinery that can physically access the site. The application documentation states that machinery will be transported to the site and will remain on site until works are complete. Works are estimated to take between 3 and 6 months to complete with worker numbers on the site varying for the duration. It is estimated up to 30 personnel may be present on site during peak activities though a typical daily workforce of 8-10 personnel is expected. No details are provided in the application regarding how workers will access the site. It is expected that suitable arrangements for worker transportation will be implemented and appropriate consent conditions will be imposed to ensure this is adequately regulated.

To ensure traffic access to the site is adequately regulated, consent can be conditioned to require the preparation and submission of a Traffic Management Plan prior to the commencement of works on site. This can be required to include details of how vehicular access to the site will be managed and unreasonable or excessive traffic movements and/or parking on Girraween Drive will be managed.

### **Air and Noise**

The nearest sensitive receivers (residential properties) are located approximately 900m from the site of proposed works. Given the relative small scale and short duration of the works, noise and vibration impact are expected to be minimal or negligible. Air quality impacts are expected to be minimal given the separation between the work site and sensitive receivers.

### **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.

### **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.

### **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).

### **Site Rehabilitation**

The application documentation specifies that the site access works and drilling pads will be retained following works pending outcomes relating to the pumped hydro energy storage proposal on the site. Should the proposed pumped hydro scheme not proceed, the application states that 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. This included adjoining and adjacent landowners as well as landowners in the vicinity that could be potentially affected by noise or visual impacts. In addition, based on the access arrangements proposed, landowners adjacent to the access track including residents on Girraween Drive, Marrangaroo, were provided written notification of the proposal and invited to make public comments.

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.

With the proposed access over private land, Crown land and Marrangaroo National Park, notification of the proposal was also provided to affected landowners, the Department of Planning and Environment (Crown Land) and the National Parks and Wildlife Service.

In response to the public exhibition of the proposal, 10 public submissions were received as well as a response from the Department of Planning and Environment (Crown Land). Of the submissions received, one indicated support for the proposal while nine raised concerns and objections. Issues raised in the submissions were provided to the applicant who responded on 31 May 2022 with further clarification and additional information. The issues raised in the submissions are summarised in the table below.

<b>Issue Raised</b>	<b>Comments/Response</b>
Safety of access, one lane bridge, weight limit on bridge	The bridge over the Main Western Railway is not a Council asset and is the responsibility of UGL Regional Linx as the appointed management entity for the country rail network. They have advised Council the load rating for the bridge was completed in 2020 and has been confirmed as suitable and safe for all "general access vehicles" under the National Heavy Vehicle Regulations.
Use of Girraween Drive for heavy vehicle access	<p>The applicant has provided further clarification detailing proposed vehicle movements which indicates some heavy machinery accessing the site for establishment, then to transport drilling rigs. Once established, there will be no regular ongoing heavy vehicle access with daily/regular access by 4WD vehicles only.</p> <p>In addition to the above, all heavy vehicle road use approvals are required through the National Heavy Vehicle Regulator (NHVR) who informs all impacted authorities and provides for the issue of conditions of consent (or the rejection) for approval of individual vehicles. In this case, the relevant impacted authorities who would be informed include Lithgow City Council, Transport for NSW and UGL Regional Linx. The NHVR is the regulatory authority to monitor and for residents to report any illegal access to. The NHVR will investigate and impose appropriate penalties for any infringements substantiated.</p>
Inadequacy of Girraween Drive, poor state of repair	The condition of Girraween Drive has been raised with Council's Infrastructure Services team. The current road surface and width are considered acceptable to enable the limited and short-term use of Girraween Drive for access to the site.
Increased traffic movements, public safety risk	The increased traffic movements will not be significant and although increased from current conditions are not sufficient to restrict or prevent access to the site based on the minimal and short term access arrangements proposed.

