



Preliminary Site Investigation

Proposed Molong BESS:

*1 Deight Street & 19 Back Saleyards Road, Molong
NSW 2866*

FOR: StorEnergy 3 Pty Limited

SLR PROJECT No: 620.041615.00027

Revision: 4.0

28 August 2025



Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
1.0	30 June 2025	J. Seiler	C. Newland	C. Newland
2.0	3 July 2025	J. Seiler	C. Newland	C. Newland
3.0	7 August 2025	J. Seiler	Mike Haynes	Mike Haynes
4.0	28 August 2025	J. Seiler	C. Newland	C. Newland

Basis of Report

This report has been prepared by SLR Consulting Australia (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with StorEnergy 3 Pty Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.



Executive Summary

SLR Consulting Australia Pty Ltd (SLR) has been engaged by StorEnergy 3 Pty Ltd (Stor) to prepare this Preliminary Site Investigation (PSI) for proposed construction of a Battery Energy Storage System (BESS) facility in Molong, New South Wales. The BESS development shall be located across 1 Deight Street (Lot 99 DP1020247) and 19 Back Saleyards Road (Lot 1 DP542283).

Project Description

The Project will involve the development, construction, operation, and eventual decommissioning of a BESS with a capacity of 150 Megawatt (MW) / 730 Megawatt-hour (MWh) connecting via overhead transmission line directly to the existing Molong 132/66 Kilovolt (kV) transmission substation operated by Transgrid.

The BESS will comprise of battery units, inverters, transformers, a substation and ancillary infrastructure all within the Development Footprint. The battery units will be within individual containers (or enclosures), with each container measuring approximately 6 metres (m) or 20 feet (ft) in length with an approximate weight of 43,000 kilograms (kg).

The inverters will convert the electricity stored in the battery units from Direct Current (DC) to Alternating Current (AC), and vice versa, that will be directed through the proposed 132kV overhead lines (approximately 900m in length) to the existing Transgrid Molong Substation.

The proposal is considered State Significant under the Planning Systems SEPP, as the proposed electricity generating works are estimated to cost in excess of \$30 million.

Objectives

Administrative

The Environmental Planning and Assessment Act 1979 (EP&A Act) and Environmental Planning and Assessment Regulation 2021 (EP&A Regulation) form the statutory framework for the environmental impact assessment and planning approval of development in NSW. Both the EP&A Act and the EP&A Regulation are administered by the NSW Department of Planning, Housing and Infrastructure (DPHI).

StorEnergy 3 Pty Ltd require a PSI to support preparation of the Environmental Impact Statement (EIS) to inform contamination management aspects in accordance with the Secretary's Environmental Assessment Requirements (SEARs).

Technical

The technical objectives of this PSI are to:

- Assess the potential for contamination to be present at the Development Footprint based on a review of the environmental setting and history, to assess whether the Development Footprint is suitable, or can be made suitable, for the proposed land use.
- Prepare the initial Conceptual Site Model (CSM) for contamination risk, evaluating potential contaminants of concern (PCOC), potential receptors and identification of relevant exposure pathways.
- Conclude on the suitability of the Development Footprint from a contamination risk perspective, making recommendations for any additional assessment, management, or remediation (if required) to render the Development Footprint suitable for the proposed use.



Works Undertaken

SLR completed the following works:

- Desktop review of publicly available information to establish:
 - Project Lots history.
 - Geological and hydrogeological setting.
 - Past and present potentially contaminating activities (on- and off-site sources).
 - Contaminants of potential concern (COPC).
 - Potentially contaminated media.
 - The condition of the Project Lots and surrounding environment with regards to potential contamination sources.
- Development of a Conceptual Site Model (CSM).
- Preparation of this PSI report.

Key Findings

The following key findings from this PSI were:

- The Project Lots were historically vacant rural grazing land, remaining undeveloped from 1963 to at least 2003.
- In 2003, the Transgrid substation and access road were constructed in the northern section. Vegetation planting occurred along the northwestern boundary, and a compacted dirt road was added along the southern boundary, alongside nearby rural and industrial development.
- The Project Lots are not listed as a notified or regulated contaminated area under the CLM Act (Govt. of NSW 1997). The Project Lots do not hold EPLs under the POEO Act (Govt. of NSW 1997) for activities undertaken on-site.
- Some sites within 5 km of the Project Lots were identified to be registered, notified or licensed under these acts. However, these were not considered to pose a contamination risk to the Development Footprint.
- On the basis of the desktop investigation and Project Lots inspection, it is inferred that activities within the Development Footprint and surrounding land are unlikely to have caused significant contamination of soil below the Development Footprint surface.
- The Project Lots historical and environmental setting review and inspection did not indicate that the Development Footprint would likely be contaminated.

Development Area Suitability

Based upon results and findings from this PSI, SLR considered the historical and environmental setting are supportive of the proposed land use, and the risk profile posed by former use or potential contamination sources is low. As such, SLR do not consider contamination as an aspect that should preclude the proposed development.



Recommendations

General construction environmental management

General environmental management is considered necessary during any proposed redevelopment of the Project Lots, documented in the project Construction Environmental Management Plan (CEMP), which should include but is not limited to the following aspects:

- Soil stockpiling and material segregation procedures.
- Off-site material management procedures (solid waste / beneficial reuse).
- Material tracking procedures (onsite / offsite).
- Imported material management procedures.
- Water management:
 - Diversion of upslope water (on and around the BESS Footprint).
 - Protection of off-site stormwater system.
 - Protection of wash-down areas.
 - Excavation pump-out procedures and management options for de-watering.
- Standard worker personal protection equipment and hygiene practices to minimise exposure to site subsurface media.
- Unexpected findings protocol (UFP) procedure.

This Preliminary Site Investigation has been prepared for issues pertaining to potential contamination at the defined Project Lots only. This report may not be reproduced, except in full and is subject to the Limitations outlined in Section 16.0.



Table of Contents

Basis of Report	i
Executive Summary	ii
Acronyms and Abbreviations	viii
1.0 Introduction	1
1.1 Purpose of this Document	1
1.2 Report Structure	1
2.0 Policy Context	2
2.1 SEARs Requirements	2
2.2 Statutory Framework	3
2.3 Assessment Guidelines	3
3.0 Project Description	4
3.1 Overview	4
3.2 Project Summary	4
4.0 Development Footprint Setting	5
5.0 Objectives	6
6.0 Scope of Works	6
7.0 Existing conditions Appraisal	7
7.1 Environmental Condition	7
7.1.1 Climate	7
7.1.2 Topography	8
7.1.3 Geology	8
7.1.4 Soil Landscape	8
7.1.5 Hydrology and Flood Hazard	8
7.1.6 Hydrogeology	8
7.1.7 Acid Sulfate Soils	10
7.2 Asbestos Registers	10
7.2.1 Loose Fill Asbestos Register	10
7.2.2 Naturally Occurring Asbestos	10
7.3 NSW EPA Contaminated Land Registers	10
7.3.1 POEO License	10
7.3.2 Section 58 CLM Act Regulated Sites	11
7.3.3 Section 60 CLM Act Notified Sites	11
7.4 NSW EPA PFAS Investigation Program	11
8.0 Site History	11



9.0	Desktop Assessment Summary	12
10.0	Areas of Potential Environmental Concern and Contaminants of Potential Concern	12
11.0	Project Lots Walkover.....	13
12.0	Preliminary Conceptual Site Model.....	14
12.1	Source	14
12.2	Receptors.....	14
12.3	Exposure Pathways	15
12.4	Potential Complete Exposure Pathways.....	15
13.0	Conclusion	19
13.1	Key Findings	19
13.2	Development Area Suitability	19
14.0	Recommendations	19
14.1	General construction environmental management	19
15.0	References.....	21
16.0	Limitations	22

Tables in Text

Table 1	PSI Report Structure.....	1
Table 2	SEARs Requirements.....	2
Table 3	Project Summary	4
Table 4	Development Footprint Identification Summary.....	5
Table 5	Registered Groundwater Bore Summary	9
Table 6	Historical Aerial Photograph Summary	11
Table 7	Potential Areas of Concern / Contaminants of Potential Concern	13
Table 8	Preliminary Conceptual Site Model	16

Graphs in Text

Graph 1	Summarised Local and Regional Meteorological Data.....	7
---------	--	---



Appendices

Appendix A	Figures
Appendix B	Historical Aerial Imagery
Appendix C	Soil Landscape Summary
Appendix D	NSW Hydrography Map
Appendix E	Groundwater Well Construction Details
Appendix F	Naturally Occuring Asbestos Map
Appendix G	POEO Licenses
Appendix H	Section 58 CLM Act Regulated Sites
Appendix I	Photographic Log



Acronyms and Abbreviations

Term	Meaning
AEP	Annual exceedance probability
AEMO	Australian Energy Market Operator
ASL	Above Sea Level
ASS	Acid Sulfate Soils
BCD	Department of Climate Change, Energy, the Environment and Water - Biodiversity and Conservation Division
BESS	Battery Energy Storage System
BESS Footprint	Footprint of BESS and ancillary infrastructure on 1 Deight Street (Lot 99 DP1020247)
Title Containing BESS	1 Deight Street (Lot 99 DP1020247)
CEMP	Construction Environmental Management Plan
C&I Guidelines	NSW EPA's Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities
CIV	Capital Investment Value
CLM Act	<i>Contaminated Land Management Act 1997 (NSW)</i>
CSCREAP	Cabonne Shire Council Renewable Energy Action Plan
CSEP	Community Stakeholder Engagement Plan
Cth	Commonwealth
DA	Development Application
DCP	Cabonne Development Control Plan
DCCEW	Department of Climate Change, Energy, the Environment and Water
DECCW	Department of Environment, Climate Change and Water (NSW)
Development Footprint	The proposed BESS Footprint, proposed access road on 1 Deight Street (Lot 99 DP1020247) and proposed Transmission Line (including easement) on 19 Back Saleyards Road
DPE	Department of Planning and Environment, known as DPHI
DPHI	Department of Planning, Housing and Infrastructure
DOP	Department of Planning, known as DPHI
EIS	Environmental Impact Statement
EMF	Electromagnetic Fields
EMT	Electromagnetic Transient
EPA	Environmental Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979 (NSW)</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2021 (NSW)</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
EPL	Environmental Protection Licence
FIA	Flood Impact Assessment
GIS	Geographical Information Systems
GW	Gigawatt
ha	Hectares



Term	Meaning
HRA	Hazard and Risk Assessment
HV	High Voltage
kg	Kilogram
km	Kilometre (1,000 metres)
km/h	kilometres per hour
LALC	Local Aboriginal Land Council
LEP	Cabonne Local Environmental Plan
LGA	Local Government Area
m	Metre
m ²	square metre
mm	Millimetre
MV	Medium Voltage
MVa	Mega volt amp
Cabonne LEP	<i>Cabonne Local Environment Plan 2012</i>
NENWRP	<i>New England North West Regional Plan 2041</i>
NSW	New South Wales
PHA	Preliminary Hazard Analysis
PMF	Probable Maximum Flood
POEO	<i>Protection of the Environment Operations Act 1997 (NSW)</i>
Project Lots	Combined Lots – 1 Deight Street (Lot 99 DP1020247), 19 Back Saleyards Road (Lot 1 DP542283)
PRS	Preliminary Risk Screening
PV	Photo Voltaic
Resilience and Hazards SEPP	<i>State Environmental Planning Policy (Resilience and Hazards) 2021 (NSW)</i>
SEAR's	Secretary's Environmental Assessment Requirements
SEED	Sharing and Enabling Environmental Data in NSW
SEPP	State Environmental Planning Policy (NSW)
SLR	SLR Consulting Australia Pty Ltd
SSD	State Significant Development
Stor	StorEnergy 3 Pty Ltd
Title Containing Transgrid Substation	19 Back Saleyards Road (Lot 1 DP542283)



1.0 Introduction

SLR Consulting Australia Pty Ltd (SLR) has been engaged by StorEnergy 3 Pty Ltd (Stor) to prepare this Preliminary Site Investigation (PSI) for a Battery Energy Storage System (BESS) facility in Molong, New South Wales. The BESS development shall be located across 1 Deight Street (Lot 99 DP1020247) and 19 Back Saleyards Road (Lot 1 DP542283).

At the time of this PSI, the title containing BESS was zoned RU1: Primary Production under the Cabonne Local Environmental Plan (LEP) 2013 (Govt. of NSW 2013) and was located within the Cabonne Shire Council Local Government Area (LGA). The Development Footprint location and BESS Footprint have been presented as Figures 1 and 2 of Appendix A, respectively.

