

DEVELOPMENT ASSESSMENT REPORT – MODDA013/23 (DA070/22) – APPROVED GEOTECHNICAL INVESTIGATION WORKS, PROPOSED ADDITIONAL BORES/MONITORING SITES, LOT 103 DP 751651, LAKE LYELL MAGPIE HOLLOW ROAD SOUTH BOWENFELS NSW 2790

1. PROPOSAL

Council is in receipt of a modification of development consent application DA070/22 modification MODDA013/23. The modification seeks approval for additional bores/monitoring sites on land known as Lot 103 DP 751651, Lake Lyell Magpie Hollow Road South Bowenfels.

The proposed modification involves:

- Up to 13 geotechnical boreholes drilled from existing or new (groundwater monitoring) drill sites (approved and proposed);
- Drilling four groundwater monitoring boreholes on existing drill pads and within the approved disturbance footprint;
- Drilling six groundwater monitoring boreholes at three new drill pads outside the approved disturbance footprint, however utilising existing disturbed areas where possible to minimise the need for additional clearing or extensive earthworks; and
- Drilling up to four additional geotechnical boreholes within the investigation envelope.

The proposed modification would not exceed the previously approved disturbance area of 0.97ha.

It is to be noted that no additional geotechnical investigations will be undertaken within 40m from a watercourse.

The original approval was determined by Council on 15 August 2022, for geotechnical investigation works and associated infrastructure.

The application will be assessed under Section 4.55 1(A) of the *Environmental Planning and Assessment Act 1979*.

2. SUMMARY

To assess and recommend determination of Section 4.55(1A) Modification of Consent MODDA013/23 of DA070/22. Recommendation will be for approval subject to conditions.

3. LOCATION OF THE PROPOSAL

Legal Description: Lot 103 DP 751651
Property Address: Lake Lyell Magpie Hollow Road SOUTH BOWENFELS NSW
2790

4. DETAILS OF CURRENT APPROVAL

DA070/22 was originally approved by Council on 15 August 2022, for geotechnical investigation works and associated infrastructure.

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.

Access to the site was approved 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.

Example of one of the previous drill sites is shown in the picture below, that has now been completed:



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).

As such, the proposed modification does not change the permissibility of the proposed development.

5.1 POLICY IMPLICATIONS (OTHER THAN DCPs)

Lithgow Community Participation Plan

2.3.5 Notification for modification of development consent

Council will notify an application to modify development consent if the original assessment of the development application was notified or advertised.

Council will notify the application for modification in the same manner as the original development application.

Council will notify those persons who previously made submission(s) and any other person, who in the opinion of the Development Assessment Officer may now be affected by the application for modification.

Given, that ten (10) submissions were received as part of the original application, (although majority had concerns with the road access which is not proposed to be amended as part of the modification), and the interest from Councillors, the application was re-notified to surrounding landowners.

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.

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" Item 3 that states:

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 application has been called in by Councillor Coleman. As such, the advice to this Council meeting is pursuant to Council policy.

5.2 FINANCIAL IMPLICATIONS

Planning Agreements

No planning agreement has been sought for the investigation project however should the applicant pursue an application for the Pumped Hydro Energy Storage System project State Significant Development, Council will likely enter into a Planning Agreement for the SSD project should the application be recommended for approval.

5.3 LEGAL IMPLICATIONS

The development includes works adjacent to Lake Lyell and is integrated development under the provisions of the *Environmental Planning and Assessment Act 1979*.

The original application was 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.

As such given that the modification does not involve any additional works to be located within 40m from a water course, the modification is not required to be referred to the NSW Department of Planning and Environment- Water Division (originally known as NRAR) or The Department of Primary Industries (Fisheries).

Environmental Planning and Assessment Act 1979 – Section 4.55(1A)

(1A) Modifications involving minimal environmental impact

A consent authority may, on application being made by the applicant or any other person entitled to act on a consent granted by the consent authority and subject to and in accordance with the regulations, modify the consent if:

- (a) it is satisfied that the proposed modification is of minimal environmental impact, and*
- (b) it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which the consent was originally granted and before that consent as originally granted was modified (if at all), and*
- (c) it has notified the application in accordance with:*
 - (i) the regulations, if the regulations so require, or*
 - (ii) a development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and*
- (d) it has considered any submissions made concerning the proposed modification within any period prescribed by the regulations or provided by the development control plan, as the case may be.*

Subsections (1), (2) and (5) do not apply to such a modification.

Comment: Council is satisfied that the modification is of a minimal environmental impact and is substantially the same development as the original consent granted by Council. The proposed modification would not exceed the disturbance footprint previously approved.