Vehicle noise	Some additional vehicle noise is acknowledged. As noted above, heavy vehicles will only access the site during site establishment and demobilisation. Based on this, the additional noise generated will be minimal and negligible.
Alternative access options	Neither Sugarmans Road (Lidsdale State Forest) or Sir Thomas Mitchell Drive can be considered to provide practical or feasible access to the site in the circumstances. Given the scale and temporary nature of the development, it would be unreasonable to require access via either of these options.
Improvements to access track will attract recreational users	The access track traverses private land, Council land, Crown land and national park land under existing agreements. The access track is not open to the public and access is restricted. No public access will be facilitated by the proposal.
Poor state of access track, inadequacy for vehicle access, continuing erosion	Minor improvements will be made to the existing access track as required to facilitate access. The applicant has evaluated the condition of the track and considers it acceptable for access to the site for the proposed works.
Approval required under Roads Act 1993	The development does not propose direct access to a classified (main) road or any works on a public road, therefore approval under the Roads Act 1993 is not required.
Limitations on consultation	Public consultation has been undertaken by Council in accordance with the requirements in the Lithgow Community Participation Plan. In the circumstances of the case, additional consultation has been undertaken by Council given the particulars of the proposed development. Any additional consultation by the applicant has been undertaken on their own volition separate from the development assessment process.
Insufficient flora and fauna assessment	The flora and fauna assessment and other environmental impact assessment considerations for the proposal has been undertaken by reputable and qualified consultants on behalf of the applicant. Council is satisfied with the quality and extent of the environmental assessment undertaken.
No local Aboriginal consultation	The application is supported by an Aboriginal Heritage Due Diligence

	Assessment Report which has adequately addressed potential impacts on cultural heritage. The report has been undertaken by qualified and reputable consultants who have adequately engaged with relevant Aboriginal stakeholders. In addition, Council specifically notified key stakeholders in the local Aboriginal community providing the opportunity to comment and review the proposal.
Unacceptable noise levels	The noise impacts of the development have been addressed in accordance with accepted standards and regulatory requirements. Given the isolated location of the works and its relative low scale and short duration, no significant noise impacts are expected.

Many of the submissions above raise valid concerns due to uncertainties with the use of Girraween Drive for access, the movement of heavy vehicles to and from the site and impact on local amenity and traffic movements. In this regard, it is recommended the applicant provide further details to Council's satisfaction detailing how traffic access to and from the site will be managed during site establishment, the geotechnical works and during demobilisation. A condition of consent is recommended that requires the submission of a Traffic Management Plan to Council for approval prior to works commencing to aid in addressing these issues.

### 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 consistent with relevant provisions of all applicable environmental planning instruments and is supported on merit. Approval of the development is recommended under Part 4 of the *Environmental Planning and Assessment Act 1979*, subject to the consent conditions in Schedule A.

## **7. ATTACHMENTS**

Schedule A- Conditions of consent.

Schedule B – Terms of approval – Water NSW

## 8. RECOMMENDATION

**THAT** development application DA 070/22 is approved subject to conditions set out in Schedule A.

Lachlan Sims  
Team Leader Development  
7/7/2022

A handwritten signature in black ink, appearing to read 'Lachlan Sims', written in a cursive style.

### 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

### 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.

<b>Document Reference</b>	<b>Prepared By</b>	<b>Date</b>
Civil Engineering Concept Design, Job No. 279966, Drawing Nos. 0001, 0002, 0030, 0040, 0200, 0300, 0301, 0302, 0303, 0341, 0351, 0352, 0361, 0365, 0371, 0372, 0373, 0374, 0375, 03981, 0385, 0391	ARUP	8 March 2022
Statement of Environmental Effects, Report No. E211001 RP3, v3	EMM	22 March 2022

#### 2. **Water NSW Requirements**

The development is to take place in accordance with the terms and conditions issued by Water NSW dated 18 May 2022 (reference number 22058-a1) and attached to this consent.

### CROWN LAND CONDITIONS

#### 3. **Crown reserves**

No works are permitted within the Crown reserves subject to short-term licence RN 632131. This licence is only for the purpose of 'Access' over Crown reserves 94571 and 80471 (Lot 57 DP 751655) and no maintenance works on vehicle tracks is authorised. Additionally, no maintenance can be authorised inside the licenced area without the applicant first obtaining consent of the Aboriginal land claimant and then obtaining subsequent Crown land authorisation.