1.1 Purpose of this Document

The *Environmental Planning and Assessment Act 1979* (EP&A Act) and *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) form the statutory framework for the environmental impact assessment and planning approval of development in NSW. Both the EP&A Act and the EP&A Regulation are administered by the NSW Department of Planning Housing and Infrastructure (DPHI).

This PSI report assesses the consistency of the development with Council and State planning and evaluates the impacts of the Proposal on potential risk(s) posed by contamination and provides recommendation for management of any unacceptable risks to human health and the environment should they be identified.

1.2 Report Structure

The structure of this PSI report is presented on Table 1.

Table 1 PSI Report Structure

Section	Title	Description
1.0	Introduction	Identifies the context of the project.
2.0	Policy Context	Summarises the relevant legislation and policy requirements that apply to the assessment.
3.0	Project Description	Describes the project, including location, site design, and access arrangements.
4.0	Development Footprint Setting	Details the existing conditions of the site and surrounds.
5.0	Objectives	Outlines the technical objectives of this PSI.
6.0	Scope of Works	Outlines the scope of works undertaken
7.0	Existing Conditions Appraisal	Outlines the environmental setting and historical site setting.
8.0	Site History	Outlines the historical site setting.
9.0	Desktop Assessment Summary	Summarises publicly available sources to identify the environmental setting and historical land use characteristics of the Project Lots.
10.0	Potential Areas / Contaminants of Concern	Evaluation of potential areas / contaminants of concern based on interpretation of site history and use.



Section	Title	Description
11.0	Projects Lots Walkover	Summarises the observed current condition of Development Footprint.
12.0	Conceptual Site Model	Evaluation of exposure pathway risk linkages with assessment on risk status.
13.0	Conclusion	Summarises the findings of the assessment and recommends approval conditions.
14.0	Recommendations	Suggested recommendation for management of potential contamination as an unexpected finding if identified during the construction phase.

2.0 Policy Context

2.1 SEARs Requirements

The proposal is a State Significant Development (SSD) and the DPHI has issued Secretary's Environmental Assessment Requirements (SEARs). The SEARs relevant to this study are listed in Table 2. There were no Agency comments specifically related to management of contamination received in conjunction with the SEARs.

Table 2 SEARs Requirements

Issue	Description
Land – including:	- Detailed justification of the suitability of the site and that the site can accommodate the proposed development having regard to its potential environmental impacts, land contamination, permissibility, strategic context and existing site constraints. - Assessment of the potential impacts of the development on existing land uses on the site and adjacent land, including: - Agricultural land, flood prone land, nearby drinking water catchments. - Crown lands, mining, quarries, mineral or petroleum rights (if relevant). - Soil survey to determine the soil characteristics and consider the potential for salinity, acid sulfate soils, and erosion to occur. - Cumulative impact assessment of nearby developments. - Assessment of the compatibility of the development with existing land uses, during construction, operation and after decommissioning, including: - Consideration of the zoning provisions applying to the land, including subdivision (if required). - Completion of a Land Use Conflict Risk Assessment in accordance with the Department of Industries Land Use Conflict Risk Assessment Guide (if required). - Assessment of impact on agricultural resources and agricultural production on the site and region. - A Preliminary investigation into potential contamination across the site, in accordance with the State Environmental Planning Policy (Resilience and Hazards) 2021 (as required).



2.2 Statutory Framework

In addition to the SEARs, this PSI report has been prepared pursuant of the requirements of the following legislation:

- Environmental Planning and Assessment Act 1979 (EP&A Act) and Environmental Planning and Assessment Regulation 2021 (EP&A Regulation).
- Protection of the Environment Operations Act 1997 (POEO Act). (1997). (NSW). (Govt. of NSW 1997).
- Contaminated Land Management Act 1997 (CLM Act). (1997). (NSW). (Govt. of NSW 1997).
- State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazard SEPP). (NSW). (Govt. of NSW 2021).
 - Clause 4.6 of the Resilience and Hazards SEPP outlines that a consent authority must not consent to the carrying out of any development on land unless —
 - (a) it has considered whether the land is contaminated.
 - (b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out.
 - (c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.

Clause 4.6 (2) specifies that before determining an application for consent to carry out development that would involve a change of use on any of the land specified in subsection (4), the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.

The previous / current use of the Development Footprint is 'agricultural/horticultural activities', which is a use identified in Table 1 of the Contaminated Land Guidelines (DUAP 1998). Accordingly, this PSI has been prepared to satisfy the requirements of Clause 4.6(2).

2.3 Assessment Guidelines

This PSI report has been prepared in accordance with the following reporting guidelines and requirements:

- National Environmental Protection Council (NEPC). (2013). *National Environmental Protection (Assessment of Site Contamination) Measure* (ASC NEPM). (NEPC 2013).
- NSW Environment Protection Authority (EPA) (2015), Guidelines on the duty to report contamination to the EPA under the Contaminated Land Management Act 1997.
- NSW EPA. (2020). *Contaminated Land Guidelines: Consultants Reporting on Contaminated Land*. (NSW EPA 2020).



3.0 Project Description

3.1 Overview

The Proposal includes the construction of a BESS facility with a capacity of 150 Megawatts (MW) near the MOLONG 132/66kV substation operated by TransGrid.

The Project is located on land in the northeast periphery of the township of Molong, within the Cabonne Shire Council Local Government Area (LGA). The land is zoned RU1 Primary Production in accordance with the Cabonne Local Environment Plan 2012 (Cabonne LEP).

Access to the BESS is to be provided via Back Saleyards Road, which runs along the western extent of the Development Footprint, with an existing substation located to the north on adjacent Lot 1. The Project location in the regional context is presented on Figure 1, and in the local context on Figure 2 of Appendix A.

3.2 Project Summary

The Project will involve the development, construction, operation, and eventual decommissioning of a BESS with a capacity of 150 MW/ 730 MWh connecting via overhead transmission line directly to the existing Molong 132/66kV transmission substation operated by Transgrid.

The BESS will comprise of battery units, inverters, transformers, a substation and ancillary infrastructure all within the Development Footprint. The battery units will be within individual containers (or enclosures), with each container measuring approximately 6 metres (m) or 20 feet (ft) in length with an approximate weight of 43,000 kilograms (kg).

The inverters will convert the electricity stored in the battery units from Direct Current (DC) to Alternating Current (AC), and vice versa, that will be directed through the proposed 132kV overhead lines (approximately 900m in length) to the existing Transgrid Molong Substation.

The proposal is considered State Significant under the Planning Systems SEPP, as the proposed Electricity generating works are estimated to cost in excess of \$30 million.

A summary of the project is detailed in Table 3.

Table 3 Project Summary

Project Element	Description
Proposed Development – Construction & Operation Summary	The Project would generally involve the following components: • Transport of construction personnel, equipment and materials to and from the project during construction (dependent on construction schedule), including all associated heavy and light vehicle traffic movements. • Project establishment works including limited vegetation clearing within the Development Footprint, bulk earthworks and a temporary construction compound. • Road works to formalise a new driveway crossing from Back Saleyards Road and internal access road for construction purposes and ongoing access. • Construction of hardstand/laydown areas, fencing, internal roads, control room, auxiliary transformer, battery enclosures, and inverter/transformer/switchgear stations (referred to as Power Conversion Stations (PCS)).



Project Element	Description
	- Construction of approximately 900m of overhead 132 kV transmission line to facilitate connection to the existing Transgrid's Molong Substation and associated high voltage concrete or steel poles and wiring. - Acoustic attenuation (to be determined as part of a detailed assessment). - Construction of ancillary works including a parking area, water tank, Operations and Maintenance (O&M) building (including storage structures), stormwater management infrastructure, security lighting and fencing. - The installation of 264 BESS units (maximum) within individual, modular containers, on hardstand footings with a total capacity of 150 MW/730MWh. - The installation of 50 inverters on hardstand footings. - Installation of subsurface cabling infrastructure within the Development Footprint. - Commissioning and testing of all installed equipment. The BESS may be subject to capacity replenishment and/or capacity augmentation events as necessary to extend storage durations.
Site Access	Access to the BESS is proposed via a new vehicle crossover and driveway from Back Saleyards Road. An internal access road will be established to accommodate construction vehicles and vehicles associated with ongoing maintenance.
Grid Connection	A new overhead transmission line (132 kV) and associated high voltage steel poles will be constructed to connect the BESS to the existing Transgrid Molong 132/66 kV transmission substation north of the Development Footprint. The transmission line poles will be up to 18 metres (m) in height with a minimum ground clearance of 7.5 m, and located within the proposed 45m transmission line easement.
Construction Duration	Construction is anticipated to take approximately 22 months.
Operation Life Expectancy	The operational life will be determined by the evolving nature of the technology, however is anticipated that the lifespan will be approximately 30 years from the Commercial Operation Date (COD).
Decommissioning	The BESS will be decommissioned, and the infrastructure removed, returning the Development Footprint to its original use following the approximate 30 year life expectancy.

4.0 Development Footprint Setting

A summary of the development description is detailed in Table 4.

Table 4 Development Footprint Identification Summary

Aspect	Details
Project Name	Molong Battery Energy Storage System (BESS)
Title containing BESS Address	1 Deight Street, Molong NSW 2866
Title containing BESS	Lot 99 in DP 1020247



Aspect		Details
Title containing Transgrid Substation		Lot 1 in DP 542283
Local Government Area (LGA)		Cabonne Shire LGA
Renewable Energy Zone		No
Land Zoning		RU1 Primary Production
Current Land Use		Agricultural
Total Development Footprint		9.56 ha
Surrounding Land Use	North	Residential dwellings and cleared land parcels. Belgravia Road (280 m north).
	East	Cleared rural and agricultural land. Molong Solar Farm (400 m east).
	South	Cleared rural and agricultural land. Further afield, Molong Creek (1.2 km south) and other agricultural farming activities.
	West	Back Saleyards Road, Molong Golf Course and residential dwellings / cleared land parcels (200 m west). Further afield, poultry sheds (600 m north-west).

5.0 Objectives

The technical objectives of this PSI are to:

- Assess the potential for contamination to be present at the Development Footprint based on a review of the environmental setting and history, to assess whether the Development Footprint is suitable, or can be made suitable, for the proposed land use.
- Prepare the initial Conceptual Site Model (CSM) for contamination risk, evaluating potential contaminants of concern (PCOC), potential receptors and identification of relevant exposure pathways.
- Conclude on the suitability of the Site from a contamination risk perspective, making recommendations for any additional assessment, management, or remediation (if required) to render the Development Footprint suitable for the proposed use.

6.0 Scope of Works

SLR completed the following Scope of Works for this PSI:

- Desktop review of publicly available information was undertaken by SLR to ascertain environmental setting features and historical use.
- An inspection of the Project Lots was undertaken on 11 November 2024 by one of SLR's suitably trained and experienced environmental consultants. The inspection included a walkover of the Development Footprint, sampling of accessible surface soils, and an assessment of the presence of notable features.
- Following the completion of the initial desktop review and inspection a Preliminary Conceptual Site Model (CSM) was developed based upon findings of the desktop review and confirmatory observations made during the inspection.
- Preparation of this PSI report.



7.0 Existing conditions Appraisal

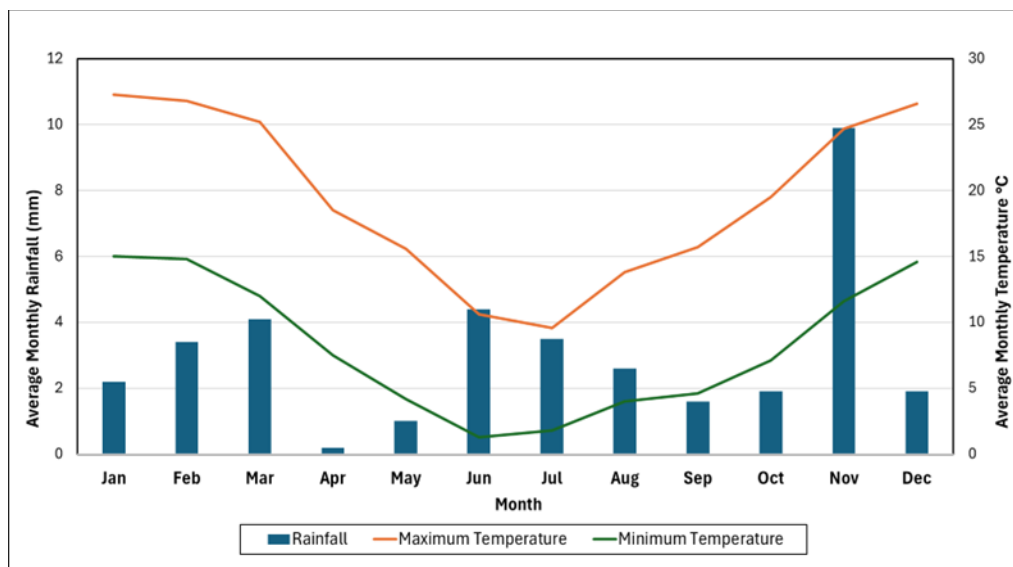
7.1 Environmental Condition

A review of various aspects of the Project Lots environmental setting was undertaken. The results of this review have been presented in the following subsections.