The development was notified to surrounding landowners and placed on public display as per the original assessment (28 days).

The application was further notified to Water NSW and all local Aboriginal Parties.

Environmental Planning and Assessment Act 1979 – Section 4.15

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:

Lithgow Local Environmental Plan 2014

The original application was assessed in accordance with the provisions of Lithgow's Local Environmental Plan 2014 and was found to be compliant. The modification does not require any further assessment under the LEP.

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

The original application was assessed in accordance with the provisions of the SEPP and was found to be likely to have low or no impact on koalas or koala habitat. The modification does not require any further assessment under the SEPP.

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

The original development application was referred to Water NSW who advised that the development can achieve a neutral or beneficial effect on water quality provided appropriate conditions are included on any development consent.

As such given the modification requires additional bore holes and ground water monitoring, the development was re-referred to WaterNSW.

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

The modification does not require any further assessment under the SEPP.

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

The original assessment stated that 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.

The modification does not require any further assessment under the DCP.

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

The assessment of the original application took into consideration likely impacts on biodiversity, aboriginal heritage, surface water, ground water, traffic and access, air and noise, visual impacts, waste, social and economic impacts and site rehabilitation.

In addition, to the above likely impacts, the modification includes:

Geology, soils and topography: The main landform element of the study area is a broadly rounded ridgeline, which the proposed works follow as the crest moves around moderate to steep hillslopes down to Farmers Creek.

The Statement of Environmental Effects states that given the moderate slopes within the study area, there is the potential for remnant topsoils to remain intact.

Overall, the proposed access track and sites of the proposed boreholes in the study area lacked evidence of any form of stone outcrops or overhangs in which cultural materials may be present, nor do they exhibit environmental characteristics where stone artefacts may be expected.

Council is satisfied that the report has adequately addressed geology, soils and topography.

Aboriginal Heritage: The Aboriginal heritage due diligence was completed for the investigation area was updated to assess the modified disturbance footprint and inclusion of additional groundwater monitoring bores.

Subsequent site inspections were carried out by a number of Aboriginal parties in the area specifically to address the additional sites proposed for inclusion in the drilling program for the groundwater monitoring network.

The study area was inspected to identify any previously recorded Aboriginal objects and areas of archaeological potential that may be present. The study area exceeded the required disturbance footprint to provide flexibility allowing for the potential relocation of boreholes or disturbance activity should cultural materials be observed.

No Aboriginal sites were identified in the study area. However, it was highlighted that there is the potential for intangible places, stories and values may occur within the study area and the need for these to be suitably investigated in subsequent project stages being the Lake Lyell Pumped Hydro project should it progress.

Access: The primary access route identified for the approved development was originally from the Great Western Highway and Girraween Drive via the Marrangaroo Estate. However, incorporating feedback from the local community and to reduce disturbance to Girraween Drive residents, this access is now only retained as a secondary or alternate access option for light vehicles. The primary access to the site is from the Great Western Highway via Oakey Forest Road. An access agreement has been developed in consultation with the Central District Kart Club for access to the site from Oakey Forest Road.

Safety and access considerations have been included in the existing traffic management plan. The amended transport route to the site via Oakey Forest Road provides improved access from The Greta Western Highway due to longer line of sight compared to the alternative route via Girraween Drive.

Traffic movements to and from the site would be consistent with or reduced from the approved development. There would be an initial peak during mobilisation and demobilisation activities for the drilling rig and materials to be delivered to the site, however once drilling has commenced vehicle movements are likely to be limited to light vehicles transporting staff to and from the site daily as well as water trucks.

No new access tracks are required for the modification. Access tracks will be consistent with the approved project.

Biodiversity: The biodiversity assessment completed for the investigation envelope was updated to assess the modified disturbance footprint and inclusion of additional groundwater bores.

The additional drill sites contain a mixture of vegetation, cleared/disturbed and non-native vegetation. Given that the disturbance footprint will not be exceeded from the original assessment, no additional impact on vegetation is expected to occur.

Minor changes to the threatened species is likely to occur within the disturbance footprint and have been considered as part of the revised mapping. However, no change to the overall listing of species is likely to occur or impact of the development on species habitats.

Surface Water: The additional groundwater monitoring locations are not located within 40m of any watercourse. Overland flow after rain occurs frequently at the site due to the steep surrounding terrain. Potential impacts from the proposed modification are consistent with those previously assessed, including sedimentation from soil disturbance during drill pad establishment, flooding from overland flow and water quality impacts from controlled and uncontrolled discharge. Management measures would be included and consistent with a detailed Construction Environmental Management Plan (CEMP). This was conditioned on the consent and will remain as part of the modification.