#### 4. **Crown roads**

Should repair works be required on any Crown road (south of Lot 57 DP 751655), including fire trails, the applicant must contact the NSW Rural Fire Service to address their access needs. Applications to undertake authorised works on a Crown road generally relate to routine maintenance to conserve pre-existing access conditions, or to determine road works to establish along a Crown road over natural terrain in accordance with the current 'Administration of Crown Roads Policy – IND-O-250'

### 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):

- How construction activities will be managed and coordinated to avoid and minimise environmental impacts;

- How access to the site will be managed to avoid unnecessary damage to the environment; and
- Include details of complaints management and handling procedure including contact details.

A copy of the CEMP is to be provided to Lithgow City Council prior to the commencement of works.

## 6. **Traffic Management Plan**

A Traffic Management Plan (TMP) is to be prepared for the proposed geotechnical works prior to activity commencing on the site to the satisfaction of Lithgow City Council. The TMP is to address (but is not limited to):

- (a) How access to the site by heavy vehicles and machinery transport will be managed and coordinated during site works, site establishment and demobilisation to avoid unnecessary impacts on local traffic movements and access to Girraween Drive via the railway overbridge;
- (b) How access to the site will be managed during the geotechnical investigation works to avoid excessive vehicular movements to and from the site;
- (c) Specify arrangements for vehicular parking and manouevring within the site;
- (d) Specfiy that no vehicle parking is permitted along the access track outside the boundaries of the site or within Girraween Drive;
- (e) Details of the transport route/s to be used for all development-related traffic;
- (f) Details of the measures to be implemented to minimise traffic impacts during site establishment, geotechnical works and demobilisation, including:
  - i. Temporary traffic controls required including detours and signage (if applicable);
  - ii. Notification of the local community of development-related traffic impacts;
  - iii. Procedures for receiving and addressing complaints from the community about development-related traffic;
  - iv. Minimising potential for conflict with school buses, waste collection vehicles and other road users as far as practicable including preventing queuing on the public road network;
  - v. Details of an employee shuttle bus service, including pick up and drop off points and associated parking arrangements for site workers and measures to encourage employee use of the service;
  - vi. Encouraging car-pooling or ride sharing by employees;
  - vii. Scheduling heavy vehicle movements to minimise convoy lengths or platoons and to minimise conflict with light vehicles;
  - viii. Responding to local climate conditions that may affect road safety such as fog, dust, snow, wet weather and flooding.

The TMP is to be implemented by the applicant following approval by Lithgow City Council.

## 7. **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.

8. **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.

9. **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.*

10. **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.

11. **Access and parking**

For all vehicles and machinery accessing the site from Girraween Drive, the applicant is to ensure that:

- (a) Traffic movements and vehicular access is managed in accordance with the approved Traffic Management Plan;
- (b) There is sufficient parking on the site (Lot 103 DP 751651) and within the approved development footprint for all vehicles associated with the geotechnical works;
- (c) No vehicle parking or manouevring is permitted along the access track;
- (d) All vehicles are loaded and unloaded on the site (Lot 103 DP 751651) and can enter and leave in a forward direction;
- (e) No vehicles associated with the geotechnical works are parked or left unattended on Girraween Drive; and
- (f) Development related vehicles leaving the site are in a clean condition to minimise dirt being tracked onto the sealed public road network.

12. **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.

13. **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.

14. **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.

15. **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.

16. **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.*

17. **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**

18. **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.

19. **Rehabilitation of site**

Should the proposed Pumped Hydro Energy Storage development not proceed, the borehole pad sites are to be rehabilitated within 6 months of the decision not to proceed.

## Schedule B Water NSW Approval



PO Box 398, Parramatta NSW 2124  
Level 14, 169 Macquarie Street  
Parramatta NSW 2150  
www.waternsw.com.au  
ABN 21 147 934 787

18 May 2022

Our Ref: 22058-a1  
Your Ref: 070/22

Lachlan Sims  
Team Leader Development  
Lithgow City Council  
PO Box 19  
LITHGOW NSW 2790

Dear Mr Sims

**Subject: Sydney Drinking Water Catchment  
DA 070/22; Lot 103 DP 751651; South Bowenfels**

I refer to Planning Portal referral received 7 April 2022 requesting the concurrence of Water NSW under Chapter 8 of the *State Environmental Planning Policy (Biodiversity and Conservation) 2021* (the SEPP) with a proposal for geotechnical investigation including nine bore holes, seven drill pads, clearing and establishment of vehicle access.