7.1.1 Climate

The Bureau of Meteorology (BOM) operates a climate data weather stations across Australia. The following climate data weather stations, and their approximate distances from the Project Lots were used in summarising the local climactic conditions:

- Molong (Hill St) (065023) approximately 1.5 km from the Project Lots - average monthly rainfall.
- Orange Agricultural Institute (063254) approximately 33 km from the Project Lots - minimum and maximum monthly average temperatures.
- Weather stations were selected primarily based on proximity to Project Lots and secondarily based on the volume of available data. SLR has summarised monthly rainfall and minimum and maximum temperatures for the Project Lots. Monthly rainfall and minimum and maximum temperatures have been plotted in Graph 1.



Graph 1 Summarised Local and Regional Meteorological Data

Based on the meteorological climate data summarised for the Project Lots, the following summaries can be made:

- The average monthly rainfall ranges from 0.2 mm in April to 9.9 mm in November.
- The average minimum temperature ranges from 1.3 °C in June to 15 °C in January.
- The average maximum temperature ranges from 9.6 °C in July to 27.3 °C in January.



7.1.2 Topography

SLR reviewed the topographical contours presented on Mosaic (Mecone 2024). The Project Lots were found to be located at a local elevation ranging from 555 – 610 m Australian Height Datum (AHD), with a gradual gentle gradient to the south. The Project Lots appeared to be located near a regionally moderate elevation. With undulating low hills with elevation ranges of 540 – 690 m. Regionally, the area tended to have relief to the south, towards Molong Creek.

7.1.3 Geology

SLR reviewed the NSW Department of Mineral Resources (DMR) Bathurst 2ndEd 1:250,000 Geological Map (NSW Government 1998). The Project Lots was found to be underlain by Ordovician units (Okf) from the Palaeozoic era. These lithologic units are part of the Kenilworth Group and are characterised by Porphyritic augite basalt, hornblende basaltic and; volcanoclastic horizons.

7.1.4 Soil Landscape

A review of the NSW Department of Planning, Industry and Environment's eSPADE special viewer indicated the Project Lots are located within the Molong residual soil landscape. The soil landscape consists of undulating low hills located east of Molong, extending from Amaroo in the south. Dominant soil types include Euchrozems with Non-calcic Brown Soils and Yellow Podzolic Soils occurring primarily on the lower slopes. The soil landscape factsheet for the Project Lots is presented in Appendix C.

7.1.5 Hydrology and Flood Hazard

Lot 99 DP 1020247 has one man made water body located in the southwest corner and does not have any permanent surface water courses.

The nearest watercourse to the Project Lots is Back Creek, a freshwater environment located approximately 800 m to the north. Molong Creek is also situated approximately 1.2 km to the south of the Development footprint. Back Creek flows approximately 4.6 km downstream where it continues to its confluence of Molong Creek (refer to catchment information in Appendix D).

Both creeks are natural freshwater bodies which flow through predominantly rural landscapes. Molong Creek originates in the elevated terrain near Amaroo and runs generally northward through the township of Molong, eventually flowing into the Bell River.

According to the Flood Impact Assessment Report prepared by SLR, the proposed Development footprint is elevated above peak flood levels from the nearby tributary and is therefore not subject to major inundation. Minor overland flow and localised ponding are expected but can be addressed through grading and proper integration with existing topography.

7.1.6 Hydrogeology

A review of the Water NSW Realtime Water Data (Water NSW 2024) indicated that there were no registered groundwater bores on the Project Lots. However, five registered bores were located within 500 m of the Project Lots. The details of these groundwater wells have been summarised in Table 5. Well construction details and stratigraphy information summary is included in Appendix E.



Table 5 Registered Groundwater Bore Summary

Bore ID	GW070649	GW803798	GW057315	GW806998	GW802920
Distance / Direction from Project Lots	250 m north	320 m north	285 m west	250 m west	500 m west
Purpose	Domestic, Stock	Domestic, Stock	Domestic, Stock	Domestic, Stock	Domestic, Stock
Total Depth	18.89 m bgs	30.00	32.00 m bgs	48.00 m bgs	41.10
Completion Date	1950	2009	1982	2003	1993
Drillers Log	Not provided	0.00 - 0.20m: Topsoil 0.20 - 4.00m: Clay 4.00 - 30.00m: Basalt	0.00 - 15.00m: Clay 15.00 - 32.00m: Basalt	0.00 - 0.40m: Topsoil 0.40 - 4.00m: Clay 4.00 - 21.00m: Limestone weathered 21.00 - 48.00m: Limestone dry	0.00 - 0.30m: Topsoil 0.30 - 4.60m: Clay 4.60 - 22.90m: Limestone soft 22.90 - 27.40m: Limestone hard 27.40 - 41.10m: Granite
Screened Interval	Not provided	Not provided	Not provided	Not provided	Not provided
SWL	Not provided	7.00 m	23.00 m	Not provided	15.20 m
Yield	0.026 L/s	1.010 L/s	1.76 L/s	Not provided	0.61 L/s
Note: w.b. = water bearing bTOC = below top of casing bgs = below ground surface					



7.1.7 Acid Sulfate Soils

A review of the NSW Department of Planning and Environment ASS Risk map, hosted on the Sharing and Enabling Environmental Data (SEED) (SEED 2024) spatial tool on 11 June 2025. Results classified negligible ASS risk for the Development Footprint.

7.2 Asbestos Registers

7.2.1 Loose Fill Asbestos Register

SLR reviewed the NSW Department of Regional NSW Naturally Occurring Asbestos (NOA) map, hosted on the SEED (SEED 2024) spatial tool on 11 June 2025. The review indicated that the Project Lots were not on the register.

7.2.2 Naturally Occurring Asbestos

SLR reviewed the NSW Department of Regional NSW Naturally Occurring Asbestos (NOA) map, hosted on the SEED (SEED 2024) spatial tool on 11 June 2025. The review indicated that the Project Lots are in an area of known geological unites with low asbestos potential. A map has been presented in Appendix F.

7.3 NSW EPA Contaminated Land Registers

The NSW EPA contaminated land public record is a searchable database of:

- Orders made under Part 3 of the Contaminated Land Management Act 1997 (CLM Act).
- Notices available to the public under section 58 of the CLM Act.
- Approved voluntary management proposals under the CLM Act that have not been fully carried out, and where EPA approval has not been revoked audit statements provided to the EPA under section 53B of the CLM Act that relate to significantly contaminated land.
- Where practicable, copies of anything formerly required to be part of the public record.
- Actions taken by EPA (or the previous State Pollution Control Commission) under sections 35 or 36 of the Environmentally Hazardous Chemicals Act 1985 (EHC Act).

Searches of the NSW EPA contaminated land registers were undertaken on 12 June 2025, the Project Lots are not listed on any NSW EPA public register. These searches are summarised in the following subsections. Searches of the public registers referenced here are presented in Appendix G – H.

7.3.1 POEO License

The Project Lots are not listed as holding an Environmental Protection Licence (EPL) or having a licence application, notice, audit or pollution study under the POEO Act (Govt. of NSW 1997). Several sites within the suburb of Molong were noted to hold current EPLs and have been summarised in Appendix G. For each of the EPLs held under the POEO Act 1997 (Govt. of NSW 1997) none were considered to potentially affect the Project Lots or proposed development.



7.3.2 Section 58 CLM Act Regulated Sites

The Project Lots are not listed as a regulated site under Section 58 of the CLM Act (Govt. of NSW 1997). Additionally, there was two sites within a 5 km radius that was listed as regulated under Section 58 of the CLM Act (Govt. of NSW 1997) and have been summarised in Appendix H. Of the regulated sites within the vicinity of the Project Lots, none were within 1 km and none were considered to potentially affect the Project Lots or proposed development.

7.3.3 Section 60 CLM Act Notified Sites

The Project Lots are not listed as a notified under Section 60 of the CLM Act (Govt. of NSW 1997). However, two nearby sites were listed as notified under Section 60 of the CLM Act (Govt. of NSW 1997) both of the nearby sites are within a 5 km radius of the Project Lots.

Two notified sites are located approximately 2.5 and 2.6 km west of the Project Lots: A Former Gasworks at 10 Hill Street and the Cabonne BP Service Station at 2 Gidley Street. Neither of these sites, including those notified under Section 60 of the CLM Act (Govt. of NSW 1997), were considered to potentially affect the Project Lots or proposed development.

7.4 NSW EPA PFAS Investigation Program

A review of the NSW EPA PFAS Investigation Program, conducted on 11 June 2025, indicated that the Project Lots are not listed as an NSW EPA PFAS investigation site.

8.0 Site History

Historical aerial imagery was reviewed to gather information about the history of the Project Lots. Historical aerial images were obtained from 1963 to present. For the purposes of this assessment, SLR has reviewed the changes in observable surface condition as viewed from aerial imagery within the Project Lots boundary and in the surrounding area. Historical aerial imagery used in this assessment has been presented in Appendix B. Observable changes to the layout of the Project Lots, based on available historical aerial imagery, are summarised in Table 6.

Table 6 Historical Aerial Photograph Summary

Edition	Features	Off-site Features
1963	Vacant undeveloped grassy pastures and scattered vegetation. A dense bushland area was observed in the central-western portion of the Lot 99 DP 1020247.	Cleared vacant rural land with grassy pastures and scattered vegetation. The Molong Showground was observed to the west of the Project Lots.
1973¹	<i>No observable change.</i>	Cleared section of land to the northeast of the Lot 99 DP 1020247.
1972	<i>No observable change.</i>	Earthworks to the north of the Project Lots.
1982	Observable farming activities including pasture slashing.	Construction of dwellings and sheds was observed to the north of the Project Lots. Minor landscaping works were noted within the Molong Showground, which is in the process of being converted into the Molong Golf Course.
1989	A compacted dirt road was observed traversing the northern section of Lot 99 DP 1020247.	<i>No observable change.</i>



Edition	Features	Off-site Features
1998	<i>No observable change.</i>	<i>No observable change.</i>
2003	Construction of the Transgrid substation was observed in the northern portion of Lot 1 DP542283, including the development of a hardstand access roadway leading to the substation.	A compacted dirt road was constructed along the southern boundary of the Project Lots.
2019	Vegetation planting was observed along the northwestern boundary of Lot 99 DP 1020247s.	Construction of dwellings and sheds was observed to the north and the south west of the Project Lots.
Notes: ¹ It was noted that the quality of aerial imagery at these dates was very low.		

9.0 Desktop Assessment Summary

Based on the review of the Project Lots historical setting, obtained through observable surface features in aerial imagery SLR identified the land use of Lot 99 DP 1020247 to be vacant undeveloped rural and grazing land. Based on a review of the historical imagery Lot 99 DP 1020247 appeared in a passive state from 1963 to at least 2003, with no discernible surface development observable from aerial imagery.

In 2003 SLR identified the construction of the Transgrid substation in the northern portion of Lot 1 DP542283, including the development of a hardstand access roadway leading to the substation.

Planting of vegetation (stands of trees) was noted along the northwestern boundary of Lot 99 DP 1020247. Additional rural residential dwellings and industrial infrastructure had been established near the Project Lots with the addition of a compacted dirt road was also constructed along the southern boundary of Lot 99 DP 1020247.

The natural environmental condition of the Project Lots appeared to be generally consistent with that of the regional setting. The Project Lots are not identified in an area of ASS risk or known NOA risk. The Project Lots are in an area of known geological unites with low asbestos potential. Notwithstanding the identification of other sites holding an EPL under the POEO Act (Govt. of NSW 1997), or notified / managed sites under the CLM Act (Govt. of NSW 1997), the Project Lots do not hold any EPLs and was not a notified / regulated site. The Project Lots are not listed on the NSW EPA PFAS Investigation Program.

In the basis of this desktop review, SLR did not consider the Project Lots historical or environmental setting to pose a significant contamination risk.

10.0 Areas of Potential Environmental Concern and Contaminants of Potential Concern

Based on the review of Lot 99 DP 1020247 setting, SLR has identified the following activities which may have introduced contamination to the Project Lots:

- Use of vehicles or machinery.
- Weed and pest control from agricultural use and vegetation management within the substation yard.
- Transgrid Substation (adjacent to the Development Footprint hence offsite).