The additional groundwater monitoring bores are located at elevated levels above Lake Lyell and will not be impacted by flooding events from the waterbody.

As such, no additional impacts are proposed to occur as part of the modification. Conditions were placed on the original consent to monitor surface water. These conditions will remain as part of the modification.

Groundwater: The additional groundwater monitoring locations would intercept shallow and deep aquifers, where present, for the purposes of characterising the regional hydrogeology. No permanent hydrogeological impacts would result from the geotechnical drilling program.

As such, no additional impacts are proposed to occur as part of the modification. Conditions were placed on the original consent to monitor groundwater. These conditions will remain as part of the modification.

Other: Other impacts of the modification are consistent with the approved development, however, would be a continuation given the extension in duration of the program (4-6 months). This includes temporary and localised noise and minor emissions of engine exhaust, dust and odours during drilling and transport.

As such, no additional impacts are proposed to occur as part of the modification. Conditions were placed on the original consent to noise, dust and potential odour impacts. These conditions will remain as part of the modification.

5.3.7 The Suitability of the site for the development

The surrounding land uses are for residential pursuits with the size and nature of the development consistent with those in the surrounding area. The development will have minimal impact to the surrounding amenity. The proposed development complies with the objectives of the zone and the site is considered to be suitable for the proposal.

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

The proposed modification was sent to Water NSW and all local Aboriginal Parties. for commenting with recommendations detailed below. The proposal was further notified to adjoining property owners for a period of 28 days.

WATERNSW

Reference is made to WaterNSW referral received 7 June 2023 in response to Council's Planner's referral dated 24 May 2023.

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

ABORIGINAL PARTIES

After consulting with on numerous occasions with the surrounding Aboriginal parties, no submissions were received. As such it is assumed that the parties have no concerns to the modification.

PUBLIC SUBMISSIONS

During the notification period, one (1) submission was received with the following concerns:

- No results have been made publicly available for the initial borehole feasibility study.
- During the initial investigations, a milky white discolouration was noted in Farmers Creek adjacent to the Borehole Operation.

- The safety and sustainability of the project.

Applicants Response:

- ***Intent of studies and release of study information:*** EnergyAustralia is seeking to extend its geotechnical investigation works to allow additional bore holes to be drilled for the purpose of establishing a groundwater monitoring network and to assess the technical and environmental feasibility of the Lake Lyell Pumped Hydro Project. Accurate geological and hydrogeological data is critical to understanding specifically how pumped hydro energy storage may be built within our intended project site.

Some data collected via this investigation may relate to areas of our privately owned land that are later excluded from the project's design footprint. As such, data that is collected as part of this investigation needs to remain confidential and will not be made public. An interpretation of how the geotechnical and hydrogeological data has been relied on to inform the project's eventual design footprint will, however, be included in the Project's Environmental Impact Statement (EIS) which will be shared as part of our project Public Exhibition.

- ***Purported drilling discharge to Farmers Creek:*** investigations were undertaken by EnergyAustralia's onsite environmental management team and program contractors, GHD did not identify any specific issue for concern or establish a connection between this alleged pollution and our onsite drilling program. EnergyAustralia will continue to monitor water quality in Lake Lyell as per its usual routine monitoring program.

Council's Assessment Planner's Response:

- Given the timeframe of the previous investigation works having just been completed, it is considered that the results from the initial investigation are still being prepared and interpreted by the expertise of the consultants. By making the results public at this stage, may provide for misinterpretation or misconception of the project to the wider community.