The subject property is located within the Warragamba catchment which forms part of Sydney's water supply.

Water NSW considered the following documents in the assessment of the application:

- Statement of Environmental Effects prepared by EMM Consulting Pty Ltd (dated 22 March 2022), and
- Site Plans prepared by Arup Pty Ltd (dated 8 March 2022).

Water NSW notes that Section 3.3 of the Statement of Environmental Effects proposes to place clean fill on drainage depression along the existing access track to avoid being bogged. Water NSW considers that this works should neither hinder nor alter natural drainage features permanently.

Based on the aerial photography and the information provided, Water NSW is satisfied that the proposed development can achieve a neutral or beneficial effect (NorBE) on water quality provided appropriate conditions are included in any development consent and are subsequently implemented.

Water NSW concurs with Council granting consent to the application subject to the following conditions:

### General

1. The bulk earthworks shall be undertaken as:
  - specified in the Statement of Environmental Effects (Report Number: E211011 RP3, Version: v3 Final, dated 22 March 2022) prepared by EMM Consulting Pty Ltd, and
  - shown on the Site Plans (Job No. 279966-00; Drawing Nos. CICW-DRG-0030, Issue 2 and CICW-DRG-0040, Issue 4, both dated 08/03/22 and Drawing Nos. CICW-DRG-0200, Issue 2 and CICW-DRG-0300, Issue 1, CICW-DRG-0301 to 0303, 0341 and 0391, Issue 2, all dated 02/02/22) prepared by Arup Pty Ltd.No revisions to the extent of works that will impact on water quality, shall be permitted without the agreement of Water NSW.
2. All stormwater drainage shall incorporate appropriate armouring and stabilisation with suitable energy dissipation.

3. All wastes associated with the earthworks and geotechnical investigation shall be removed from the site and/or deposited in a licensed waste facility as specified in Table 6.1 of the Statement of Environmental Effects (Report Number: E211011 RP3, Version: v3 Final, dated 22 March 2022) prepared by EMM Consulting Pty Ltd.

*Reason for Conditions 1 to 3 – To ensure that the works are undertaken and the disturbed site is left in a condition to achieve a sustainable neutral or beneficial effect on water quality over the longer term.*

#### **Earthworks and Construction Activities**

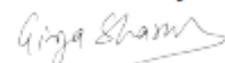
4. A Soil and Water Management Plan as a subplan of Construction Environmental Management Plan shall be prepared for all works for the development by a person with knowledge and experience in the preparation of such plans. The Plan shall:
  - meet the requirements outlined in Volume 1 Chapter 2 of the NSW Landcom's *Soils and Construction: Managing Urban Stormwater (2004)* and *Volume 2E – Mines & Quarries (DECC 2008)*
  - be prepared in consultation with Water NSW prior to Council issuing a Construction Certificate and to the satisfaction of Council
  - 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 roadside drains or natural drainage system, and
  - specify how suitable groundcover will be achieved within required timeframes.
5. A suitably qualified and certified professional shall oversee the implementation of the Soil and Water Management Plan and certify in writing to Water NSW and Council prior to and during any construction activity that erosion and sediment controls have been installed and maintained at the site in accordance with the Plan.
6. 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.

*Reason for Conditions 4 to 6 - To manage adverse environmental and water quality impacts during the construction phase of the development and to minimise the risk of erosion, sedimentation, and pollution within or from the site during this construction phase.*

Under the SEPP, Council must provide Water NSW with a copy of its determination of the application within 10 days of the determination.

If you wish to discuss this matter further please contact Juri Jung via email at [environmental.assessments@watermsw.com.au](mailto:environmental.assessments@watermsw.com.au).

Yours sincerely



**GIRJA SHARMA**  
**Catchment Assessments Manager**