Project Lots were historically vacant rural grazing land, remaining undeveloped from 1963 to at least 2003. In 2003, the Transgrid substation and access road were constructed in the northern section. Vegetation planting occurred along the northwestern boundary, and a compacted dirt road was added along the southern boundary, alongside nearby rural and industrial development. The primary source of contamination at the Project Lots was identified as agricultural use of weed and pest control used for vegetation management and the use of vehicles or machinery.

Based on the rural agricultural land use of the land immediately surrounding the Development Footprint, SLR has identified the Contaminants of Potential Concern (COPC) for the Development Footprint, summarised in Table 7.

Table 7 Potential Areas of Concern / Contaminants of Potential Concern

Activity	Potential Contaminants of Concern
Use of Vehicles or Machinery	• Benzene, toluene, ethylbenzene, xylenes and naphthalene (BTEXN) • Total petroleum / recoverable hydrocarbons (TPH / TRH) • Polycyclic aromatic hydrocarbons (PAH) • Lead
Agricultural use / vegetation management: • Weed and Pest Control • Fertilisers	• Phenoxy acid herbicides. • Organochlorine / organophosphorus pesticides (OCP / OPP) • Nitrogen and phosphorous
Transgrid Substation (Lot 1 DP542283)	• Polychlorinated biphenyls (PCB)

11.0 Project Lots Walkover

A walkover and inspection of the Development Footprint and surrounding land was conducted by one of SLR's suitably trained and experienced environmental consultants on 11 November 2024. A photographic log of the area inspected has been presented in Appendix I.

The inspection included a walkover of the Development Footprint to assess the presence of notable features such as hardstand coverage, slumping, scarring, maintenance of hardstand coverage areas, bare ground, surface staining, odours and other visual or olfactory indicators of potential or actual contamination as well as the presence of above or belowground storage infrastructure, including the presence of fill points, vent pipes and monitoring wells.

The main observations from the inspection included:

- The majority of the Development Footprint was unsealed, with the ground surface consisting mainly of grassy pasture and scattered vegetation. A dense bushland area was observed along the western boundary.
- The Molong Transgrid Substation is located in the northern portion of the Project Lots.
- The topography of the Project Lots are generally flat, with a gentle slope downward to the south.



- Hardstand surfaces and gravel roads provide access to the Molong Transgrid Substation from Back Saleyards Road.
- The land surrounding the Project Lots appeared well maintained, with no obvious visual or olfactory signs of ground contamination.

12.0 Preliminary Conceptual Site Model

This CSM has been developed in accordance with the ASC NEPM (NEPC 2013), which draws upon ASTM E1689-20 (2020) Standard Guide for Developing Conceptual Site Models for Contaminated Sites (ASTM 2020). Per ASTM E1689, definitions of the key elements of the complete exposure pathways are as follows:

- **Contaminant** – any substance, including any radiological material, that is potentially hazardous to human health and / or the environment and is present in the environment at concentrations above its background concentrations.
- **Source** – the location from which a contaminant(s) has entered or may enter a physical system.
- **Receptor** – humans and other living organisms potentially exposed to and adversely affected by contaminants because they are present at the source(s) or along contamination migration pathways.
- **Migration Pathway** – the course through which contaminants in the environment may move away from the source(s) to potential environmental receptors.
- **Exposure Route** – the process by which a contaminant or physical agent in the environment comes into direct contact with the body, tissues, or exchange boundaries of an environmental receptor organism. Examples include (but are not limited to) ingestion, inhalation, dermal absorption, root uptake, and gill uptake.

Descriptions of the key elements of the CSM associated with the Development Footprint and a summary of the identified potentially complete exposure pathways are outlined in the following sections.

12.1 Source

The following potential sources of contamination likely to have been introduced to the Development Footprint and surrounding area include:

- Direct application of:
 - Herbicides for weed control.
 - Pesticides for insect control.
 - Nitrogen / phosphorous-based fertilisers to encourage crop growth.
- Diffuse impact from vehicles / farm machinery (potential hydrocarbon leaks).
- Possible use of transformer oils / congeners at adjacent Transgrid Substation (offsite).

12.2 Receptors

The following key receptors have been identified:

- Human:
 - Current agricultural workers.
 - Future construction workers and contractors.



- Future employees, maintenance workers and visitors.
- Ecological:
 - Soil fauna, organisms and processes in top two metres of profile (rhizome).
 - Underlying groundwater.
 - Surface water of Back Creek located approximately 800 m to the north of the Development Footprint.

12.3 Exposure Pathways

The following exposure pathways are considered plausible for identified receptors:

- Human:
 - Direct contact and ingestion of potential contaminants.
 - Inhalation of contaminants in dust possibly generated during Project works.
- Ecological:
 - Ingestion of potential contaminants by soil fauna / organisms.
 - Absorption / uptake of contaminants by roots of vegetation through osmosis.
 - Vertical migration of potential dissolved contaminants through soil to groundwater.
 - Horizontal migration of potential dissolved contaminants in groundwater and discharge into surface water environment of Back Creek located approximately 800 m to the north of the Development Footprint.

Note that other receptors may also be present at the development footprint on a circumstantial basis. This CSM has not considered transient exposure to occasional visitors in the vicinity of the development footprint, as chronic daily exposures are generally considered to represent more significant exposures. On the basis of exposure frequency and duration, the above receptors are considered to present the highest chronic intake and dose.

12.4 Potential Complete Exposure Pathways

For a risk to the environment or human health to exist there must be a contaminant source and a migration pathway and exposure route to the receptor. The potentially complete exposure pathways present in relation to the development footprint contamination status at the time of this investigation are presented in Table 8.



Table 8 Preliminary Conceptual Site Model

Potential Source	Potential Contaminant	Receptor Exposure	Notes	Preliminary Risk Evaluation
Agricultural use / vegetation management: - Herbicides for weed control. - Pesticides for insect control. - Nitrogen / phosphorous-based fertilisers.	- OCP / OPP - Phenoxy acid herbicides - Elevated nitrogen / phosphorous load	Human: - Direct contact / ingestion. - Inhalation	- There may be residual pesticide / herbicide / fertiliser load in soil, however future construction workers and maintenance workers should implement appropriate personal protective equipment (PPE) and maintain robust personal hygiene as standard, mitigating the potential dermal contact / ingestion pathway. - Onsite application of such chemicals will no longer be undertaken with construction / use of Project Lots as a BESS, mitigating the potential aerial exposure / inhalation pathway.	LOW
		Ecological: Soil fauna, organisms and processes in rhizome.	There may be residual pesticide / herbicide / fertiliser load in soil, however future use of the development footprint as a BESS will adopt a less sensitive land use (industrial).	LOW
		Ecological: - Underlying groundwater. - Surface water in nearby unnamed watercourse.	- Having the BESS footprint sealed in places by either hard-standing and/or covered by containers will minimise potential infiltration for water that could see contaminants leach into underlying groundwater. - This most likely will act to reduce potential chemical / nutrient load that could migrate offsite towards nearby surface water environments.	LOW
Use of Vehicles or Machinery:	- TRH - BTEX - PAH	Human: Direct contact / ingestion.	There may be residual diffuse petroleum hydrocarbon impact to soil, however future construction workers and maintenance workers should implement appropriate PPE and maintain	LOW



Potential Source	Potential Contaminant	Receptor Exposure	Notes	Preliminary Risk Evaluation
Potential leaks of hydrocarbons from vehicles machinery.			robust personal hygiene as standard, mitigating the potential dermal contact / ingestion pathway. Any such impact if found to exist is expected to be limited in extent and confined to the surface. Such impact should be managed via an appropriate Unexpected Findings Procedure (UFP), implemented as standard in management plans for construction.	
		Ecological: Soil fauna, organisms and processes in rhizome.	There may be residual hydrocarbon impact within soil, however future use of the Project Lots as a BESS will adopt a less sensitive land use (industrial).	LOW
		Ecological: - Underlying groundwater. - Surface water in nearby unnamed watercourse.	- Having the BESS Footprint sealed in places by either hard-standing and/or covered by containers will minimise potential infiltration for water that could see contaminants leach into underlying groundwater. - This most likely will act to reduce potential chemical / nutrient load that could migrate offsite towards nearby surface water environments.	LOW
Transgrid Substation (adjacent / offsite)	PCBs	Human: Direct contact / ingestion.	Use of PCBs as coolants and lubricants in electrical equipment, such as transformers and capacitors, were fully prohibited in Australia by 1975. While no longer manufactured or imported, PCBs may still be present in older equipment.	NEGLECTIBLE
		Ecological: Soil fauna, organisms and processes in rhizome.		



Potential Source	Potential Contaminant	Receptor Exposure	Notes	Preliminary Risk Evaluation
		Ecological: - Underlying groundwater. - Surface water in nearby unnamed watercourse.	- Evidence suggests that the Transgrid substation was constructed around 2003, with the likelihood of PCB use very low. - As such the potential for spills of PCB into soil environment, then migration into underlying groundwater and then surface waters is considered negligible.	



13.0 Conclusion

13.1 Key Findings

The following key findings from this PSI were:

- The Project Lots were historically vacant rural grazing land, remaining undeveloped from 1963 to at least 2003.
- In 2003, the Transgrid substation and access road were constructed in the northern section. Vegetation planting occurred along the northwestern boundary, and a compacted dirt road was added along the southern boundary, alongside nearby rural and industrial development.
- The Project lots are not listed as a notified or regulated contaminated area under the CLM Act (Govt. of NSW 1997). The Project Lots do not hold EPLs under the POEO Act (Govt. of NSW 1997) for activities undertaken onsite.
- Some sites within 5 km of the Project Lots were identified to be registered, notified or licensed under these acts. However, these were not considered to pose a contamination risk to the Development Footprint.
- On the basis of the desktop investigation and Project Lot inspection, it is inferred that activities within the Development Footprint and surrounding land are unlikely to have caused significant contamination of soil below the Development Footprint surface.
- The Project Lot historical and environmental setting review and Project Lots inspection did not indicate that the Development Footprint would likely be contaminated.

13.2 Development Area Suitability

Based upon results and findings from this PSI, SLR considers the historical and environmental setting are supportive of the proposed land use, and the risk profile posed by former use or potential contamination sources is low.

As such, SLR do not consider contamination as an aspect that should preclude the proposed development.

14.0 Recommendations

14.1 General construction environmental management

General environmental management is considered necessary during any proposed redevelopment of the Project Lots, documented in the Construction Environmental Management Plan (CEMP), which should include but is not limited to the following aspects:

- Soil stockpiling and material segregation procedures.
- Offsite material management procedures (solid waste / beneficial reuse).
- Material tracking procedures (onsite / offsite).
- Imported material management procedures.
- Water management:
 - Diversion of upslope water (on and around the BESS Footprint).



- Protection of offsite stormwater system.
- Protection of wash-down areas.
- Excavation pump-out procedures and management options for de-watering.
- Standard worker personal protection equipment and hygiene practices to minimise exposure to site subsurface media.
- Unexpected findings protocol (UFP) procedure.



15.0 References

n.d.

- ASTM. 2020. *Standard Guide for Developing Conceptual Site Models for Contaminated Sites*. Pennsylvania: ASTM International .
- BMT. 2013. *Lane Cove River Coastal Zone Management Plan*. Report, Sydney: MBT WMP Pty Ltd.
- DUAP. 1998. *Managing Land Contamination*. Guideline, Sydney: NSW Environment Protection Authority.
- Govt. of NSW. 2013. *Cabonne Local Environmental Plan*. Legislation, Sydney: Government of NSW.
- Govt. of NSW. 1997. *Contaminated Land Management Act 1997*. Legislation, Sydney: Government of NSW.
- Govt. of NSW. 2009. *Lane Cove Local Environmental Plan*. Legislation, Sydney: Government of NSW.
- Govt. of NSW. 1997. *Protection of the Environment Operations Act 1997*. Legislation, Sydney: Governmnet of NSW.
- Mecone. 2024. *Mosaic by Mecone*. Accessed February 07, 2024. <https://meconemosaic.au/?coords=%5B%5B-33.803619%2C151.158163%5D%5D>.
- NEPC. 2013. *National Enironmental Protection (Assessment of Site Contamination) Measure*. Guideline, Canberra: National Environmnetal Protection Council.
- NEPC. 2013. *National Environmental Protection (Assessment of Site Contamination) Measure*. Canberra: National Environmental Protection Council.
- NSW EPA. 2020. *Consultants reporting on contaminated land*. Guideline, Sydney: NSW Environmental Protection Authority.
- NSW EPA. 2022. *Contaminated Land Guidelines: Sampling design guidelines part 1 - application*. Guideline, Sydney: NSW Environmnetal Protection Authority.
- NSW EPA. 2022. *Contaminated Land Guidelines: Sampling design guidelines part 2 - interpretation*. Guideline, Sydney: NSW Environmental Protection Authority .
- NSW Government. 1998. *Bathurst 1:250 000 Geological Map*. Map, Canberra: NSW Government Department of Mineral Resources.
- SEED. 2024. *Acid Sulfate Soils Risk*. 7 Febraury. <https://datasets.seed.nsw.gov.au/dataset/acid-sulfate-soils-risk0196c>.
- . 2024. *Naturally Occurring Asbestos*. 7 February . <https://datasets.seed.nsw.gov.au/dataset/naturally-occurring-asbestos>.
- Water NSW. 2024. *Real Time Water Data: All Groundwater Site Details Greater Sydney Area*. Accessed February 07, 2024. <https://realtimedata.waternsw.com.au/water.stm>.