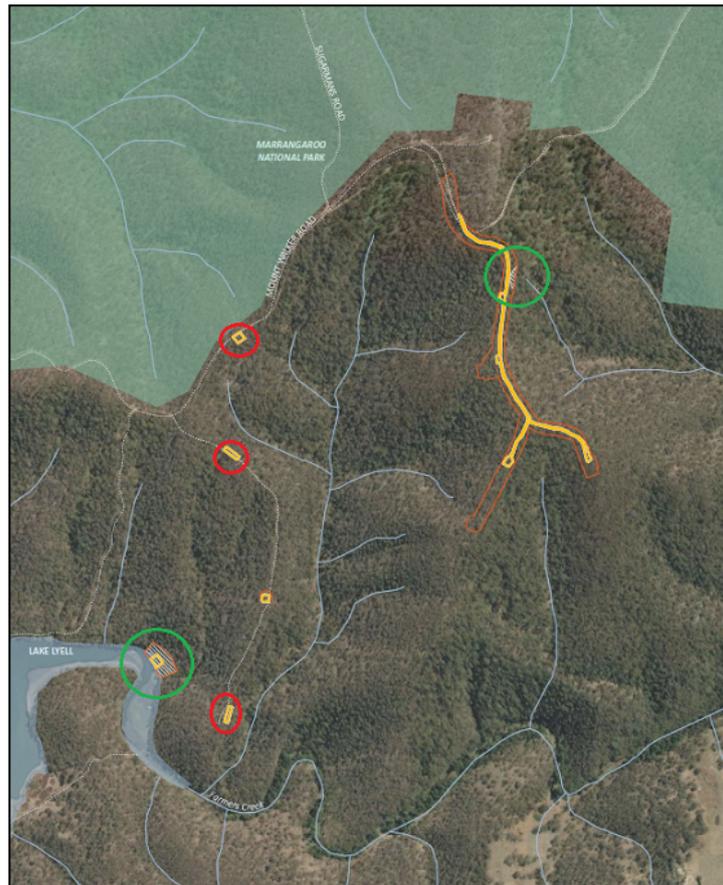
The point of the geotechnical investigations is to provide test and results to determine whether the future pumped hydro project will be feasible or not. The result will form part of the SSD statement of environment effects, that will be publicly available should the development proceed.

- After the initial investigations were undertaken and concerns received regarding the cloudy water, Council consulted with EnergyAustralia as well as undertook inspections of the site locations. As such there was insignificant results and evidence that the water discolouration was a result of the geotechnical investigation works.

It is to be noted that the modification investigation will be further away (over 40m) from watercourse than the initial investigation.

The plan below shows the location of the additional drilling locations. The red circles indicate the new sites that have triggered this modification and the green circles show the sites that were within the 40m of a watercourse in the original DA. In the green circled areas that there is hatching – this shows the amount of the site that is within 40m of a watercourse. The same trigger was applied to the new sites with no

hatching within these sites indicating that they are all greater than 40m to a watercourse.



Council is satisfied with the response from EnergyAustralia during the investigation of the concerns and concluded that there was no evidence that the milky white water was from the project.

Soil and erosion management will remain as conditions on the consent.

An additional condition is recommended to be included on the consent to ensure that monitoring of the drilling works are undertaken to ensure there is no impact to Farmers Creek or Lake Lyell.

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 the Section 4.55 Modification of Consent application No. MODDA013/23 associated with DA070/22 be approved subject to Conditions 1, 6 and 11 being amended on the consent and 17a being an additional consent. This is outlined 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, **Modification of Consent Application**, as indicated below except as modified by any conditions of this consent.

Document Reference	Prepared By	Date
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
Statement of Environmental Effects-Modification to DA070/22, Report No. E211001 RP-008, V2	EMM	11 April 2023
Aboriginal Heritage Due Diligence Assessment	EMM	February 2023
Flora and Fauna Assessment	EMM	February 2023

AMENDED AS PER MOD013/23

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.~~

General

1. The bulk earthworks shall be undertaken as:

- 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-DRG0200, 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, and
- as modified in the Statement of Environmental Effects (Report Number: E211011 RP008, Version: v2, dated 11 April 2023) including shown on Figure 3.1 of the Statement of Environmental Effects prepared by EMM Consulting 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 RP-008, Version: v2, dated 11 April 2023) prepared by EMM Consulting Pty Ltd.

Earthworks and Construction Activities

4. The Soil and Water Management Plan (Project number: 12571362, Revision 0, dated 12/09/2022) and Erosion and Sediment Control Plans (Project No. 12571362, Revision 1, dated 29/09/2022) both prepared by GHD Pty Ltd shall be updated 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 consulted with Water NSW prior to Council issuing a Construction Certificate and be to the satisfaction of the Principal Certifying Authority**
- **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.

AMENDED AS PER MOD013/23

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 **Oakey Forest Road** and 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) Specify that no vehicle parking is permitted along the access track outside the boundaries of the site or within **Oakey Forest Road and** 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.

AMENDED AS PER MOD013/23

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 **and Oakey Forest Road**, 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 manoeuvring 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 **or Oakey Forest Road**; and
- (f) Development related vehicles leaving the site are in a clean condition to minimise dirt being tracked onto the sealed public road network.

AMENDED AS PER MOD013/23

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.

17.a) **Monitoring of Works**

The applicant is to monitor all drilling works to ensure there is no impact to Farmers Creek or Lake Lyell.

ADDITIONAL AS PER MOD013/23

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.