16.0 Limitations

This report has been prepared for use by the Stor who has commissioned the works in accordance with the project brief only and has been based in part on information obtained from the client and other parties.

The advice herein relates only to this project and all results conclusions and recommendations made should be reviewed by a competent person with experience in environmental investigations, before being used for any other purpose.

SLR accepts no liability for use or interpretation by any person or body other than the client who commissioned the works. This report should not be reproduced without prior approval by the client or amended in any way without prior approval by SLR, and should not be relied upon by other parties, who should make their own enquiries.

Sampling and chemical analysis of environmental media is based on appropriate guidance documents made and approved by the relevant regulatory authorities. Conclusions arising from the review and assessment of environmental data are based on the sampling and analysis considered appropriate based on the regulatory requirements.

This report does not, nor does it intend to, characterise and quantify actual contamination at the Project Lots. This assessment is limited to a review of potential contamination issues at the Project Lots which may impact the Development Footprint intended land use.

Changes to the subsurface conditions may occur after the investigations described herein, through natural processes or through the intentional or accidental addition of contaminants. The conclusions and recommendations reached in this report are based on the information obtained at the time of the investigations.

This report does not provide a complete assessment of the environmental status of the Project Lots, and it is limited to the scope defined herein. Should information become available regarding conditions at the Project Lots including previously unknown sources of contamination, SLR reserves the right to review the report in the context of the additional information.

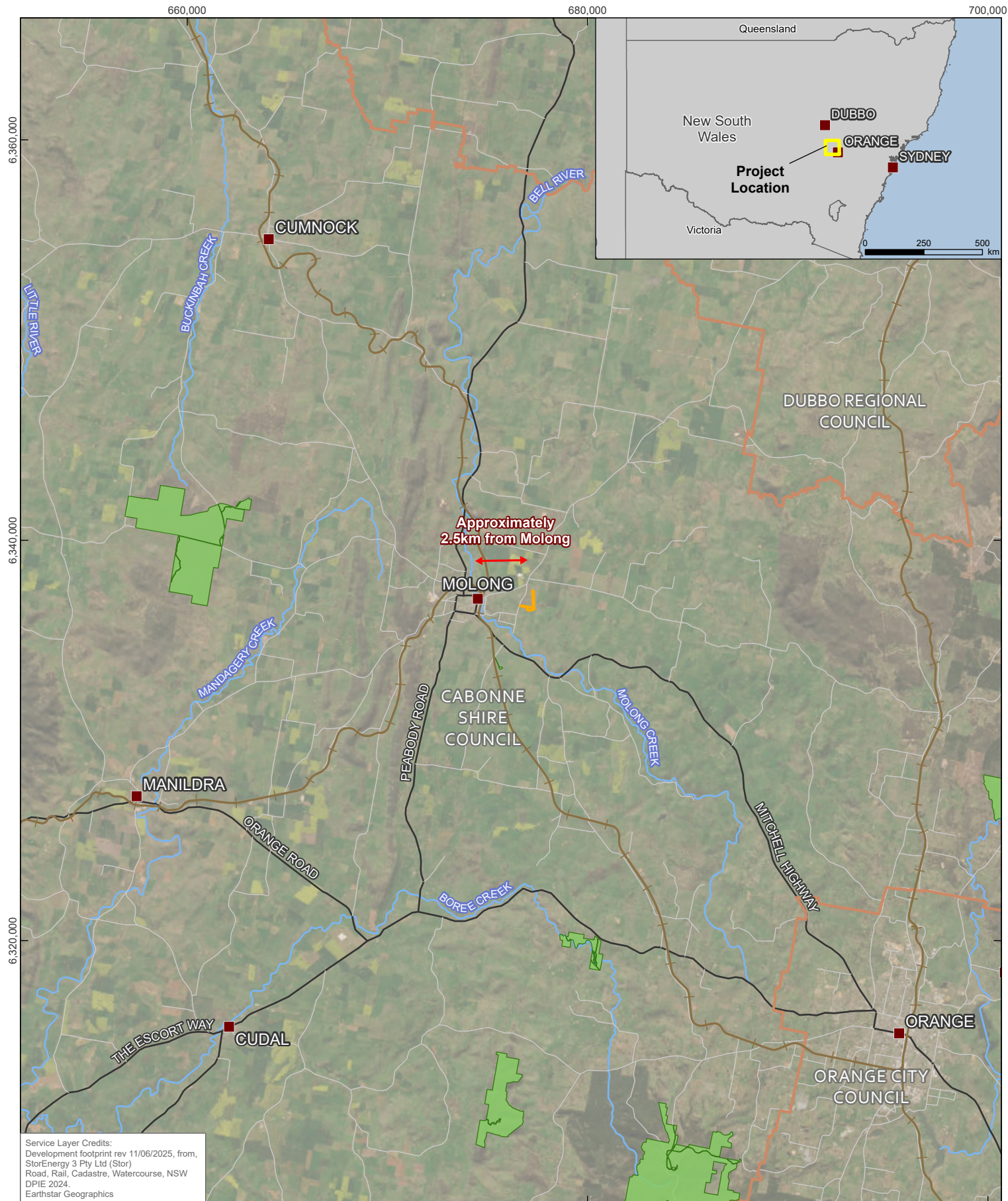




Appendix A:

Figures





0 5 10 km

Coordinate System: GDA2020 MGA Zone 55

Scale: 1:250,000 at A4

Project Number: 620.041615

Date Drawn: 28-Jul-2025

Drawn by: NT

LEGEND

- Town/City
- +— Rail
- Watercourse
- Road**
- Primary Road
- Road
- Development Footprint (9.56 ha)
- Local Government Area
- NPWS Reserve

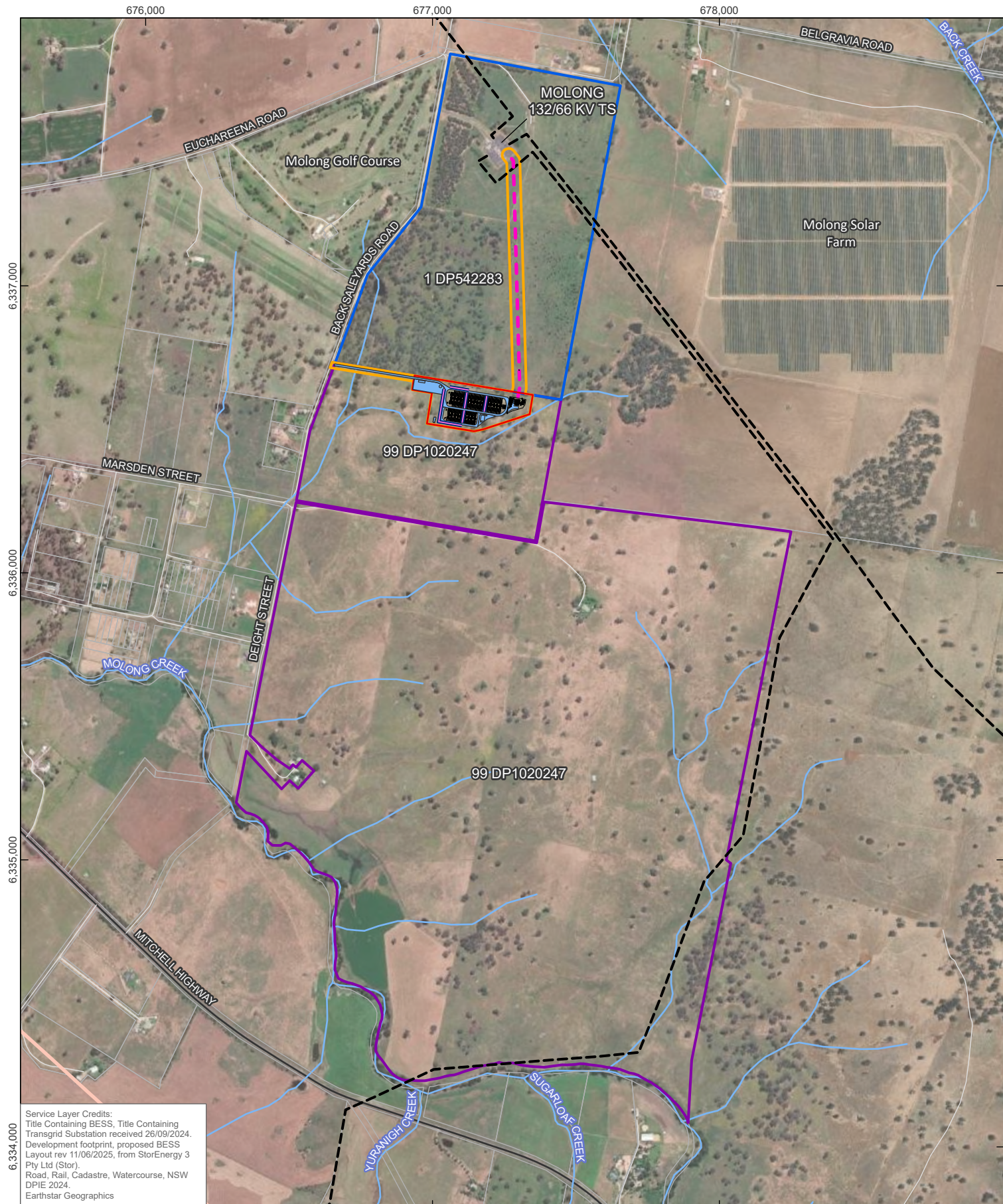
MOLONG BESS

REGIONAL LOCALITY PLAN



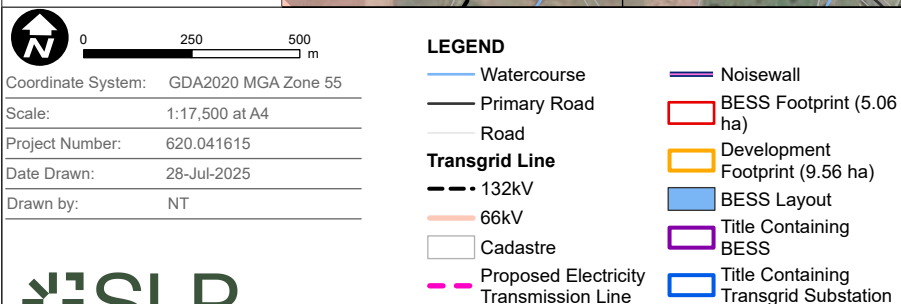
DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.

FIGURE A-1



Service Layer Credits:
 Title Containing BESS, Title Containing
 Transgrid Substation received 26/09/2024.
 Development footprint, proposed BESS
 Layout rev 11/06/2025, from StorEnergy 3
 Pty Ltd (Stor).
 Road, Rail, Cadastre, Watercourse, NSW
 DPIE 2024.
 Earthstar Geographics

Coordinate System: GDA2020 MGA Zone 55
 Scale: 1:17,500 at A4
 Project Number: 620.041615
 Date Drawn: 28-Jul-2025
 Drawn by: NT



MOLONG BESS

SITE OVERVIEW



DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.

FIGURE A-2



Appendix B:

Historical Aerial Imagery



676,500

677,000

677,500

6,337,500

6,337,000

6,336,500

EUCHAREENAROAD

BACKSLEYAROSROAD

MARSDEN STREET

1 DP542283

99 DP1020247

99 DP1020247

Service Layer Credits:
 Site Access, Lease Area, Grid Connection
 received from Client 26/08/2024.
 Road, Rail, Cadastre, Watercourse, NSW
 DPIE 2024 Imagery: NSW Historical
 Imagery, Department of Customer Service
 Maxar



Coordinate System: GDA2020 MGA Zone 55

Scale: 1:7,500 at A4

Project Number: 620.041615

Date Drawn: 29-Jun-2025

Drawn by: NT

LEGEND

- Road
- BESS Footprint
- Development Footprint
- BESS Site
- Transgrid Substation Site

MOLONG BESS

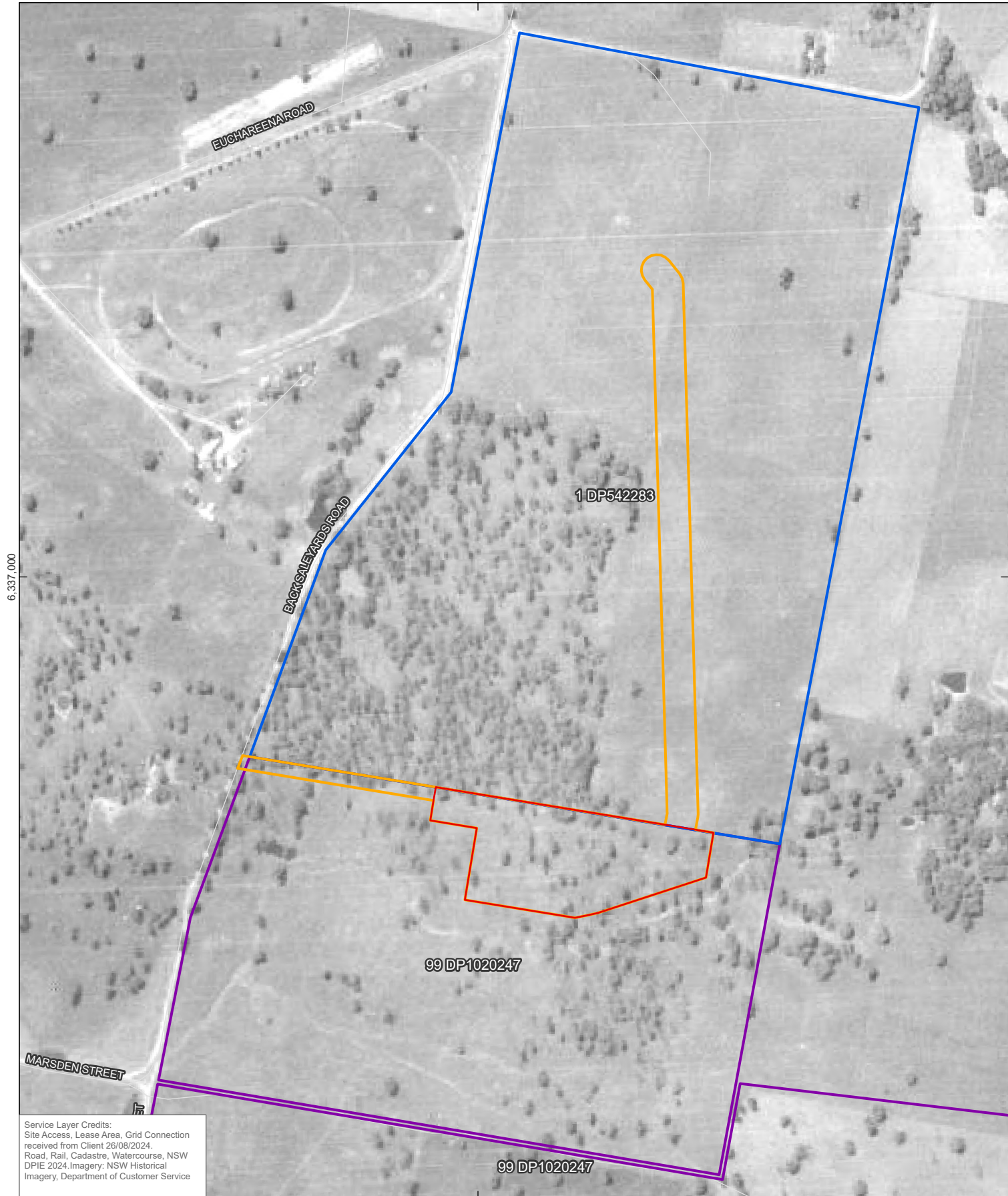
HISTORICAL IMAGERY 1963



DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.

FIGURE B-1

677,000



Service Layer Credits:
Site Access, Lease Area, Grid Connection
received from Client 26/08/2024.
Road, Rail, Cadastre, Watercourse, NSW
DPIE 2024 Imagery: NSW Historical
Imagery, Department of Customer Service



Coordinate System: GDA2020 MGA Zone 55

Scale: 1:7,500 at A4

Project Number: 620.041615

Date Drawn: 29-Jun-2025

Drawn by: NT

LEGEND

- Road
- BESS Footprint
- Development Footprint
- BESS Site
- Transgrid Substation Site

MOLONG BESS

HISTORICAL IMAGERY 1973



DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.

FIGURE B-2

676,500

677,000

677,500

6,337,500

6,337,000

6,336,500

EUCHAREENAR ROAD

BACKSLEYARDS ROAD

MARSDEN STREET

1 DP542283

99 DP1020247

99 DP1020247

Service Layer Credits:
 Site Access, Lease Area, Grid Connection
 received from Client 26/08/2024.
 Road, Rail, Cadastre, Watercourse, NSW
 DPIE 2024 Imagery: NSW Historical
 Imagery, Department of Customer Service



Coordinate System: GDA2020 MGA Zone 55

Scale: 1:7,500 at A4

Project Number: 620.041615

Date Drawn: 29-Jun-2025

Drawn by: NT

LEGEND

- Road
- BESS Footprint
- Development Footprint
- BESS Site
- Transgrid Substation Site

MOLONG BESS

HISTORICAL IMAGERY 1982



DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.

FIGURE B-3

676,500

677,000

677,500

6,337,500

6,337,500

6,336,500

EUCHAREENAROAD

BACKSLEYAROSROAD

MARSDEN STREET

1 DP542283

99 DP1020247

99 DP1020247

Service Layer Credits:
 Site Access, Lease Area, Grid Connection
 received from Client 26/08/2024.
 Road, Rail, Cadastre, Watercourse, NSW
 DPIE 2024 Imagery: NSW Historical
 Imagery, Department of Customer Service



Coordinate System: GDA2020 MGA Zone 55

Scale: 1:7,500 at A4

Project Number: 620.041615

Date Drawn: 29-Jun-2025

Drawn by: NT

LEGEND

- Road
- BESS Footprint
- Development Footprint
- BESS Site
- Transgrid Substation Site

MOLONG BESS

HISTORICAL IMAGERY 1989



DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.

FIGURE B-4

676,500

677,000

677,500

6,337,500

6,337,000

6,336,500

EUCHAREENAROAD

BACKSLEYARDSROAD

MARSDEN STREET

1 DP542283

99 DP1020247

99 DP1020247

Service Layer Credits:
 Site Access, Lease Area, Grid Connection
 received from Client 26/08/2024.
 Road, Rail, Cadastre, Watercourse, NSW
 DPIE 2024 Imagery: NSW Historical
 Imagery, Department of Customer Service



Coordinate System: GDA2020 MGA Zone 55

Scale: 1:7,500 at A4

Project Number: 620.041615

Date Drawn: 29-Jun-2025

Drawn by: NT

LEGEND

- Road
- BESS Footprint
- Development Footprint
- BESS Site
- Transgrid Substation Site

MOLONG BESS

HISTORICAL IMAGERY 1998



DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.

FIGURE B-5

676,500

677,000

677,500

6.337.500

6.337.500

6.336.500

EUCHAREENAR ROAD

BACKSLEYARDS ROAD

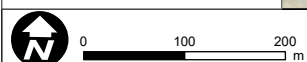
MARSDEN STREET

1 DP542283

99 DP1020247

99 DP1020247

Service Layer Credits:
 Site Access, Lease Area, Grid Connection
 received from Client 26/08/2024.
 Road, Rail, Cadastre, Watercourse, NSW
 DPIE 2024 Imagery: NSW Historical
 Imagery, Department of Customer Service



Coordinate System: GDA2020 MGA Zone 55

Scale: 1:7,500 at A4

Project Number: 620.041615

Date Drawn: 29-Jun-2025

Drawn by: NT

LEGEND

- Road
- BESS Footprint
- Development Footprint
- BESS Site
- Transgrid Substation Site

MOLONG BESS

HISTORICAL IMAGERY 2003



DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.

FIGURE B-6

676,500

677,000

677,500

6,337,500

6,337,000

6,336,500

EUCHAREENAR ROAD

BACK SALEYARDS ROAD

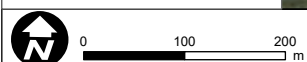
MARSDEN STREET

1 DP542283

99 DP1020247

99 DP1020247

Service Layer Credits:
 Site Access, Lease Area, Grid Connection
 received from Client 26/08/2024.
 Road, Rail, Cadastre, Watercourse, NSW
 DPIE 2024 Imagery: NSW Historical
 Imagery, Department of Customer Service



Coordinate System: GDA2020 MGA Zone 55

Scale: 1:7,500 at A4

Project Number: 620.041615

Date Drawn: 29-Jun-2025

Drawn by: NT

LEGEND

- Road
- BESS Footprint
- Development Footprint
- BESS Site
- Transgrid Substation Site

MOLONG BESS**HISTORICAL IMAGERY 2019**

DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.

FIGURE B-7



Appendix C:

Soil Landscape Summary





GENERAL: This soil landscape comprises the undulating low hills east of Molong from Amaroo in the south. The main soils are Euchrozems (Dr4.21, Gn3.12, Gn4.12). Non-calcic Brown Soils (Dr2.12, Dr2.22, Db1.22) and Yellow Podzolic Soils (Dy2.11) are found mainly on lower slopes. Terra Rossas are associated with scattered limestone outcrops.

CLIMATIC ZONE: 10A

LANDFORM: Undulating low hills have elevations from 540–690 m with slopes between 4–8% and slope lengths in the 1 200–3 000 m range. Local relief averages 60 m with some hills reaching 80 m. Drainage lines are 1 500–2 000 m apart. Molong Creek is the major waterway.

NATIVE VEGETATION: South of the Mitchell Highway the landscape is dominated by a yellow box community. Yellow box and Blakely's red gum are dominant species, with some grey box and white box. Other associated species include apple box, bastard box and broad-leaved peppermint. Near the Bell River there is a grey box community. River red gum and river she-oak grow along streambanks.

North of the Mitchell Highway there is a white box–apple box community with Blakely's red gum, yellow box and red ironbark as associated species.

GEOLOGY:

Geological Unit: Cargo Andesite

Parent Rock: Andesite, tuff, slate and limestone.

Parent Material: *in situ* and alluvial-colluvial materials derived from above parent rocks.

GENERAL SOIL DESCRIPTIONS:

EUCHROZEMS

Topsoil: Dark to dull reddish brown loam to clay loam with weak to moderate

structure; pH 6.0–7.0. A clay loam A2 horizon may occur, with moderate structure; pH 6.5.

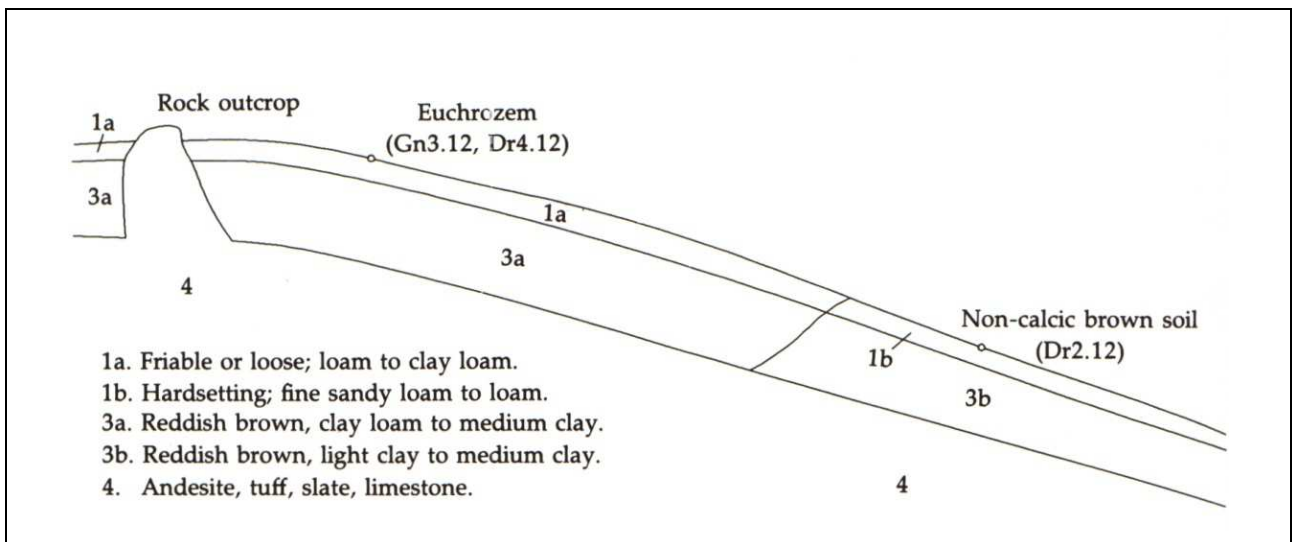
Subsoil: Gradual to clear change to bright to dark reddish brown clay loam to heavy clay; strong structure; pH 6.5–7.0; increasing clayiness with depth; rough or smooth-faced peds.

NON-CALCIC BROWN SOILS

Topsoil: Bright brown sandy loam with weak structure; pH 5.5.
Overlies brown A2 horizon with weak structure; pH 6.0; to 25 cm depth.

Subsoil: Brown sandy clay loam with moderate subangular blocky structure; pH 6.0–6.5.

	Euchrozems	Non-calcic Brown Soils
Dominance	Common	Common
Landform element	Upper to lower slope	Lower slope
Surface condition	Friable, loose	Loose
Drainage	Moderately well-drained	Well-drained
Soil permeability	Moderately permeable	Moderately permeable
Watertable depth	+150 cm	+150 cm
Available water-holding capacity	High	Low
Depth to bedrock	+55 cm	+60 cm
Flood hazard	Nil	Low
pH (topsoil)	6.0–7.0	5.5
Fertility (chemical)	Moderate to high	Low
Known nutrient deficiencies	N, P	N, P
Soil salinity	Low	Low
Erodibility (topsoil)	Low	Moderate
Erodibility (subsoil)	Low to moderate	Low
Erosion hazard	Low	Low
Structural degradation hazard	Moderate	High
Land capability classification	III, IV	III
USCS (subsoil)	CH	CL
Shrink-swell potential	Low to moderate	Low
Mass movement hazard	Nil	Nil
Existing land use	Grazing on improved and unimproved pastures; cropping	-
Soil Erosion	Little evident	Minor gullyng



Distribution diagram of the Molong soil landscape showing the occurrence and relationship of dominant soil materials



Appendix D:

Hydrography Map







Appendix E:

Groundwater Well Construction Details



WaterNSW

Work Summary

GW057315

Licence: 80BL124881

Licence Status: CONVERTED

Authorised Purpose(s): DOMESTIC,STOCK
Intended Purpose(s): STOCK, DOMESTIC

Work Type: Bore open thru rock

Work Status:

Construct.Method: Rotary Air

Owner Type: Private

Commenced Date:
Completion Date: 01/09/1982

Final Depth: 32.00 m
Drilled Depth: 32.00 m

Contractor Name: (None)
Driller: Clive Francis Jones
Assistant Driller:

Property: N/A NSW
GWMA:
GW Zone:

Standing Water Level (m):
Salinity Description:
Yield (L/s):

Site Details

Site Chosen By:

County
Form A: WELLINGTON
Licensed: WELLINGT

Parish
GAMBOOLA
GAMBOOLA

Cadastre
15
Whole Lot

Region: 80 - Macquarie-Western

CMA Map: 8631-N

River Basin: 421 - MACQUARIE RIVER
Area/District:

Grid Zone:

Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: (Unknown)

Northing: 6337163.000
Easting: 676526.000

Latitude: 33°05'23.4"S
Longitude: 148°53'29.3"E

GS Map: -

MGA Zone: 55

Coordinate Source: GD.,ACC.MAP

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1	1	Casing	Welded Steel	-0.30	15.00	165			Driven into Hole

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
23.00	32.00	9.00	Fractured	23.00		1.76			

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	15.00	15.00	Clay	Clay	
15.00	32.00	17.00	Basalt Water Supply	Basalt	

*** End of GW057315 ***

Warning To Clients: This raw data has been supplied to the WaterNSW by drillers, licensees and other sources. WaterNSW does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

WaterNSW

Work Summary

GW070649

Licence: 80BL152199	Licence Status: CONVERTED
Authorised Purpose(s): DOMESTIC,STOCK Intended Purpose(s):	
Work Type: Bore	
Work Status:	
Construct.Method:	
Owner Type:	
Commenced Date:	Final Depth: 18.89 m
Completion Date: 01/01/1950	Drilled Depth:
Contractor Name: (None)	
Driller:	
Assistant Driller:	
Property: N/A NSW	Standing Water Level (m):
GWMA:	Salinity Description:
GW Zone:	Yield (L/s): 0.026

Site Details

Site Chosen By:			
County		Parish	Cadastre
Form A: WELLINGTON		COPPER HI	87 DP756876
Licensed: WELLINGT		COPPERHI	Whole Lot 87//756876
Region: 80 - Macquarie-Western		CMA Map: 8631-N	
River Basin: 421 - MACQUARIE RIVER		Grid Zone:	Scale:
Area/District:			
Elevation: 0.00 m (A.H.D.)		Northing: 6337979.000	Latitude: 33°04'56.4"S
Elevation Source: Unknown		Eastings: 677449.000	Longitude: 148°54'04.3"E
GS Map: -		MGA Zone: 55	Coordinate Source: Map Interpre

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	18.89	152			(Unknown)
1	1	Casing	Steel	0.00	18.89	152			

Remarks

01/01/1950: Form A Remarks:
form 'ag'

*** End of GW070649 ***

Warning To Clients: This raw data has been supplied to the WaterNSW by drillers, licensees and other sources. WaterNSW does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

WaterNSW

Work Summary

GW802920

Licence: 80WA711996

Licence Status: CURRENT

Authorised Purpose(s): DOMESTIC,STOCK
Intended Purpose(s): STOCK, DOMESTIC

Work Type: Bore

Work Status: Supply Obtained

Construct.Method: Rotary Air

Owner Type: Private

Commenced Date:

Completion Date: 01/06/1993

Final Depth: 41.10 m

Drilled Depth: 41.10 m

Contractor Name: Watermin Drillers Pty Ltd

Driller: Clive Francis Jones

Assistant Driller:

Property: DUNGULLIN Eucharena Rd MOLONG
2866 NSW

Standing Water Level (m): 15.200

GWMA:
GW Zone:

Salinity Description:
Yield (L/s): 0.610

Site Details

Site Chosen By:

County
Form A: WELLINGTON
Licensed: WELLINGT

Parish
GAMBOOLA
GAMBOOLA

Cadastre
11//546140
Whole Lot 11//546140

Region: 80 - Macquarie-Western

River Basin: 421 - MACQUARIE RIVER
Area/District:

CMA Map: 8631-N

Grid Zone:

Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown

Northing: 6336730.000
Easting: 676298.000

Latitude: 33°05'37.6"S
Longitude: 148°53'20.8"E

GS Map: -

MGA Zone: 55

Coordinate Source: GIS - Geogra

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	22.90	165			Rotary Air
1		Hole	Hole	22.90	41.10	165			Percussion
1	1	Casing	Pvc Class 6	-0.30	22.90	165			Driven into Hole,

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
21.30	25.90	4.60	Unknown	15.20		0.61			

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.30	0.30	Topsoil	Topsoil	
0.30	4.60	4.30	Clay, brown	Clay	
4.60	22.90	18.30	Limestone, soft, grey	Invalid Code	
22.90	27.40	4.50	Limestone, hard, grey	Invalid Code	
27.40	41.10	13.70	Granite, pink & green	Granite	

Remarks

01/06/1993: Form A Remarks:

Nat Carling, 20-July-2006: Location based on detailed sketch provided on Form 'A'.

*** End of GW802920 ***

Warning To Clients: This raw data has been supplied to the WaterNSW by drillers, licensees and other sources. WaterNSW does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

WaterNSW

Work Summary

GW803798

Licence: 80WA714548

Licence Status: CURRENT

Authorised Purpose(s): DOMESTIC,STOCK
Intended Purpose(s): STOCK, DOMESTIC

Work Type: Bore

Work Status: Supply Obtained

Construct.Method: Rotary Air

Owner Type: Private

Commenced Date:

Completion Date: 28/03/2009

Final Depth: 30.00 m

Drilled Depth: 30.00 m

Contractor Name: Central West Water Drillers

Driller: Robert Schmidtke

Assistant Driller: Neil Dickson

Property: LOT 85 EUCHAREENA ROAD MOLONG
2866 NSW

GWMA: 811

GW Zone:

Standing Water Level (m): 7.000

Salinity Description: Good

Yield (L/s): 1.010

Site Details

Site Chosen By:

County
Form A: WELLINGTON
Licensed: WELLINGT

Parish
COPPER HI
COPPERHI

Cadastre
86//756876
Whole Lot 85//756876

Region: 80 - Macquarie-Western

River Basin: 421 - MACQUARIE RIVER
Area/District:

CMA Map: 8631-N

Grid Zone:

Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown

Northing: 6338080.000
Easting: 677351.000

Latitude: 33°04'53.2"S
Longitude: 148°54'00.4"E

GS Map: -

MGA Zone: 55

Coordinate Source: GPS - Global

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	30.00	200			Rotary Air
1	1	Casing	Pvc Class 9	-0.30	30.00	140	129		Driven into Hole, Seated on Bottom, Riveted and Glued, S: 21.00-30.00m
1	1	Opening	Slots - Vertical	12.00	18.00	140		0	Mechanically Slotted, PVC Class 9, Riveted and Glued, SL: 200.0mm, A: 2.00mm
1	1	Opening	Slots - Vertical	24.00	30.00	140		0	Mechanically Slotted, PVC Class 9, Riveted and Glued, SL: 200.0mm, A: 2.00mm

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
12.00	13.00	1.00	Unknown	7.00	13.00	0.25		00:30:00	
17.00	18.00	1.00	Unknown	7.00	18.00	0.38		00:30:00	
20.00	21.00	1.00	Unknown	7.00	21.00	0.38		00:30:00	

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.20	0.20	Topsoil	Topsoil	
0.20	4.00	3.80	Clay	Clay	
4.00	30.00	26.00	Basalt	Basalt	

Remarks

28/03/2009: Form A Remarks:

Nat Carling, 6-May-2009: GPS provided by driller. Recommended pump depth 25m. Yield 800 gph or 1.01l/s.

*** End of GW803798 ***

Warning To Clients: This raw data has been supplied to the WaterNSW by drillers, licensees and other sources. WaterNSW does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.

WaterNSW Work Summary

GW806998

Licence: 80BL241861

Licence Status: CONVERTED

Authorised Purpose(s): DOMESTIC,STOCK
Intended Purpose(s): STOCK, DOMESTIC

Work Type: Bore

Work Status: Supply Obtained

Construct.Method:

Owner Type: Private

Commenced Date:

Completion Date: 20/09/2003

Final Depth: 48.00 m

Drilled Depth: 48.00 m

Contractor Name: Alan Jeffery WILSON

Driller: Alan Jeffery Wilson

Assistant Driller:

Property: SUNSET SUBDIVISION NSW

GWMA:

GW Zone:

Standing Water Level (m):

Salinity Description:

Yield (L/s):

Site Details

Site Chosen By:

County
Form A: WELLINGTON
Licensed: WELLINGT

Parish
GAMBOOLA
GAMBOOLA

Cadastre
4//1065466
Whole Lot 4//1065466

Region: - (Not set)

River Basin: - Unknown

Area/District:

CMA Map:

Grid Zone:

Scale:

Elevation: 0.00 m (A.H.D.)

Elevation Source: Unknown

Northing: 6336292.700

Easting: 676385.000

Latitude: 33°05'51.7"S

Longitude: 148°53'24.4"E

GS Map: -

MGA Zone: 55

Coordinate Source: GPS - Global

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

Hole	Pipe	Component	Type	From (m)	To (m)	Outside Diameter (mm)	Inside Diameter (mm)	Interval	Details
1		Hole	Hole	0.00	5.00	150			Rotary Air
1		Hole	Hole	5.00	48.00	150			Rotary - Percussion (Down Hole H
1		Backfill	Clay	0.00	48.00				
1		Backfill	Drilled Cutting	0.00	48.00				

Water Bearing Zones

From (m)	To (m)	Thickness (m)	WBZ Type	S.W.L. (m)	D.D.L. (m)	Yield (L/s)	Hole Depth (m)	Duration (hr)	Salinity (mg/L)
0.00	48.00	48.00	Unknown						

Drillers Log

From (m)	To (m)	Thickness (m)	Drillers Description	Geological Material	Comments
0.00	0.40	0.40	Topsoil	Topsoil	
0.40	4.00	3.60	Clay: Brown	Clay	
4.00	21.00	17.00	LimeStone: Weathered	Limestone	
21.00	48.00	27.00	Limestone - Dry	Limestone	

Remarks

20/09/2003: Completed 31.01.2020, by SG

Additional information: Bore is dry, not cased.

Letter attached from Department of Land and water conservation, detailing a conversation with Licencee, stating the Driller states the bore is dry, but as it is producing a small yield, there were plans to case the bore and conduct a pump test.

There are no additional letters to illustrate if this occurred.

*** End of GW806998 ***

Warning To Clients: This raw data has been supplied to the WaterNSW by drillers, licensees and other sources. WaterNSW does not verify the accuracy of this data. The data is presented for use by you at your own risk. You should consider verifying this data before relying on it. Professional hydrogeological advice should be sought in interpreting and using this data.



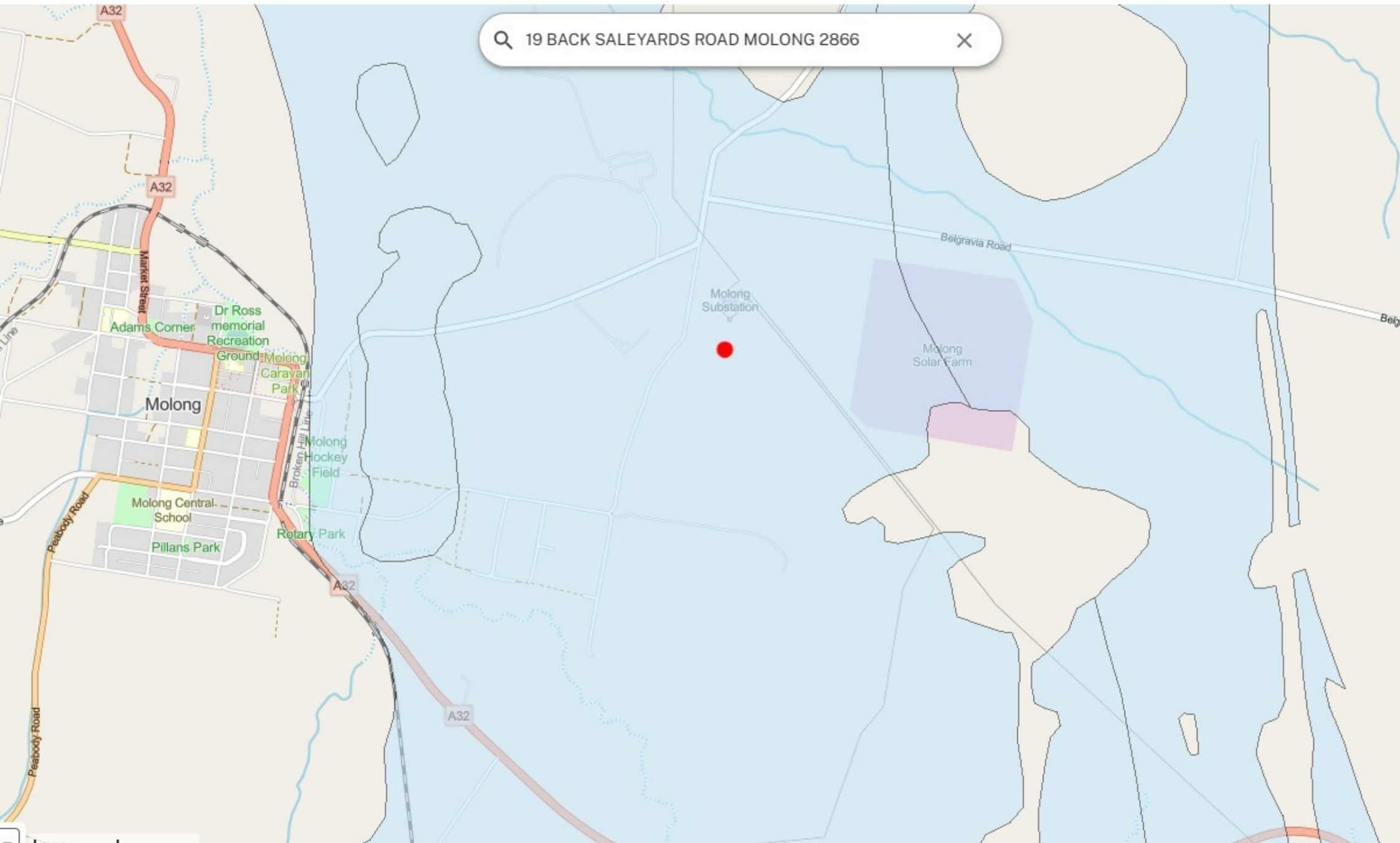
Appendix F:

Naturally Occurring Asbestos Map





19 BACK SALEYARDS ROAD MOLONG 2866





Appendix G:

POEO Licenses



Table G-1 Nearby Site's Holding EPLs under the POEO Act

EPL Holder Address	Distance / Direction from Project Lots	POEO Licence Details		
		Number	Issued Date	Status / Type
<i>Earth Plant Hire Pty Limited</i> Bloomfield Road, Molong, NSW 2866	4.7 km west	386	09 Mar 2000	Revoked
<i>CWQ Pty Ltd</i> 25 Paradise Lane, Molong, NSW 2866	5 km northwest	21537	20 Sep 2021	Issued
<i>Cabonne Shire Council</i> Wellington Road, Molong, NSW 2866	3.1 km west	1623	17 Aug 2001	Issued
<i>Heidelberg Materials Australia Pty Ltd</i> Three Rivers Road Molong NSW 2866	16 km north	4138	28 Mar 2000	Issued
<i>Orange City Council – Resource Recovery Centre</i> Euchareena Road Molong NSW 2866	3.25 km north	20104	28 May 2012	Issued
<i>J.R & E.G Richards Pty Ltd</i> Euchareena Road Molong NSW 2866	3.25 km north	20140	17 Sep 2012	Issued
<i>Charlmont Gravel Pty Ltd</i> 4001 Mitchell Highway, Molong, NSW 2866	6 km northwest	20473	06 Aug 2014	Issued
<i>F.K Gardner & Son's Pty Ltd</i> Mitchell Highway, Molong, NSW 2866	6.5 km northwest	20779	04 May 2016	Surrendered
<i>Cabonne Shire Council</i> 67 Bloomfield Road, Molong, NSW 2866	4.7 km west	21757	02 May 2023	Issued



Table G-2 Nearby Site's with EPL Variation under the POEO Act

EPL Holder Address	Distance / Direction from Project Lots	EPL	POEO Licence Details		
			Number	Issued Date	Status / Type
<i>Cabonne Shire Council</i> Bloomfield Road, Molong, NSW 2866	4.7 km west	21757	1004720	24 Jul 2001	Issued / s.58 License Variation
			1037851	21 Jul 2004	Issued / s.58 License Variation
			1128125	13 Jul 2011	Issued / s.58 License Variation
			1501680	31 Oct 2011	Issued / s.58 License Variation
			1507610	27 Jul 2012	Issued / s.58 License Variation
<i>Cabonne Shire Council</i> Wellington Road, Molong, NSW 2866	3.1 km west	1623	1023605	04 Mar 2003	Issued / s.58 License Variation
			1055898	20 Mar 2006	Issued / s.58 License Variation
			1082178	26 Feb 2008	Issued / s.58 License Variation
			1118613	17 Sep 2012	Issued / s.58 License Variation
			1129367	30 Jun 2011	Issued / s.58 License Variation
			1505200	02 Aug 2012	Issued / s.58 License Variation
			1530417	12 Jun 2015	Issued / s.58 License Variation
			1541085	11 Jul 2016	Issued / s.58 License Variation
<i>Heidelberg Materials Australia Pty Ltd</i> Three Rivers Road Molong NSW 2866	16 km north	4138	1505103	20 Mar 2012	Issued / s.58 License Variation
			1507172	13 Aug 2012	Issued / s.58 License Variation
<i>J.R & E.G Richards Pty Ltd</i> Euchareena Road Molong NSW 2866	3.25 km north	20140	1512029	12 Jul 2013	Issued / s.58 License Variation
		20104	1515076	10 Jul 2013	Issued / s.58 License Variation



EPL Holder Address	Distance / Direction from Project Lots	EPL	POEO Licence Details		
			Number	Issued Date	Status / Type
Orange City Council – Resource Recovery Centre Euchareena Road Molong NSW 2866			1525339	16 Jan 2015	Issued / s.58 License Variation
			1538487	06 Jul 2016	Issued / s.58 License Variation
			1645818	19 Mar 2025	Issued / s.58 License Variation
F.K Gardner & Son's Pty Ltd Mitchell Highway, Molong, NSW 2866	6.5 km northwest	20779	1548180	25 Jan 2017	Issued / s.58 License Variation
Charlmount Gravel Pty Ltd 4001 Mitchell Highway, Molong, NSW 2866	6 km northwest	20473	1564440	14 May 2018	Issued / s.58 License Variation
			1580233	17 Jun 2019	Issued / s.58 License Variation
			1641891	09 Sep 2024	Issued / s.58 License Variation

Table G-3 Nearby Site's Issued Penalty Notices under the POEO Act

EPL Holder Address	Distance / Direction from Project Lots	POEO Licence Details			
		Number	Issued Date	Status / Type	Reason
Cabonne Shire Council Wellington Road, Molong, NSW 2866	3.1 km west	3173529096	17 Aug 2001	Issued	Not test pollution incident response management plan in accordance with regulations - Corporation

Table G-4 Nearby Site's Issued with Clean up Notice under the POEO Act

EPL Holder Address	Distance / Direction from Project Lots	POEO Licence Details		
		Number	Issued Date	Status / Type
Cobonne Service Centre Pty Ltd 2 Gidley Street, Molong, NSW 2866	2.6 km west	1503278	09 Dec 2011	Issued / Clean up Notice





Appendix H:

Section 58 CLM Act
Regulated Sites



Table H-1 Nearby Section 58 CLM Act (Govt. of NSW 1997) Notified Site's

Site Name Address	Distance / Direction from Project Lots	Notices Related to this Site			
		Number Date	Status	Recipient	Notice Type
<i>Cabonne BP Service Station</i> 2 Gidley Street, Molong 2866	2.6 km west	<i>20121108</i> Issued 16 Nov 2012	Current	Not Applicable	Declaration of Significantly Contaminated Land
		<i>20191732</i> Issued 19 Dec 2019	Current	Not Applicable	Approved Voluntary Management Proposal
		<i>20224422</i> Issued 02 Jun 2022	Current	Cabonne Service Centre Pty Ltd	Amendment or Repeal of Order or Notice
		<i>SAS-JC-NSW38b</i> Issued 20 Dec 2022	Current	Not Applicable	Site Audit Statement
		<i>SAS-JC-NSW38a</i> Issued 20 Dec 2022	Current	Not Applicable	Site Audit Statement
<i>Former Gasworks Hill Street, Molong 2866</i>	2.5 km west	<i>20192801</i> Issued 08 Mar 2019 Issued 18 Mar 2019	Current	Cabonne Shire Council	Ongoing Maintenance Order
		<i>20194404</i> Issued 08 Mar 2019	Former	Former Molong Gasworks	Notice to End Investigation Declaration
		<i>201817-7-16</i> Issued 21 Nov 2018	Former	Cabonne Shire Council	Notice of Completion or Withdrawal of Approved VMP
		<i>20151701</i> Issued 13 Feb 2015 Completed 21 Nov 2018	Former	Cabonne Shire Council	Approved Voluntary Management Proposal
		<i>20101118</i> Issued 07 Dec 2010 Ended 08 Mar 2019	Former	Not Applicable	Declaration of Significantly Contaminated Land





Appendix I:

Photographic Log



Molong, (BESS)

Photo 1: Flat, grassy paddock with scattered trees and a wire fence line. (11, November 2024)



Photo 2: Grassed paddock with overhead powerlines and scattered trees. (11, November 2024)



Photo 3: View looking west, with Molong TransGrid Station and thick bushland observed. Photo Title (11, November 2024)



Photo 4: Surface cracking observed in grassy area. (11, November 2024)



Photo 5: Grassed paddock and scattered trees. (11, November 2024)



Photo 6: View looking east from Back Saleyards Road onto the Site, showing hardstand roadway providing access. (11, November 2024)





AUSTRALIA HEAD OFFICE

Tenancy 202, Submarine School
Sub Base Platypus, 120 High Street
North Sydney NSW 2060
(Registered Office)

T: 1300 434 443
sydney@slrconsulting.com

NEW ZEALAND HEAD OFFICE

201 Victoria Street West,
Auckland 1010
(Registered Office)

T: +64 9 303 0311
AotearoaNZ@slrconsulting.com

SINGAPORE HEAD OFFICE

The Work Project,
6 Battery Road,
06-617, Singapore 049909
(Registered Office)

T: +65 6822 2203
singapore@slrconsulting.com

Making
Sustainability
Happen

SLRCONSULTING.COM